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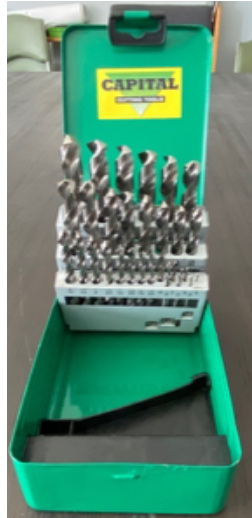
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METAL CASE DRILL SETS (HSS)

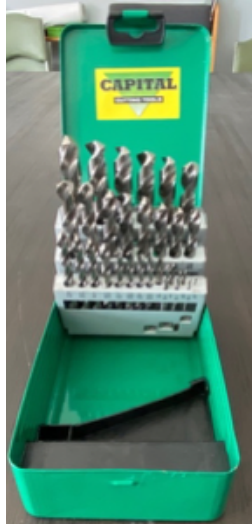
Code	Set No.	No. of Drills	Sizes	\$ ea.
JDS-100	CM-1	25	1mm – 13mm in 0.5mm rises	163.84
JDS-200	CM-2	19	1mm – 10mm in 0.5mm rises	82.40
JDS-300	CM-3	29	1/16 – 1/2 in 1/64 rises	180.01
JDS-400	CM-4	21	1/16 – 3/8 in 1/64 rises	84.22

METAL CASE DRILL SETS (COBALT)

Code	Set No.	No. of Drills	Sizes	\$ ea.
JDS-500	CM-5	25	1mm – 13mm in 0.5mm rises	315.44
JDS-600	CM-6	19	1mm – 10mm in 0.5mm rises	160.00
JDS-700	CM-7	29	1/16 – 1/2 in 1/64 rises	339.09
JDS-800	CM-8	21	1/16 – 3/8 in 1/64 rises	169.36

REFILL SETS (HSS)

Code	Set No.	No. of Drills	Sizes	\$ ea.
JSR-A	RF-1	25	1mm – 13mm in 0.5mm rises	150.43
JSR-B	RF-2	19	1mm – 10mm in 0.5mm rises	68.99
JSR-C	RF-3	29	1/16 – 1/2 in 1/64 rises	166.59
JSR-D	RF-4	21	1/16 – 3/8 in 1/64 rises	70.87



REFILL SETS (COBALT)

Code	Set No.	No. of Drills	Sizes	\$ ea.
JSR-E	RF-5	25	1mm – 13mm in 0.5mm rises	299.34
JSR-F	RF-6	19	1mm – 10mm in 0.5mm rises	143.89
JSR-G	RF-7	29	1/16 – 1/2 in 1/64 rises	322.03
JSR-H	RF-8	21	1/16 – 3/8 in 1/64 rises	159.30

METAL CASE (EMPTY)

Code	Set No.	No. of Drills	Sizes	\$ ea.
JDE-100	JDE-1	N / A	1mm – 13mm in 0.5mm rises	17.05
JDE-200	JDE-2	N / A	1mm – 10mm in 0.5mm rises	10.06
JDE-300	JDE-3	N / A	1/16 – 1/2 in 1/64 rises	17.05
JDE-400	JDE-4	N / A	1/16 – 3/8 in 1/64 rises	10.06

LEFT HAND COBALT METAL CASE DRILL SETS

Code	Set No.	No. of Drills	Sizes	\$ ea.
LHCJ-100	LHCJ-1	13	1mm – 13mm in 1.0mm rises	217.24
LHCJ-200	LHCJ-2	10	1mm – 10mm in 1.0mm rises	143.38



REDUCED SHANK DRILL SETS (HSS)

Code	Sizes	\$ ea.
RSD-200	M14, M15, M16, M17, M18, M19, M20	349.40
RSD-300	9/16, 19/32, 5/8, 21/32, 11/16, 23/32, 3/4	362.77
RSD-100	M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25	618.85
RSD-400	9/16, 19/32, 5/8, 21/32, 11/16, 23/32, 3/4, 25/32, 13/16, 7/8, 15/16, 1"	642.22

EXTENSION REDUCED SHANK DRILL SETS (HSS) - 200MM OAL

Code	Sizes	\$ ea.
RSD-500	M14, M15, M16, M17, M18, M19, M20	617.88
RSD-700	9/16, 19/32, 5/8, 21/32, 11/16, 23/32, 3/4	626.41
RSD-600	M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25	1149.42
RSD-800	9/16, 19/32, 5/8, 21/32, 11/16, 23/32, 3/4, 25/32, 13/16, 7/8, 15/16, 1"	1167.67

REDUCED SHANK DRILL SETS INCLUDE ONE DRILL PER SIZE LISTED ABOVE



CENTRE DRILL PLAIN TYPE SETS

Code	Sizes	Number in Set	\$ ea.
C170-0105	No 1	2	85.23
	No 2	2	
	No 3	1	
	No 4	1	
	No 5	1	

Code	Sizes	Number in Set	\$ ea.
C170-0107	No 1	2	147.84
	No 2	2	
	No 3	2	
	No 4	2	
	No 5	1	
	No 6	1	
	No 7	1	

Code	Sizes	Number in Set	\$ ea.
C170-0108	No 1	2	200.41
	No 2	2	
	No 3	2	
	No 4	2	
	No 5	1	
	No 6	1	
	No 7	1	
	No 8	1	



ANNULAR CUTTER SETS - HSS COBALT

Code	Sizes	\$ ea.
CC801-100	M14, M15, M16, M17, M18, M19, M20, M22, M25	604.07

ANNULAR CUTTER SETS INCLUDE ONE PIECE PER LISTED SIZE & TWO PINS



HOLES AW SETS - 8% COBALT

Code	Set Type	Sizes	\$ ea.
HSP-0100	PLUMBER	19, 22, 29, 38, 44, 57	209.04
HSP-0200	PLUMBER	44, 57, 64, 92, 114	243.15
HSP-0300	PLUMBER	16, 19, 22, 25, 27, 32, 35, 44, 57, 73, 92, 114	334.50
HSE-0100	ELECTRICIAL	16, 20, 25, 32, 40, 51	202.20
HSE-0200	ELECTRICIAL	22, 29, 35, 44, 51, 68	221.12
HSE-0300	ELECTRICIAL	51, 76, 86, 105,	224.10
HSE-0400	ELECTRICIAL	16, 20, 22, 25, 32, 40, 51, 60, 92	262.53
HSM-100	MAINTENANCE	20, 25, 32, 38, 54	194.66
HSM-200	MAINTENANCE	16, 20, 25, 32, 40, 51, 54, 64	240.71
HSM-300	MAINTENANCE	16, 20, 22, 25, 32, 40, 51, 54, 60	249.47
HSM-400	MAINTENANCE	16, 19, 22, 25, 29, 32, 35, 38, 44, 51	252.11
HSM-500	MAINTENANCE	19, 22, 29, 35, 38, 44, 51, 57, 64	260.61
HSM-600	MAINTENANCE	16, 19, 22, 25, 32, 38, 54, 92, 102	277.49
HSM-700	MAINTENANCE	19, 22, 25, 32, 35, 38, 44, 51, 54, 63, 76	288.43
HSM-800	MAINTENANCE	19, 22, 25, 29, 32, 35, 44, 51, 57, 64, 68, 76	317.85
HSM-900	MAINTENANCE	16, 20, 22, 25, 32, 40, 51, 54, 64, 92, 114	321.39
HSM-1000	MAINTENANCE	16, 20, 22, 25, 32, 38, 40, 51, 54, 60, 64, 70, 89, 92, 100, 114	444.87

HOLES AW SETS INCLUDE ONE HOLES AW PER SIZE, PLUS ADAPTOR, PILOT DRILL & ARBOR



MTS DRILL SETS

Code	Sizes	\$ ea.
D187-200	M14, M15, M16, M17, M18, M19, M20	448.76
D187-100	9/16, 19/32, 5/8, 21/32, 11/16, 23/32, 3/4	460.46

MTS DRILL SETS INCLUDE ONE PIECE PER SIZE LISTED



EXTRA LENGTH MTS DRILL SETS - 200MM F/L

Code	Sizes	\$ ea.
D192-200	M14, M15, M16, M17, M18, M19, M20	774.26

EXTRA LENGTH MTS DRILL SETS INCLUDE ONE PIECE PER SIZE LISTED, DRILLS HAVE 200MM F/L



HSS SLITTING SAW SETS - FINE PITCH

Code	Diameter	Sizes	\$ ea.
S578-300	3"	1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4	680.34
S578-400	4"	1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4	975.15
S578-500	5"	1/16, 1/8, 5/32, 3/16, 1/4	1012.59
S578-600	6"	1/16, 1/8, 3/16, 1/4	901.50

HSS SLITTING SAW SETS - COARSE PITCH

Code	Diameter	Sizes	\$ ea.
S579-300	3"	1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4	680.34
S579-400	4"	1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4	975.15
S579-500	5"	1/16, 1/8, 5/32, 3/16, 1/4	1012.59
S579-600	6"	1/16, 1/8, 3/16, 1/4	901.50

SLITTING SAW SETS INCLUDE ONE SAW PER SIZE LISTED



PLAIN SHANK SLOT DRILL SETS - SHORT SERIES

Code	Sizes	\$ ea.
SP100	M3, M4, M5, M6, M8, M10, M12	203.05
SP200	M3, M4, M5, M6, M7, M8, M9, M10, M11, M12	283.36
SP300	M3, M4, M5, M6, M8, M10, M12, M14, M16, M20	316.08
SP400	M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M14, M16, M20	396.39
SP500	M3, M4, M5, M6, M8, M10, M12, M14, M16, M20, M22, M25	477.79



PLAIN SHANK END MILL SETS - SHORT SERIES

Code	Sizes	\$ ea.
EP100	M3, M4, M5, M6, M8, M10, M12	182.79
EP200	M3, M4, M5, M6, M7, M8, M9, M10, M11, M12	254.63
EP300	M3, M4, M5, M6, M8, M10, M12, M14, M16, M20	295.25
EP400	M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M14, M16, M20	367.08
EP500	M3, M4, M5, M6, M8, M10, M12, M14, M16, M20, M22, M25	455.09



CARBIDE SLOT DRILL SETS - TiCN COATED

Code	Sizes	\$ ea.
CSDS-0412	M4, M5, M6, M8, M10, M12	358.93
CSDS-0416	M4, M5, M6, M8, M10, M12, M16	443.96
CSDS-0420	M4, M5, M6, M8, M10, M12, M16, M20	638.57

CARBIDE END MILL SETS - TiCN COATED

Code	Sizes	\$ ea.
CEMS-0412	M4, M5, M6, M8, M10, M12	358.93
CEMS-0416	M4, M5, M6, M8, M10, M12, M16	443.96
CEMS-0420	M4, M5, M6, M8, M10, M12, M16, M20	638.57

CARBIDE BALL NOSE SLOT DRILL SETS - TiCN COATED

Code	Sizes	\$ ea.
CBNSDS-0412	M4, M5, M6, M8, M10, M12	462.20
CBNSDS-0416	M4, M5, M6, M8, M10, M12, M16	535.18
CBNSDS-0420	M4, M5, M6, M8, M10, M12, M16, M20	778.44

CARBIDE SETS INCLUDE 2 EACH OF M4, M5 & M6, AND 1 OF EACH REMAINING SIZE LISTED ABOVE



ALL REAMER SETS

Code	Sizes	\$ ea.
HSS H7 MTS MACHINE REAMER SETS		
603R-100	M3, M4, M5, M6, M7, M8, M9, M10, 11, M12, M13	776.95
603R-200	M14, M15, M16, M17, M18, M19, M20	745.38
HSS H7 HAND REAMER SETS		
601R-100	M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13	603.15
601R-200	1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/2	733.81
MTS BRIDGE REAMER SETS		
607R-100	M9, M10, 11, M12, M13	652.81
607R-200	M14, M15, M16, M17, M18, M19, M20	1203.10
HSS H7 Co STRAIGHT SHANK CHUCKING REAMER SETS		
RCM-100	M3, M4, M5, M6, M7, M8, M9, M10, 11, M12, M13	482.10
RCM-200	M13, M14, M15, M16, M17, M18, M19, M20	793.96
RCI-100	1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/2	604.78
STRAIGHT FLUTE HAND TAPER PIN REAMER SETS		
R606-100	50:1 2, 3, 4, 5, 6, 8, 10, 12, 13	778.40
R606-200	48:1 1/16, 1/8, 5/32, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2	687.67

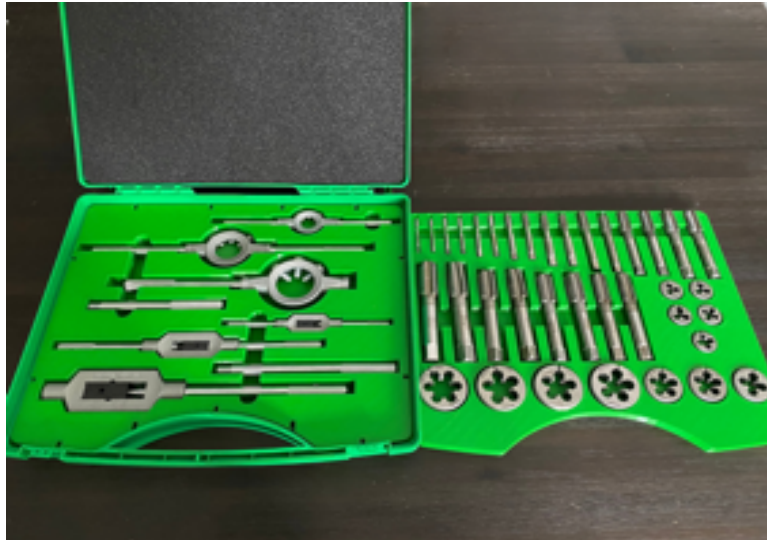
EACH SET INCLUDES ONE REAMER PER SIZE LISTED ABOVE



WARRAGUL TYPE DIE SETS

Code	Sizes	\$ ea.
WD100	M16 x 1.5, M20 x 1.5, M25 x 1.5, M32 x 1.5, M40 x 1.5	1075.33

EACH SET INCLUDES ONE WARRAGUL TYPE DIE PER SIZE LISTED ABOVE



TAP & DIE SETS

HIGH SPEED STEEL - GROUND THREAD

Code	Thread Form	Sizes	\$ ea.
SETS INCLUDE 2 TAP WRENCHES & 2 DIE STOCKS			
TDS-600	METRIC	M4, M5, M6, M8, M10, M12, M14, M16	968.14
TDS-700	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1085.66
TDS-800	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1167.17
SETS INCLUDE 3 TAP WRENCHES & 3 DIE STOCKS			
TDS-100	METRIC	M4, M5, M6, M8, M10, M12, M14, M16, M18, M20, M22, M24	1780.53
TDS-200	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1793.15
TDS-300	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1813.07
SETS DO NOT INCLUDE ANY TAP WRENCHES OR DIE STOCKS			
TDS-150	METRIC	M4, M5, M6, M8, M10, M12, M14, M16, M18, M20, M22, M24	1418.89
TDS-250	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1431.51
TDS-350	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1493.50

EACH SET INCLUDES A TAPER TAP, BOTTOM TAP & BUTTON DIE PER SIZE LISTED ABOVE
AS WELL AS SIZE RELEVANT HOLDERS FOR BOTH TAPS AND DIES AS LISTED ABOVE



TAP & BUTTON DIE SETS

HIGH SPEED STEEL - GROUND THREAD

Code	Thread Form	Sizes	\$ ea.
TBDS100-0312	METRIC	M3, M4, M5, M6, M8, M10, M12	620.32
TBDS220-1036	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2	761.42
TBDS200-1036	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2	778.44
TBDS300-2636	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2	800.33
TBDS320-2636	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2	814.94
TBDS100-0316	METRIC	M3, M4, M5, M6, M8, M10, M12, M14, M16	997.38
TBDS220-1040	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1052.12
TBDS200-1040	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1070.36
TBDS300-2640	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1088.60
TBDS320-2640	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1210.23
TBDS100-0324	METRIC	M3, M4, M5, M6, M8, M10, M12, M14, M16, M18, M20, M24	1885.29
TBDS220-1052	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1988.68
TBDS200-1052	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2000.84
TBDS300-2652	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2049.49
TBDS320-2652	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2373.03

EACH SET INCLUDES A TAPER TAP, INTER TAP, BOTTOM TAP & BUTTON DIE PER SIZE LISTED ABOVE



TAP & DIE NUT SETS

HIGH SPEED STEEL - GROUND THREAD

Code	Thread Form	Sizes	\$ ea.
TDNS100-0312	METRIC	M3, M4, M5, M6, M8, M10, M12	749.25
TDNS220-1036	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2	783.31
TDNS200-1036	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2	824.66
TDNS300-2636	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2	829.53
TDNS320-2636	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2	937.78
TDNS100-0316	METRIC	M3, M4, M5, M6, M8, M10, M12, M14, M16	1142.12
TDNS220-1040	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1179.83
TDNS200-1040	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1153.06
TDNS300-2640	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1160.37
TDNS320-2640	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1421.87
TDNS100-0324	METRIC	M3, M4, M5, M6, M8, M10, M12, M14, M16, M18, M20, M24	2092.07
TDNS220-1052	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2132.21
TDNS200-1052	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2107.88
TDNS300-2652	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2152.89
TDNS320-2652	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2529.94

EACH SET INCLUDES A TAPER TAP, INTER TAP, BOTTOM TAP & DIE NUT PER SIZE LISTED ABOVE

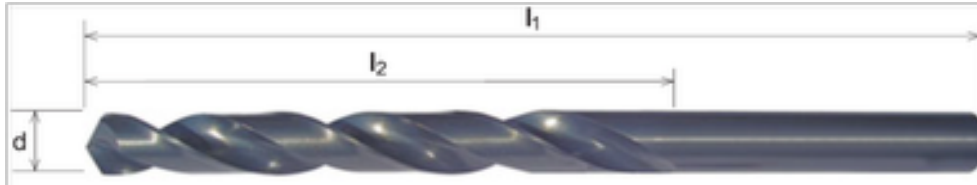


TAP & DRILL SETS

HIGH SPEED STEEL - GROUND THREAD

Code	Thread Form	Sizes	\$ ea.
TDRS100-0312	METRIC	M3, M4, M5, M6, M8, M10, M12	342.65
TDRS220-1036	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2	361.24
TDRS200-1036	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2	363.68
TDRS300-2636	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2	391.65
TDRS320-2636	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2	391.65
TDRS100-0316	METRIC	M3, M4, M5, M6, M8, M10, M12, M14, M16	508.42
TDRS220-1040	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	526.67
TDRS200-1040	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	551.00
TDRS300-2640	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	577.76
TDRS320-2640	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	577.76
TDRS100-0324	METRIC	M3, M4, M5, M6, M8, M10, M12, M14, M16, M18, M20, M24	1100.77
TDRS220-1052	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1128.74
TDRS200-1052	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1131.17
TDRS300-2652	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1173.75
TDRS320-2652	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1283.22

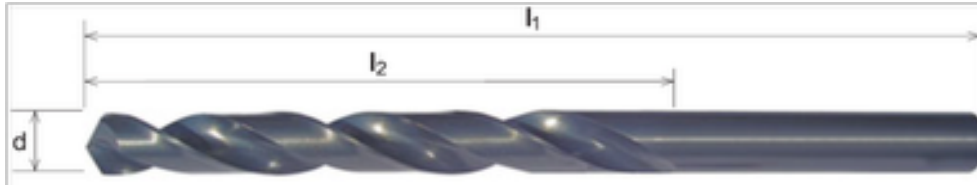
EACH SET INCLUDES A TAPER TAP, BOTTOM TAP & HSS DRILL PER SIZE LISTED ABOVE



JOBBER DRILLS (BULK) BLACK FINISH

Code	Size	l ₂	l ₁	\$ ea.
J102-00156	1/64	5	20	5.00
J101-00157	0.4	5	20	5.00
J101-00165	0.42	5	20	6.99
J101-00177	0.45	5	20	5.00
J101-00189	0.48	5	20	6.99
J101-00197	0.5	6	22	5.00
J101-00205	0.52	6	22	6.99
J101-00217	0.55	7	24	5.00
J101-00228	0.58	7	24	6.99
J101-00236	0.6	7	24	5.00
J101-00244	0.62	8	26	6.99
J101-00256	0.65	8	26	5.00
J101-00268	0.68	9	28	6.46
J101-00276	0.7	9	28	5.00
J101-00283	0.72	9	28	5.41
J101-00295	0.75	9	28	5.00
J101-00307	0.78	10	30	5.00
J102-00312	1/32	10	30	3.45
J101-00315	0.8	10	30	3.17
J101-00323	0.82	10	30	4.98
J101-00335	0.85	10	30	3.17
J101-00346	0.88	11	32	5.00
J101-00354	0.9	11	32	3.17
J101-00362	0.92	11	32	5.00
J101-00374	0.95	11	32	3.17
J101-00386	0.98	12	34	5.00
J101-00394	1	12	34	1.96
J101-00413	1.05	12	34	3.13
J101-00433	1.1	14	36	1.96
J101-00453	1.15	14	36	3.13
J102-00469	3/64	16	38	1.96
J101-00472	1.2	16	38	1.96

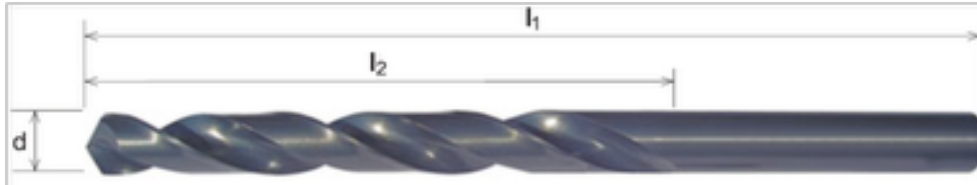
Code	Size	l ₂	l ₁	\$ ea.
J101-00492	1.25	16	38	3.13
J101-00512	1.3	16	38	2.01
J101-00531	1.35	18	40	3.19
J101-00551	1.4	18	40	2.37
J101-00571	1.45	18	40	2.37
J101-00591	1.5	18	40	1.79
J101-00610	1.55	20	43	2.39
J102-00625	1/16	20	43	1.78
J101-00630	1.6	20	43	1.74
J101-00650	1.65	20	43	2.39
J101-00669	1.7	20	43	1.66
J101-00689	1.75	22	46	2.37
J101-00709	1.8	22	46	1.61
J101-00728	1.85	22	46	2.39
J101-00748	1.9	22	46	1.61
J101-00768	1.95	24	49	2.39
J102-00781	5/64	24	49	1.61
J101-00787	2	24	49	1.61
J101-00807	2.05	24	49	2.01
J101-00827	2.1	24	49	1.61
J101-00846	2.15	27	53	2.01
J101-00866	2.2	27	53	1.61
J101-00886	2.25	27	53	2.01
J101-00906	2.3	27	53	1.61
J101-00925	2.35	27	53	2.01
J102-00938	3/32	30	57	1.61
J101-00945	2.4	30	57	1.61
J101-00965	2.45	30	57	2.01
J101-00984	2.5	30	57	1.61
J101-01004	2.55	30	57	2.01
J101-01024	2.6	30	57	1.61
J101-01043	2.65	30	57	2.01



JOBBER DRILLS (BULK) BLACK FINISH

Code	Size	l ₂	l ₁	\$ ea.
J101-01063	2.7	33	61	1.48
J101-01083	2.75	33	61	1.61
J102-01094	7/64	33	61	1.48
J101-01102	2.8	33	61	1.48
J101-01122	2.85	33	61	1.64
J101-01142	2.9	33	61	1.48
J101-01161	2.95	33	61	1.64
J101-01181	3	33	61	1.55
J101-01220	3.1	36	65	1.55
J102-01250	1/8	36	65	1.55
J101-01260	3.2	36	65	1.55
J101-01279	3.25	36	65	1.64
J101-01299	3.3	36	65	1.61
J101-01339	3.4	39	70	1.61
J101-01378	3.5	39	70	1.69
J102-01406	9/64	39	70	1.76
J101-01417	3.6	39	70	1.61
J101-01457	3.7	39	70	1.76
J101-01476	3.75	39	70	1.81
J101-01496	3.8	43	75	1.81
J101-01535	3.9	43	75	1.88
J102-01562	5/32	43	75	1.88
J101-01575	4	43	75	1.94
J101-01614	4.1	43	75	2.02
J101-01654	4.2	43	75	1.55
J101-01673	4.25	43	75	2.02
J101-01693	4.3	47	80	2.15
J102-01719	11/64	47	80	2.19
J101-01732	4.4	47	80	2.15
J101-01772	4.5	47	80	2.15
J101-01811	4.6	47	80	2.32
J101-01850	4.7	47	80	2.32

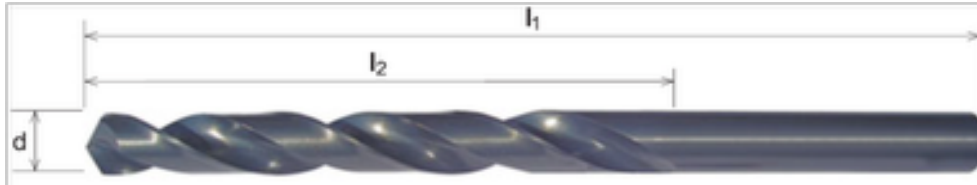
Code	Size	l ₂	l ₁	\$ ea.
J101-01870	4.75	47	80	2.39
J101-01875	3/16	52	86	2.42
J101-01890	4.8	52	86	2.53
J101-01929	4.9	52	86	2.53
J101-01968	5.0	52	86	2.66
J101-02008	5.1	52	86	2.66
J102-02031	13/64	52	86	2.80
J101-02047	5.2	52	86	3.31
J101-02066	5.25	52	86	3.13
J101-02087	5.3	52	86	3.13
J101-02126	5.4	57	93	3.13
J101-02165	5.5	57	93	3.13
J102-02188	7/32	57	93	3.24
J101-02205	5.6	57	93	3.24
J101-02244	5.7	57	93	3.36
J101-02263	5.75	57	93	3.21
J101-02283	5.8	57	93	3.21
J101-02323	5.9	57	93	3.21
J102-02344	15/64	57	93	3.21
J101-02362	6.0	57	93	3.32
J101-02402	6.1	63	101	3.47
J101-02441	6.2	63	101	3.47
J101-02460	6.25	63	101	3.65
J101-02480	6.3	63	101	3.47
J102-02500	1/4	63	101	3.60
J101-02520	6.4	63	101	3.73
J101-02559	6.5	63	101	3.73
J101-02598	6.6	63	101	4.08
J101-02638	6.7	63	101	4.08
J102-02656	17/64	69	109	4.08
J101-02657	6.75	69	109	4.29
J101-02677	6.8	69	109	4.15



JOBBER DRILLS (BULK) BLACK FINISH

Code	Size	l ₂	l ₁	\$ ea.
J101-02717	6.9	69	109	4.33
J101-02756	7.0	69	109	4.36
J101-02795	7.1	69	109	4.36
J102-02812	9/32	69	109	4.57
J101-02835	7.2	69	109	4.67
J101-02854	7.25	69	109	4.97
J101-02874	7.3	69	109	4.67
J101-02913	7.4	69	109	4.67
J101-02953	7.5	69	109	4.95
J102-02969	19/64	75	117	4.95
J101-02992	7.6	75	117	5.10
J101-03032	7.7	75	117	5.33
J101-03051	7.75	75	117	5.64
J101-03071	7.8	75	117	5.33
J101-03110	7.9	75	117	5.33
J102-03125	5/16	75	117	5.35
J101-03150	8.0	75	117	5.33
J101-03189	8.1	75	117	5.81
J101-03228	8.2	75	117	5.81
J101-03258	8.25	75	117	6.09
J101-03268	8.3	75	117	5.81
J102-03281	21/64	75	117	5.81
J101-03307	8.4	75	117	5.89
J101-03346	8.5	75	117	6.05
J101-03386	8.6	81	125	6.35
J101-03425	8.7	81	125	6.35
J102-03438	11/32	81	125	6.35
J101-03444	8.75	81	125	6.88
J101-03465	8.8	81	125	6.65
J101-03504	8.9	81	125	6.65
J101-03543	9.0	81	125	6.65
J101-03583	9.1	81	125	6.91

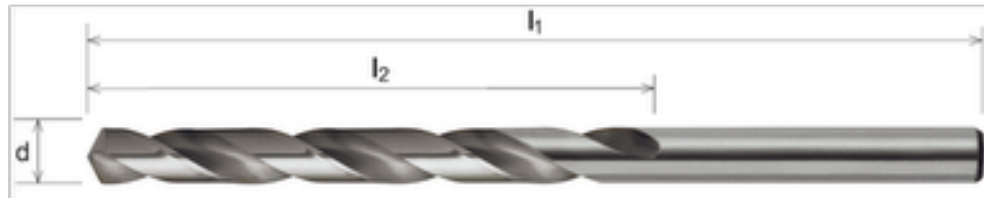
Code	Size	l ₂	l ₁	\$ ea.
J102-03594	23/64	81	125	6.91
J101-03622	9.2	81	125	7.35
J101-03641	9.25	81	125	7.94
J101-03661	9.3	81	125	7.35
J101-03701	9.4	81	125	7.35
J101-03740	9.5	81	125	7.35
J102-03750	3/8	87	133	7.35
J101-03780	9.6	87	133	7.78
J101-03819	9.7	87	133	7.78
J101-03838	9.75	87	133	8.31
J101-03858	9.8	87	133	7.85
J101-03898	9.9	87	133	7.85
J102-03906	25/64	87	133	7.85
J101-03937	10.0	87	133	7.90
J101-03976	10.1	87	133	12.04
J101-04016	10.2	87	133	8.78
J101-04035	10.25	87	133	12.04
J101-04055	10.3	87	133	12.04
J102-04062	13/32	87	133	8.78
J101-04094	10.4	87	133	12.76
J101-04134	10.5	87	133	8.95
J101-04173	10.6	87	133	13.39
J101-04213	10.7	94	142	13.39
J102-04219	27/64	94	142	9.79
J101-04232	10.75	94	142	14.77
J101-04252	10.8	94	142	14.77
J101-04291	10.9	94	142	14.77
J101-04331	11.0	94	142	10.35
J101-04370	11.1	94	142	16.10
J102-04375	7/16	94	142	10.92
J101-04409	11.2	94	142	16.78
J101-04429	11.25	94	142	16.78



JOBBER DRILLS (BULK) BLACK FINISH

Code	Size	l ₂	l ₁	\$ ea.
J101-04449	11.3	94	142	16.78
J101-04488	11.4	94	142	16.63
J101-04528	11.5	94	142	11.55
J102-04531	29/64	94	142	11.55
J101-04567	11.6	94	142	18.11
J101-04606	11.7	94	142	18.11
J101-04625	11.75	94	142	18.11
J101-04646	11.8	94	142	18.11
J101-04685	11.9	101	151	17.19
J102-04688	15/32	101	151	13.04
J101-04724	12.0	101	151	13.19
J101-04764	12.1	101	151	20.13
J101-04803	12.2	101	151	20.13
J101-04822	12.25	101	151	20.92
J101-04843	12.3	101	151	20.13
J102-04844	31/64	101	151	13.83
J101-04882	12.4	101	151	20.84
J101-04924	12.5	101	151	14.49
J101-04961	12.6	101	151	20.84
J101-04987	12.7	101	151	21.50
J102-05000	1/2	101	151	14.51
J101-05019	12.75	101	151	21.50
J101-05039	12.8	101	151	21.50
J101-05079	12.9	101	151	21.50
J101-05118	13.0	101	151	15.58
J102-05157	33/64	101	151	33.41

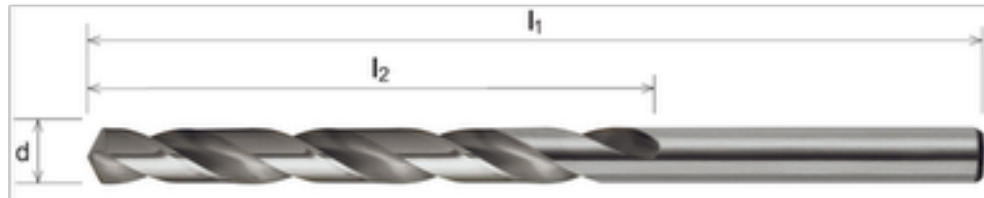
Code	Size	l ₂	l ₁	\$ ea.
J101-05216	13.25	108	160	47.03
J101-05275	13.4	108	160	47.03
J102-05312	17/32	108	160	33.41
J101-05314	13.5	108	160	46.02
J101-05413	13.75	108	160	46.02
J102-05468	35/64	108	160	33.54
J101-05512	14.0	108	160	33.57
J102-05625	9/16	114	169	34.84
J101-05709	14.5	114	169	35.56
J102-05781	37/64	114	169	35.56
J101-05906	15.0	114	169	38.42
J102-05938	19/32	120	178	38.42
J102-06094	39/64	120	178	38.44
J101-06102	15.5	120	178	46.02
J101-06200	15.75	120	178	46.02
J102-06250	5/8	120	178	44.10
J101-06299	16.0	120	178	42.37
J101-06496	16.5	125	184	56.90
J101-06693	17.0	125	184	56.90
J101-06890	17.5	130	191	71.85
J101-07087	18.0	130	191	71.85
J101-07283	18.5	135	198	76.19
J101-07480	19.0	135	198	76.19
J101-07677	19.5	140	205	62.24
J101-07874	20.0	140	205	85.07



JOBBER DRILLS (BULK) BRIGHT FINISH

Code	Size	l ₂	l ₁	\$ ea.
J104-00156	1/64	5	20	5.00
J103-00157	0.4	5	20	5.00
J103-00165	0.42	5	20	6.99
J103-00177	0.45	5	20	5.00
J103-00189	0.48	5	20	6.99
J103-00197	0.5	6	22	5.00
J103-00205	0.52	6	22	6.99
J103-00217	0.55	7	24	5.00
J103-00228	0.58	7	24	6.99
J103-00236	0.6	7	24	5.00
J103-00244	0.62	8	26	6.99
J103-00256	0.65	8	26	5.00
J103-00268	0.68	9	28	6.46
J103-00276	0.7	9	28	5.00
J103-00283	0.72	9	28	5.41
J103-00295	0.75	9	28	5.00
J103-00307	0.78	10	30	5.00
J104-00312	1/32	10	30	3.45
J103-00315	0.8	10	30	3.17
J103-00323	0.82	10	30	4.98
J103-00335	0.85	10	30	3.17
J103-00346	0.88	11	32	5.00
J103-00354	0.9	11	32	3.17
J103-00362	0.92	11	32	5.00
J103-00374	0.95	11	32	3.17
J103-00386	0.98	12	34	5.00
J103-00394	1	12	34	1.96
J103-00413	1.05	12	34	3.13
J103-00433	1.1	14	36	1.96
J103-00453	1.15	14	36	3.13
J104-00469	3/64	16	38	1.96
J103-00472	1.2	16	38	1.96

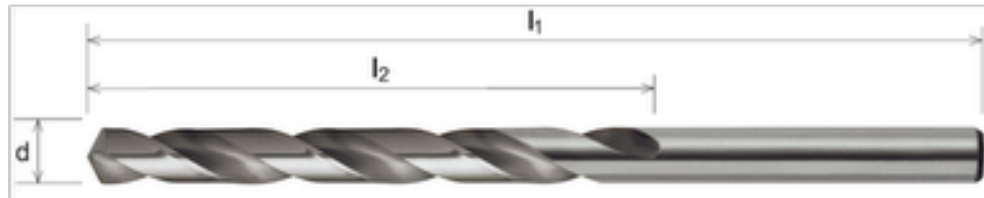
Code	Size	l ₂	l ₁	\$ ea.
J103-00492	1.25	16	38	3.13
J103-00512	1.3	16	38	2.01
J103-00531	1.35	18	40	3.19
J103-00551	1.4	18	40	2.37
J103-00571	1.45	18	40	2.37
J103-00591	1.5	18	40	1.79
J103-00610	1.55	20	43	2.39
J104-00625	1/16	20	43	1.78
J103-00630	1.6	20	43	1.74
J103-00650	1.65	20	43	2.39
J103-00669	1.7	20	43	1.66
J103-00689	1.75	22	46	2.37
J103-00709	1.8	22	46	1.61
J103-00728	1.85	22	46	2.39
J103-00748	1.9	22	46	1.61
J103-00768	1.95	24	49	2.39
J104-00781	5/64	24	49	1.61
J103-00787	2	24	49	1.61
J103-00807	2.05	24	49	2.01
J103-00827	2.1	24	49	1.61
J103-00846	2.15	27	53	2.01
J103-00866	2.2	27	53	1.61
J103-00886	2.25	27	53	2.01
J103-00906	2.3	27	53	1.61
J103-00925	2.35	27	53	2.01
J104-00938	3/32	30	57	1.61
J103-00945	2.4	30	57	1.61
J103-00965	2.45	30	57	2.01
J103-00984	2.5	30	57	1.61
J103-01004	2.55	30	57	2.01
J103-01024	2.6	30	57	1.61
J103-01043	2.65	30	57	2.01



JOBBER DRILLS (BULK) BRIGHT FINISH

Code	Size	l ₂	l ₁	\$ ea.
J103-01063	2.7	33	61	1.48
J103-01083	2.75	33	61	1.61
J104-01094	7/64	33	61	1.48
J103-01102	2.8	33	61	1.48
J103-01122	2.85	33	61	1.64
J103-01142	2.9	33	61	1.48
J103-01161	2.95	33	61	1.64
J103-01181	3	33	61	1.55
J103-01220	3.1	36	65	1.55
J104-01250	1/8	36	65	1.55
J103-01260	3.2	36	65	1.55
J103-01279	3.25	36	65	1.64
J103-01299	3.3	36	65	1.61
J103-01339	3.4	39	70	1.61
J103-01378	3.5	39	70	1.69
J104-01406	9/64	39	70	1.76
J103-01417	3.6	39	70	1.61
J103-01457	3.7	39	70	1.76
J103-01476	3.75	39	70	1.81
J103-01496	3.8	43	75	1.81
J103-01535	3.9	43	75	1.88
J104-01562	5/32	43	75	1.88
J103-01575	4	43	75	1.94
J103-01614	4.1	43	75	2.02
J103-01654	4.2	43	75	1.55
J103-01673	4.25	43	75	2.02
J103-01693	4.3	47	80	2.15
J104-01719	11/64	47	80	2.19
J103-01732	4.4	47	80	2.15
J103-01772	4.5	47	80	2.15
J103-01811	4.6	47	80	2.32
J103-01850	4.7	47	80	2.32

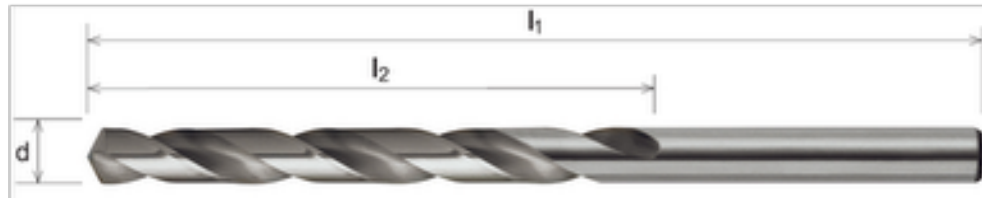
Code	Size	l ₂	l ₁	\$ ea.
J103-01870	4.75	47	80	2.39
J103-01875	3/16	52	86	2.42
J103-01890	4.8	52	86	2.53
J103-01929	4.9	52	86	2.53
J103-01968	5.0	52	86	2.66
J103-02008	5.1	52	86	2.66
J104-02031	13/64	52	86	2.80
J103-02047	5.2	52	86	3.31
J103-02066	5.25	52	86	3.13
J103-02087	5.3	52	86	3.13
J103-02126	5.4	57	93	3.13
J103-02165	5.5	57	93	3.13
J104-02188	7/32	57	93	3.24
J103-02205	5.6	57	93	3.24
J103-02244	5.7	57	93	3.36
J103-02263	5.75	57	93	3.21
J103-02283	5.8	57	93	3.21
J103-02323	5.9	57	93	3.21
J104-02344	15/64	57	93	3.21
J103-02362	6.0	57	93	3.32
J103-02402	6.1	63	101	3.47
J103-02441	6.2	63	101	3.47
J103-02460	6.25	63	101	3.65
J103-02480	6.3	63	101	3.47
J104-02500	1/4	63	101	3.60
J103-02520	6.4	63	101	3.73
J103-02559	6.5	63	101	3.73
J103-02598	6.6	63	101	4.08
J103-02638	6.7	63	101	4.08
J104-02656	17/64	69	109	4.08
J103-02657	6.75	69	109	4.29
J103-02677	6.8	69	109	4.15



JOBBER DRILLS (BULK) BRIGHT FINISH

Code	Size	l ₂	l ₁	\$ ea.
J103-02717	6.9	69	109	4.33
J103-02756	7.0	69	109	4.36
J103-02795	7.1	69	109	4.36
J104-02812	9/32	69	109	4.57
J103-02835	7.2	69	109	4.67
J103-02854	7.25	69	109	4.97
J103-02874	7.3	69	109	4.67
J103-02913	7.4	69	109	4.67
J103-02953	7.5	69	109	4.95
J104-02969	19/64	75	117	4.95
J103-02992	7.6	75	117	5.10
J103-03032	7.7	75	117	5.33
J103-03051	7.75	75	117	5.64
J103-03071	7.8	75	117	5.33
J103-03110	7.9	75	117	5.33
J104-03125	5/16	75	117	5.35
J103-03150	8.0	75	117	5.33
J103-03189	8.1	75	117	5.81
J103-03228	8.2	75	117	5.81
J103-03258	8.25	75	117	6.09
J103-03268	8.3	75	117	5.81
J104-03281	21/64	75	117	5.81
J103-03307	8.4	75	117	5.89
J103-03346	8.5	75	117	6.05
J103-03386	8.6	81	125	6.35
J103-03425	8.7	81	125	6.35
J104-03438	11/32	81	125	6.35
J103-03444	8.75	81	125	6.88
J103-03465	8.8	81	125	6.65
J103-03504	8.9	81	125	6.65
J103-03543	9.0	81	125	6.65
J103-03583	9.1	81	125	6.91

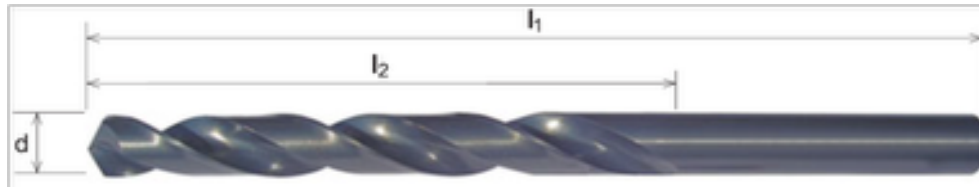
Code	Size	l ₂	l ₁	\$ ea.
J104-03594	23/64	81	125	6.91
J103-03622	9.2	81	125	7.35
J103-03641	9.25	81	125	7.94
J103-03661	9.3	81	125	7.35
J103-03701	9.4	81	125	7.35
J103-03740	9.5	81	125	7.35
J104-03750	3/8	87	133	7.35
J103-03780	9.6	87	133	7.78
J103-03819	9.7	87	133	7.78
J103-03838	9.75	87	133	8.31
J103-03858	9.8	87	133	7.85
J103-03898	9.9	87	133	7.85
J104-03906	25/64	87	133	7.85
J103-03937	10.0	87	133	7.90
J103-03976	10.1	87	133	12.04
J103-04016	10.2	87	133	8.78
J103-04035	10.25	87	133	12.04
J103-04055	10.3	87	133	12.04
J104-04062	13/32	87	133	8.78
J103-04094	10.4	87	133	12.76
J103-04134	10.5	87	133	8.95
J103-04173	10.6	87	133	13.39
J103-04213	10.7	94	142	13.39
J104-04219	27/64	94	142	9.79
J103-04232	10.75	94	142	14.77
J103-04252	10.8	94	142	14.77
J103-04291	10.9	94	142	14.77
J103-04331	11.0	94	142	10.35
J103-04370	11.1	94	142	16.10
J104-04375	7/16	94	142	10.92
J103-04409	11.2	94	142	16.78
J103-04429	11.25	94	142	16.78



JOBBER DRILLS (BULK) BRIGHT FINISH

Code	Size	l_2	l_1	\$ ea.
J103-04449	11.3	94	142	16.78
J103-04488	11.4	94	142	16.63
J103-04528	11.5	94	142	11.55
J104-04531	29/64	94	142	11.55
J103-04567	11.6	94	142	18.11
J103-04606	11.7	94	142	18.11
J103-04625	11.75	94	142	18.11
J103-04646	11.8	94	142	18.11
J103-04685	11.9	101	151	17.19
J104-04688	15/32	101	151	13.04
J103-04724	12.0	101	151	13.19
J103-04764	12.1	101	151	20.13
J103-04803	12.2	101	151	20.13

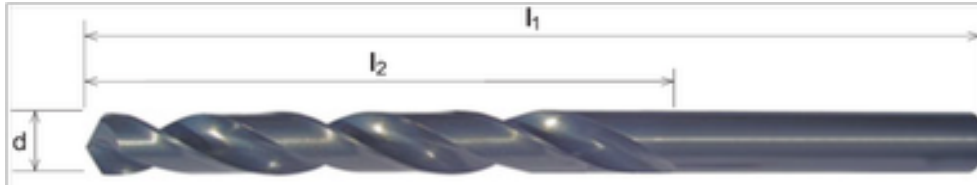
Code	Size	l_2	l_1	\$ ea.
J103-04822	12.25	101	151	20.92
J103-04843	12.3	101	151	20.13
J104-04844	31/64	101	151	13.83
J103-04882	12.4	101	151	20.84
J103-04924	12.5	101	151	14.49
J103-04961	12.6	101	151	20.84
J103-04987	12.7	101	151	21.50
J104-05000	1/2	101	151	14.51
J103-05019	12.75	101	151	21.50
J103-05039	12.8	101	151	21.50
J103-05079	12.9	101	151	21.50
J103-05118	13.0	101	151	15.58
J104-05157	33/64	101	151	33.41



JOBBER DRILLS (SINGLE HANG PACK)

Code	Size	l_2	l_1	\$ ea.
JS13-00156	1/64	5	20	8.12
JS13-00157	0.4	5	20	6.15
JS13-00165	0.42	5	20	8.13
JS13-00177	0.45	5	20	6.15
JS13-00189	0.48	5	20	8.13
JS13-00197	0.5	6	22	6.15
JS13-00205	0.52	6	22	8.13
JS13-00217	0.55	7	24	6.15
JS13-00228	0.58	7	24	8.13
JS13-00236	0.6	7	24	6.15
JS13-00244	0.62	8	26	8.18
JS13-00256	0.65	8	26	6.15
JS13-00268	0.68	9	28	7.62
JS13-00276	0.7	9	28	6.15
JS13-00283	0.72	9	28	6.55
JS13-00295	0.75	9	28	6.15
JS13-00307	0.78	10	30	6.15
JS14-00312	1/32	10	30	4.61
JS13-00315	0.8	10	30	4.33
JS13-00323	0.82	10	30	6.13
JS13-00335	0.85	10	30	4.33
JS13-00346	0.88	11	32	6.15
JS13-00354	0.9	11	32	4.33
JS13-00362	0.92	11	32	6.15
JS13-00374	0.95	11	32	4.33
JS13-00386	0.98	12	34	6.15
JS13-00394	1.0	12	34	3.10
JS13-00413	1.05	12	34	4.27
JS13-00433	1.1	14	36	3.10
JS13-00453	1.15	14	36	4.27
JS14-00469	3/64	16	38	3.10
JS13-00472	1.2	16	38	3.10

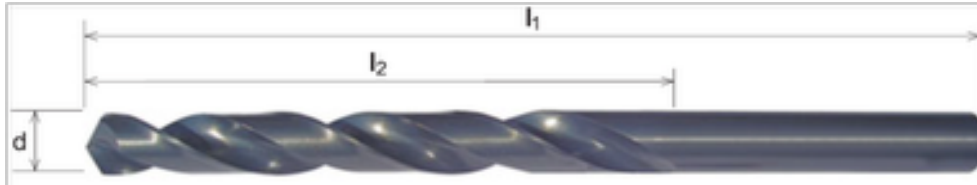
Code	Size	l_2	l_1	\$ ea.
JS13-00492	1.25	16	38	4.27
JS13-00512	1.3	16	38	3.15
JS13-00531	1.35	18	40	4.35
JS13-00551	1.4	18	40	3.52
JS13-00571	1.45	18	40	3.52
JS13-00591	1.5	18	40	2.93
JS13-00610	1.55	20	43	3.54
JS14-00625	1/16	20	43	2.95
JS13-00630	1.6	20	43	2.92
JS13-00650	1.65	20	43	3.54
JS13-00669	1.7	20	43	2.81
JS13-00689	1.75	22	46	3.52
JS13-00709	1.8	22	46	2.75
JS13-00728	1.85	22	46	3.54
JS13-00748	1.9	22	46	2.75
JS13-00768	1.95	24	49	3.54
JS14-00781	5/64	24	49	2.75
JS13-00787	2.0	24	49	2.75
JS13-00807	2.05	24	49	3.15
JS13-00827	2.1	24	49	2.75
JS13-00846	2.15	27	53	3.15
JS13-00866	2.2	27	53	2.75
JS13-00886	2.25	27	53	3.15
JS13-00906	2.3	27	53	2.75
JS13-00925	2.35	27	53	3.15
JS14-00938	3/32	30	57	2.75
JS13-00945	2.4	30	57	2.75
JS13-00965	2.45	30	57	3.15
JS13-00984	2.5	30	57	2.75
JS13-01004	2.55	30	57	3.15
JS13-01024	2.6	30	57	2.75
JS13-01043	2.65	30	57	3.15



JOBBER DRILLS (SINGLE HANG PACK)

Code	Size	l ₂	l ₁	\$ ea.
JS13-01063	2.7	33	61	2.62
JS13-01083	2.75	33	61	2.75
JS14-01094	7/64	33	61	2.62
JS13-01102	2.8	33	61	2.62
JS13-01122	2.85	33	61	2.78
JS13-01142	2.9	33	61	2.62
JS13-01161	2.95	33	61	2.78
JS13-01181	3.0	33	61	2.70
JS13-01220	3.1	36	65	2.70
JS14-01250	1/8	36	65	2.70
JS13-01260	3.2	36	65	2.96
JS13-01279	3.25	36	65	2.92
JS13-01299	3.3	36	65	2.92
JS13-01339	3.4	39	70	2.92
JS13-01378	3.5	39	70	3.01
JS14-01406	9/64	39	70	3.07
JS13-01417	3.6	39	70	2.92
JS13-01457	3.7	39	70	3.07
JS13-01476	3.75	39	70	3.07
JS13-01496	3.8	43	75	3.07
JS13-01535	3.9	43	75	3.20
JS14-01562	5/32	43	75	3.20
JS13-01575	4.0	43	75	3.26
JS13-01614	4.1	43	75	3.34
JS13-01654	4.2	43	75	3.49
JS13-01673	4.25	43	75	3.34
JS13-01693	4.3	47	80	3.48
JS14-01719	11/64	47	80	3.51
JS13-01732	4.4	47	80	3.48
JS13-01772	4.5	47	80	3.48
JS13-01811	4.6	47	80	3.63
JS13-01850	4.7	47	80	3.63

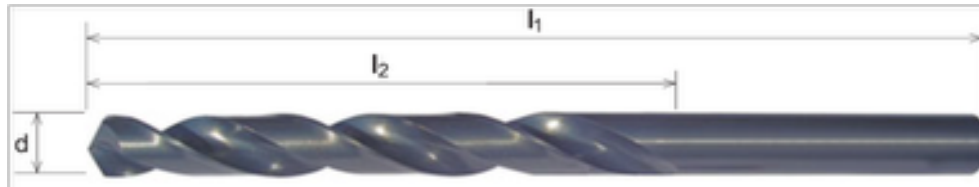
Code	Size	l ₂	l ₁	\$ ea.
JS13-01870	4.75	47	80	3.74
JS13-01875	3/16	52	86	3.74
JS13-01890	4.8	52	86	3.85
JS13-01929	4.9	52	86	3.85
JS13-01968	5.0	52	86	3.99
JS13-02008	5.1	52	86	3.99
JS14-02031	13/64	52	86	4.27
JS13-02047	5.2	52	86	4.64
JS13-02066	5.25	52	86	4.44
JS13-02087	5.3	52	86	4.44
JS13-02126	5.4	57	93	4.44
JS13-02165	5.5	57	93	4.44
JS14-02188	7/32	57	93	4.56
JS13-02205	5.6	57	93	4.56
JS13-02244	5.7	57	93	4.67
JS13-02263	5.75	57	93	4.52
JS13-02283	5.8	57	93	4.52
JS13-02323	5.9	57	93	4.52
JS14-02344	15/64	57	93	4.52
JS13-02362	6.0	57	93	4.66
JS13-02402	6.1	63	101	4.78
JS13-02441	6.2	63	101	4.78
JS13-02460	6.25	63	101	5.15
JS13-02480	6.3	63	101	4.97
JS14-02500	1/4	63	101	5.09
JS13-02520	6.4	63	101	5.23
JS13-02559	6.5	63	101	5.23
JS13-02598	6.6	63	101	5.57
JS13-02638	6.7	63	101	5.57
JS14-02656	17/64	69	109	5.57
JS13-02657	6.75	69	109	5.79
JS13-02677	6.8	69	109	5.63



JOBBER DRILLS (SINGLE HANG PACK)

Code	Size	l_2	l_1	\$ ea.
JS13-02717	6.9	69	109	5.82
JS13-02756	7.0	69	109	5.85
JS13-02795	7.1	69	109	5.85
JS14-02812	9/32	69	109	6.07
JS13-02835	7.2	69	109	6.16
JS13-02854	7.25	69	109	6.46
JS13-02874	7.3	69	109	6.16
JS13-02913	7.4	69	109	6.16
JS13-02953	7.5	69	109	6.44
JS14-02969	19/64	75	117	6.44
JS13-02992	7.6	75	117	6.44
JS13-03032	7.7	75	117	6.83
JS13-03051	7.75	75	117	7.14
JS13-03071	7.8	75	117	6.83
JS13-03110	7.9	75	117	6.83
JS14-03125	5/16	75	117	6.84
JS13-03150	8.0	75	117	6.83
JS13-03189	8.1	75	117	7.29
JS13-03228	8.2	75	117	7.29
JS13-03258	8.25	75	117	7.57
JS13-03268	8.3	75	117	7.29
JS14-03281	21/64	75	117	7.29
JS13-03307	8.4	75	117	7.39
JS13-03346	8.5	75	117	7.54
JS13-03386	8.6	81	125	7.84
JS13-03425	8.7	81	125	7.84
JS14-03438	11/32	81	125	7.84
JS13-03444	8.75	81	125	8.36
JS13-03465	8.8	81	125	8.13
JS13-03504	8.9	81	125	8.13
JS13-03543	9.0	81	125	8.13
JS13-03583	9.1	81	125	8.40

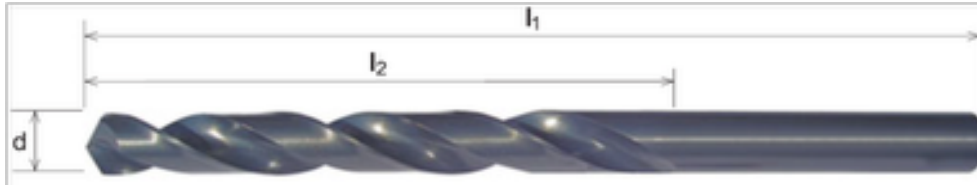
Code	Size	l_2	l_1	\$ ea.
JS14-03594	23/64	81	125	8.40
JS13-03622	9.2	81	125	8.85
JS13-03641	9.25	81	125	9.43
JS13-03661	9.3	81	125	8.85
JS13-03701	9.4	81	125	8.85
JS13-03740	9.5	81	125	8.85
JS14-03750	3/8	87	133	8.85
JS13-03780	9.6	87	133	9.28
JS13-03819	9.7	87	133	9.28
JS13-03838	9.75	87	133	9.79
JS13-03858	9.8	87	133	9.34
JS13-03898	9.9	87	133	9.34
JS14-03906	25/64	87	133	9.34
JS13-03937	10.0	87	133	9.39
JS13-03976	10.1	87	133	13.53
JS13-04016	10.2	87	133	10.27
JS13-04035	10.25	87	133	13.53
JS13-04055	10.3	87	133	13.53
JS14-04062	13/32	87	133	10.27
JS13-04094	10.4	87	133	14.26
JS13-04134	10.5	87	133	10.44
JS13-04173	10.6	87	133	14.88
JS13-04213	10.7	94	142	14.88
JS14-04219	27/64	94	142	11.28
JS13-04232	10.75	94	142	16.26
JS13-04252	10.8	94	142	16.26
JS13-04291	10.9	94	142	16.26
JS13-04331	11.0	94	142	11.84
JS13-04370	11.1	94	142	17.60
JS14-04375	7/16	94	142	12.06
JS13-04409	11.2	94	142	18.26
JS13-04429	11.25	94	142	18.26



JOBBER DRILLS (SINGLE HANG PACK)

Code	Size	l_2	l_1	\$ ea.
JS13-04449	11.3	94	142	18.26
JS13-04488	11.4	94	142	18.12
JS13-04528	11.5	94	142	13.04
JS14-04531	29/64	94	142	13.04
JS13-04567	11.6	94	142	19.60
JS13-04606	11.7	94	142	19.60
JS13-04625	11.75	94	142	19.60
JS13-04646	11.8	94	142	19.60
JS13-04685	11.9	101	151	18.68
JS14-04688	15/32	101	151	14.54
JS13-04724	12.0	101	151	14.68
JS13-04764	12.1	101	151	21.63
JS13-04803	12.2	101	151	21.63

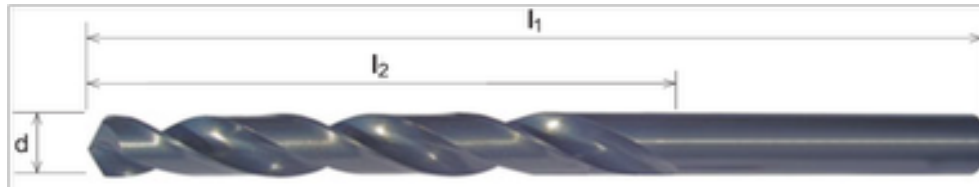
Code	Size	l_2	l_1	\$ ea.
JS13-04822	12.25	101	151	22.42
JS13-04843	12.3	101	151	21.63
JS14-04844	31/64	101	151	15.33
JS13-04882	12.4	101	151	22.33
JS13-04924	12.5	101	151	15.98
JS13-04961	12.6	101	151	22.33
JS13-05000	12.7	101	151	23.00
JS14-05000	1/2	101	151	16.00
JS13-05019	12.75	101	151	23.73
JS13-05039	12.8	101	151	23.73
JS13-05079	12.9	101	151	23.73
JS13-05118	13.0	101	151	17.07



LEFT HAND JOBBER DILLS (BULK)

Code	Size	l ₂	l ₁	\$ ea.
LHJ-00394	1.0	12	34	8.53
LHJ-00433	1.1	14	36	9.20
LHJ-00469	3/64	16	38	10.78
LHJ-00472	1.2	16	38	9.20
LHJ-00512	1.3	16	38	9.20
LHJ-00551	1.4	18	40	9.20
LHJ-00591	1.5	18	40	7.23
LHJ-00625	1/16	20	43	7.23
LHJ-00630	1.6	20	43	9.20
LHJ-00669	1.7	20	43	9.20
LHJ-00709	1.8	22	46	9.20
LHJ-00748	1.9	22	46	9.20
LHJ-00781	5/64	24	49	9.49
LHJ-00787	2.0	24	49	7.23
LHJ-00827	2.1	24	49	7.23
LHJ-00866	2.2	27	53	7.23
LHJ-00906	2.3	27	53	7.23
LHJ-00938	3/32	30	57	9.49
LHJ-00945	2.4	30	57	7.23
LHJ-00984	2.5	30	57	7.23
LHJ-01024	2.6	30	57	7.23
LHJ-01063	2.7	33	61	7.23
LHJ-01094	7/64	33	61	9.49
LHJ-01102	2.8	33	61	7.23
LHJ-01142	2.9	33	61	7.23
LHJ-01181	3.0	33	61	7.23
LHJ-01220	3.1	36	65	9.20
LHJ-01250	1/8	36	65	9.49
LHJ-01260	3.2	36	65	9.20
LHJ-01299	3.3	36	65	9.20
LHJ-01339	3.4	39	70	9.20
LHJ-01378	3.5	39	70	8.68

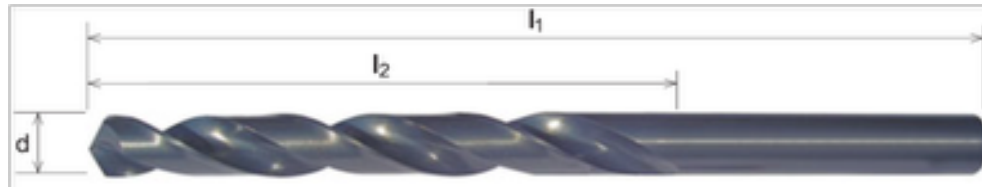
Code	Size	l ₂	l ₁	\$ ea.
LHJ-01406	9/64	39	70	10.78
LHJ-01417	3.6	39	70	9.20
LHJ-01457	3.7	39	70	9.20
LHJ-01496	3.8	43	75	9.20
LHJ-01535	3.9	43	75	9.20
LHJ-01562	5/32	43	75	9.20
LHJ-01575	4.0	43	75	7.83
LHJ-01614	4.1	43	75	9.20
LHJ-01654	4.2	43	75	9.20
LHJ-01693	4.3	47	80	9.20
LHJ-01719	11/64	47	80	10.78
LHJ-01732	4.4	47	80	9.20
LHJ-01772	4.5	47	80	9.20
LHJ-01811	4.6	47	80	12.79
LHJ-01850	4.7	47	80	12.79
LHJ-01875	3/16	52	86	14.40
LHJ-01890	4.8	52	86	12.79
LHJ-01929	4.9	52	86	12.79
LHJ-01968	5.0	52	86	10.78
LHJ-02008	5.1	52	86	13.38
LHJ-02031	13/64	52	86	16.35
LHJ-02047	5.2	52	86	13.38
LHJ-02087	5.3	52	86	13.38
LHJ-02126	5.4	57	93	13.38
LHJ-02165	5.5	57	93	12.79
LHJ-02188	7/32	57	93	18.25
LHJ-02205	5.6	57	93	15.35
LHJ-02244	5.7	57	93	15.35
LHJ-02283	5.8	57	93	15.35
LHJ-02323	5.9	57	93	15.35
LHJ-02344	15/64	57	93	18.32
LHJ-02362	6.0	57	93	12.79



LEFT HAND JOBBER DILLS (BULK)

Code	Size	l ₂	l ₁	\$ ea.
LHJ-02402	6.1	63	101	17.30
LHJ-02441	6.2	63	101	17.30
LHJ-02480	6.3	63	101	17.30
LHJ-02500	1/4	63	101	19.79
LHJ-02520	6.4	63	101	17.30
LHJ-02559	6.5	63	101	15.35
LHJ-02598	6.6	63	101	18.96
LHJ-02638	6.7	63	101	18.96
LHJ-02656	17/64	69	109	23.35
LHJ-02677	6.8	69	109	18.96
LHJ-02717	6.9	69	109	18.96
LHJ-02756	7.0	69	109	15.33
LHJ-02795	7.1	69	109	20.27
LHJ-02812	9/32	69	109	23.11
LHJ-02835	7.2	69	109	20.27
LHJ-02874	7.3	69	109	20.27
LHJ-02913	7.4	69	109	20.27
LHJ-02953	7.5	69	109	18.96
LHJ-02969	19/64	75	117	28.03
LHJ-02992	7.6	75	117	25.12
LHJ-03032	7.7	75	117	25.12
LHJ-03071	7.8	75	117	25.12
LHJ-03110	7.9	75	117	25.12
LHJ-03125	5/16	75	117	28.79
LHJ-03150	8.0	75	117	21.74
LHJ-03189	8.1	75	117	29.38
LHJ-03228	8.2	75	117	29.38
LHJ-03268	8.3	75	117	29.38
LHJ-03281	21/64	75	117	34.54
LHJ-03307	8.4	75	117	29.38
LHJ-03346	8.5	75	117	25.12
LHJ-03386	8.6	81	125	39.46

Code	Size	l ₂	l ₁	\$ ea.
LHJ-03425	8.7	81	125	39.46
LHJ-03438	11/32	81	125	44.80
LHJ-03465	8.8	81	125	39.46
LHJ-03504	8.9	81	125	39.46
LHJ-03543	9.0	81	125	29.38
LHJ-03583	9.1	81	125	42.30
LHJ-03594	23/64	81	125	49.36
LHJ-03622	9.2	81	125	42.30
LHJ-03661	9.3	81	125	42.30
LHJ-03701	9.4	81	125	42.30
LHJ-03740	9.5	81	125	32.23
LHJ-03750	3/8	87	133	49.36
LHJ-03780	9.6	87	133	45.87
LHJ-03819	9.7	87	133	45.87
LHJ-03858	9.8	87	133	45.87
LHJ-03898	9.9	87	133	45.87
LHJ-03906	25/64	87	133	59.14
LHJ-03937	10.0	87	133	32.23
LHJ-03976	10.1	87	133	45.87
LHJ-04016	10.2	87	133	45.87
LHJ-04055	10.3	87	133	45.87
LHJ-04062	13/32	87	133	59.14
LHJ-04094	10.4	87	133	45.87
LHJ-04134	10.5	87	133	42.30
LHJ-04173	10.6	87	133	54.75
LHJ-04213	10.7	94	142	54.75
LHJ-04219	27/64	94	142	69.63
LHJ-04252	10.8	94	142	54.75
LHJ-04291	10.9	94	142	54.75
LHJ-04331	11.0	94	142	45.87
LHJ-04370	11.1	94	142	62.52
LHJ-04375	7/16	94	142	59.14



LEFT HAND JOBBER DILLS (BULK)

Code	Size	l_2	l_1	\$ ea.
LHJ-04409	11.2	94	142	62.52
LHJ-04449	11.3	94	142	62.52
LHJ-04488	11.4	94	142	62.52
LHJ-04528	11.5	94	142	54.75
LHJ-04531	29/64	94	142	69.63
LHJ-04567	11.6	94	142	62.52
LHJ-04606	11.7	94	142	62.52
LHJ-04646	11.8	94	142	62.52
LHJ-04685	11.9	101	151	62.52
LHJ-04688	15/32	101	151	69.63
LHJ-04724	12.0	101	151	54.75
LHJ-04764	12.1	101	151	70.79

Code	Size	l_2	l_1	\$ ea.
LHJ-04803	12.2	101	151	70.79
LHJ-04843	12.3	101	151	70.79
LHJ-04844	31/64	101	151	77.61
LHJ-04882	12.4	101	151	70.79
LHJ-04924	12.5	101	151	64.82
LHJ-04961	12.6	101	151	70.79
LHJ-05000	12.7	101	151	70.79
LHJ-05000	1/2	101	151	74.07
LHJ-05039	12.8	101	151	70.79
LHJ-05079	12.9	101	151	70.79
LHJ-05118	13.0	101	151	77.61



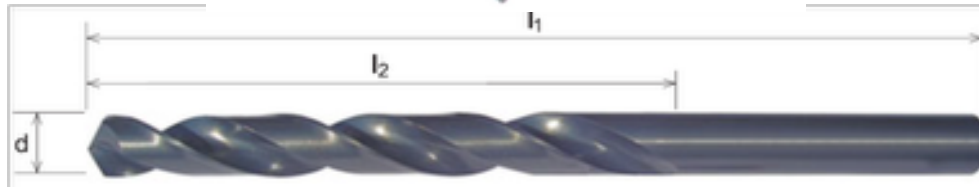
TiNITE COATED JOBBER DILLS (BULK)

Code	Size	l ₂	l ₁	\$ ea.
J105-00394	1.0	12	34	4.83
J105-00591	1.5	18	40	5.07
J106-00625	1/16	20	43	5.17
J106-00781	5/64	24	49	5.39
J105-00787	2.0	24	49	5.17
J106-00938	3/32	30	57	5.64
J105-00984	2.5	30	57	5.67
J106-01094	7/64	33	61	5.84
J105-01181	3.0	33	61	5.78
J106-01250	1/8	36	65	6.00
J105-01378	3.5	39	70	5.84
J106-01406	9/64	39	70	6.78
J106-01562	5/32	43	75	7.16
J106-01575	4.0	43	75	6.00
J106-01719	11/64	47	80	7.39
J105-01772	4.5	47	80	6.78
J106-01875	3/16	52	86	7.64
J105-01968	5.0	52	86	7.61
J106-02031	13/64	52	86	8.94
J105-02165	5.5	57	93	8.24
J106-02188	7/32	57	93	9.84
J106-02344	15/64	57	93	10.39
J105-02362	6.0	57	93	8.93
J106-02500	1/4	63	101	10.66
J105-02559	6.5	63	101	9.84
J106-02656	17/64	69	109	10.88
J105-02756	7.0	69	109	10.17

Code	Size	l ₂	l ₁	\$ ea.
J106-02812	9/32	69	109	11.23
J105-02953	7.5	69	109	10.69
J106-02969	19/64	75	117	11.59
J106-03125	5/16	75	117	12.03
J105-03150	8.0	75	117	11.46
J106-03281	21/64	75	117	12.36
J105-03346	8.5	75	117	12.03
J106-03438	11/32	81	125	12.77
J105-03543	9.0	81	125	12.69
J106-03594	23/64	81	125	13.16
J105-03740	9.5	81	125	13.61
J106-03750	3/8	87	133	13.95
J106-03906	25/64	87	133	14.62
J105-03937	10.0	87	133	14.45
J106-04062	13/32	87	133	14.71
J105-04134	10.5	87	133	14.96
J106-04219	27/64	94	142	14.96
J105-04331	11.0	94	142	15.99
J106-04375	7/16	94	142	15.93
J105-04528	11.5	94	142	16.59
J106-04531	29/64	94	142	16.59
J106-04688	15/32	101	151	17.08
J105-04724	12.0	101	151	17.55
J106-04844	31/64	101	151	18.28
J105-04924	12.5	101	151	18.21
J106-05000	1/2	101	151	18.89
J105-05118	13.0	101	151	19.35

CAPITAL

CUTTING TOOLS



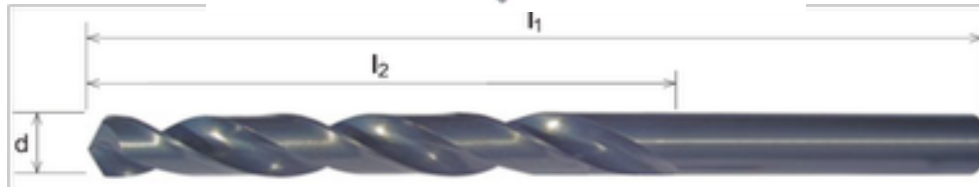
LETTER GAUGE JOBBER DRILLS

Code	Letter	l_2	l_1	\$ ea.
J109-02340	A	57	93	9.04
J109-02380	B	57	93	9.32
J109-02420	C	63	101	9.57
J109-02460	D	63	101	10.31
J109-02500	E	63	101	9.94
J109-02570	F	63	101	10.45
J109-02610	G	63	101	11.15
J109-02660	H	63	101	11.59
J109-02720	I	69	109	11.63
J109-02770	J	69	109	11.70
J109-02810	K	69	109	11.70
J109-02900	L	69	109	12.33
J109-02950	M	69	109	12.88

Code	Letter	l_2	l_1	\$ ea.
J109-03000	N	75	117	13.65
J109-03160	O	75	117	13.65
J109-03230	P	75	117	14.60
J109-03320	Q	75	117	14.78
J109-03390	R	81	125	15.66
J109-03480	S	81	125	16.27
J109-03580	T	81	125	16.80
J109-03680	U	81	125	17.68
J109-03770	V	81	125	17.82
J109-03860	W	87	133	18.11
J109-03970	X	87	133	18.24
J109-04040	Y	87	133	18.32
J109-04130	Z	87	133	18.49

CAPITAL

CUTTING TOOLS



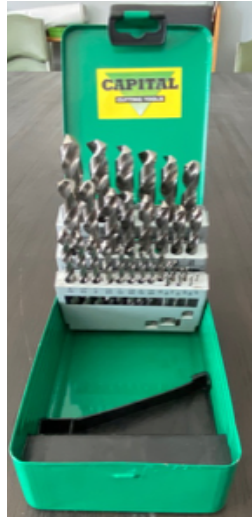
NUMBER GAUGE JOBBER DRILLS

Code	Number	l_2	l_1	\$ ea.
J110-02280	1	57	93	4.74
J110-02210	2	57	93	4.74
J110-02130	3	57	93	4.74
J110-02090	4	52	86	4.74
J110-02055	5	52	86	4.74
J110-02040	6	52	86	4.74
J110-02010	7	52	86	4.74
J110-01990	8	52	86	4.74
J110-01960	9	52	86	4.74
J110-01935	10	52	86	4.74
J110-01910	11	52	86	5.28
J110-01890	12	52	86	5.28
J110-01850	13	47	80	5.28
J110-01820	14	47	80	5.28
J110-01800	15	47	80	5.28
J110-01770	16	47	80	5.28
J110-01730	17	47	80	5.28
J110-01695	18	47	80	5.28
J110-01660	19	43	75	5.28
J110-01610	20	43	75	5.28
J110-01590	21	43	75	5.45
J110-01570	22	43	75	5.45
J110-01540	23	43	75	5.45
J110-01520	24	43	75	5.45
J110-01495	25	43	75	5.45
J110-01470	26	39	70	5.45
J110-01440	27	39	70	5.45
J110-01405	28	39	70	5.45
J110-01360	29	39	70	5.45
J110-01285	30	36	65	5.45

Code	Number	l_2	l_1	\$ ea.
J110-01200	31	36	65	5.78
J110-01160	32	33	61	5.78
J110-01130	33	33	61	5.78
J110-01110	34	33	61	5.78
J110-01100	35	33	61	5.78
J110-01065	36	33	61	5.78
J110-01040	37	30	57	5.78
J110-01015	38	30	57	5.78
J110-00995	39	30	57	5.78
J110-00980	40	30	57	5.78
J110-00960	41	30	57	6.44
J110-00935	42	27	53	6.44
J110-00890	43	27	53	6.44
J110-00860	44	27	53	6.44
J110-00820	45	24	49	6.44
J110-00810	46	24	49	6.44
J110-00785	47	24	49	6.44
J110-00760	48	24	49	6.44
J110-00730	49	22	46	6.44
J110-00700	50	22	46	6.44
J110-00670	51	20	43	7.75
J110-00635	52	20	43	7.75
J110-00595	53	18	40	7.75
J110-00550	54	18	40	7.75
J110-00520	55	18	40	7.75
J110-00465	56	16	38	7.75
J110-00430	57	14	36	7.75
J110-00420	58	12	34	7.75
J110-00410	59	12	34	7.75
J110-00400	60	12	34	7.75

CAPITAL

CUTTING TOOLS



METAL CASE DRILL SETS (HSS)

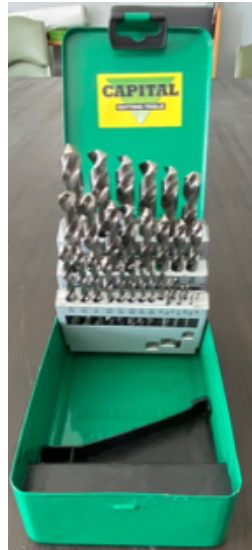
Code	Set No.	No. of Drills	Drill Sizes	\$ ea.
JDS-100	CM-1	25	1mm – 13mm in 0.5mm rises	163.84
JDS-200	CM-2	19	1mm – 10mm in 0.5mm rises	82.40
JDS-300	CM-3	29	1/16 – 1/2 in 1/64 rises	180.01
JDS-400	CM-4	21	1/16 – 3/8 in 1/64 rises	84.22

METAL CASE DRILL SETS (COBALT)

Code	Set No.	No. of Drills	Drill Sizes	\$ ea.
JDS-500	CM-5	25	1mm – 13mm in 0.5mm rises	315.44
JDS-600	CM-6	19	1mm – 10mm in 0.5mm rises	160.00
JDS-700	CM-7	29	1/16 – 1/2 in 1/64 rises	339.09
JDS-800	CM-8	21	1/16 – 3/8 in 1/64 rises	169.36

REFILL SETS (HSS)

Code	Set No.	No. of Drills	Drill Sizes	\$ ea.
JSR-A	RF-1	25	1mm – 13mm in 0.5mm rises	150.43
JSR-B	RF-2	19	1mm – 10mm in 0.5mm rises	68.99
JSR-C	RF-3	29	1/16 – 1/2 in 1/64 rises	166.59
JSR-D	RF-4	21	1/16 – 3/8 in 1/64 rises	70.87



REFILL SETS (COBALT)

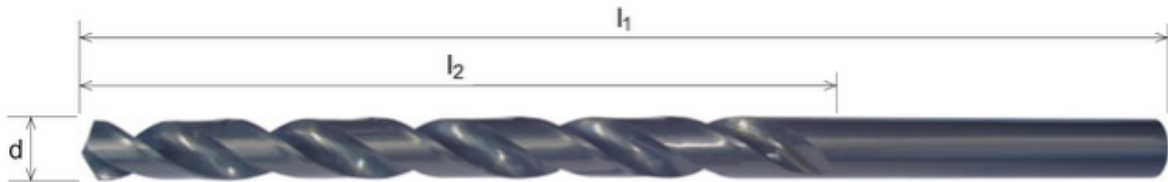
Code	Set No.	No. of Drills	Sizes	\$ ea.
JSR-E	RF-5	25	1mm – 13mm in 0.5mm rises	299.34
JSR-F	RF-6	19	1mm – 10mm in 0.5mm rises	143.89
JSR-G	RF-7	29	1/16 – 1/2 in 1/64 rises	322.03
JSR-H	RF-8	21	1/16 – 3/8 in 1/64 rises	159.30

METAL CASE (EMPTY)

Code	Set No.	No. of Drills	Sizes	\$ ea.
JDE-100	JDE-1	N / A	1mm – 13mm in 0.5mm rises	17.05
JDE-200	JDE-2	N / A	1mm – 10mm in 0.5mm rises	10.06
JDE-300	JDE-3	N / A	1/16 – 1/2 in 1/64 rises	17.05
JDE-400	JDE-4	N / A	1/16 – 3/8 in 1/64 rises	10.06

LEFT HAND COBALT METAL CASE DRILL SETS

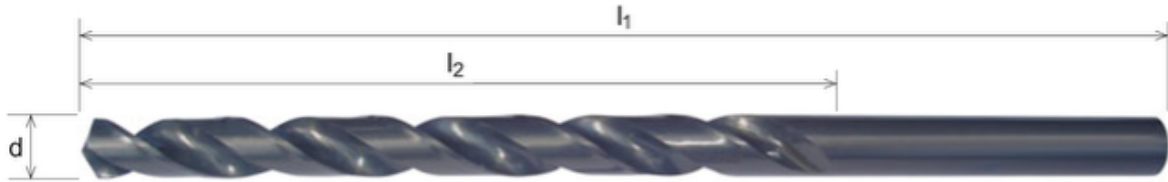
Code	Set No.	No. of Drills	Sizes	\$ ea.
LHCJ-100	LHCJ-1	13	1mm – 13mm in 1.0mm rises	217.24
LHCJ-200	LHCJ-2	10	1mm – 10mm in 1.0mm rises	143.38



LONG SERIES DRILLS (BULK)

Code	Size	l_2	l_1	\$ ea.
J107-00394	1.0	33	56	5.44
J107-00433	1.1	37	60	6.51
J108-00469	3/64	41	65	6.51
J107-00472	1.2	41	65	6.51
J107-00512	1.3	41	65	6.51
J107-00551	1.4	45	70	6.51
J107-00591	1.5	45	70	4.42
J108-00625	1/16	50	76	6.22
J107-00630	1.6	50	76	5.31
J107-00669	1.7	50	76	5.31
J107-00709	1.8	53	80	5.31
J107-00748	1.9	53	80	5.31
J108-00781	5/64	56	85	4.47
J107-00787	2.0	56	85	5.35
J107-00827	2.1	56	85	6.43
J107-00866	2.2	59	90	6.43
J107-00906	2.3	59	90	6.43
J108-00938	3/32	62	95	4.49
J107-00945	2.4	62	95	6.43
J107-00984	2.5	62	95	5.35
J107-01024	2.6	62	95	6.43
J107-01063	2.7	66	100	6.43
J108-01094	7/64	66	100	4.49
J107-01102	2.8	66	100	6.43
J107-01142	2.9	66	100	6.43
J107-01181	3.0	66	100	5.35
J107-01220	3.1	69	106	5.82
J108-01250	1/8	69	106	5.05
J107-01260	3.2	69	106	5.82
J107-01299	3.3	69	106	5.82
J107-01339	3.4	73	112	5.82
J107-01378	3.5	73	112	5.82

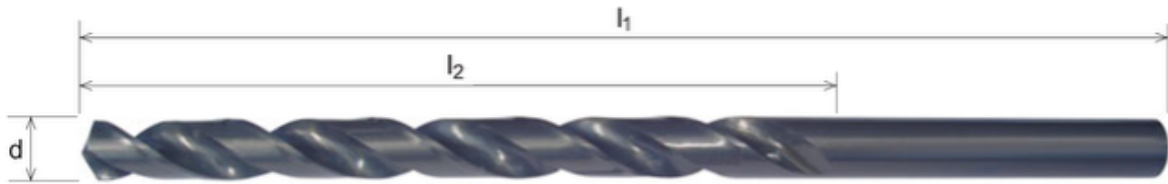
Code	Size	l_2	l_1	\$ ea.
J108-01406	9/64	73	112	5.30
J107-01417	3.6	73	112	7.01
J107-01457	3.7	73	112	7.01
J107-01496	3.8	78	119	7.01
J107-01535	3.9	78	119	7.01
J108-01562	5/32	78	119	5.67
J107-01575	4.0	78	119	6.07
J107-01614	4.1	78	119	7.27
J107-01654	4.2	78	119	7.27
J107-01693	4.3	82	126	7.27
J108-01719	11/64	82	126	6.07
J107-01732	4.4	82	126	7.27
J107-01772	4.5	82	126	7.48
J107-01811	4.6	82	126	8.98
J107-01850	4.7	82	126	8.98
J108-01875	3/16	87	132	7.48
J107-01890	4.8	87	132	8.98
J107-01929	4.9	87	132	8.98
J107-01968	5.0	87	132	8.06
J107-02008	5.1	87	132	9.69
J108-02031	13/64	87	132	8.06
J107-02047	5.2	87	132	9.69
J107-02087	5.3	87	132	9.69
J107-02126	5.4	91	139	8.37
J107-02165	5.5	91	139	8.37
J108-02188	7/32	91	139	8.37
J107-02205	5.6	91	139	10.05
J107-02244	5.7	91	139	10.05
J107-02283	5.8	91	139	10.05
J107-02323	5.9	91	139	10.05
J108-02344	15/64	91	139	8.67
J107-02362	6.0	91	139	8.96



LONG SERIES DRILLS (BULK)

Code	Size	l ₂	l ₁	\$ ea.
J107-02402	6.1	97	148	10.77
J107-02441	6.2	97	148	10.77
J107-02480	6.3	97	148	10.77
J108-02500	1/4	97	148	9.72
J107-02520	6.4	97	148	10.77
J107-02559	6.5	97	148	13.03
J107-02598	6.6	97	148	15.12
J107-02638	6.7	97	148	15.12
J108-02656	17/64	102	156	13.03
J107-02677	6.8	102	156	15.12
J107-02717	6.9	102	156	15.12
J107-02756	7.0	102	156	13.03
J107-02795	7.1	102	156	15.63
J108-02812	9/32	102	156	12.72
J107-02835	7.2	102	156	18.77
J107-02874	7.3	102	156	18.77
J107-02913	7.4	102	156	18.77
J107-02953	7.5	102	156	14.05
J108-02969	19/64	109	165	14.05
J107-02992	7.6	109	165	16.88
J107-03032	7.7	109	165	15.23
J107-03071	7.8	109	165	16.88
J107-03110	7.9	109	165	16.88
J108-03125	5/16	109	165	14.62
J107-03150	8.0	109	165	16.17
J107-03189	8.1	109	165	19.36
J107-03228	8.2	109	165	19.36
J107-03268	8.3	109	165	19.36
J108-03281	21/64	109	165	16.15
J107-03307	8.4	109	165	19.36
J107-03346	8.5	109	165	16.15
J107-03386	8.6	115	175	19.36

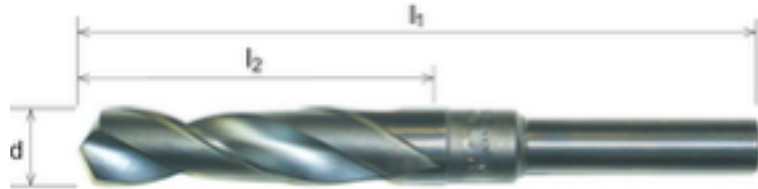
Code	Size	l ₂	l ₁	\$ ea.
J107-03425	8.7	115	175	19.36
J108-03438	11/32	115	175	18.24
J107-03465	8.8	115	175	19.36
J107-03504	8.9	115	175	19.36
J107-03543	9.0	115	175	18.64
J107-03583	9.1	115	175	22.42
J108-03594	23/64	115	175	18.64
J107-03622	9.2	115	175	22.42
J107-03661	9.3	115	175	22.42
J107-03701	9.4	115	175	22.42
J107-03740	9.5	115	175	19.62
J108-03750	3/8	121	184	19.13
J107-03780	9.6	121	184	23.52
J107-03819	9.7	121	184	23.52
J107-03858	9.8	121	184	23.52
J107-03898	9.9	121	184	23.52
J108-03906	25/64	121	184	20.18
J107-03937	10.0	121	184	20.18
J107-03976	10.1	121	184	23.18
J107-04016	10.2	121	184	28.26
J107-04055	10.3	121	184	28.26
J108-04062	13/32	121	184	23.18
J107-04094	10.4	121	184	28.26
J107-04134	10.5	121	184	23.18
J107-04173	10.6	121	184	32.95
J107-04213	10.7	128	195	32.95
J108-04219	27/64	128	195	25.45
J107-04252	10.8	128	195	32.95
J107-04291	10.9	128	195	32.95
J107-04331	11.0	128	195	26.25
J107-04370	11.1	128	195	36.66
J108-04375	7/16	128	195	26.25



LONG SERIES DRILLS (BULK)

Code	Size	l_2	l_1	\$ ea.
J107-04409	11.2	128	195	36.66
J107-04449	11.3	128	195	36.66
J107-04488	11.4	128	195	36.66
J107-04528	11.5	128	195	29.97
J108-04531	29/64	128	195	26.93
J107-04567	11.6	128	195	41.95
J107-04606	11.7	128	195	41.95
J107-04646	11.8	128	195	41.95
J107-04685	11.9	134	205	41.95
J108-04688	15/32	134	205	30.64
J107-04724	12.0	134	205	32.14
J107-04764	12.1	134	205	45.02
J107-04803	12.2	134	205	45.02
J107-04843	12.3	134	205	45.02
J108-04844	31/64	134	205	32.14
J107-04882	12.4	134	205	45.02
J107-04924	12.5	134	205	33.67
J107-04961	12.6	134	205	47.11
J107-05000	12.7	134	205	47.11
J108-05000	1/2	134	205	33.67

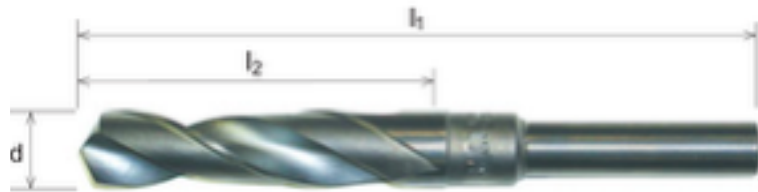
Code	Size	l_2	l_1	\$ ea.
J107-05039	12.8	134	205	47.11
J107-05079	12.9	134	205	47.11
J107-05118	13.0	134	205	35.14
J108-05156	33/64	140	214	35.83
J108-05312	17/32	140	214	40.63
J107-05512	14.0	140	214	43.77
J108-05625	9/16	144	220	40.96
J107-05906	15.0	144	220	49.74
J107-05937	19/32	149	227	49.75
J108-06250	5/8	149	227	45.40
J107-06299	16.0	149	227	45.40
J107-06693	17.0	154	235	54.59
J107-07087	18.0	158	241	59.22
J107-07480	19.0	162	247	60.76
J107-07874	20.0	166	254	68.89
J107-08267	21.0	171	261	70.43
J107-08661	22.0	176	268	74.46
J107-09055	23.0	180	275	79.83
J107-09448	24.0	185	282	91.11
J107-09842	25.0	185	290	98.14



HSS 1/2" REDUCED SHANK DRILLS

Code	Size	l_2	l_1	\$ ea.
RDM13	13.0	94	142	27.34
RDI27	17/32	80	152	36.11
RDI28	35/64	80	152	36.11
RDM13.5	13.5	80	152	36.11
RDM14	14.0	80	152	36.11
RDI29	9/16	80	152	36.11
RDM14.5	14.5	80	152	36.11
RDI30	37/64	80	152	36.11
RDM15	15.0	80	152	39.54
RDI31	19/32	80	152	39.54
RDI32	39/64	80	152	39.54
RDM15.5	15.5	80	152	39.54
RDI33	5/8	80	152	39.54
RDI34	41/64	80	152	39.54
RDM16	16.0	80	152	39.54
RDM16.5	16.5	80	152	44.68
RDI35	21/32	80	152	44.68
RDM17	17.0	80	152	44.68
RDI36	43/64	80	152	44.68
RDI37	11/16	80	152	45.55
RDM17.5	17.5	80	152	46.42
RDI38	45/64	80	152	46.80
RDM18	18.0	80	152	46.42
RDI39	23/32	80	152	46.42
RDM18.5	18.5	80	152	48.15
RDI40	47/64	80	152	48.15
RDM19	19.0	80	152	48.15
RDI41	3/4	80	152	48.15
RDI42	49/64	76	152	55.04

Code	Size	l_2	l_1	\$ ea.
RDM19.5	19.5	76	152	55.04
RDI43	25/32	76	152	55.04
RDM20	20.0	76	152	55.04
RDI44	51/64	76	152	56.73
RDM20.5	20.5	76	152	59.30
RDI45	13/16	76	152	56.73
RDM21	21.0	76	152	59.30
RDI46	53/64	76	152	59.30
RDI47	27/32	76	152	59.30
RDM21.5	21.5	76	152	59.30
RDI48	55/64	76	152	59.30
RDM22	22.0	76	152	59.30
RDI49	7/8	76	152	59.30
RDM22.5	22.5	76	152	65.32
RDI50	57/64	76	152	65.32
RDM23	23.0	76	152	65.32
RDI51	29/32	76	152	65.32
RDI52	59/64	76	152	68.76
RDM23.5	23.5	76	152	68.76
RDI53	15/16	76	152	68.76
RDM24	24.0	76	152	72.18
RDI54	61/64	76	152	72.18
RDM24.5	24.5	76	152	72.18
RDI55	31/32	76	152	72.18
RDM25	25.0	76	152	72.18
RDI56	63/64	76	152	72.18
RDI57	1"	76	152	72.18
RDM25.5	25.5	76	152	72.17
RDM26	26.0	76	152	99.70



HSS 1/2" REDUCED SHANK DRILLS

Code	Size	l ₂	l ₁	\$ ea.
RDM26.5	26.5	76	152	99.70
RDI60	1.3/64	76	152	99.70
RDI61	1.1/16	76	152	99.70
RDM27	27.0	76	152	99.70
RDI62	1.5/64	76	152	106.58
RDI63	1.3/32	76	152	106.58
RDM28	28.0	76	152	106.57
RDI64	1.7/64	76	152	106.58
RDM28.5	28.5	76	152	106.57
RDI65	1.1/8	76	152	106.57
RDI66	1.9/64	76	152	111.71
RDM29	29.0	76	152	106.57
RDI67	1.5/32	76	152	111.71
RDM30	30.0	76	152	111.72
RDI69	1.3/16	76	152	111.72
RDI70	1.7/32	76	152	123.75

Code	Size	l ₂	l ₁	\$ ea.
RDM31	31.0	76	152	123.75
RDI71	1.15/64	76	152	123.75
RDI73	1.1/4	76	152	123.75
RDM32	32.0	76	152	123.75
RDM33	33.0	76	152	145.09
RDI77	1.5/16	76	152	145.10
RDM34	34.0	76	152	145.10
RDI81	1.3/8	76	152	145.10
RDM35	35.0	76	152	145.09
RDM36	36.0	76	152	160.21
RDM37	37.0	76	152	160.21
RDM38	38.0	76	152	160.21
RDI89	1.1/2	76	152	160.21
RDM39	39.0	76	152	160.21
RDM40	40.0	76	152	160.21

COBALT 1/2" REDUCED SHANK EXTENSION DRILLS

Code	Size	l ₂	l ₁	\$ ea.
RDEM13	13.0	200	260	134.28
RDEM14	14.0	200	260	140.56
RDEI19	9/16	200	260	148.84
RDEI33	5/8	200	260	150.12
RDEM16	16.0	200	260	152.40
RDEM17	17.0	200	260	153.68
RDEI37	11/16	200	260	154.96
RDEM18	18.0	200	260	156.24
RDEM19	19.0	200	260	159.52
RDEI41	3/4	200	260	162.80
RDEM20	20.0	200	260	165.08
RDEM21	21.0	200	260	167.36
RDEM22	22.0	200	260	170.64

Code	Size	l ₂	l ₁	\$ ea.
RDEI49	7/8	200	260	173.92
RDEM23	23.0	200	260	178.20
RDEM24	24.0	200	260	191.48
RDEM25	25.0	200	260	200.76
RDEI57	1"	200	260	203.55
RDEM26	26.0	200	260	206.04
RDEM27	27.0	200	260	210.32
RDEI61	1.1/16	200	260	214.60
RDEM28	28.0	200	260	218.88
RDEI65	1.1/8	200	260	227.16
RDEM29	29.0	200	260	236.44
RDEM30	30.0	200	260	246.00



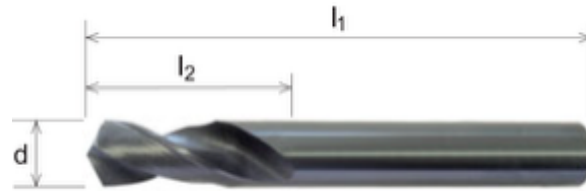
REDUCED SHANK DRILL SETS (HSS)

Code	Sizes	\$ ea.
RSD-200	M14, M15, M16, M17, M18, M19, M20	349.40
RSD-300	9/16, 19/32, 5/8, 21/32, 11/16, 23/32, 3/4	362.77
RSD-100	M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25	618.85
RSD-400	9/16, 19/32, 5/8, 21/32, 11/16, 23/32, 3/4, 25/32, 13/16, 7/8, 15/16, 1"	642.22

EXTENSION REDUCED SHANK DRILL SETS (HSS) - 200MM OAL

Code	Sizes	\$ ea.
RSD-500	M14, M15, M16, M17, M18, M19, M20	617.88
RSD-700	9/16, 19/32, 5/8, 21/32, 11/16, 23/32, 3/4	626.41
RSD-600	M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25	1149.42
RSD-800	9/16, 19/32, 5/8, 21/32, 11/16, 23/32, 3/4, 25/32, 13/16, 7/8, 15/16, 1"	1167.67

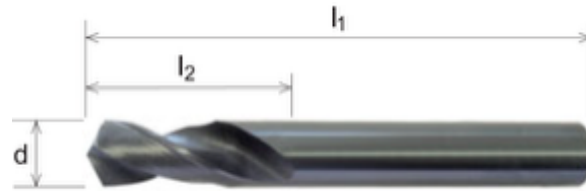
REDUCED SHANK DRILL SETS INCLUDE ONE DRILL PER SIZE LISTED ABOVE



STUB DRILLS

Code	Size	l_2	l_1	\$ ea.
J123-00591	1.5	9	32	2.24
J124-00625	1/16	10	34	2.15
J123-00630	1.6	10	34	2.57
J123-00669	1.7	10	34	2.57
J123-00709	1.8	12	38	2.57
J123-00748	1.9	12	38	2.39
J124-00781	5/64	12	38	2.39
J123-00787	2.0	12	38	2.39
J123-00827	2.1	12	38	2.63
J123-00866	2.2	13	40	2.63
J123-00906	2.3	13	40	2.63
J124-00938	3/32	14	43	2.39
J123-00945	2.4	14	43	2.63
J123-00984	2.5	14	43	2.39
J123-01024	2.6	14	43	2.63
J123-01063	2.7	16	46	2.63
J124-01094	7/64	16	46	1.91
J123-01102	2.8	16	46	2.35
J123-01142	2.9	16	46	2.35
J123-01181	3.0	16	46	2.02
J123-01220	3.1	18	49	2.35
J124-01250	1/8	18	49	2.02
J123-01260	3.2	18	49	2.35
J123-01299	3.3	18	49	2.35
J123-01339	3.4	20	52	2.35
J123-01378	3.5	20	52	2.15
J124-01406	9/64	20	52	2.15
J123-01417	3.6	20	52	2.48
J123-01457	3.7	20	52	2.48
J123-01496	3.8	22	55	2.48
J123-01535	3.9	22	55	2.48
J124-01562	5/32	22	55	2.35

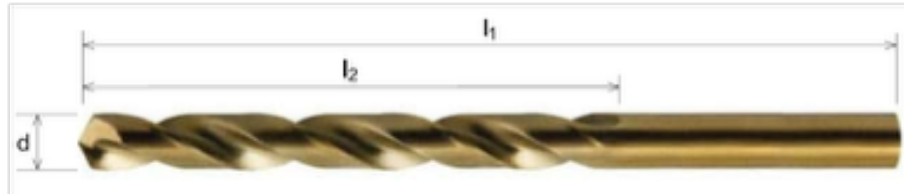
Code	Size	l_2	l_1	\$ ea.
J123-01575	4.0	22	55	2.48
J123-01614	4.1	22	55	2.80
J123-01654	4.2	22	55	2.80
J123-01693	4.3	24	58	2.80
J124-01719	11/64	24	58	2.68
J123-01732	4.4	24	58	2.80
J123-01772	4.5	24	58	2.68
J123-01811	4.6	24	58	2.80
J123-01850	4.7	24	58	2.80
J124-01875	3/16	26	62	2.94
J123-01890	4.8	26	62	2.94
J123-01929	4.9	26	62	3.17
J123-01968	5.0	26	62	3.17
J123-02008	5.1	26	62	3.17
J124-02031	13/64	26	62	3.78
J123-02047	5.2	26	62	3.78
J123-02087	5.3	26	62	3.78
J123-02126	5.4	28	66	3.78
J123-02165	5.5	28	66	3.78
J124-02188	7/32	28	66	3.78
J123-02205	5.6	28	66	3.78
J123-02244	5.7	28	66	4.18
J123-02283	5.8	28	66	4.18
J123-02323	5.9	28	66	4.18
J123-02362	6.0	28	66	4.18
J123-02402	6.1	31	70	4.54
J123-02441	6.2	31	70	4.54
J123-02480	6.3	31	70	4.11
J124-02500	1/4	31	70	4.54
J123-02520	6.4	31	70	4.64
J123-02559	6.5	31	70	4.64
J123-02677	6.8	34	74	5.46



STUB DRILLS

Code	Size	l ₂	l ₁	\$ ea.
J123-02756	7.0	34	74	5.44
J123-02835	7.2	34	74	5.44
J123-02953	7.5	34	74	6.15
J123-03071	7.8	37	79	6.69
J124-03125	5/16	37	79	6.69
J123-03150	8.0	37	79	6.69
J123-03228	8.2	37	79	7.52
J123-03346	8.5	37	79	7.52
J123-03465	8.8	40	84	8.29
J123-03543	9.0	40	84	8.29
J123-03622	9.2	40	84	9.20
J123-03740	9.5	40	84	9.20
J124-03750	3/8	43	89	9.20
J123-03858	9.8	43	89	9.87
J123-03937	10.0	43	89	9.87
J123-04016	10.2	43	89	9.87
J123-04134	10.5	43	89	13.14
J123-04252	10.8	47	95	13.14
J123-04331	11.0	47	95	13.14
J124-04375	7/16	47	95	13.14
J123-04409	11.2	47	95	14.48
J123-04528	11.5	47	95	14.48
J123-04646	11.8	47	95	14.48
J123-04724	12.0	51	102	16.40
J123-04803	12.2	51	102	18.04

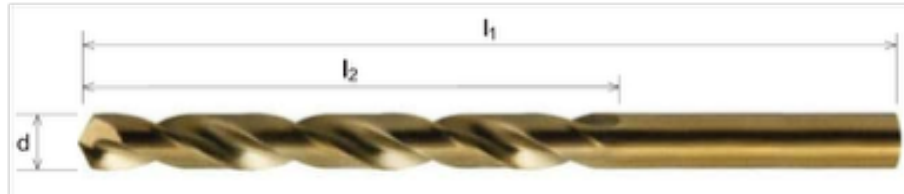
Code	Size	l ₂	l ₁	\$ ea.
J123-04924	12.5	51	102	18.04
J124-05000	1/2	51	102	18.04
J123-05039	12.8	51	102	19.13
J123-05118	13.0	51	102	19.13
J123-05196	13.2	51	102	30.15
J123-05314	13.5	54	107	32.85
J123-05433	13.8	54	107	33.46
J123-05512	14.0	54	107	34.39
J123-05709	14.5	56	111	34.39
J123-05906	15.0	56	111	34.66
J123-06102	15.5	58	115	35.78
J123-06299	16.0	58	115	38.24
J123-06496	16.5	60	119	51.34
J123-06693	17.0	60	119	51.34
J123-06890	17.5	62	123	64.81
J123-07087	18.0	62	123	64.81
J123-07283	18.5	64	127	64.81
J123-07480	19.0	64	127	44.28
J123-07677	19.5	66	131	56.14
J123-07874	20.0	66	131	63.59
J123-08268	21.0	68	136	63.59
J123-08661	22.0	70	141	65.40
J123-09055	23.0	72	146	65.40
J123-09449	24.0	75	151	67.57
J123-09843	25.0	75	151	68.89



COBALT JOBBER DRILLS

Code	Size	l ₂	l ₁	\$ ea.
J113-00394	1.0	18	40	13.19
J113-00591	1.5	18	40	10.35
J114-00625	1/16	20	43	5.44
J113-00630	1.6	20	43	10.35
J113-00669	1.7	20	43	10.35
J113-00709	1.8	22	46	10.35
J113-00748	1.9	22	46	10.35
J114-00781	5/64	24	49	4.98
J113-00787	2.0	24	49	4.54
J113-00827	2.1	24	49	4.98
J113-00866	2.2	27	53	4.98
J113-00906	2.3	27	53	4.98
J114-00938	3/32	30	57	4.98
J113-00945	2.4	30	57	4.98
J113-00984	2.5	30	57	4.54
J113-01024	2.6	30	57	4.54
J113-01063	2.7	33	61	4.54
J114-01094	7/64	33	61	4.54
J113-01102	2.8	33	61	4.54
J113-01142	2.9	33	61	4.54
J113-01181	3.0	33	61	4.36
J113-01220	3.1	36	65	6.12
J114-01250	1/8	36	65	4.85
J113-01260	3.2	36	65	6.12
J113-01299	3.3	36	65	6.12
J113-01339	3.4	39	70	6.12
J113-01378	3.5	39	70	4.75
J114-01406	9/64	39	70	5.86
J113-01417	3.6	39	70	6.79
J113-01457	3.7	39	70	6.79
J113-01496	3.8	43	75	6.79
J113-01535	3.9	43	75	6.79

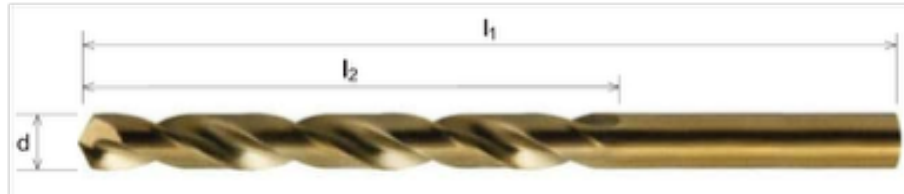
Code	Size	l ₂	l ₁	\$ ea.
J114-01562	5/32	43	75	5.86
J113-01575	4.0	43	75	5.46
J113-01614	4.1	43	75	6.79
J113-01654	4.2	43	75	6.79
J113-01693	4.3	47	80	6.79
J114-01719	11/64	47	80	6.65
J113-01732	4.4	47	80	6.79
J113-01772	4.5	47	80	5.99
J113-01811	4.6	47	80	9.24
J113-01850	4.7	47	80	9.24
J114-01875	3/16	52	86	7.25
J113-01890	4.8	52	86	9.24
J113-01929	4.9	52	86	9.24
J113-01968	5.0	52	86	7.06
J113-02008	5.1	52	86	9.79
J114-02031	13/64	52	86	8.34
J113-02047	5.2	52	86	9.79
J113-02087	5.3	52	86	9.79
J113-02126	5.4	57	93	9.79
J113-02165	5.5	57	93	8.19
J114-02188	7/32	57	93	9.05
J113-02205	5.6	57	93	9.97
J113-02244	5.7	57	93	9.97
J113-02283	5.8	57	93	9.97
J113-02323	5.9	57	93	9.97
J114-02344	15/64	57	93	9.97
J113-02362	6.0	57	93	9.46
J113-02402	6.1	63	101	11.14
J113-02441	6.2	63	101	11.14
J113-02480	6.3	63	101	11.14
J114-02500	1/4	63	101	11.14
J113-02520	6.4	63	101	11.14



COBALT JOBBER DRILLS

Code	Size	l ₂	l ₁	\$ ea.
J113-02559	6.5	63	101	10.56
J113-02598	6.6	63	101	14.16
J113-02638	6.7	63	101	14.16
J114-02656	17/64	69	109	12.68
J113-02677	6.8	69	109	14.16
J113-02717	6.9	69	109	14.16
J113-02756	7.0	69	109	12.57
J113-02795	7.1	69	109	19.02
J114-02812	9/32	69	109	14.16
J113-02835	7.2	69	109	19.02
J113-02874	7.3	69	109	19.02
J113-02913	7.4	69	109	19.02
J113-02953	7.5	69	109	14.01
J114-02969	19/64	75	117	15.38
J113-02992	7.6	75	117	19.02
J113-03032	7.7	75	117	19.02
J113-03071	7.8	75	117	19.02
J113-03110	7.9	75	117	19.02
J114-03125	5/16	75	117	16.58
J113-03150	8.0	75	117	15.05
J113-03189	8.1	75	117	22.96
J113-03228	8.2	75	117	22.96
J113-03268	8.3	75	117	22.96
J114-03281	21/64	75	117	17.78
J113-03307	8.4	75	117	22.96
J113-03346	8.5	75	117	16.89
J113-03386	8.6	81	125	25.84
J113-03425	8.7	81	125	25.84
J114-03438	11/32	81	125	19.46
J113-03465	8.8	81	125	25.84
J113-03504	8.9	81	125	25.84
J113-03543	9.0	81	125	18.51

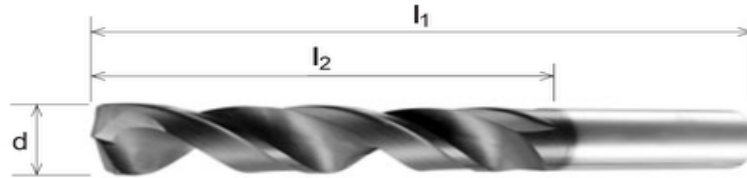
Code	Size	l ₂	l ₁	\$ ea.
J113-03583	9.1	81	125	28.97
J114-03594	23/64	81	125	21.43
J113-03622	9.2	81	125	28.97
J113-03661	9.3	81	125	28.97
J113-03701	9.4	81	125	30.09
J113-03740	9.5	81	125	20.66
J114-03750	3/8	87	133	22.77
J113-03780	9.6	87	133	28.97
J113-03819	9.7	87	133	28.97
J113-03858	9.8	87	133	28.97
J113-03898	9.9	87	133	28.97
J114-03906	25/64	87	133	24.31
J113-03937	10.0	87	133	22.42
J113-03976	10.1	87	133	32.90
J113-04016	10.2	87	133	32.90
J113-04055	10.3	87	133	32.90
J114-04062	13/32	87	133	27.34
J113-04094	10.4	87	133	32.90
J113-04134	10.5	87	133	27.91
J113-04173	10.6	87	133	32.90
J113-04213	10.7	94	142	32.90
J114-04219	27/64	94	142	30.18
J113-04252	10.8	94	142	32.90
J113-04291	10.9	94	142	32.90
J113-04331	11.0	94	142	29.28
J113-04370	11.1	94	142	40.38
J114-04375	7/16	94	142	32.80
J113-04409	11.2	94	142	40.38
J113-04449	11.3	94	142	40.38
J113-04488	11.4	94	142	40.38
J113-04528	11.5	94	142	33.62
J114-04531	29/64	94	142	36.11



COBALT JOBBER DRILLS

Code	Size	l ₂	l ₁	\$ ea.
J113-04567	11.6	94	142	52.82
J113-04606	11.7	94	142	52.82
J113-04646	11.8	94	142	52.82
J113-04685	11.9	101	151	52.82
J114-04688	15/32	101	151	40.60
J113-04724	12.0	101	151	52.82
J113-04764	12.1	101	151	120.77
J113-04803	12.2	101	151	120.77
J113-04843	12.3	101	151	120.77
J114-04844	31/64	101	151	67.32

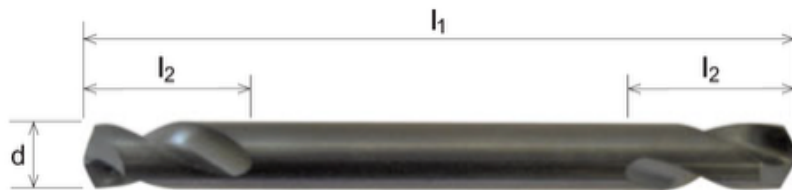
Code	Size	l ₂	l ₁	\$ ea.
J113-04882	12.4	101	151	120.77
J113-04924	12.5	101	151	66.95
J113-04961	12.6	101	151	120.77
J113-05000	12.7	101	151	120.77
J114-05000	1/2	101	151	45.14
J113-05019	12.75	101	151	120.77
J113-05039	12.8	101	151	120.77
J113-05079	12.9	101	151	120.77
J113-05118	13.0	101	151	55.91



CARBIDE JOBBER DRILLS

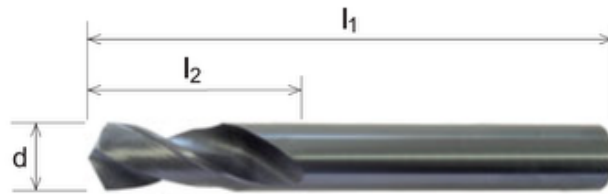
Code	Size	l_2	l_1	\$ ea.
CJD-01181	3.0	45	80	44.72
CJD-01378	3.5	45	80	44.72
CJD-01575	4.0	45	80	44.72
CJD-01772	4.5	45	80	54.30
CJD-01968	5.0	45	80	54.30
CJD-02165	5.5	50	83	70.27
CJD-02362	6.0	50	83	76.66
CJD-02559	6.5	53	85	87.70
CJD-02756	7.0	53	85	101.45
CJD-02953	7.5	58	90	110.95
CJD-03150	8.0	58	90	126.81
CJD-03346	8.5	64	98	139.78

Code	Size	l_2	l_1	\$ ea.
CJD-03543	9.0	64	98	156.93
CJD-03740	9.5	64	98	170.34
CJD-03937	10.0	68	105	190.72
CJD-04134	10.5	73	110	201.61
CJD-04331	11.0	73	110	217.64
CJD-04528	11.5	80	120	231.61
CJD-04724	12.0	80	120	244.45
CJD-04924	12.5	90	137	262.98
CJD-05118	13.0	90	137	275.65
CJD-05512	14.0	105	156	340.64
CJD-05906	15.0	105	156	381.68
CJD-06299	16.0	105	156	441.19



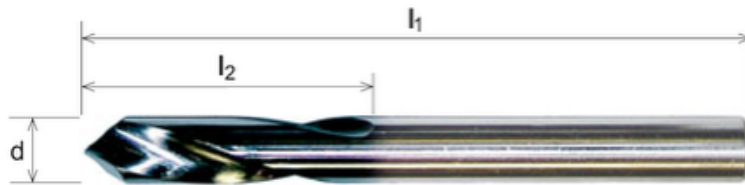
DOUBLE ENDED PANEL DRILLS

Code	Size	l_2	l_1	\$ ea.
D126-01285	30	10	49	2.60
D126-01610	20	12	55	3.19
D126-01910	11	14	62	3.80



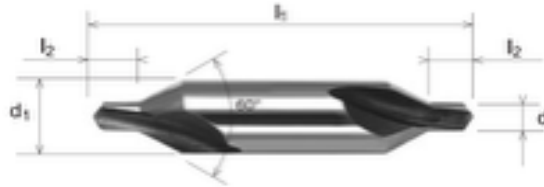
SINGLE ENDED PANEL DRILLS

Code	Size	l_2	l_1	\$ ea.
D129-01285	30	12	49	1.66
D129-01610	20	15	55	2.04
D129-01910	11	17	62	2.43



NC SPOTTING DRILL HSS Co TiCN

Code	Diameter	OAL	F/L	Point Angle	\$ ea.
D149-6	6	66	30	90°	31.61
D149-8	8	79	33	90°	38.51
D149-10	10	89	35	90°	45.21
D149-12	12	102	40	90°	66.54
D149-16	16	115	40	90°	154.20
D149-20	20	131	55	90°	175.65

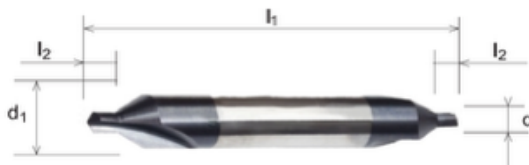


CENTRE DRILL PLAIN TYPE

Code	Size	Body O/D	OAL	Drill Point Diameter	Drill Point Length	\$ ea.
C170-1	No1	1/8	31	3/64	3/64	7.34
C170-2	No2	3/16	47	5/64	5/64	7.71
C170-3	No3	1/4	50	7/64	7/64	8.49
C170-4	No4	5/16	54	1/8	1/8	10.23
C170-5	No5	7/16	70	3/16	3/16	16.62
C170-6	No6	1/2	75	7/32	7/32	31.00
C170-7	No7	5/8	81	1/4	1/4	47.08
C170-8	No8	3/4	87	5/16	5/16	66.22
C170-10	No10	1"	97	3/8	3/8	97.24

LONG SERIES CENTRE DRILL

Code	Size	Body O/D	OAL	Drill Point Diameter	Drill Point Length	\$ ea.
C171-1	No1	1/8	60	3/64	3/64	43.09
C171-2	No2	3/16	80	5/64	5/64	43.09
C171-3	No3	1/4	100	7/64	7/64	47.40
C171-4	No4	5/16	120	1/8	1/8	60.32
C171-5	No5	7/16	120	3/16	3/16	68.94
C171-6	No6	1/2	120	7/32	7/32	80.01
C171-7	No7	5/8	120	1/4	1/4	95.67



CARBIDE CENTRE DRILL

Code	Size	Body O/D	OAL	Drill Point Diameter	Drill Point Length	\$ ea.
CCD-1	No1	1/8	31	3/64	3/64	67.13
CCD-2	No2	3/16	47	5/64	5/64	73.62
CCD-3	No3	1/4	50	7/64	7/64	88.59
CCD-4	No4	5/16	54	1/8	1/8	96.51
CCD-5	No5	7/16	70	3/16	3/16	136.16
CCD-6	No6	1/2	75	7/32	7/32	157.20
CCD-7	No7	5/8	81	1/4	1/4	191.59

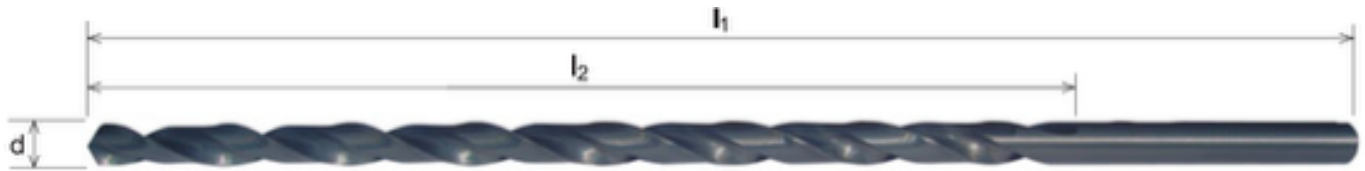


CENTRE DRILL PLAIN TYPE SETS

Code	Sizes	Number in Set	\$ ea.
C170-0105	No 1	2	88.64
	No 2	2	
	No 3	1	
	No 4	1	
	No 5	1	

Code	Sizes	Number in Set	\$ ea.
C170-0107	No 1	2	153.75
	No 2	2	
	No 3	2	
	No 4	2	
	No 5	1	
	No 6	1	
	No 7	1	

Code	Sizes	Number in Set	\$ ea.
C170-0108	No 1	2	208.42
	No 2	2	
	No 3	2	
	No 4	2	
	No 5	1	
	No 6	1	
	No 7	1	
	No 8	1	



EXTRA LENGTH DRILLS - STRAIGHT SHANK

80mm FLUTE LENGTH

Code	Size	l_2	l_1	\$ ea.
J16U-00591	1.5	80	125	19.62
J16U-00787	2.0	80	125	19.62

Code	Size	l_2	l_1	\$ ea.
J16U-00984	2.5	80	125	19.62
J16U-01181	3.0	80	125	17.76

100mm FLUTE LENGTH

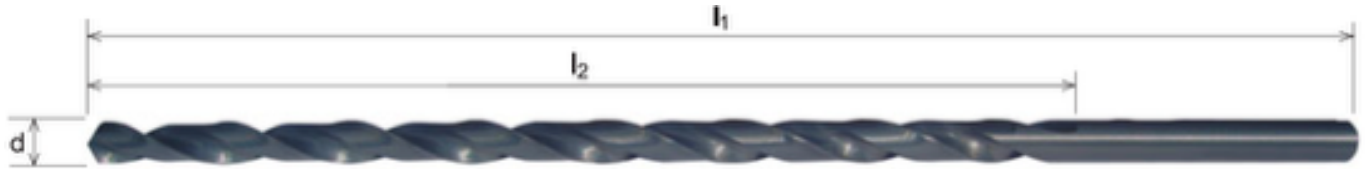
Code	Size	l_2	l_1	\$ ea.
J16V-00591	1.5	100	160	25.68
J16V-00787	2.0	100	160	25.68
J16V-00984	2.5	100	160	20.86
J16V-01181	3.0	100	160	19.05
J16V-01378	3.5	100	160	20.18

Code	Size	l_2	l_1	\$ ea.
J16V-01575	4.0	100	160	21.30
J16V-01772	4.5	100	160	26.40
J16V-01968	5.0	100	160	27.72
J16V-02165	5.5	100	160	31.70
J16V-02362	6.0	100	160	33.87

150mm FLUTE LENGTH

Code	Size	l_2	l_1	\$ ea.
J16W-00787	2.0	150	200	31.70
J16W-00984	2.5	150	200	31.70
J16W-01181	3.0	150	200	30.10
J16W-01378	3.5	150	200	32.26
J16W-01575	4.0	150	200	32.26
J16W-01772	4.5	150	200	33.51
J16W-01968	5.0	150	200	33.51
J16W-02165	5.5	150	200	36.35
J16W-02362	6.0	150	200	37.06

Code	Size	l_2	l_1	\$ ea.
J16W-02559	6.5	150	200	37.06
J16W-02756	7.0	150	200	42.82
J16W-02953	7.5	150	200	42.82
J16W-03150	8.0	150	200	44.76
J16W-03346	8.5	150	200	44.77
J16W-03543	9.0	150	200	51.52
J16W-03740	9.5	150	200	53.77
J16W-03937	10.0	150	200	55.45



EXTRA LENGTH DRILLS - STRAIGHT SHANK

200mm FLUTE LENGTH

Code	Size	l_2	l_1	\$ ea.
J16X-01181	3.0	200	250	34.48
J16X-01378	3.5	200	250	35.41
J16X-01575	4.0	200	250	36.91
J16X-01772	4.5	200	250	37.83
J16X-01968	5.0	200	250	40.42
J16X-02165	5.5	200	250	41.67
J16X-02362	6.0	200	250	44.81
J16X-02559	6.5	200	250	46.01
J16X-02756	7.0	200	250	47.74
J16X-02953	7.5	200	250	49.79
J16X-03150	8.0	200	250	56.11

Code	Size	l_2	l_1	\$ ea.
J16X-03346	8.5	200	250	61.03
J16X-03543	9.0	200	250	61.77
J16X-03740	9.5	200	250	64.55
J16X-03937	10.0	200	250	66.67
J16X-04134	10.5	200	250	75.91
J16X-04331	11.0	200	250	79.30
J16X-04528	11.5	200	250	83.99
J16X-04724	12.0	200	250	87.08
J16X-04921	12.5	200	250	90.86
J16X-05118	13.0	200	250	92.48

250mm FLUTE LENGTH

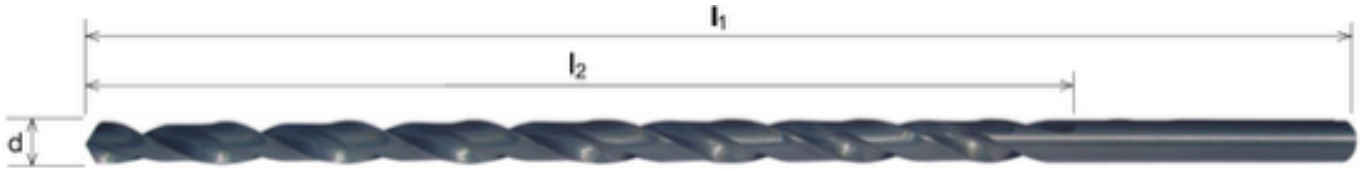
Code	Size	l_2	l_1	\$ ea.
J16Y-01181	3.0	250	315	41.81
J16Y-01575	4.0	250	315	43.56
J16Y-01968	5.0	250	315	45.20
J16Y-02362	6.0	250	315	46.86
J16Y-02756	7.0	250	315	58.21
J16Y-03150	8.0	250	315	63.95

Code	Size	l_2	l_1	\$ ea.
J16Y-03543	9.0	250	315	70.67
J16Y-03937	10.0	250	315	80.75
J16Y-04331	11.0	250	315	91.92
J16Y-04724	12.0	250	315	102.76
J16Y-05118	13.0	250	315	110.31

300mm FLUTE LENGTH

Code	Size	l_2	l_1	\$ ea.
J16Z-01378	3.5	300	400	60.29
J16Z-01575	4.0	300	400	55.50
J16Z-01772	4.5	300	400	62.23
J16Z-01968	5.0	300	400	57.36
J16Z-02165	5.5	300	400	66.64
J16Z-02362	6.0	300	400	61.49
J16Z-02559	6.5	300	400	76.80
J16Z-02756	7.0	300	400	71.72
J16Z-02953	7.5	300	400	86.18
J16Z-03150	8.0	300	400	78.12

Code	Size	l_2	l_1	\$ ea.
J16Z-03346	8.5	300	400	95.88
J16Z-03543	9.0	300	400	84.61
J16Z-03740	9.5	300	400	102.23
J16Z-03937	10.0	300	400	91.18
J16Z-04134	10.5	300	400	110.55
J16Z-04331	11.0	300	400	102.25
J16Z-04528	11.5	300	400	130.39
J16Z-04724	12.0	300	400	117.22
J16Z-04921	12.5	300	400	144.60
J16Z-05118	13.0	300	400	123.15



EXTRA LENGTH DRILLS - STRAIGHT SHANK

3" FLUTE LENGTH

Code	Size	l_2	l_1	\$ ea.
J163U-00625	1/16	3"	5"	20.54
J163U-00781	5/64	3"	5"	20.54

Code	Size	l_2	l_1	\$ ea.
J163U-00938	3/32	3"	5"	20.54
J163U-01250	1/8	3"	5"	16.32

4" FLUTE LENGTH

Code	Size	l_2	l_1	\$ ea.
J164V-01250	1/8	4"	6"	25.41
J164V-01562	5/32	4"	6"	28.18
J164V-01875	3/16	4"	6"	30.46

Code	Size	l_2	l_1	\$ ea.
J164V-02188	7/32	4"	6"	32.59
J164V-02500	1/4	4"	6"	34.89

6" FLUTE LENGTH

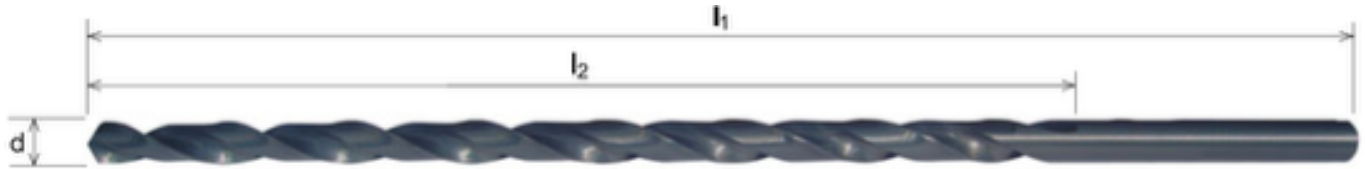
Code	Size	l_2	l_1	\$ ea.
J165W-01250	1/8	6"	8"	27.34
J165W-01562	5/32	6"	8"	30.84
J165W-01875	3/16	6"	8"	32.26
J165W-02188	7/32	6"	8"	32.93
J165W-02500	1/4	6"	8"	34.48
J165W-02812	9/32	6"	8"	36.70

Code	Size	l_2	l_1	\$ ea.
J165W-03125	5/16	6"	8"	41.09
J165W-03438	11/32	6"	8"	46.72
J165W-03750	3/8	6"	8"	50.81
J165W-04375	7/16	6"	8"	55.50
J165W-05000	1/2	6"	8"	73.71

8" FLUTE LENGTH

Code	Size	l_2	l_1	\$ ea.
J168X-01250	1/8	8"	10"	30.58
J168X-01562	5/32	8"	10"	36.20
J168X-01875	3/16	8"	10"	38.38
J168X-02188	7/32	8"	10"	38.64
J168X-02500	1/4	8"	10"	41.58
J168X-02812	9/32	8"	10"	44.25
J168X-03125	5/16	8"	10"	50.37

Code	Size	l_2	l_1	\$ ea.
J168X-03438	11/32	8"	10"	56.98
J168X-03750	3/8	8"	10"	62.61
J168X-04062	13/32	8"	10"	68.94
J168X-04375	7/16	8"	10"	75.34
J168X-04688	15/32	8"	10"	82.71
J168X-05000	1/2	8"	10"	91.06



EXTRA LENGTH DRILLS - STRAIGHT SHANK

10" FLUTE LENGTH

Code	Size	l_2	l_1	\$ ea.
J161Y-01250	1/8	10"	12"	43.39
J161Y-01562	5/32	10"	12"	45.37
J161Y-01875	3/16	10"	12"	45.98
J161Y-02188	7/32	10"	12"	46.91
J161Y-02500	1/4	10"	12"	50.79
J161Y-02812	9/32	10"	12"	54.04
J161Y-03125	5/16	10"	12"	61.29

Code	Size	l_2	l_1	\$ ea.
J161Y-03438	11/32	10"	12"	69.22
J161Y-03750	3/8	10"	12"	75.57
J161Y-04062	13/32	10"	12"	83.22
J161Y-04375	7/16	10"	12"	92.33
J161Y-04688	15/32	10"	12"	99.45
J161Y-05000	1/2	10"	12"	109.96

12" FLUTE LENGTH

Code	Size	l_2	l_1	\$ ea.
J161Z-01875	3/16	12"	16"	58.54
J161Z-02500	1/4	12"	16"	61.72
J161Z-03125	5/16	12"	16"	75.06
J161Z-03438	11/32	12"	16"	82.02

Code	Size	l_2	l_1	\$ ea.
J161Z-03750	3/8	12"	16"	92.99
J161Z-04375	7/16	12"	16"	112.53
J161Z-04688	15/32	12"	16"	121.82
J161Z-05000	1/2	12"	16"	132.02



HSS ANNULAR CUTTERS

35mm Depth

Code	Size	\$ ea.	Code	Size	\$ ea.
CC801-1200	12.0	43.05	CC801-3700	37.0	135.77
CC801-1300	13.0	46.86	CC801-3800	38.0	139.41
CC801-1400	14.0	48.18	CC801-3900	39.0	143.14
CC801-1500	15.0	52.31	CC801-4000	40.0	146.92
CC801-1600	16.0	55.86	CC801-4100	41.0	168.03
CC801-1700	17.0	58.25	CC801-4200	42.0	172.06
CC801-1800	18.0	61.39	CC801-4300	43.0	178.54
CC801-1900	19.0	62.61	CC801-4400	44.0	180.30
CC801-2000	20.0	64.46	CC801-4500	45.0	210.99
CC801-2100	21.0	66.32	CC801-4600	46.0	215.10
CC801-2200	22.0	68.25	CC801-4700	47.0	219.40
CC801-2300	23.0	70.32	CC801-4800	48.0	223.74
CC801-2400	24.0	75.35	CC801-4900	49.0	228.21
CC801-2500	25.0	77.48	CC801-5000	50.0	232.74
CC801-2600	26.0	95.82	CC801-5100	51.0	266.54
CC801-2700	27.0	98.35	CC801-5200	52.0	271.07
CC801-2800	28.0	101.06	CC801-5300	53.0	280.11
CC801-2900	29.0	103.84	CC801-5400	54.0	289.16
CC801-3000	30.0	106.71	CC801-5500	55.0	274.62
CC801-3100	31.0	111.80	CC801-5600	56.0	312.83
CC801-3200	32.0	114.75	CC801-5700	57.0	321.76
CC801-3300	33.0	122.30	CC801-5800	58.0	330.69
CC801-3400	34.0	125.54	CC801-5900	59.0	339.62
CC801-3500	35.0	128.86	CC801-6000	60.0	319.28
CC801-3600	36.0	132.40			

****OVERALL LENGTH OF 35MM DEPTH = 64MM**



HSS ANNULAR CUTTERS

50mm Depth

Code	Size	\$ ea.	Code	Size	\$ ea.
CC802-1400	14.0	87.67	CC802-3400	34.0	210.37
CC802-1500	15.0	88.66	CC802-3500	35.0	187.32
CC802-1600	16.0	94.65	CC802-3600	36.0	221.41
CC802-1700	17.0	98.46	CC802-3700	37.0	225.92
CC802-1800	18.0	102.68	CC802-3800	38.0	200.00
CC802-1900	19.0	104.78	CC802-3900	39.0	234.16
CC802-2000	20.0	107.28	CC802-4000	40.0	208.39
CC802-2100	21.0	109.75	CC802-4100	41.0	257.29
CC802-2200	22.0	112.28	CC802-4200	42.0	276.91
CC802-2300	23.0	114.98	CC802-4300	43.0	296.53
CC802-2400	24.0	121.95	CC802-4400	44.0	316.14
CC802-2500	25.0	124.55	CC802-4500	45.0	306.53
CC802-2600	26.0	144.46	CC802-4600	46.0	340.96
CC802-2700	27.0	147.63	CC802-4700	47.0	346.11
CC802-2800	28.0	150.92	CC802-4800	48.0	351.26
CC802-2900	29.0	155.44	CC802-4900	49.0	356.42
CC802-3000	30.0	157.83	CC802-5000	50.0	332.27
CC802-3100	31.0	185.89	CC802-5500	55.0	391.72
CC802-3200	32.0	168.59	CC802-6000	60.0	452.37
CC802-3300	33.0	204.12			

****OVERALL LENGTH OF 50MM DEPTH = 89MM**



ANNULAR CUTTER SETS - HSS COBALT

Code	Sizes	\$ ea.
CC801-100	M14, M15, M16, M17, M18, M19, M20, M22, M25	604.07

ANNULAR CUTTER SETS INCLUDE ONE PIECE PER LISTED SIZE & TWO PINS



HOLESAWS - 8% COBALT

Code	Size	\$ ea.	Code	Size	\$ ea.
HS801-0140	14.0	9.94	HS801-0640	64.0	28.43
HS801-0160	16.0	10.24	HS801-0650	65.0	29.13
HS801-0190	19.0	11.10	HS801-0670	67.0	31.21
HS801-0200	20.0	11.40	HS801-0680	68.0	31.32
HS801-0210	21.0	12.22	HS801-0700	70.0	31.48
HS801-0220	22.0	12.72	HS801-0730	73.0	31.90
HS801-0240	24.0	13.25	HS801-0760	76.0	32.41
HS801-0250	25.0	13.82	HS801-0790	79.0	33.38
HS801-0270	27.0	14.98	HS801-0830	83.0	33.38
HS801-0290	29.0	15.54	HS801-0860	86.0	35.13
HS801-0320	32.0	17.00	HS801-0890	89.0	35.36
HS801-0330	33.0	17.26	HS801-0920	92.0	38.44
HS801-0350	35.0	17.66	HS801-0950	95.0	40.71
HS801-0370	37.0	18.04	HS801-0980	98.0	42.91
HS801-0380	38.0	18.93	HS801-1020	102.0	44.82
HS801-0400	40.0	19.21	HS801-1050	105.0	48.05
HS801-0410	41.0	19.45	HS801-1080	108.0	51.33
HS801-0430	43.0	21.84	HS801-1140	114.0	55.90
HS801-0440	44.0	22.13	HS801-1210	121.0	58.19
HS801-0460	46.0	22.53	HS801-1270	127.0	61.73
HS801-0480	48.0	22.77	HS801-1400	140.0	67.36
HS801-0510	51.0	22.89	HS801-1460	146.0	70.35
HS801-0520	52.0	24.19	HS801-1520	152.0	72.99
HS801-0540	54.0	24.98	HS801-1600	160.0	79.72
HS801-0550	55.0	25.19	HS801-1650	165.0	87.31
HS801-0570	57.0	26.12	HS801-1680	168.0	89.97
HS801-0590	59.0	26.64	HS801-1780	178.0	103.02
HS801-0600	60.0	26.71	HS801-2000	200.0	121.71

ADAPTERS, PILOT DRILLS AND ARBORS SOLD SEPARATELY



HOLES AW ARBORS

Code	Size	\$ ea.
HS-ARB-02500	1/4" SHANK 1/2 x 20 UNF	19.89
HS-ARB-04375	7/16" SHANK 5/8 x 18 UNF	33.67

HOLES AW ADAPTOR

Code	Size	\$ ea.
HS-ADA-05625	9/16 x 12 UNF	10.24

HOLES AW PILOT DRILL

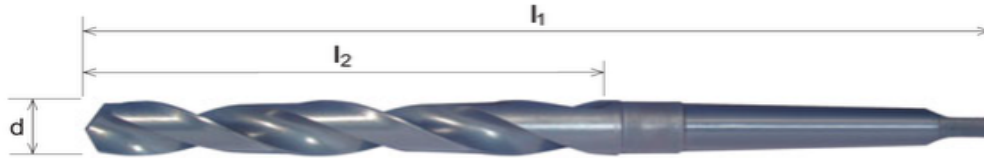
Code	Size	\$ ea.
HSD-02500	1/4" x 4" LONG	11.40



HOLES AW SETS - 8% COBALT

Code	Set Type	Sizes	\$ ea.
HSP-0100	PLUMBER	19, 22, 29, 38, 44, 57	209.04
HSP-0200	PLUMBER	44, 57, 64, 92, 114	243.15
HSP-0300	PLUMBER	16, 19, 22, 25, 27, 32, 35, 44, 57, 73, 92, 114	334.50
HSE-0100	ELECTRICIAL	16, 20, 25, 32, 40, 51	202.20
HSE-0200	ELECTRICIAL	22, 29, 35, 44, 51, 68	221.12
HSE-0300	ELECTRICIAL	51, 76, 86, 105,	224.10
HSE-0400	ELECTRICIAL	16, 20, 22, 25, 32, 40, 51, 60, 92	262.53
HSM-100	MAINTENANCE	20, 25, 32, 38, 54	194.66
HSM-200	MAINTENANCE	16, 20, 25, 32, 40, 51, 54, 64	240.71
HSM-300	MAINTENANCE	16, 20, 22, 25, 32, 40, 51, 54, 60	249.47
HSM-400	MAINTENANCE	16, 19, 22, 25, 29, 32, 35, 38, 44, 51	252.11
HSM-500	MAINTENANCE	19, 22, 29, 35, 38, 44, 51, 57, 64	260.61
HSM-600	MAINTENANCE	16, 19, 22, 25, 32, 38, 54, 92, 102	277.49
HSM-700	MAINTENANCE	19, 22, 25, 32, 35, 38, 44, 51, 54, 63, 76	288.43
HSM-800	MAINTENANCE	19, 22, 25, 29, 32, 35, 44, 51, 57, 64, 68, 76	317.85
HSM-900	MAINTENANCE	16, 20, 22, 25, 32, 40, 51, 54, 64, 92, 114	321.39
HSM-1000	MAINTENANCE	16, 20, 22, 25, 32, 38, 40, 51, 54, 60, 64, 70, 89, 92, 100, 114	444.87

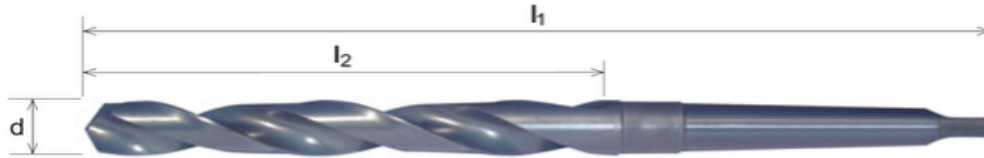
HOLES AW SETS INCLUDE ONE HOLES AW PER SIZE, PLUS ADAPTOR, PILOT DRILL & ARBOR



MTS DRILLS

Code	Size	l ₂	l ₁	\$ ea.
No. 1 MORSE TAPER SHANK				
D182-01181	3.0	33	114	21.50
D182-01220	3.1	33	114	26.37
D180-01250	1/8	33	114	19.89
D182-01259	3.2	33	114	26.37
D182-01299	3.3	33	114	26.37
D182-01338	3.4	39	120	26.37
D182-01378	3.5	39	120	21.50
D180-01406	9/64	39	120	21.10
D182-01417	3.6	39	120	26.37
D182-01456	3.7	39	120	26.37
D182-01496	3.8	39	120	26.37
D182-01535	3.9	43	124	26.37
D180-01562	5/32	43	124	20.27
D182-01575	4.0	43	124	21.48
D182-01614	4.1	43	124	26.37
D182-01635	4.2	43	124	26.37
D182-01692	4.3	43	124	26.37
D180-01719	11/64	47	128	22.60
D182-01732	4.4	47	128	28.01
D182-01772	4.5	47	128	22.83
D182-01811	4.6	47	128	28.01
D182-01850	4.7	47	128	28.01
D180-01875	3/16	47	128	21.48
D182-01889	4.8	47	128	28.01
D182-01929	4.9	52	133	28.01
D182-01968	5.0	52	133	22.40
D182-02007	5.1	52	133	28.01
D180-02031	13/64	52	133	22.93
D182-02047	5.2	52	133	28.01
D182-02086	5.3	52	133	28.01
D182-02125	5.4	57	138	28.01

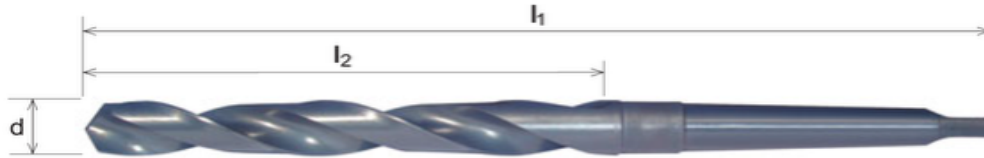
Code	Size	l ₂	l ₁	\$ ea.
No. 1 MORSE TAPER SHANK				
D182-02165	5.5	57	138	22.94
D180-02188	7/32	57	138	21.32
D182-02204	5.6	57	138	28.01
D182-02244	5.7	57	138	28.01
D182-02283	5.8	57	138	28.01
D182-02322	5.9	57	138	28.01
D180-02344	15/64	57	138	22.75
D182-02362	6.0	57	138	22.75
D182-02401	6.1	57	138	28.01
D182-02440	6.2	57	138	28.01
D182-02480	6.3	57	138	28.01
D180-02500	1/4	63	144	21.66
D182-02519	6.4	63	144	28.34
D182-02559	6.5	63	144	22.75
D182-02598	6.6	63	144	28.34
D182-02637	6.7	63	144	28.34
D180-02656	17/64	63	144	22.75
D182-02677	6.8	63	144	28.34
D182-02716	6.9	69	150	28.34
D182-02755	7.0	69	150	23.26
D182-02795	7.1	69	150	29.43
D180-02812	9/32	69	150	22.21
D182-02834	7.2	69	150	29.43
D182-02874	7.3	69	150	29.43
D182-02913	7.4	69	150	29.43
D182-02952	7.5	69	150	23.26
D180-02969	19/64	69	150	23.62
D182-02992	7.6	69	150	29.43
D182-03031	7.7	69	150	29.43
D182-03070	7.8	69	150	29.43
D182-03110	7.9	75	156	29.43



MTS DRILLS

Code	Size	l_2	l_1	\$ ea.
No. 1 MORSE TAPER SHANK				
D180-03125	5/16	75	156	23.26
D182-03150	8.0	75	156	24.15
D182-03188	8.1	75	156	32.37
D182-03228	8.2	75	156	32.37
D182-03267	8.3	75	156	32.37
D180-03281	21/64	75	156	24.90
D182-03307	8.4	75	156	32.37
D182-03346	8.5	75	156	25.99
D182-03385	8.6	75	156	32.37
D182-03425	8.7	75	156	32.37
D180-03438	11/32	75	156	26.89
D182-03464	8.8	75	156	32.37
D182-03503	8.9	81	162	32.37
D182-03543	9.0	81	162	26.89
D182-03582	9.1	81	162	33.06
D180-03594	23/64	81	162	26.89
D182-03622	9.2	81	162	33.06
D182-03661	9.3	81	162	33.06
D182-03700	9.4	81	162	33.06
D182-03740	9.5	81	162	25.97
D180-03750	3/8	87	168	25.07
D182-03779	9.6	87	168	33.38
D182-03818	9.7	87	168	33.38
D182-03858	9.8	87	168	33.38
D182-03897	9.9	87	168	33.38
D180-03906	25/64	87	168	25.41
D182-03937	10.0	87	168	26.14
D182-04015	10.2	87	168	33.46
D182-04035	10.25	87	168	33.77
D180-04062	13/32	87	168	25.79
D182-04134	10.5	87	168	26.14

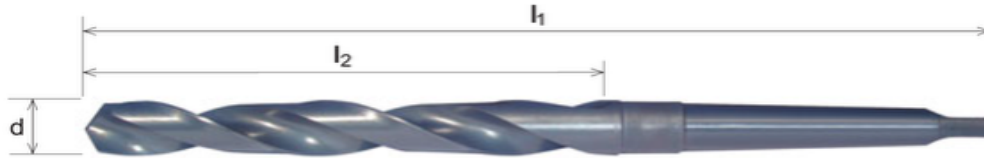
Code	Size	l_2	l_1	\$ ea.
No. 1 MORSE TAPER SHANK				
D180-04219	27/64	94	175	26.14
D182-04232	10.75	94	175	33.77
D182-04251	10.8	94	175	33.77
D182-04331	11.0	94	175	26.89
D180-04375	7/16	94	175	25.79
D182-04409	11.2	94	175	33.77
D182-04429	11.25	94	175	33.77
D182-04528	11.5	94	175	26.89
D180-04531	29/64	94	175	27.80
D182-04625	11.75	94	175	33.77
D182-04645	11.8	94	175	33.77
D180-04688	15/32	101	182	26.50
D182-04724	12.0	101	182	27.72
D182-04803	12.2	101	182	34.03
D182-04822	12.25	101	182	34.03
D180-04844	31/64	101	182	33.13
D182-04921	12.5	101	182	33.87
D180-05000	1/2	101	182	32.24
D182-05019	12.75	101	182	36.90
D182-05078	12.8	101	182	36.90
D182-05118	13.0	101	182	37.62
D180-05156	33/64	101	182	38.52
D182-05196	13.2	101	182	41.37
D182-05216	13.25	101	182	41.37
D180-05312	17/32	108	189	36.71
D182-05314	13.5	108	189	36.71
D182-05413	13.75	108	189	42.59
D182-05433	13.8	108	189	42.59
D180-05469	35/64	108	189	37.62
D182-05512	14.0	108	189	37.98



MTS DRILLS

Code	Size	l ₂	l ₁	\$ ea.
No. 2 MORSE TAPER SHANK				
D182-05610	14.25	114	212	53.71
D180-05625	9/16	114	212	49.26
D182-05709	14.5	114	212	51.95
D180-05781	37/64	114	212	59.09
D182-05807	14.75	114	212	59.18
D182-05906	15.0	114	212	53.74
D180-05938	19/32	120	218	50.17
D182-06003	15.25	120	218	59.18
D180-06094	39/64	120	218	53.74
D182-06102	15.5	120	218	53.74
D182-06200	15.75	120	218	59.18
D180-06250	5/8	120	218	51.06
D182-06299	16.0	120	218	56.44
D182-06397	16.25	125	223	59.18
D180-06406	41/64	125	223	54.64
D182-06496	16.5	125	223	57.32
D180-06562	21/32	125	223	51.95
D182-06594	16.75	125	223	59.18
D182-06693	17.0	125	223	55.53
D180-06719	43/64	125	223	58.21
D182-06791	17.25	125	223	59.18
D180-06785	11/16	130	228	52.83
D182-06890	17.5	130	228	53.71
D182-06988	17.75	130	228	59.83
D180-07031	45/64	130	228	56.44
D182-07087	18.0	130	228	56.44
D182-07185	18.25	135	233	59.83
D180-07188	23/32	135	233	54.64
D182-07283	18.5	135	233	57.32

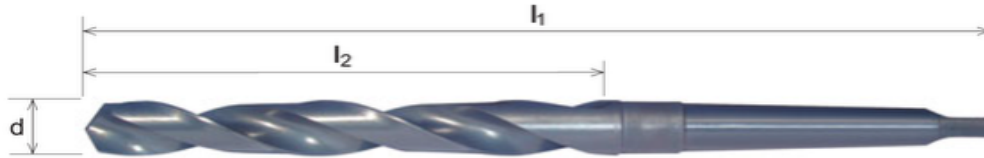
Code	Size	l ₂	l ₁	\$ ea.
No. 2 MORSE TAPER SHANK				
D180-07344	47/64	135	233	57.32
D182-07381	18.75	135	233	65.06
D182-07480	19.0	135	233	59.99
D180-07500	3/4	140	238	57.32
D182-07578	19.25	140	238	65.06
D180-07656	49/64	140	238	60.02
D182-07677	19.5	140	238	64.50
D182-07775	19.75	140	238	65.06
D180-07812	25/32	140	238	60.91
D182-07874	20.0	140	238	64.50
D180-07969	51/64	140	238	68.05
D182-07972	20.25	140	238	71.70
D182-08071	20.5	145	243	71.65
D180-08125	13/16	145	243	65.40
D182-08169	20.75	145	243	73.45
D182-08268	21.0	145	243	69.84
D180-08281	53/64	145	243	69.84
D182-08366	21.25	150	248	73.45
D180-08438	27/32	150	248	66.65
D182-08465	21.5	150	248	74.33
D182-08562	21.75	150	248	78.82
D180-08594	55/64	150	248	74.33
D182-08661	22.0	150	248	70.80
D180-08750	7/8	150	248	73.46
D182-08759	22.25	155	253	78.81
D182-08858	22.5	155	253	84.20
D180-08906	57/64	155	253	78.82
D182-08956	22.75	155	253	81.75
D182-09055	23.0	155	253	80.62



MTS DRILLS

Code	Size	l_2	l_1	\$ ea.
No. 3 MORSE TAPER SHANK				
D180-09062	29/32	155	253	74.91
D182-09153	23.25	155	253	79.86
D180-09219	59/64	155	276	98.51
D182-09252	23.5	155	276	95.83
D182-09350	23.75	160	281	79.86
D180-09375	15/16	160	281	93.15
D182-09449	24.0	160	281	94.04
D180-09531	61/64	160	281	98.51
D182-09547	24.25	160	281	79.86
D182-09646	24.5	160	281	98.51
D180-09688	31/32	160	281	97.66
D182-09744	24.75	160	281	108.58
D182-09843	25.0	160	281	104.80
D180-09844	63/64	160	281	107.49
D180-10000	1"	165	286	106.61
D182-10039	25.5	165	286	107.49
D180-10156	1.1/64	165	286	108.58
D182-10236	26.0	165	286	110.16
D180-10312	1.1/32	165	286	110.16
D182-10433	26.5	165	286	116.46
D180-10469	1.3/64	165	286	121.81
D180-10625	1.1/16	170	291	121.81
D182-10630	27.0	170	291	121.81
D180-10781	1.5/64	170	291	123.60
D182-10827	27.5	170	291	123.60
D180-10938	1.3/32	170	291	123.60
D182-11024	28	170	291	128.09
D180-11094	1.7/64	170	291	128.09
D182-11220	28.5	175	296	129.90
D180-11250	1.1/8	175	296	129.90
D180-11406	1.9/64	175	296	134.37

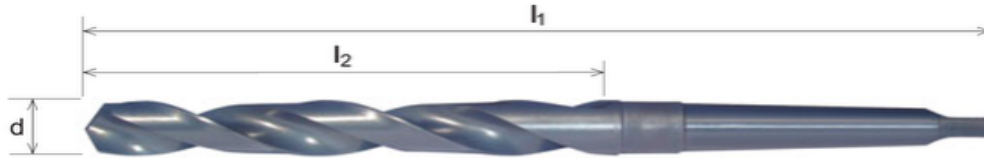
Code	Size	l_2	l_1	\$ ea.
No. 3 MORSE TAPER SHANK				
D182-11417	29.0	175	296	134.37
D180-11562	1.5/32	175	296	135.26
D182-11614	29.5	175	296	135.26
D180-11719	1.11/64	175	296	135.26
D182-11811	30.0	175	296	146.94
D180-11875	1.3/16	180	301	136.38
D182-12008	30.5	180	301	167.50
D180-12031	1.13/64	180	301	140.64
D180-12188	1.7/32	180	301	140.64
D182-12205	31.0	180	301	152.30
D180-12344	1.15/64	180	301	162.14
D182-12402	31.5	180	301	162.14
D180-12500	1.1/4	185	306	142.42
No. 4 MORSE TAPER SHANK				
D182-12598	32.0	185	334	230.20
D180-12656	1.17/64	185	334	232.01
D182-12795	32.5	185	334	249.02
D180-12812	1.9/32	185	334	230.24
D180-12969	1.19/64	185	334	259.78
D182-12992	33.0	185	334	259.78
D180-13125	1.5/16	185	334	234.73
D182-13189	33.5	185	334	244.55
D180-13281	1.21/64	185	334	275.06
D182-13386	34.0	190	339	250.82
D180-13438	1.11/32	190	339	250.82
D182-13583	34.5	190	339	301.02
D180-13594	1.23/64	190	339	322.52
D180-13750	1.3/8	190	339	288.45
D182-13780	35.0	190	339	268.78
D180-13906	1.25/64	190	339	322.52
D182-13976	35.5	190	339	288.45



MTS DRILLS

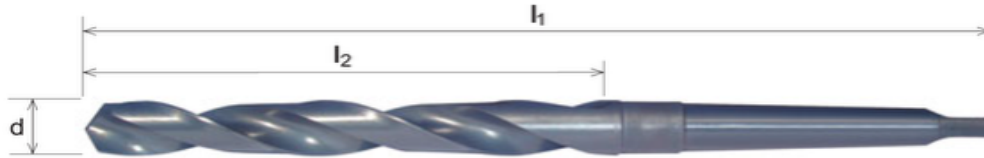
Code	Size	l_2	l_1	\$ ea.
No. 4 MORSE TAPER SHANK				
D180-14062	1.13/32	190	339	268.78
D182-14173	36	195	344	272.35
D180-14219	1.27/64	195	344	326.10
D182-14370	36.5	195	344	292.07
D180-14375	1.7/16	195	344	277.74
D180-14531	1.29/64	195	344	333.26
D182-14567	37.0	195	344	299.21
D180-14688	1.15/32	195	344	281.30
D182-14764	37.5	195	344	281.30
D180-14844	1.31/64	195	344	283.09
D182-14961	38.0	200	349	283.09
D180-15000	1.1/2	200	349	284.86
D180-15156	1.33/64	200	349	292.07
D182-15157	38.5	200	349	292.94
D180-15312	1.17/32	200	349	304.57
D182-15354	39	200	349	304.90
D180-15469	1.35/64	200	349	295.62
D182-15551	39.5	200	349	295.62
D180-15625	1.9/16	200	349	287.60
D182-15748	40.0	200	349	287.60
D180-15781	1.37/64	200	349	307.27
D180-15938	1.19/32	205	354	310.53
D182-15945	40.5	205	354	311.40
D180-16094	1.39/64	205	354	312.27
D182-16142	41.0	205	354	312.27
D180-16250	1.5/8	205	354	318.49
D182-16339	41.5	205	354	436.90
D180-16406	1.41/64	205	354	438.60
D182-16535	42.0	205	354	445.29
D180-16562	1.21/32	205	354	445.29

Code	Size	l_2	l_1	\$ ea.
No. 4 MORSE TAPER SHANK				
D180-16719	1.43/64	205	354	445.29
D182-16732	42.5	205	354	445.29
D180-16875	1.11/16	210	359	451.95
D182-16929	43.0	210	359	451.95
D180-17031	1.45/64	210	359	488.50
D182-17126	43.5	210	359	436.90
D180-17188	1.23/32	210	359	441.94
D182-17323	44.0	210	359	443.61
D180-17500	1.3/4	210	359	480.43
D182-17520	44.5	210	359	482.09
D182-17716	45.0	210	359	488.82
D180-17812	1.25/32	215	359	492.16
D182-17913	45.5	215	359	495.49
D182-18110	46.0	215	364	504.69
D180-18125	1.13/16	215	364	505.55
D182-18307	46.5	215	364	509.72
D180-18438	1.27/32	215	364	510.56
D182-18504	47.0	215	364	511.42
D182-18701	47.5	215	364	508.88
D180-18750	1.7/8	220	369	527.31
D182-18898	48.0	220	369	532.31
D180-19062	1.29/32	220	369	544.05
D182-19094	48.5	220	369	545.71
D182-19291	49.0	220	369	545.71
D180-19375	1.15/16	220	369	545.71
D182-19488	49.5	220	369	604.32
D182-19685	50.0	220	369	569.17
D180-19688	1.31/32	220	369	556.60
D182-19882	50.5	225	374	671.29
D180-20000	2"	225	374	569.17



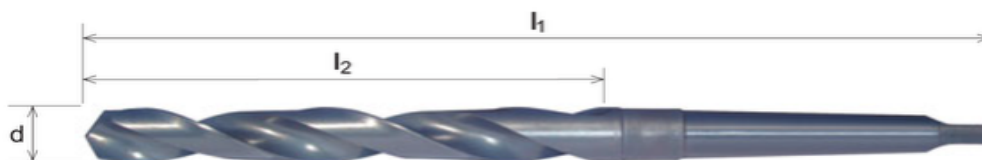
MTS DRILLS

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
No. 5 MORSE TAPER SHANK					No. 5 MORSE TAPER SHANK				
D182-20079	51.0	225	412	664.65	D182-24803	63.0	240	427	934.43
D180-20312	2.1/32	225	412	664.65	D180-25000	2.1/2	240	427	934.56
D182-20472	52.0	225	412	677.01	D182-25197	64.0	245	432	944.24
D180-20625	2.1/16	225	412	677.01	D182-25591	65.0	245	432	971.04
D182-20866	53.0	225	412	677.01	D180-25625	2.9/16	245	432	1132.33
D180-21250	2.1/8	230	417	692.73	D182-25984	66.0	245	432	995.82
D182-21260	54.0	230	417	692.55	D180-26250	2.5/8	245	432	1002.69
D182-21654	55.0	230	417	692.55	D182-26378	67.0	245	432	1019.83
D180-21875	2.3/16	230	417	692.55	D182-26772	68.0	250	437	1029.01
D182-22047	56.0	230	417	718.80	D182-27165	69.0	250	437	1034.42
D182-22441	57.0	235	422	718.79	D180-27500	2.3/4	250	437	1047.01
D180-22500	2.1/4	235	422	718.79	D182-27599	70.0	250	437	1041.02
D182-22835	58.0	235	422	738.51	D182-27953	71.0	250	437	1070.02
D180-23125	2.5/16	235	422	738.51	D182-28346	72.0	255	442	1092.62
D182-23228	59.0	235	422	804.14	D182-28740	73.0	255	442	1180.18
D182-23622	60.0	235	422	804.14	D180-28750	2.7/8	255	442	1275.58
D180-23750	2.3/8	235	422	804.14	D182-29134	74.0	255	442	1279.37
D182-24016	61.0	240	427	820.74	D182-29528	75.0	255	442	1455.74
D180-24375	2.7/16	240	427	882.74	D180-30000	3"	255	442	1481.88
D182-24409	62.0	240	427	865.04					



SPECIAL MORSE TAPER MTS DRILLS

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
<u>SPECIAL</u> No. 2 MORSE TAPER SHANK					<u>SPECIAL</u> No. 3 MORSE TAPER SHANK				
D183-09449	24.0	160	281	164.09	D183-14567	37.0	195	344	386.98
D183-09843	25.0	160	281	174.54	D183-14961	38.0	200	349	371.33
D181-10000	1"	165	286	176.29	D181-15000	1.1/2	200	349	373.06
D183-10236	26.0	165	286	179.74	D183-15354	39.0	200	349	392.19
D181-10625	1.1/16	170	291	191.05	D181-15625	1.9/16	200	349	375.71
D183-10630	27.0	170	291	191.05	D183-15748	40.0	200	349	375.71
D183-11024	28.0	170	291	197.15	D183-16142	41.0	205	354	399.66
D181-11250	1.1/8	175	296	198.91	D181-16250	1.5/8	205	354	405.70
D183-11417	29.0	175	296	203.25	D183-16535	42.0	205	354	528.81
D183-11811	30.0	175	296	215.45	D181-16875	1.11/16	210	359	535.28
D181-11875	1.3/16	180	301	205.20	D183-16929	43.0	210	359	535.28
D183-12205	31.0	180	301	220.66	D183-17323	44.0	210	359	527.18
D181-12500	1.1/4	185	306	211.06	D181-17500	1.3/4	210	359	562.93
<u>SPECIAL</u> No. 3 MORSE TAPER SHANK					D183-17716	45.0	210	359	571.84
D183-12598	32.0	185	334	319.99	D183-18110	46.0	215	364	586.48
D183-12992	33.0	185	334	348.70	D181-18125	1.13/16	215	364	587.31
D181-13125	1.5/16	185	334	324.38	D183-18504	47.0	215	364	593.01
D183-13386	34.0	190	339	340.00	D181-18750	1.7/8	220	369	608.44
D181-13750	1.3/8	190	339	376.54	D183-18898	48.0	220	369	613.29
D183-13780	35.0	190	339	357.44	D183-19291	49.0	220	369	626.31
D183-14173	36.0	195	344	360.91	D181-19375	1.15/16	220	369	626.31
D181-14375	1.7/16	195	344	366.14	D183-19685	50.0	220	369	649.08
					D181-20000	2"	225	374	649.08



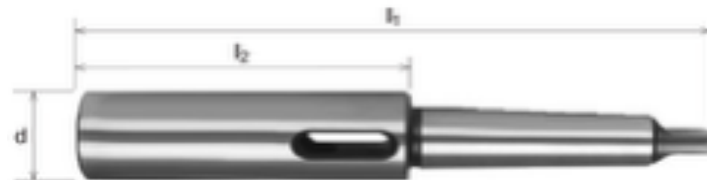
SPECIAL MORSE TAPER MTS DRILLS

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
<u>SPECIAL</u> No. 4 MORSE TAPER SHANK					<u>SPECIAL</u> No. 4 MORSE TAPER SHANK				
D183-20079	51.0	225	412	810.24	D183-25197	64.0	245	432	1074.59
D183-20472	52.0	225	412	887.34	D183-25591	65.0	245	432	1116.62
D183-20866	53.0	225	412	887.34	D183-25984	66.0	245	432	1141.40
D183-21260	54.0	230	417	838.14	D183-26378	67.0	245	432	1167.10
D183-21654	55.0	230	417	838.14	D183-26772	68.0	250	437	1176.28
D183-22047	56.0	230	417	864.37	D183-27165	69.0	250	437	1181.70
D183-22441	57.0	235	422	864.37	D183-27599	70.0	250	437	1186.60
D183-22835	58.0	235	422	887.48	D183-27953	71.0	250	437	1215.60
D183-23228	59.0	235	422	949.72	D183-28346	72.0	255	442	1238.20
D183-23622	60.0	235	422	949.72	D183-28740	73.0	255	442	1325.76
D183-24016	61.0	240	427	966.33	D183-29134	74.0	255	442	1424.95
D183-24409	62.0	240	427	1010.63	D183-29528	75.0	255	442	1601.32
D183-24803	63.0	240	427	1080.02					



MORSE TAPER DRILL SLEEVES

Code	Morse Taper Inside	Morse Taper Outside	\$ ea.
MDS01	0	1	44.18
MDS12	1	2	44.18
MDS13	1	3	44.18
MDS23	2	3	44.18
MDS24	2	4	52.87
MDS25	2	5	77.54
MDS34	3	4	77.54
MDS35	3	5	77.54
MDS45	4	5	77.54
MDS56	5	6	211.42



MORSE TAPER EXTENSION SOCKETS

Code	Inside	Outside	O.D. Extension	O.A.L	\$ ea.
MDE-1145	1	1	20	145	92.38
MDE-1160	1	2	20	160	92.38
MDE-1175	1	3	20	175	134.27
MDE-1200	1	4	20	200	197.24
MDE-2160	2	1	30	160	134.27
MDE-2175	2	2	30	175	141.68
MDE-2194	2	3	30	194	134.27
MDE-2215	2	4	30	215	197.24
MDE-2247	2	5	30	247	351.07
MDE-3196	3	2	36	196	197.24
MDE-3215	3	3	36	215	189.72
MDE-3240	3	4	36	240	189.72
MDE-3268	3	5	36	268	351.07
MDE-4240	4	3	48	240	330.13
MDE-4265	4	4	48	265	314.41
MDE-4300	4	5	48	300	421.31
MDE-5300	5	4	63	300	566.67
MDE-5335	5	5	63	335	560.52



MTS DRILL SETS

Code	Sizes	\$ ea.
D187-200	M14, M15, M16, M17, M18, M19, M20	448.76
D187-100	9/16, 19/32, 5/8, 21/32, 11/16, 23/32, 3/4	460.46

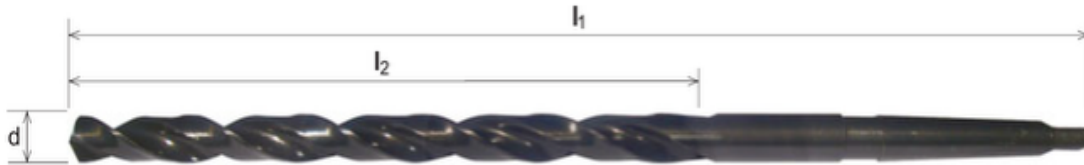
MTS DRILL SETS INCLUDE ONE PIECE PER SIZE LISTED



EXTRA LENGTH MTS DRILL SETS - 200MM F/L

Code	Sizes	\$ ea.
D192-200	M14, M15, M16, M17, M18, M19, M20	774.26

EXTRA LENGTH MTS DRILL SETS INCLUDE ONE PIECE PER SIZE LISTED, DRILLS HAVE 200MM F/L



EXTRA LENGTH MTS DRILLS

6" FLUTE LENGTH

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
D191-01875	3/16	6"	9"	34.77	D191-03125	5/16	6"	9"	45.53
D191-02500	1/4	6"	9"	38.00	D191-03750	3/8	6"	9"	55.42

8" FLUTE LENGTH

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
D193-01875	3/16	8"	11"	40.17	D193-05000	1/2	8"	11"	110.19
D193-02031	13/64	8"	11"	41.93	D193-05625	9/16	8"	12"	121.74
D193-02500	1/4	8"	11"	42.55	D193-06250	5/8	8"	12"	131.21
D193-03125	5/16	8"	11"	48.13	D193-06875	11/16	8"	12"	138.62
D193-03750	3/8	8"	11"	67.06	D193-07500	3/4	8"	12"	147.88
D193-04375	7/16	8"	11"	102.36	D193-08750	7/8	8"	12"	154.87

12" FLUTE LENGTH

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
D195-01875	3/16	12"	15"	90.11	D195-11875	1.3/16	12"	17"	462.14
D195-02500	1/4	12"	15"	93.15	D195-12500	1.1/4	12"	17"	479.70
D195-03125	5/16	12"	15"	98.17	D195-13125	1.5/16	12"	17"	506.70
D195-03750	3/8	12"	15"	114.19	D195-13750	1.3/8	12"	17"	525.20
D195-04375	7/16	12"	15"	130.23	D195-14375	1.7/16	12"	17"	555.99
D195-05000	1/2	12"	15"	132.17	D195-14688	1.15/32	12"	17"	582.30
D195-05625	9/16	12"	16"	137.83	D195-15000	1.1/2	12"	18"	610.24
D195-06250	5/8	12"	16"	171.05	D195-15625	1.9/16	12"	18"	622.84
D195-06875	11/16	12"	16"	181.73	D195-16250	1.5/8	12"	18"	700.14
D195-07500	3/4	12"	16"	195.25	D195-16875	1.11/16	12"	18"	772.14
D195-08750	7/8	12"	16"	219.48	D195-17500	1.3/4	12"	18"	853.13
D195-10000	1"	12"	17"	337.04	D195-18125	1.13/16	12"	18"	978.70
D195-10625	1.1/16	12"	17"	360.25	D195-18750	1.7/8	12"	18"	1060.93
D195-11550	1.1/8	12"	17"	439.49	D195-20000	2"	12"	18"	1124.56



EXTRA LENGTH MTS DRILLS

15" FLUTE LENGTH

Code	Size	l_2	l_1	\$ ea.	Code	Size	l_2	l_1	\$ ea.
D197-05625	9/16	15"	20"	208.69	D197-12500	1.1/4	15"	20"	628.77
D197-06250	5/8	15"	20"	219.94	D197-13750	1.3/8	15"	21"	657.22
D197-06875	11/16	15"	20"	229.32	D197-14375	1.7/16	15"	21"	695.35
D197-07500	3/4	15"	20"	238.20	D197-15000	1.1/2	15"	21"	819.74
D197-08750	7/8	15"	20"	248.38	D197-16250	1.5/8	15"	21"	999.36
D197-10000	1"	15"	20"	379.05	D197-17500	1.3/4	15"	21"	1208.79
D197-11550	1.1/8	15"	20"	579.65	D197-18750	1.7/8	15"	21"	1276.43
D197-11875	1.3/16	15"	20"	599.77	D197-20000	2"	15"	21"	1411.72

18" FLUTE LENGTH

Code	Size	l_2	l_1	\$ ea.	Code	Size	l_2	l_1	\$ ea.
D199-06250	5/8	18"	22"	276.00	D199-15000	1.1/2	18"	24"	853.94
D199-06875	11/16	18"	22"	287.75	D199-15625	1.9/16	18"	24"	871.85
D199-07500	3/4	18"	22"	297.63	D199-16250	1.5/8	18"	24"	980.18
D199-08750	7/8	18"	22"	310.44	D199-16875	1.11/16	18"	24"	1068.55
D199-10000	1"	18"	23"	473.79	D199-17500	1.3/4	18"	24"	1194.17
D199-10625	1.1/16	18"	23"	504.19	D199-18125	1.13/16	18"	24"	1370.16
D199-11550	1.1/8	18"	23"	615.23	D199-18750	1.7/8	18"	24"	1485.28
D199-11875	1.3/16	18"	23"	646.99	D199-20000	2"	18"	24"	1574.39
D199-12500	1.1/4	18"	23"	671.57	D199-21250	2.1/8	18"	25"	1627.52
D199-13125	1.5/16	18"	24"	709.34	D199-22500	2.1/4	18"	25"	1710.73
D199-13750	1.3/8	18"	24"	751.49	D199-23750	2.3/8	18"	25"	1755.21
D199-14375	1.7/16	18"	24"	819.32	D199-25000	2.1/2	18"	25"	1792.50
D199-14688	1.15/32	18"	24"	839.32					



EXTRA LENGTH MTS DRILLS

150mm FLUTE LENGTH

Code	Size	l_2	l_1	\$ ea.
D190-01968	5.0	150	230	33.92
D190-02165	5.5	150	230	34.26
D190-02362	6.0	150	230	38.87
D190-02559	6.5	150	230	39.40
D190-02756	7.0	150	230	40.28
D190-02953	7.5	150	230	41.35

Code	Size	l_2	l_1	\$ ea.
D190-03150	8.0	150	230	44.08
D190-03346	8.5	150	230	52.03
D190-03543	9.0	150	230	53.77
D190-03740	9.5	150	230	55.42
D190-03937	10.0	150	230	57.07
D190-04724	12.0	150	230	58.79

200mm FLUTE LENGTH

Code	Size	l_2	l_1	\$ ea.
D192-01968	5.0	200	280	40.17
D192-02165	5.5	200	280	40.89
D192-02362	6.0	200	280	42.55
D192-02559	6.5	200	280	43.08
D192-02756	7.0	200	280	44.08
D192-02953	7.5	200	280	45.04
D192-03150	8.0	200	280	49.13
D192-03346	8.5	200	280	54.63
D192-03543	9.0	200	280	57.42
D192-03740	9.5	200	280	67.06
D192-03937	10.0	200	280	71.75
D192-04134	10.5	200	280	102.36
D192-04331	11.0	200	280	102.36
D192-04724	12.0	200	280	110.19
D192-05118	13.0	200	280	120.92
D192-05512	14.0	200	280	124.80

Code	Size	l_2	l_1	\$ ea.
D192-05906	15.0	200	300	129.96
D192-06299	16.0	200	300	133.78
D192-06693	17.0	200	300	141.48
D192-07087	18.0	200	300	142.43
D192-07480	19.0	200	300	150.21
D192-07874	20.0	200	300	150.99
D192-08268	21.0	200	300	152.63
D192-08661	22.0	200	300	156.86
D192-09055	23.0	200	300	164.36
D192-09449	24.0	200	315	178.47
D192-09843	25.0	200	315	187.67
D192-10236	26.0	200	315	196.14
D192-10630	27.0	200	315	207.39
D192-11024	28.0	200	315	216.98
D192-11417	29.0	200	315	223.38
D192-11811	30.0	200	315	235.47



EXTRA LENGTH MTS DRILLS

300mm FLUTE LENGTH

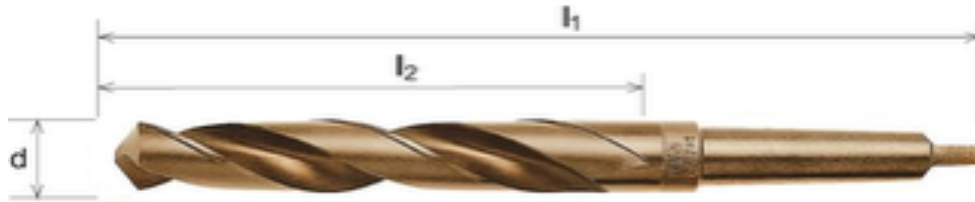
Code	Size	l_2	l_1	\$ ea.	Code	Size	l_2	l_1	\$ ea.
D194-02362	6.0	300	380	57.44	D194-09055	23.0	300	400	280.88
D194-02559	6.5	300	380	56.35	D194-09449	24.0	300	415	308.98
D194-02756	7.0	300	380	57.44	D194-09843	25.0	300	415	336.96
D194-02953	7.5	300	380	79.78	D194-10236	26.0	300	415	349.16
D194-03150	8.0	300	380	97.46	D194-10630	27.0	300	415	373.95
D194-03346	8.5	300	380	101.23	D194-11024	28.0	300	415	402.84
D194-03543	9.0	300	380	104.48	D194-11417	29.0	300	415	439.49
D194-03740	9.5	300	380	111.57	D194-11811	30.0	300	415	453.81
D194-03937	10.0	300	380	114.21	D194-12205	31.0	300	450	462.14
D194-04134	10.5	300	380	129.26	D194-12598	32.0	300	450	479.88
D194-04331	11.0	300	380	129.26	D194-12992	33.0	300	450	486.66
D194-04527	11.5	300	380	131.65	D194-13386	34.0	300	450	506.70
D194-04724	12.0	300	380	131.66	D194-13780	35.0	300	450	530.91
D194-05118	13.0	300	380	132.17	D194-14173	36.0	300	450	555.99
D194-05314	13.5	300	380	132.17	D194-14567	37.0	300	450	571.82
D194-05512	14.0	300	380	144.82	D194-14961	38.0	300	450	610.23
D194-05708	14.5	300	380	144.82	D194-15354	39.0	300	450	622.84
D194-05906	15.0	300	400	156.92	D194-15748	40.0	300	450	693.95
D194-06299	16.0	300	400	171.05	D194-16142	41.0	300	450	722.99
D194-06496	16.5	300	400	171.05	D194-16535	42.0	300	450	782.27
D194-06693	17.0	300	400	180.28	D194-16929	43.0	300	450	797.10
D194-06889	17.5	300	400	180.28	D194-17323	44.0	300	450	818.13
D194-07087	18.0	300	400	187.98	D194-17716	45.0	300	450	842.67
D194-07283	18.5	300	400	187.98	D194-18110	46.0	300	450	867.18
D194-07480	19.0	300	400	195.25	D194-18504	47.0	300	450	900.26
D194-07677	19.5	300	400	195.25	D194-18898	48.0	300	450	919.77
D194-07874	20.0	300	400	203.59	D194-19291	49.0	300	450	973.34
D194-08268	21.0	300	400	209.43	D194-19685	50.0	300	450	1112.53
D194-08661	22.0	300	400	219.48					



EXTRA LENGTH MTS DRILLS

375mm FLUTE LENGTH

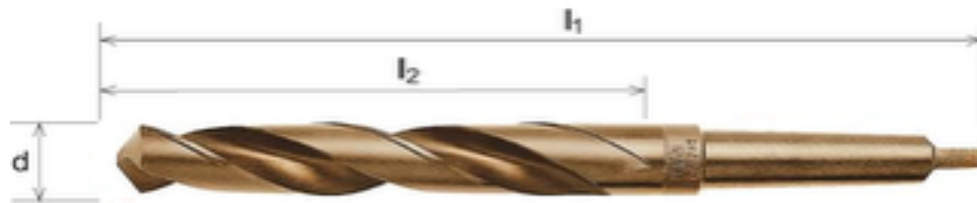
Code	Size	l_2	l_1	\$ ea.	Code	Size	l_2	l_1	\$ ea.
D196-05512	14.0	375	475	181.67	D196-12992	33.0	375	525	589.34
D196-05906	15.0	375	475	191.47	D196-13386	34.0	375	525	607.30
D196-06299	16.0	375	475	208.69	D196-13780	35.0	375	525	642.98
D196-06693	17.0	375	475	223.43	D196-14173	36.0	375	525	661.38
D196-07087	18.0	375	475	229.32	D196-14567	37.0	375	525	694.31
D196-07480	19.0	375	475	238.20	D196-14961	38.0	375	525	746.38
D196-07874	20.0	375	475	248.38	D196-15354	39.0	375	525	816.76
D196-08268	21.0	375	475	255.47	D196-15748	40.0	375	525	846.80
D196-08661	22.0	375	475	267.74	D196-16142	41.0	375	525	920.92
D196-09055	23.0	375	475	342.67	D196-16535	42.0	375	525	957.02
D196-09449	24.0	375	500	376.95	D196-16929	43.0	375	525	975.87
D196-09843	25.0	375	500	441.71	D196-17323	44.0	375	525	992.65
D196-10236	26.0	375	500	425.98	D196-17716	45.0	375	525	1027.72
D196-10630	27.0	375	500	459.95	D196-18110	46.0	375	525	1060.01
D196-11024	28.0	375	500	495.49	D196-18504	47.0	375	525	1098.09
D196-11417	29.0	375	500	540.55	D196-18898	48.0	375	525	1123.21
D196-11811	30.0	375	500	558.33	D196-19291	49.0	375	525	1177.56
D196-12205	31.0	375	525	564.81	D196-19685	50.0	375	525	1370.54
D196-12598	32.0	375	525	575.62					



COBALT DRILLS - MTS

Code	Size	l ₂	l ₁	\$ ea.
TSCO13	13.0	108	189	59.44
TSCO13.5	13.5	108	189	63.69
TSCO14	14.0	108	189	67.06
TSCI29	9/16	114	212	67.06
TSCO14.5	14.5	114	212	88.36
TSCO15	15.0	114	212	89.96
TSCO15.5	15.5	120	218	89.96
TSCI33	5/8	120	218	96.03
TSCO16	16.0	120	218	96.03
TSCO16.5	16.5	125	223	96.03
TSCO17	17.0	125	223	100.51
TSCI37	11/16	125	223	100.51
TSCO17.5	17.5	130	228	100.51
TSCO18	18.0	130	228	101.60
TSCO18.5	18.5	135	233	101.60
TSCO19	19.0	135	233	102.96
TSCI41	3/4	135	233	102.96
TSCO19.5	19.5	140	238	102.96
TSCO20	20.0	140	238	108.74
TSCO20.5	20.5	145	243	108.74
TSCI45	13/16	145	245	120.86
TSCO21	21.0	145	245	120.86
TSCO21.5	21.5	150	248	120.86
TSCO22	22.0	150	248	126.56
TSCI49	7/8	150	248	126.56
TSCO22.5	22.5	155	253	126.56
TSCO23	23.0	155	253	137.26
TSCO23.5	23.5	155	276	137.26
TSCI53	15/16	155	276	158.82

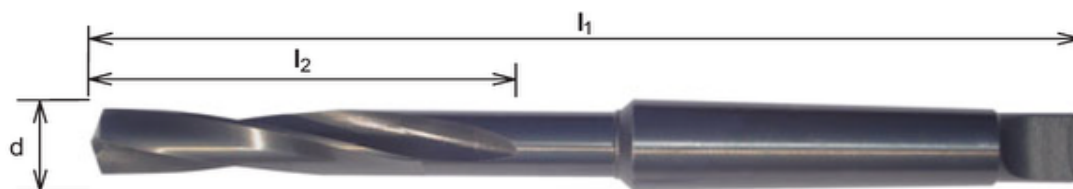
Code	Size	l ₂	l ₁	\$ ea.
TSCO24	24.0	160	281	158.82
TSCO24.5	24.5	160	281	158.82
TSCO25	25.0	160	281	176.72
TSCI57	1"	160	281	176.72
TSCO25.5	25.5	165	286	205.53
TSCO26	26.0	165	286	205.53
TSCI61	1.1/16	165	286	205.53
TSCO27	27.0	170	291	205.53
TSCO28	28.0	170	291	214.40
TSCI65	1.1/8	175	296	224.84
TSCO29	29.0	175	296	224.84
TSCO30	30.0	175	296	243.93
TSCI69	1.3/16	180	301	252.84
TSCO31	31.0	180	301	252.84
TSCI73	1.1/4	180	301	252.84
TSCO32	32.0	185	334	257.45
TSCO33	33.0	185	334	284.66
TSCI77	1.5/16	190	339	290.99
TSCO34	34.0	190	339	290.99
TSCI81	1.3/8	190	339	300.68
TSCO35	35.0	190	339	300.68
TSCO36	36.0	195	344	307.90
TSCI85	1.7/16	195	344	307.90
TSCO37	37.0	200	349	337.64
TSCO38	38.0	200	349	344.90
TSCI89	1.1/2	200	349	344.90
TSCO39	39.0	205	354	350.25
TSCI90	1.9/16	205	354	356.66
TSCO40	40.0	205	354	356.66



COBALT DRILLS - MTS

Code	Size	l_2	l_1	\$ ea.
TSCO41	41.0	212	257	357.41
TSCI91	1.5/8	212	257	357.41
TSCO42	42.0	212	257	367.50
TSCI92	1.11/16	212	257	367.50
TSCO43	43.0	235	360	378.90
TSCO44	44.0	235	360	386.12
TSCI93	1.3/4	235	360	408.32
TSCO45	45.0	235	360	408.32
TSCO46	46.0	235	360	421.21

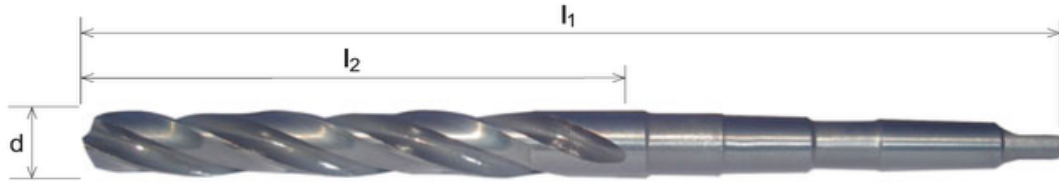
Code	Size	l_2	l_1	\$ ea.
TSCI94	1.13/16	240	365	425.51
TSCO47	47.0	240	365	430.26
TSCI95	1.7/8	240	365	442.00
TSCO48	48.0	240	365	442.00
TSCO49	49.0	240	365	487.42
TSCI96	1.15/16	240	365	487.42
TSCO50	50.0	240	365	588.22
TSCI97	2"	240	365	588.22



ARMOUR PIERCING DRILLS - MTS HSS-Co

Code	Size	l_2	l_1	\$ ea.
AP-01968	5.0	35	97	65.91
AP-02362	6.0	35	97	65.91
AP-02500	1/4	42	105	67.97
AP-02756	7.0	42	105	67.97
AP-03125	5/16	51	112	70.02
AP-03150	8.0	51	112	70.02
AP-03438	11/32	53	128	70.02
AP-03543	9.0	53	128	70.02
AP-03750	3/8	56	140	74.15
AP-03937	10.0	56	140	74.15
AP-04331	11.0	76	175	90.63
AP-04375	7/16	76	175	90.63
AP-04724	12.0	81	179	96.80
AP-05000	1/2	81	179	96.80
AP-05118	13.0	81	179	115.34
AP-05512	14.0	86	184	127.69
AP-05625	9/16	86	184	127.69
AP-05906	15.0	89	187	127.69
AP-06250	5/8	89	187	135.94
AP-06299	16.0	89	187	135.94
AP-06693	17.0	92	190	140.06
AP-06875	11/16	92	190	148.29
AP-07087	18.0	92	190	148.29
AP-07480	19.0	95	213	156.55
AP-07500	3/4	95	213	160.66
AP-07874	20.0	95	213	160.66
AP-08125	13/16	102	219	189.49
AP-08268	21.0	102	219	183.31
AP-08661	22.0	105	222	189.49
AP-08750	7/8	105	222	220.37
AP-09055	23.0	105	222	201.48

Code	Size	l_2	l_1	\$ ea.
AP-09375	15/16	105	222	234.79
AP-09449	24.0	105	222	234.79
AP-09843	25.0	108	225	265.69
AP-10000	1"	108	225	282.17
AP-10236	26.0	124	270	296.59
AP-10630	27.0	124	270	315.11
AP-11024	28.0	124	270	315.11
AP-11250	1.1/8	124	270	370.75
AP-11417	29.0	124	270	327.48
AP-11811	30.0	124	270	358.38
AP-12205	31.0	124	270	368.67
AP-12500	1.1/4	133	280	428.40
AP-12598	32.0	133	280	405.75
AP-12992	33.0	133	280	455.18
AP-13386	34.0	133	280	463.42
AP-13780	35.0	136	292	481.94
AP-14173	36.0	146	292	488.14
AP-14567	37.0	146	292	551.98
AP-14961	38.0	149	295	558.17
AP-15354	39.0	149	295	558.17
AP-15748	40.0	152	298	570.52
AP-16142	41.0	152	298	605.54
AP-16535	42.0	152	298	638.49
AP-16929	43.0	152	298	663.19
AP-17323	44.0	152	298	698.21
AP-17716	45.0	152	298	735.29
AP-18100	46.0	152	298	757.94
AP-18504	47.0	152	298	770.31
AP-18898	48.0	152	298	819.74
AP-19291	49.0	152	298	842.87
AP-19685	50.0	152	356	877.39



CORE DRILLS - MTS

Code	Size	l_2	l_1	\$ ea.
D188-02362	6.0	57	138	70.65
D188-02500	1/4	63	144	70.65
D188-02756	7.0	69	150	70.65
D188-03125	5/16	75	156	70.65
D188-03150	8.0	75	156	70.65
D188-03543	9.0	81	162	75.88
D188-03750	3/8	87	168	78.49
D188-03937	10.0	87	168	78.49
D188-04331	11.0	94	175	83.68
D188-04375	7/16	94	175	83.68
D188-04724	12.0	101	182	107.20
D188-05000	1/2	101	182	89.53
D188-05118	13.0	108	189	110.46
D188-05512	14.0	114	212	94.73
D188-05625	9/16	114	212	103.14
D188-05906	15.0	120	218	103.14
D188-06250	5/8	120	218	108.33
D188-06299	16.0	125	223	108.33
D188-06693	17.0	125	223	116.13
D188-06875	11/16	130	228	123.99
D188-07087	18.0	130	228	123.99
D188-07480	19.0	135	233	144.04
D188-07500	3/4	140	238	151.82
D188-07874	20.0	140	238	151.82
D188-08125	13/16	145	243	158.95
D188-08268	21.0	145	243	158.95
D188-08661	22.0	150	248	162.83
D188-08750	7/8	150	248	167.39
D188-09055	23.0	155	253	167.39
D188-09375	15/16	160	281	172.58
D188-09449	24.0	160	281	172.58

Code	Size	l_2	l_1	\$ ea.
D188-09843	25.0	160	281	209.54
D188-10000	1"	165	286	209.54
D188-10236	26.0	165	286	223.08
D188-10630	27.0	165	291	252.36
D188-11024	28.0	165	291	260.16
D188-11250	1.1/8	165	296	349.35
D188-11417	29.0	165	296	276.38
D188-11811	30.0	165	296	284.17
D188-12205	31.0	165	301	289.36
D188-12500	1.1/4	165	306	368.56
D188-12598	32.0	165	310	296.79
D188-12992	33.0	165	310	304.23
D188-13386	34.0	165	310	316.36
D188-13780	35.0	165	310	323.37
D188-14173	36.0	165	310	327.29
D188-14567	37.0	165	310	335.94
D188-14961	38.0	165	310	346.84
D188-15000	1.1/2	165	310	413.12
D188-15354	39.0	165	310	358.13
D188-15748	40.0	165	310	364.36
D188-16142	41.0	165	310	443.48
D188-16535	42.0	165	310	468.78
D188-16929	43.0	165	310	499.67
D188-17323	44.0	165	310	535.20
D188-17716	45.0	165	310	585.62
D188-18100	46.0	165	310	633.17
D188-18504	47.0	165	310	656.83
D188-18898	48.0	165	310	704.61
D188-19291	49.0	165	310	719.89
D188-19685	50.0	165	310	767.25



SCREW SLOTTING SAWS

Code	O/D	Width	Bore	Teeth	\$ ea.
S510-1006	1.3/4	0.006	5/8	90	80.11
S510-1008	1.3/4	0.008	5/8	90	80.11
S510-1010	1.3/4	0.010	5/8	90	68.11
S510-1012	1.3/4	0.012	5/8	90	68.11
S510-1014	1.3/4	0.014	5/8	90	68.11
S510-1016	1.3/4	0.016	5/8	90	56.52
S510-1018	1.3/4	0.018	5/8	90	56.52
S510-1020	1.3/4	0.020	5/8	90	56.52
S510-1023	1.3/4	0.023	5/8	90	56.52
S510-1025	1.3/4	0.025	5/8	90	56.52
S510-1028	1.3/4	0.028	5/8	90	56.52
S510-1032	1.3/4	0.032	5/8	90	56.52
S510-1035	1.3/4	0.035	5/8	90	56.52
S510-1040	1.3/4	0.040	5/8	90	56.52
S510-1045	1.3/4	0.045	5/8	90	56.52
S510-1051	1.3/4	0.051	5/8	90	56.52
S510-1057	1.3/4	0.057	5/8	90	56.52
S510-1064	1.3/4	0.064	5/8	90	69.60
S510-1072	1.3/4	0.072	5/8	90	69.60
S510-1081	1.3/4	0.081	5/8	90	77.74
S510-1091	1.3/4	0.091	5/8	90	77.74
S510-1102	1.3/4	0.102	5/8	90	85.52
S510-1114	1.3/4	0.114	5/8	90	85.52

Code	O/D	Width	Bore	Teeth	\$ ea.
S510-3006	2.1/4	0.006	5/8	60	86.41
S510-3008	2.1/4	0.008	5/8	60	86.41
S510-3010	2.1/4	0.010	5/8	60	86.41
S510-3012	2.1/4	0.012	5/8	60	86.41
S510-3014	2.1/4	0.014	5/8	60	86.41
S510-3016	2.1/4	0.016	5/8	60	86.41
S510-3018	2.1/4	0.018	5/8	60	86.41
S510-3020	2.1/4	0.020	5/8	60	86.41
S510-3023	2.1/4	0.023	5/8	60	86.41
S510-3025	2.1/4	0.025	5/8	60	86.41
S510-3028	2.1/4	0.028	5/8	60	86.41
S510-3032	2.1/4	0.032	5/8	60	86.41
S510-3035	2.1/4	0.035	5/8	60	86.41
S510-3040	2.1/4	0.040	5/8	60	86.41
S510-3045	2.1/4	0.045	5/8	60	86.41
S510-3051	2.1/4	0.051	5/8	60	86.41
S510-3057	2.1/4	0.057	5/8	60	86.41
S510-3064	2.1/4	0.064	5/8	60	86.41
S510-3072	2.1/4	0.072	5/8	60	86.41
S510-3081	2.1/4	0.081	5/8	60	86.41
S510-3091	2.1/4	0.091	5/8	60	86.41
S510-3102	2.1/4	0.102	5/8	60	86.41
S510-3114	2.1/4	0.114	5/8	60	86.41



SCREW SLOTTING SAWS

Code	O/D	Width	Bore	Teeth	\$ ea.
S510-5006	2.3/4	0.006	1"	72	93.58
S510-5008	2.3/4	0.008	1"	72	93.58
S510-5010	2.3/4	0.010	1"	72	93.58
S510-5012	2.3/4	0.012	1"	72	93.58
S510-5014	2.3/4	0.014	1"	72	73.92
S510-5016	2.3/4	0.016	1"	72	73.92
S510-5018	2.3/4	0.018	1"	72	73.92
S510-5020	2.3/4	0.020	1"	72	73.92
S510-5023	2.3/4	0.023	1"	72	73.92
S510-5025	2.3/4	0.025	1"	72	73.92
S510-5028	2.3/4	0.028	1"	72	73.92
S510-5032	2.3/4	0.032	1"	72	73.92
S510-5035	2.3/4	0.035	1"	72	73.92
S510-5036	2.3/4	0.036	1"	72	73.92

Code	O/D	Width	Bore	Teeth	\$ ea.
S510-5040	2.3/4	0.040	1"	72	73.92
S510-5045	2.3/4	0.045	1"	72	73.92
S510-5051	2.3/4	0.051	1"	72	73.92
S510-5057	2.3/4	0.057	1"	72	88.49
S510-5064	2.3/4	0.064	1"	72	88.49
S510-5072	2.3/4	0.072	1"	72	88.49
S510-5081	2.3/4	0.081	1"	72	88.49
S510-5091	2.3/4	0.091	1"	72	88.49
S510-5102	2.3/4	0.102	1"	72	95.68
S510-5114	2.3/4	0.114	1"	72	95.68
S510-5128	2.3/4	0.128	1"	72	110.48
S510-5144	2.3/4	0.144	1"	72	110.48
S510-5162	2.3/4	0.162	1"	72	151.17
S510-5182	2.3/4	0.182	1"	72	151.17



HSS SLITTING SAWS - FINE PITCH

Code	O/D	Width	Bore	Teeth	\$ ea.
S578-25135	2.1/2	1/64	1"	62	73.97
S578-25312	2.1/2	1/32	1"	62	63.00
S578-25469	2.1/2	3/64	1"	62	60.89
S578-25625	2.1/2	1/16	1"	62	72.49
S578-25938	2.1/2	3/32	1"	62	85.52
S578-25125	2.1/2	1/8	1"	62	92.15
S578-25156	2.1/2	5/32	1"	62	129.02
S578-25250	2.1/2	1/4	1"	62	145.07

S578-30135	3"	1/64	1"	74	71.03
S578-30312	3"	1/32	1"	74	71.03
S578-30469	3"	3/64	1"	74	89.26
S578-30625	3"	1/16	1"	74	89.26
S578-30781	3"	5/64	1"	74	100.08
S578-30938	3"	3/32	1"	74	100.04
S578-30125	3"	1/8	1"	74	115.18
S578-30156	3"	5/32	1"	74	134.98
S578-30187	3"	3/16	1"	74	159.48
S578-30218	3"	7/32	1"	74	159.48
S578-30250	3"	1/4	1"	74	159.48

S578-30301	3"	1.0mm	1"	74	87.23
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S578-40135	4"	1/64	1"	100	105.24
S578-40312	4"	1/32	1"	100	93.58
S578-40469	4"	3/64	1"	100	108.72
S578-40625	4"	1/16	1"	100	108.72
S578-40781	4"	5/64	1"	100	136.29
S578-40938	4"	3/32	1"	100	136.29
S578-40109	4"	7/64	1"	100	159.48
S578-40125	4"	1/8	1"	100	159.48
S578-40156	4"	5/32	1"	100	191.37
S578-40187	4"	3/16	1"	100	223.24

S578-40250	4"	1/4	1"	100	260.97
S578-40401	4"	1.0mm	1"	100	110.85
S578-50312	5"	1/32	1"	124	156.59
S578-50469	5"	3/64	1"	124	156.59
S578-50625	5"	1/16	1"	124	158.18
S578-50938	5"	3/32	1"	124	191.37
S578-50125	5"	1/8	1"	124	223.24
S578-50156	5"	5/32	1"	124	263.86
S578-50187	5"	3/16	1"	124	313.14
S578-50250	5"	1/4	1"	124	363.73

S578-60312	6"	1/32	1"	150	214.57
S578-60469	6"	3/64	1"	150	221.87
S578-60625	6"	1/16	1"	150	240.67
S578-60938	6"	3/32	1"	150	254.80
S578-60125	6"	1/8	1"	150	298.65
S578-60187	6"	3/16	1"	150	353.16
S578-60250	6"	1/4	1"	150	423.52

S578-80625	8"	1/16	1"	200	487.42
S578-80938	8"	3/32	1"	200	487.42
S578-80125	8"	1/8	1"	200	531.08
S578-80157	8"	3/16	1"	200	561.65
S578-80250	8"	1/4	1"	200	598.85

S578-10625	10"	1/16	1"	250	511.20
S578-10125	10"	1/8	1"	250	573.29
S578-12625	12"	1/16	1"	300	539.02
S578-12125	12"	1/8	1"	300	616.34



HSS SLITTING SAWS - COARSE PITCH

Code	O/D	Width	Bore	Teeth	\$ ea.
S579-25135	2.1/2	1/64	1"	26	73.97
S579-25312	2.1/2	1/32	1"	26	63.00
S579-25469	2.1/2	3/64	1"	26	60.89
S579-25625	2.1/2	1/16	1"	26	72.49
S579-25938	2.1/2	3/32	1"	26	85.52
S579-25125	2.1/2	1/8	1"	26	92.15
S579-25156	2.1/2	5/32	1"	26	129.02
S579-25250	2.1/2	1/4	1"	26	145.07
S579-30135	3"	1/64	1"	30	71.03
S579-30312	3"	1/32	1"	30	71.03
S579-30469	3"	3/64	1"	30	89.26
S579-30625	3"	1/16	1"	30	89.26
S579-30781	3"	5/64	1"	30	100.08
S579-30938	3"	3/32	1"	30	100.04
S579-30125	3"	1/8	1"	30	115.18
S579-30156	3"	5/32	1"	30	134.98
S579-30187	3"	3/16	1"	30	159.48
S579-30218	3"	7/32	1"	30	159.48
S579-30250	3"	1/4	1"	30	159.48
S579-40135	4"	1/64	1"	36	105.24
S579-40312	4"	1/32	1"	36	93.58
S579-40469	4"	3/64	1"	36	108.72
S579-40625	4"	1/16	1"	36	108.72
S579-40781	4"	5/64	1"	36	136.29
S579-40938	4"	3/32	1"	36	136.29
S579-40109	4"	7/64	1"	36	159.48
S579-40125	4"	1/8	1"	36	159.48
S579-40156	4"	5/32	1"	36	191.37
S579-40187	4"	3/16	1"	36	223.24
S579-40250	4"	1/4	1"	36	260.97
S579-50312	5"	1/32	1"	40	156.59
S579-50469	5"	3/64	1"	40	156.59
S579-50625	5"	1/16	1"	40	158.18

Code	O/D	Width	Bore	Teeth	\$ ea.
S579-50938	5"	3/32	1"	40	191.37
S579-50125	5"	1/8	1"	40	223.24
S579-50156	5"	5/32	1"	40	263.86
S579-50187	5"	3/16	1"	40	313.14
S579-50250	5"	1/4	1"	40	363.73
S579-60312	6"	1/32	1"	44	214.57
S579-60469	6"	3/64	1"	44	221.87
S579-60625	6"	1/16	1"	44	240.67
S579-60781	6"	5/64	1"	44	240.67
S579-60938	6"	3/32	1"	44	254.80
S579-60125	6"	1/8	1"	44	298.65
S579-60156	6"	5/32	1"	44	348.61
S579-60187	6"	3/16	1"	44	353.16
S579-60218	6"	7/32	1"	44	423.52
S579-60250	6"	1/4	1"	44	423.52
S579-80625	8"	1/16	1"	52	433.26
S579-80781	8"	5/64	1"	52	487.42
S579-80938	8"	3/32	1"	52	487.42
S579-80125	8"	1/8	1"	52	531.08
S579-80156	8"	5/32	1"	52	531.08
S579-80187	8"	3/16	1"	52	531.08
S579-80218	8"	7/32	1"	52	580.81
S579-80250	8"	1/4	1"	52	634.42
S579-10625	10"	1/16	1"	62	511.20
S579-10781	10"	5/64	1"	62	511.20
S579-10938	10"	3/32	1"	62	511.20
S579-10125	10"	1/8	1"	62	529.61
S579-10156	10"	5/32	1"	62	603.63
S579-10187	10"	3/16	1"	62	725.87
S579-10218	10"	7/32	1"	62	769.11
S579-10250	10"	1/4	1"	62	835.90
S579-12125	12"	1/8	1"	70	1011.11
S579-12187	12"	3/16	1"	70	1254.44



HSS SLITTING SAW SETS - FINE PITCH

Code	Diameter	Sizes	\$ ea.
S578-300	3"	1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4	680.34
S578-400	4"	1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4	975.15
S578-500	5"	1/16, 1/8, 5/32, 3/16, 1/4	1012.59
S578-600	6"	1/16, 1/8, 3/16, 1/4	901.50

HSS SLITTING SAW SETS - COARSE PITCH

Code	Diameter	Sizes	\$ ea.
S579-300	3"	1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4	680.34
S579-400	4"	1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4	975.15
S579-500	5"	1/16, 1/8, 5/32, 3/16, 1/4	1012.59
S579-600	6"	1/16, 1/8, 3/16, 1/4	901.50

SLITTING SAW SETS INCLUDE ONE SAW PER SIZE LISTED



SINGLE ANGLE CUTTERS - STRAIGHT TOOTH HSS

Code	O/D	Angle	Width	Bore	Teeth	\$ ea.
S49R6-30045	3"	45°	1/2	1"	20	361.54
S49R6-30060	3"	60°	1/2	1"	20	395.93
S49R6-3AB45	3"	45°	5/8	1"	20	395.93
S49R6-3AB60	3"	60°	5/8	1"	20	395.93
S49R6-3AC60	3"	60°	3/4	1"	20	395.93
S49R6-40050	4"	45°	3/4	1"	20	557.89
S49R6-40060	4"	60°	3/4	1"	20	557.89

LEFT HAND SINGLE ANGLE CUTTERS - STRAIGHT TOOTH HSS

Code	O/D	Angle	Width	Bore	Teeth	\$ ea.
S49L6-30045	3"	45°	1/2	1"	20	361.54
S49L6-30060	3"	60°	1/2	1"	20	395.93
S49L6-3AB45	3"	45°	5/8	1"	20	395.93
S49L6-3AB60	3"	60°	5/8	1"	20	395.93
S49L6-3AC60	3"	60°	3/4	1"	20	395.93
S49L6-40050	4"	45°	3/4	1"	20	557.89
S49L6-40060	4"	60°	3/4	1"	20	557.89

EQUAL ANGLE CUTTERS - STRAIGHT TOOTH HSS

Code	O/D	Angle	Width	Bore	Teeth	\$ ea.
S497-30045	3"	45°	1/2	1"	24	455.93
S497-30060	3"	60°	1/2	1"	20	455.93
S497-30090	3"	90°	1/2	1"	20	455.93
S497-3AA60	3"	60°	5/8	1"	20	471.93
S497-3AA90	3"	90°	5/8	1"	20	471.93
S497-3AB60	3"	60°	3/4	1"	18	483.91
S497-3AB90	3"	90°	3/4	1"	18	483.91
S497-40045	4"	45°	3/4	1"	20	585.91
S497-40060	4"	60°	3/4	1"	20	585.91
S497-40090	4"	90°	3/4	1"	20	585.91



SIDE & FACE CUTTERS - STRAIGHT TOOTH HSS

Code	Diameter	Width	Bore	\$ ea.
505S-25187	2.5"	3/16	1"	208.68
505S-25250	2.5"	1/4	1"	217.06
505S-25312	2.5"	5/16	1"	228.91
505S-25375	2.5"	3/8	1"	237.11
505S-25437	2.5"	7/16	1"	244.24
505S-25500	2.5"	1/2	1"	251.34
505S-25625	2.5"	5/8	1"	265.56
505S-30187	3"	3/16	1"	239.28
505S-30250	3"	1/4	1"	241.45
505S-30312	3"	5/16	1"	252.23
505S-30375	3"	3/8	1"	258.68
505S-30437	3"	7/16	1"	265.13
505S-30500	3"	1/2	1"	278.07
505S-30562	3"	9/16	1"	286.90
505S-30625	3"	5/8	1"	288.85
505S-30750	3"	3/4	1"	295.55
505S-40187	4"	3/16	1"	291.00
505S-40250	4"	1/4	1"	308.25
505S-40312	4"	5/16	1"	331.97
505S-40375	4"	3/8	1"	344.89
505S-40437	4"	7/16	1"	362.15
505S-40500	4"	1/2	1"	370.77
505S-40562	4"	9/16	1"	393.61
505S-40625	4"	5/8	1"	409.57

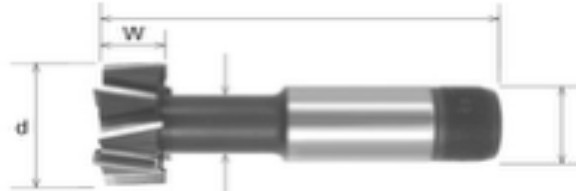
Code	Diameter	Width	Bore	\$ ea.
505S-40750	4"	3/4	1"	446.55
505S-40100	4"	1"	1"	485.08
505S-50187	5"	3/16	1"	385.66
505S-50250	5"	1/4	1"	400.96
505S-50312	5"	5/16	1"	478.99
505S-50375	5"	3/8	1"	489.34
505S-50437	5"	7/16	1"	543.01
505S-50500	5"	1/2	1"	538.91
505S-50562	5"	9/16	1"	573.82
505S-50625	5"	5/8	1"	625.99
505S-50750	5"	3/4	1"	680.53
505S-50875	5"	7/8	1"	744.55
505S-50100	5"	1"	1"	796.71
505S-60187	6"	3/16	1"	549.23
505S-60250	6"	1/4	1"	562.62
505S-60312	6"	5/16	1"	599.24
505S-60375	6"	3/8	1"	625.13
505S-60437	6"	7/16	1"	687.61
505S-60500	6"	1/2	1"	687.61
505S-60562	6"	9/16	1"	716.09
505S-60625	6"	5/8	1"	756.63
505S-60750	6"	3/4	1"	877.35
505S-60875	6"	7/8	1"	1045.47
505S-60100	6"	1"	1"	1047.63



SIDE & FACE CUTTERS - STAGGERED TOOTH - COBALT

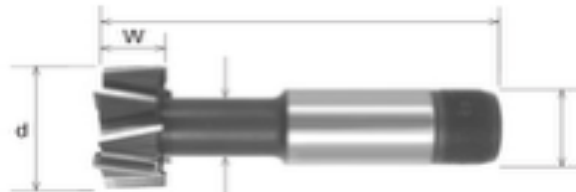
Code	Diameter	Width	Bore	\$ ea.
507S-30250	3"	1/4	1"	275.05
507S-30312	3"	5/16	1"	282.17
507S-30375	3"	3/8	1"	301.15
507S-30500	3"	1/2	1"	350.43
507S-30625	3"	5/8	1"	368.43
507S-40250	4"	1/4	1"	378.68
507S-40312	4"	5/16	1"	399.94
507S-40375	4"	3/8	1"	416.03
507S-40500	4"	1/2	1"	446.23
507S-40625	4"	5/8	1"	482.84
507S-40750	4"	3/4	1"	514.99

Code	Diameter	Width	Bore	\$ ea.
507S-50250	5"	1/4	1"	479.78
507S-50312	5"	5/16	1"	501.31
507S-50375	5"	3/8	1"	519.28
507S-50500	5"	1/2	1"	564.33
507S-50625	5"	5/8	1"	616.52
507S-60250	6"	1/4	1"	638.54
507S-60312	6"	5/16	1"	663.63
507S-60375	6"	3/8	1"	702.74
507S-60500	6"	1/2	1"	756.62
507S-60625	6"	5/8	1"	838.53



HSS THREADED SHANK T-SLOT CUTTERS - METRIC

Code	Bolt Size	O/D	Width	OAL	Shank	Neck	Teeth	\$ ea.
415T-02362	6	12.5	6	55	10	5	6	99.32
415T-03150	8	16	8	60	10	7	6	113.45
415T-03937	10	18	8	62	12	8	6	127.35
415T-04724	12	21	9	68	12	10	6	153.14
415T-05512	14	25	11	70	16	12	8	171.04
415T-06299	16	28	12	75	16	13	8	202.36
415T-07087	18	32	14	90	25	15	8	266.90
415T-07874	20	36	16	95	25	17	10	293.62
415T-08661	22	40	18	100	25	19	10	390.04



HSS THREADED SHANK T-SLOT CUTTERS - FRACTIONAL

Code	Bolt Size	O/D	Width	OAL	Shank	Neck	Teeth	\$ ea.
415T-02500	1/4	37/64	1/4	2.3/8	1/2	5	6	110.77
415T-03125	5/16	45/64	5/16	2.9/16	1/2	7	6	121.54
415T-03750	3/8	53/64	23/64	2.11/16	1/2	8	6	132.14
415T-04375	7/16	61/64	27/64	2.7/8	1/2	10	8	160.16
415T-05000	1/2	1.5/64	15/32	3.1/8	1/2	12	8	163.34
415T-06250	5/8	1.21/64	37/64	3.13/16	1"	13	8	211.11
415T-07500	3/4	1.33/64	11/16	4.1/8	1"	15	10	304.52
415T-08750	7/8	1.45/64	51/64	4.7/16	1"	17	10	369.56
415T-10000	1"	1.61/64	29/32	4.15/16	1"	19	10	461.40



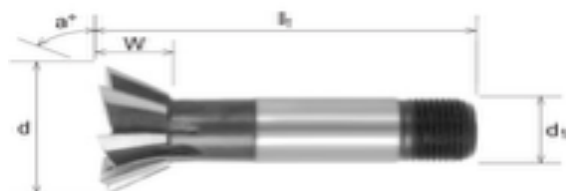
HSS THREADED SHANK WOODRUFF CUTTERS - FRACTIONAL

Code	Size	O/D	Width	OAL	Shank	Neck	\$ ea.
W413-20400	204	1/2	1/16	56	1/2	8	73.79
W413-30400	304	1/2	3/32	56	1/2	8	73.79
W413-40400	404	1/2	1/8	56	1/2	8	73.79
W413-30500	305	5/8	3/32	56	1/2	8	73.79
W413-40500	405	5/8	1/8	56	1/2	8	83.02
W413-50500	505	5/8	5/32	56	1/2	8	79.98
W413-40600	406	3/4	1/8	56	1/2	8	75.96
W413-50600	506	3/4	5/32	56	1/2	8	78.18
W413-60600	606	3/4	3/16	56	1/2	8	78.18
W413-50700	507	7/8	5/32	64	1/2	8	93.38
W413-60700	607	7/8	3/16	64	1/2	8	93.38
W413-80700	807	7/8	1/4	64	1/2	8	93.38
W413-60800	608	1"	3/16	70	1/2	8	108.56
W413-80800	808	1"	1/4	70	1/2	8	108.56
W413-10080	1008	1"	5/16	70	1/2	8	108.56
W413-60900	609	1.1/8	3/16	70	1/2	8	144.49
W413-80900	809	1.1/8	1/4	70	1/2	8	144.49
W413-10090	1009	1.1/8	5/16	70	1/2	8	144.49
W413-81000	810	1.1/4	1/4	70	1/2	8	150.89
W413-10100	1010	1.1/4	5/16	70	1/2	8	150.89
W413-12100	1210	1.1/4	3/8	70	1/2	8	150.89
W413-81100	811	1.3/8	1/4	76	1/2	8	173.77
W413-10110	1011	1.3/8	5/16	76	1/2	8	173.77
W413-12110	1211	1.3/8	3/8	76	1/2	8	173.77
W413-81200	812	1.1/2	1/4	76	1/2	8	182.39
W413-10120	1012	1.1/2	5/16	76	1/2	8	182.39
W413-12120	1212	1.1/2	3/8	76	1/2	8	182.39



HSS THREADED SHANK WOODRUFF CUTTERS - METRIC

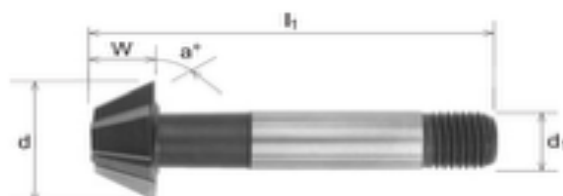
Code	Size	O/D	Width	OAL	Shank	Neck	\$ ea.
W414-10520	10.5	10.5	2.0	56	12	8	70.58
W414-10525	10.5	10.5	2.5	56	12	8	70.58
W414-10530	10.5	10.5	3.0	56	12	8	70.58
W414-13530	13.5	13.5	3.0	56	12	8	72.18
W414-13540	13.5	13.5	4.0	56	12	8	72.18
W414-16530	16.5	16.5	3.0	56	12	8	80.07
W414-16540	16.5	16.5	4.0	56	12	8	80.07
W414-16550	16.5	16.5	5.0	56	12	8	80.07
W414-19540	19.5	19.5	4.0	57	12	8	93.41
W414-19550	19.5	19.5	5.0	57	12	8	93.41
W414-19560	19.5	19.5	6.0	57	12	8	93.41
W414-22550	22.5	22.5	5.0	64	12	8	119.35
W414-22560	22.5	22.5	6.0	64	12	8	119.35
W414-22580	22.5	22.5	8.0	64	12	8	119.35
W414-22510	22.5	22.5	10.0	64	12	8	119.35
W414-25560	25.5	25.5	6.0	70	12	8	136.81
W414-28560	28.5	28.5	6.0	70	12	8	161.83
W414-28580	28.5	28.5	8.0	70	12	8	161.83
W414-28510	28.5	28.5	10.0	70	12	8	161.83
W414-32570	32.5	32.5	7.0	70	12	8	189.41
W414-32580	32.5	32.5	8.0	70	12	8	189.41
W414-32510	32.5	32.5	10.0	70	12	8	189.41
W414-45510	45.5	45.5	10.0	70	12	8	320.31



HSS THREADED SHANK DOVETAIL CUTTERS - METRIC

Code	Size	Angle	OAL	Shank O/D	Length	\$ ea.
428-16045	16.0	45	60	12	6	83.43
428-20045	20.0	45	63	12	8	106.75
428-25045	25.0	45	67	12	9	144.80
428-32045	32.0	45	71	16	12	206.62
428-40045	40.0	45	71	16	14	294.75
428-50045	50.0	45	71	16	18	346.43

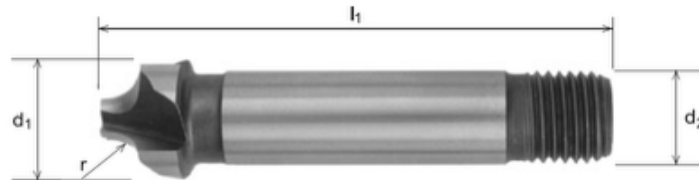
429-16060	16.0	60	60	12	8	86.42
429-20060	20.0	60	63	12	10	109.25
429-25060	25.0	60	67	12	12	149.64
429-32060	32.0	60	71	16	19	215.75
429-40060	40.0	60	71	16	21	300.80
429-50060	50.0	60	71	16	26	374.81



HSS THREADED SHANK INVERTED DOVETAIL CUTTERS - METRIC

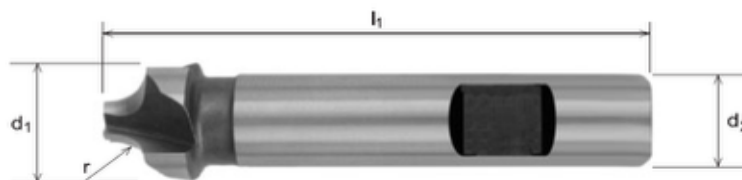
Code	Size	Angle	OAL	Shank O/D	Length	\$ ea.
430-16045	16.0	45	60	12	6	88.05
430-20045	20.0	45	63	12	8	113.17
430-25045	25.0	45	67	12	9	151.74
430-32045	32.0	45	71	16	12	220.89
430-40045	40.0	45	71	16	14	305.69
430-50045	50.0	45	71	16	18	357.54

431-16060	16.0	60	60	12	8	89.80
431-20060	20.0	60	63	12	10	115.24
431-25060	25.0	60	67	12	12	154.93
431-32060	32.0	60	71	16	19	224.58
431-40060	40.0	60	71	16	21	308.29
431-50060	50.0	60	71	16	26	381.34



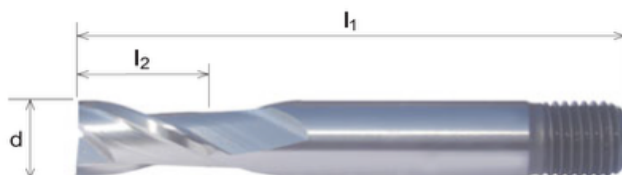
HSS THREADED SHANK CORNER ROUNDING CUTTERS - METRIC

Code	Radius	O/D	Shank	OAL	\$ ea.
450C-020	2	10	10	60	58.11
450C-030	3	12	12	60	66.73
450C-040	4	14	12	60	80.07
450C-050	5	16	12	60	92.15
450C-060	6	20	16	67	120.13
450C-080	8	24	16	71	163.50
450C-100	10	28	20	85	203.00
450C-120	12	34	20	90	296.95
450C-140	14	44	25	100	328.64
450C-160	16	48	25	100	433.63
450C-180	18	54	32	105	584.80
450C-200	20	56	32	112	726.26



HSS FLATTED SHANK CORNER ROUNDING CUTTERS - METRIC

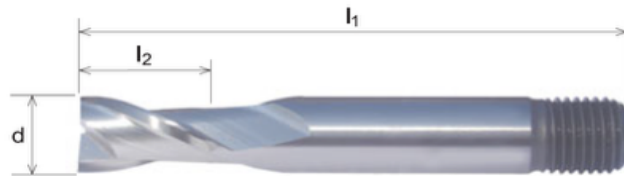
Code	Radius	O/D	Shank	OAL	\$ ea.
452C-020	2	10	10	60	56.03
452C-030	3	12	12	60	65.80
452C-040	4	14	12	60	80.07
452C-050	5	16	12	70	92.15
452C-060	6	20	16	70	120.13
452C-080	8	24	16	70	160.97
452C-100	10	28	20	85	203.00
452C-120	12	34	20	100	293.76
452C-140	14	44	25	100	328.64
452C-160	16	48	25	105	433.63
452C-180	18	54	32	112	584.80
452C-200	20	56	32	112	703.99



SLOT DRILLS Co8 - SHORT SERIES

THREADED SHANK - CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
SD801-0150	1.5	2.5	48	40.73	SD803-652	7/16	17	65	29.64
SD803-590	1/16	2.5	48	21.93	SD801-1150	11.5	13	70	37.09
SD801-0200	2.0	4	48	21.38	SD803-653	15/32	17	65	28.89
SD803-592	3/32	5	51	21.93	SD801-1200	12.0	16	73	27.42
SD801-0250	2.5	5	49	28.57	SD803-659	1/2	19	67	28.89
SD801-0300	3.0	5	49	20.81	SD801-1300	13.0	16	73	30.42
SD803-616	1/8	8	51	19.96	SD801-1400	14.0	16	73	32.42
SD801-0350	3.5	6	50	28.57	SD803-663	9/16	22	69	33.60
SD803-619	5/32	10	52	16.93	SD801-1500	15.0	16	73	38.98
SD801-0400	4.0	7	51	17.55	SD803-664	5/8	22	72	35.64
SD801-0450	4.5	7	51	28.57	SD801-1600	16.0	19	79	37.07
SD803-623	3/16	10	52	17.64	SD801-1700	17.0	19	79	46.10
SD801-0500	5.0	8	52	17.55	SD803-037	11/16	24	74	45.70
SD801-0550	5.5	8	52	28.57	SD801-1800	18.0	19	79	44.09
SD803-627	7/32	11	56	18.59	SD801-1900	19.0	19	79	50.60
SD801-0600	6.0	8	52	20.81	SD803-668	3/4	25	77	47.62
SD803-630	1/4	11	56	20.93	SD801-2000	20.0	19	79	48.04
SD801-0650	6.5	10	60	37.09	SD803-045	13/16	25	98	82.03
SD801-0700	7.0	10	60	26.26	SD801-2100	21.0	26	102	84.08
SD803-634	9/32	11	59	26.68	SD801-2200	22.0	26	102	84.08
SD801-0750	7.5	10	60	37.09	SD803-049	7/8	25	100	84.08
SD803-637	5/16	13	60	26.26	SD801-2300	23.0	26	102	84.08
SD801-0800	8.0	11	61	26.68	SD803-053	15/16	25	103	96.10
SD801-0850	8.5	11	61	37.09	SD801-2400	24.0	26	102	84.08
SD803-641	11/32	14	60	31.86	SD801-2500	25.0	26	102	84.08
SD801-0900	9.0	11	61	27.87	SD803-057	1"	27	95	84.08
SD801-0950	9.5	11	61	37.09	SD801-2600	26.0	26	102	108.05
SD803-645	3/8	14	60	26.68	SD803-061	1.1/16	28	95	110.08
SD801-1000	10.0	13	63	27.05	SD801-2800	28.0	26	102	147.03
SD803-648	13/32	16	60	35.52	SD803-065	1.1/8	30	95	145.00
SD801-1050	10.5	13	70	37.09	SD801-3000	30.0	26	102	157.97
SD801-1100	11.0	13	70	29.20	SD803-073	1.1/4	35	117	165.30

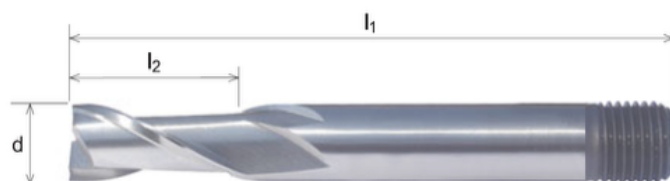


SLOT DRILLS Co8 - SHORT SERIES

THREADED SHANK - CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
SD801-3200	32.0	32	112	189.15	SD801-4500	45.0	38	118	347.79
SD803-081	1.3/8	40	111	199.05	SD803-0108	1.7/8	45	125	361.31
SD801-3500	35.0	32	112	209.17	SD801-5000	50.0	45	125	361.31
SD801-3600	36.0	32	112	209.17	SD803-0122	2"	51	118	337.30
SD801-3800	38.0	43	115	209.17	SD801-5500	55.0	52	135	448.47
SD803-090	1.1/2	43	115	209.17	SD803-0130	2.1/4	57	142	460.88
SD801-4000	40.0	38	118	237.13	SD801-6000	60.0	60	147	519.85
SD803-098	1.5/8	48	118	247.17	SD803-0138	2.1/2	63	151	549.34
SD803-0104	1.3/4	48	118	269.14					

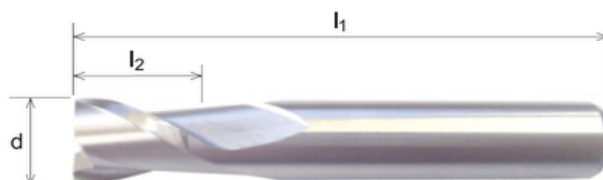
SLOT DRILLS - 1.1/8 and over 1" Shank
28.0mm and over 25.0mm Shank



SLOT DRILLS Co8 - LONG SERIES

THREADED SHANK - CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
SD804-590	1/16	5	53	22.21	SD802-1500	15.0	31	108	49.66
SD802-0200	2.0	4	51	24.97	SD804-664	5/8	32	108	52.02
SD804-592	3/32	6	54	21.77	SD802-1600	16.0	31	108	64.10
SD802-0250	2.5	7	54	33.05	SD802-1700	17.0	35	114	70.03
SD802-0300	3.0	11	60	24.97	SD804-037	11/16	35	114	64.10
SD804-616	1/8	11	64	22.78	SD802-1800	18.0	35	114	76.05
SD802-0350	3.5	12	66	33.05	SD802-1900	19.0	38	120	70.03
SD804-619	5/32	12	66	21.55	SD804-668	3/4	38	120	72.11
SD802-0400	4.0	12	66	19.82	SD802-2000	20.0	38	120	115.27
SD802-0450	4.5	12	66	33.05	SD804-045	13/16	38	120	115.27
SD804-623	3/16	13	70	21.55	SD802-2100	21.0	38	120	115.27
SD802-0500	5.0	12	70	20.44	SD802-2200	22.0	41	140	108.05
SD802-0550	5.5	16	76	33.05	SD804-049	7/8	42	140	117.98
SD804-627	7/32	16	76	22.21	SD802-2300	23.0	41	152	138.40
SD802-0600	6.0	16	76	24.32	SD802-2400	24.0	41	152	146.71
SD804-630	1/4	16	76	24.92	SD802-2500	25.0	44	159	120.22
SD802-0650	6.5	16	76	46.27	SD804-057	1"	44	159	146.71
SD802-0700	7.0	16	76	29.70	SD802-2600	26.0	44	159	200.34
SD804-634	9/32	16	76	30.42	SD802-2800	28.0	47	159	197.37
SD802-0750	7.5	16	76	46.27	SD804-065	1.1/8	48	159	218.46
SD804-637	5/16	19	79	31.22	SD802-3000	30.0	51	159	257.30
SD802-0800	8.0	19	79	31.67	SD804-073	1.1/4	51	159	230.10
SD802-0850	8.5	22	82	46.27	SD802-3200	32.0	51	159	261.54
SD804-641	11/32	22	82	40.90	SD804-081	1.3/8	54	159	264.66
SD802-0900	9.0	22	82	33.78	SD802-3500	35.0	54	159	267.81
SD802-0950	9.5	22	82	33.05	SD802-3600	36.0	54	159	279.45
SD804-645	3/8	22	73	31.67	SD802-3800	38.0	57	159	283.11
SD802-1000	10.0	22	82	32.31	SD804-090	1.1/2	57	159	350.24
SD802-1100	11.0	22	89	36.62	SD802-4000	40.0	63	159	332.32
SD804-652	7/16	22	89	35.64	SD802-4200	42.0	63	159	342.11
SD802-1200	12.0	25	95	36.06	SD804-0104	1.3/4	64	159	362.44
SD804-659	1/2	25	95	35.06	SD802-4500	45.0	63	159	453.45
SD802-1300	13.0	25	95	41.05	SD802-5000	50.0	63	159	353.73
SD802-1400	14.0	28	101	45.58	SD804-0122	2"	64	159	353.73
SD804-663	9/16	29	102	52.02					



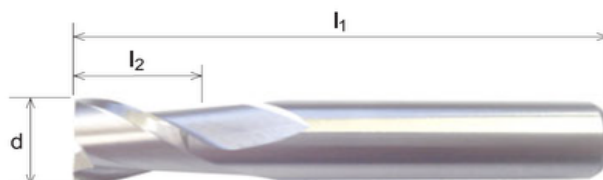
SLOT DRILLS PLAIN SHANK Co8 - SHORT SERIES

CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
SP801-0200	2.0	4	48	21.38	SP803-659	1/2	19	67	28.88
SP801-0250	2.5	5	49	28.57	SP801-1300	13.0	16	73	30.42
SP801-0300	3.0	5	49	20.81	SP801-1400	14.0	16	73	32.42
SP803-616	1/8	6	50	19.95	SP803-663	9/16	22	69	33.60
SP801-0350	3.5	6	50	28.57	SP801-1500	15.0	16	73	38.98
SP801-0400	4.0	7	51	17.55	SP803-664	5/8	22	72	35.64
SP801-0450	4.5	7	51	28.57	SP801-1600	16.0	19	79	37.09
SP801-0500	5.0	8	52	17.55	SP801-1700	17.0	19	79	46.10
SP801-0550	5.5	8	52	28.57	SP801-1800	18.0	19	79	44.09
SP801-0600	6.0	8	52	20.81	SP801-1900	19.0	19	79	50.60
SP803-630	1/4	11	56	20.93	SP803-668	3/4	25	77	47.62
SP801-0650	6.5	10	60	37.09	SP801-2000	20.0	19	79	48.04
SP801-0700	7.0	10	60	26.44	SP801-2100	21.0	26	102	84.09
SP801-0750	7.5	10	60	37.09	SP801-2200	22.0	26	102	84.09
SP803-637	5/16	13	60	26.26	SP803-049	7/8	25	100	84.09
SP801-0800	8.0	11	61	26.68	SP801-2300	23.0	26	102	84.09
SP801-0850	8.5	11	61	37.09	SP801-2400	24.0	26	102	84.09
SP801-0900	9.0	11	61	27.87	SP801-2500	25.0	26	102	84.09
SP801-0950	9.5	11	61	37.09	SP803-057	1"	27	95	84.09
SP803-645	3/8	14	60	26.68	SP801-3200	32.0	30	105	189.14
SP801-1000	10.0	13	63	27.05	SP801-3500	35.0	30	105	209.17
SP801-1100	11.0	13	70	29.22	SP801-4000	40.0	30	105	237.13
SP803-652	7/16	17	65	29.64	SP801-4500	45.0	30	105	347.79
SP801-1200	12.0	16	73	27.42					

SLOT DRILLS - 1.1/8 and over 1" Shank

28.0mm and over 25.0mm Shank

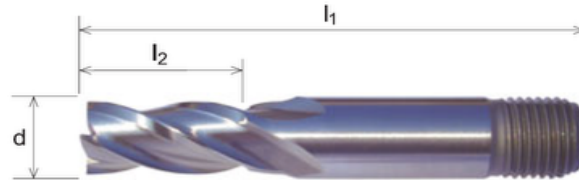


SLOT DRILLS PLAIN SHANK Co8 - LONG SERIES

CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
SP802-0200	2.0	7	54	24.97	SP804-652	7/16	22	102	36.62
SP802-0250	2.5	8	56	33.05	SP802-1200	12.0	26	110	36.06
SP802-0300	3.0	8	56	24.97	SP804-659	1/2	25	110	36.06
SP802-0350	3.5	10	59	33.05	SP802-1300	13.0	26	110	41.05
SP802-0400	4.0	11	63	19.80	SP802-1400	14.0	26	110	43.06
SP802-0450	4.5	11	63	33.05	SP804-663	9/16	29	102	52.02
SP802-0500	5.0	13	68	20.44	SP802-1500	15.0	26	110	52.02
SP802-0550	5.5	13	68	33.05	SP804-664	5/8	32	108	52.02
SP802-0600	6.0	13	68	24.32	SP802-1600	16.0	32	123	52.02
SP804-630	1/4	16	80	24.32	SP802-1700	17.0	32	123	64.10
SP802-0650	6.5	16	80	46.27	SP802-1800	18.0	32	123	64.10
SP802-0700	7.0	16	80	29.70	SP802-1900	19.0	32	123	76.05
SP802-0750	7.5	16	80	46.27	SP804-668	3/4	38	141	76.05
SP804-637	5/16	19	88	31.67	SP802-2000	20.0	38	141	72.11
SP802-0800	8.0	19	88	31.67	SP802-2100	21.0	38	141	108.05
SP802-0850	8.5	19	88	46.27	SP802-2200	22.0	28	141	108.05
SP802-0900	9.0	19	88	33.05	SP804-049	7/8	42	166	108.05
SP802-0950	9.5	19	88	46.27	SP802-2300	23.0	45	166	120.23
SP804-645	3/8	22	95	32.42	SP802-2400	24.0	45	166	120.23
SP802-1000	10.0	22	95	32.42	SP802-2500	25.0	45	166	120.23
SP802-1100	11.0	22	102	36.62	SP804-057	1"	44	166	120.23

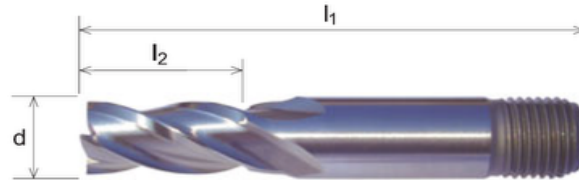
SLOT DRILLS - 1.1/8 and over 1" Shank
28.0mm and over 25.0mm Shank



ENDMILLS Co8 - SHORT SERIES

THREADED SHANK - CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
EM801-0150	1.5	6	51	37.09	EM803-652	7/16	22	67	25.42
EM801-0200	2.0	6	51	21.62	EM801-1150	11.5	21	66	46.83
EM801-0250	2.5	6	51	37.09	EM801-1200	12.0	24	70	27.42
EM801-0300	3.0	9	54	16.68	EM803-659	1/2	24	70	27.05
EM803-616	1/8	10	54	16.68	EM801-1300	13.0	24	70	53.82
EM801-0350	3.5	12	57	28.57	EM801-1400	14.0	28	73	31.41
EM803-619	5/32	13	57	16.68	EM803-663	9/16	29	73	33.05
EM801-0400	4.0	12	57	16.40	EM801-1500	15.0	26	71	62.40
EM801-0450	4.5	12	57	28.57	EM803-664	5/8	32	77	35.46
EM803-623	3/16	13	57	16.68	EM801-1600	16.0	26	77	36.48
EM801-0500	5.0	16	60	16.68	EM801-1700	17.0	35	80	44.09
EM801-0550	5.5	16	60	28.57	EM803-037	11/16	35	80	44.09
EM803-627	7/32	16	60	16.68	EM801-1800	18.0	35	80	44.09
EM801-0600	6.0	16	60	16.40	EM801-1900	19.0	38	83	47.19
EM803-630	1/4	16	60	16.68	EM803-668	3/4	38	83	46.71
EM801-0650	6.5	16	60	37.09	EM801-2000	20.0	38	83	49.05
EM801-0700	7.0	16	60	21.62	EM803-045	13/16	38	95	75.34
EM803-634	9/32	16	60	19.82	EM801-2100	21.0	41	98	49.05
EM801-0750	7.5	18	63	37.09	EM801-2200	22.0	41	98	78.12
EM803-637	5/16	18	64	20.86	EM803-049	7/8	41	98	84.43
EM801-0800	8.0	18	63	21.62	EM801-2300	23.0	41	98	65.98
EM801-0850	8.5	21	66	37.09	EM803-053	15/16	41	98	85.10
EM803-641	11/32	21	66	21.26	EM801-2400	24.0	41	98	88.13
EM801-0900	9.0	21	66	37.09	EM801-2500	25.0	44	101	88.13
EM801-0950	9.5	21	66	37.09	EM803-057	1"	43	102	85.10
EM803-645	3/8	22	67	21.26	EM801-2800	28.0	46	104	116.17
EM801-1000	10.0	21	66	21.62	EM803-065	1.1/8	46	105	151.69
EM803-648	13/32	21	66	24.21	EM801-3000	30.0	46	104	153.13
EM801-1050	10.5	21	66	46.83	EM803-073	1.1/4	51	113	170.70
EM801-1100	11.0	21	66	46.83	EM801-3200	32.0	51	112	209.41

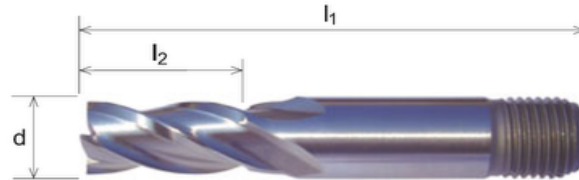


ENDMILLS Co8 - SHORT SERIES

THREADED SHANK - CENTRE CUTTING

Code	Size	l_2	l_1	\$ ea.	Code	Size	l_2	l_1	\$ ea.
EM803-081	1.3/8	54	116	186.25	EM801-4500	45.0	57	119	307.12
EM801-3500	35.0	54	116	220.11	EM801-5000	50.0	65	127	343.43
EM801-3600	36.0	54	116	201.10	EM803-0122	2"	65	127	330.87
EM801-3800	38.0	54	116	215.09	EM801-5500	55.0	68	135	449.48
EM803-090	1.1/2	54	116	215.09	EM803-0130	2.1/4	68	135	461.41
EM801-4000	40.0	55	117	320.00	EM801-6000	60.0	74	143	520.64
EM803-0104	1.3/4	57	119	283.14	EM803-0138	2.1/2	74	143	550.72

ENDMILLS - 1.1/8 and over 1" Shank
28.0mm and over 25.0mm Shank



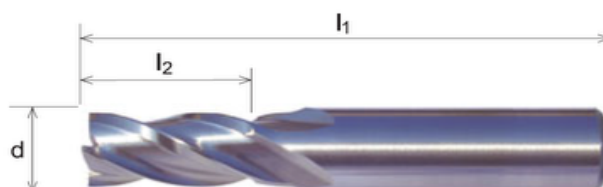
ENDMILLS Co8 - LONG SERIES

THREADED SHANK - CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.
EM802-0300	3.0	19	63	21.38
EM804-616	1/8	19	64	19.96
EM804-619	5/32	25	70	19.09
EM802-0400	4.0	25	70	19.41
EM804-623	3/16	25	70	18.59
EM802-0500	5.0	31	76	19.41
EM804-627	7/32	32	76	19.09
EM802-0600	6.0	31	76	20.27
EM804-630	1/4	32	76	19.41
EM802-0700	7.0	34	79	24.83
EM804-634	9/32	34	79	24.07
EM804-637	5/16	34	79	23.62
EM802-0800	8.0	34	79	25.25
EM802-0850	8.5	34	79	25.93
EM802-0900	9.0	37	82	42.92
EM804-645	3/8	37	83	24.24
EM802-1000	10.0	37	82	25.25
EM802-1100	11.0	41	89	52.87
EM804-652	7/16	42	89	30.82
EM802-1200	12.0	49	95	30.42
EM804-659	1/2	49	95	32.09
EM802-1300	13.0	50	95	59.91
EM802-1400	14.0	57	101	39.69
EM804-663	9/16	57	102	41.05
EM802-1500	15.0	58	103	68.20
EM804-664	5/8	59	109	50.08

Code	Size	l ₂	l ₁	\$ ea.
EM802-1600	16.0	58	108	47.44
EM804-037	11/16	70	115	59.93
EM802-1800	18.0	70	115	60.86
EM802-1900	19.0	76	121	65.75
EM804-668	3/4	76	121	67.53
EM802-2000	20.0	76	121	68.71
EM802-2200	22.0	85	143	102.17
EM804-049	7/8	86	143	102.17
EM802-2400	24.0	92	149	116.71
EM802-2500	25.0	100	157	122.11
EM804-057	1"	100	157	122.08
EM802-2800	28.0	98	157	191.01
EM804-065	1.1/8	100	157	191.01
EM802-3000	30.0	101	163	210.58
EM804-073	1.1/4	102	164	217.14
EM802-3200	32.0	101	163	219.36
EM804-081	1.3/8	102	164	251.27
EM802-3500	35.0	101	163	254.67
EM802-3800	38.0	101	163	269.19
EM804-090	1.1/2	102	164	269.19
EM802-4000	40.0	101	163	339.46
EM804-0104	1.3/4	102	164	318.51
EM802-4500	45.0	101	163	349.08
EM802-5000	50.0	101	163	437.14
EM804-0122	2"	102	164	437.14

ENDMILLS - 1.1/8 and over 1" Shank
28.0mm and over 25.0mm Shank

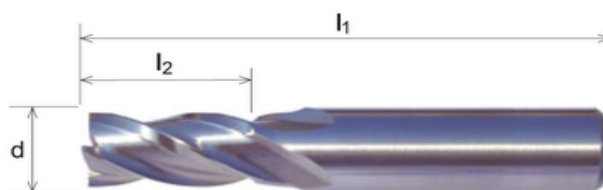


ENDMILLS PLAIN SHANK Co8 - SHORT SERIES

CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
EP801-0300	3.0	8	52	16.68	EP803-664	5/8	26	83	35.46
EP801-0400	4.0	11	55	16.40	EP801-1600	16.0	32	92	36.48
EP801-0500	5.0	13	57	16.68	EP801-1700	17.0	32	92	44.09
EP801-0600	6.0	13	57	16.40	EP801-1800	18.0	32	92	44.09
EP803-630	1/4	13	57	16.68	EP801-1900	19.0	32	92	47.19
EP801-0700	7.0	16	66	21.62	EP803-668	3/4	32	92	46.71
EP803-637	5/16	16	66	20.84	EP801-2000	20.0	38	104	49.05
EP801-0800	8.0	19	69	21.62	EP801-2100	21.0	38	104	49.05
EP801-0900	9.0	19	69	26.54	EP801-2200	22.0	38	104	78.12
EP803-645	3/8	22	72	21.28	EP803-049	7/8	38	104	84.43
EP801-1000	10.0	22	72	21.62	EP801-2300	23.0	38	104	65.98
EP801-1100	11.0	22	79	26.54	EP801-2400	24.0	38	104	88.13
EP803-652	7/16	22	79	25.42	EP801-2500	25.0	45	121	88.13
EP801-1200	12.0	26	83	27.42	EP803-057	1"	45	121	88.13
EP803-659	1/2	26	83	27.05	EP803-065	1.1/8	100	157	127.79
EP801-1300	13.0	26	83	38.31	EP801-3000	30.0	101	163	127.79
EP801-1400	14.0	26	83	31.41	EP801-3200	32.0	101	163	185.51
EP803-663	9/16	26	83	33.05	EP801-3500	35.0	101	163	196.21
EP801-1500	15.0	26	83	43.19	EP801-4000	40.0	101	163	296.10

ENDMILLS - 1.1/8 and over 1" Shank
28.0mm and over 25.0mm Shank

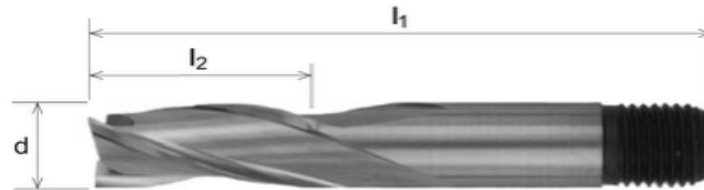


ENDMILLS PLAIN SHANK Co8 - LONG SERIES

CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
EP802-0300	3.0	12	56	21.38	EP802-1300	13.0	53	110	53.82
EP802-0400	4.0	19	63	19.41	EP802-1400	14.0	53	110	39.69
EP802-0500	5.0	24	68	19.41	EP804-663	9/16	63	123	39.69
EP802-0600	6.0	24	68	20.27	EP802-1500	15.0	63	123	62.39
EP804-630	1/4	24	68	20.27	EP804-664	5/8	63	123	47.52
EP802-0700	7.0	30	80	24.83	EP802-1600	16.0	63	123	47.52
EP804-637	5/16	30	80	25.25	EP802-1800	18.0	63	123	60.86
EP802-0800	8.0	38	88	25.25	EP804-668	3/4	63	123	68.71
EP802-0900	9.0	38	88	37.08	EP802-2000	20.0	75	141	68.71
EP804-645	3/8	45	95	25.25	EP802-2200	22.0	75	141	108.47
EP802-1000	10.0	45	95	25.25	EP804-049	7/8	75	141	108.47
EP802-1100	11.0	45	102	46.83	EP802-2400	24.0	90	166	124.98
EP804-652	7/16	53	110	33.80	EP802-2500	25.0	90	166	124.98
EP802-1200	12.0	53	110	30.42	EP804-057	1"	90	166	124.98
EP804-659	1/2	53	110	30.42					

ENDMILLS - 1.1/8 and over 1" Shank
28.0mm and over 25.0mm Shank

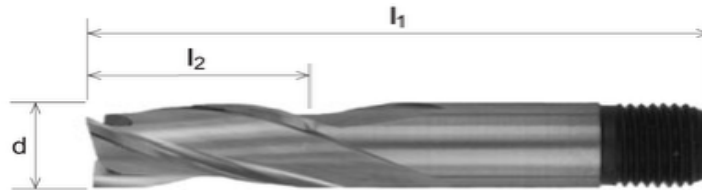


THREE FLUTE ENDMILLS Co8 - SHORT SERIES

THREADED SHANK - CENTRE CUTTING

Code	Size	l_2	l_1	\$ ea.	Code	Size	l_2	l_1	\$ ea.
3F801-0300	3.0	9	54	25.37	3F803-663	9/16	29	73	41.03
3F801-0400	4.0	12	57	25.37	3F801-1500	15.0	26	71	47.11
3F801-0500	5.0	16	60	25.37	3F803-664	5/8	32	77	43.40
3F801-0600	6.0	16	60	25.37	3F801-1600	16.0	26	77	47.11
3F803-630	1/4	16	60	26.63	3F801-1700	17.0	35	80	53.10
3F801-0700	7.0	16	60	38.95	3F801-1800	18.0	35	80	53.10
3F803-637	5/16	18	64	31.78	3F801-1900	19.0	38	83	58.21
3F801-0800	8.0	18	63	32.43	3F803-668	3/4	38	83	58.21
3F801-0900	9.0	21	66	38.95	3F801-2000	20.0	38	83	64.38
3F803-645	3/8	22	67	32.43	3F801-2200	22.0	41	98	92.53
3F801-1000	10.0	21	66	38.95	3F803-049	7/8	41	98	92.53
3F801-1100	11.0	21	66	34.20	3F801-2500	25.0	44	101	113.06
3F803-652	7/16	22	67	36.23	3F803-057	1"	43	102	113.06
3F801-1200	12.0	24	70	34.20	3F803-065	1.1/8	46	105	211.32
3F803-659	1/2	24	70	35.04	3F803-073	1.1/4	51	113	216.79
3F801-1300	13.0	24	70	39.20	3F803-081	1.3/8	54	116	271.63
3F801-1400	14.0	28	73	38.22	3F803-090	1.1/2	54	116	283.36

ENDMILLS - 1.1/8 and over 1" Shank
28.0mm and over 25.0mm Shank

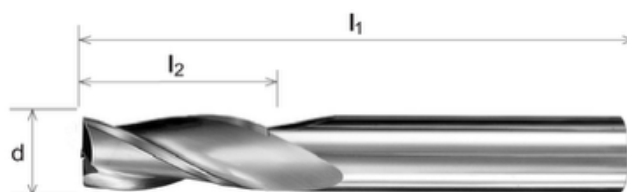


THREE FLUTE ENDMILLS Co8 - LONG SERIES

THREADED SHANK - CENTRE CUTTING

Code	Size	l_2	l_1	\$ ea.	Code	Size	l_2	l_1	\$ ea.
3F802-0600	6.0	31	76	31.04	3F804-664	5/8	59	109	62.77
3F804-630	1/4	32	76	31.04	3F802-1600	16.0	58	108	64.93
3F804-637	5/16	34	79	38.14	3F802-1800	18.0	70	115	71.35
3F802-0800	8.0	34	79	38.14	3F804-668	3/4	76	121	86.84
3F804-645	3/8	37	83	40.42	3F802-2000	20.0	76	121	108.64
3F802-1000	10.0	37	82	41.08	3F802-2200	22.0	85	143	139.66
3F802-1100	11.0	41	89	43.40	3F804-049	7/8	86	143	142.38
3F804-652	7/16	42	89	43.40	3F802-2500	25.0	100	157	152.74
3F802-1200	12.0	49	95	43.40	3F804-057	1"	100	157	152.74
3F804-659	1/2	49	95	43.40	3F804-065	1.1/8	100	157	298.81
3F802-1400	14.0	57	101	46.32	3F804-073	1.1/4	102	164	304.15
3F804-663	9/16	57	102	50.11	3F804-081	1.3/8	102	164	333.05
3F802-1500	15.0	58	103	64.93	3F804-090	1.1/2	102	164	334.09

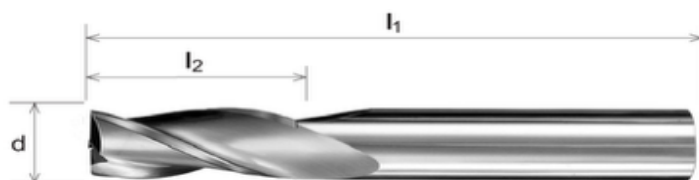
ENDMILLS - 1.1/8 and over 1" Shank
28.0mm and over 25.0mm Shank



THREE FLUTE ENDMILLS PLAIN SHANK Co8 - SHORT SERIES

CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
3P801-0300	3.0	9	54	25.37	3P801-1300	13.0	24	70	39.20
3P801-0400	4.0	12	57	25.37	3P801-1400	14.0	28	73	38.22
3P801-0500	5.0	16	60	25.37	3P801-1500	15.0	26	71	47.11
3P801-0600	6.0	16	60	25.37	3P801-1600	16.0	26	77	47.11
3P801-0700	7.0	16	60	38.95	3P801-1700	17.0	35	80	53.10
3P801-0800	8.0	18	63	32.43	3P801-1800	18.0	35	80	53.10
3P801-0900	9.0	21	66	38.95	3P801-1900	19.0	38	83	58.21
3P801-1000	10.0	21	66	38.95	3P801-2000	20.0	38	83	64.38
3P801-1100	11.0	21	66	34.20	3P801-2200	22.0	41	98	92.53
3P801-1200	12.0	24	70	34.20	3P801-2500	25.0	44	101	113.06

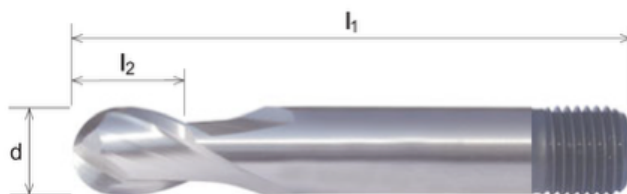


THREE FLUTE ENDMILLS PLAIN SHANK Co8 - LONG SERIES

CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
3P802-0300	3.0	31	76	30.46	3P802-1300	13.0	57	101	46.32
3P802-0400	4.0	32	76	30.46	3P802-1400	14.0	57	102	46.32
3P802-0500	5.0	34	79	31.04	3P802-1500	15.0	58	103	64.93
3P802-0600	6.0	34	79	31.04	3P802-1600	16.0	59	109	64.93
3P802-0700	7.0	37	83	38.14	3P802-1800	18.0	70	115	71.09
3P802-0800	8.0	37	82	38.14	3P802-1900	19.0	76	121	108.64
3P802-0900	9.0	41	89	41.08	3P802-2000	20.0	76	121	108.64
3P802-1000	10.0	42	89	41.08	3P802-2200	22.0	85	143	139.66
3P802-1100	11.0	49	95	43.40	3P802-2500	25.0	86	143	152.74
3P802-1200	12.0	49	95	43.40					

ENDMILLS - 1.1/8 and over 1" Shank
28.0mm and over 25.0mm Shank

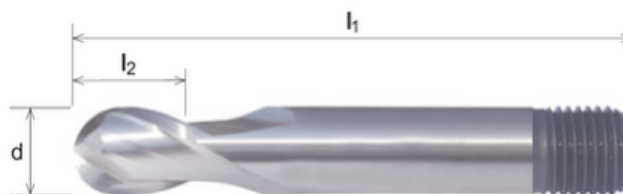


BALL NOSE SLOT DRILLS Co8 - SHORT SERIES

THREADED SHANK - CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
BSD801-0200	2.0	4	48	39.20	BSD803-668	3/4	25	77	95.50
BSD801-0300	3.0	5	49	34.29	BSD801-2000	20.0	19	79	106.83
BSD803-616	1/8	8	51	34.29	BSD801-2100	21.0	19	79	154.47
BSD801-0400	4.0	7	51	34.29	BSD801-2200	22.0	26	102	145.70
BSD803-623	3/16	10	52	34.29	BSD803-049	7/8	25	100	145.70
BSD801-0500	5.0	8	52	34.29	BSD801-2400	24.0	26	102	146.51
BSD801-0600	6.0	8	52	34.29	BSD801-2500	25.0	26	102	149.58
BSD803-630	1/4	11	56	34.29	BSD803-057	1"	27	95	152.34
BSD801-0700	7.0	10	60	49.52	BSD801-2800	28.0	26	102	219.61
BSD803-637	5/16	13	60	43.61	BSD803-065	1.1/8	30	95	219.61
BSD801-0800	8.0	11	61	47.35	BSD801-3000	30.0	26	102	331.56
BSD801-0900	9.0	11	61	60.33	BSD803-073	1.1/4	35	117	340.95
BSD803-645	3/8	14	60	43.61	BSD801-3200	32.0	32	112	340.95
BSD801-1000	10.0	13	63	60.19	BSD803-081	1.3/8	40	111	350.36
BSD801-1100	11.0	13	70	60.19	BSD801-3500	35.0	32	112	358.12
BSD803-652	7/16	17	65	45.00	BSD801-3800	38.0	43	115	434.53
BSD801-1200	12.0	16	73	60.19	BSD803-090	1.1/2	43	115	358.12
BSD803-659	1/2	19	67	60.19	BSD801-4000	40.0	38	118	434.53
BSD801-1300	13.0	16	73	71.18	BSD803-098	1.5/8	48	118	552.41
BSD801-1400	14.0	16	73	73.69	BSD803-0104	1.3/4	48	118	552.41
BSD801-1500	15.0	16	73	80.72	BSD801-4500	45.0	38	118	552.41
BSD803-664	5/8	22	72	80.72	BSD803-0108	1.7/8	45	125	636.49
BSD801-1600	16.0	19	79	80.72	BSD801-5000	50.0	45	125	625.53
BSD801-1700	17.0	19	79	95.50	BSD803-0122	2"	51	118	636.49
BSD801-1800	18.0	19	79	95.50					

SLOT DRILLS - 1.1/8 and over 1" Shank
28.0mm and over 25.0mm Shank

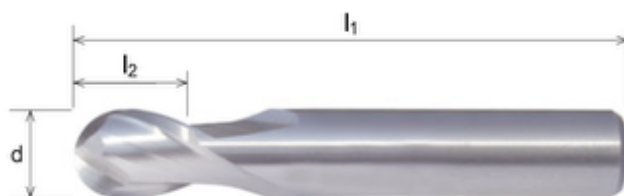


BALL NOSE SLOT DRILLS Co8 - LONG SERIES

THREADED SHANK - CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
BSD802-0200	2.0	4	51	53.26	BSD802-1800	18.0	35	114	129.13
BSD802-0300	3.0	11	60	53.26	BSD804-668	3/4	38	121	132.38
BSD804-616	1/8	11	64	45.41	BSD802-2000	20.0	38	120	132.18
BSD802-0400	4.0	12	66	49.30	BSD802-2200	22.0	41	140	173.85
BSD804-623	3/16	13	70	49.30	BSD804-049	7/8	42	140	173.85
BSD802-0500	5.0	12	70	49.30	BSD802-2400	24.0	41	152	201.05
BSD802-0600	6.0	16	76	49.86	BSD802-2500	25.0	44	159	203.89
BSD804-630	1/4	16	76	49.86	BSD804-057	1"	44	159	203.89
BSD802-0700	7.0	16	76	61.36	BSD802-2800	28.0	47	159	265.73
BSD804-637	5/16	19	79	56.49	BSD804-065	1.1/8	48	159	265.73
BSD802-0800	8.0	19	79	56.49	BSD802-3000	30.0	51	159	371.56
BSD802-0900	9.0	22	82	65.05	BSD804-073	1.1/4	51	159	405.98
BSD804-645	3/8	22	73	59.82	BSD802-3200	32.0	51	159	405.98
BSD802-1000	10.0	22	82	59.82	BSD804-081	1.3/8	54	159	415.85
BSD802-1100	11.0	22	89	64.97	BSD802-3500	35.0	54	159	467.93
BSD804-652	7/16	22	89	64.97	BSD802-3800	38.0	57	159	526.21
BSD802-1200	12.0	25	95	67.83	BSD804-090	1.1/2	57	159	467.31
BSD804-659	1/2	25	95	67.83	BSD802-4000	40.0	63	159	526.21
BSD802-1300	13.0	25	95	67.83	BSD804-0104	1.3/4	64	159	619.07
BSD802-1400	14.0	28	101	74.47	BSD802-4500	45.0	63	159	619.07
BSD802-1500	15.0	31	108	81.70	BSD802-5000	50.0	63	159	681.49
BSD804-664	5/8	32	108	92.36	BSD804-0122	2"	64	159	687.88
BSD802-1600	16.0	31	108	102.71					

SLOT DRILLS - 1.1/8 and over 1" Shank
28.0mm and over 25.0mm Shank



BALL NOSE SLOT DRILLS PLAIN SHANK Co8 - SHORT SERIES

CENTRE CUTTING

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
BP801-0200	2.0	4	48	37.46	BP801-1300	13.0	16	73	70.09
BP801-0300	3.0	5	49	37.46	BP801-1400	14.0	16	73	70.09
BP801-0400	4.0	7	51	37.46	BP801-1500	15.0	16	73	74.13
BP801-0500	5.0	8	52	37.46	BP801-1600	16.0	19	79	84.31
BP801-0600	6.0	8	52	39.18	BP801-1700	17.0	19	79	94.94
BP801-0700	7.0	10	60	45.42	BP801-1800	18.0	19	79	94.94
BP801-0800	8.0	11	61	45.81	BP801-1900	19.0	19	79	121.74
BP801-0900	9.0	11	61	48.79	BP801-2000	20.0	19	79	107.83
BP801-1000	10.0	13	63	49.69	BP801-2200	22.0	26	102	157.96
BP801-1100	11.0	13	70	67.21	BP801-2400	24.0	26	102	167.33
BP801-1200	12.0	16	73	67.83	BP801-2500	25.0	26	102	170.96

SLOT DRILLS - 1.1/8 and over 1" Shank

28.0mm and over 25.0mm Shank



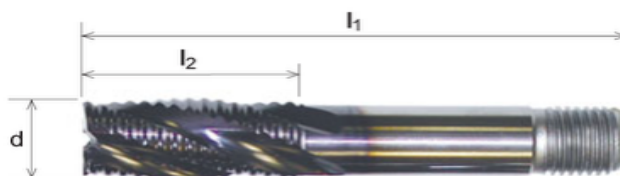
PLAIN SHANK SLOT DRILL SETS - SHORT SERIES

Code	Sizes	\$ ea.
SP100	M3, M4, M5, M6, M8, M10, M12	203.05
SP200	M3, M4, M5, M6, M7, M8, M9, M10, M11, M12	283.36
SP300	M3, M4, M5, M6, M8, M10, M12, M14, M16, M20	316.08
SP400	M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M14, M16, M20	396.39
SP500	M3, M4, M5, M6, M8, M10, M12, M14, M16, M20, M22, M25	477.79



PLAIN SHANK END MILL SETS - SHORT SERIES

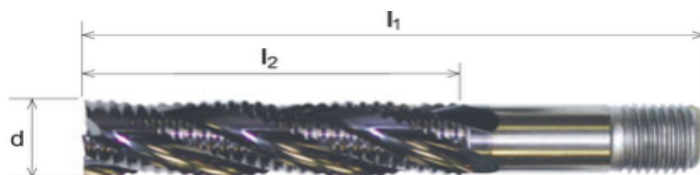
Code	Sizes	\$ ea.
EP100	M3, M4, M5, M6, M8, M10, M12	182.79
EP200	M3, M4, M5, M6, M7, M8, M9, M10, M11, M12	254.63
EP300	M3, M4, M5, M6, M8, M10, M12, M14, M16, M20	295.25
EP400	M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M14, M16, M20	367.08
EP500	M3, M4, M5, M6, M8, M10, M12, M14, M16, M20, M22, M25	455.09



ROUGHING ENDMILLS COARSE PITCH - SHORT SERIES

HSS Co - THREADED SHANK

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
476-0600	6.0	16	60	36.06	476-2000	20.0	38	83	102.31
477-630	1/4	16	60	36.06	476-2200	22.0	41	98	154.70
477-637	5/16	18	64	45.33	477-049	7/8	41	98	154.70
476-0800	8.0	18	63	45.33	476-2500	25.0	44	101	163.68
477-645	3/8	22	67	51.16	477-057	1"	43	102	163.68
476-1000	10.0	21	66	51.16	476-2800	28.0	46	104	279.56
476-1200	12.0	24	70	57.70	476-3000	30.0	46	104	290.57
477-659	1/2	24	70	57.70	476-3200	32.0	51	112	320.60
476-1400	14.0	28	73	74.19	476-3500	35.0	54	116	386.49
477-664	5/8	32	77	78.47	476-3800	38.0	54	116	471.56
476-1600	16.0	26	77	78.47	476-4000	40.0	55	117	503.08
476-1800	18.0	35	80	85.97	476-4500	45.0	57	119	653.97
477-668	3/4	38	83	102.31	476-5000	50.0	65	127	697.91



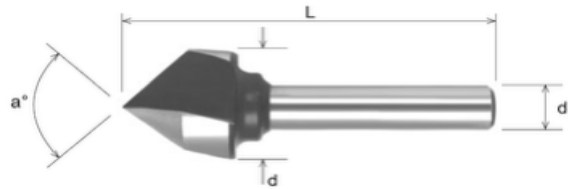
ROUGHING ENDMILLS COARSE PITCH - LONG SERIES

HSS Co - THREADED SHANK

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
479-645	3/8	37	83	59.70	479-049	7/8	86	143	233.86
478-1000	10.0	37	82	59.70	478-2500	25.0	100	157	250.97
478-1200	12.0	49	95	72.48	479-057	1"	100	157	250.97
479-659	1/2	49	95	72.48	478-2800	28.0	98	157	397.71
478-1400	14.0	57	101	89.62	478-3000	30.0	101	163	383.08
479-664	5/8	59	109	96.69	478-3200	32.0	101	163	469.64
478-1600	16.0	58	108	96.69	478-3500	35.0	101	163	570.19
478-1800	18.0	70	115	155.54	478-3800	38.0	101	163	625.34
479-668	3/4	76	121	162.10	478-4000	40.0	101	163	632.34
478-2000	20.0	76	121	162.10	478-4500	45.0	101	163	820.61
478-2200	22.0	85	143	233.86	478-5000	50.0	101	163	864.23

CAPITAL

CUTTING TOOLS



PARALLEL SHANK COUNTERSINKS

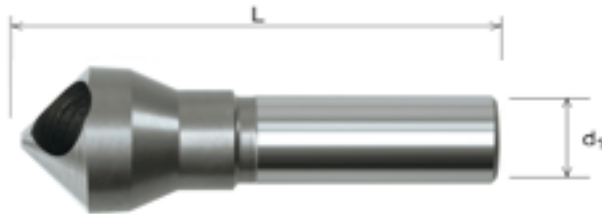
3 FLUTE HSS-Co.

Code	Size (d)	d ₁	L	\$ ea.
60°				
671-0630	6.3	5	45	35.46
671-0800	8.0	6	50	27.09
671-1000	10.0	6	50	33.11
671-1250	12.5	8	56	40.89
671-1600	16.0	10	63	49.28
671-2000	20.0	10	67	65.30
671-2500	25.0	10	71	88.28
671-3150	31.5	12	76	142.28
671-4000	40.0	16	83	241.31
671-5000	50.0	16	92	280.37

Code	Size	d ₁	L	\$ ea.
82°				
669-0630	6.3	5	45	35.46
669-0800	8.0	6	50	27.09
669-1000	10.0	6	50	33.11
669-1250	12.5	8	56	40.89
669-1600	16.0	10	60	49.28
669-2000	20.0	10	63	65.30
669-2500	25.0	10	67	88.28
669-3150	31.5	12	70	142.28
669-4000	40.0	16	76	241.31
669-5000	50.0	16	82	280.37

Code	Size	d ₁	L	\$ ea.
90°				
672-0630	6.3	5	45	35.46
672-0800	8.0	6	50	27.09
672-1000	10.0	6	50	33.11
672-1250	12.5	8	56	40.89
672-1600	16.0	10	60	49.28
672-2000	20.0	10	63	65.30
672-2500	25.0	10	67	88.28
672-3150	31.5	12	70	142.28
672-4000	40.0	16	76	241.31
672-5000	50.0	16	82	280.37

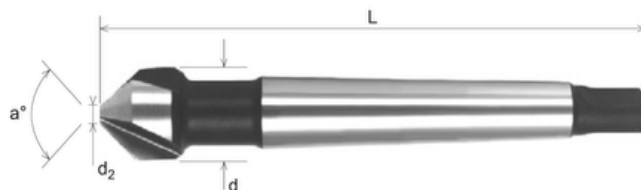
Code	Size (d)	d ₁	L	\$ ea.
120°				
670-0800	8.0	6	50	27.09
670-1000	10.0	6	50	33.11
670-1250	12.5	8	56	40.89
670-1600	16.0	10	63	49.28
670-2000	20.0	10	67	65.30
670-2500	25.0	10	71	88.28



CROSSHOLE COUNTERSINKS

3 FLUTE HSS-Co.

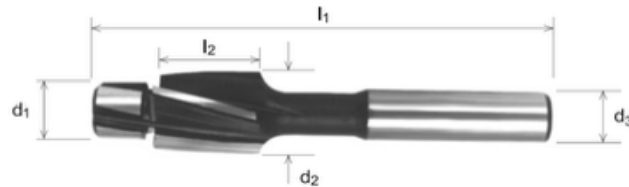
Code	Size	Angle	\$ ea.	Code	Size	Angle	\$ ea.
661-1000	10.0	90°	39.50	661-3000	30.0	90°	240.22
661-1500	15.0	90°	43.38	661-3500	35.0	90°	288.97
661-2000	20.0	90°	115.65	661-4000	40.0	90°	318.87
661-2500	25.0	90°	161.36	661-5000	50.0	90°	370.53



MTS COUNTERSINKS

3 FLUTE HSS-Co.

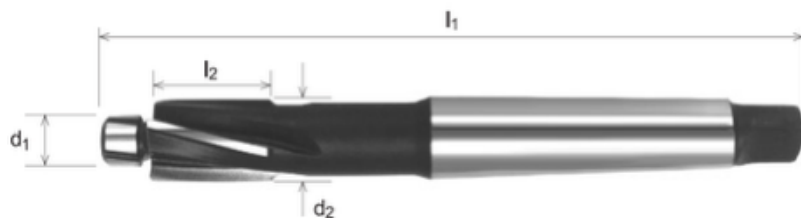
Code	Size (d)	d ₂	L	\$ ea.	Code	Size	d ₂	L	\$ ea.
60°					90°				
No. 1 MORSE TAPER SHANK					No. 1 MORSE TAPER SHANK				
673-1600	16.0	4	90	86.92	674-1600	16.0	4	90	90.39
No. 2 MORSE TAPER SHANK					No. 2 MORSE TAPER SHANK				
673-2000	20.0	5	106	109.65	674-2000	20.0	5	106	114.04
673-2500	25.0	6.3	112	145.13	674-2500	25.0	6.3	112	150.94
673-3150	31.5	10	118	161.28	674-3150	31.5	10	118	167.73
No. 3 MORSE TAPER SHANK					No. 3 MORSE TAPER SHANK				
673-4000	40.0	12.5	150	238.66	674-4000	40.0	12.5	150	248.21
673-5000	50.0	16	160	383.82	674-5000	50.0	16	160	399.18
No. 4 MORSE TAPER SHANK					No. 4 MORSE TAPER SHANK				
673-6300	63.0	20	190	612.78	674-6300	63.0	20	190	637.29
673-8300	83.0	25	200	788.70	674-8300	83.0	25	200	820.25



COUNTERBORES

HSS PARALLEL SHANK

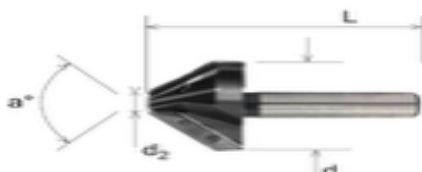
Code	Size	d ₂	d ₁	d ₃	l ₂	l ₁	\$ ea.
R7PM-0300	3.0	6	3.4	5	14	71	68.44
R7PM-0350	3.5	6.5	3.9	5	14	71	78.03
R7PM-0400	4.0	8	4.5	5	14	71	65.20
R7PM-0500	5.0	10	5.5	8	18	80	71.65
R7PM-0600	6.0	11	6.6	8	18	80	75.90
R7PM-0800	8.0	15	9	12.5	22	100	125.52
R7PM-1000	10.0	18	11	12.5	22	100	154.72
R7PM-1200	12.0	20	14	12.5	22	100	161.99



COUNTERBORES

HSS - MTS

Code	Size	d ₂	d ₁	l ₂	l ₁	\$ ea.
R7MM-0800	8.0	15	9	22	132	152.66
R7MM-1000	10.0	18	11	25	140	182.34
R7MM-1200	12.0	20	14	25	140	188.72
R7MM-1400	14.0	24	16	30	150	202.80
R7MM-1600	16.0	26	18	35	180	220.57
R7MM-1800	18.0	30	20	35	180	235.17
R7MM-2000	20.0	33	22	40	190	243.25
R7MM-2200	22.0	36	24	40	190	267.25
R7MM-2400	24.0	40	26	40	190	267.51



PARALLEL SHANK TUNGSTEN CARBIDE COUNTERSINKS INDEXABLE TYPE

Code	Size	d ₂	L	\$ ea.
90°				
13.0 Shank Diameter				
676-2500	25.0	8	90	524.30
676-2501	Replacement Tip			48.21
676-4000	40.0	10	90	545.39
676-4001	Replacement Tip			48.21
16.0 Shank Diameter				
678-2500	25.0	8	90	524.30
678-2501	Replacement Tip			48.21
678-4000	40.0	10	110	545.39
678-4001	Replacement Tip			48.21
678-5000	50.0	10	110	810.55
678-5001	Replacement Tip			58.76
19.0 Shank Diameter				
680-4000	40.0	10	110	545.39
680-4001	Replacement Tip			48.21
680-5000	50.0	10	110	810.55
680-5001	Replacement Tip			58.76

All cutters supplied complete with carbide tips



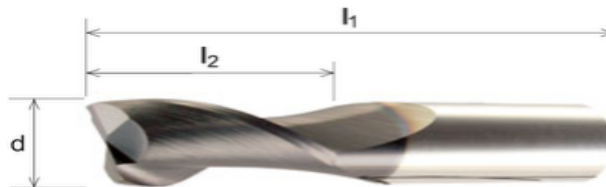
M.T.S TUNGSTEN CARBIDE COUNTERSINKS INDEXABLE TYPE

Code	Size	d ₂	L	\$ ea.
90°				
No. 1 MORSE TAPER SHANK				
682-2500	25.0	8	130	552.92
682-2501	Replacement Tip			48.21
No. 2 MORSE TAPER SHANK				
684-2500	25.0	8	130	560.46
684-2501	Replacement Tip			48.21
684-4000	40.0	10	150	602.64
684-4001	Replacement Tip			48.21
No. 3 MORSE TAPER SHANK				
686-4000	40.0	10	150	602.64
686-4001	Replacement Tip			48.21
686-5000	50.0	10	150	741.24
686-5001	Replacement Tip			58.75

All cutters supplied complete with carbide tips

CAPITAL

CUTTING TOOLS



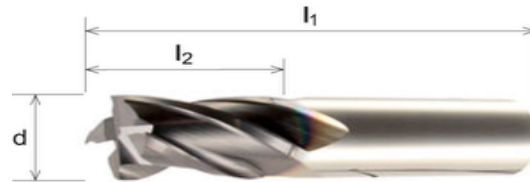
CARBIDE SLOT DRILLS - TiCN COATED

MICRO-GRAIN CARBIDE - CNC GROUND

Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
TCSD615	3.0	9	39	32.71	TCSD645	3/8	21	68	80.11
TCSD616	1/8	9	39	30.36	TCSD647	10.0	22	76	98.14
TCSD617	3.5	9	39	39.03	TCSD648	13/32	22	76	137.98
TCSD619	5/32	14	51	59.58	TCSD649	10.5	22	76	112.22
TCSD620	4.0	14	51	39.03	TCSD651	11.0	22	76	112.22
TCSD622	4.5	14	51	45.40	TCSD652	7/16	22	76	102.13
TCSD623	3/16	16	51	41.71	TCSD653	11.5	22	76	119.23
TCSD624	5.0	16	51	45.40	TCSD655	15/32	25	76	161.97
TCSD626	5.5	16	51	56.23	TCSD656	12.0	25	76	119.23
TCSD627	7/32	16	51	77.81	TCSD658	12.5	25	76	165.96
TCSD629	6.0	19	51	56.23	TCSD659	1/2	25	76	123.03
TCSD630	1/4	19	51	51.22	TCSD660	13.0	25	76	187.97
TCSD631	6.5	19	51	62.27	TCSD661	13.5	25	76	207.96
TCSD633	7.0	19	51	62.27	TCSD662	14.0	30	89	207.96
TCSD634	9/32	21	63	95.58	TCSD663	9/16	30	89	176.53
TCSD636	7.5	21	63	68.61	TCSD664	5/8	30	89	201.25
TCSD637	5/16	21	63	62.27	TCSD665	16.0	32	89	245.55
TCSD638	8.0	21	63	68.61	TCSD667	18.0	35	102	375.93
TCSD640	8.5	21	63	111.79	TCSD668	3/4	35	102	415.92
TCSD641	11/32	21	63	114.58	TCSD669	20.0	38	102	435.92
TCSD642	9.0	21	68	87.79	TCSD670	22.0	38	102	515.29
TCSD644	9.5	21	68	98.14	TCSD671	25.0	38	102	716.24

CAPITAL

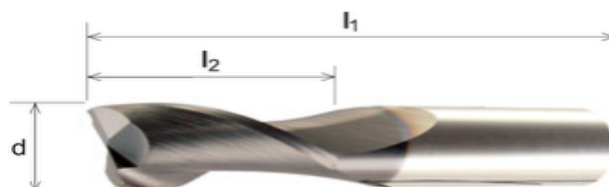
CUTTING TOOLS



CARBIDE END MILLS - TiCN COATED

MICRO-GRAIN CARBIDE - CNC GROUND

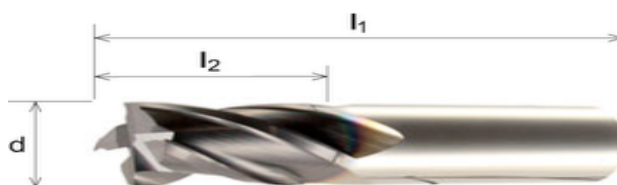
Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
TCSE615	3.0	9	39	32.71	TCSE645	3/8	21	68	80.11
TCSE616	1/8	9	39	30.36	TCSE647	10.0	22	76	98.14
TCSE617	3.5	9	39	39.03	TCSE648	13/32	22	76	137.98
TCSE619	5/32	14	51	59.58	TCSE649	10.5	22	76	112.22
TCSE620	4.0	14	51	39.03	TCSE651	11.0	22	76	112.22
TCSE622	4.5	14	51	45.40	TCSE652	7/16	22	76	102.13
TCSE623	3/16	16	51	41.71	TCSE653	11.5	22	76	119.23
TCSE624	5.0	16	51	45.40	TCSE655	15/32	25	76	161.97
TCSE626	5.5	16	51	56.23	TCSE656	12.0	25	76	119.23
TCSE627	7/32	16	51	77.81	TCSE658	12.5	25	76	165.96
TCSE629	6.0	19	51	56.23	TCSE659	1/2	25	76	123.03
TCSE630	1/4	19	51	51.22	TCSE660	13.0	25	76	187.97
TCSE631	6.5	19	51	62.27	TCSE661	13.5	25	76	207.96
TCSE633	7.0	19	51	62.27	TCSE662	14.0	30	89	207.96
TCSE634	9/32	21	63	95.58	TCSE663	9/16	30	89	176.53
TCSE636	7.5	21	63	68.61	TCSE664	5/8	30	89	201.25
TCSE637	5/16	21	63	62.27	TCSE665	16.0	32	89	245.55
TCSE638	8.0	21	63	68.61	TCSE667	18.0	35	102	375.93
TCSE640	8.5	21	63	111.79	TCSE668	3/4	35	102	415.92
TCSE641	11/32	21	63	114.58	TCSE669	20.0	38	102	435.92
TCSE642	9.0	21	68	87.79	TCSE670	22.0	38	102	515.29
TCSE644	9.5	21	68	98.14	TCSE671	25.0	38	102	716.24



CARBIDE LONG SERIES SLOT DRILLS - TiCN COATED

MICRO-GRAIN CARBIDE - CNC GROUND

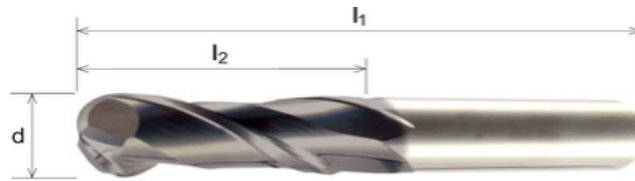
Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
CSLT615	3.0	19	57	63.48	CSLT652	7/16	51	102	172.12
CSLT616	1/8	19	57	63.50	CSLT656	12.0	51	102	202.72
CSLT620	4.0	19	57	68.06	CSLT659	1/2	51	102	202.72
CSLT623	3/16	25	64	73.40	CSLT662	14.0	57	127	288.55
CSLT624	5.0	25	64	73.75	CSLT663	9/16	57	127	331.98
CSLT629	6.0	28	76	81.86	CSLT664	5/8	57	127	371.75
CSLT630	1/4	28	76	82.02	CSLT665	16.0	57	127	372.50
CSLT637	5/16	29	76	109.79	CSLT667	18.0	57	127	452.70
CSLT638	8.0	29	76	109.81	CSLT668	3/4	57	127	464.18
CSLT645	3/8	32	102	129.32	CSLT669	20.0	57	127	523.72
CSLT647	10.0	32	102	145.25					



CARBIDE LONG SERIES END MILLS - TiCN COATED

MICRO-GRAIN CARBIDE - CNC GROUND

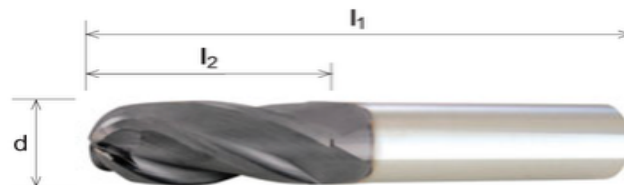
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LSTCE615	3.0	19	57	63.48	LSTCE652	7/16	51	102	172.12
LSTCE616	1/8	19	57	63.50	LSTCE656	12.0	51	102	202.72
LSTCE620	4.0	19	57	68.06	LSTCE659	1/2	51	102	202.72
LSTCE623	3/16	25	64	73.40	LSTCE662	14.0	57	127	288.55
LSTCE624	5.0	25	64	73.75	LSTCE663	9/16	57	127	331.98
LSTCE629	6.0	28	76	81.86	LSTCE664	5/8	57	127	371.75
LSTCE630	1/4	28	76	82.02	LSTCE665	16.0	57	127	372.50
LSTCE637	5/16	29	76	109.79	LSTCE667	18.0	57	127	452.70
LSTCE638	8.0	29	76	109.81	LSTCE668	3/4	57	127	464.18
LSTCE645	3/8	32	102	129.32	LSTCE669	20.0	57	127	523.72
LSTCE647	10.0	32	102	145.25					



CARBIDE BALL NOSE SLOT DRILLS - TiCN COATED

MICRO-GRAIN CARBIDE - CNC GROUND

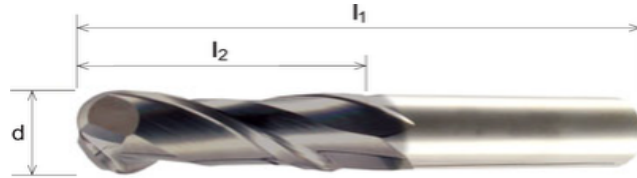
Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
TCSSB615	3.0	9	39	38.91	TCSSB647	10.0	22	76	116.42
TCSSB616	1/8	9	39	39.79	TCSSB652	7/16	22	76	128.17
TCSSB620	4.0	14	51	46.92	TCSSB656	12.0	25	76	141.42
TCSSB623	3/16	16	51	47.59	TCSSB659	1/2	25	76	144.58
TCSSB624	5.0	16	51	54.96	TCSSB662	14.0	30	89	248.81
TCSSB629	6.0	19	51	69.14	TCSSB663	9/16	30	89	253.36
TCSSB630	1/4	19	51	67.79	TCSSB664	5/8	30	89	297.14
TCSSB637	5/16	21	63	83.19	TCSSB665	16.0	32	89	292.09
TCSSB638	8.0	21	63	81.65	TCSSB667	18.0	35	102	435.07
TCSSB640	9.0	21	63	91.33	TCSSB668	3/4	35	102	465.91
TCSSB645	3/8	21	68	114.58	TCSSB669	20.0	38	102	520.00



CARBIDE BALL NOSE END MILLS - TiCN COATED

MICRO-GRAIN CARBIDE - CNC GROUND

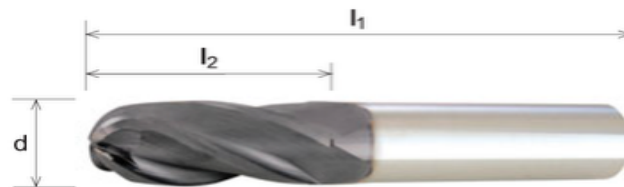
Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
TCEB615	3.0	9	39	38.90	TCEB652	7/16	22	76	128.17
TCEB616	1/8	9	39	39.80	TCEB656	12.0	25	76	141.41
TCEB620	4.0	14	51	46.92	TCEB659	1/2	25	76	144.58
TCEB623	3/16	16	51	47.59	TCEB662	14.0	30	89	248.81
TCEB624	5.0	16	51	54.95	TCEB663	9/16	30	89	253.36
TCEB629	6.0	19	51	69.13	TCEB664	5/8	30	89	297.14
TCEB630	1/4	19	51	67.79	TCEB665	16.0	32	89	292.09
TCEB637	5/16	21	63	83.19	TCEB667	18.0	35	102	435.07
TCEB638	8.0	21	63	81.65	TCEB668	3/4	35	102	465.91
TCEB645	3/8	21	68	114.58	TCEB669	20.0	38	102	520.00
TCEB647	10.0	22	76	116.42					



CARBIDE LONG SERIES BALL NOSE SLOT DRILLS - TiCN COATED

MICRO-GRAIN CARBIDE - CNC GROUND

Code	Size	l_2	l_1	\$ ea.	Code	Size	l_2	l_1	\$ ea.
LECSB615	3.0	19	57	69.71	LECSB652	7/16	51	102	204.02
LECSB616	1/8	19	57	67.89	LECSB656	12.0	51	102	224.91
LECSB620	4.0	19	57	75.95	LECSB659	1/2	51	102	232.72
LECSB623	3/16	25	64	83.31	LECSB662	14.0	57	127	330.05
LECSB624	5.0	25	64	83.31	LECSB663	9/16	57	127	371.18
LECSB629	6.0	28	76	94.77	LECSB664	5/8	57	127	424.32
LECSB630	1/4	28	76	98.91	LECSB665	16.0	57	127	421.22
LECSB637	5/16	29	76	131.07	LECSB667	18.0	57	127	527.49
LECSB638	8.0	29	76	122.85	LECSB668	3/4	57	127	548.57
LECSB645	3/8	32	102	162.70	LECSB669	20.0	57	127	615.14
LECSB647	10.0	32	102	163.53					



CARBIDE LONG SERIES BALL NOSE END MILLS - TiCN COATED

MICRO-GRAIN CARBIDE - CNC GROUND

Code	Size	l_2	l_1	\$ ea.	Code	Size	l_2	l_1	\$ ea.
LTCEB615	3.0	19	57	69.71	LTCEB652	7/16	51	102	204.02
LTCEB616	1/8	19	57	67.89	LTCEB656	12.0	51	102	224.90
LTCEB620	4.0	19	57	75.95	LTCEB659	1/2	51	102	232.73
LTCEB623	3/16	25	64	83.32	LTCEB662	14.0	57	127	329.41
LTCEB624	5.0	25	64	83.32	LTCEB663	9/16	57	127	371.17
LTCEB629	6.0	28	76	94.77	LTCEB664	5/8	57	127	424.32
LTCEB630	1/4	28	76	98.90	LTCEB665	16.0	57	127	421.21
LTCEB637	5/16	29	76	131.08	LTCEB667	18.0	57	127	527.49
LTCEB638	8.0	29	76	122.84	LTCEB668	3/4	57	127	548.57
LTCEB645	3/8	32	102	162.70	LTCEB669	20.0	57	127	615.15
LTCEB647	10.0	32	102	163.53					



CARBIDE SLOT DRILL SETS - TiCN COATED

Code	Sizes	\$ ea.
CSDS-0412	M4, M5, M6, M8, M10, M12	358.93
CSDS-0416	M4, M5, M6, M8, M10, M12, M16	443.96
CSDS-0420	M4, M5, M6, M8, M10, M12, M16, M20	638.57

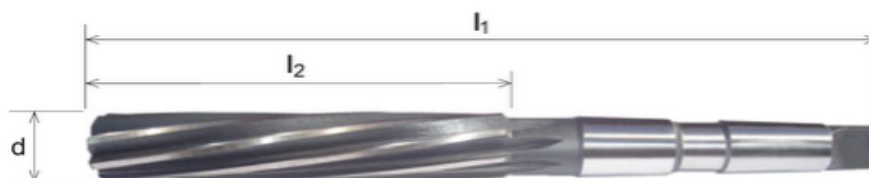
CARBIDE END MILL SETS - TiCN COATED

Code	Sizes	\$ ea.
CEMS-0412	M4, M5, M6, M8, M10, M12	358.93
CEMS-0416	M4, M5, M6, M8, M10, M12, M16	443.96
CEMS-0420	M4, M5, M6, M8, M10, M12, M16, M20	638.57

CARBIDE BALL NOSE SLOT DRILL SETS - TiCN COATED

Code	Sizes	\$ ea.
CBNSDS-0412	M4, M5, M6, M8, M10, M12	462.20
CBNSDS-0416	M4, M5, M6, M8, M10, M12, M16	535.18
CBNSDS-0420	M4, M5, M6, M8, M10, M12, M16, M20	778.44

CARBIDE SETS INCLUDE 2 EACH OF M4, M5 & M6, AND 1 OF EACH REMAINING SIZE LISTED ABOVE



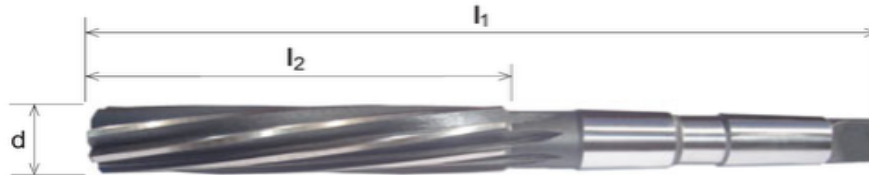
HSS H7 MTS MACHINE REAMERS

Code	Size	l_2	l_1	\$ ea.
No. 1 MORSE TAPER SHANK				
603R-00591	1.5	20	63	67.05
603R-00625	1/16	21	64	67.05
603R-00781	5/64	25	69	67.05
603R-00787	2.0	25	69	67.05
603R-00938	3/32	29	77	69.73
603R-00984	2.5	29	77	70.55
603R-01094	7/64	31	89	73.71
603R-01181	3.0	32	115	73.71
603R-01250	1/8	32	115	73.71
603R-01378	3.5	32	115	73.87
603R-01406	9/64	32	115	73.87
603R-01562	5/32	32	115	73.87
603R-01575	4.0	38	120	70.57
603R-01719	11/64	38	120	70.57
603R-01772	4.5	38	120	70.57
603R-01875	3/16	38	120	70.57
603R-01968	5.0	38	120	70.57
603R-02031	13/64	38	120	70.57
603R-02165	5.5	45	127	70.57
603R-02188	7/32	45	127	73.87
603R-02344	15/64	45	127	80.83
603R-02362	6.0	45	127	53.13
603R-02500	1/4	50	130	53.13
603R-02559	6.5	50	130	55.71
603R-02656	17/64	50	130	55.71
603R-02755	7.0	54	134	55.71
603R-02812	9/32	54	134	55.71
603R-02952	7.5	54	134	55.71
603R-02969	19/64	54	134	55.71
603R-03125	5/16	54	134	56.95
603R-03150	8.0	54	134	56.95

Code	Size	l_2	l_1	\$ ea.
603R-03281	21/64	54	134	58.49
603R-03346	8.5	54	134	58.49
603R-03438	11/32	62	142	59.00
603R-03543	9.0	62	142	56.96
603R-03594	23/64	62	142	56.96
603R-03740	9.5	62	142	56.96
603R-03750	3/8	66	146	56.96
603R-03906	25/64	66	146	56.96
603R-03937	10.0	66	146	57.77
603R-04062	13/32	66	146	63.12
603R-04134	10.5	66	146	72.13
603R-04219	27/64	66	146	81.44
603R-04331	11.0	71	151	72.13
603R-04375	7/16	71	151	63.12
603R-04528	11.5	71	151	78.28
603R-04531	29/64	71	151	72.38
603R-04688	15/32	76	156	66.42
603R-04724	12.0	76	156	68.89
603R-04844	31/64	76	156	87.41
603R-04921	12.5	76	156	74.73
603R-05000	1/2	76	156	66.39
603R-05118	13.0	76	156	83.20
603R-05156	33/64	76	156	93.94
603R-05312	17/32	81	161	75.88
603R-05314	13.5	81	161	101.64
603R-05469	35/64	81	161	101.64
603R-05512	14.0	81	161	82.69

No. 2 MORSE TAPER SHANK

603R-05625	9/16	81	181	82.89
603R-05709	14.5	81	181	112.00
603R-05781	37/64	81	181	100.24



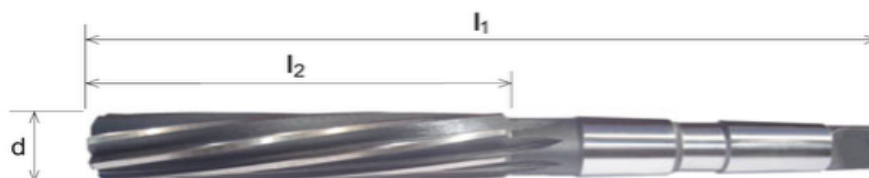
HSS H7 MTS MACHINE REAMERS

Code	Size	l ₂	l ₁	\$ ea.
603R-05906	15.0	81	181	108.20
603R-05938	19/32	87	187	102.36
603R-06094	39/64	87	187	121.00
603R-06102	15.5	87	187	121.00
603R-06250	5/8	87	187	88.36
603R-06299	16.0	87	187	107.94
603R-06406	41/64	87	187	121.00
603R-06496	16.5	87	187	121.00
603R-06562	21/32	87	187	107.94
603R-06693	17.0	87	187	107.94
603R-06719	43/64	87	187	121.00
603R-06785	11/16	93	193	101.97
603R-06890	17.5	93	193	143.35
603R-07031	45/64	93	193	143.35
603R-07087	18.0	93	193	133.80
603R-07188	23/32	93	193	129.91
603R-07283	18.5	93	193	151.00
603R-07344	47/64	93	193	151.00
603R-07480	19.0	93	193	141.31
603R-07500	3/4	100	200	117.68
603R-07656	49/64	100	200	161.48
603R-07677	19.5	100	200	161.48
603R-07812	25/32	100	200	161.48
603R-07874	20.0	100	200	141.31
603R-07969	51/64	100	200	163.22
603R-08071	20.5	100	200	140.95
603R-08125	13/16	100	200	125.79
603R-08268	21.0	100	200	180.79
603R-08281	53/64	100	200	199.28
603R-08438	27/32	107	207	199.28
603R-08465	21.5	107	207	168.44
603R-08594	55/64	107	207	199.28

Code	Size	l ₂	l ₁	\$ ea.
603R-08661	22.0	107	207	152.93
603R-08750	7/8	107	207	142.15
603R-08858	22.5	107	207	153.49
603R-08906	57/64	107	207	204.41
603R-09055	23.0	107	207	182.47

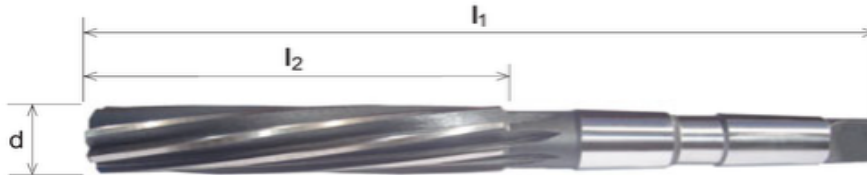
No. 3 MORSE TAPER SHANK

Code	Size	l ₂	l ₁	\$ ea.
603R-09062	29/32	107	207	182.47
603R-09219	59/64	107	207	204.41
603R-09252	23.5	107	207	183.60
603R-09375	15/16	115	242	193.42
603R-09449	24.0	115	242	193.42
603R-09531	61/64	115	242	226.14
603R-09646	24.5	115	242	193.98
603R-09688	31/32	115	242	226.14
603R-09843	25.0	115	242	200.09
603R-09844	63/64	115	242	235.88
603R-10000	1"	115	242	224.02
603R-10039	25.5	115	242	202.29
603R-10156	1.1/64	115	242	235.88
603R-10236	26.0	115	242	214.71
603R-10312	1.1/32	115	242	235.88
603R-10433	26.5	115	242	214.71
603R-10469	1.3/64	115	242	235.88
603R-10625	1.1/16	124	251	214.71
603R-10630	27.0	124	251	219.15
603R-10781	1.5/64	124	251	235.88
603R-10827	27.5	124	251	219.15
603R-10938	1.3/32	124	251	235.88
603R-11024	28.0	124	251	221.98
603R-11094	1.7/64	124	251	244.37
603R-11220	28.5	124	251	221.98



HSS H7 MTS MACHINE REAMERS

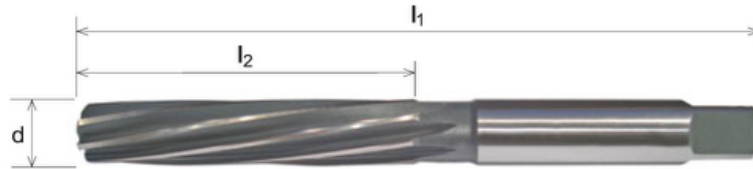
Code	Size	l ₂	l ₁	\$ ea.	Code	Size	l ₂	l ₁	\$ ea.
603R-11250	1.1/8	124	251	221.98	603R-14219	1.27/64	142	302	420.55
603R-11406	1.9/64	124	251	266.82	603R-14370	36.5	142	302	362.31
603R-11417	29.0	124	251	221.98	603R-14375	1.7/16	142	302	388.86
603R-11562	1.5/32	124	251	278.56	603R-14531	1.29/64	142	302	474.01
603R-11614	29.5	124	251	278.56	603R-14567	37.0	142	302	388.86
603R-11719	1.11/64	124	251	317.63	603R-14688	1.15/32	142	302	474.01
603R-11811	30.0	124	251	278.56	603R-14764	37.5	142	302	388.86
603R-11875	1.3/16	133	260	278.56	603R-14844	1.31/64	165	310	474.01
603R-12008	30.5	133	260	278.56	603R-14961	38.0	165	310	388.86
603R-12031	1.13/64	133	260	354.49	603R-15000	1.1/2	165	310	454.75
603R-12188	1.7/32	133	260	317.63	603R-15156	1.33/64	165	310	524.56
603R-12205	31.0	133	260	278.56	603R-15157	38.5	165	310	454.75
603R-12344	1.15/64	133	260	354.49	603R-15312	1.17/32	165	310	524.56
603R-12402	31.5	133	260	297.32	603R-15354	39.0	165	310	454.75
603R-12500	1.1/4	133	260	297.32	603R-15469	1.35/64	165	310	612.84
No. 4 MORSE TAPER SHANK					603R-15551	39.5	165	310	454.75
603R-12598	32.0	133	293	297.32	603R-15625	1.9/16	165	310	454.75
603R-12656	1.17/64	133	293	388.35	603R-15748	40.0	165	310	454.75
603R-12795	32.5	133	293	297.32	603R-15781	1.37/64	165	310	633.63
603R-12812	1.9/32	133	293	388.35	603R-15938	1.19/32	165	310	510.36
603R-12969	1.19/64	133	293	388.35	603R-15945	40.5	165	310	510.36
603R-12992	33.0	133	293	297.32	603R-16094	1.39/64	165	310	633.63
603R-13125	1.5/16	133	293	336.33	603R-16142	41.0	165	310	510.36
603R-13281	1.21/64	142	302	388.35	603R-16250	1.5/8	165	310	510.36
603R-13386	34.0	142	302	336.33	603R-16339	41.5	165	310	510.36
603R-13438	1.11/32	142	302	420.55	603R-16406	1.41/64	165	310	641.43
603R-13583	34.5	142	302	362.31	603R-16535	42.0	165	310	567.62
603R-13594	1.23/64	142	302	420.55	603R-16562	1.21/32	165	310	567.62
603R-13750	1.3/8	142	302	362.31	603R-16719	1.43/64	165	310	706.36
603R-13780	35.0	142	302	362.31	603R-16732	42.5	165	310	608.83
603R-13906	1.25/64	142	302	420.55	603R-16875	1.11/16	165	310	608.83
603R-13976	35.5	142	302	362.31	603R-16929	43.0	165	310	608.83
603R-14062	1.13/32	142	302	421.15	603R-17031	1.45/64	165	310	706.36
603R-14173	36.0	142	302	362.31	603R-17126	43.5	165	310	645.91
					603R-17188	1.23/32	165	310	645.91



HSS H7 MTS MACHINE REAMERS

Code	Size	l ₂	l ₁	\$ ea.
603R-17323	44.0	165	310	645.91
603R-17500	1.3/4	165	310	645.91
603R-17520	44.5	165	310	730.96
603R-17716	45.0	165	310	647.96
603R-17812	1.25/32	165	310	730.96
603R-17913	45.5	165	310	730.96
603R-18110	46.0	165	310	730.96
603R-18125	1.13/16	165	310	776.64
603R-18307	46.5	165	310	776.64
603R-18438	1.27/32	165	310	776.64
603R-18504	47.0	165	310	776.64
603R-18701	47.5	165	310	776.64
603R-18750	1.7/8	165	310	790.95
603R-18898	48.0	165	310	790.95
603R-19062	1.29/32	165	310	790.95
603R-19094	48.5	165	310	790.95
603R-19291	49.0	165	310	820.45
603R-19375	1.15/16	165	310	820.45
603R-19488	49.5	165	310	831.63
603R-19685	50.0	165	310	831.63
603R-19688	1.31/32	165	310	831.63
603R-19882	50.5	165	310	880.33
603R-20000	2"	165	310	880.33
603R-20079	51.0	165	310	905.74
603R-20312	2.1/32	165	310	905.74
603R-20472	52.0	165	310	921.48
603R-20625	2.1/16	165	310	921.48
603R-20866	53.0	165	310	921.48
603R-21250	2.1/8	165	310	984.55
603R-21260	54.0	165	310	984.55
603R-21654	55.0	165	310	1014.92
603R-21875	2.3/16	165	310	1014.92

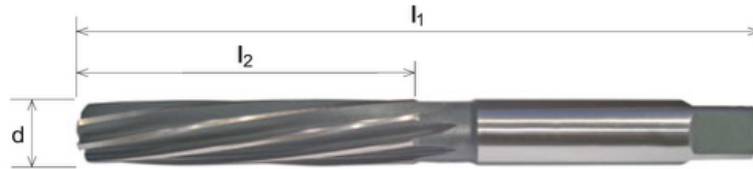
Code	Size	l ₂	l ₁	\$ ea.
603R-22047	56.0	165	310	1014.92
603R-22441	57.0	165	310	1029.50
603R-22500	2.1/4	165	310	1029.50
603R-22835	58.0	165	310	1029.50
603R-23125	2.5/16	165	310	1029.50
603R-23228	59.0	165	310	1053.79
603R-23622	60.0	165	310	1053.79
603R-23750	2.3/8	165	310	1053.79
603R-24016	61.0	165	310	1074.30
603R-24375	2.7/16	165	310	1074.30
603R-24409	62.0	165	310	1074.30
603R-24803	63.0	165	310	1074.30
603R-25000	2.1/2	165	310	1099.31
603R-25197	64.0	165	310	1099.31
603R-25591	65.0	165	310	1108.60
603R-25625	2.9/16	165	310	1192.88
603R-25984	66.0	165	310	1192.88
603R-26250	2.5/8	165	310	1192.88
603R-26378	67.0	165	310	1254.49
603R-26772	68.0	165	310	1254.49
603R-27165	69.0	165	310	1254.49
603R-27500	2.3/4	165	310	1254.49
603R-27599	70.0	165	310	1290.39
603R-27953	71.0	165	310	1290.39
603R-28346	72.0	165	310	1272.49
603R-28740	73.0	165	310	1378.88
603R-28750	2.7/8	165	310	1378.88
603R-29134	74.0	165	310	1378.88
603R-29528	75.0	165	310	1378.88
603R-29921	76.0	165	310	1560.82
603R-30000	3"	165	310	1608.21



HSS H7 HAND REAMERS

Code	Size	l ₂	l ₁	\$ ea.
601R-00591	1.5	20	41	35.45
601R-00625	1/16	21	44	35.45
601R-00781	5/64	25	50	35.45
601R-00787	2.0	25	50	35.45
601R-00938	3/32	29	58	38.88
601R-00984	2.5	29	58	40.31
601R-01094	7/64	31	62	44.68
601R-01181	3.0	31	62	42.20
601R-01250	1/8	33	66	35.45
601R-01378	3.5	35	71	43.31
601R-01406	9/64	35	71	35.43
601R-01562	5/32	38	76	43.31
601R-01575	4.0	38	76	38.03
601R-01719	11/64	41	81	43.31
601R-01772	4.5	41	81	38.03
601R-01875	3/16	44	87	41.91
601R-01968	5.0	44	87	38.03
601R-02031	13/64	44	87	37.19
601R-02165	5.5	47	93	38.03
601R-02188	7/32	47	93	39.20
601R-02344	15/64	47	93	39.20
601R-02362	6.0	47	93	39.20
601R-02500	1/4	50	100	39.20
601R-02559	6.5	50	100	39.20
601R-02656	17/64	50	100	43.49
601R-02755	7.0	54	107	43.49
601R-02812	9/32	54	107	43.49
601R-02952	7.5	54	107	43.49
601R-02969	19/64	54	107	43.49
601R-03125	5/16	58	115	45.00
601R-03150	8.0	58	115	45.00
601R-03281	21/64	58	115	53.53
601R-03346	8.5	58	115	47.44
601R-03438	11/32	62	124	53.53
601R-03543	9.0	62	124	53.53

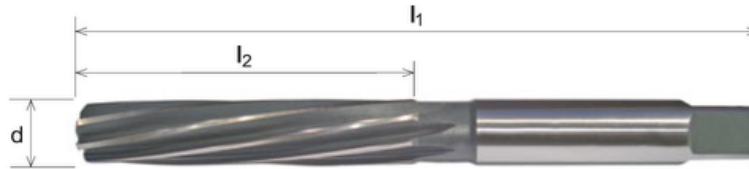
Code	Size	l ₂	l ₁	\$ ea.
601R-03594	23/64	62	124	53.53
601R-03740	9.5	62	124	53.53
601R-03750	3/8	66	133	53.53
601R-03906	25/64	66	133	53.53
601R-03937	10.0	66	133	53.53
601R-04062	13/32	66	133	57.74
601R-04134	10.5	66	133	62.87
601R-04219	27/64	71	142	62.87
601R-04331	11.0	71	142	62.87
601R-04375	7/16	71	142	62.87
601R-04528	11.5	71	142	69.66
601R-04531	29/64	71	142	69.66
601R-04688	15/32	76	152	69.66
601R-04724	12.0	76	152	69.66
601R-04844	31/64	76	152	81.88
601R-04921	12.5	76	152	81.88
601R-05000	1/2	76	152	69.66
601R-05118	13.0	76	152	81.88
601R-05156	33/64	76	152	91.93
601R-05312	17/32	81	163	84.47
601R-05314	13.5	81	163	81.88
601R-05469	35/64	81	163	98.84
601R-05512	14.0	81	163	81.88
601R-05625	9/16	81	163	86.00
601R-05709	14.5	81	163	110.03
601R-05781	37/64	81	163	110.03
601R-05906	15.0	81	163	110.03
601R-05938	19/32	87	175	110.03
601R-06094	39/64	87	175	139.98
601R-06102	15.5	87	175	139.98
601R-06250	5/8	87	175	89.91
601R-06299	16.0	87	175	109.06
601R-06406	41/64	87	175	138.52
601R-06496	16.5	87	175	138.52
601R-06562	21/32	87	175	121.43



HSS H7 HAND REAMERS

Code	Size	l ₂	l ₁	\$ ea.
601R-06693	17.0	87	175	104.78
601R-06719	43/64	87	175	136.46
601R-06785	11/16	93	188	109.06
601R-06890	17.5	93	188	163.55
601R-07031	45/64	93	188	159.11
601R-07087	18.0	93	188	136.46
601R-07188	23/32	93	188	150.51
601R-07283	18.5	93	188	171.61
601R-07344	47/64	93	188	160.35
601R-07480	19.0	93	188	147.37
601R-07500	3/4	100	201	121.56
601R-07656	49/64	100	201	170.03
601R-07677	19.5	100	201	170.03
601R-07812	25/32	100	201	164.00
601R-07874	20.0	100	201	143.91
601R-07969	51/64	100	201	173.46
601R-08071	20.5	100	201	161.56
601R-08125	13/16	100	201	130.51
601R-08268	21.0	100	201	181.75
601R-08281	53/64	100	201	214.96
601R-08438	27/32	100	201	214.96
601R-08465	21.5	107	215	214.96
601R-08594	55/64	107	215	214.96
601R-08661	22.0	107	215	153.55
601R-08750	7/8	107	215	154.98
601R-08858	22.5	107	215	159.80
601R-08906	57/64	107	215	214.71
601R-09055	23.0	107	215	190.38
601R-09062	29/32	107	215	190.38
601R-09219	59/64	107	215	214.87
601R-09252	23.5	107	215	214.87
601R-09375	15/16	115	231	195.17
601R-09449	24.0	115	231	195.17
601R-09531	61/64	115	231	233.87
601R-09646	24.5	115	231	214.56

Code	Size	l ₂	l ₁	\$ ea.
601R-09688	31/32	115	231	236.37
601R-09843	25.0	115	231	204.41
601R-09844	63/64	115	231	246.83
601R-10000	1"	115	231	226.06
601R-10039	25.5	115	231	287.76
601R-10236	26.0	115	231	287.76
601R-10433	26.5	115	231	287.56
601R-10625	1.1/16	115	231	287.56
601R-10630	27.0	115	231	291.56
601R-10827	27.5	124	247	302.15
601R-11024	28.0	115	231	295.44
601R-11220	28.5	115	231	302.15
601R-11250	1.1/8	115	231	295.44
601R-11417	29.0	115	231	295.44
601R-11614	29.5	115	231	352.45
601R-11811	30.0	115	231	348.51
601R-11875	1.3/16	115	231	352.45
601R-12008	30.5	115	231	328.78
601R-12205	31.0	133	265	328.78
601R-12402	31.5	133	265	343.09
601R-12500	1.1/4	133	265	363.67
601R-12598	32.0	133	265	363.67
601R-12795	32.5	133	265	343.09
601R-12992	33.0	133	265	363.67
601R-13125	1.5/16	133	265	378.44
601R-13189	33.5	133	265	378.44
601R-13386	34.0	133	265	401.14
601R-13583	34.5	133	265	401.34
601R-13750	1.3/8	133	265	425.42
601R-13780	35.0	133	265	425.42
601R-13976	35.5	133	265	401.34
601R-14173	36.0	142	284	401.34
601R-14370	36.5	142	284	401.34
601R-14375	1.7/16	142	284	420.80
601R-14567	37.0	142	284	424.55



HSS H7 HAND REAMERS

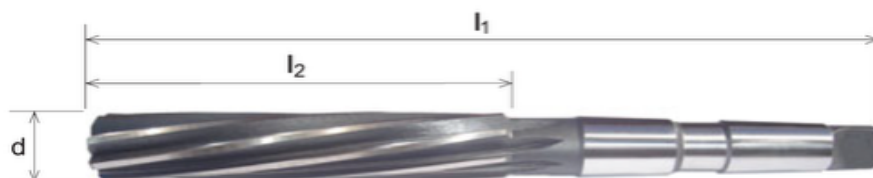
Code	Size	l ₂	l ₁	\$ ea.
601R-14764	37.5	142	284	424.55
601R-14961	38.0	142	284	424.55
601R-15000	1.1/2	142	284	429.01
601R-15157	38.5	142	284	429.01
601R-15354	39.0	142	284	429.01
601R-15551	39.5	142	284	429.01
601R-15625	1.9/16	142	284	429.01
601R-15748	40.0	142	284	429.01
601R-15945	40.5	142	284	481.48
601R-16142	41.0	142	284	481.48
601R-16250	1.5/8	142	284	481.48
601R-16339	41.5	142	284	481.48
601R-16535	42.0	142	284	535.50
601R-16732	42.5	142	284	574.37
601R-16875	1.11/16	142	284	609.34
601R-16929	43.0	142	284	609.34
601R-17126	43.5	153	297	609.34
601R-17323	44.0	153	297	689.59

Code	Size	l ₂	l ₁	\$ ea.
601R-17500	1.3/4	153	297	611.28
601R-17520	44.5	153	297	689.59
601R-17716	45.0	153	297	689.59
601R-17913	45.5	153	297	732.67
601R-18110	46.0	153	297	732.67
601R-18125	1.13/16	153	297	732.67
601R-18307	46.5	153	297	732.84
601R-18504	47.0	153	297	732.67
601R-18701	47.5	164	308	732.67
601R-18750	1.7/8	164	308	746.18
601R-18898	48.0	164	308	746.18
601R-19094	48.5	164	308	746.18
601R-19291	49.0	164	308	774.01
601R-19375	1.15/16	164	308	774.01
601R-19488	49.5	164	308	784.55
601R-19685	50.0	164	308	784.55
601R-20000	2"	164	308	855.42

HSS ADJUSTABLE HAND REAMERS

Code	Size	l ₂	l ₁	\$ ea.
ARH4	10.9-13.5 (H4)	40	140	110.83
ARH5	13.5-15.0 (H5)	45	145	114.40
ARH6	15.0-16.75 (H6)	55	170	117.98
ARH7	16.75-18.25 (H7)	60	180	121.55
ARH8	18.25-19.75 (H8)	60	180	125.13
ARH9	19.75-21.4 (H9)	70	185	135.85
ARH10	21.4-23.8 (H10)	75	205	171.60
ARH11	23.8-26.98 (H11)	85	230	210.93

Code	Size	l ₂	l ₁	\$ ea.
ARH12	26.98-30.16 (H12)	85	255	232.38
ARH13	30.16-34.13 (H13)	95	280	260.98
ARH14	34.13-38.1 (H14)	110	305	278.85
ARH15	38.1-46.03 (H15)	140	410	393.25
ARH16	46.03-56.35 (H16)	140	410	514.80
ARH17	56.35-69.85 (H17)	150	440	657.23
ARH18	69.85-84.93 (H18)	150	440	855.14



REAMERS EXTRA LENGTH - MACHINE HSS H7

Code	Size	l_2	l_1	\$ ea.
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100mm FLUTE LENGTH

No. 1 MORSE TAPER SHANK

R100-01575	4.0	100	180	92.59
R100-01968	5.0	100	180	99.91
R100-02362	6.0	100	180	109.16
R100-02755	7.0	100	180	112.12
R100-03150	8.0	100	180	117.69
R100-03543	9.0	100	180	121.71
R100-03937	10.0	100	180	126.23
R100-04331	11.0	100	180	130.59
R100-04724	12.0	100	180	143.50

200mm FLUTE LENGTH

No. 1 MORSE TAPER SHANK

R200-03150	8.0	200	280	186.04
R200-03543	9.0	200	280	200.40
R200-03937	10.0	200	280	206.21
R200-04331	11.0	200	280	216.90
R200-04724	12.0	200	280	232.98
R200-05118	13.0	200	280	241.42
R200-05512	14.0	200	280	247.21

No. 2 MORSE TAPER SHANK

R200-05906	15.0	200	300	254.65
R200-06299	16.0	200	300	262.92
R200-06693	17.0	200	300	266.90
R200-07087	18.0	200	300	273.14
R200-07480	19.0	200	300	275.49
R200-07874	20.0	200	300	281.25
R200-08268	21.0	200	300	302.78
R200-08661	22.0	200	300	318.19
R200-09055	23.0	200	300	340.58

Code	Size	l_2	l_1	\$ ea.
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No. 3 MORSE TAPER SHANK

R200-09449	24.0	200	320	360.33
R200-09843	25.0	200	320	374.96
R200-10236	26.0	200	320	396.27
R200-10630	27.0	200	320	419.62
R200-11024	28.0	200	320	432.76
R200-11417	29.0	200	320	484.03
R200-11811	30.0	200	320	495.00

300mm FLUTE LENGTH

No. 1 MORSE TAPER SHANK

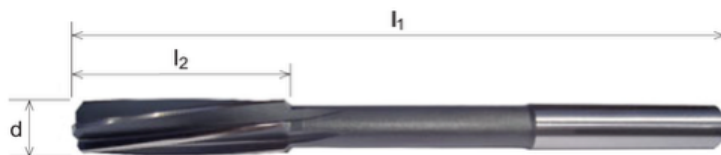
R300-04724	12.0	300	380	274.09
R300-05118	13.0	300	380	284.03
R300-05512	14.0	300	380	290.84

No. 2 MORSE TAPER SHANK

R300-05906	15.0	300	400	298.91
R300-06299	16.0	300	400	309.30
R300-06693	17.0	300	400	314.02
R300-07087	18.0	300	400	321.35
R300-07480	19.0	300	400	325.37
R300-07874	20.0	300	400	335.82
R300-08268	21.0	300	400	356.22
R300-08661	22.0	300	400	374.65
R300-09055	23.0	300	400	400.69

No. 3 MORSE TAPER SHANK

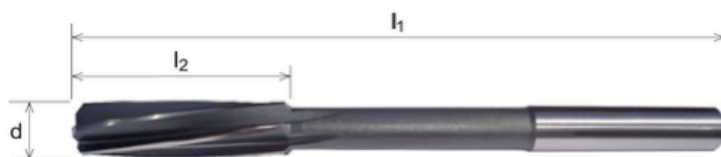
R300-09449	24.0	300	420	423.94
R300-09843	25.0	300	420	441.13
R300-10236	26.0	300	420	466.23
R300-10630	27.0	300	420	493.62
R300-11024	28.0	300	420	509.13
R300-11417	29.0	300	420	569.47
R300-11811	30.0	300	420	582.36



CHUCKING REAMERS H7 HSS Co - STRAIGHT SHANK

Code	Size	l ₂	l ₁	\$ ea.
RCM2.0	2.0	11	49	32.29
RCM2.1	2.1	11	49	26.71
RCM2.2	2.2	12	53	26.71
RCM2.3	2.3	12	53	26.71
RCM2.4	2.4	14	57	26.71
RCM2.5	2.5	14	57	14.80
RCM2.6	2.6	14	57	26.71
RCM2.7	2.7	15	61	26.71
RCM2.8	2.8	15	61	26.71
RCM2.9	2.9	15	61	26.71
RCM3.0	3.0	15	61	15.02
RCM3.1	3.1	16	65	27.82
RCIA	1/8	16	65	27.82
RCM3.2	3.2	16	65	27.82
RCM3.3	3.3	16	65	27.82
RCM3.4	3.4	18	70	27.82
RCM3.5	3.5	18	70	15.31
RCIB	9/64	18	70	27.82
RCM3.6	3.6	18	70	35.23
RCM3.7	3.7	18	70	35.23
RCM3.8	3.8	19	75	35.23
RCM3.9	3.9	19	75	35.23
RCIC	5/32	19	75	27.82
RCM4.0	4.0	19	75	24.03
RCM4.1	4.1	19	75	35.23
RCM4.2	4.2	19	75	35.23
RCM4.3	4.3	21	80	35.23
RCID	11/64	21	80	27.82
RCM4.4	4.4	21	80	35.23
RCM4.5	4.5	21	80	26.40
RCM4.6	4.6	21	80	35.23
RCM4.7	4.7	21	80	35.23

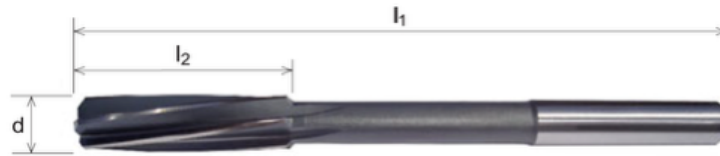
Code	Size	l ₂	l ₁	\$ ea.
RCIE	3/16	23	86	28.77
RCM4.8	4.8	23	86	37.54
RCM4.9	4.9	23	86	37.54
RCM5.0	5.0	23	86	27.26
RCM5.1	5.1	23	86	37.54
RCIF	13/64	23	86	28.77
RCM5.2	5.2	23	86	37.54
RCM5.3	5.3	23	86	37.54
RCM5.4	5.4	26	93	37.54
RCM5.5	5.5	26	93	27.86
RCIH	7/32	26	93	28.77
RCM5.6	5.6	26	93	37.54
RCM5.7	5.7	26	93	37.54
RCM5.8	5.8	26	93	37.54
RCM5.9	5.9	26	93	37.54
RCII	15/64	26	93	28.77
RCM6.0	6.0	26	93	28.77
RCM6.1	6.1	28	101	38.41
RCM6.2	6.2	28	101	38.41
RCM6.3	6.3	28	101	38.41
RCIJ	1/4	28	101	28.77
RCM6.4	6.4	28	101	38.41
RCM6.5	6.5	28	101	30.58
RCM6.6	6.6	28	101	40.63
RCM6.7	6.7	28	101	40.63
RCIK	17/64	28	101	40.63
RCM6.8	6.8	31	109	40.63
RCM6.9	6.9	31	109	40.63
RCM7.0	7.0	31	109	32.17
RCM7.1	7.1	31	109	40.63
RCIL	9/32	31	109	40.63
RCM7.2	7.2	31	109	40.63



CHUCKING REAMERS H7 HSS Co - STRAIGHT SHANK

Code	Size	l ₂	l ₁	\$ ea.
RCM7.3	7.3	31	109	40.63
RCM7.4	7.4	31	109	40.63
RCM7.5	7.5	31	109	32.17
RCM7.6	7.6	33	117	41.95
RCM7.7	7.7	33	117	41.95
RCM7.8	7.8	33	117	41.95
RCM7.9	7.9	33	117	41.95
RCIM	5/16	33	117	33.47
RCM8.0	8.0	33	117	33.47
RCM8.1	8.1	33	117	44.08
RCM8.2	8.2	33	117	44.08
RCM8.3	8.3	33	117	44.08
RCM8.4	8.4	33	117	44.08
RCM8.5	8.5	33	117	36.57
RCM8.6	8.6	36	125	46.45
RCM8.7	8.7	36	125	46.45
RCIN	11/32	36	125	46.45
RCM8.8	8.8	36	125	46.45
RCM8.9	8.9	36	125	46.45
RCM9.0	9.0	36	125	36.88
RCM9.1	9.1	36	125	46.45
RCM9.2	9.2	36	125	46.45
RCM9.3	9.3	36	125	46.45
RCM9.4	9.4	36	125	46.45
RCM9.5	9.5	36	125	40.73
RCIO	3/8	38	133	47.95
RCM9.6	9.6	38	133	47.95
RCM9.7	9.7	38	133	47.95
RCM9.8	9.8	38	133	56.12
RCM9.9	9.9	38	133	56.12
RCM10.0	10.0	38	133	45.88
RCM10.1	10.1	38	133	58.16

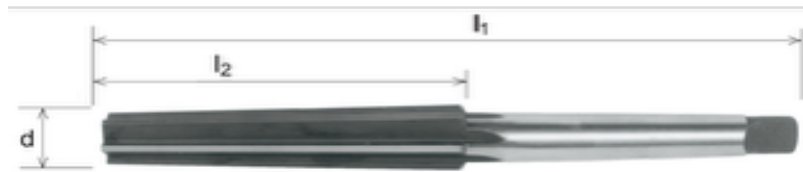
Code	Size	l ₂	l ₁	\$ ea.
RCM10.2	10.2	38	133	58.16
RCM10.3	10.3	38	133	58.16
RCIP	13/32	38	133	51.44
RCM10.4	10.4	38	133	58.16
RCM10.5	10.5	38	133	47.32
RCM10.6	10.6	38	133	59.05
RCM10.7	10.7	41	142	59.05
RCM10.8	10.8	41	142	59.05
RCM10.9	10.9	41	142	59.05
RCM11.0	11.0	41	142	51.44
RCM11.1	11.1	41	142	51.44
RCIQ	7/16	41	142	51.44
RCM11.2	11.2	41	142	63.95
RCM11.3	11.3	41	142	63.95
RCM11.4	11.4	41	142	63.95
RCM11.5	11.5	41	142	51.44
RCM11.6	11.6	41	142	63.95
RCM11.7	11.7	41	142	63.95
RCM11.8	11.8	41	142	63.95
RCM11.9	11.9	44	151	63.95
RCIR	15/32	44	151	67.46
RCM12.0	12.0	44	151	56.96
RCM12.1	12.1	44	151	71.32
RCM12.2	12.2	44	151	71.32
RCM12.3	12.3	44	151	71.32
RCM12.4	12.4	44	151	71.32
RCM12.5	12.5	44	151	59.87
RCM12.6	12.6	44	151	74.66
RCM12.7	12.7	44	151	74.66
RCIS	1/2	44	151	59.87
RCM12.8	12.8	44	151	74.66
RCM12.9	12.9	44	151	74.66



CHUCKING REAMERS H7 HSS Co - STRAIGHT SHANK

Code	Size	l ₂	l ₁	\$ ea.
RCM13.0	13.0	44	151	59.87
RCM13.5	13.5	47	160	62.56
RCM14.0	14.0	47	160	65.40
RCIT	9/16	50	162	73.89
RCM14.5	14.5	50	162	73.89
RCM15.0	15.0	50	162	73.89
RCM15.5	15.5	52	170	79.35
RCIU	5/8	52	170	79.35
RCM16.0	16.0	52	170	79.35
RCM16.5	16.5	54	175	122.38
RCM17.0	17.0	54	175	126.51
RCM17.5	17.5	56	182	159.92

Code	Size	l ₂	l ₁	\$ ea.
RCM18.0	18.0	56	182	150.90
RCM18.5	18.5	58	189	167.12
RCM19.0	19.0	58	189	157.99
RCIV	3/4	60	195	135.69
RCM19.5	19.5	60	195	185.23
RCM20.0	20.0	60	195	167.20
RCM21.0	21.0	63	202	203.46
RCM22.0	22.0	63	202	177.17
RCM23.0	23.0	63	202	205.04
RCM24.0	24.0	63	202	215.37
RCM25.0	25.0	63	202	221.65
RCIW	1"	63	202	244.24



MTS TAPER SOCKET REAMERS IMPERIAL

Code	Size	l_2	l_1	\$ ea.
------	------	-------	-------	--------

ROUGHING

No. 1 MORSE TAPER SHANK				
R611-00R	0	61	137	130.80
R611-10R	1	66	142	159.11

No. 2 MORSE TAPER SHANK				
R611-20R	2	79	173	236.01

No. 3 MORSE TAPER SHANK				
R611-30R	3	96	212	382.16

No. 4 MORSE TAPER SHANK				
R611-40R	4	119	263	595.11

No. 5 MORSE TAPER SHANK				
R611-50R	5	150	331	849.21

Code	Size	l_2	l_1	\$ ea.
------	------	-------	-------	--------

FINISHING

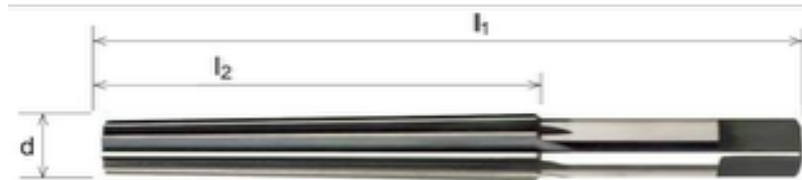
No. 1 MORSE TAPER SHANK				
R612-00F	0	61	137	123.89
R612-10F	1	66	142	148.03

No. 2 MORSE TAPER SHANK				
R612-20F	2	79	173	224.83

No. 3 MORSE TAPER SHANK				
R612-30F	3	96	212	345.04

No. 4 MORSE TAPER SHANK				
R612-40F	4	119	263	584.20

No. 5 MORSE TAPER SHANK				
R612-50F	5	150	331	832.38



HAND TAPER SOCKET REAMERS IMPERIAL

Code	Size	l_2	l_1	\$ ea.
------	------	-------	-------	--------

ROUGHING

1/2" SHANK				
R613-00R	0	61	122	130.80
R613-10R	1	66	127	159.11

1/2" SHANK				
R613-20R	2	79	153	236.01

16mm SHANK				
R613-30R	3	96	187	382.16

20mm SHANK				
R613-40R	4	119	233	595.11

25mm SHANK				
R613-50R	5	150	296	849.21

Code	Size	l_2	l_1	\$ ea.
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FINISHING

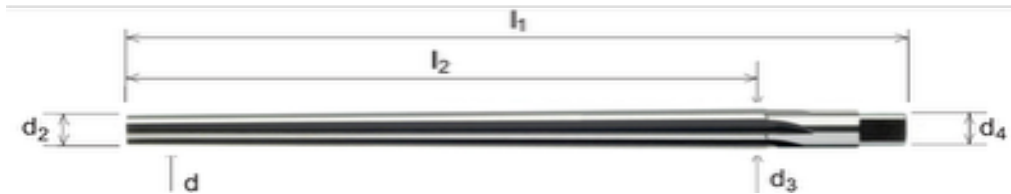
1/2" SHANK				
R614-00F	0	61	122	123.89
R614-10F	1	66	127	148.03

1/2" SHANK				
R614-20F	2	79	153	224.83

16mm SHANK				
R614-30F	3	96	187	345.04

20mm SHANK				
R614-40F	4	119	233	584.20

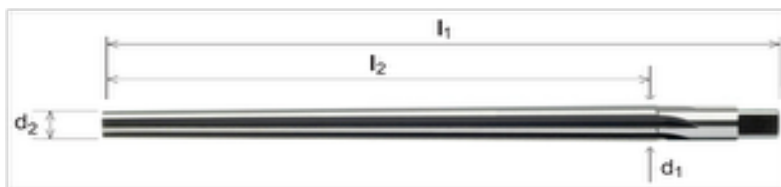
25mm SHANK				
R614-50F	5	150	296	832.38



HAND TAPER PIN REAMERS - STRAIGHT FLUTE 50:1

STRAIGHT SHANK H7 HSS

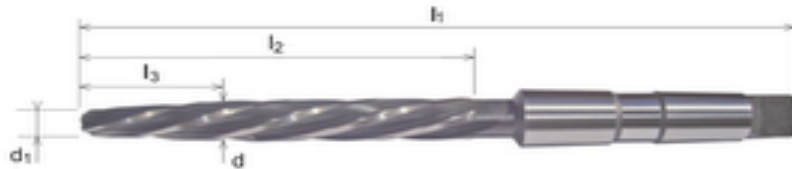
Code	Size	d ₂	d ₃	d ₄	l ₂	l ₁	\$ ea.
R605-2	2.0	1.9	2.9	3.2	48	68	66.13
R605-2.5	2.5	2.4	3.4	3.2	48	68	66.13
R605-3	3.0	2.9	4.1	4.0	58	80	59.12
R605-4	4.0	3.9	5.3	5.0	68	93	59.12
R605-5	5.0	4.9	6.4	6.3	73	100	59.12
R605-6	6.0	5.9	8.0	8.0	105	135	61.31
R605-8	8.0	7.9	10.8	10.0	145	180	74.56
R605-10	10.0	9.9	13.4	12.5	175	215	102.58
R605-12	12.0	11.8	16.0	14.0	210	255	140.31
R605-13	13.0	12.8	17.0	15.0	210	255	143.30
R605-14	14.0	13.8	18.0	16.0	210	255	210.33
R605-16	16.0	15.8	20.4	18.0	230	280	282.40
R605-18	18.0	17.8	22.6	20.2	240	295	315.89
R605-20	20.0	19.8	24.8	22.4	250	310	346.52
R605-25	25.0	24.7	30.7	28.0	300	370	519.28



HAND TAPER PIN REAMERS - STRAIGHT FLUTE 48:1

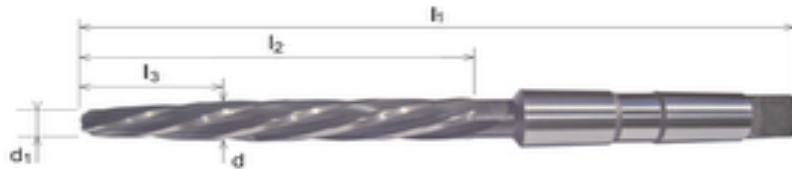
STRAIGHT SHANK H7 HSS

Code	Nominal Dia.	Number Series	d ₁	d ₂	l ₂	l ₁	\$ ea.
R606-00625	1/16	7/0	1.63	1.1	25.4	50.8	53.66
R606-00781	5/64	6/0	2.03	1.5	25.4	50.8	53.66
R606-00938	3/32	5/0	2.41	1.75	31.80	57.2	47.59
R606-01094	7/64	4/0	2.82	2.03	38.1	63.5	47.59
R606-01250	1/8	3/0	3.23	2.29	44.5	69.9	47.59
R606-01406	9/64	2/0	3.63	2.64	47.6	73.0	47.59
R606-01562	5/32	0	4.01	2.95	50.8	76.2	49.48
R606-01719	11/64	1	4.42	3.23	52.2	88.9	49.48
R606-01875	3/16	2	4.95	3.5	69.9	101.6	49.48
R606-02188	7/32	3	5.59	4.13	69.9	101.6	49.48
R606-02500	1/4	4	6.43	4.64	85.7	117.5	51.42
R606-02812	9/32	5	7.42	5.23	104.8	142.9	53.29
R606-03125	5/16		8.03	5.84	104.8	142.9	58.10
R606-03438	11/32	6	8.81	6.43	114.3	152.4	58.10
R606-03750	3/8		9.68	7.03	127.0	165.1	72.34
R606-04062	13/32	7	10.46	7.42	146.1	190.5	72.34
R606-04375	7/16		11.25	8.21	146.1	190.5	116.57
R606-05000	1/2	8	12.85	9.41	165.1	209.6	117.99
R606-05625	9/16	9	14.50	10.93	171.5	215.9	196.76
R606-06250	5/8		16.08	12.11	190.5	235.0	251.49
R606-07500	3/4	10	19.30	14.67	222.3	273.1	263.63
R606-08750	7/8	11	22.48	17.45	241.3	304.8	335.53
R606-10000	1"	12	26.67	21.39	254.0	346.1	594.71
R606-11250	1.1/8	13	31.98	25.63	304.8	406.4	686.21
R606-12500	1.1/4	14	39.17	31.75	355.6	463.55	741.45
R606-13750	1.3/8	15	39.17	31.75	355.6	463.55	909.82



MTS BRIDGE REAMERS

Code	Size (d)	d ₁	l ₂	l ₁	l ₃	\$ ea.
No. 1 MORSE TAPER SHANK						
607R-03543	9.0	5.4	90	166	36	143.30
607R-04094	10.4	6.6	95	171	38	150.13
607R-04331	11.0	7.0	100	176	40	153.95
No. 2 MORSE TAPER SHANK						
607R-04724	12	7.8	105	199	42	163.91
607R-05000	1/2	7.8	105	199	42	172.24
607R-05118	13	8.8	105	199	42	172.24
607R-05512	14	9.4	115	209	46	173.52
607R-05625	9/16	9.6	115	209	46	173.52
607R-05906	15	10.0	125	219	50	200.71
607R-06250	5/8	10.2	135	229	50	173.52
607R-06299	16	10.6	135	229	50	200.71
No. 3 MORSE TAPER SHANK						
607R-06693	17	11.6	135	251	54	219.17
607R-06875	11/16	11.8	135	251	54	219.17
607R-07087	18	12.2	145	261	58	225.91
607R-07480	19	13.2	145	261	58	225.91
607R-07500	3/4	13.2	145	261	58	225.91
607R-07874	20	13.8	155	271	62	235.42
607R-08125	13/16	14.2	155	271	62	235.42
607R-08268	21	14.8	155	271	62	235.42
607R-08661	22	15.4	165	281	66	269.91
607R-08750	7/8	15.8	165	281	66	269.91
607R-09055	23	16.4	165	281	66	301.91
607R-09375	15/16	16.6	165	281	66	301.91



MTS BRIDGE REAMERS

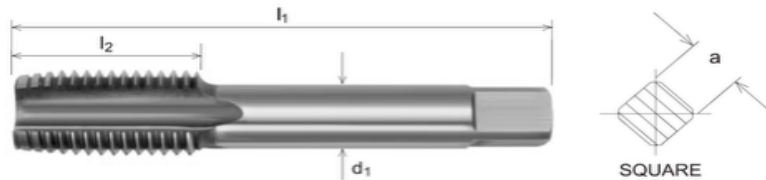
Code	Size (d)	d ₁	l ₂	l ₁	l ₃	\$ ea.
No. 3 MORSE TAPER SHANK						
607R-09449	24	16.8	180	296	72	301.91
607R-09843	25	17.8	180	296	72	305.18
607R-10000	1"	18.2	180	296	72	305.18
607R-10236	26	18.8	180	296	72	371.11
607R-10630	27	19.2	195	311	78	380.38
607R-11024	28	20.2	195	311	78	441.13
607R-11625	1.1/8	21.2	195	311	78	441.13
607R-11811	30	22.2	195	311	78	455.59
607R-12500	1.1/4	23.1	195	311	78	504.13
No. 4 MORSE TAPER SHANK						
607R-12598	32	23.6	210	354	84	531.06
607R-12992	33	24.6	210	354	84	540.76
607R-13386	34	25.2	220	364	88	595.82
607R-13750	1.3/8	26.2	220	364	88	595.82
607R-14567	37	28.2	220	364	88	650.71
607R-14961	38	28.8	230	374	92	715.73
607R-15000	1.1/2	28.8	230	374	92	780.47
607R-15748	40	30.8	230	374	92	881.44



ALL REAMER SETS

Code		Sizes	\$ ea.
HSS H7 MTS MACHINE REAMER SETS			
603R-100		M3, M4, M5, M6, M7, M8, M9, M10, 11, M12, M13	776.95
603R-200		M14, M15, M16, M17, M18, M19, M20	745.38
HSS H7 HAND REAMER SETS			
601R-100		M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13	603.15
601R-200		1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/2	733.81
MTS BRIDGE REAMER SETS			
607R-100		M9, M10, 11, M12, M13	652.81
607R-200		M14, M15, M16, M17, M18, M19, M20	1203.10
HSS H7 Co STRAIGHT SHANK CHUCKING REAMER SETS			
RCM-100		M3, M4, M5, M6, M7, M8, M9, M10, 11, M12, M13	482.10
RCM-200		M13, M14, M15, M16, M17, M18, M19, M20	793.96
RCI-100		1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/2	604.78
STRAIGHT FLUTE HAND TAPER PIN REAMER SETS			
R606-100	50:1	2, 3, 4, 5, 6, 8, 10, 12, 13	778.40
R606-200	48:1	1/16, 1/8, 5/32, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2	687.67

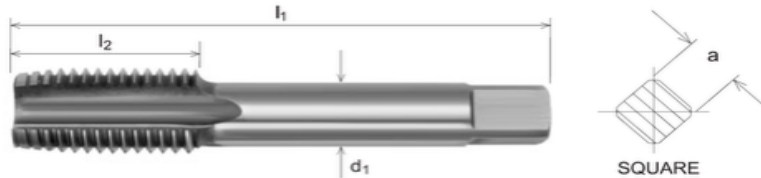
EACH SET INCLUDES ONE REAMER PER SIZE LISTED ABOVE



TAPS - METRIC COARSE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T104-	T105-	T106-	T103-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0163	1.6	0.35	8	41	2.5	2	50.88	50.88	50.88	152.63
0204	2.0	0.4	8	41	2.5	2	19.57	19.57	19.57	58.71
0202	2.2	0.45	9.5	44.5	2.8	2.24	19.16	19.16	19.16	57.47
0251	2.5	0.45	9.5	44.5	2.8	2.24	15.87	15.87	15.87	47.59
0305	3.0	0.5	11	48	3.15	2.5	11.94	11.94	11.94	35.83
0356	3.5	0.6	13	50	3.55	2.8	12.45	12.45	12.45	37.39
0402	4.0	0.7	13	53	4	3.15	10.30	10.30	10.30	30.89
0457	4.5	0.75	13	53	4.5	3.55	13.46	13.46	13.46	40.35
0508	5.0	0.8	16	58	5	4	11.55	11.55	11.55	34.61
0610	6.0	1.0	19	66	6.3	5	11.91	11.91	11.91	35.73
0710	7.0	1.0	19	66	7.1	5.6	14.31	14.31	14.31	42.77
0812	8.0	1.25	22	72	8	6.3	12.45	12.45	12.45	37.39
0912	9.0	1.25	22	72	9	7.1	20.40	20.40	20.40	61.24
1015	10	1.5	24	80	10	8	17.06	17.06	17.06	51.16
1115	11	1.5	25	85	8	6.3	25.91	25.91	25.91	77.72
1217	12	1.75	29	89	9	7.1	26.35	26.35	26.35	79.04
1420	14	2.0	30	95	11.2	9	31.68	31.68	31.68	95.04
1620	16	2.0	32	102	12.5	10	38.39	38.39	38.39	115.18
1825	18	2.5	37	112	14	11.2	59.53	59.53	59.53	178.59
2025	20	2.5	37	112	14	11.2	66.32	66.32	66.32	198.97
2225	22	2.5	38	118	16	12.5	74.91	74.91	74.91	224.73
2430	24	3.0	45	130	18	14	86.47	86.47	86.47	259.40
2730	27	3.0	45	135	20	16	132.55	132.55	132.55	397.61
3035	30	3.5	48	138	20	16	147.93	147.93	147.93	443.76
3335	33	3.5	51	151	22.4	18	193.19	193.19	193.19	579.57
3640	36	4.0	57	162	25	20	224.71	224.71	224.71	674.13
3940	39	4.0	60	170	28	22.4	268.96	268.96	268.96	806.86
4245	42	4.5	60	170	28	22.4	307.35	307.35	307.35	922.02
4545	45	4.5	67	187	31.5	25	397.75	397.75	397.75	1193.21



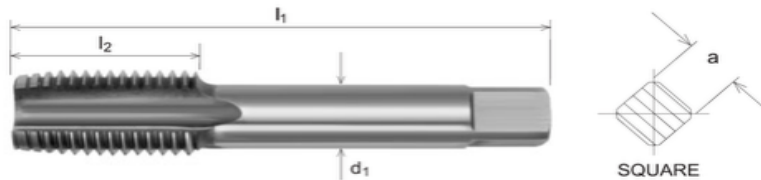
TAPS - METRIC COARSE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T104-	T105-	T106-	T103-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
4850	48	5.0	67	187	31.5	25	424.50	424.50	424.50	1273.47
5250	52	5.0	70	200	35.5	28	483.11	483.11	483.11	1449.34
5655	56	5.5	70	200	35.5	28	677.69	677.69	677.69	2032.98
6055	60	5.5	70	200	40	31.5	717.27	717.27	717.27	2151.82
6460	64	6.0	70	200	40	31.5	811.67	811.67	811.67	2434.96
6860	68	6.0	70	200	45	35.5	856.85	856.85	856.85	2570.54
7260	72	6.0	70	200	45	35.5	912.64	912.64	912.64	2737.91
7660	76	6.0	70	200	50	40	1099.55	1099.55	1099.55	3298.69
8060	80	6.0	70	200	50	40	1181.09	1181.09	1181.09	3543.37
8506	85	6.0	70	200	50	40	1273.78	1273.78	1273.78	3821.31
9060	90	6.0	70	200	50	40	1367.76	1367.76	1367.76	4103.27
9560	95	6.0	70	200	56	45	1424.28	1424.28	1424.28	4272.86
1060	100	6.0	70	200	56	45	1594.71	1594.71	1594.71	4784.15

CAPITAL

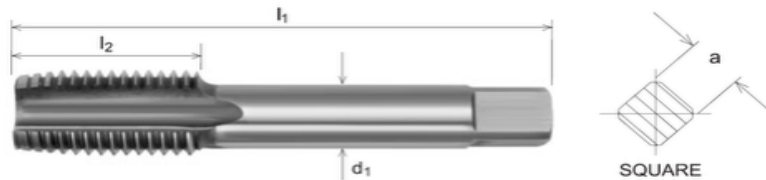
CUTTING TOOLS



TAPS - METRIC COARSE **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T114-	T115-	T116-	T113-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0305	3.0	0.5	11	48	3.15	2.5	26.86	26.86	26.86	80.62
0402	4.0	0.7	13	53	4	3.15	26.86	26.86	26.86	80.62
0457	4.5	0.75	13	53	4.5	3.55	37.29	37.29	37.29	111.87
0508	5.0	0.8	16	58	5	4	26.86	26.86	26.86	80.62
0610	6.0	1.0	19	66	6.3	5	28.42	28.42	28.42	85.26
0710	7.0	1.0	19	66	7.1	5.6	27.01	27.01	27.01	81.03
0812	8.0	1.25	22	72	8	6.3	29.81	29.81	29.81	89.42
0912	9.0	1.25	22	72	9	7.1	29.81	29.81	29.81	89.42
1015	10	1.5	24	80	10	8	36.34	36.34	36.34	108.99
1115	11	1.5	25	85	8	6.3	34.61	34.61	34.61	103.81
1217	12	1.75	29	89	9	7.1	61.31	61.31	61.31	183.90
1420	14	2.0	30	95	11.2	9	76.60	76.60	76.60	229.79
1620	16	2.0	32	102	12.5	10	82.34	82.34	82.34	247.03
1825	18	2.5	37	112	14	11.2	113.01	113.01	113.01	339.02
2025	20	2.5	37	112	14	11.2	132.23	132.23	132.23	396.69
2225	22	2.5	38	118	16	12.5	162.71	162.71	162.71	488.14
2430	24	3.0	45	130	18	14	170.94	170.94	170.94	512.85
2730	27	3.0	45	135	20	16	181.25	181.25	181.25	543.74
3035	30	3.5	48	138	20	16	187.42	187.42	187.42	562.28
3335	33	3.5	51	151	22.4	18	234.40	234.40	234.40	703.16
3640	36	4.0	57	162	25	20	265.92	265.92	265.92	797.73
3940	39	4.0	60	170	28	22.4	310.13	310.13	310.13	928.47
4245	42	4.5	60	170	28	22.4	427.10	427.10	427.10	1281.27
4545	45	4.5	67	187	31.5	25	431.59	431.59	431.59	1294.80
4850	48	5.0	67	187	31.5	25	442.00	442.00	442.00	1325.99
5250	52	5.0	70	200	35.5	28	483.11	483.11	483.11	1449.34
5655	56	5.5	70	200	35.5	38	677.69	677.69	677.69	2032.98
6055	60	5.5	70	200	40	31.5	717.27	717.27	717.27	2151.82
6460	64	6.0	70	200	40	31.5	811.67	811.67	811.67	2434.96
6860	68	6.0	70	200	45	35.5	856.85	856.85	856.85	2570.54
7260	72	6.0	70	200	45	35.5	913.45	913.45	913.45	2737.91



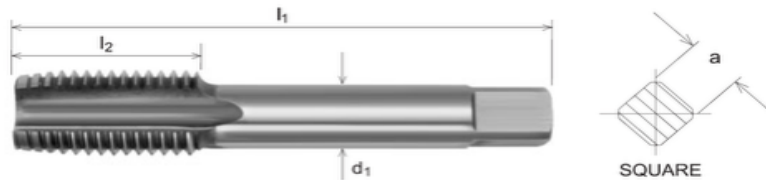
TAPS - METRIC OVERSIZE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T144-	T145-	T146-	T143-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0508.4	5	0.8 + .4	19	66	8	6.30	34.42	34.42	34.42	103.26
0610.4	6	1.0 + .4	19	66	8	6.30	34.42	34.42	34.42	103.26
0812.4	8	1.25 + .4	22	72	8	6.3	34.41	34.41	34.41	103.25
1015.4	10	1.5 + .4	24	80	10	8	37.08	37.08	37.08	111.23
1217.4	12	1.75 + .4	29	89	9	7.1	55.01	55.01	55.01	165.02
1420.4	14	2.0 + .4	30	95	11.2	9	62.19	62.19	62.19	186.58
1620.4	16	2.0 + .4	32	102	12.5	10	64.89	64.89	64.89	194.67
1825.4	18	2.5 + .4	37	112	14	11.2	80.24	80.24	80.24	240.72
2025.4	20	2.5 + .4	37	112	14	11.2	93.40	93.40	93.40	280.23
2225.4	22	2.5 + .4	38	118	16	12.5	106.72	106.72	106.72	320.18
2430.4	24	3.0 + .4	45	130	18	14	118.02	118.02	118.02	354.07
2430.45	24	3.0 + .45	45	130	18	14	118.02	118.02	118.02	354.07
2430.5	24	3.0 + .5	45	130	18	14	118.02	118.02	118.02	354.07
2730.4	27	3.0 + .4	45	135	20	16	155.26	155.26	155.26	465.80
2730.5	27	3.0 + .5	45	135	20	16	155.26	155.26	155.26	465.80
3035.4	30	3.5 + .4	48	138	20	16	248.81	248.81	248.81	746.43
3035.5	30	3.5 + .5	48	138	20	16	248.81	248.81	248.81	746.43
3035.6	30	3.5 + .6	48	138	20	16	248.81	248.81	248.81	746.43
3335.5	33	3.5 + .5	51	151	22.4	18	291.25	291.25	291.25	873.76
3640.5	36	4.0 + 0.5	57	162	25	20	337.37	337.37	337.37	1012.11
3640.6	36	4.0 + 0.6	57	162	25	20	337.37	337.37	337.37	1012.11
4245.5	42	4.5 + .5	60	170	28	22.4	357.36	357.36	357.36	1072.07
4245.6	42	4.5 + .6	60	170	28	22.4	357.36	357.36	357.36	1072.07

CAPITAL

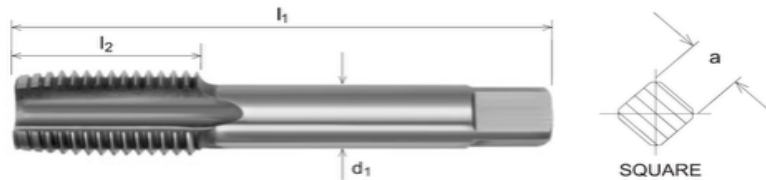
CUTTING TOOLS



TAPS - METRIC OVERSIZE **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T154-	T155-	T156-	T153-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0610.4	6	1.0 + .4	20	65	7	5.8	43.41	43.41	43.41	130.24
0812.4	8	1.25 + .4	22	72	8	6.3	43.41	43.41	43.41	130.24
1005.4	10	0.5 + .5	24	80	10	8	46.34	46.34	46.34	139.06
1015.4	10	1.5 + .4	24	80	10	8	46.34	46.34	46.34	139.06
1217.4	12	1.75 + .4	29	89	9	7.1	59.32	59.32	59.32	177.95
1420.4	14	2.0 + .4	30	95	11.2	9	66.17	66.17	66.17	198.51
1620.4	16	2.0 + .4	32	102	12.5	10	70.65	70.65	70.65	211.96
1825.4	18	2.5 + .4	37	112	14	11.2	85.44	85.44	85.44	256.31
2025.4	20	2.5 + .4	37	112	14	11.2	100.09	100.09	100.09	300.29
2225.4	22	2.5 + .4	38	118	16	12.5	121.41	121.41	121.41	364.22
2430.4	24	3.0 + .4	45	130	18	14	130.57	130.57	130.57	391.73
2430.45	24	3.0 + .45	45	130	18	14	130.57	130.57	130.57	391.73
2430.5	24	3.0 + .5	45	130	18	14	130.57	130.57	130.57	391.73
2730.4	27	3.0 + .4	45	135	20	16	163.44	163.44	163.44	490.33
2730.5	27	3.0 + .5	45	135	20	16	163.44	163.44	163.44	490.33
3035.4	30	3.5 + .4	48	138	20	16	248.81	248.81	248.81	746.43
3035.5	30	3.5 + .5	48	138	20	16	248.81	248.81	248.81	746.43
3035.6	30	3.5 + .6	48	138	20	16	248.81	248.81	248.81	746.43
3640.5	36	4.0 + .5	57	162	25	20	337.37	337.37	337.37	1012.11
3640.6	36	4.0 + .6	57	162	25	20	337.37	337.37	337.37	1012.11
4245.5	42	4.5 + .5	60	170	28	22.4	357.36	357.36	357.36	1072.07
4245.6	42	4.5 + .6	60	170	28	22.4	357.36	357.36	357.36	1072.07



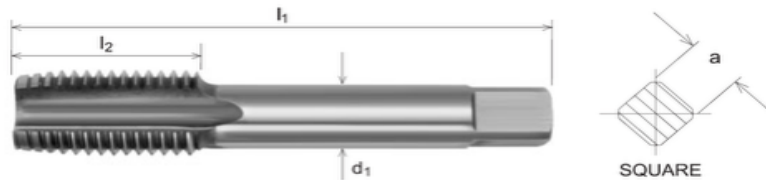
TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T124-	T125-	T126-	T123-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0234	2.3	0.4	11	48	3.15	2.5	23.88	23.88	23.88	71.68
0245	2.0	0.45	11	48	3.15	2.5	23.88	23.88	23.88	71.68
0264	2.6	0.45	11	48	3.15	2.5	23.88	23.88	23.88	71.68
0303	3.0	0.35	11	48	3.15	2.5	23.88	23.88	23.88	71.68
0306	3.0	0.6	11	48	3.15	2.5	23.88	23.88	23.88	71.68
0353	3.5	0.35	13	50	3.55	2.8	23.88	23.88	23.88	71.68
0355	3.5	0.5	13	50	3.55	2.8	23.88	23.88	23.88	71.68
0356	3.5	0.6	13	50	3.55	2.8	23.88	23.88	23.88	71.68
0405	4.0	0.5	13	53	4	3.15	23.88	23.88	23.88	71.68
0407	4.0	0.75	13	53	4	3.15	23.88	23.88	23.88	71.68
0455	4.5	0.5	13	53	4.5	3.55	23.88	23.88	23.88	71.68
0505	5.0	0.5	16	58	5	4	20.99	20.99	20.99	62.99
0507	5.0	0.75	16	58	5	4	23.88	23.88	23.88	71.68
0509	5.0	0.9	16	58	5	4	23.88	23.88	23.88	71.68
0510	5.0	1.0	16	58	5	4	23.88	23.88	23.88	71.68
0512	5.0	1.25	16	58	5	4	23.88	23.88	23.88	71.68
0515	5.0	1.5	16	58	5	4	23.88	23.88	23.88	71.68
0555	5.5	0.5	17	62	5.6	4.5	24.00	24.00	24.00	71.98
0557	5.5	0.75	17	62	5.6	4.5	23.88	23.88	23.88	71.63
0605	6.0	0.5	19	66	6.3	5	24.00	24.00	24.00	71.98
0607	6.0	0.7	19	66	6.3	5	28.30	28.30	28.30	84.91
0607	6.0	0.75	19	66	6.3	5	28.29	28.29	28.29	84.91
0608	6.0	0.8	19	66	6.3	5	28.29	28.29	28.29	84.91
0609	6.0	0.9	19	66	6.3	5	28.29	28.29	28.29	84.91
0612	6.0	1.25	19	66	6.3	5	28.29	28.29	28.29	84.91
0615	6.0	1.5	19	66	6.3	5	28.29	28.29	28.29	84.91
0705	7.0	0.5	19	66	7.1	5.6	30.12	30.12	30.12	90.34
0707	7.0	0.75	19	66	7.1	5.6	30.12	30.12	30.12	90.34
0708	7.0	0.8	19	66	7.1	5.6	30.12	30.12	30.12	90.34

CAPITAL

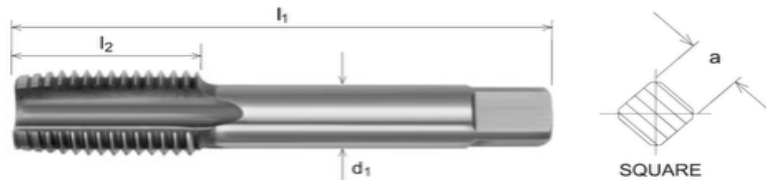
CUTTING TOOLS



TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

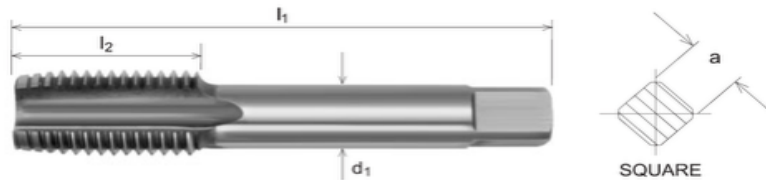
Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T124-	T125-	T126-	T123-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0709	7.0	0.9	19	66	7.1	5.6	30.12	30.12	30.12	90.34
0712	7.0	1.25	19	66	7.1	5.6	30.12	30.12	30.12	90.34
0715	7.0	1.5	19	66	7.1	5.6	50.32	50.32	50.32	150.94
0805	8.0	0.5	19	69	8	6.3	50.32	50.32	50.32	150.94
0870	8.0	0.7	19	69	8	6.3	50.32	50.32	50.32	150.94
0807	8.0	0.75	19	69	8	6.3	28.70	28.70	28.70	86.09
0808	8.0	0.8	19	69	8	6.3	37.29	37.29	37.29	111.87
0809	8.0	0.9	19	69	8	6.3	50.32	50.32	50.32	150.94
0810	8.0	1.0	19	69	8	6.3	23.01	23.01	23.01	69.04
0815	8.0	1.5	19	69	8	6.3	30.12	30.12	30.12	90.34
0817	8.0	1.75	19	69	8	6.3	50.32	50.32	50.32	150.94
0905	9.0	0.5	19	69	9	7.1	30.12	30.12	30.12	90.34
0906	9.0	0.6	19	69	9	7.1	30.12	30.12	30.12	90.34
0907	9.0	0.75	19	69	9	7.1	39.18	39.18	39.18	117.51
0908	9.0	0.8	19	69	9	7.1	30.12	30.12	30.12	90.34
0910	9.0	1.0	19	69	9	7.1	34.02	34.02	34.02	102.03
0915	9.0	1.5	19	69	9	7.1	30.12	30.12	30.12	90.34
0917	9.0	1.75	19	69	9	7.1	30.12	30.12	30.12	90.34
1005	10	0.5	20	76	10	8	50.32	50.32	50.32	150.94
1007	10	0.7	20	76	10	8	39.03	39.03	39.03	117.10
1075	10	0.75	20	76	10	8	39.07	39.07	39.07	117.22
1008	10	0.8	20	76	10	8	39.03	39.03	39.03	117.10
1009	10	0.9	20	76	10	8	39.07	39.07	39.07	117.22
1010	10	1.0	20	76	10	8	31.65	31.65	31.65	94.93
1012	10	1.25	20	76	10	8	31.58	31.58	31.58	94.75
1017	10	1.75	20	76	10	8	56.54	56.54	56.54	169.61
1020	10	2.0	20	76	10	8	109.04	109.04	109.04	327.14
1105	11	0.5	22	82	8	6.3	67.77	67.77	67.77	203.33
1107	11	0.75	22	82	8	6.3	77.62	77.62	77.62	232.85



TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

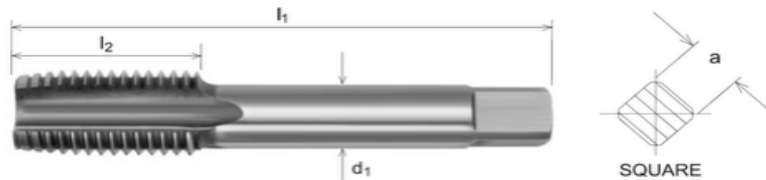
Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T124-	T125-	T126-	T123-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
1110	11	1.0	22	82	8	6.3	77.62	77.62	77.62	232.85
1112	11	1.25	22	82	8	6.3	77.62	77.62	77.62	232.85
1117	11	1.75	22	82	8	6.3	77.62	77.62	77.62	232.85
1120	11	2.0	22	82	8	6.3	77.62	77.62	77.62	232.85
1205	12	0.5	24	84	9	7.1	53.41	53.41	53.41	160.23
1207	12	0.7	24	84	9	7.1	53.41	53.41	53.41	160.23
1275	12	0.75	24	84	9	7.1	56.01	56.01	56.01	168.01
1208	12	0.8	24	84	9	7.1	45.61	45.61	45.61	136.82
1210	12	1.0	24	84	9	7.1	45.61	45.61	45.61	136.82
1212	12	1.25	24	84	9	7.1	36.34	36.34	36.34	108.99
1215	12	1.5	24	84	9	7.1	36.34	36.34	36.34	108.99
1220	12	2.0	24	84	9	7.1	34.61	34.61	34.61	103.81
1305	13	0.5	29	89	9	7.1	50.88	50.88	50.88	152.65
1307	13	0.75	29	89	9	7.1	37.70	37.70	37.70	113.11
1310	13	1.0	29	89	9	7.1	37.70	37.70	37.70	113.10
1312	13	1.25	29	89	9	7.1	37.70	37.70	37.70	113.10
1315	13	1.5	29	89	9	7.1	37.70	37.70	37.70	113.10
1317	13	1.75	29	89	9	7.1	37.70	37.70	37.70	113.10
1320	13	2.0	29	89	9	7.1	37.70	37.70	37.70	113.10
1405	14	0.5	25	90	11.2	9	57.06	57.06	57.06	171.19
1407	14	0.7	25	90	11.2	9	57.06	57.06	57.06	171.19
1475	14	0.75	25	90	11.2	9	57.06	57.06	57.06	171.19
1410	14	1.0	25	90	11.2	9	54.87	54.87	54.87	164.59
1412	14	1.25	25	90	11.2	9	53.62	53.62	53.62	160.82
1415	14	1.5	25	90	11.2	9	53.62	53.62	53.62	160.82
1417	14	1.75	25	90	11.2	9	53.62	53.62	53.62	160.82
1505	15	0.5	30	95	11.2	9	80.53	80.53	80.53	241.62
1507	15	0.75	30	95	11.2	9	80.53	80.53	80.53	241.62
1508	15	0.8	30	95	11.2	9	80.53	80.53	80.53	241.62



TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

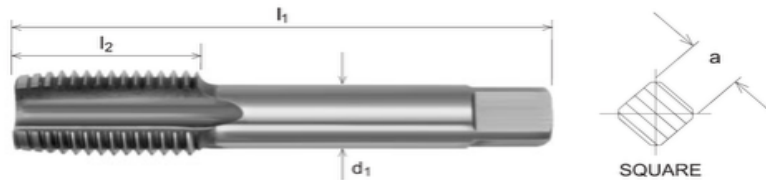
Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T124-	T125-	T126-	T123-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
1510	15	1.0	30	95	11.2	9	75.42	75.42	75.42	226.27
1512	15	1.25	30	95	11.2	9	75.42	75.42	75.42	226.27
1515	15	1.5	30	95	11.2	9	75.42	75.42	75.42	226.27
1517	15	1.75	30	95	11.2	9	75.42	75.42	75.42	226.27
1520	15	2.0	30	95	11.2	9	75.42	75.42	75.42	226.27
1525	15	2.5	30	95	11.2	9	75.42	75.42	75.42	226.27
1605	16	0.5	32	102	12.5	10	81.37	81.37	81.37	244.10
1607	16	0.75	32	102	12.5	10	81.37	81.37	81.37	244.10
1608	16	0.8	32	102	12.5	10	81.37	81.37	81.37	244.10
1610	16	1.0	32	102	12.5	10	54.87	54.87	54.87	164.59
1612	16	1.25	32	102	12.5	10	54.87	54.87	54.87	164.59
1615	16	1.5	32	102	12.5	10	53.62	53.62	53.62	160.82
1617	16	1.75	32	102	12.5	10	72.33	72.33	72.33	216.98
1710	17	1.0	32	102	12.5	10	93.32	93.32	93.32	279.93
1712	17	1.25	32	102	12.5	10	93.32	93.32	93.32	279.93
1715	17	1.5	32	102	12.5	10	93.32	93.32	93.32	279.93
1720	17	2.0	32	102	12.5	10	93.32	93.32	93.32	279.93
1805	18	0.5	37	112	14	11.2	86.21	86.21	86.21	258.63
1807	18	0.75	37	112	14	11.2	86.21	86.21	86.21	258.63
1810	18	1.0	37	112	14	11.2	86.21	86.21	86.21	258.63
1812	18	1.25	37	112	14	11.2	64.71	64.71	64.71	194.13
1815	18	1.5	37	112	14	11.2	68.94	68.94	68.94	206.85
1820	18	2.0	37	112	14	11.2	74.88	74.88	74.88	224.61
1907	19	0.75	37	112	14	11.2	114.52	114.52	114.52	343.54
1910	19	1.0	37	112	14	11.2	114.52	114.52	114.52	343.54
1915	19	1.5	37	112	14	11.2	114.52	114.52	114.52	343.54
1920	19	2.0	37	112	14	11.2	114.52	114.52	114.52	343.54
1925	19	2.5	37	112	14	11.2	114.52	114.52	114.52	343.54
2005	20	0.5	37	112	14	11.2	105.18	105.18	105.18	315.54



TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

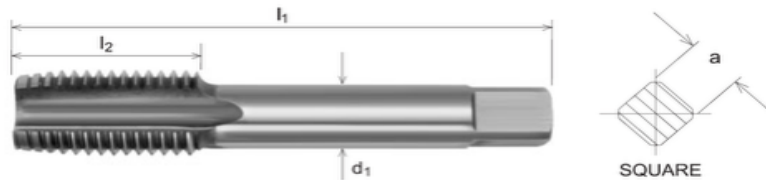
Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T124-	T125-	T126-	T123-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2007	20	0.75	37	112	14	11.2	105.18	105.18	105.18	315.54
2008	20	0.8	37	112	14	11.2	105.18	105.18	105.18	315.54
2010	20	1.0	37	112	14	11.2	105.18	105.18	105.18	315.54
2012	20	1.25	37	112	14	11.2	83.33	83.33	83.33	249.98
2015	20	1.5	37	112	14	11.2	86.21	86.21	86.21	258.63
2017	20	1.75	37	112	14	11.2	86.21	86.21	86.21	258.63
2020	20	2.0	37	112	14	11.2	83.33	83.33	83.33	249.98
2030	20	3.0	37	112	14	11.2	86.21	86.21	86.21	258.62
2110	21	1.0	37	112	14	11.2	133.68	133.68	133.68	401.04
2115	21	1.5	37	112	14	11.2	150.48	150.48	150.48	451.41
2117	21	1.75	37	112	14	11.2	150.48	150.48	150.48	451.41
2207	22	0.7	37	112	14	11.2	150.48	150.48	150.48	451.41
2210	22	1.0	38	118	16	12.5	150.48	150.48	150.48	451.41
2212	22	1.25	38	118	16	12.5	103.35	103.35	103.35	310.02
2215	22	1.5	38	118	16	12.5	83.33	83.33	83.33	249.98
2217	22	1.75	38	118	16	12.5	184.34	184.34	184.34	553.04
2220	22	2.0	38	118	16	12.5	184.34	184.34	184.34	553.03
2230	22	3.0	38	118	16	12.5	184.34	184.34	184.34	553.03
2305	23	0.5	45	130	18	14	184.34	184.34	184.34	553.03
2310	23	1.0	45	130	18	14	184.34	184.34	184.34	553.03
2315	23	1.5	45	130	18	14	137.51	137.51	137.51	412.58
2317	23	1.75	45	130	18	14	137.51	137.51	137.51	412.58
2405	24	0.5	45	130	18	14	153.06	153.06	153.06	459.18
2407	24	0.75	45	130	18	14	153.06	153.06	153.06	459.18
2410	24	1.0	45	130	18	14	153.06	153.06	153.06	459.18
2412	24	1.25	45	130	18	14	119.27	119.27	119.27	357.80
2415	24	1.5	45	130	18	14	93.07	93.07	93.07	279.22
2417	24	1.75	45	130	18	14	126.43	126.43	126.43	379.27
2420	24	2.0	45	130	18	14	123.58	123.58	123.58	370.75



TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

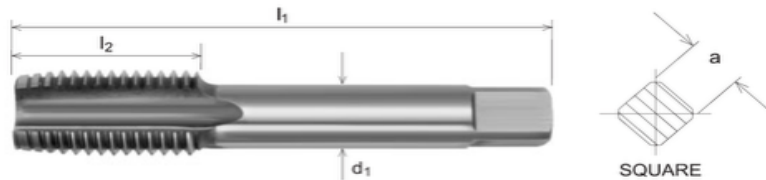
Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T124-	T125-	T126-	T123-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2425	24	2.5	45	130	18	14	163.82	163.82	163.82	491.43
2510	25	1.0	45	130	18	14	163.82	163.82	163.82	491.43
2512	25	1.25	45	130	18	14	93.07	93.07	93.07	279.22
2515	25	1.5	45	130	18	14	93.11	93.11	93.11	279.44
2520	25	2.0	45	130	18	14	163.82	163.82	163.82	491.43
2525	25	2.5	45	130	18	14	163.82	163.82	163.82	491.43
2530	25	3.0	45	130	18	14	163.82	163.82	163.82	491.43
2610	26	1.0	48	138	20	16	163.82	163.82	163.82	491.43
2612	26	1.25	48	138	20	16	163.82	163.82	163.82	491.43
2615	26	1.5	48	138	20	16	163.82	163.82	163.82	491.43
2617	26	1.75	48	138	20	16	174.20	174.20	174.20	522.60
2620	26	2.0	48	138	20	16	174.20	174.20	174.20	522.60
2625	26	2.5	48	138	20	16	174.20	174.20	174.20	522.60
2705	27	0.5	48	138	20	16	174.20	174.20	174.20	522.60
2710	27	1.0	48	138	20	16	174.20	174.20	174.20	522.60
2712	27	1.25	48	138	20	16	174.20	174.20	174.20	522.60
2715	27	1.5	48	138	20	16	117.10	117.10	117.10	351.32
2720	27	2.0	48	138	20	16	189.74	189.74	189.74	569.22
2725	27	2.5	48	138	20	16	189.74	189.74	189.74	569.22
2810	28	1.0	48	138	20	16	189.74	189.74	189.74	569.22
2812	28	1.25	48	138	20	16	189.74	189.74	189.74	569.22
2815	28	1.5	48	138	20	16	189.74	189.74	189.74	569.22
2817	28	1.75	48	138	20	16	189.74	189.74	189.74	569.22
2820	28	2.0	48	138	20	16	189.74	189.74	189.74	569.22
2825	28	2.5	48	138	20	16	179.00	179.00	179.00	537.00
2830	28	3.0	48	138	20	16	189.74	189.74	189.74	569.22
2910	29	1.0	48	138	20	16	197.11	197.11	197.11	591.34
2912	29	1.25	48	138	20	16	197.11	197.11	197.11	591.34
2915	29	1.5	48	138	20	16	197.11	197.11	197.11	591.34



TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

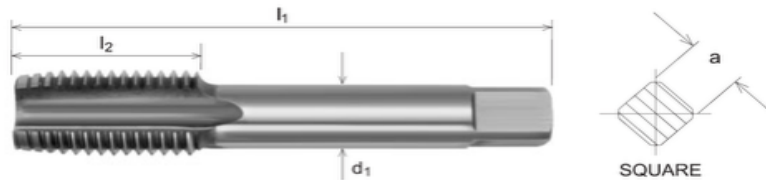
Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T124-	T125-	T126-	T123-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
3010	30	1.0	48	138	20	16	166.69	166.69	166.69	500.08
3012	30	1.25	48	138	20	16	166.69	166.69	166.69	500.08
3015	30	1.5	48	138	20	16	166.69	166.69	166.69	500.08
3017	30	1.75	48	138	20	16	166.69	166.69	166.69	500.08
3020	30	2.0	48	138	20	16	155.10	155.10	155.10	465.29
3025	30	2.5	48	138	20	16	158.80	158.80	158.80	476.41
3030	30	3.0	48	138	20	16	184.34	184.34	184.34	553.03
3110	31	1.0	48	138	20	16	211.32	211.32	211.32	633.96
3115	31	1.5	48	138	20	16	210.73	210.73	210.73	633.96
3210	32	1.0	51	151	22.4	18	191.76	191.76	191.76	575.29
3212	32	1.25	51	151	22.4	18	191.76	191.76	191.76	575.29
3215	32	1.5	51	151	22.4	18	132.88	132.88	132.88	398.63
3220	32	2.0	51	151	22.4	18	191.76	191.76	191.76	575.29
3230	32	3.0	51	151	22.4	18	191.76	191.76	191.76	575.29
3310	33	1.0	51	151	22.4	18	213.79	213.79	213.79	641.37
3312	33	1.25	51	151	22.4	18	213.79	213.79	213.79	641.37
3315	33	1.5	51	151	22.4	18	213.79	213.79	213.79	641.37
3320	33	2.0	51	151	22.4	18	200.42	200.42	200.42	601.23
3330	33	3.0	51	151	22.4	18	213.79	213.79	213.79	641.37
3410	34	1.0	57	162	25	20	228.02	228.02	228.02	684.03
3415	34	1.5	57	162	25	20	228.02	228.02	228.02	684.03
3510	35	1.0	57	162	25	20	231.09	231.09	231.09	693.28
3515	35	1.5	57	162	25	20	231.09	231.09	231.09	693.28
3520	35	2.0	57	162	25	20	231.09	231.09	231.09	693.28
3530	35	3.0	57	162	25	20	231.09	231.09	231.09	693.28
3610	36	1.0	57	162	25	20	264.45	264.45	264.45	793.37
3612	36	1.25	57	162	25	20	264.45	264.45	264.45	793.37
3615	36	1.5	57	162	25	20	264.45	264.45	264.45	793.37
3620	36	2.0	57	162	25	20	297.63	297.63	297.63	892.89



TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

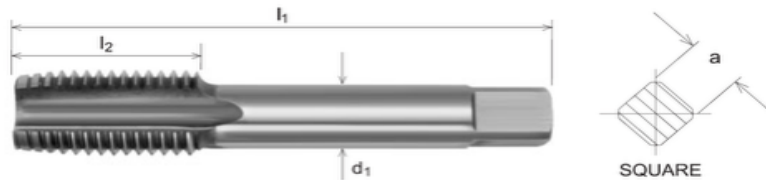
Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T124-	T125-	T126-	T123-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
3630	36	3.0	57	162	25	20	297.63	297.63	297.63	892.89
3710	37	1.0	60	170	28	22.4	345.41	345.41	345.41	1036.22
3715	37	1.5	60	170	28	22.4	345.41	345.41	345.41	1036.22
3810	38	1.0	60	170	28	22.4	357.96	357.96	357.96	1073.88
3815	38	1.5	60	170	28	22.4	357.96	357.96	357.96	1073.88
3820	38	2.0	60	170	28	22.4	357.96	357.96	357.96	1073.88
3910	39	1.0	60	170	28	22.4	363.94	363.94	363.94	1091.84
3915	39	1.5	60	170	28	22.4	363.94	363.94	363.94	1091.84
3920	39	2.0	60	170	28	22.4	363.94	363.94	363.94	1091.84
3930	39	3.0	60	170	28	22.4	363.94	363.94	363.94	1091.84
4010	40	1.0	60	170	28	22.4	372.59	372.59	372.59	1117.78
4015	40	1.5	60	170	28	22.4	205.22	205.22	205.22	615.66
4020	40	2.0	60	170	28	22.4	372.59	372.59	372.59	1117.78
4110	41	1.0	60	170	28	22.4	380.02	380.02	380.02	1140.03
4115	41	1.5	60	170	28	22.4	380.02	380.02	380.02	1140.03
4210	42	1.0	60	170	28	22.4	390.52	390.52	390.52	1171.52
4215	42	1.5	60	170	28	22.4	390.52	390.52	390.52	1171.52
4220	42	2.0	60	170	28	22.4	390.52	390.52	390.52	1171.52
4230	42	3.0	60	170	28	22.4	390.52	390.52	390.52	1171.52
4240	42	4.0	60	170	28	22.4	390.52	390.52	390.52	1171.52
4510	45	1.0	67	187	31.5	25	408.22	408.22	408.22	1224.65
4515	45	1.5	67	187	31.5	25	408.22	408.22	408.22	1224.65
4520	45	2.0	67	187	31.5	25	408.22	408.22	408.22	1224.65
4530	45	3.0	67	187	31.5	25	408.02	408.02	408.02	1224.06
4610	46	1.0	67	187	31.5	25	466.10	466.10	466.10	1398.32
4615	46	1.5	67	187	31.5	25	466.10	466.10	466.10	1398.32
4710	47	1.0	67	187	31.5	25	466.10	466.10	466.10	1398.32
4715	47	1.5	67	187	31.5	25	466.10	466.10	466.10	1398.32
4810	48	1.0	67	187	31.5	25	449.22	449.22	449.22	1347.64



TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

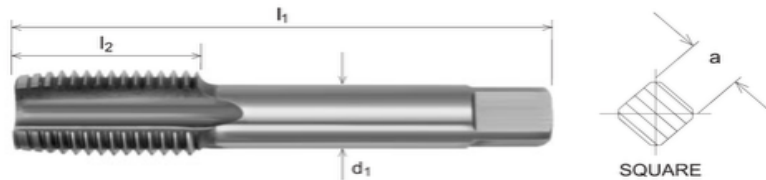
Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T124-	T125-	T126-	T123-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
4815	48	1.5	67	187	31.5	25	449.22	449.22	449.22	1347.64
4820	48	2.0	67	187	31.5	25	449.22	449.22	449.22	1347.64
4830	48	3.0	67	187	31.5	25	449.22	449.22	449.22	1347.64
4840	48	4.0	67	187	31.5	25	449.22	449.22	449.22	1347.64
4845	48	4.5	67	187	31.5	25	449.22	449.22	449.22	1347.64
4915	49	1.5	70	200	35.5	28	466.10	466.10	466.10	1398.32
5015	50	1.5	70	200	35.5	28	460.94	460.94	460.94	1382.84
5020	50	2.0	70	200	35.5	28	460.94	460.94	460.94	1382.84
5055	50	5.5	70	200	35.5	28	460.94	460.94	460.94	1382.84
5230	52	3.0	70	200	35.5	28	524.79	524.79	524.79	1574.39
5620	56	2.0	70	200	35.5	28	610.47	610.47	610.47	1831.42
5640	56	4.0	70	200	35.5	28	698.02	698.02	698.02	2094.05
6020	60	2.0	70	200	45	35.5	738.79	738.79	738.79	2216.40
6060	60	6.0	70	200	45	35.5	738.79	738.79	738.79	2216.40
6315	63	1.5	70	200	45	35.5	696.16	696.16	696.16	2088.47
6415	64	1.5	70	200	45	35.5	696.16	696.16	696.16	2088.47
6440	64	4.0	70	200	45	35.5	819.74	819.74	819.74	2459.18
7020	70	2.0	70	200	45	35.5	886.79	886.79	886.79	2660.38



TAPS - METRIC FINE **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

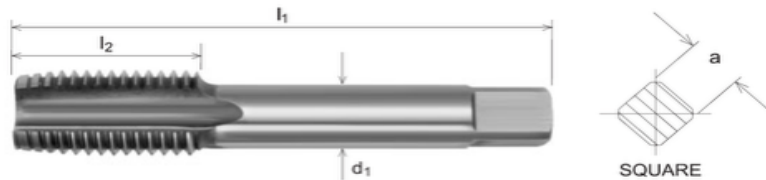
Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T134-	T135-	T136-	T133-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0255	2.5	0.5	11	48	3.15	2.5	26.86	26.86	26.86	80.62
0356	3.5	0.6	11	48	3.15	2.5	26.86	26.86	26.86	80.62
0405	4.0	0.5	13	53	4	3.15	26.86	26.86	26.86	80.62
0457	4.5	0.75	13	53	4	3.15	26.86	26.86	26.86	80.62
0505	5.0	0.5	16	58	5	4	26.86	26.86	26.86	80.62
0507	5.0	0.75	16	58	5	4	66.73	66.73	66.73	200.20
0510	5.0	1.0	16	58	5	4	26.86	26.86	26.86	80.62
0557	5.5	0.5	17	62	5.6	4.5	57.88	57.88	57.88	173.67
0605	6.0	0.5	19	66	6.3	5	57.88	57.88	57.88	173.67
0607	6.0	0.75	19	66	6.3	5	57.88	57.88	57.88	173.67
0609	6.0	0.9	19	66	6.3	5	57.88	57.88	57.88	173.67
0612	6.0	1.25	19	66	6.3	5	57.88	57.88	57.88	173.67
0615	6.0	1.5	19	66	6.3	5	57.88	57.88	57.88	173.67
0705	7.0	0.5	19	66	7.1	5.6	48.61	48.61	48.61	145.82
0707	7.0	0.75	19	66	7.1	5.6	48.61	48.61	48.61	145.82
0712	7.0	1.25	19	66	7.1	5.6	48.61	48.61	48.61	145.82
0715	7.0	1.5	19	66	7.1	5.6	48.61	48.61	48.61	145.82
0805	8.0	0.5	19	69	8	6.3	48.61	48.61	48.61	145.82
0807	8.0	0.75	19	69	8	6.3	48.61	48.61	48.61	145.82
0808	8.0	0.8	19	69	8	6.3	48.61	48.61	48.61	145.82
0810	8.0	1.0	19	69	8	6.3	48.61	48.61	48.61	145.82
0815	8.0	1.5	19	69	8	6.3	48.61	48.61	48.61	145.82
0905	9.0	0.5	19	69	9	7.1	65.43	65.43	65.43	196.32
0907	9.0	0.75	19	69	9	7.1	65.43	65.43	65.43	196.32
0910	9.0	1.0	19	69	9	7.1	65.43	65.43	65.43	196.32
0915	9.0	1.5	19	69	9	7.1	50.32	50.32	50.32	150.94
1005	10	0.5	20	76	10	8	57.47	57.47	57.47	172.42
1007	10	0.7	20	76	10	8	57.47	57.47	57.47	172.42



TAPS - METRIC FINE LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T134-	T135-	T136-	T133-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
1075	10	0.75	20	76	10	8	57.52	57.52	57.52	172.56
1008	10	0.8	20	76	10	8	50.25	50.25	50.25	150.77
1010	10	1.0	20	76	10	8	50.25	50.25	50.25	150.77
1012	10	1.25	20	76	10	8	50.25	50.25	50.25	150.77
1017	10	1.75	20	76	10	8	50.25	50.25	50.25	150.77
1020	10	2.0	20	76	10	8	50.25	50.25	50.25	150.77
1105	11	0.5	22	82	8	6.3	60.37	60.37	60.37	181.07
1107	11	0.75	22	82	8	6.3	60.37	60.37	60.37	181.07
1110	11	1.0	22	82	8	6.3	60.37	60.37	60.37	181.07
1112	11	1.25	22	82	8	6.3	60.37	60.37	60.37	181.07
1205	12	0.5	24	84	9	7.1	64.27	64.27	64.27	192.78
1207	12	0.75	24	84	9	7.1	64.27	64.27	64.27	192.78
1208	12	0.8	24	84	9	7.1	64.27	64.27	64.27	192.78
1210	12	1.0	24	84	9	7.1	64.27	64.27	64.27	192.78
1212	12	1.25	24	84	9	7.1	64.27	64.27	64.27	192.78
1215	12	1.5	24	84	9	7.1	64.27	64.27	64.27	192.78
1220	12	2.0	24	84	9	7.1	64.27	64.27	64.27	192.78
1305	13	0.5	29	89	9	7.1	65.71	65.71	65.71	197.13
1310	13	1.0	29	89	9	7.1	65.71	65.71	65.71	197.13
1312	13	1.25	29	89	9	7.1	65.71	65.71	65.71	197.13
1315	13	1.5	29	89	9	7.1	65.71	65.71	65.71	197.13
1317	13	1.75	29	89	9	7.1	65.71	65.71	65.71	197.13
1405	14	0.5	25	90	11.2	9	71.26	71.26	71.26	213.79
1407	14	0.75	25	90	11.2	9	71.26	71.26	71.26	213.79
1410	14	1.0	25	90	11.2	9	71.26	71.26	71.26	213.79
1412	14	1.25	25	90	11.2	9	71.26	71.26	71.26	213.79
1415	14	1.5	25	90	11.2	9	76.60	76.60	76.60	229.79
1417	14	1.75	25	90	11.2	9	71.26	71.26	71.26	213.79
1505	15	0.5	30	95	11.2	9	83.20	83.20	83.20	249.63



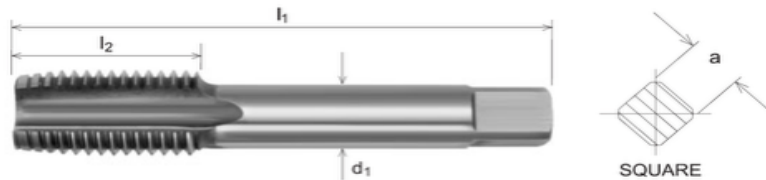
TAPS - METRIC FINE **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T134-	T135-	T136-	T133-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
1507	15	0.75	30	95	11.2	9	83.20	83.20	83.20	249.63
1508	15	0.8	30	95	11.2	9	83.20	83.20	83.20	249.63
1510	15	1.0	30	95	11.2	9	84.04	84.04	84.04	252.11
1512	15	1.25	30	95	11.2	9	83.20	83.20	83.20	249.63
1515	15	1.5	30	95	11.2	9	83.20	83.20	83.20	249.63
1517	15	1.75	30	95	11.2	9	83.20	83.20	83.20	249.63
1520	15	2.0	30	95	11.2	9	83.20	83.20	83.20	249.63
1607	16	0.75	32	102	12.5	10	83.20	83.20	83.20	249.63
1608	16	0.8	32	102	12.5	10	83.20	83.20	83.20	249.63
1610	16	1.0	32	102	12.5	10	83.20	83.20	83.20	249.63
1612	16	1.25	32	102	12.5	10	83.20	83.20	83.20	249.63
1615	16	1.5	32	102	12.5	10	83.20	83.20	83.20	249.63
1617	16	1.75	32	102	12.5	10	83.20	83.20	83.20	249.63
1710	17	1.0	32	102	12.5	10	117.46	117.46	117.46	352.40
1712	17	1.25	32	102	12.5	10	117.46	117.46	117.46	352.40
1715	17	1.5	32	102	12.5	10	117.46	117.46	117.46	352.40
1810	18	1.0	37	112	14	11.2	123.38	123.38	123.38	370.15
1812	18	1.25	37	112	14	11.2	123.38	123.38	123.38	370.15
1815	18	1.5	37	112	14	11.2	123.38	123.38	123.38	370.15
1820	18	2.0	37	112	14	11.2	123.38	123.38	123.38	370.15
1910	19	1.0	37	112	14	11.2	125.64	125.64	125.64	376.91
1915	19	1.5	37	112	14	11.2	125.64	125.64	125.64	376.91
2010	20	1.0	37	112	14	11.2	135.52	135.52	135.52	406.57
2012	20	1.25	37	112	14	11.2	135.52	135.52	135.52	406.57
2015	20	1.5	37	112	14	11.2	135.52	135.52	135.52	406.57
2017	20	1.75	37	112	14	11.2	135.52	135.52	135.52	406.57
2020	20	2.0	37	112	14	11.2	135.52	135.52	135.52	406.57
2110	21	1.0	37	112	14	11.2	151.59	151.59	151.59	454.77
2115	21	1.5	37	112	14	11.2	151.59	151.59	151.59	454.77

CAPITAL

CUTTING TOOLS



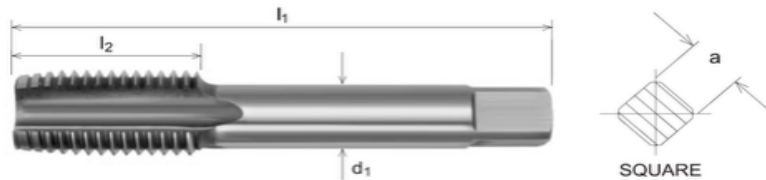
TAPS - METRIC FINE LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T134-	T135-	T136-	T133-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2210	22	1.0	38	118	16	12.5	166.83	166.83	166.83	500.48
2212	22	1.25	38	118	16	12.5	166.83	166.83	166.83	500.48
2215	22	1.5	38	118	16	12.5	166.83	166.83	166.83	500.48
2217	22	1.75	38	118	16	12.5	166.83	166.83	166.83	500.48
2220	22	2.0	38	118	16	12.5	166.83	166.83	166.83	500.48
2310	23	1.0	45	130	18	14	224.81	224.81	224.81	674.41
2315	23	1.5	45	130	18	14	224.81	224.81	224.81	674.41
2410	24	1.0	45	130	18	14	183.93	183.93	183.93	551.80
2412	24	1.25	45	130	18	14	183.93	183.93	183.93	551.80
2415	24	1.5	45	130	18	14	183.93	183.93	183.93	551.80
2417	24	1.75	45	130	18	14	183.93	183.93	183.93	551.80
2420	24	2.0	45	130	18	14	183.93	183.93	183.93	551.80
2425	24	2.5	45	130	18	14	183.93	183.93	183.93	551.80
2510	25	1.0	45	130	18	14	190.12	190.12	190.12	570.35
2512	25	1.25	45	130	18	14	190.12	190.12	190.12	570.35
2515	25	1.5	45	130	18	14	190.12	190.12	190.12	570.35
2520	25	2.0	45	130	18	14	190.12	190.12	190.12	570.35
2610	26	1.0	48	138	20	16	193.82	193.82	193.82	581.46
2612	26	1.25	48	138	20	16	193.82	193.82	193.82	581.46
2615	26	1.5	48	138	20	16	193.82	193.82	193.82	581.46
2617	26	1.75	48	138	20	16	193.82	193.82	193.82	581.46
2710	27	1.0	48	138	20	16	198.97	198.97	198.97	596.89
2715	27	1.5	48	138	20	16	198.97	198.97	198.97	596.89
2720	27	2.0	48	138	20	16	181.25	181.25	181.25	543.74
2810	28	1.0	48	138	20	16	202.26	202.26	202.26	606.77
2815	28	1.5	48	138	20	16	202.26	202.26	202.26	606.77
2820	28	2.0	48	138	20	16	202.26	202.26	202.26	606.77
2825	28	2.5	48	138	20	16	202.26	202.26	202.26	606.77
2830	28	3.0	48	138	20	16	202.26	202.26	202.26	606.77

CAPITAL

CUTTING TOOLS



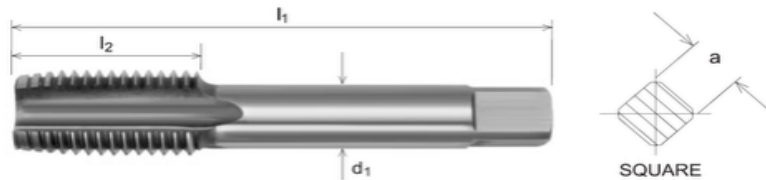
TAPS - METRIC FINE LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T134-	T135-	T136-	T133-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2910	29	1.0	48	138	20	16	236.93	236.93	236.93	710.81
2915	29	1.5	48	138	20	16	236.93	236.93	236.93	710.81
3010	30	1.0	48	138	20	16	187.42	187.42	187.42	562.28
3012	30	1.25	48	138	20	16	187.42	187.42	187.42	562.28
3015	30	1.5	48	138	20	16	187.42	187.42	187.42	562.28
3017	30	1.75	48	138	20	16	187.42	187.42	187.42	562.28
3020	30	2.0	48	138	20	16	187.42	187.42	187.42	562.28
3025	30	2.5	48	138	20	16	187.42	187.42	187.42	562.28
3030	30	3.0	48	138	20	16	187.42	187.42	187.42	562.28
3110	31	1.0	48	138	20	16	264.12	264.12	264.12	792.37
3115	31	1.5	48	138	20	16	264.12	264.12	264.12	792.37
3210	32	1.0	51	151	22.4	18	215.43	215.43	215.43	646.32
3215	32	1.5	51	151	22.4	18	215.43	215.43	215.43	646.32
3220	32	2.0	51	151	22.4	18	215.43	215.43	215.43	646.32
3310	33	1.0	51	151	22.4	18	234.40	234.40	234.40	703.16
3312	33	1.25	51	151	22.4	18	234.40	234.40	234.40	703.16
3315	33	1.5	51	151	22.4	18	234.40	234.40	234.40	703.16
3320	33	2.0	51	151	22.4	18	234.40	234.40	234.40	703.16
3330	33	3.0	51	151	22.4	18	234.40	234.40	234.40	703.16
3410	34	1.0	57	162	25	20	273.91	273.91	273.91	821.71
3415	34	1.5	57	162	25	20	273.91	273.91	273.91	821.71
3510	35	1.0	57	162	25	20	285.54	285.54	285.54	856.60
3515	35	1.5	57	162	25	20	285.54	285.54	285.54	856.60
3520	35	2.0	57	162	25	20	285.54	285.54	285.54	856.60
3610	36	1.0	57	162	25	20	264.45	264.45	264.45	793.37
3615	36	1.5	57	162	25	20	264.45	264.45	264.45	793.37
3620	36	2.0	57	162	25	20	297.63	297.63	297.63	892.89
3630	36	3.0	57	162	25	20	297.63	297.63	297.63	892.89
3710	37	1.0	60	170	28	22.4	352.08	352.08	352.08	1056.21

CAPITAL

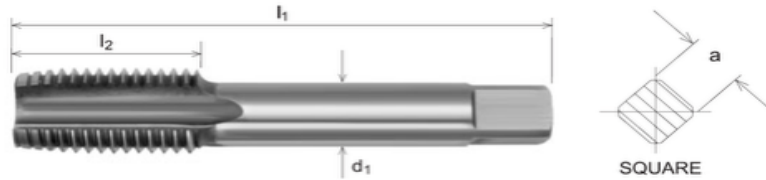
CUTTING TOOLS



TAPS - METRIC FINE LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

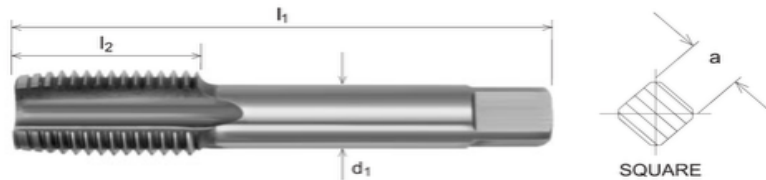
Code	Size	Pitch	l_2	l_1	d_1	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T134-	T135-	T136-	T133-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
3715	37	1.5	60	170	28	22.4	352.08	352.08	352.08	1056.21
3810	38	1.0	60	170	28	22.4	357.96	357.96	357.96	1073.88
3815	38	1.5	60	170	28	22.4	357.96	357.96	357.96	1073.88
3820	38	2.0	60	170	28	22.4	357.96	357.96	357.96	1073.88
3910	39	1.0	60	170	28	22.4	363.94	363.94	363.94	1091.84
3915	39	1.5	60	170	28	22.4	364.36	364.36	364.36	1093.07
3920	39	2.0	60	170	28	22.4	363.94	363.94	363.94	1091.84
3930	39	3.0	60	170	28	22.4	363.94	363.94	363.94	1091.84
4010	40	1.0	60	170	28	22.4	349.11	349.11	349.11	1047.34
4015	40	1.5	60	170	28	22.4	349.11	349.11	349.11	1047.34
4020	40	2.0	60	170	28	22.4	349.11	349.11	349.11	1047.34
4110	41	1.0	60	170	28	22.4	411.28	411.28	411.28	1233.84
4115	41	1.5	60	170	28	22.4	411.28	411.28	411.28	1233.84
4210	42	1.0	60	170	28	22.4	431.59	431.59	431.59	1294.80
4215	42	1.5	60	170	28	22.4	431.59	431.59	431.59	1294.80
4220	42	2.0	60	170	28	22.4	431.59	431.59	431.59	1294.80
4230	42	3.0	60	170	28	22.4	431.59	431.59	431.59	1294.80
4240	42	4.0	60	170	28	22.4	431.59	431.59	431.59	1294.80
4510	45	1.0	67	187	31.5	25	431.59	431.59	431.59	1294.80
4515	45	1.5	67	187	31.5	25	431.59	431.59	431.59	1294.80
4520	45	2.0	67	187	31.5	25	431.59	431.59	431.59	1294.80
4530	45	3.0	67	187	31.5	25	431.59	431.59	431.59	1294.80
4610	46	1.0	67	187	31.5	25	496.91	496.91	496.91	1490.73
4615	46	1.5	67	187	31.5	25	496.91	496.91	496.91	1490.73
4710	47	1.0	67	187	31.5	25	496.91	496.91	496.91	1490.73
4715	47	1.5	67	187	31.5	25	496.91	496.91	496.91	1490.73
4810	48	1.0	67	187	31.5	25	441.92	441.92	441.92	1325.74
4815	48	1.5	67	187	31.5	25	441.92	441.92	441.92	1325.74
4820	48	2.0	67	187	31.5	25	441.92	441.92	441.92	1325.74



TAPS - METRIC FINE **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T134-	T135-	T136-	T133-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
4830	48	3.0	67	187	31.5	25	441.92	441.92	441.92	1325.74
4840	48	4.0	67	187	31.5	25	441.92	441.92	441.92	1325.74
4845	48	4.5	67	187	31.5	25	441.92	441.92	441.92	1325.74
4915	49	1.5	70	200	35.5	28	531.14	531.14	531.14	1593.40
5015	50	1.5	70	200	35.5	28	496.07	496.07	496.07	1485.88
5020	50	2.0	70	200	35.5	28	496.07	496.07	496.07	1485.88
5055	50	5.5	70	200	35.5	28	496.07	496.07	496.07	1485.88



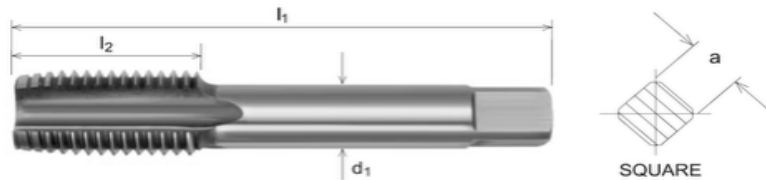
TAPS - UNC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T204-	T205-	T206-	T203-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0164	1	64	8	45	2.92	2.3	42.60	42.60	42.60	127.79
0256	2	56	9	46	2.92	2.3	32.34	32.34	32.34	96.75
0348	3	48	9	46	2.92	2.4	30.27	30.27	30.27	90.80
0440	4	40	11	48	3.15	2.5	21.32	21.32	21.32	63.99
0540	5	40	11	48	3.15	2.5	21.32	21.32	21.32	63.99
0632	6	32	13	50	3.55	2.8	13.95	13.95	13.95	41.85
0832	8	32	13	53	4.5	3.55	14.23	14.23	14.23	42.67
1024	10	24	16	58	5	4	13.01	13.01	13.01	39.03
1224	12	24	17	62	5.6	4.5	16.25	16.25	16.25	47.03
2820	1/4	20	19	66	6.3	5	12.42	12.42	12.42	37.22
3018	5/16	18	22	72	8	6.3	13.01	13.01	13.01	39.03
3216	3/8	16	24	80	10	8	17.91	17.91	17.91	53.71
3414	7/16	14	25	85	8	6.3	23.77	23.77	23.77	71.29
3613	1/2	13	29	89	9	7.1	26.63	26.63	26.63	79.89
3812	9/16	12	30	95	11.2	9	36.34	36.34	36.34	108.99
4011	5/8	11	32	102	12.5	10	38.28	38.28	38.28	114.81
4410	3/4	10	37	112	14	11.2	49.82	49.82	49.82	149.47
4809	7/8	9	38	118	16	12.5	74.66	74.66	74.66	223.97
5208	1"	8	45	130	18	14	90.12	90.12	90.12	270.39
5407	1.1/8	7	48	138	20	16	147.40	147.40	147.40	442.23
5607	1.1/4	7	51	151	22.4	18	164.67	164.67	164.67	494.01
5806	1.3/8	6	57	162	25	20	220.30	220.30	220.30	660.91
6006	1.1/2	6	60	170	28	22.4	245.42	245.42	245.42	736.24
6404	1.3/4	5	67	187	31.5	25	367.85	367.85	367.85	1103.53
6804	2"	4.5	70	200	35.5	28	501.96	501.96	501.96	1506.45
7212	2.1/4	4.5	70	200	35.5	28	692.85	692.85	692.85	2078.12

CAPITAL

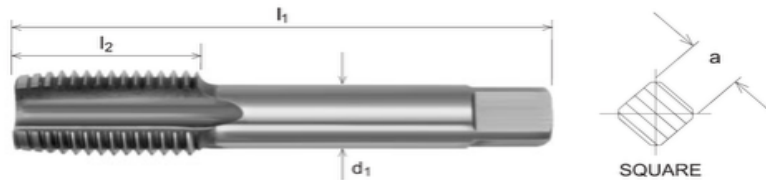
CUTTING TOOLS



TAPS - UNC LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

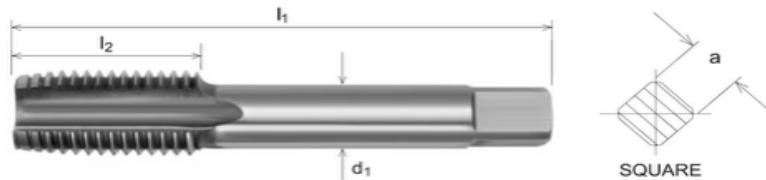
Code	Size	TPI	l_2	l_1	d_1	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T214-	T215-	T216-	T213-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
1024	10	24	16	58	5	4	59.63	59.63	59.63	178.90
1224	12	24	17	62	5.6	4.5	59.63	59.63	59.63	178.90
2820	1/4	20	19	66	6.3	5	41.90	41.90	41.90	125.70
3018	5/16	18	22	72	8	6.3	46.50	46.50	46.50	139.52
3216	3/8	16	24	80	10	8	53.99	53.99	53.99	161.94
3414	7/16	14	25	85	8	6.3	76.26	76.26	76.26	228.79
3613	1/2	13	29	89	9	7.1	98.22	98.22	98.22	294.65
3812	9/16	12	30	95	11.2	9	117.81	117.81	117.81	353.42
4011	5/8	11	32	102	12.5	10	117.81	117.81	117.81	353.42
4410	3/4	10	37	112	14	11.2	165.21	165.21	165.21	495.59
4809	7/8	9	38	118	16	12.5	211.67	211.67	211.67	635.02
5208	1"	8	45	130	18	14	233.40	233.40	233.40	700.22
5407	1.1/8	7	48	138	20	16	249.22	249.22	249.22	747.64
5607	1.1/4	7	51	151	22.4	18	272.51	272.51	272.51	817.50
5806	1.3/8	6	57	162	25	20	297.83	297.83	297.83	893.48
6006	1.1/2	6	60	170	28	22.4	314.93	314.93	314.93	945.36
6404	1.3/4	5	67	187	31.5	25	399.56	399.56	399.56	1198.71
6804	2"	4.1/2	70	200	35.5	28	506.48	506.48	506.48	1519.43



TAPS - UNF

HIGH SPEED STEEL - GROUND THREAD

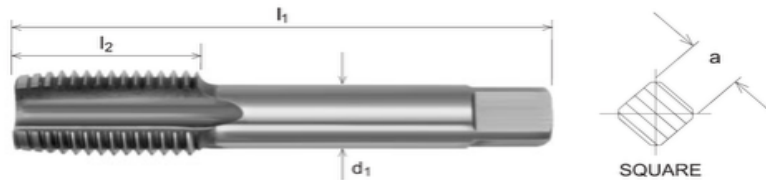
Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T224-	T225-	T226-	T223-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0080	0	80	9	46	2.92	2.4	69.10	69.10	69.10	207.30
0172	1	72	9	46	2.92	2.4	69.10	69.10	69.10	207.30
0264	2	64	9	46	2.92	2.4	69.10	69.10	69.10	207.30
0356	3	56	9	46	2.92	2.4	28.74	28.74	28.74	86.21
0448	4	48	11	48	3.15	2.5	20.12	20.12	20.12	60.38
0544	5	44	11	48	3.15	2.5	20.12	20.12	20.12	60.38
0640	6	40	13	50	3.55	2.8	9.84	9.84	9.84	29.48
0836	8	36	13	53	4.5	3.55	13.82	13.82	13.82	41.44
1032	10	32	16	58	5	4	12.04	12.04	12.04	36.12
1228	12	28	17	62	5.6	4.5	14.94	14.94	14.94	44.84
2828	1/4	28	19	66	6.3	5	11.46	11.46	11.46	34.41
3024	5/16	24	22	72	8	6.3	12.11	12.11	12.11	36.30
3224	3/8	24	24	80	10	8	16.61	16.61	16.61	49.86
3420	7/16	20	25	85	8	6.3	22.42	22.42	22.42	67.26
3620	1/2	20	29	89	9	7.1	25.28	25.28	25.28	75.85
3818	9/16	18	30	95	11.2	9	36.34	36.34	36.34	108.99
4018	5/8	18	32	102	12.5	10	37.29	37.29	37.29	111.87
4416	3/4	16	37	112	14	11.2	45.83	45.83	45.83	149.24
4814	7/8	14	38	118	16	12.5	76.72	76.72	76.72	230.16
5212	1"	12	45	130	18	14	89.91	89.91	89.91	269.75
5214	1" UNS	14	45	130	18	14	129.16	129.16	129.16	387.49
5312	1.1/16	12	48	138	20	16	140.43	140.43	140.43	421.29
5412	1.1/8	12	48	138	20	16	147.40	147.40	147.40	442.23
5512	1.3/16	12	48	138	20	16	156.83	156.83	156.83	470.48
5612	1.1/4	12	51	151	22.4	18	164.67	164.67	164.67	494.02
5712	1.5/16	12	51	151	22.4	18	209.79	209.79	209.79	629.37
5812	1.3/8	12	57	162	25	20	220.30	220.30	220.30	660.91
5912	1.7/16	12	57	162	25	20	220.30	220.30	220.30	660.91
6012	1.1/2	12	60	170	28	22.4	245.07	245.07	245.07	735.22



TAPS - UNF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T224-	T225-	T226-	T223-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
6112	1.9/16	12	60	170	28	22.4	347.67	347.67	347.67	1043.00
6212	1.5/8	12	60	170	28	22.4	384.74	384.74	384.74	1154.21
6412	1.3/4	12	67	187	31.5	25	454.98	454.98	454.98	1364.94
6612	1.7/8	12	67	187	31.5	25	460.75	460.75	460.75	1382.25
6812	2"	12	70	200	35.5	28	474.87	474.87	474.87	1424.60
7212	2.1/4	12	70	200	35.5	28	692.85	692.85	692.85	2078.59
7612	2.1/2	12	70	200	35.5	28	833.13	833.13	833.13	2499.38
8412	3"	12	70	200	35.5	28	956.71	956.71	956.71	2870.13



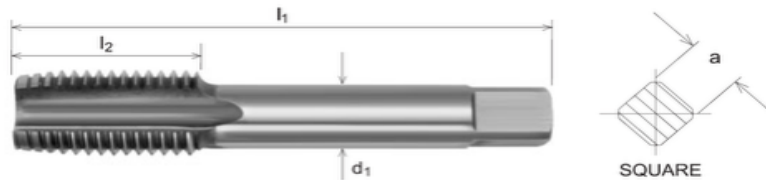
TAPS - UNF LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T234-	T235-	T236-	T233-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
836	8	36	16	58	5	4	58.62	58.62	58.62	175.85
1032	10	32	16	58	5	4	28.34	28.34	28.34	85.55
1228	12	28	17	62	5.6	4.5	39.97	39.97	39.97	119.88
2828	1/4	28	19	66	6.3	5	41.90	41.90	41.90	125.70
3024	5/16	24	22	72	8	6.3	46.50	46.50	46.50	139.52
3224	3/8	24	24	80	10	8	53.99	53.99	53.99	161.94
3420	7/16	20	25	85	8	6.3	76.26	76.26	76.26	228.79
3620	1/2	20	29	89	9	7.1	98.22	98.22	98.22	294.65
3818	9/16	18	30	95	11.2	9	100.91	100.91	100.91	302.76
4018	5/8	18	32	102	12.5	10	117.36	117.36	117.36	352.09
4416	3/4	16	37	112	14	11.2	173.46	173.46	173.46	520.38
4814	7/8	14	38	118	16	12.5	222.24	222.24	222.24	666.73
5212	1"	12	45	130	18	14	264.09	264.09	264.09	792.25
5214	1" UNS	14	45	130	18	14	264.09	264.09	264.09	792.25
5312	1.1/16	12	48	138	20	16	264.09	264.09	264.09	792.25
5412	1.1/8	12	48	138	20	16	280.93	280.93	280.93	842.80
5512	1.3/16	12	48	138	20	16	300.71	300.71	300.71	902.12
5612	1.1/4	12	51	151	22.4	18	275.14	275.14	275.14	825.43
5712	1.5/16	12	51	151	22.4	18	368.08	368.08	368.08	1104.26
5812	1.3/8	12	57	162	25	20	377.97	377.97	377.97	1133.87
5912	1.7/16	12	57	162	25	20	391.14	391.14	391.14	1173.41
6012	1.1/2	12	60	170	28	22.4	401.42	401.42	401.42	1204.63
6112	1.9/16	12	60	170	28	22.4	421.62	421.62	421.62	1264.85
6212	1.5/8	12	60	170	28	22.4	465.06	465.06	465.06	1395.19
6412	1.3/4	12	67	187	31.5	25	481.76	481.76	481.76	1445.26
6612	1.7/8	12	67	187	31.5	25	511.83	511.83	511.83	1535.49
6812	2"	12	70	200	35.5	28	525.81	525.81	525.81	1577.43

CAPITAL

CUTTING TOOLS



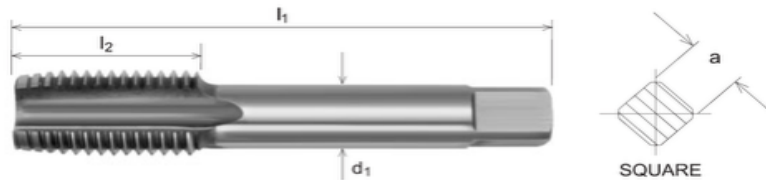
TAPS - UNEF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T244-	T245-	T246-	T243-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
1232	12	32	17	62	5.6	4.5	32.85	32.85	32.85	98.56
2832	1/4	32	19	66	6.3	5	27.72	27.72	27.72	83.15
3032	5/16	32	22	72	8	6.3	31.01	31.01	31.01	92.99
3232	3/8	32	24	80	10	8	34.99	34.99	34.99	104.98
3428	7/16	28	25	85	8	6.3	37.82	37.82	37.82	113.45
3628	1/2	28	29	89	9	7.1	45.61	45.61	45.61	136.82
3824	9/16	24	30	95	11.2	9	69.13	69.13	69.13	207.38
4024	5/8	24	32	102	12.5	10	77.84	77.84	77.84	233.52
4224	11/16	24	37	112	14	11.2	111.62	111.62	111.62	334.89
4420	3/4	20	37	112	14	11.2	84.84	84.84	84.84	254.51
4620	13/16	20	38	118	16	12.5	169.94	169.94	169.94	509.79
4820	7/8	20	38	118	16	12.5	184.76	184.76	184.76	554.27
5020	15/16	20	45	130	18	14	186.83	186.83	186.83	560.47
5220	1"	20	45	130	18	14	93.07	93.07	93.07	279.22
5318	1.1/16	18	48	138	20	16	215.02	215.02	215.02	645.08
5418	1.1/8	18	48	138	20	16	228.94	228.94	228.94	686.80
5518	1.3/16	18	48	138	20	16	228.94	228.94	228.94	686.80
5618	1.1/4	18	51	151	22.4	18	281.77	281.77	281.77	845.28
5718	1.5/16	18	51	151	22.4	18	334.57	334.57	334.57	1003.74
5818	1.3/8	18	57	162	25	20	348.70	348.70	348.70	1046.11
5918	1.7/16	18	57	162	25	20	349.84	349.84	349.84	1049.53
6018	1.1/2	18	60	170	28	22.4	350.55	350.55	350.55	1051.65

CAPITAL

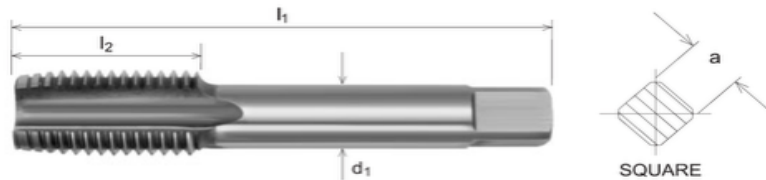
CUTTING TOOLS



TAPS - UNEF LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T254-	T255-	T256-	T253-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2832	1/4	32	19	66	6.3	5	44.81	44.81	44.81	134.42
3032	5/16	32	22	72	8	6.3	50.88	50.88	50.88	152.65
3232	3/8	32	24	80	10	8	66.95	66.95	66.95	200.84
3428	7/16	28	25	85	8	6.3	76.26	76.26	76.26	228.79
3628	1/2	28	29	89	9	7.1	98.22	98.22	98.22	294.65
3824	9/16	24	30	95	11.2	9	100.91	100.91	100.91	302.76
4024	5/8	24	32	102	12.5	10	117.31	117.31	117.31	351.91
4224	11/16	24	37	112	14	11.2	119.26	119.26	119.26	357.78
4420	3/4	20	37	112	14	11.2	180.12	180.12	180.12	540.32
4620	13/16	20	38	118	16	12.5	173.46	173.46	173.46	520.38
4820	7/8	20	38	118	16	12.5	222.24	222.24	222.24	666.73
5020	15/16	20	45	130	18	14	222.24	222.24	222.24	666.73
5220	1"	20	45	130	18	14	264.09	264.09	264.09	792.25



TAPS - 8 UN SERIES

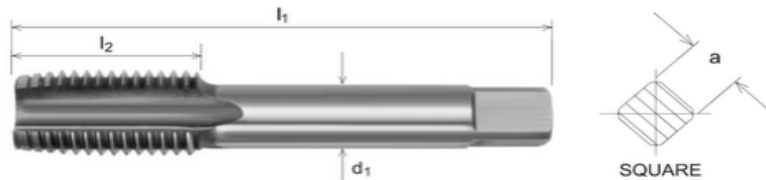
HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T264-	T265-	T266-	T263-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
4808	7/8	8	38	118	16	12.5	178.60	178.60	178.60	535.81
5408	1.1/8	8	48	138	20	16	140.39	140.39	140.39	421.16
5608	1.1/4	8	51	151	22.4	18	156.83	156.83	156.83	470.48
5808	1.3/8	8	57	162	25	20	209.68	209.68	209.68	629.01
6008	1.1/2	8	60	170	28	22.4	233.69	233.69	233.69	701.11
6208	1.5/8	8	60	170	28	22.4	384.74	384.74	384.74	1154.21
6408	1.3/4	8	67	187	31.5	25	456.00	456.00	456.00	1368.02
6608	1.7/8	8	67	187	31.5	25	460.75	460.75	460.75	1382.25
6808	2"	8	70	200	35.5	28	478.04	478.04	478.04	1434.14
7208	2.1/4	8	70	200	35.5	28	692.85	692.85	692.85	2078.59
7608	2.1/2	8	70	200	35.5	28	833.13	833.13	833.13	2499.38
8008	2.3/4	8	70	200	35.5	28	911.39	911.39	911.39	2734.20
8408	3"	8	70	200	35.5	28	956.74	956.74	956.74	2870.25

TAPS - 8 UN SERIES LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T274-	T275-	T276-	T273-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
5408	1.1/8	8	48	138	20	16	154.61	154.61	154.61	463.83
5608	1.1/4	8	51	151	22.4	18	171.04	171.04	171.04	513.13
5808	1.3/8	8	57	162	25	20	223.89	223.89	223.89	671.66
6008	1.1/2	8	60	170	28	22.4	247.91	247.91	247.91	743.72
6208	1.5/8	8	60	170	28	22.4	398.95	398.95	398.95	1196.85
6408	1.3/4	8	67	187	31.5	25	484.43	484.43	484.43	1453.29
6608	1.7/8	8	67	187	31.5	25	489.18	489.18	489.18	1467.53
6808	2"	8	70	200	35.5	28	506.47	506.47	506.47	1519.42
7608	2.1/2	8	70	200	35.5	28	861.55	861.55	861.55	2584.64
8408	3"	8	70	200	35.5	28	982.45	982.45	982.45	2947.36



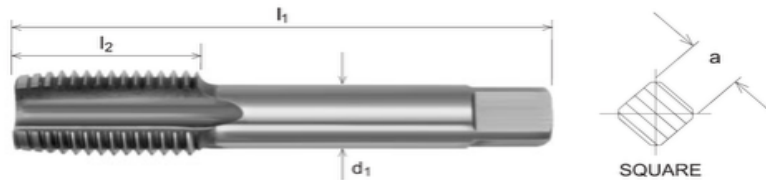
TAPS - UN FORM

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T284 -	T285 -	T286 -	T283 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0648	6	48	13	50	3.55	2.8	69.10	69.10	69.10	207.30
0848	8	48	13	53	4.5	3.55	69.10	69.10	69.10	207.30
2532	5/32	32	13	53	4.5	3.55	60.21	60.21	60.21	180.65
2540	5/32	40	13	53	4.5	3.55	60.21	60.21	60.21	180.65
2632	3/16	32	16	58	5	4	60.21	60.21	60.21	180.65
2640	3/16	40	16	58	5	4	60.21	60.21	60.21	180.65
1048	10	48	16	58	5	4	69.10	69.10	69.10	207.30
20336	.203	36	16	58	5	4	69.10	69.10	69.10	207.30
20936	.209	36	16	58	5	4	69.10	69.10	69.10	207.30
2732	7/32	32	18	64	6	4	78.91	78.91	78.91	236.72
2740	7/32	40	18	64	6	4	78.91	78.91	78.91	236.72
23464	.234	64	19	66	6.3	5	92.11	92.11	92.11	276.34
2824	1/4	24	19	66	6.3	5	60.22	60.22	60.22	180.66
2827	1/4	27	19	66	6.3	5	60.22	60.22	60.22	180.66
2836	1/4	36	19	66	6.3	5	60.22	60.22	60.22	180.66
2840	1/4	40	19	66	6.3	5	60.22	60.22	60.22	180.66
2848	1/4	48	19	66	6.3	5	60.22	60.22	60.22	180.66
2856	1/4	56	19	66	6.3	5	90.34	90.34	90.34	271.02
2924	9/32	24	19	66	6.3	5	78.91	78.91	78.91	236.72
2928	9/32	28	19	66	6.3	5	78.91	78.91	78.91	236.72
2932	9/32	32	19	66	6.3	5	78.91	78.91	78.91	236.72
2936	9/32	36	19	66	6.3	5	78.91	78.91	78.91	236.72
2940	9/32	40	19	66	6.3	5	100.31	100.31	100.31	300.95
30232	.302	32	22	72	8	6.3	69.10	69.10	69.10	207.30
30336	.303	36	22	72	8	6.3	69.10	69.10	69.10	207.30
30532	.305	32	22	72	8	6.3	69.10	69.10	69.10	207.30
30536	.305	36	22	72	8	6.3	69.10	69.10	69.10	207.30
31132	.311	32	22	72	8	6.3	69.10	69.10	69.10	207.30
3016	5/16	16	22	72	8	6.3	74.37	74.37	74.37	223.10
3020	5/16	20	22	72	8	6.3	64.27	64.27	64.27	192.78
3027	5/16	27	22	72	8	6.3	64.27	64.27	64.27	192.78

CAPITAL

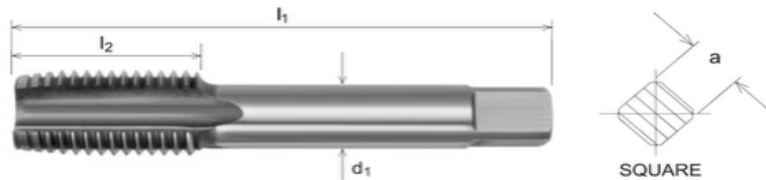
CUTTING TOOLS



TAPS - UN FORM

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T284 -	T285 -	T286 -	T283 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
3028	5/16	28	22	72	8	6.3	64.27	64.27	64.27	192.78
3030	5/16	30	22	72	8	6.3	64.27	64.27	64.27	192.78
3032	5/16	32	22	72	8	6.3	29.85	29.85	29.85	92.99
3036	5/16	36	22	72	8	6.3	64.27	64.27	64.27	192.78
3040	5/16	40	22	72	8	6.3	61.37	61.37	61.37	184.13
3048	5/16	48	22	72	8	6.3	82.20	82.20	82.20	246.55
3056	5/16	56	22	72	8	6.3	82.20	82.20	82.20	246.55
3064	5/16	64	22	72	8	6.3	82.20	82.20	82.20	246.55
3124	11/32	24	22	72	8	6.3	73.31	73.31	73.31	219.97
3132	11/32	32	22	72	8	6.3	73.31	73.31	73.31	219.97
3218	3/8	18	24	80	10	8	61.60	61.60	61.60	184.79
3220	3/8	20	24	80	10	8	61.60	61.60	61.60	184.79
3227	3/8	27	24	80	10	8	61.60	61.60	61.60	184.79
3228	3/8	28	24	80	10	8	61.60	61.60	61.60	184.79
3232	3/8	32	24	80	10	8	61.60	61.60	61.60	184.79
3236	3/8	36	24	80	10	8	61.60	61.60	61.60	184.79
3240	3/8	40	24	80	10	8	61.60	61.60	61.60	184.79
3248	3/8	48	24	80	10	8	79.09	79.09	79.09	237.26
3324	13/32	24	24	80	10	8	86.92	86.92	86.92	260.75
3332	13/32	32	24	80	10	8	86.92	86.92	86.92	260.75
3336	13/32	36	24	80	10	8	86.92	86.92	86.92	260.75
3412	7/16	12	25	85	8	6.3	67.36	67.36	67.36	202.08
3416	7/16	16	25	85	8	6.3	67.36	67.36	67.36	202.08
3418	7/16	18	25	85	8	6.3	67.36	67.36	67.36	202.08
3424	7/16	24	25	85	8	6.3	67.36	67.36	67.36	202.08
3427	7/16	27	25	85	8	6.3	67.36	67.36	67.36	202.08
3428	7/16	28	25	85	8	6.3	37.82	37.82	37.82	113.45
3432	7/16	32	25	85	8	6.3	67.36	67.36	67.36	202.08
3440	7/16	40	25	85	8	6.3	67.36	67.36	67.36	202.08



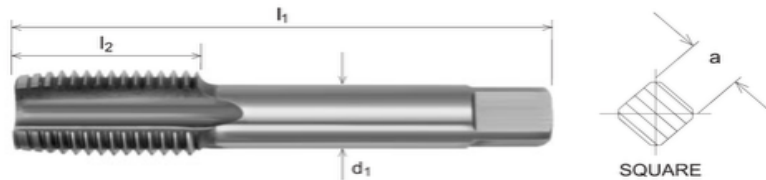
TAPS - UN FORM

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T284 -	T285 -	T286 -	T283 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
3524	15/32	24	25	85	8	6.3	97.86	97.86	97.86	293.53
3532	15/32	32	25	85	8	6.3	97.86	97.86	97.86	293.53
3612	1/2	12	29	89	9	7.1	75.37	75.37	75.37	226.14
3614	1/2	14	29	89	9	7.1	74.37	74.37	74.37	223.10
3616	1/2	16	29	89	9	7.1	74.37	74.37	74.37	223.10
3618	1/2	18	29	89	9	7.1	74.37	74.37	74.37	223.10
3624	1/2	24	29	89	9	7.1	74.37	74.37	74.37	223.10
3627	1/2	27	29	89	9	7.1	74.15	74.15	74.15	222.44
3632	1/2	32	29	89	9	7.1	74.15	74.15	74.15	222.44
3636	1/2	36	29	89	9	7.1	74.15	74.15	74.15	222.44
3640	1/2	40	29	89	9	7.1	80.32	80.32	80.32	240.98
3740	17/32	40	29	89	9	7.1	96.51	96.51	96.51	289.52
3816	9/16	16	30	95	11.2	9	96.51	96.51	96.51	289.52
3820	9/16	20	30	95	11.2	9	96.51	96.51	96.51	289.52
3824	9/16	24	30	95	11.2	9	93.20	93.20	93.20	279.58
3827	9/16	27	30	95	11.2	9	95.98	95.98	95.98	287.94
3828	9/16	28	30	95	11.2	9	95.98	95.98	95.98	287.94
3832	9/16	32	30	95	11.2	9	95.98	95.98	95.98	287.94
4012	5/8	12	32	102	12.5	10	102.68	102.68	102.68	308.06
4014	5/8	14	32	102	12.5	10	102.68	102.68	102.68	308.06
4016	5/8	16	32	102	12.5	10	102.68	102.68	102.68	308.06
4020	5/8	20	32	102	12.5	10	102.68	102.68	102.68	308.06
4027	5/8	27	32	102	12.5	10	114.22	114.22	114.22	342.67
4028	5/8	28	32	102	12.5	10	114.22	114.22	114.22	342.67
4032	5/8	32	32	102	12.5	10	114.22	114.22	114.22	342.67
4036	5/8	36	32	102	12.5	10	151.79	151.79	151.79	455.41
4040	5/8	40	32	102	12.5	10	151.79	151.79	151.79	455.41
4212	11/16	12	37	112	14	11.2	107.12	107.12	107.12	321.32
4214	11/16	14	37	112	14	11.2	107.12	107.12	107.12	321.32
4216	11/16	16	37	112	14	11.2	107.12	107.12	107.12	321.32
4218	11/16	18	37	112	14	11.2	107.12	107.12	107.12	321.32

CAPITAL

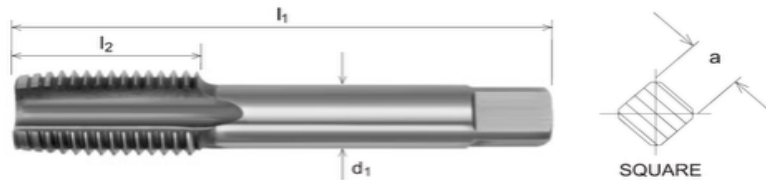
CUTTING TOOLS



TAPS - UN FORM

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T284 -	T285 -	T286 -	T283 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
4220	11/16	20	37	112	14	11.2	107.12	107.12	107.12	321.32
4227	11/16	27	37	112	14	11.2	111.62	111.62	111.62	334.89
4228	11/16	28	37	112	14	11.2	132.02	132.02	132.02	396.09
4232	11/16	32	37	112	14	11.2	132.02	132.02	132.02	396.09
4240	11/16	40	37	112	14	11.2	132.02	132.02	132.02	396.09
4411	3/4	11	37	112	14	11.2	121.11	121.11	121.11	363.31
4412	3/4	12	37	112	14	11.2	121.11	121.11	121.11	363.31
4414	3/4	14	37	112	14	11.2	121.11	121.11	121.11	363.31
4418	3/4	18	37	112	14	11.2	121.11	121.11	121.11	363.31
4420	3/4	20	37	112	14	11.2	64.71	64.71	64.71	194.13
4424	3/4	24	37	112	14	11.2	121.11	121.11	121.11	363.31
4427	3/4	27	37	112	14	11.2	143.35	143.35	143.35	430.06
4428	3/4	28	37	112	14	11.2	143.35	143.35	143.35	430.06
4432	3/4	32	37	112	14	11.2	143.35	143.35	143.35	430.06
4440	3/4	40	37	112	14	11.2	143.35	143.35	143.35	430.06
4610	13/16	10	38	118	16	12.5	163.95	163.95	163.95	491.83
4611	13/16	11	38	118	16	12.5	163.95	163.95	163.95	491.83
4612	13/16	12	38	118	16	12.5	163.95	163.95	163.95	491.83
4614	13/16	14	38	118	16	12.5	114.76	114.76	114.76	344.28
4616	13/16	16	38	118	16	12.5	114.76	114.76	114.76	344.28
4618	13/16	18	38	118	16	12.5	114.76	114.76	114.76	344.28
4624	13/16	24	38	118	16	12.5	114.76	114.76	114.76	344.28
4627	13/16	27	38	118	16	12.5	114.76	114.76	114.76	344.28
4628	13/16	28	38	118	16	12.5	134.23	134.23	134.23	402.70
4632	13/16	32	38	118	16	12.5	134.23	134.23	134.23	402.70
4809	7/8	9	38	118	16	12.5	52.26	52.26	52.26	156.78
4810	7/8	10	38	118	16	12.5	129.33	129.33	129.33	387.99
4811	7/8	11	38	118	16	12.5	129.33	129.33	129.33	387.99
4812	7/8	12	38	118	16	12.5	129.33	129.33	129.33	387.99
4814	7/8	14	38	118	16	12.5	53.70	53.70	53.70	161.11
4816	7/8	16	38	118	16	12.5	129.33	129.33	129.33	387.99



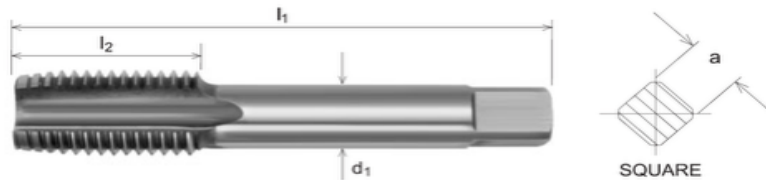
TAPS - UN FORM

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T284 -	T285 -	T286 -	T283 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
4818	7/8	18	38	118	16	12.5	129.33	129.33	129.33	387.99
4820	7/8	20	38	118	16	12.5	129.33	129.33	129.33	387.99
4824	7/8	24	38	118	16	12.5	129.33	129.33	129.33	387.99
4827	7/8	27	38	118	16	12.5	184.76	184.76	184.76	554.27
4828	7/8	28	38	118	16	12.5	184.76	184.76	184.76	554.27
4832	7/8	32	38	118	16	12.5	199.17	199.17	199.17	597.53
4840	7/8	40	38	118	16	12.5	199.17	199.17	199.17	597.53
5010	15/16	10	45	130	18	14	200.42	200.42	200.42	601.23
5012	15/16	12	45	130	18	14	200.42	200.42	200.42	601.23
5014	15/16	14	45	130	18	14	200.42	200.42	200.42	601.23
5016	15/16	16	45	130	18	14	200.42	200.42	200.42	601.23
5018	15/16	18	45	130	18	14	179.82	179.82	179.82	539.45
5020	15/16	20	45	130	18	14	186.83	186.83	186.83	560.47
5024	15/16	24	45	130	18	14	179.82	179.82	179.82	539.45
5027	15/16	27	45	130	18	14	181.88	181.88	181.88	545.63
5028	15/16	28	45	130	18	14	181.88	181.88	181.88	545.63
5032	15/16	32	45	130	18	14	181.88	181.88	181.88	545.63
5208	1"	8	45	130	18	14	90.09	90.09	90.09	270.27
5210	1"	10	45	130	18	14	199.17	199.17	199.17	597.53
5212	1"	12	45	130	18	14	89.91	89.91	89.91	269.75
5214	1"	14	45	130	18	14	129.16	129.16	129.16	387.49
5218	1"	16	45	130	18	14	212.58	212.58	212.58	637.75
5218	1"	18	45	130	18	14	199.17	199.17	199.17	597.53
5220	1"	20	45	130	18	14	93.07	93.07	93.07	279.22
5224	1"	24	45	130	18	14	199.17	199.17	199.17	597.53
5227	1"	27	45	130	18	14	199.17	199.17	199.17	597.53
5232	1"	32	45	130	18	14	199.17	199.17	199.17	597.53
5236	1"	36	45	130	18	14	199.17	199.17	199.17	597.53
5240	1"	40	45	130	18	14	199.17	199.17	199.17	597.53

CAPITAL

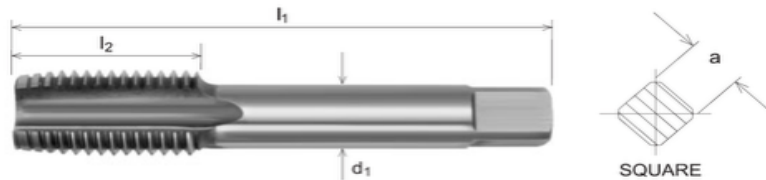
CUTTING TOOLS



TAPS - UN FORM

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T284 -	T285 -	T286 -	T283 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
5310	1.1/16	10	48	138	20	16	215.02	215.02	215.02	643.90
5312	1.1/16	12	48	138	20	16	140.39	140.39	140.39	421.16
5314	1.1/16	14	48	138	20	16	215.02	215.02	215.02	643.90
5316	1.1/16	16	48	138	20	16	215.02	215.02	215.02	643.90
5318	1.1/16	18	48	138	20	16	215.02	215.02	215.02	643.90
5320	1.1/16	20	48	138	20	16	215.02	215.02	215.02	643.90
5324	1.1/16	24	48	138	20	16	215.02	215.02	215.02	643.90
5332	1.1/16	32	48	138	20	16	215.02	215.02	215.02	643.90
5407	1.1/8	7	48	138	20	16	147.40	147.40	147.40	442.23
5408	1.1/8	8	48	138	20	16	140.39	140.39	140.39	421.16
5410	1.1/8	10	48	138	20	16	237.11	237.11	237.11	711.34
5412	1.1/8	12	48	138	20	16	147.40	147.40	147.40	442.23
5414	1.1/8	14	48	138	20	16	237.11	237.11	237.11	711.34
5416	1.1/8	16	48	138	20	16	243.68	243.68	243.68	730.98
5418	1.1/8	18	48	138	20	16	228.94	228.94	228.94	686.80
5420	1.1/8	20	48	138	20	16	243.68	243.68	243.68	730.98
5424	1.1/8	24	48	138	20	16	243.68	243.68	243.68	730.98
5427	1.1/8	27	48	138	20	16	243.68	243.68	243.68	730.98
5432	1.1/8	32	48	138	20	16	243.68	243.68	243.68	730.98
5436	1.1/8	36	48	138	20	16	243.68	243.68	243.68	730.98
5514	1.3/16	14	48	138	20	16	257.05	257.05	257.05	771.13
5516	1.3/16	16	48	138	20	16	257.05	257.05	257.05	771.13
5520	1.3/16	20	48	138	20	16	258.09	258.09	258.09	774.24
5524	1.3/16	24	48	138	20	16	258.09	258.09	258.09	774.24
5532	1.3/16	32	48	138	20	16	283.83	283.83	283.83	851.45
5608	1.1/4	8	51	151	22.4	18	156.83	156.83	156.83	470.48
5610	1.1/4	10	51	151	22.4	18	269.32	269.32	269.32	808.83
5614	1.1/4	14	51	151	22.4	18	269.32	269.32	269.32	808.83
5616	1.1/4	16	51	151	22.4	18	269.32	269.32	269.32	808.83
5620	1.1/4	20	51	151	22.4	18	269.32	269.32	269.32	808.83
5624	1.1/4	24	51	151	22.4	18	269.32	269.32	269.32	808.83



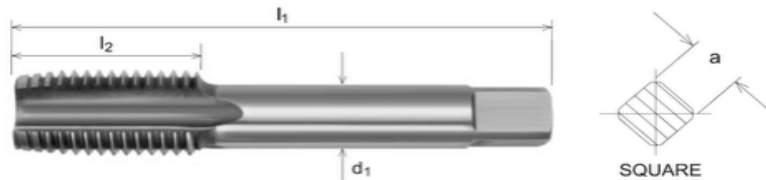
TAPS - UN FORM

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T284 -	T285 -	T286 -	T283 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
5632	1.1/4	32	51	151	22.4	18	283.70	283.70	283.70	851.11
5714	1.5/16	14	51	151	22.4	18	279.68	279.68	279.68	839.08
5716	1.5/16	16	51	151	22.4	18	279.68	279.68	279.68	839.08
5720	1.5/16	20	51	151	22.4	18	279.68	279.68	279.68	839.08
5724	1.5/16	24	51	151	22.4	18	279.68	279.68	279.68	839.08
5810	1.3/8	10	57	162	25	20	288.98	288.98	288.98	866.93
5814	1.3/8	14	57	162	25	20	288.98	288.98	288.98	866.93
5816	1.3/8	16	57	162	25	20	288.98	288.98	288.98	866.93
5818	1.3/8	18	57	162	25	20	288.98	288.98	288.98	866.93
5820	1.3/8	20	57	162	25	20	288.98	288.98	288.98	866.93
5824	1.3/8	24	57	162	25	20	288.98	288.98	288.98	866.93
5916	1.7/16	16	57	162	25	20	319.19	319.19	319.19	957.60
5920	1.7/16	20	57	162	25	20	319.19	319.19	319.19	957.60
6006	1.1/2	6	60	170	28	22.4	245.42	245.42	245.42	736.24
6008	1.1/2	8	60	170	28	22.4	233.69	233.69	233.69	701.11
6014	1.1/2	14	60	170	28	22.4	350.55	350.55	350.55	1051.65
6016	1.1/2	16	60	170	28	22.4	350.55	350.55	350.55	1051.65
6020	1.1/2	20	60	170	28	22.4	350.55	350.55	350.55	1051.65
6024	1.1/2	24	60	170	28	22.4	350.55	350.55	350.55	1051.65
6118	1.9/16	18	60	170	28	22.4	347.67	347.67	347.67	1043.00
6120	1.9/16	20	60	170	28	22.4	347.67	347.67	347.67	1043.00
6216	1.5/8	16	60	170	28	22.4	384.74	384.74	384.74	1154.21
6218	1.5/8	18	60	170	28	22.4	384.74	384.74	384.74	1154.21
6416	1.3/4	16	67	187	31.5	25	454.77	454.77	454.77	1364.30
6418	1.3/4	18	67	187	31.5	25	454.77	454.77	454.77	1364.30
6420	1.3/4	20	67	187	31.5	25	454.77	454.77	454.77	1364.30
6616	1.7/8	16	67	187	31.5	25	460.75	460.75	460.75	1382.25
6618	1.7/8	18	67	187	31.5	25	460.75	460.75	460.75	1382.25
6620	1.7/8	20	67	187	31.5	25	460.75	460.75	460.75	1382.25
6810	2"	10	70	200	35.5	28	478.04	478.04	478.04	1434.14
6814	2"	14	70	200	35.5	28	474.75	474.75	474.75	1424.26

CAPITAL

CUTTING TOOLS



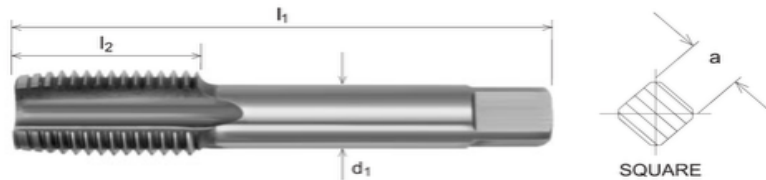
TAPS - UN FORM

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T284 -	T285 -	T286 -	T283 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
6816	2"	16	70	200	35.5	28	474.75	474.75	474.75	1424.26
6818	2"	18	70	200	35.5	28	474.75	474.75	474.75	1424.26
7012	2.1/8	12	70	200	35.5	28	525.35	525.35	525.35	1576.02
7412	2.3/8	12	70	200	35.5	28	639.93	639.93	639.93	1919.80
7812	2.5/8	12	70	200	35.5	28	758.56	758.56	758.56	2275.71
8012	2.3/4	12	70	200	35.5	28	777.53	777.53	777.53	2332.56
9012	3.1/2	12	70	200	35.5	28	1372.41	1372.41	1372.41	4117.20
9412	4"	12	70	200	35.5	28	1483.90	1483.90	1483.90	4451.74

CAPITAL

CUTTING TOOLS



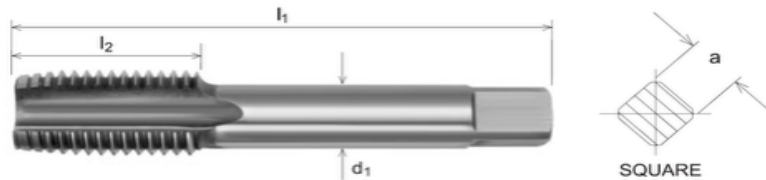
TAPS - UN FORM LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T294 -	T295 -	T296 -	T293 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0648	6	40	13	50	3.55	2.8	69.44	69.44	69.44	208.31
2732	7/32	32	19	66	6.3	5	44.81	44.81	44.81	134.42
2824	1/4	24	19	66	6.3	5	44.81	44.81	44.81	134.42
2827	1/4	27	19	66	6.3	5	44.81	44.81	44.81	134.42
2836	1/4	36	19	66	6.3	5	73.24	73.24	73.24	219.72
2840	1/4	40	19	66	6.3	5	73.24	73.24	73.24	219.72
2848	1/4	48	19	66	6.3	5	73.24	73.24	73.24	219.72
2856	1/4	56	19	66	6.3	5	73.24	73.24	73.24	219.72
2932	9/32	32	19	66	6.3	5	75.19	75.19	75.19	225.55
2940	9/32	40	19	66	6.3	5	82.20	82.20	82.20	246.55
3016	5/16	16	22	72	8	6.3	50.98	50.98	50.98	152.94
3020	5/16	20	22	72	8	6.3	50.98	50.98	50.98	152.94
3027	5/16	27	22	72	8	6.3	50.88	50.88	50.88	152.65
3028	5/16	28	22	72	8	6.3	50.88	50.88	50.88	152.65
3036	5/16	36	22	72	8	6.3	79.31	79.31	79.31	237.93
3040	5/16	40	22	72	8	6.3	79.31	79.31	79.31	237.93
3048	5/16	48	22	72	8	6.3	79.31	79.31	79.31	237.93
3056	5/16	56	22	72	8	6.3	79.31	79.31	79.31	237.93
3064	5/16	64	22	72	8	6.3	79.31	79.31	79.31	237.93
3132	11/32	32	22	72	8	6.3	88.35	88.35	88.35	265.04
3220	3/8	20	24	80	10	8	53.99	53.99	53.99	161.94
3227	3/8	27	24	80	10	8	66.95	66.95	66.95	200.84
3228	3/8	28	24	80	10	8	66.95	66.95	66.95	200.84
3232	3/8	32	24	80	10	8	61.60	61.60	61.60	184.81
3236	3/8	36	24	80	10	8	86.51	86.51	86.51	259.52
3240	3/8	40	24	80	10	8	86.51	86.51	86.51	259.52
3248	3/8	48	24	80	10	8	96.80	96.80	96.80	290.41
3324	13/32	24	24	80	10	8	108.96	108.96	108.96	326.89

CAPITAL

CUTTING TOOLS



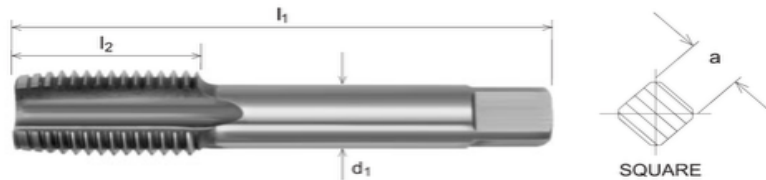
TAPS - UN FORM LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T294 -	T295 -	T296 -	T293 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
3332	13/32	32	24	80	10	8	108.96	108.96	108.96	326.89
3414	7/16	14	25	85	8	6.3	76.26	76.26	76.26	228.79
3416	7/16	16	25	85	8	6.3	76.26	76.26	76.26	228.79
3420	7/16	20	25	85	8	6.3	76.26	76.26	76.26	228.79
3424	7/16	24	25	85	8	6.3	76.26	76.26	76.26	228.79
3427	7/16	27	25	85	8	6.3	76.26	76.26	76.26	228.79
3428	7/16	28	25	85	8	6.3	76.26	76.26	76.26	228.79
3432	7/16	32	25	85	8	6.3	76.26	76.26	76.26	228.79
3440	7/16	40	25	85	8	6.3	80.14	80.14	80.14	240.39
3524	15/32	24	25	85	8	6.3	108.96	108.96	108.96	326.89
3532	15/32	32	25	85	8	6.3	108.96	108.96	108.96	326.89
3611	1/2	11	29	89	9	7.1	98.23	98.23	98.23	294.70
3612	1/2	12	29	89	9	7.1	98.23	98.23	98.23	294.70
3614	1/2	14	29	89	9	7.1	98.23	98.23	98.23	294.70
3616	1/2	16	29	89	9	7.1	98.23	98.23	98.23	294.70
3618	1/2	18	29	89	9	7.1	98.23	98.23	98.23	294.70
3624	1/2	24	29	89	9	7.1	98.23	98.23	98.23	294.70
3627	1/2	27	29	89	9	7.1	98.23	98.23	98.23	294.70
3632	1/2	32	29	89	9	7.1	98.23	98.23	98.23	294.70
3636	1/2	36	29	89	9	7.1	98.23	98.23	98.23	294.70
3640	1/2	40	29	89	9	7.1	98.23	98.23	98.23	294.70
3816	9/16	16	30	95	11.2	9	117.81	117.81	117.81	353.42
3820	9/16	20	30	95	11.2	9	100.91	100.91	100.91	302.76
3824	9/16	24	30	95	11.2	9	105.45	105.45	105.45	316.36
3827	9/16	27	30	95	11.2	9	105.45	105.45	105.45	316.36
3828	9/16	28	30	95	11.2	9	105.45	105.45	105.45	316.36
3832	9/16	32	30	95	11.2	9	105.45	105.45	105.45	316.36

CAPITAL

CUTTING TOOLS



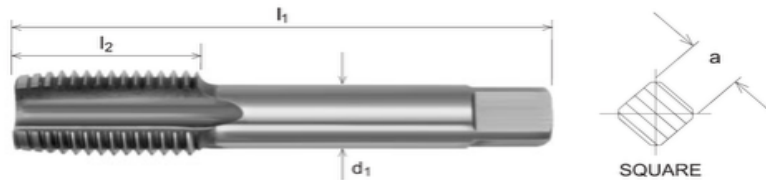
TAPS - UN FORM LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T294 -	T295 -	T296 -	T293 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
3840	9/16	40	30	95	11.2	9	105.45	105.45	105.45	316.36
3932	19/32	32	30	95	11.2	9	117.80	117.80	117.80	353.41
4011	5/8	11	32	102	12.5	10	117.81	117.81	117.81	353.42
4012	5/8	12	32	102	12.5	10	117.81	117.81	117.81	353.42
4014	5/8	14	32	102	12.5	10	117.81	117.81	117.81	353.42
4016	5/8	16	32	102	12.5	10	117.81	117.81	117.81	353.42
4018	5/8	18	32	102	12.5	10	117.31	117.31	117.31	351.91
4020	5/8	20	32	102	12.5	10	117.31	117.31	117.31	351.91
4024	5/8	24	32	102	12.5	10	117.31	117.31	117.31	351.91
4027	5/8	27	32	102	12.5	10	117.31	117.31	117.31	351.91
4028	5/8	28	32	102	12.5	10	117.31	117.31	117.31	351.91
4032	5/8	32	32	102	12.5	10	117.31	117.31	117.31	351.91
4036	5/8	36	32	102	12.5	10	117.31	117.31	117.31	351.91
4214	11/16	14	37	112	14	11.2	119.26	119.26	119.26	357.78
4216	11/16	16	37	112	14	11.2	119.26	119.26	119.26	357.78
4218	11/16	18	37	112	14	11.2	119.26	119.26	119.26	357.78
4220	11/16	20	37	112	14	11.2	119.26	119.26	119.26	357.78
4227	11/16	27	37	112	14	11.2	119.26	119.26	119.26	357.78
4228	11/16	28	37	112	14	11.2	119.26	119.26	119.26	357.78
4232	11/16	32	37	112	14	11.2	119.26	119.26	119.26	357.78
4240	11/16	40	37	112	14	11.2	119.26	119.26	119.26	357.78
4412	3/4	12	37	112	14	11.2	165.21	165.21	165.21	495.59
4414	3/4	14	37	112	14	11.2	173.46	173.46	173.46	520.38
4418	3/4	18	37	112	14	11.2	173.46	173.46	173.46	520.38
4420	3/4	20	37	112	14	11.2	180.12	180.12	180.12	540.32
4424	3/4	24	37	112	14	11.2	180.12	180.12	180.12	540.32
4427	3/4	27	37	112	14	11.2	190.53	190.53	190.53	571.57
4428	3/4	28	37	112	14	11.2	185.28	185.28	185.28	555.81
4432	3/4	32	37	112	14	11.2	185.28	185.28	185.28	555.81

CAPITAL

CUTTING TOOLS



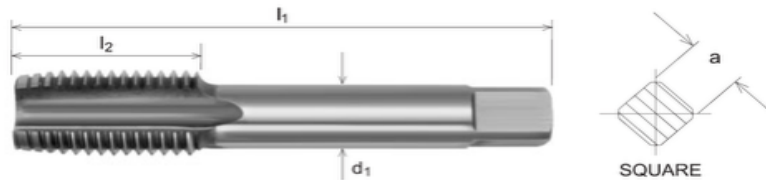
TAPS - UN FORM LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T294 -	T295 -	T296 -	T293 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
4610	13/16	10	38	118	16	12.5	165.21	165.21	165.21	495.59
4612	13/16	12	38	118	16	12.5	165.21	165.21	165.21	495.59
4614	13/16	14	38	118	16	12.5	173.46	173.46	173.46	520.38
4616	13/16	16	38	118	16	12.5	173.46	173.46	173.46	520.38
4618	13/16	18	38	118	16	12.5	173.46	173.46	173.46	520.38
4620	13/16	20	38	118	16	12.5	173.46	173.46	173.46	520.38
4624	13/16	24	38	118	16	12.5	180.12	180.12	180.12	540.32
4627	13/16	27	38	118	16	12.5	190.53	190.53	190.53	571.57
4628	13/16	28	38	118	16	12.5	185.28	185.28	185.28	555.81
4632	13/16	32	38	118	16	12.5	185.28	185.28	185.28	555.81
4809	7/8	9	38	118	16	12.5	211.67	211.67	211.67	635.02
4810	7/8	10	38	118	16	12.5	222.24	222.24	222.24	666.73
4812	7/8	12	38	118	16	12.5	222.24	222.24	222.24	666.73
4814	7/8	14	38	118	16	12.5	222.24	222.24	222.24	666.73
4816	7/8	16	38	118	16	12.5	222.24	222.24	222.24	666.73
4818	7/8	18	38	118	16	12.5	222.24	222.24	222.24	666.73
4820	7/8	20	38	118	16	12.5	222.24	222.24	222.24	666.73
4824	7/8	24	38	118	16	12.5	222.24	222.24	222.24	666.73
4827	7/8	27	38	118	16	12.5	236.16	236.16	236.16	708.46
4832	7/8	32	38	118	16	12.5	236.16	236.16	236.16	708.46
4840	7/8	40	38	118	16	12.5	241.60	241.60	241.60	724.81
5012	15/16	12	45	130	18	14	222.24	222.24	222.24	666.73
5016	15/16	16	45	130	18	14	222.24	222.24	222.24	666.73
5018	15/16	18	45	130	18	14	222.24	222.24	222.24	666.73
5020	15/16	20	45	130	18	14	222.24	222.24	222.24	666.73
5024	15/16	24	45	130	18	14	222.24	222.24	222.24	666.73
5027	15/16	27	45	130	18	14	240.45	240.45	240.45	721.39
5028	15/16	28	45	130	18	14	240.45	240.45	240.45	721.39
5032	15/16	32	45	130	18	14	240.45	240.45	240.45	721.39

CAPITAL

CUTTING TOOLS



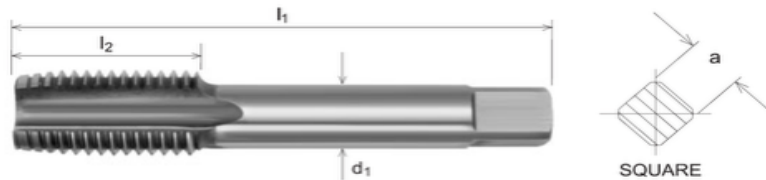
TAPS - UN FORM LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T294 -	T295 -	T296 -	T293 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
5210	1"	10	45	130	18	14	233.40	233.40	233.40	700.22
5214	1"	14	45	130	18	14	264.09	264.09	264.09	792.25
5218	1"	18	45	130	18	14	264.09	264.09	264.09	792.25
5220	1"	20	45	130	18	14	264.09	264.09	264.09	792.25
5224	1"	24	45	130	18	14	264.09	264.09	264.09	792.25
5232	1"	32	45	130	18	14	264.09	264.09	264.09	792.25
5236	1"	36	45	130	18	14	264.09	264.09	264.09	792.25
5240	1"	40	45	130	18	14	264.09	264.09	264.09	792.25
5310	1.1/16	10	48	138	20	16	266.61	266.61	266.61	799.84
5314	1.1/16	14	48	138	20	16	266.61	266.61	266.61	799.84
5316	1.1/16	16	48	138	20	16	266.61	266.61	266.61	799.84
5318	1.1/16	18	48	138	20	16	266.61	266.61	266.61	799.84
5320	1.1/16	20	48	138	20	16	266.61	266.61	266.61	799.84
5324	1.1/16	24	48	138	20	16	275.36	275.36	275.36	826.04
5332	1.1/16	32	48	138	20	16	275.36	275.36	275.36	826.04
5408	1.1/8	8	48	138	20	16	266.61	266.61	266.61	799.84
5410	1.1/8	10	48	138	20	16	266.61	266.61	266.61	799.84
5414	1.1/8	14	48	138	20	16	266.61	266.61	266.61	799.84
5416	1.1/8	16	48	138	20	16	266.61	266.61	266.61	799.84
5418	1.1/8	18	48	138	20	16	266.61	266.61	266.61	799.84
5420	1.1/8	20	48	138	20	16	266.61	266.61	266.61	799.84
5424	1.1/8	24	48	138	20	16	266.61	266.61	266.61	799.84
5427	1.1/8	27	48	138	20	16	266.61	266.61	266.61	799.84
5432	1.1/8	32	48	138	20	16	266.61	266.61	266.61	799.84
5436	1.1/8	36	48	138	20	16	266.61	266.61	266.61	799.84
5510	1.3/16	10	48	138	20	16	283.83	283.83	283.83	851.45
5514	1.3/16	14	48	138	20	16	270.85	270.85	270.85	812.55
5516	1.3/16	16	48	138	20	16	270.85	270.85	270.85	812.55
5520	1.3/16	20	48	138	20	16	270.85	270.85	270.85	812.55

CAPITAL

CUTTING TOOLS



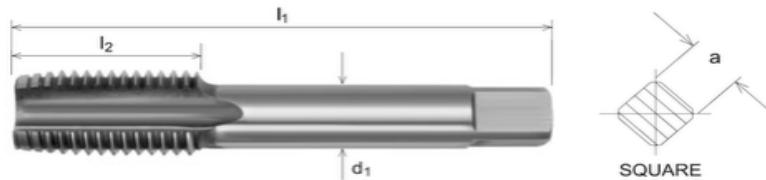
TAPS - UN FORM LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T294 -	T295 -	T296 -	T293 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
5524	1.3/16	24	48	138	20	16	270.85	270.85	270.85	812.55
5532	1.3/16	32	48	138	20	16	270.85	270.85	270.85	812.55
5608	1.1/4	8	51	151	22.4	18	156.83	156.83	156.83	470.48
5610	1.1/4	10	51	151	22.4	18	275.14	275.14	275.14	825.27
5614	1.1/4	14	51	151	22.4	18	275.14	275.14	275.14	825.27
5616	1.1/4	16	51	151	22.4	18	275.14	275.14	275.14	825.27
5620	1.1/4	20	51	151	22.4	18	275.14	275.14	275.14	825.27
5624	1.1/4	24	51	151	22.4	18	298.04	298.04	298.04	894.12
5632	1.1/4	32	51	151	22.4	18	298.04	298.04	298.04	894.12
5714	1.5/16	14	51	151	22.4	18	281.16	281.16	281.16	843.44
5716	1.5/16	16	51	151	22.4	18	281.16	281.16	281.16	843.44
5720	1.5/16	20	51	151	22.4	18	281.16	281.16	281.16	843.44
5814	1.3/8	14	57	162	25	20	297.83	297.83	297.83	893.48
5816	1.3/8	16	57	162	25	20	297.83	297.83	297.83	893.48
5820	1.3/8	20	57	162	25	20	297.83	297.83	297.83	893.48
5824	1.3/8	24	57	162	25	20	297.83	297.83	297.83	893.48
5914	1.7/16	14	57	162	25	20	303.80	303.80	303.80	911.41
5916	1.7/16	16	57	162	25	20	303.80	303.80	303.80	911.41
5918	1.7/16	18	57	162	25	20	303.80	303.80	303.80	911.41
5920	1.7/16	20	57	162	25	20	303.80	303.80	303.80	911.41
6008	1.1/2	8	60	170	28	22.4	303.80	303.80	303.80	911.41
6014	1.1/2	14	60	170	28	22.4	315.11	315.11	315.11	945.36
6016	1.1/2	16	60	170	28	22.4	315.11	315.11	315.11	945.36
6018	1.1/2	18	60	170	28	22.4	315.11	315.11	315.11	945.36
6020	1.1/2	20	60	170	28	22.4	315.11	315.11	315.11	945.36
6024	1.1/2	24	60	170	28	22.4	315.11	315.11	315.11	945.36
6114	1.9/16	14	60	170	28	22.4	327.48	327.48	327.48	982.45
6118	1.9/16	18	60	170	28	22.4	327.48	327.48	327.48	982.45
6120	1.9/16	20	60	170	28	22.4	327.48	327.48	327.48	982.45

CAPITAL

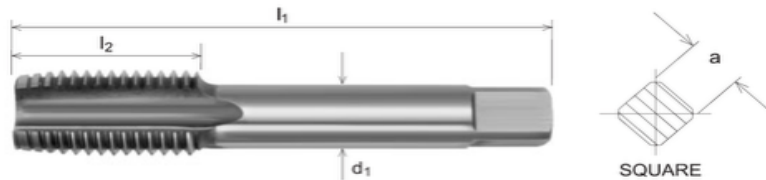
CUTTING TOOLS



TAPS - UN FORM LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T294 -	T295 -	T296 -	T293 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
6208	1.5/8	8	60	170	28	22.4	384.74	384.74	384.74	1154.21
6214	1.5/8	14	60	170	28	22.4	395.45	395.45	395.45	1186.34
6216	1.5/8	16	60	170	28	22.4	395.45	395.45	395.45	1186.34
6218	1.5/8	18	60	170	28	22.4	395.45	395.45	395.45	1186.34
6414	1.3/4	14	67	187	31.5	25	420.17	420.17	420.17	1260.51
6416	1.3/4	16	67	187	31.5	25	428.40	428.40	428.40	1285.21
6418	1.3/4	18	67	187	31.5	25	432.51	432.51	432.51	1297.57
6420	1.3/4	20	67	187	31.5	25	432.51	432.51	432.51	1297.57
6608	1.7/8	8	67	187	31.5	25	460.75	460.75	460.75	1382.25
6616	1.7/8	16	67	187	31.5	25	428.40	428.40	428.40	1285.21
6618	1.7/8	18	67	187	31.5	25	432.51	432.51	432.51	1297.57
6620	1.7/8	20	67	187	31.5	25	436.66	436.66	436.66	1309.94
6808	2"	8	70	200	35.5	28	478.04	478.04	478.04	1434.14
6810	2"	10	70	200	35.5	28	506.68	506.68	506.68	1520.01
6814	2"	14	70	200	35.5	28	506.68	506.68	506.68	1520.01
6816	2"	16	70	200	35.5	28	512.85	512.85	512.85	1538.53
6818	2"	18	70	200	35.5	28	512.85	512.85	512.85	1538.53
7012	2.1/8	12	70	200	35.5	28	541.68	541.68	541.68	1625.05
7212	2.1/4	12	70	200	35.5	28	692.24	692.24	692.24	2076.74
7412	2.3/8	12	70	200	35.5	28	739.40	739.40	739.40	2218.22
7612	2.1/2	12	70	200	35.5	28	833.13	833.13	833.13	2499.38
7812	2.5/8	12	70	200	35.5	28	810.54	810.54	810.54	2431.66
8012	2.3/4	12	70	200	35.5	28	906.24	906.24	906.24	2718.72
8412	3"	12	70	200	35.5	28	955.94	955.94	955.94	2870.13
9012	3.1/2	12	70	200	35.5	28	1373.76	1373.76	1373.76	4121.31
9412	4"	12	70	200	35.5	28	1604.44	1604.44	1604.44	4813.34



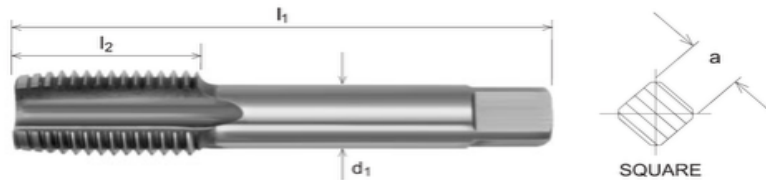
TAPS - BSW

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T304 -	T305 -	T306 -	T303 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2348	3/32	48	9.5	44.5	2.5	2.24	48.05	48.05	48.05	144.18
2440	1/8	40	11	48	3.15	2.5	19.20	19.20	19.20	57.60
2532	5/32	32	13	53	4	3.15	19.20	19.20	19.20	57.60
2624	3/16	24	16	58	5	4	12.11	12.11	12.11	36.30
2724	7/32	24	18	64	6	4	18.23	18.23	18.23	54.66
2820	1/4	20	19	66	6.3	5	12.27	12.27	12.27	36.85
3018	5/16	18	22	72	8	6.3	12.85	12.85	12.85	38.56
3216	3/8	16	24	80	10	8	17.60	17.60	17.60	52.79
3414	7/16	14	25	85	8	6.3	23.42	23.42	23.42	70.27
3612	1/2	12	29	89	9	7.1	26.22	26.22	26.22	78.68
3812	9/16	12	30	95	11.2	9	38.03	38.03	38.03	114.11
4011	5/8	11	32	102	12.5	10	40.04	40.04	40.04	120.09
4211	11/16	11	37	112	14	11.2	107.12	107.12	107.12	321.31
4410	3/4	10	37	112	14	11.2	52.06	52.06	52.06	156.17
4809	7/8	9	38	118	16	12.5	78.10	78.10	78.10	234.27
5208	1"	8	45	130	18	14	94.15	94.15	94.15	282.46
5407	1.1/8	7	48	138	20	16	154.19	154.19	154.19	462.55
5607	1.1/4	7	51	151	22.4	18	170.84	170.84	170.84	512.50
5806	1.3/8	6	57	162	25	20	224.35	224.35	224.35	673.03
6006	1.1/2	6	60	170	28	22.4	255.11	255.11	255.11	765.31
6205	1.5/8	5	60	170	28	22.4	329.13	329.13	329.13	987.39
6405	1.3/4	5	67	187	31.5	25	360.04	360.04	360.04	1080.13
6604	1.7/8	4.5	67	187	31.5	25	504.61	504.61	504.61	1514.99
6804	2"	4.5	70	200	35.5	28	519.87	519.87	519.87	1559.62

CAPITAL

CUTTING TOOLS



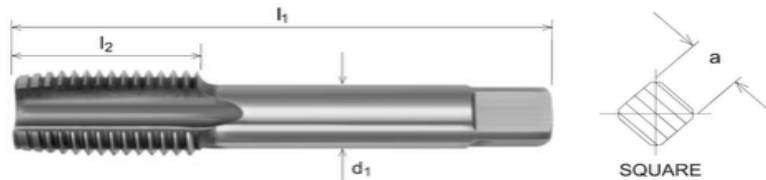
TAPS - BSW LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T314 -	T315 -	T316 -	T313 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2440	1/8	40	11	48	3.15	2.5	87.02	87.02	87.02	259.52
2532	5/32	32	13	53	4	3.15	87.02	87.02	87.02	259.52
2624	3/16	24	16	58	5	4	87.02	87.02	87.02	259.52
2724	7/32	24	18	64	6	4	65.91	65.91	65.91	197.72
2820	1/4	20	19	66	6.3	5	31.86	31.86	31.86	95.57
3018	5/16	18	22	72	8	6.3	35.35	35.35	35.35	106.05
3216	3/8	16	24	80	10	8	39.56	39.56	39.56	118.68
3414	7/16	14	25	85	8	6.3	45.61	45.61	45.61	136.82
3612	1/2	12	29	89	9	7.1	74.73	74.73	74.73	224.22
3812	9/16	12	30	95	11.2	9	115.47	115.47	115.47	346.43
4011	5/8	11	32	102	12.5	10	109.48	109.48	109.48	328.42
4410	3/4	10	37	112	14	11.2	117.27	117.27	117.27	351.80
4809	7/8	9	38	118	16	12.5	163.98	163.98	163.98	491.96
5208	1"	8	45	130	18	14	232.82	232.82	232.82	698.44
5407	1.1/8	7	48	138	20	16	257.63	257.63	257.63	772.83
5607	1.1/4	7	51	151	22.4	18	285.42	285.42	285.42	856.29
5806	1.3/8	6	57	162	25	20	374.84	374.84	374.84	1124.56
6006	1.1/2	6	60	170	28	22.4	395.45	395.45	395.45	1186.34
6205	1.5/8	5	60	170	28	22.4	428.30	428.30	428.30	1284.92
6405	1.3/4	5	67	187	31.5	25	479.88	479.88	479.88	1439.67
6604	1.7/8	4.5	67	187	31.5	25	554.05	554.05	554.05	1662.13
6804	2"	4.5	70	200	35.5	28	565.39	565.39	565.39	1696.14

CAPITAL

CUTTING TOOLS



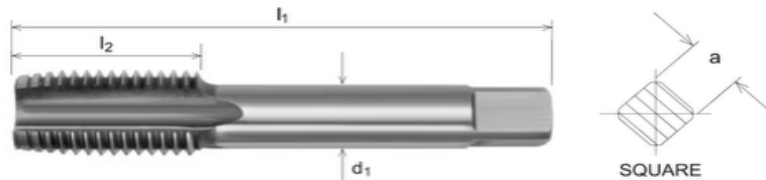
TAPS - BSF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T324 -	T325 -	T326 -	T323 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2632	3/16	32	16	58	5	4	13.24	13.24	13.24	39.72
2728	7/32	28	18	64	6	4	21.24	21.24	21.24	63.72
2826	1/4	26	19	66	6.3	5	15.20	15.20	15.20	45.61
2926	9/32	26	20	68	6.3	5	38.59	38.59	38.59	115.75
3022	5/16	22	22	72	8	6.3	16.47	16.47	16.47	49.38
3220	3/8	20	24	80	10	8	18.00	18.00	18.00	53.97
3418	7/16	18	25	85	8	6.3	27.62	27.62	27.62	82.85
3616	1/2	16	29	89	9	7.1	34.07	34.07	34.07	102.21
3816	9/16	16	30	95	11.2	9	44.08	44.08	44.08	132.23
4014	5/8	14	32	102	12.5	10	44.08	44.08	44.08	132.23
4214	11/16	14	34	107	12.5	10	67.46	67.46	67.46	202.37
4412	3/4	12	37	112	14	11.2	68.07	68.07	68.07	204.20
4612	13/16	12	38	118	16	12.5	90.16	90.16	90.16	270.47
4811	7/8	11	42	124	18	14	92.05	92.05	92.05	276.11
5210	1"	10	45	130	18	14	120.29	120.29	120.29	360.86
5409	1.1/8	9	48	138	20	16	168.62	168.62	168.62	505.86
5609	1.1/4	9	51	151	22.4	18	193.90	193.90	193.90	581.70
5808	1.3/8	8	57	162	25	20	244.33	244.33	244.33	732.99
6008	1.1/2	8	60	170	28	22.4	257.16	257.16	257.16	771.48
6208	1.5/8	8	60	170	28	22.4	329.13	329.13	329.13	987.39
6407	1.3/4	7	67	187	31.5	25	363.62	363.62	363.62	1090.90
6807	2"	7	70	200	35.5	28	519.87	519.87	519.87	1559.62

CAPITAL

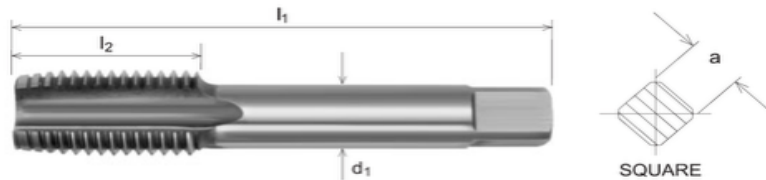
CUTTING TOOLS



TAPS - BSF **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

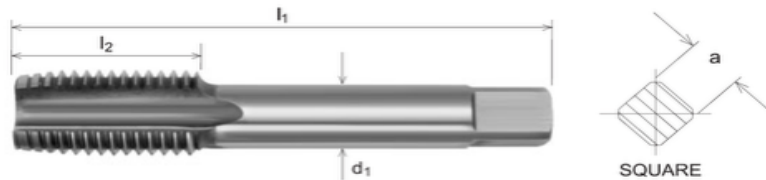
Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T334 -	T335 -	T336 -	T333 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2632	3/16	26	16	58	5	4	45.31	45.31	45.31	135.93
2826	1/4	26	19	66	6.3	5	45.66	45.66	45.66	136.99
3022	5/16	22	22	72	8	6.3	50.53	50.53	50.53	151.59
3220	3/8	20	24	80	10	8	62.64	62.64	62.64	187.90
3418	7/16	18	25	85	8	6.3	66.82	66.82	66.82	200.43
3616	1/2	16	29	89	9	7.1	101.16	101.16	101.16	303.47
3816	9/16	16	30	95	11.2	9	115.47	115.47	115.47	346.43
4014	5/8	14	32	102	12.5	10	113.10	113.10	113.10	339.31
4214	11/16	14	34	107	12.5	10	148.29	148.29	148.29	444.88
4412	3/4	12	37	112	14	11.2	158.75	158.75	158.75	476.25
4612	13/16	12	38	118	16	12.5	211.22	211.22	211.22	633.67
4811	7/8	11	42	124	18	14	211.67	211.67	211.67	635.02
5210	1"	10	45	130	18	14	233.40	233.40	233.40	700.22
5409	1.1/8	9	48	138	20	16	272.03	272.03	272.03	816.09
5609	1.1/4	9	51	151	22.4	18	296.59	296.59	296.59	889.76
5808	1.3/8	8	57	162	25	20	377.39	377.39	377.39	1132.16
6008	1.1/2	8	60	170	28	22.4	398.64	398.64	398.64	1195.93
6208	1.5/8	8	60	170	28	22.4	348.08	348.08	348.08	1044.22
6407	1.3/4	7	67	187	31.5	25	404.73	404.73	404.73	1214.17
6807	2"	7	70	200	35.5	28	613.76	613.76	613.76	1841.31



TAPS - BSB BRASS

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T344 -	T345 -	T346 -	T343 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2626	3/16	26	16	58	5	4	21.37	21.37	21.37	64.12
2826	1/4	26	19	66	6.3	5	15.20	15.20	15.20	45.61
2926	9/32	26	19	66	6.3	5	23.79	23.79	23.79	71.37
3026	5/16	26	22	72	8	6.3	28.01	28.01	28.01	84.04
3226	3/8	26	24	80	10	8	28.01	28.01	28.01	84.04
3326	13/32	26	24	80	10	8	46.07	46.07	46.07	138.21
3426	7/16	26	25	85	8	6.3	41.98	41.98	41.98	125.93
3626	1/2	26	29	89	9	7.1	50.05	50.05	50.05	150.18
3826	9/16	26	30	95	11.2	9	54.87	54.87	54.87	164.59
3926	19/32	26	30	95	11.2	9	54.87	54.87	54.87	164.59
4026	5/8	26	32	102	12.5	10	54.87	54.87	54.87	164.59
4226	11/16	26	34	107	12.5	10	114.60	114.60	114.60	343.83
4426	3/4	26	37	112	14	11.2	114.58	114.58	114.58	343.79
4626	13/16	26	38	118	16	12.5	140.92	140.92	140.92	422.76
4826	7/8	26	42	124	18	14	140.92	140.92	140.92	422.76
5026	15/16	26	45	130	18	14	151.08	151.08	151.08	453.24
5226	1"	26	45	130	18	14	151.08	151.08	151.08	453.24
5326	1.1/16	26	45	130	18	14	228.93	228.93	228.93	686.80
5426	1.1/8	26	48	138	20	16	228.94	228.94	228.94	686.80
5526	1.3/16	26	48	138	20	16	252.40	252.40	252.40	757.20
5626	1.1/4	26	51	151	22.4	18	281.81	281.81	281.81	845.38
5826	1.3/8	26	57	162	25	20	308.06	308.06	308.06	924.18
6026	1.1/2	26	60	170	28	22.4	339.18	339.18	339.18	1017.55



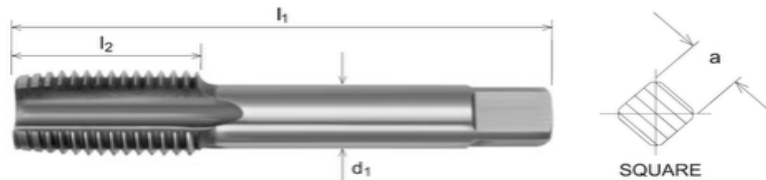
TAPS - BSB BRASS **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T354 -	T355 -	T356 -	T353 -
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2826	1/4	26	19	66	6.3	5	45.66	45.66	45.66	136.99
2926	9/32	26	19	66	6.3	5	48.11	48.11	48.11	142.85
3026	5/16	26	22	72	8	6.3	50.53	50.53	50.53	151.59
3226	3/8	26	24	80	10	8	62.64	62.64	62.64	187.90
3426	7/16	26	25	85	8	6.3	66.82	66.82	66.82	200.43
3626	1/2	26	29	89	9	7.1	101.16	101.16	101.16	303.47
3826	9/16	26	30	95	11.2	9	115.47	115.47	115.47	346.43
4026	5/8	26	32	102	12.5	10	119.26	119.26	119.26	357.78
4426	3/4	26	37	112	14	11.2	158.75	158.75	158.75	476.25
4826	7/8	26	42	124	18	14	211.67	211.67	211.67	635.02
5226	1"	26	45	130	18	14	233.40	233.40	233.40	700.22

CAPITAL

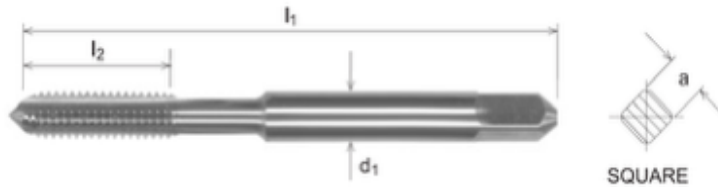
CUTTING TOOLS



TAPS - BS ELECTRICAL CONDUIT

HIGH SPEED STEEL - GROUND THREAD

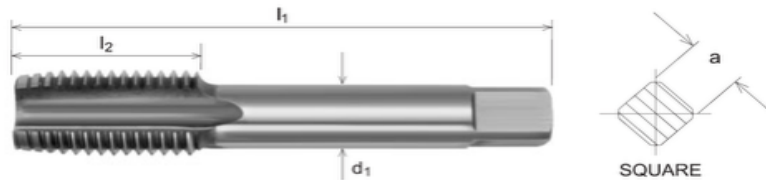
Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T364-	T365-	T366-	T363-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
3216	3/8	16	24	80	10	8	79.23	79.23	79.23	237.69
3618	1/2	18	29	89	9	7.1	83.63	83.63	83.63	250.86
4018	5/8	18	32	102	12.5	10	136.89	136.89	136.89	410.68
4216	11/16	16	34	107	12.5	10	189.74	189.74	189.74	569.23
4416	3/4	16	37	112	14	11.2	222.62	222.62	222.62	667.85
4816	7/8	16	42	124	18	14	235.98	235.98	235.98	707.93
5216	1"	16	45	130	18	14	245.09	245.09	245.09	735.29
5616	1.1/4	16	51	151	22.4	18	260.55	260.55	260.55	781.66
6014	1.1/2	14	60	170	28	22.4	359.41	359.41	359.41	1078.24
6814	2"	14	70	200	35.5	28	453.12	453.12	453.12	1359.37
7214	2.1/2	14	70	200	35.5	28	731.16	731.16	731.16	2193.50



TAPS - BA

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T504-	T505-	T506-	T503-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0025	0	25.38	19	66	6.3	5	13.55	13.55	13.55	40.66
0128	1	28.25	17	62	5.6	4.5	14.23	14.23	14.23	42.67
0231	2	31.36	16	58	5	4	12.60	12.60	12.60	37.83
0334	3	34.84	13	53	4.5	3.55	14.05	14.05	14.05	42.14
0438	4	38.46	13	50	3.55	2.8	12.60	12.60	12.60	37.83
0543	5	43.10	11	48	3.15	2.5	13.11	13.11	13.11	39.31
0647	6	47.85	9.5	44.5	2.8	2.24	14.23	14.23	14.23	42.67
0752	7	52.91	9.5	44.5	2.8	2.24	21.66	21.66	21.66	64.97
0859	8	59.17	9.5	44.5	2.8	2.24	20.84	20.84	20.84	62.49
0964	9	64.94	8	41	2.5	2	38.03	38.03	38.03	114.11
1072	10	72.46	8	41	2.5	2	40.04	40.04	40.04	120.09
1181	11	81.97	7	40	2.5	2	50.16	50.16	50.16	150.47
1290	12	90.91	7	40	2.5	2	62.47	62.47	62.47	187.42



TAPS - BS CYCLE 60°

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T524-	T525-	T526-	T523-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2632	3/16	32	16	58	5	4	70.12	70.12	70.12	210.38
2726	7/32	26	18	64	6	4	70.12	70.12	70.12	210.38
2826	1/4	26	19	66	6.3	5	70.12	70.12	70.12	210.38
2926	9/32	26	20	68	6.3	5	70.12	70.12	70.12	210.38
3026	5/16	26	22	72	8	6.3	74.15	74.15	74.15	222.44
3226	3/8	26	24	80	10	8	74.15	74.15	74.15	222.44
3426	7/16	26	25	85	8	6.3	80.32	80.32	80.32	240.98
3626	1/2	26	29	89	9	7.1	90.63	90.63	90.63	271.89
3826	9/16	26	30	95	11.2	9	100.91	100.91	100.91	302.76
4026	5/8	26	32	102	12.5	10	107.12	107.12	107.12	321.32
4226	11/16	26	34	107	12.5	10	117.40	117.40	117.40	352.19
4426	3/4	26	37	112	14	11.2	130.80	130.80	130.80	392.39
4826	7/8	26	42	124	18	14	153.45	153.45	153.45	460.36

TAPS - PG

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T544-	T545-	T546-	T543-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0720	PG-7	20	29	89	9	7.1	46.86	46.86	46.86	140.59
0918	PG-9	18	32	102	12.5	10	51.91	51.91	51.91	155.71
1118	PG-11	18	37	112	14	11.2	61.29	61.29	61.29	183.85
1318	PG-13.5	18	37	112	14	11.2	79.83	79.83	79.83	239.45
1618	PG-16	18	38	118	16	12.5	98.97	98.97	98.97	296.89
2116	PG-21	16	48	138	20	16	116.39	116.39	116.39	349.13
2916	PG-29	16	60	170	28	22.4	269.91	269.91	269.91	809.72
3616	PG-36	16	67	187	31.5	25	416.05	416.05	416.05	1248.14
4216	PG-42	16	70	200	35.5	28	566.39	566.39	566.39	1699.19
4816	PG-48	16	70	200	40	31.5	638.49	638.49	638.49	1915.44



PIPE TAPS - BSPF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T404-	T405-	T406-	T403-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2228	1/16	28	11	51	6	5	69.10	69.10	69.10	207.30
2428	1/8	28	15	59	8	6.3	20.33	20.33	20.33	60.99
2819	1/4	19	19	67	10	8	28.74	28.74	28.74	86.21
3219	3/8	19	21	75	12.5	10	42.14	42.14	42.14	126.43
3614	1/2	14	26	87	16	12.5	59.33	59.33	59.33	178.01
4014	5/8	14	26	91	18	14	78.45	78.45	78.45	235.34
4414	3/4	14	28	96	20	16	84.25	84.25	84.25	252.76
4814	7/8	14	29	102	22.4	18	120.60	120.60	120.60	361.81
5211	1"	11	33	109	25	20	139.80	139.80	139.80	419.40
5611	1.1/4	11	36	119	31.5	25	248.59	248.59	248.59	745.80
6011	1.1/2	11	37	125	35.5	28	279.32	279.32	279.32	837.98
6411	1.3/4	11	39	132	35.5	28	587.77	587.77	587.77	1763.31
6811	2"	11	41	140	40	31.5	473.72	473.72	473.72	1421.15
7211	2.1/4	11	42	142	40	31.5	719.88	719.88	719.88	2159.62
7611	2.1/2	11	45	153	45	35.5	839.86	839.86	839.86	2519.56
8411	3"	11	48	164	50	40	989.82	989.82	989.82	2969.47
9411	4"	11	55	188	60	48.5	1471.73	1471.73	1471.73	4415.20



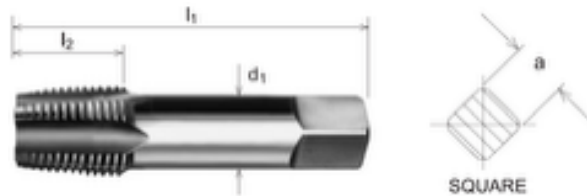
PIPE TAPS - "G" BSP

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T424-	T425-	T426-	T423-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2428	1/8	28	13	53	6	4	20.33	20.33	20.33	60.99
2819	1/4	19	19	67	10	8	28.74	28.74	28.74	86.21
3219	3/8	19	21	75	12.5	10	42.14	42.14	42.14	126.43
3614	1/2	14	26	87	16	12.5	59.33	59.33	59.33	178.01
4014	5/8	14	26	91	18	14	78.45	78.45	78.45	235.34
4414	3/4	14	28	96	20	16	84.25	84.25	84.25	252.76
4814	7/8	14	29	102	22.4	18	120.60	120.60	120.60	361.81
5211	1"	11	33	109	25	20	139.80	139.80	139.80	419.40
5611	1.1/4	11	36	119	31.5	25	248.59	248.59	248.59	745.80
6011	1.1/2	11	37	125	35.5	28	279.32	279.32	279.32	837.98
6411	1.3/4	11	39	132	35.5	28	587.77	587.77	587.77	1763.31
6811	2"	11	41	140	40	31.5	473.72	473.72	473.72	1421.15

CAPITAL

CUTTING TOOLS



PIPE TAPS - BSPT

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T464-	T465-	T466-	T463-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2228	1/16	28	13	53	6	4	73.23	73.23	73.23	219.68
2428	1/8	28	15	59	8	6.3	45.94	45.94	45.94	137.85
2819	1/4	19	19	67	10	8	49.73	49.73	49.73	149.16
3219	3/8	19	21	75	12.5	10	76.60	76.60	76.60	229.79
3614	1/2	14	26	87	16	12.5	86.21	86.21	86.21	258.61
4014	5/8	14	26	91	18	14	184.34	184.34	184.34	553.01
4414	3/4	14	28	96	20	16	94.04	94.04	94.04	282.12
4814	7/8	14	29	102	22.4	18	196.62	196.62	196.62	589.87
5211	1"	11	33	109	25	20	153.21	153.21	153.21	459.63
5411	1.1/8	11	35	113	27	22.5	219.05	219.05	219.05	657.16
5611	1.1/4	11	36	119	31.5	25	247.02	247.02	247.02	741.05
6011	1.1/2	11	37	125	35.5	28	326.12	326.12	326.12	978.38
6811	2"	11	41	140	40	31.5	531.39	531.39	531.39	1594.15
7611	2.1/2	11	45	153	45	35.5	869.84	869.84	869.84	2609.51
8411	3"	11	48	164	50	40	1377.74	1377.74	1377.74	4133.22
8611	3.1/2	11	51	176	55	45	1414.25	1414.25	1414.25	4242.74
9411	4"	11	55	188	60	48.5	1516.22	1516.22	1516.22	4548.68

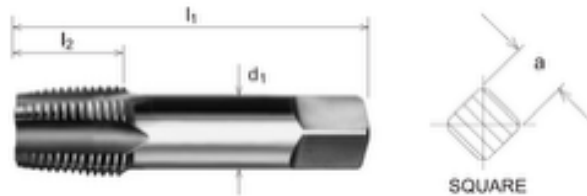
PIPE TAPS - "RC" BSPT

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T444-	T445-	T446-	T443-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2428	1/8	28	15	59	8	6.3	45.94	45.94	45.94	137.85
2819	1/4	19	19	67	10	8	49.73	49.73	49.73	149.16
3219	3/8	19	21	75	12.5	10	76.60	76.60	76.60	229.79
3614	1/2	14	26	87	16	12.5	86.21	86.21	86.21	258.61
4414	3/4	14	28	96	20	16	94.04	94.04	94.04	282.12
5211	1"	11	33	109	25	20	153.21	153.21	153.21	459.63
5611	1.1/4	11	36	119	31.5	25	247.02	247.02	247.02	741.05

CAPITAL

CUTTING TOOLS



PIPE TAPS - NPT

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T618	T619	T620-	T617-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2227	1/16	27	13	56	8	6.3	42.11	42.11	42.11	126.35
2427	1/8	27	15	59	8	6.3	35.83	35.83	35.83	107.49
2818	1/4	18	19	67	10	8	50.68	50.68	50.68	152.05
3218	3/8	18	21	75	12.5	10	76.60	76.60	76.60	229.79
3614	1/2	14	26	87	16	12.5	88.00	88.00	88.00	264.01
4014	5/8	14	26	91	18	14	95.49	95.49	95.49	286.48
4414	3/4	14	28	96	20	16	109.16	109.16	109.16	327.46
4811	7/8	11.5	29	102	22.4	18	131.33	131.33	131.33	394.00
5211	1"	11.5	33	109	25	20	157.76	157.76	157.76	473.27
5611	1.1/4	11.5	36	119	31.5	25	258.28	258.28	258.28	774.84
6011	1.1/2	11.5	37	125	35.5	28	405.03	405.03	405.03	1215.06
6811	2"	11.5	41	140	40	31.5	644.47	644.47	644.47	1933.43
7608	2.1/2	8	45	153	45	35.5	877.84	877.84	877.84	2633.51
8408	3"	8	48	164	50	40	1029.81	1029.81	1029.81	3089.42
8608	3.1/2	8	51	176	55	45	1369.76	1369.76	1369.76	4109.27
9408	4"	8	55	188	60	48.5	1497.74	1497.74	1497.74	4493.22

PIPE TAPS - NPTF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T624-	T625-	T626-	T623
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2227	1/16	27	13	56	8	6.3	47.85	47.85	47.85	143.57
2427	1/8	27	15	59	8	6.3	54.10	54.10	54.10	162.29
2818	1/4	18	19	67	10	8	72.66	72.66	72.66	217.97
3218	3/8	18	21	75	12.5	10	91.85	91.85	91.85	275.55
3614	1/2	14	26	87	16	12.5	105.27	105.27	105.27	315.82
4414	3/4	14	28	96	20	16	140.54	140.54	140.54	421.64
5211	1"	11.5	33	109	25	20	179.92	179.92	179.92	539.75
5611	1.1/4	11.5	36	119	31.5	25	275.67	275.67	275.67	827.03

CAPITAL

CUTTING TOOLS



PIPE TAPS - NPS

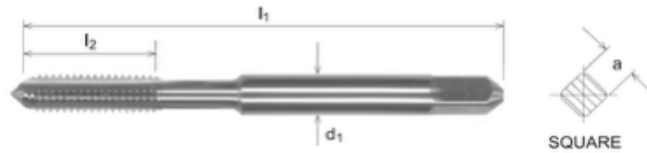
HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T644-	T645-	T646-	T643-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2227	1/16	27	13	52	6	4	69.10	69.10	69.10	207.30
2427	1/8	27	15	59	8	6.3	36.98	36.98	36.98	110.93
2818	1/4	18	19	67	10	8	60.10	60.10	60.10	180.30
3218	3/8	18	21	75	12.5	10	73.33	73.33	73.33	220.02
3614	1/2	14	26	87	16	12.5	112.15	112.15	112.15	336.43
4414	3/4	14	28	96	20	16	153.27	153.27	153.27	459.82
5211	1"	11.5	33	109	25	20	223.62	223.62	223.62	670.86
5611	1.1/4	11.5	36	119	31.5	25	250.95	250.95	250.95	752.82
6011	1.1/2	11.5	37	125	35.5	28	279.32	279.32	279.32	837.98
6811	2"	11.5	41	140	40	31.5	644.47	644.47	644.47	1933.41
7608	2.1/2	8	45	153	45	35.5	877.84	877.84	877.84	2633.53
8408	3"	8	48	164	50	40	1019.83	1019.83	1019.83	3059.44

PIPE TAPS - NPSF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T664-	T665-	T666-	T663-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2227	1/16	27	15	59	8	6.3	69.10	69.10	69.10	207.30
2427	1/8	27	15	59	8	6.3	27.77	27.77	27.77	83.28
2818	1/4	18	19	67	10	8	45.94	45.94	45.94	137.81
3218	3/8	18	21	75	12.5	10	55.52	55.52	55.52	166.53
3614	1/2	14	26	87	16	12.5	84.28	84.28	84.28	252.85
4414	3/4	14	28	96	20	16	119.06	119.06	119.06	357.14
5211	1"	11.5	33	109	25	20	233.66	233.66	233.66	700.98
5611	1.1/4	11.5	36	119	31.5	25	255.06	255.06	255.06	765.18
6011	1.1/2	11.5	37	125	35.5	28	287.18	287.18	287.18	861.57
6811	2"	11.5	41	140	40	31.5	644.47	644.47	644.47	1933.41



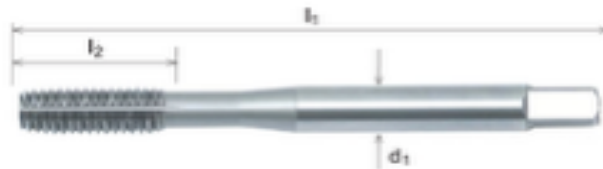
COBALT - DIN 371 HSS

REINFORCED SHANK - METRIC COARSE

Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T704-	T705-	T706-	T703-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0305	3.0	0.5	11	56	3.5	2.7	20.87	20.87	20.87	62.61
0402	4.0	0.7	13	63	4.5	3.4	18.23	18.23	18.23	54.66
0508	5.0	0.8	16	70	6	4.9	20.87	20.87	20.87	62.61
0610	6.0	1.0	19	80	6	4.9	20.87	20.87	20.87	62.61
0812	8.0	1.25	22	90	8	6.2	22.17	22.17	22.17	66.55
1015	10	1.5	24	100	10	8	28.82	28.82	28.82	86.44

COBALT - DIN 376 HSS

Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T714-	T715-	T716-	T713-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0305	3.0	0.5	11	56	2.2	1.7	20.87	20.87	20.87	62.61
0402	4.0	0.7	13	63	2.8	2.1	18.23	18.23	18.23	54.66
0508	5.0	0.8	16	70	3.5	2.7	20.87	20.87	20.87	62.61
0610	6.0	1.0	19	80	4.5	3.4	20.87	20.87	20.87	62.61
0812	8.0	1.25	22	90	6	4.9	22.17	22.17	22.17	66.55
1015	10	1.5	24	100	7	5.5	28.82	28.82	28.82	86.44
1217	12	1.75	29	110	9	7	42.11	42.11	42.11	126.35
1420	14	2.0	30	110	11	9	51.50	51.50	51.50	154.47
1620	16	2.0	32	110	12	9	58.11	58.11	58.11	174.36
1825	18	2.5	34	125	14	11	90.08	90.08	90.08	270.23
2025	20	2.5	34	140	16	12	100.75	100.75	100.75	302.23



FLUTELESS TAPS - METRIC

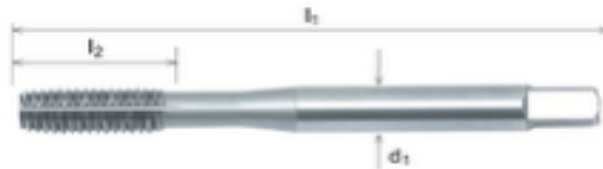
HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T107-0305	3.0	0.5	11	48	3.15	2.5	39.07
T107-0356	3.5	0.6	13	50	3.55	2.8	37.94
T107-0407	4.0	0.7	13	53	4	3.15	39.07
T107-0457	4.5	0.5	13	53	4	3.15	82.76
T107-0508	5.0	0.8	16	58	5	4	42.46
T107-0605	6.0	0.5	16	66	6.3	5	62.76
T107-0610	6.0	1.0	19	66	6.3	5	42.46
T107-0812	8.0	1.25	22	72	8	6.3	45.36
T107-1012	10	1.25	24	80	10	8	80.69
T107-1015	10	1.5	24	80	10	8	68.29
T107-1212	12	1.25	29	89	9	7.1	105.23
T107-1217	12	1.75	29	89	9	7.1	91.59
T107-1412	14	1.25	30	95	11.2	9	171.46
T107-1415	14	1.5	30	95	11.2	9	171.46
T107-1420	14	2.0	30	95	11.2	9	155.23
T107-1620	16	2.0	32	102	12.5	10	178.16
T107-1815	18	1.5	37	112	14	11.2	195.37
T107-2015	20	1.5	37	112	14	11.2	206.54

FLUTELESS TAPS - UNC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T207-0440	4	40	11	48	3.15	2.5	49.40
T207-0540	5	40	11	48	3.15	2.5	49.40
T207-0632	6	32	13	50	3.55	2.8	39.07
T207-0832	8	32	13	53	4.5	3.55	39.07
T207-1024	10	24	16	58	5	4	39.07
T207-2820	1/4	20	19	66	6.3	5	41.32
T207-3018	5/16	18	22	72	8	6.3	45.37
T207-3216	3/8	16	24	80	10	8	56.29
T207-3414	7/16	14	25	85	8	6.3	67.79
T207-3613	1/2	13	29	89	9	7.1	67.79



FLUTELESS TAPS - UNF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T227-0448	4	48	11	48	3.15	2.5	49.40
T227-0544	5	44	11	48	3.15	2.5	49.40
T227-0640	6	40	13	50	3.55	2.8	40.19
T227-0836	8	36	13	53	4.5	3.55	40.19
T227-1032	10	32	16	58	5	4	40.19
T227-1228	12	28	17	62	5.6	4.5	41.32
T227-2828	1/4	28	19	66	6.3	5	41.32
T227-3024	5/16	24	22	72	8	6.3	45.45
T227-3224	3/8	24	24	80	10	8	56.29
T227-3420	7/16	20	25	85	8	6.3	67.79
T227-3620	1/2	20	29	89	9	7.1	67.79

FLUTELESS TAPS - BSW

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T307-2440	1/8	40	11	48	3.15	2.5	42.46
T307-2624	3/16	24	16	58	5	4	42.46
T307-2820	1/4	20	19	66	6.3	5	41.32
T307-3018	5/16	18	22	72	8	6.3	45.22
T307-3216	3/8	16	24	80	10	8	56.27
T307-3414	7/16	14	25	85	8	6.3	69.92
T307-3612	1/2	12	29	89	9	7.1	69.92

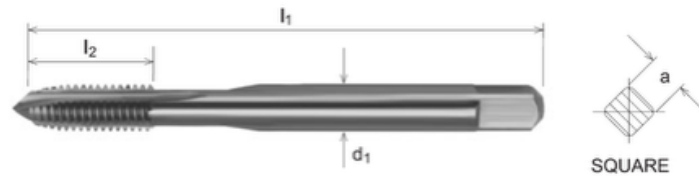
FLUTELESS TAPS - BSF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T327-2826	1/4	26	19	66	6.3	5	44.52
T327-3022	5/16	22	22	72	8	6.3	49.33
T327-3220	3/8	20	24	80	10	8	49.75
T327-3418	7/16	18	25	85	8	6.3	67.23
T327-3616	1/2	16	29	89	9	7.1	67.23

CAPITAL

CUTTING TOOLS



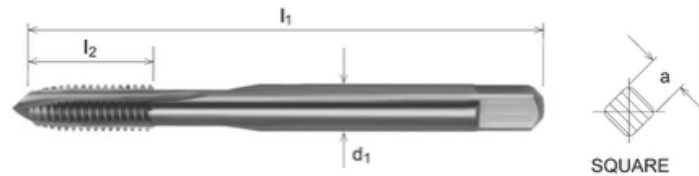
GUN NOSE TAPS - METRIC COARSE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T108-0254	2.5	0.45	11	48	3.15	2.5	38.55
T108-0305	3.0	0.5	11	48	3.15	2.5	14.84
T108-0356	3.5	0.6	13	50	3.55	2.8	14.84
T108-0402	4.0	0.7	13	53	4	3.15	12.39
T108-0457	4.5	0.75	13	53	4.5	3.55	14.33
T108-0508	5.0	0.8	16	58	5	4	11.78
T108-0610	6.0	1.0	19	66	6.3	5	14.23
T108-0710	7.0	1.0	19	66	7.1	5.6	20.25
T108-0812	8.0	1.25	22	72	8	6.3	15.31
T108-0912	9.0	1.25	22	72	9	7.1	18.75
T108-1015	10	1.5	24	80	10	8	20.33
T108-1115	11	1.5	25	85	8	6.3	31.09
T108-1217	12	1.75	29	89	9	7.1	33.72
T108-1420	14	2.0	30	95	11.2	9	43.67
T108-1620	16	2.0	32	102	12.5	10	54.17
T108-1825	18	2.5	37	112	14	11.2	73.76
T108-2025	20	2.5	37	112	14	11.2	93.40
T108-2225	22	2.5	38	118	16	12.5	100.24
T108-2430	24	3.0	45	130	18	14	121.64
T108-2730	27	3.0	45	135	20	16	137.56
T108-3035	30	3.5	48	138	20	16	205.45
T108-3335	33	3.5	51	151	22.4	18	378.16
T108-3640	36	4.0	57	162	25	20	397.00
T108-3940	39	4.0	60	170	28	22.4	407.81
T108-4245	42	4.5	60	170	28	22.4	426.34
T108-4545	45	4.5	67	187	31.5	25	440.77
T108-4850	48	5.0	67	187	31.5	25	465.48
T108-5250	52	5.0	70	200	35.5	28	512.85
T108-5655	56	5.5	70	200	35.5	28	727.30

CAPITAL

CUTTING TOOLS



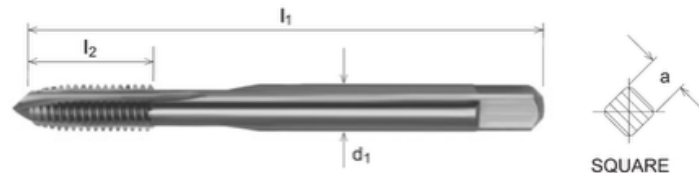
GUN NOSE TAPS - METRIC COARSE **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T118-0402	4.0	0.7	13	53	4	3.15	54.86
T118-0508	5.0	0.8	16	58	5	4	57.34
T118-0610	6.0	1.0	19	66	6.3	5	59.84
T118-0812	8.0	1.25	22	72	8	6.3	64.83
T118-1015	10	1.5	24	80	10	8	74.79
T118-1217	12	1.75	29	89	9	7.1	82.28
T118-1420	14	2.0	30	95	11.2	9	92.25
T118-1620	16	2.0	32	102	12.5	10	109.72
T118-1825	18	2.5	37	112	14	11.2	149.60
T118-2025	20	2.5	37	112	14	11.2	179.53
T118-2225	22	2.5	38	118	16	12.5	191.99
T118-2430	24	3.0	45	130	18	14	206.95
T118-2730	27	3.0	45	135	20	16	236.87
T118-3035	30	3.5	48	138	20	16	269.29
T118-3335	33	3.5	51	151	22.4	18	304.19
T118-3640	36	4.0	57	162	25	20	334.11

CAPITAL

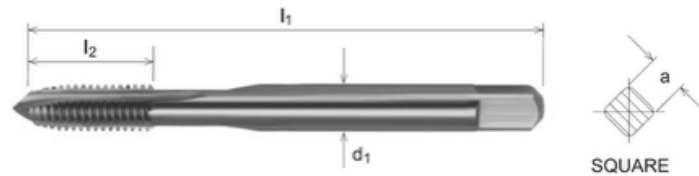
CUTTING TOOLS



GUN NOSE TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

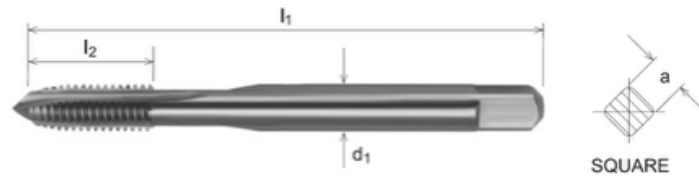
Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T128-0405	4.0	0.5	13	53	4	3.15	31.04
T128-0505	5.0	0.5	16	58	5	4	33.61
T128-0607	6.0	0.75	19	66	6.3	5	37.45
T128-0609	6.0	0.9	19	66	6.3	5	37.45
T128-0705	7.0	0.5	19	69	8	6.3	42.54
T128-0805	8.0	0.5	19	69	8	6.3	38.24
T128-0807	8.0	0.75	19	69	8	6.3	38.24
T128-0810	8.0	1.0	19	69	8	6.3	29.81
T128-0910	9.0	1.0	19	69	9	7.1	56.83
T128-1007	10	0.75	20	76	10	8	42.65
T128-1010	10	1.0	20	76	10	8	42.65
T128-1012	10	1.25	20	76	10	8	42.65
T128-1107	11	0.75	22	82	8	6.3	68.69
T128-1110	11	1.0	22	82	8	6.3	68.69
T128-1112	11	1.25	22	82	8	6.3	68.69
T128-1207	12	0.75	24	84	9	7.1	62.28
T128-1210	12	1.0	24	84	9	7.1	62.28
T128-1212	12	1.25	24	84	9	7.1	62.28
T128-1215	12	1.5	24	84	9	7.1	62.28
T128-1220	12	2.0	24	84	9	7.1	62.28
T128-1310	13	1.0	29	89	9	7.1	71.83
T128-1315	13	1.5	29	89	9	7.1	71.83
T128-1407	14	0.7	25	90	11.2	9	100.08
T128-1410	14	1.0	25	90	11.2	9	100.08
T128-1412	14	1.25	25	90	11.2	9	73.79
T128-1415	14	1.5	25	90	11.2	9	73.79
T128-1510	15	1.0	30	95	11.2	9	77.77
T128-1515	15	1.5	30	95	11.2	9	77.77
T128-1607	16	0.75	32	102	12.5	10	73.79
T128-1610	16	1.0	32	102	12.5	10	73.79
T128-1612	16	1.25	32	102	12.5	10	73.79
T128-1615	16	1.5	32	102	12.5	10	73.79



GUN NOSE TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

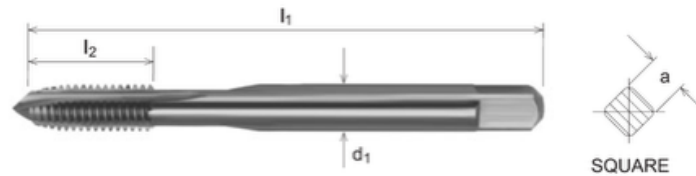
Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T128-1617	16	1.75	32	102	12.5	10	73.79
T128-1710	17	1.0	37	112	14	11.2	96.56
T128-1715	17	1.5	37	112	14	11.2	96.56
T128-1807	18	0.75	37	112	14	11.2	115.03
T128-1810	18	1.0	37	112	14	11.2	115.03
T128-1812	18	1.25	37	112	14	11.2	115.03
T128-1815	18	1.5	37	112	14	11.2	115.03
T128-1820	18	2.0	37	112	14	11.2	115.03
T128-2010	20	1.0	37	112	14	11.2	144.67
T128-2012	20	1.25	37	112	14	11.2	144.67
T128-2015	20	1.5	37	112	14	11.2	144.67
T128-2020	20	2.0	37	112	14	11.2	144.67
T128-2115	21	1.5	38	118	16	12.5	144.67
T128-2210	22	1.0	38	118	16	12.5	149.09
T128-2212	22	1.25	38	118	16	12.5	149.09
T128-2215	22	1.5	38	118	16	12.5	149.09
T128-2220	22	2.0	38	118	16	12.5	149.09
T128-2315	23	1.5	45	130	18	14	155.12
T128-2410	24	1.0	45	130	18	14	167.73
T128-2412	24	1.25	45	130	18	14	167.73
T128-2415	24	1.5	45	130	18	14	167.73
T128-2420	24	2.0	45	130	18	14	167.73
T128-2510	25	1.0	45	130	18	14	199.82
T128-2515	25	1.5	45	130	18	14	199.82
T128-2520	25	2.0	45	130	18	14	199.82
T128-2610	26	1.0	48	138	20	16	206.27
T128-2615	26	1.5	48	138	20	16	206.27
T128-2710	27	1.0	48	138	20	16	212.90
T128-2715	27	1.5	48	138	20	16	212.90
T128-2720	27	2.0	48	138	20	16	212.90
T128-2810	28	1.0	48	138	20	16	237.48
T128-2815	28	1.5	48	138	20	16	237.48



GUN NOSE TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T128-2820	28	2.0	48	138	20	16	237.48
T128-3010	30	1.0	48	138	20	16	229.79
T128-3015	30	1.5	48	138	20	16	229.79
T128-3020	30	2.0	48	138	20	16	229.81
T128-3025	30	2.5	48	138	20	16	229.81
T128-3030	30	3.0	48	138	20	16	229.81
T128-3210	32	1.0	51	151	22.4	18	235.73
T128-3215	32	1.5	51	151	22.4	18	235.73
T128-3220	32	2.0	51	151	22.4	18	235.73
T128-3310	33	1.0	51	151	22.4	18	255.44
T128-3315	33	1.5	51	151	22.4	18	255.44
T128-3320	33	2.0	51	151	22.4	18	255.44
T128-3330	33	3.0	51	151	22.4	18	255.44
T128-3410	34	1.0	57	162	25	20	261.29
T128-3415	34	1.5	57	162	25	20	261.29
T128-3515	35	1.5	57	162	25	20	264.11
T128-3610	36	1.0	57	162	25	20	267.12
T128-3615	36	1.5	57	162	25	20	267.12
T128-3620	36	2.0	57	162	25	20	267.12
T128-3630	36	3.0	57	162	25	20	267.12
T128-3810	38	1.0	60	170	28	22.4	310.54
T128-3815	38	1.5	60	170	28	22.4	310.54
T128-3820	38	2.0	60	170	28	22.4	310.54
T128-3910	39	1.0	60	170	28	22.4	310.54
T128-3915	39	1.5	60	170	28	22.4	310.54
T128-3920	39	2.0	60	170	28	22.4	310.54
T128-3930	39	3.0	60	170	28	22.4	310.54
T128-4010	40	1.0	60	170	28	22.4	336.70
T128-4015	40	1.5	60	170	28	22.4	336.70
T128-4020	40	2.0	60	170	28	22.4	336.70
T128-4210	42	1.0	60	170	28	22.4	348.03
T128-4215	42	1.5	60	170	28	22.4	348.03

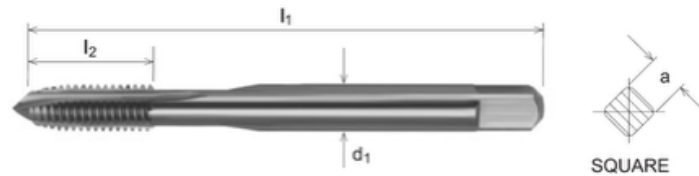


GUN NOSE TAPS - METRIC FINE
HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T128-4220	42	2.0	60	170	28	22.4	348.03
T128-4230	42	3.0	60	170	28	22.4	348.03
T128-4510	45	1.0	67	187	31.5	25	358.13
T128-4515	45	1.5	67	187	31.5	25	358.13
T128-4520	45	2.0	67	187	31.5	25	358.13
T128-4530	45	3.0	67	187	31.5	25	358.13
T128-4810	48	1.0	67	187	31.5	25	367.72
T128-4815	48	1.5	67	187	31.5	25	367.72
T128-4820	48	2.0	67	187	31.5	25	367.72
T128-4830	48	3.0	67	187	31.5	25	367.72
T128-5015	50	1.5	70	200	35.5	28	387.26

CAPITAL

CUTTING TOOLS



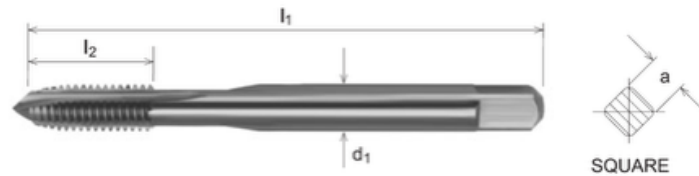
GUN NOSE TAPS - METRIC OVERSIZE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
TG146-0610.6	6	1.0 + .4	19	66	6.3	5	44.38
TG146-0812.4	8	1.25 + .4	22	72	8	6.3	47.95
TG146-1015.4	10	1.5 + .4	24	80	10	8	50.48
TG146-1217.4	12	1.75 + .4	29	89	9	7.1	61.29
TG146-1420.4	14	2.0 + .4	30	95	11.2	9	69.25
TG146-1620.4	16	2.0 + .4	32	102	12.5	10	75.80
TG146-1825.4	18	2.5 + .4	37	112	14	11.2	72.98
TG146-2025.4	20	2.5 + .4	37	112	14	11.2	108.14
TG146-2430.4	24	3.0 + .4	45	130	18	14	149.74
TG146-2430.45	24	3.0 + .45	45	130	18	14	149.74
TG146-3035.4	30	3.5 + .4	48	138	20	16	248.82
TG146-3640.4	36	4.0 + .4	57	162	25	20	443.73
TG146-3640.5	36	4.0 + .5	57	162	25	20	443.73

CAPITAL

CUTTING TOOLS



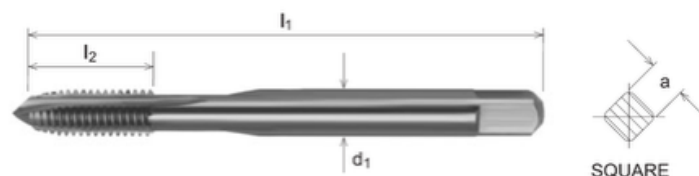
GUN NOSE TAPS - METRIC **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T138-0607	6.0	0.75	19	66	6.3	5	79.80
T138-0810	8.0	1.0	19	69	8	6.3	82.35
T138-1012	10	1.25	20	76	10	8	94.75
T138-1110	11	1.0	22	82	8	6.3	137.14
T138-1212	12	1.25	24	84	9	7.1	119.68
T138-1215	12	1.5	24	84	9	7.1	129.66
T138-1415	14	1.5	25	90	11.2	9	134.63
T138-1615	16	1.5	32	102	12.5	10	148.93
T138-2015	20	1.5	37	112	14	11.2	179.51
T138-2215	22	1.5	38	118	16	12.5	209.43
T138-3020	30	2.0	48	138	20	16	381.46
T138-3030	30	3.0	48	138	20	16	381.46

CAPITAL

CUTTING TOOLS



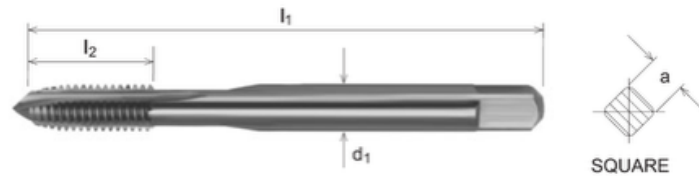
GUN NOSE TAPS - UNC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T208-0164	1	64	8	45	2.92	2.3	47.67
T208-0256	2	56	9	46	2.92	2.3	36.96
T208-0348	3	48	9	46	2.92	2.4	33.07
T208-0440	4	40	11	48	3.15	2.5	22.26
T208-0540	5	40	11	48	3.15	2.5	17.81
T208-0632	6	32	13	50	3.55	2.8	14.46
T208-0832	8	32	13	53	4.5	3.55	16.05
T208-1024	10	24	16	58	5	4	14.62
T208-1224	12	24	17	62	5.6	4.5	16.93
T208-2820	1/4	20	19	66	6.3	5	14.08
T208-3018	5/16	18	22	72	8	6.3	15.17
T208-3216	3/8	16	24	80	10	8	18.47
T208-3414	7/16	14	25	85	8	6.3	30.09
T208-3613	1/2	13	29	89	9	7.1	33.36
T208-3812	9/16	12	30	95	11.2	9	52.88
T208-4011	5/8	11	32	102	12.5	10	52.88
T208-4211	11/16	11	37	112	14	11.2	66.95
T208-4410	3/4	10	37	112	14	11.2	74.56
T208-4809	7/8	9	38	118	16	12.5	97.77
T208-5208	1"	8	45	130	18	14	120.52
T208-5407	1.1/8	7	48	138	20	16	198.79
T208-5607	1.1/4	7	51	151	22.4	18	229.12
T208-5806	1.3/8	6	57	162	25	20	308.75
T208-6006	1.1/2	6	60	170	28	22.4	347.90
T208-6404	1.3/4	5	67	187	31.5	25	432.51
T208-6804	2"	4.1/2	70	200	35.5	28	528.31

CAPITAL

CUTTING TOOLS



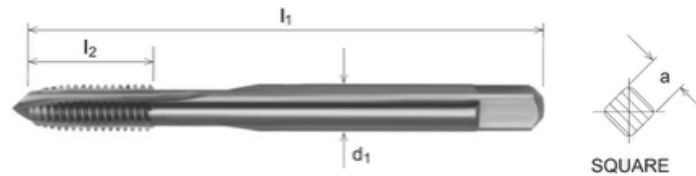
GUN NOSE TAPS - UNF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T228-0080	0	80	9	46	2.92	2.4	69.10
T228-0172	1	72	9	46	2.92	2.4	69.10
T228-0264	2	64	9	46	2.92	2.4	69.10
T228-0356	3	56	9	46	2.92	2.4	18.60
T228-0448	4	48	11	48	3.15	2.5	18.23
T228-0544	5	44	11	48	3.15	2.5	18.23
T228-0640	6	40	13	50	3.55	2.8	17.81
T228-0836	8	36	13	53	4.5	3.55	17.81
T228-1032	10	32	16	58	5	4	14.79
T228-1228	12	28	17	62	5.6	4.5	17.16
T228-2828	1/4	28	19	66	6.3	5	14.26
T228-3024	5/16	24	22	72	8	6.3	15.36
T228-3224	3/8	24	24	80	10	8	20.73
T228-3420	7/16	20	25	85	8	6.3	30.09
T228-3620	1/2	20	29	89	9	7.1	33.36
T228-3818	9/16	18	30	95	11.2	9	57.90
T228-4018	5/8	18	32	102	12.5	10	52.88
T228-4416	3/4	16	37	112	14	11.2	74.71
T228-4814	7/8	14	38	118	16	12.5	99.83
T228-5212	1"	12	45	130	18	14	121.13
T228-5214	1" UNS	14	45	130	18	14	144.72
T228-5312	1.1/16	12	48	138	20	16	190.53
T228-5412	1.1/8	12	48	138	20	16	199.56
T228-5512	1.3/16	12	48	138	20	16	208.25
T228-5612	1.1/4	12	51	151	22.4	18	215.08
T228-5712	1.5/16	12	51	151	22.4	18	237.27
T228-5812	1.3/8	12	57	162	25	20	260.24
T228-5912	1.7/16	12	57	162	25	20	265.51
T228-6012	1.1/2	12	60	170	28	22.4	278.86
T228-6112	1.9/16	12	60	170	28	22.4	354.74
T228-6212	1.5/8	12	60	170	28	22.4	399.74
T228-6412	1.3/4	12	67	187	31.5	25	484.16
T228-6612	1.7/8	12	67	187	31.5	25	492.85
T228-6812	2"	12	70	200	35.5	28	499.52

CAPITAL

CUTTING TOOLS



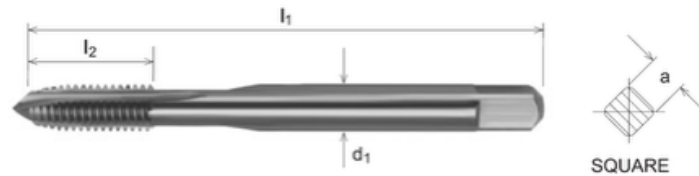
GUN NOSE TAPS - UNEF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T248-2832	1/4	32	19	66	6.3	5	34.84
T248-3032	5/16	32	22	72	8	6.3	38.90
T248-3232	3/8	32	24	80	10	8	43.92
T248-3428	7/16	28	25	85	8	6.3	47.46
T248-3628	1/2	28	29	89	9	7.1	57.24
T248-3824	9/16	24	30	95	11.2	9	93.20
T248-4024	5/8	24	32	102	12.5	10	68.86
T248-4224	11/16	24	37	112	14	11.2	78.83
T248-4420	3/4	20	37	112	14	11.2	81.19
T248-4620	13/16	20	38	118	16	12.5	182.18
T248-4820	7/8	20	38	118	16	12.5	188.37
T248-5020	15/16	20	45	130	18	14	192.52
T248-5220	1"	20	45	130	18	14	131.61
T248-5318	1.1/16	18	48	138	20	16	223.24
T248-5418	1.1/8	18	48	138	20	16	231.39
T248-5518	1.3/16	18	48	138	20	16	237.60
T248-5618	1.1/4	18	51	151	22.4	18	244.92
T248-5718	1.5/16	18	51	151	22.4	18	259.96
T248-5818	1.3/8	18	57	162	25	20	283.90
T248-5918	1.7/16	18	57	162	25	20	302.38
T248-6018	1.1/2	18	60	170	28	22.4	312.59

CAPITAL

CUTTING TOOLS



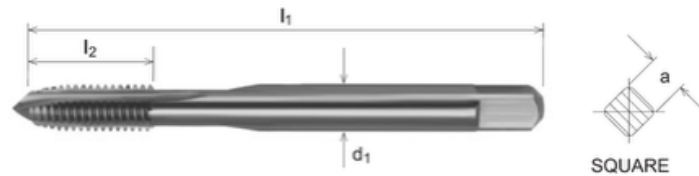
GUN NOSE TAPS - 8 UN SERIES

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T268-5408	1.1/8	8	48	138	20	16	163.56
T268-5608	1.1/4	8	51	151	22.4	18	180.00
T268-5808	1.3/8	8	57	162	25	20	234.00
T268-6008	1.1/2	8	60	170	28	22.4	268.45
T268-6208	1.5/8	8	60	170	28	22.4	419.50
T268-6408	1.3/4	8	67	187	31.5	25	490.76
T268-6608	1.7/8	8	67	187	31.5	25	497.76
T268-6808	2"	8	70	200	35.5	28	524.39
T268-7208	2.1/4	8	70	200	35.5	28	739.19
T268-7608	2.1/2	8	70	200	35.5	28	879.48
T268-8008	2.3/4	8	70	200	35.5	28	957.74
T268-8408	3"	8	70	200	35.5	28	1003.09

CAPITAL

CUTTING TOOLS



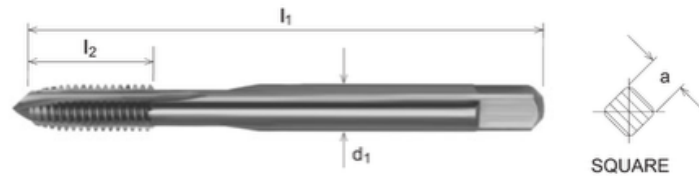
GUN NOSE TAPS - BSW

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T308-2440	1/8	40	11	48	3.15	2.5	22.14
T308-2532	5/32	32	13	53	4	3.15	21.37
T308-2624	3/16	24	16	58	5	4	17.53
T308-2724	7/32	24	18	64	6	4	17.53
T308-2820	1/4	20	19	66	6.3	5	14.90
T308-3018	5/16	18	22	72	8	6.3	15.99
T308-3216	3/8	16	24	80	10	8	21.78
T308-3414	7/16	14	25	85	8	6.3	31.47
T308-3612	1/2	12	29	89	9	7.1	34.92
T308-3812	9/16	12	30	95	11.2	9	60.52
T308-4011	5/8	11	32	102	12.5	10	56.29
T308-4211	11/16	11	35	107	14	11.2	78.73
T308-4410	3/4	10	37	112	14	11.2	78.73
T308-4610	13/16	10	38	118	16	12.5	99.85
T308-4809	7/8	9	38	118	16	12.5	99.85
T308-5008	15/16	9	42	126	18	14	121.15
T308-5208	1"	8	45	130	18	14	121.15
T308-5407	1.1/8	7	48	138	20	16	180.23
T308-5607	1.1/4	7	51	151	22.4	18	231.31
T308-5806	1.3/8	6	57	162	25	20	306.89
T308-6006	1.1/2	6	60	170	28	22.4	350.68
T308-6205	1.5/8	5	60	170	28	22.4	374.86

CAPITAL

CUTTING TOOLS



GUN NOSE TAPS - BSF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T328-2632	3/16	32	16	58	5	4	24.15
T328-2826	1/4	26	19	66	6.3	5	21.93
T328-3022	5/16	22	22	72	8	6.3	24.15
T328-3220	3/8	20	24	80	10	8	32.90
T328-3418	7/16	18	25	85	8	6.3	38.69
T328-3616	1/2	16	29	89	9	7.1	46.65
T328-3816	9/16	16	30	95	11.2	9	64.79
T328-4014	5/8	14	32	102	12.5	10	71.50
T328-4412	3/4	12	37	112	14	11.2	103.20
T328-4811	7/8	11	42	124	18	14	120.47
T328-5210	1"	10	45	130	18	14	149.08
T328-5409	1.1/8	9	48	138	20	16	184.66
T328-5609	1.1/4	9	51	151	22.4	18	236.34
T328-5808	1.3/8	8	57	162	25	20	314.11
T328-6008	1.1/2	8	60	170	28	22.4	354.82

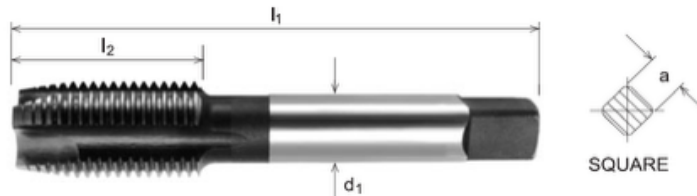
GUN NOSE TAPS - BSB

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T348-2826	1/4	26	19	66	6.3	5	17.93
T348-3026	5/16	26	22	72	8	6.3	33.05
T348-3226	3/8	26	24	80	10	8	33.05
T348-3426	7/16	26	25	85	8	6.3	49.51
T348-3626	1/2	26	29	89	9	7.1	59.04
T348-3826	9/16	26	30	95	11.2	9	64.71
T348-4026	5/8	26	32	102	12.5	10	64.71
T348-4226	11/16	26	34	107	12.5	10	104.44
T348-4426	3/4	26	37	112	14	11.2	110.49
T348-4626	13/16	26	38	118	16	12.5	139.04
T348-4826	7/8	26	42	124	18	14	143.08
T348-5026	15/16	26	45	130	18	14	161.08
T348-5226	1"	26	45	130	18	14	166.35
T348-5426	1.1/8	26	48	138	20	16	223.61
T348-5626	1.1/4	26	51	151	22.4	18	268.15

CAPITAL

CUTTING TOOLS



GUN NOSE TAPS - BSP

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T408-2428	1/8	28	15	59	8	6.3	26.63
T408-2819	1/4	19	19	67	10	8	36.42
T408-3219	3/8	19	21	75	12.5	10	47.06
T408-3614	1/2	14	26	87	16	12.5	74.71
T408-4014	5/8	14	26	91	18	14	102.79
T408-4414	3/4	14	28	96	20	16	104.32
T408-5211	1"	11	33	109	25	20	163.59
T408-5611	1.1/4	11	36	119	31.5	25	288.76
T408-6011	1.1/2	11	37	125	35.5	28	323.77

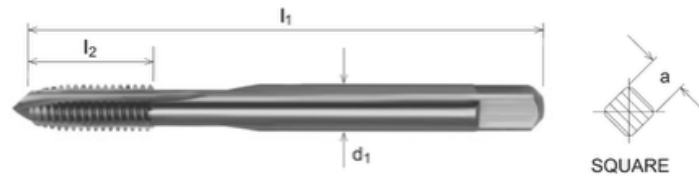
GUN NOSE TAPS - "G" BSP

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T428-2428	1/8	28	15	59	8	6.3	26.63
T428-2819	1/4	19	19	67	10	8	36.42
T428-3219	3/8	19	21	75	12.5	10	47.06
T428-3614	1/2	14	26	87	16	12.5	74.71
T428-4014	5/8	14	26	91	18	14	102.79
T428-4414	3/4	14	28	96	20	16	104.32
T428-4814	7/8	14	29	102	22.4	18	220.37
T428-5211	1"	11	33	109	25	20	163.59
T428-5611	1.1/4	11	36	119	31.5	25	288.76
T428-6011	1.1/2	11	37	125	35.5	28	323.77

CAPITAL

CUTTING TOOLS



GUN NOSE TAPS - BA

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T508-0025	0	25.38	19	66	6.3	5	33.74
T508-0128	1	28.25	17	62	5.6	4.5	44.58
T508-0231	2	31.36	16	58	5	4	33.74
T508-0334	3	34.84	13	53	4.5	3.55	42.36
T508-0438	4	38.46	13	50	3.55	2.8	42.36
T508-0543	5	43.1	11	48	3.15	2.5	44.51
T508-0647	6	47.85	9.5	44.5	2.8	2.24	44.51
T508-0752	7	52.91	9.5	44.5	2.8	2.24	58.51
T508-0859	8	59.17	9.5	44.5	2.8	2.24	58.51
T508-0964	9	64.94	8	41	2.5	2	57.77
T508-1072	10	72.46	8	41	2.5	2	66.22
T508-1290	12	90.91	7	40	2.5	2	69.38

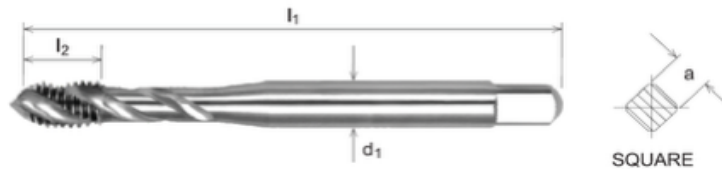
GUN NOSE TAPS - PG

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T548-0720	PG-7	20	29	89	9	7.1	55.27
T548-0918	PG-9	18	32	102	12.5	10	61.21
T548-1118	PG-11	18	37	112	14	11.2	72.28
T548-1318	PG-13.5	18	37	112	14	11.2	94.14
T548-1618	PG-16	18	38	118	16	12.5	116.71
T548-2116	PG-21	16	48	138	20	16	135.59
T548-2916	PG-29	16	60	170	28	22.4	235.44
T548-3616	PG-36	16	67	187	31.5	25	326.12
T548-4216	PG-42	16	70	200	35.5	28	437.63
T548-4816	PG-48	16	70	200	40	31.5	588.45

CAPITAL

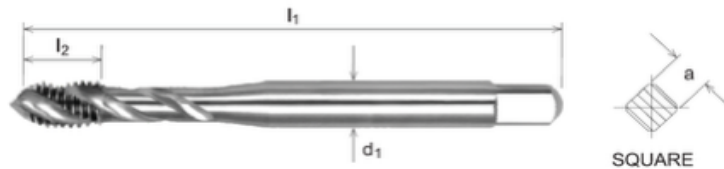
CUTTING TOOLS



SPIRAL FLUTE TAPS - METRIC COARSE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T109-0251	2.5	0.45	9.5	44.5	2.8	2.24	30.17
T109-0305	3.0	0.5	11	48	3.15	2.5	19.48
T109-0356	3.5	0.6	13	50	3.55	2.8	20.91
T109-0402	4.0	0.7	13	53	4	3.15	15.15
T109-0457	4.5	0.75	13	53	4.5	3.55	29.69
T109-0508	5.0	0.8	16	58	5	4	16.93
T109-0610	6.0	1.0	19	66	6.3	5	17.53
T109-0710	7.0	1.0	19	66	7.1	5.6	20.05
T109-0812	8.0	1.25	22	72	8	6.3	18.98
T109-1015	10	1.5	24	80	10	8	27.01
T109-1217	12	1.75	29	89	9	7.1	42.31
T109-1420	14	2.0	30	95	11.2	9	54.12
T109-1620	16	2.0	32	102	12.5	10	67.51
T109-1825	18	2.5	37	112	14	11.2	91.18
T109-2025	20	2.5	37	112	14	11.2	114.86
T109-2225	22	2.5	38	118	16	12.5	125.16
T109-2430	24	3.0	45	130	18	14	145.00
T109-2730	27	3.0	45	135	20	16	170.54
T109-3035	30	3.5	48	138	20	16	205.50
T109-3335	33	3.5	51	151	22.4	18	378.16
T109-3640	36	4.0	57	162	25	20	397.00
T109-3940	39	4.0	60	170	28	22.4	422.23
T109-4245	42	4.5	60	170	28	22.4	442.83
T109-4545	45	4.5	67	187	31.5	25	453.12
T109-4850	48	5.0	67	187	31.5	25	529.31



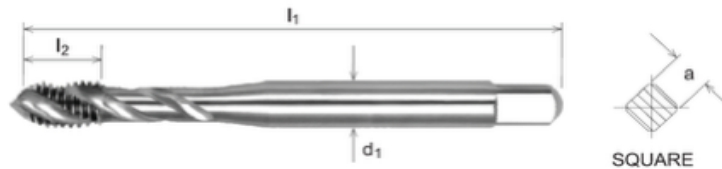
SPIRAL FLUTE TAPS - METRIC COARSE **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T119-0402	4.0	0.7	13	53	4	3.15	63.58
T119-0508	5.0	0.8	16	58	5	4	66.06
T119-0610	6.0	1.0	19	66	6.3	5	68.56
T119-0812	8.0	1.25	22	72	8	6.3	73.54
T119-1015	10	1.5	24	80	10	8	83.52
T119-1217	12	1.75	29	89	9	7.1	91.00
T119-1420	14	2.0	30	95	11.2	9	100.96
T119-1620	16	2.0	32	102	12.5	10	127.15
T119-1825	18	2.5	37	112	14	11.2	167.04
T119-2025	20	2.5	37	112	14	11.2	196.96
T119-2225	22	2.5	38	118	16	12.5	209.43
T119-2430	24	3.0	45	130	18	14	224.38
T119-2730	27	3.0	45	135	20	16	254.30
T119-3035	30	3.5	48	138	20	16	286.72
T119-3335	33	3.5	51	151	22.4	18	321.63
T119-3640	36	4.0	57	162	25	20	351.55

CAPITAL

CUTTING TOOLS



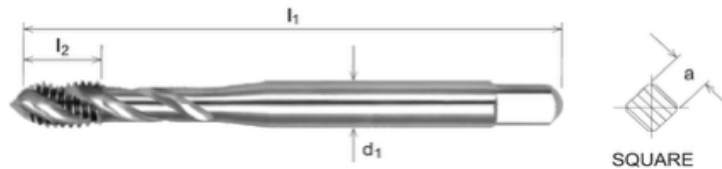
SPIRAL FLUTE TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T129-0204	2.0	0.4	8	41	2.5	2	41.91
T129-0407	4.0	0.75	13	53	4	3.15	29.69
T129-0505	5.0	0.5	16	58	5	4	37.45
T129-0507	5.0	0.75	16	58	5	4	37.45
T129-0510	5.0	1	16	58	5	4	37.45
T129-0605	6.0	0.5	19	66	6.3	5	37.45
T129-0607	6.0	0.75	19	66	6.3	5	37.45
T129-0805	8.0	0.5	19	69	8	6.3	29.81
T129-0807	8.0	0.75	19	69	8	6.3	29.81
T129-0810	8.0	1.0	19	69	8	6.3	29.81
T129-0815	8.0	1.5	19	69	8	6.3	29.81
T129-0905	9.0	0.5	19	69	9	7.1	56.83
T129-0910	9.0	1.0	19	69	9	7.1	56.83
T129-1005	10	0.5	20	76	10	8	42.65
T129-1007	10	0.75	20	76	10	8	42.65
T129-1010	10	1.0	20	76	10	8	42.65
T129-1012	10	1.25	20	76	10	8	42.65
T129-1020	10	2	20	76	10	8	42.65
T129-1110	11	1.0	22	82	8	6.3	68.69
T129-1112	11	1.25	22	82	8	6.3	68.69
T129-1210	12	1.0	24	84	9	7.1	62.28
T129-1212	12	1.25	24	84	9	7.1	62.28
T129-1215	12	1.5	24	84	9	7.1	62.28
T129-1310	13	1.0	29	89	9	7.1	71.83
T129-1315	13	1.5	29	89	9	7.1	71.83
T129-1410	14	1.0	25	90	11.2	9	100.08
T129-1412	14	1.25	25	90	11.2	9	73.79
T129-1415	14	1.5	25	90	11.2	9	73.79
T129-1510	15	1.0	30	95	11.2	9	77.77
T129-1515	15	1.5	30	95	11.2	9	77.77
T129-1610	16	1.0	32	102	12.5	10	73.79
T129-1612	16	1.25	32	102	12.5	10	73.79

CAPITAL

CUTTING TOOLS



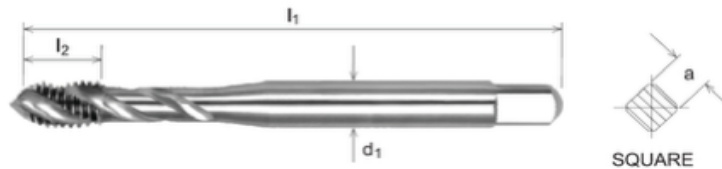
SPIRAL FLUTE TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T129-1615	16	1.5	32	102	12.5	10	73.79
T129-1810	18	1.0	37	112	14	11.2	115.03
T129-1812	18	1.25	37	112	14	11.2	115.03
T129-1815	18	1.5	37	112	14	11.2	115.03
T129-1820	18	2.0	37	112	14	11.2	115.03
T129-1915	19	1.5	37	112	14	11.2	115.03
T129-2010	20	1.0	37	112	14	11.2	144.69
T129-2012	20	1.25	37	112	14	11.2	144.69
T129-2015	20	1.5	37	112	14	11.2	144.69
T129-2020	20	2.0	37	112	14	11.2	144.69
T129-2210	22	1.0	38	118	16	12.5	149.44
T129-2212	22	1.25	38	118	16	12.5	149.44
T129-2215	22	1.5	38	118	16	12.5	149.44
T129-2220	22	2.0	38	118	16	12.5	149.44
T129-2410	24	1.0	45	130	18	14	211.24
T129-2412	24	1.25	45	130	18	14	211.24
T129-2415	24	1.5	45	130	18	14	211.24
T129-2420	24	2.0	45	130	18	14	211.24
T129-2510	25	1.0	45	130	18	14	273.70
T129-2515	25	1.5	45	130	18	14	273.70
T129-2520	25	2.0	45	130	18	14	273.70
T129-2610	26	1.0	48	138	20	16	276.00
T129-2615	26	1.5	48	138	20	16	276.00
T129-2710	27	1.0	48	138	20	16	276.00
T129-2715	27	1.5	48	138	20	16	276.00
T129-2720	27	2.0	48	138	20	16	276.00
T129-2810	28	1.0	48	138	20	16	292.46
T129-2815	28	1.5	48	138	20	16	292.46
T129-2820	28	2.0	48	138	20	16	292.46
T129-3010	30	1.0	48	138	20	16	296.59
T129-3015	30	1.5	48	138	20	16	296.59
T129-3020	30	2.0	48	138	20	16	296.59

CAPITAL

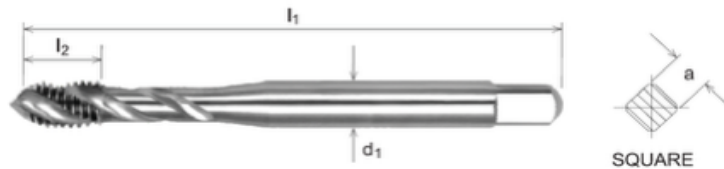
CUTTING TOOLS



SPIRAL FLUTE TAPS - METRIC FINE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T129-3030	30	3.0	48	138	20	16	296.59
T129-3210	32	1.0	51	151	22.4	18	336.12
T129-3215	32	1.5	51	151	22.4	18	336.12
T129-3220	32	2.0	51	151	22.4	18	336.12
T129-3310	33	1.0	51	151	22.4	18	375.32
T129-3315	33	1.5	51	151	22.4	18	375.32
T129-3320	33	2.0	51	151	22.4	18	375.32
T129-3330	33	3.0	51	151	22.4	18	375.32
T129-3410	34	1.0	57	162	25	20	398.99
T129-3415	34	1.5	57	162	25	20	398.99
T129-3610	36	1.0	57	162	25	20	358.38
T129-3615	36	1.5	57	162	25	20	358.38
T129-3620	36	2.0	57	162	25	20	358.38
T129-3630	36	3.0	57	162	25	20	358.38
T129-3910	39	1.0	60	170	28	22.4	385.14
T129-3915	39	1.5	60	170	28	22.4	385.14
T129-3920	39	2.0	60	170	28	22.4	385.14
T129-3930	39	3.0	60	170	28	22.4	385.14
T129-4010	40	1.0	60	170	28	22.4	405.75
T129-4015	40	1.5	60	170	28	22.4	405.75
T129-4020	40	2.0	60	170	28	22.4	405.75
T129-4210	42	1.0	60	170	28	22.4	416.05
T129-4215	42	1.5	60	170	28	22.4	416.05
T129-4220	42	2.0	60	170	28	22.4	416.05
T129-4230	42	3.0	60	170	28	22.4	416.05
T129-4510	45	1.0	67	187	31.5	25	426.34
T129-4515	45	1.5	67	187	31.5	25	426.34
T129-4520	45	2.0	67	187	31.5	25	426.34
T129-4530	45	3.0	67	187	31.5	25	426.34
T129-4810	48	1.0	67	187	31.5	25	438.71
T129-4815	48	1.5	67	187	31.5	25	438.71
T129-4820	48	2.0	67	187	31.5	25	438.71
T129-4830	48	3.0	67	187	31.5	25	438.71
T129-5015	50	1.5	70	200	35.5	28	471.66



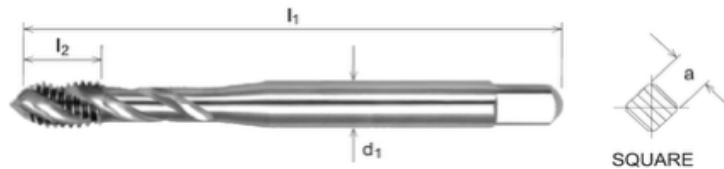
SPIRAL FLUTE TAPS - METRIC OVERSIZE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
TS146-0610.6	6	1.0 + .4	19	66	6.3	5	40.10
TS146-0812.4	8	1.25 + .4	22	72	8	6.3	42.96
TS146-1015.4	10	1.5 + .4	24	80	10	8	50.48
TS146-1217.4	12	1.75 + .4	29	89	9	7.1	61.29
TS146-1420.4	14	2.0 + .4	30	95	11.2	9	69.25
TS146-1620.4	16	2.0 + .4	32	102	12.5	10	75.80
TS146-2025.4	20	2.5 + .4	37	112	14	11.2	108.14
TS146-2430.4	24	3.0 + .4	45	130	18	14	149.74
TS146-2430.45	24	3.0 + .45	45	130	18	14	149.74
TS146-3035.4	30	3.5 + .4	48	138	20	16	248.81

CAPITAL

CUTTING TOOLS



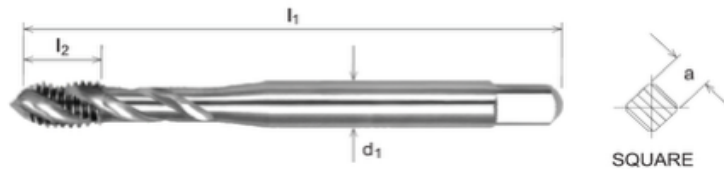
SPIRAL FLUTE TAPS - UNC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T209-0440	4	40	11	48	3.15	2.5	22.09
T209-0540	5	40	11	48	3.15	2.5	22.09
T209-0632	6	32	13	50	3.55	2.8	17.83
T209-0832	8	32	13	53	4.5	3.55	17.83
T209-1024	10	24	16	58	5	4	17.83
T209-1224	12	24	17	62	5.6	4.5	17.83
T209-2820	1/4	20	19	66	6.3	5	17.53
T209-3018	5/16	18	22	72	8	6.3	19.16
T209-3216	3/8	16	24	80	10	8	26.32
T209-3414	7/16	14	25	85	8	6.3	37.21
T209-3613	1/2	13	29	89	9	7.1	42.69
T209-3812	9/16	12	30	95	11.2	9	67.77
T209-4011	5/8	11	32	102	12.5	10	67.51
T209-4410	3/4	10	37	112	14	11.2	91.18
T209-4809	7/8	9	38	118	16	12.5	125.16
T209-5208	1"	8	45	130	18	14	145.11
T209-5407	1.1/8	7	48	138	20	16	271.89
T209-5607	1.1/4	7	51	151	22.4	18	284.22
T209-5806	1.3/8	6	57	162	25	20	354.26
T209-6006	1.1/2	6	60	170	28	22.4	374.86
T209-6404	1.3/4	5	67	187	31.5	25	405.75
T209-6804	2"	4.1/2	70	200	35.5	28	508.74

CAPITAL

CUTTING TOOLS



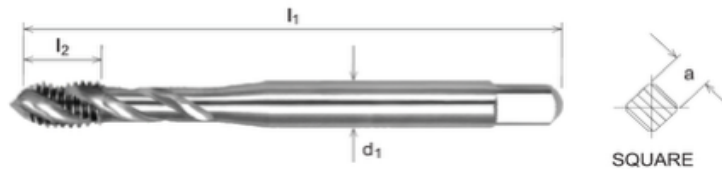
SPIRAL FLUTE TAPS - UNF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T229-0448	4	48	11	48	3.15	2.5	22.09
T229-0544	5	44	11	48	3.15	2.5	22.09
T229-0640	6	40	13	50	3.55	2.8	22.09
T229-0836	8	36	13	53	4.5	3.55	22.09
T229-1032	10	32	16	58	5	4	18.08
T229-1228	12	28	17	62	5.6	4.5	18.08
T229-2828	1/4	28	19	66	6.3	5	17.53
T229-3024	5/16	24	22	72	8	6.3	19.16
T229-3224	3/8	24	24	80	10	8	26.32
T229-3420	7/16	20	25	85	8	6.3	37.21
T229-3620	1/2	20	29	89	9	7.1	42.69
T229-3818	9/16	18	30	95	11.2	9	70.81
T229-4018	5/8	18	32	102	12.5	10	67.51
T229-4416	3/4	16	37	112	14	11.2	91.18
T229-4814	7/8	14	38	118	16	12.5	139.85
T229-5212	1"	12	45	130	18	14	176.05
T229-5214	1" UNS	14	45	130	18	14	227.92
T229-5312	1.1/16	12	48	138	20	16	251.69
T229-5412	1.1/8	12	48	138	20	16	271.89
T229-5512	1.3/16	12	48	138	20	16	276.16
T229-5612	1.1/4	12	51	151	22.4	18	284.22
T229-5712	1.5/16	12	51	151	22.4	18	315.11
T229-5812	1.3/8	12	57	162	25	20	354.26
T229-5912	1.7/16	12	57	162	25	20	364.54
T229-6012	1.1/2	12	60	170	28	22.4	374.86
T229-6112	1.9/16	12	60	170	28	22.4	371.44
T229-6212	1.5/8	12	60	170	28	22.4	380.10
T229-6412	1.3/4	12	67	187	31.5	25	406.55
T229-6612	1.7/8	12	67	187	31.5	25	426.94
T229-6812	2"	12	70	200	35.5	28	448.42

CAPITAL

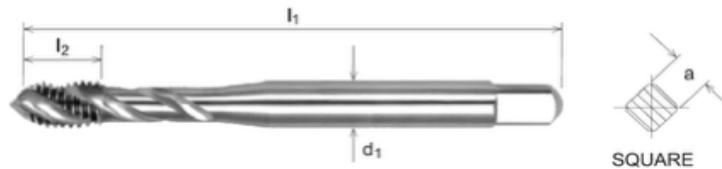
CUTTING TOOLS



SPIRAL FLUTE TAPS - UNEF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T249-2832	1/4	32	19	66	6.3	5	43.06
T249-3032	5/16	32	22	72	8	6.3	46.30
T249-3232	3/8	32	24	80	10	8	52.14
T249-3428	7/16	28	25	85	8	6.3	55.68
T249-3628	1/2	28	29	89	9	7.1	65.47
T249-3824	9/16	24	30	95	11.2	9	80.38
T249-4024	5/8	24	32	102	12.5	10	85.30
T249-4224	11/16	24	37	112	14	11.2	122.90
T249-4420	3/4	20	37	112	14	11.2	97.64
T249-4620	13/16	20	38	118	16	12.5	147.42
T249-4820	7/8	20	38	118	16	12.5	157.80
T249-5020	15/16	20	45	130	18	14	168.62
T249-5220	1"	20	45	130	18	14	190.41
T249-5318	1.1/16	18	48	138	20	16	236.90
T249-5418	1.1/8	18	48	138	20	16	254.35
T249-5518	1.3/16	18	48	138	20	16	254.35
T249-5618	1.1/4	18	51	151	22.4	18	287.74
T249-5718	1.5/16	18	51	151	22.4	18	321.10
T249-5818	1.3/8	18	57	162	25	20	355.28
T249-5918	1.7/16	18	57	162	25	20	373.15
T249-6018	1.1/2	18	60	170	28	22.4	390.50



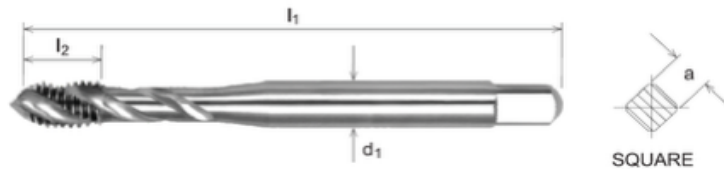
SPIRAL FLUTE TAPS - 8 UN SERIES

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T269-5408	1.1/8	8	48	138	20	16	274.86
T269-5608	1.1/4	8	51	151	22.4	18	295.46
T269-5808	1.3/8	8	57	162	25	20	361.02
T269-6008	1.1/2	8	60	170	28	22.4	390.17
T269-6208	1.5/8	8	60	170	28	22.4	422.51
T269-6408	1.3/4	8	67	187	31.5	25	460.56
T269-6608	1.7/8	8	67	187	31.5	25	532.18
T269-6808	2"	8	70	200	35.5	28	569.83
T269-7208	2.1/4	8	70	200	35.5	28	619.44
T269-7608	2.1/2	8	70	200	35.5	28	677.14
T269-8008	2.3/4	8	70	200	35.5	28	722.97
T269-8408	3"	8	70	200	35.5	28	761.81

CAPITAL

CUTTING TOOLS



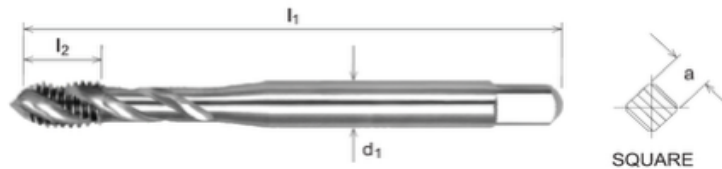
SPIRAL FLUTE TAPS - BSW

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T309-2440	1/8	40	11	48	3.15	2.5	21.52
T309-2532	5/32	32	13	53	4	3.15	22.29
T309-2624	3/16	24	16	58	5	4	22.29
T309-2724	7/32	24	18	64	6	4	18.29
T309-2820	1/4	20	19	66	6.3	5	20.02
T309-3018	5/16	18	22	72	8	6.3	27.47
T309-3216	3/8	16	24	80	10	8	27.47
T309-3414	7/16	14	25	85	8	6.3	38.90
T309-3612	1/2	12	29	89	9	7.1	44.58
T309-3812	9/16	12	30	95	11.2	9	74.10
T309-4011	5/8	11	32	102	12.5	10	70.57
T309-4211	11/16	11	35	107	14	11.2	87.85
T309-4410	3/4	10	37	112	14	11.2	87.85
T309-4610	13/16	10	38	118	16	12.5	125.16
T309-4809	7/8	9	38	118	16	12.5	125.16
T309-5008	15/16	9	42	126	18	14	145.11
T309-5208	1"	8	45	130	18	14	145.11
T309-5407	1.1/8	7	48	138	20	16	271.89
T309-5607	1.1/4	7	51	151	22.4	18	284.22
T309-5806	1.3/8	6	57	162	25	20	354.26
T309-6006	1.1/2	6	60	170	28	22.4	374.86
T309-6205	1.5/8	5	60	170	28	22.4	643.06

CAPITAL

CUTTING TOOLS



SPIRAL FLUTE TAPS - BSF

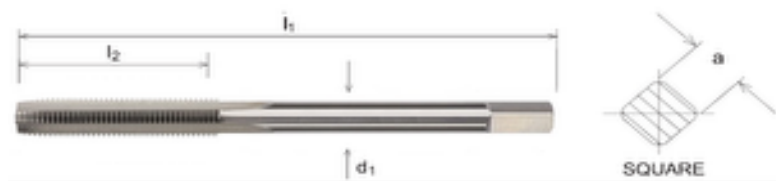
HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T329-2632	3/16	32	16	58	5	4	23.59
T329-2826	1/4	26	19	66	6.3	5	23.90
T329-3022	5/16	22	22	72	8	6.3	28.37
T329-3220	3/8	20	24	80	10	8	40.12
T329-3418	7/16	18	25	85	8	6.3	52.11
T329-3616	1/2	16	29	89	9	7.1	61.14
T329-3816	9/16	16	30	95	11.2	9	83.33
T329-4014	5/8	14	32	102	12.5	10	83.33
T329-4412	3/4	12	37	112	14	11.2	121.95
T329-4811	7/8	11	42	124	18	14	149.29
T329-5210	1"	10	45	130	18	14	191.73
T329-5409	1.1/8	9	48	138	20	16	271.89
T329-5609	1.1/4	9	51	151	22.4	18	284.22
T329-5808	1.3/8	8	57	162	25	20	354.26
T329-6008	1.1/2	8	60	170	28	22.4	374.86

SPIRAL FLUTE TAPS - "G" BSP

HIGH SPEED STEEL - GROUND THREAD

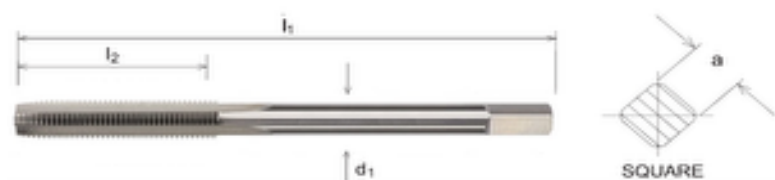
Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T429-2428	1/8	28	15	59	8	6.3	43.80
T429-2819	1/4	19	19	67	10	8	43.80
T429-3219	3/8	19	21	75	12.5	10	70.80
T429-3614	1/2	14	26	87	16	12.5	93.02
T429-4014	5/8	14	26	91	18	14	119.26
T429-4414	3/4	14	28	96	20	16	120.37
T429-4814	7/8	14	29	102	22.4	18	336.76
T429-5211	1"	11	33	109	25	20	387.21
T429-5611	1.1/4	11	36	119	31.5	25	453.12
T429-6011	1.1/2	11	37	125	35.5	28	508.74



MACHINE NUT TAPS - METRIC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T101-4-	T101-5-	T101-6-	T101-3-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0305	3.0	0.5	19	89	2.15	2.5	47.87	47.87	47.87	143.58
0356	3.5	0.6	25	89	2.55	2.8	47.87	47.87	47.87	143.58
0402	4.0	0.7	32	102	3.15	3.15	47.87	47.87	47.87	143.58
0508	5.0	0.8	41	108	3.85	4	64.60	64.60	64.60	193.79
0610	6.0	1.0	46	127	4.5	5	64.60	64.60	64.60	193.79
0710	7.0	1.0	51	127	5.6	5.6	64.60	64.60	64.60	193.79
0810	8.0	1.0	63	140	6.3	6.3	96.22	96.22	96.22	288.66
0812	8.0	1.25	63	140	6.3	6.3	67.80	67.80	67.80	203.43
0912	9.0	1.25	70	152	7.1	7.1	97.66	97.66	97.66	292.99
1015	10	1.5	76	152	8	8	97.66	97.66	97.66	292.99
1115	11	1.5	76	165	8	6.3	97.66	97.66	97.66	292.99
1212	12	1.25	83	178	9.6	7.1	168.55	168.55	168.55	505.64
1217	12	1.75	83	178	9.6	7.1	134.01	134.01	134.01	402.03
1420	14	2.0	92	190	11.2	9	134.01	134.01	134.01	402.03
1615	16	1.5	92	203	12.5	10	181.69	181.69	181.69	545.06
1620	16	2.0	92	203	12.5	10	142.79	142.79	142.79	428.40
1825	18	2.5	102	216	14	11.2	155.69	155.69	155.69	467.05
2025	20	2.5	102	229	14	11.2	190.53	190.53	190.53	571.57
2225	22	2.5	102	254	16	12.5	208.28	208.28	208.28	624.83
2430	24	3.0	115	254	18	14	275.26	275.26	275.26	825.79
2730	27	3.0	115	300	20	16	389.28	389.28	389.28	1167.82
3035	30	3.5	115	300	20	16	405.75	405.75	405.75	1217.25



MACHINE NUT TAPS - UNC

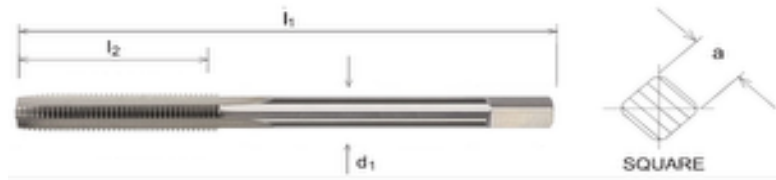
HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T201-4-	T201-5-	T201-6-	T201-3-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0832	8	32	25	95	2.55	2.8	51.34	51.34	51.34	154.00
1024	10	24	32	108	3.15	3.15	51.34	51.34	51.34	154.00
1224	12	24	36	115	3.15	3.15	55.45	55.45	55.45	166.35
2820	1/4	20	41	127	3.85	4	59.35	59.35	59.35	178.08
3018	5/16	18	46	140	4.5	5	59.35	59.35	59.35	178.08
3216	3/8	16	51	152	5.6	5.6	84.53	84.53	84.53	253.58
3414	7/16	14	60	165	5.6	5.6	112.53	112.53	112.53	337.60
3613	1/2	13	63	178	6.3	6.3	116.15	116.15	116.15	348.42
3812	9/16	12	70	190	7.1	7.1	125.23	125.23	125.23	375.68
4011	5/8	11	76	203	8	8	135.62	135.62	135.62	406.87
4410	3/4	10	83	229	9.6	7.1	152.38	152.38	152.38	457.17
4809	7/8	9	92	254	11.2	9	213.53	213.53	213.53	640.54
5208	1"	8	102	279	16	12.5	284.49	284.49	284.49	853.46

MACHINE NUT TAPS - UNF

HIGH SPEED STEEL - GROUND THREAD

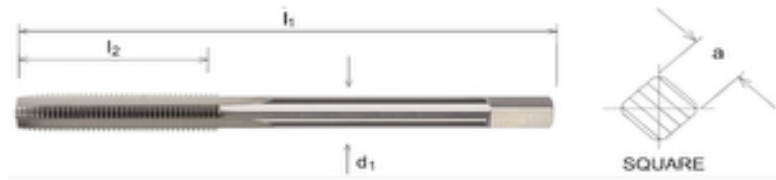
Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T221-4-	T221-5-	T221-6-	T221-3-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2828	1/4	28	41	127	3.85	4	58.20	58.20	58.20	174.61
3024	5/16	24	46	140	4.5	5	62.31	62.31	62.31	186.94
3224	3/8	24	51	152	5.6	5.6	88.74	88.74	88.74	266.23
3420	7/16	20	60	165	5.6	5.6	106.36	106.36	106.36	319.06
3620	1/2	20	63	178	6.3	6.3	121.95	121.95	121.95	365.84
3818	9/16	18	70	190	7.1	7.1	125.23	125.23	125.23	375.68
4018	5/8	18	76	203	8	8	135.62	135.62	135.62	406.87
4416	3/4	16	83	229	9.6	7.1	152.38	152.38	152.38	457.17
4814	7/8	14	92	254	11.2	9	212.52	212.52	212.52	640.54
5212	1"	12	102	279	16	12.5	284.49	284.49	284.49	853.46



MACHINE NUT TAPS - BSW

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T301-4-	T301-5-	T301-6-	T301-3-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2440	1/8	40	28	104	3.3	3.3	52.08	52.08	52.08	156.25
2532	5/32	32	32	108	3.3	3.3	80.32	80.32	80.32	240.98
2624	3/16	24	32	108	3.3	3.3	52.08	52.08	52.08	156.25
2724	7/32	24	41	127	4.7	4	80.32	80.32	80.32	240.98
2820	1/4	20	41	127	4.7	4	57.44	57.44	57.44	172.30
3018	5/16	18	46	140	6	5	62.31	62.31	62.31	186.94
3216	3/8	16	50	152	7.5	6.3	88.74	88.74	88.74	266.23
3414	7/16	14	60	165	9	6.3	106.16	106.16	106.16	318.49
3612	1/2	12	63	178	9.5	7.1	121.95	121.95	121.95	365.84
3812	9/16	12	70	190	11.5	9	125.23	125.23	125.23	375.68
4011	5/8	11	76	203	13	10	129.16	129.16	129.16	387.49
4211	11/16	11	82	228	15	11.2	145.16	145.16	145.16	435.47
4410	3/4	10	82	228	15	11.2	145.16	145.16	145.16	435.47
4609	13/16	9	92	254	18	12.5	213.53	213.53	213.53	640.54
4809	7/8	9	92	254	18	12.5	213.53	213.53	213.53	640.54
5009	15/16	9	101	279	21	14	271.06	271.06	271.06	812.85
5208	1"	8	101	279	21	14	271.06	271.06	271.06	812.85



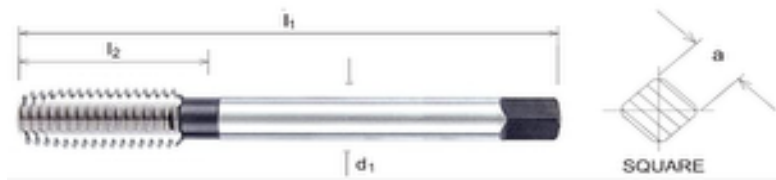
MACHINE NUT TAPS - BSF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T321-4-	T321-5-	T321-6-	T321-3-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2632	3/16	32	32	108	3.3	3.3	58.39	58.39	58.39	172.25
2826	1/4	26	41	127	4.7	4	63.53	63.53	63.53	190.55
3022	5/16	22	46	140	6	5	69.33	69.33	69.33	207.97
3220	3/8	20	50	152	7.5	6.3	92.62	92.62	92.62	277.87
3418	7/16	18	60	165	9	6.3	106.36	106.36	106.36	319.06
3616	1/2	16	63	178	9.5	7.1	121.95	121.95	121.95	365.84
3816	9/16	16	70	190	11.5	9	125.23	125.23	125.23	375.68
4014	5/8	14	76	203	13	10	135.62	135.62	135.62	406.87
4412	3/4	12	82	228	15	11.2	152.40	152.40	152.40	457.23
4811	7/8	11	92	254	18	12.5	213.53	213.53	213.53	640.54
5210	1"	10	101	279	21	14	284.49	284.49	284.49	853.46

CAPITAL

CUTTING TOOLS



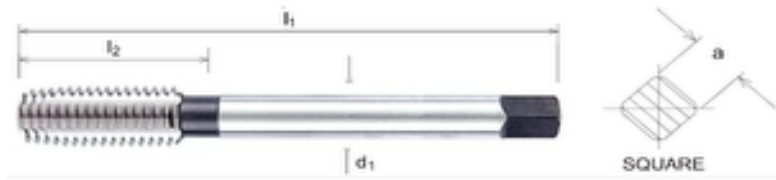
EXTENSION TAPS - METRIC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T102-4-	T102-5-	T102-6-	T102-3-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
0508	5.0	0.8	24	87	5	4	67.97	67.97	67.97	203.90
0610	6.0	1.0	28.5	99	6.3	5	67.97	67.97	67.97	203.90
0710	7.0	1.0	28.5	99	7.1	5.6	67.97	67.97	67.97	203.90
0812	8.0	1.25	33	108	8	6.3	70.02	70.02	70.02	210.09
0912	9.0	1.25	33	108	9	7.1	100.91	100.91	100.91	302.76
1012	10	1.25	36	120	10	8	100.91	100.91	100.91	302.76
1015	10	1.5	36	120	10	8	100.91	100.91	100.91	302.76
1115	11	1.5	37.5	127	8	6.3	137.99	137.99	137.99	413.99
1217	12	1.75	43.5	133	9	7.1	137.99	137.99	137.99	413.99
1420	14	2.0	45	142	11.2	9	137.99	137.99	137.99	413.99
1620	16	2.0	48	153	12.5	10	152.40	152.40	152.40	457.23
1815	18	1.5	55.5	168	14	11.2	160.66	160.66	160.66	481.94
1825	18	2.5	55.5	168	14	11.2	160.66	160.66	160.66	481.94
2015	20	1.5	55.5	168	14	11.2	201.85	201.85	201.85	605.54
2020	20	2.0	55.5	168	14	11.2	201.85	201.85	201.85	605.54
2025	20	2.5	55.5	168	14	11.2	201.85	201.85	201.85	605.54
2225	22	2.5	57	177	16	12.5	220.37	220.37	220.37	661.14
2430	24	3.0	67.5	195	18	14	286.28	286.28	286.28	858.85
2730	27	3.0	67.5	202	20	16	363.94	363.94	363.94	1091.80
3035	30	3.5	72	207	20	16	383.93	383.93	383.93	1151.79
3335	33	3.5	76.5	226	22.4	18	457.92	457.92	457.92	1373.75
3640	36	4.0	85.5	243	25	20	497.91	497.91	497.91	1493.72
3940	39	4.0	90	255	28	22.4	575.89	575.89	575.89	1727.69
4245	42	4.5	90	255	28	22.4	629.89	629.89	629.89	1889.66
4545	45	4.5	100.5	280	31.5	25	593.89	593.89	593.89	1781.67
4850	48	5.0	100.5	280	31.5	25	878.12	878.12	878.12	2634.37

CAPITAL

CUTTING TOOLS



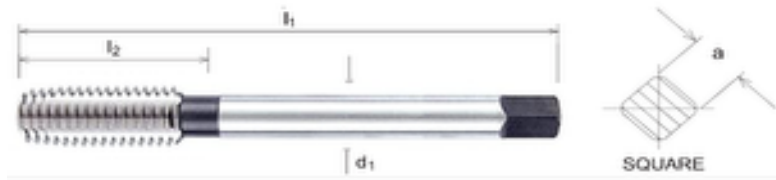
EXTENSION TAPS - UNC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T202-4-	T202-5-	T202-6-	T202-3-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2820	1/4	20	28.5	99	6.3	5	65.91	65.91	65.91	197.72
3018	5/16	18	33	108	8	6.3	65.91	65.91	65.91	197.72
3216	3/8	16	36	120	10	8	90.63	90.63	90.63	271.89
3414	7/16	14	37.5	127.5	8	6.3	109.17	109.17	109.17	327.48
3613	1/2	13	43.5	133.5	9	7.1	121.51	121.51	121.51	364.54
3812	9/16	12	45	142.5	11.2	9	129.77	129.77	129.77	389.28
4011	5/8	11	48	153	12.5	10	137.99	137.99	137.99	413.99
4410	3/4	10	55.5	168	14	11.2	158.60	158.60	158.60	475.77
4809	7/8	9	57	177	16	12.5	224.51	224.51	224.51	673.51
5208	1"	8	67.5	195	18	14	275.94	275.94	275.94	827.85
5407	1.1/8	7	72	207	20	16	383.93	383.93	383.93	1151.79
5607	1.1/4	7	76.5	226	22.4	18	457.92	457.92	457.92	1373.75
5806	1.3/8	6	85.5	243	25	20	497.91	497.91	497.91	1493.72
6006	1.1/2	6	90	255	28	22.4	595.89	595.89	595.89	1787.68
6404	1.3/4	5	100	280	31.5	25	619.89	619.89	619.89	1859.65
6804	2"	4.1/2	105	300	35.5	28	909.84	909.84	909.84	2729.51

CAPITAL

CUTTING TOOLS



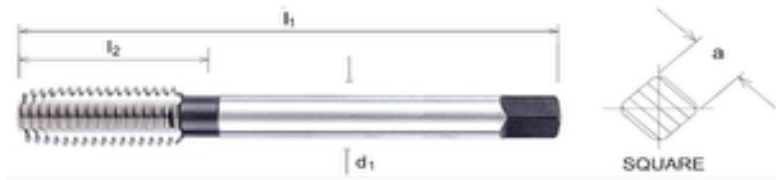
EXTENSION TAPS - UNF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T222-4-	T222-5-	T222-6-	T222-3-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2828	1/4	28	28.5	99	6.3	5	59.74	59.74	59.74	179.20
3024	5/16	24	33	108	8	6.3	65.91	65.91	65.91	197.72
3224	3/8	24	36	120	10	8	90.63	90.63	90.63	271.89
3420	7/16	20	37.5	127.5	8	6.3	109.17	109.17	109.17	327.48
3620	1/2	20	43.5	133.5	9	7.1	105.06	105.06	105.06	364.54
3818	9/16	18	45	142.5	11.2	9	127.69	127.69	127.69	383.08
4018	5/8	18	48	153	12.5	10	137.99	137.99	137.99	413.99
4416	3/4	16	55.5	168	14	11.2	152.40	152.40	152.40	457.23
4814	7/8	14	57	177	16	12.5	216.26	216.26	216.26	648.78
5212	1"	12	67.5	195	18	14	277.94	277.94	277.94	833.84
5312	1.1/16	12	72	207	20	16	293.94	293.94	293.94	881.85
5412	1.1/8	12	72	207	20	16	325.93	325.93	325.93	978.34
5512	1.3/16	12	72	207	20	16	393.93	393.93	393.93	1181.79
5612	1.1/4	12	76.5	226	22.4	18	457.92	457.92	457.92	1373.75
5712	1.5/16	12	76.5	226	22.4	18	471.93	471.93	471.93	1415.75
5812	1.3/8	12	85.5	243	25	20	497.91	497.91	497.91	1493.72
5912	1.7/16	12	85.5	243	25	20	525.91	525.91	525.91	1577.72
6012	1.1/2	12	90	255	28	22.4	595.89	595.89	595.89	1787.68
6112	1.9/16	12	90	255	28	22.4	607.90	607.90	607.90	1823.67
6212	1.5/8	12	90	255	28	22.4	607.90	607.90	607.90	1823.67
6412	1.3/4	12	100	280	31.5	25	619.89	619.89	619.89	1859.65
6612	1.7/8	12	100	280	31.5	25	639.88	639.88	639.88	1919.65
6812	2"	12	105	300	35.5	28	909.84	909.84	909.84	2729.51

CAPITAL

CUTTING TOOLS



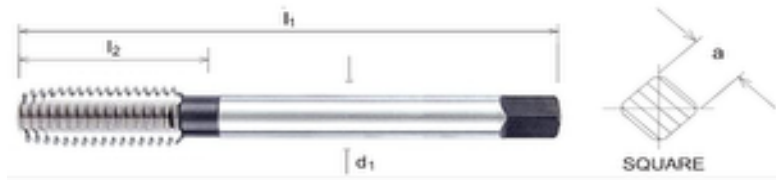
EXTENSION TAPS - BSW

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T302-4-	T302-5-	T302-6-	T302-3-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2820	1/4	20	28.5	99	6.3	5	59.74	59.74	59.74	179.20
3018	5/16	18	33	108	8	6.3	67.97	67.97	67.97	203.90
3216	3/8	16	36	120	10	8	90.63	90.63	90.63	271.89
3414	7/16	14	37.5	127	8	6.3	109.17	109.17	109.17	327.48
3612	1/2	12	43.5	133	9	7.1	129.77	129.77	129.77	389.28
3812	9/16	12	45	142	11.2	9	137.99	137.99	137.99	413.99
4011	5/8	11	48	153	12.5	10	142.12	142.12	142.12	426.34
4211	11/16	11	48	153	12.5	10	152.40	152.40	152.40	457.23
4410	3/4	10	55.5	168	14	11.2	254.65	254.65	254.65	763.94
4609	13/16	9	55.5	168	14	11.2	224.51	224.51	224.51	673.51
4809	7/8	9	57	177	16	12.5	224.51	224.51	224.51	673.51
5009	15/16	9	57	177	16	12.5	282.17	282.17	282.17	846.50
5208	1"	8	67.5	195	18	14	273.95	273.95	273.95	821.85
5407	1.1/8	7	72	207	20	16	325.93	325.93	325.93	977.82
5607	1.1/4	7	76.5	226	22.4	18	457.92	457.92	457.92	1373.74
5806	1.3/8	6	85.5	243	25	20	497.91	497.91	497.91	1493.72
6006	1.1/2	6	90	255	28	22.4	595.89	595.89	595.89	1787.68
6205	1.5/8	5	90	255	28	22.4	607.90	607.90	607.90	1823.67
6405	1.3/4	5	100	280	31.5	25	619.89	619.89	619.89	1859.65
6604	1.7/8	4	100	280	31.5	25	639.88	639.88	639.88	1919.65
6804	2"	4	105	300	35.5	28	909.84	909.84	909.84	2729.51

CAPITAL

CUTTING TOOLS



EXTENSION TAPS - BSF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom	Set
							Code Prefix	Code Prefix	Code Prefix	Code Prefix
							T322-4-	T322-5-	T322-6-	T322-3-
							\$ ea.	\$ ea.	\$ ea.	\$ ea.
2826	1/4	26	28.5	99	6.3	5	70.02	70.02	70.02	210.09
3022	5/16	22	33	108	8	6.3	74.15	74.15	74.15	222.44
3220	3/8	20	36	120	10	8	94.75	94.75	94.75	284.22
3418	7/16	18	37.5	127	8	6.3	109.17	109.17	109.17	327.48
3616	1/2	16	43.5	133	9	7.1	127.69	127.69	127.69	382.14
3816	9/16	16	45	142	11.2	9	131.82	131.82	131.82	395.45
4014	5/8	14	48	153	12.5	10	140.06	140.06	140.06	420.17
4214	11/16	14	51	160	12.5	10	152.40	152.40	152.40	457.23
4412	3/4	12	55.5	168	14	11.2	158.60	158.60	158.60	475.77
4612	13/16	12	57	177	16	12.5	220.37	220.37	220.37	661.14
4811	7/8	11	63	186	18	14	220.37	220.37	220.37	661.14
5210	1"	10	67.5	195	18	14	283.95	283.95	283.95	851.84
5409	1.1/8	9	72	207	20	16	333.95	333.95	333.95	1001.83
5609	1.1/4	9	76.5	226	22.4	18	471.93	471.93	471.93	1415.75
5808	1.3/8	8	85	243	25	20	509.90	509.90	509.90	1529.73
6008	1.1/2	8	90	255	28	22.4	607.90	607.90	607.90	1823.67

CAPITAL

CUTTING TOOLS



COMBINATION DRILL AND TAP

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
DT-0305	3.0	0.5	12	35	2.5	2.5	88.58
DT-0407	4.0	0.7	14	38	3.3	3.15	91.41
DT-0508	5.0	0.8	18	40	4.2	4	95.21
DT-0610	6.0	1.0	18	43	5	5	117.35
DT-0812	8.0	1.25	23	51	6.8	6.3	141.92
DT-1015	10	1.5	32	59	8.5	8	169.47
DT-1217	12	1.75	38	65	10.3	9.5	182.55

CAPITAL

CUTTING TOOLS



ACME TYPE TAPS

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T80-3606	1/2	6	60	108	10	7.1	363.94
T80-3608	1/2	8	60	108	10	7.1	363.94
T80-3610	1/2	10	60	108	10	7.1	363.94
T80-4005	5/8	5	80	140	13	10	419.91
T80-4006	5/8	6	80	140	13	10	419.91
T80-4008	5/8	8	80	140	13	10	419.91
T80-4010	5/8	10	80	140	13	10	419.91
T80-4404	3/4	4	96	165	15	11.2	483.91
T80-4405	3/4	5	96	165	15	11.2	483.91
T80-4406	3/4	6	96	165	15	11.2	483.91
T80-4408	3/4	8	96	165	15	11.2	483.91
T80-4410	3/4	10	96	165	15	11.2	483.91
T80-4804	7/8	4	108	184	18	12.5	543.90
T80-4806	7/8	6	108	184	18	12.5	543.90
T80-5204	1"	4	117	200	21	14	663.89
T80-5205	1"	5	117	200	21	14	663.89
T80-5206	1"	6	117	200	21	14	663.89
T80-5208	1"	8	117	200	21	14	663.89
T80-5405	1.1/8	5	123	212	21.5	16	728.88
T80-5604	1.1/4	4	133	228	22.4	18	793.87
T80-5605	1.1/4	5	133	228	22.4	18	793.87
T80-5606	1.1/4	6	133	228	22.4	18	793.87
T80-6004	1.1/2	4	145	240	24	20	922.82

CAPITAL

CUTTING TOOLS



ACME TYPE TAPS **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
T81-3606	1/2	6	60	108	10	7.1	379.94
T81-3608	1/2	8	60	108	10	7.1	379.94
T81-3610	1/2	10	60	108	10	7.1	379.94
T81-4006	5/8	6	80	140	13	10	435.92
T81-4008	5/8	8	80	140	13	10	435.92
T81-4010	5/8	10	80	140	13	10	435.92
T81-4404	3/4	4	96	165	15	11.2	503.92
T81-4405	3/4	5	96	165	15	11.2	503.92
T81-4406	3/4	6	96	165	15	11.2	503.92
T81-4408	3/4	8	96	165	15	11.2	503.92
T81-4804	7/8	4	108	184	18	12.5	559.91
T81-4806	7/8	6	108	184	18	12.5	559.91
T81-5205	1"	5	117	200	21	14	679.89
T81-5206	1"	6	117	200	21	14	679.89
T81-5404	1.1/8	4	123	212	21.5	16	745.07
T81-5605	1.1/4	5	133	228	22.4	18	939.96
T81-6004	1.1/2	4	145	240	24	20	984.35



TRAPEZOIDAL TYPE TAPS - TRAPEZOIDAL

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T82-1015	10	1.5	60	108	10	8	339.94
T82-1020	10	2.0	60	108	10	8	339.94
T82-1030	10	3.0	60	108	10	8	339.94
T82-1120	11	2.0	60	108	10	8	351.56
T82-1130	11	3.0	60	108	10	8	351.56
T82-1220	12	2.0	60	108	10	8	363.94
T82-1230	12	3.0	60	108	10	8	363.94
T82-1430	14	3.0	70	124	11.2	9	393.93
T82-1440	14	4.0	70	124	11.2	9	393.93
T82-1620	16	2.0	80	140	12.5	10	429.93
T82-1630	16	3.0	80	140	12.5	10	429.93
T82-1640	16	4.0	80	140	12.5	10	429.93
T82-1830	18	2.0	88	152	14	11.2	503.92
T82-1820	18	3.0	88	152	14	11.2	503.92
T82-1840	18	4.0	88	152	14	11.2	503.92
T82-1925	19	2.5	88	152	14	11.2	523.37
T82-2020	20	2.0	96	165	14	11.2	543.90
T82-2030	20	3.0	96	165	14	11.2	543.90
T82-2040	20	4.0	96	165	14	11.2	543.90
T82-2250	22	5.0	108	184	16	12.5	577.89
T82-2430	24	3.0	117	200	18	14	677.88
T82-2440	24	4.0	117	200	18	14	677.88
T82-2450	24	5.0	117	200	18	14	677.88
T82-2550	25	5.0	117	200	18	14	725.09
T82-3060	30	6.0	133	228	20	16	773.86
T82-3660	36	6.0	146	254	25	20	832.87

CAPITAL

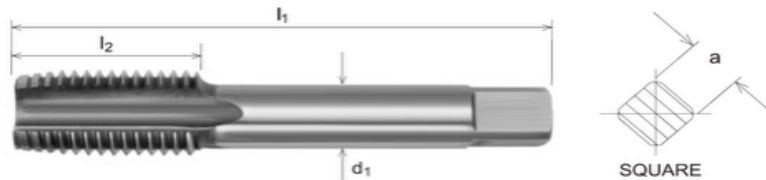
CUTTING TOOLS



TRAPEZOIDAL TYPE TAPS - TRAPEZOIDAL **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
T83-1015	10	1.5	60	108	10	8	351.93
T83-1020	10	2.0	60	108	10	8	351.93
T83-1120	11	2.0	60	108	10	8	362.38
T83-1220	12	2.0	60	108	9	7.1	377.95
T83-1230	12	3.0	60	108	9	7.1	377.95
T83-1430	14	3.0	70	124	11.2	9	407.86
T83-1440	14	4.0	70	124	11.2	9	407.86
T83-1620	16	2.0	80	140	12.5	10	445.93
T83-1630	16	3.0	80	140	12.5	10	445.93
T83-1640	16	4.0	80	140	12.5	10	445.93
T83-1820	18	2.0	88	152	14	11.2	517.91
T83-1840	18	4.0	88	152	14	11.2	517.91
T83-1850	18	5.0	88	152	14	11.2	517.91
T83-2020	20	2.0	96	165	14	11.2	563.90
T83-2040	20	4.0	96	165	14	11.2	563.90
T83-2250	22	5.0	108	184	16	12.5	621.28
T83-2450	24	5.0	117	200	18	14	707.87

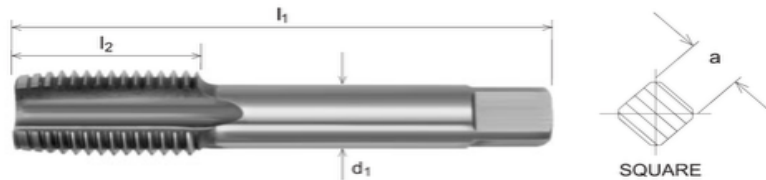


THREAD INSERT TAPS - METRIC COARSE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom
							Code Prefix	Code Prefix	Code Prefix
							TI104-	TI105-	TI106-
							\$ ea.	\$ ea.	\$ ea.
0305	3.0	0.5	11	48	3.15	2.5	31.91	31.91	31.91
0356	3.5	0.6	13	50	3.55	2.8	37.22	37.22	37.22
0402	4.0	0.7	13	53	4	3.15	31.12	31.12	31.12
0508	5.0	0.8	16	58	5	4	30.25	30.25	30.25
0610	6.0	1.0	19	66	6.3	5	31.35	31.35	31.35
0710	7.0	1.0	19	66	7.1	5.6	36.58	36.58	36.58
0812	8.0	1.25	22	72	8	6.3	35.18	35.18	35.18
0912	9.0	1.25	22	72	9	7.1	53.51	53.51	53.51
1015	10	1.5	24	80	10	8	42.54	42.54	42.54
1115	11	1.5	25	85	8	6.3	59.55	59.55	59.55
1217	12	1.75	29	89	9	7.1	59.05	59.05	59.05
1420	14	2.0	30	95	11.2	9	68.97	68.97	68.97
1620	16	2.0	32	102	12.5	10	80.24	80.24	80.24
1825	18	2.5	37	112	14	11.2	128.25	128.25	128.25
2025	20	2.5	37	112	14	11.2	140.64	140.64	140.64
2225	22	2.5	38	118	16	12.5	156.73	156.73	156.73
2430	24	3.0	45	130	18	14	191.30	191.30	191.30
2730	27	3.0	45	135	20	16	226.44	226.44	226.44
3035	30	3.5	48	138	20	16	258.56	258.56	258.56
3335	33	3.5	51	151	22.4	18	297.37	297.37	297.37
3640	36	4.0	57	162	25	20	346.91	346.91	346.91
3940	39	4.0	60	170	28	22.4	383.23	383.23	383.23
4245	42	4.5	60	170	28	22.4	420.85	420.85	420.85
4545	45	4.5	67	187	31.5	25	484.03	484.03	484.03
4850	48	5.0	67	187	31.5	25	522.27	522.27	522.27

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION



THREAD INSERT TAPS - METRIC

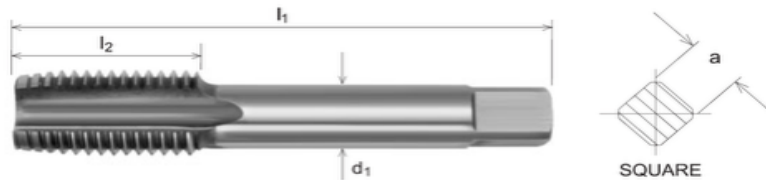
HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom
							Code Prefix	Code Prefix	Code Prefix
							TI124-	TI125-	TI126-
							\$ ea.	\$ ea.	\$ ea.
0807	8.0	0.75	19	69	8	6.3	45.43	45.43	45.43
0810	8.0	1.0	19	69	8	6.3	37.22	37.22	37.22
0910	9.0	1.0	19	69	9	7.1	54.15	54.15	54.15
0915	9.0	1.5	19	69	9	7.1	51.90	51.90	51.90
1010	10	1.0	20	76	10	8	46.99	46.99	46.99
1012	10	1.25	20	76	10	8	42.73	42.73	42.73
1110	11	1.0	22	82	8	6.3	57.52	57.52	57.52
1112	11	1.25	22	82	8	6.3	58.48	58.48	58.48
1210	12	1.0	24	84	9	7.1	102.81	102.81	102.81
1212	12	1.25	24	84	9	7.1	62.64	62.64	62.64
1215	12	1.5	24	84	9	7.1	59.59	59.59	59.59
1310	13	1.0	29	89	9	7.1	76.59	76.59	76.59
1312	13	1.25	29	89	9	7.1	69.12	69.12	69.12
1315	13	1.5	29	89	9	7.1	72.39	72.39	72.39
1317	13	1.75	29	89	9	7.1	69.12	69.12	69.12
1410	14	1.0	25	90	11.2	9	83.38	83.38	83.38
1412	14	1.25	25	90	11.2	9	71.06	71.06	71.06
1415	14	1.5	25	90	11.2	9	69.14	69.14	69.14
1510	15	1.0	30	95	11.2	9	90.73	90.73	90.73
1515	15	1.5	30	95	11.2	9	85.45	85.45	85.45
1520	15	2.0	30	95	11.2	9	85.45	85.45	85.45
1610	16	1.0	32	102	12.5	10	83.61	83.61	83.61
1615	16	1.5	32	102	12.5	10	83.61	83.61	83.61
1810	18	1.0	37	112	14	11.2	127.22	127.22	127.22
1815	18	1.5	37	112	14	11.2	127.22	127.22	127.22
1820	18	2.0	37	112	14	11.2	135.90	135.90	135.90
2010	20	1.0	37	112	14	11.2	141.23	141.23	141.23
2015	20	1.5	37	112	14	11.2	145.56	145.56	145.56
2020	20	2.0	37	112	14	11.2	148.86	148.86	148.86

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION

CAPITAL

CUTTING TOOLS

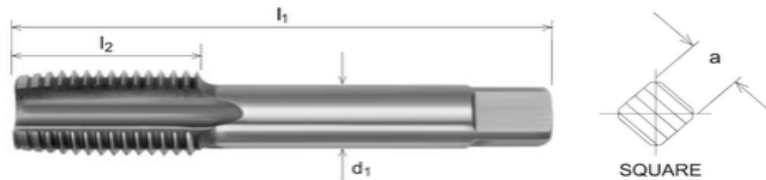


THREAD INSERT TAPS - METRIC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom
							Code Prefix	Code Prefix	Code Prefix
							TI124-	TI125-	TI126-
							\$ ea.	\$ ea.	\$ ea.
2210	22	1.0	38	118	16	12.5	159.51	159.51	159.51
2215	22	1.5	38	118	16	12.5	159.51	159.51	159.51
2220	22	2.0	38	118	16	12.5	159.51	159.51	159.51
2410	24	1.0	45	130	18	14	194.90	194.90	194.90
2415	24	1.5	45	130	18	14	194.90	194.90	194.90
2420	24	2.0	45	130	18	14	194.90	194.90	194.90
2510	25	1.0	45	130	18	14	229.38	229.38	229.38
2515	25	1.5	45	130	18	14	229.38	229.38	229.38
2610	26	1.0	48	138	20	16	244.47	244.47	244.47
2615	26	1.5	48	138	20	16	244.47	244.47	244.47
2710	27	1.0	48	138	20	16	274.37	274.37	274.37
2715	27	1.5	48	138	20	16	274.37	274.37	274.37
2720	27	2.0	48	138	20	16	277.15	277.15	277.15
3010	30	1.0	48	138	20	16	286.46	286.46	286.46
3015	30	1.5	48	138	20	16	286.46	286.46	286.46
3020	30	2.0	48	138	20	16	286.46	286.46	286.46
3310	33	1.0	51	151	22.4	18	296.71	296.71	296.71
3315	33	1.5	51	151	22.4	18	296.71	296.71	296.71
3320	33	2.0	51	151	22.4	18	296.71	296.71	296.71
3330	33	3.0	51	151	22.4	18	296.71	296.71	296.71
3610	36	1.0	57	162	25	20	341.37	341.37	341.37
3615	36	1.5	57	162	25	20	341.37	341.37	341.37
3620	36	2.0	57	162	25	20	342.68	342.68	342.68
3630	36	3.0	57	162	25	20	344.90	344.90	344.90
3920	39	2.0	60	170	28	22.4	384.04	384.04	384.04
3930	39	3.0	60	170	28	22.4	384.04	384.04	384.04
4220	42	2.0	60	170	28	22.4	446.31	446.31	446.31
4230	42	3.0	60	170	28	22.4	446.31	446.31	446.31
4240	42	4.0	60	170	28	22.4	446.31	446.31	446.31

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION

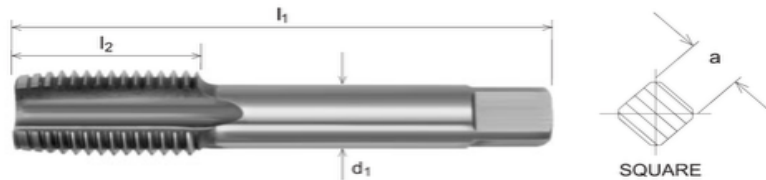


THREAD INSERT TAPS - UNC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom
							Code Prefix	Code Prefix	Code Prefix
							TI204-	TI205-	TI206-
							\$ ea.	\$ ea.	\$ ea.
0440	4	40	11	48	3.15	2.5	33.16	33.16	33.16
0540	5	40	11	48	3.15	2.5	36.60	36.60	36.60
0632	6	32	13	50	3.55	2.8	29.97	29.97	29.97
0832	8	32	13	53	4.5	3.55	31.89	31.89	31.89
1024	10	24	16	58	5	4	32.37	32.37	32.37
1224	12	24	17	62	5.6	4.5	33.95	33.95	33.95
2820	1/4	20	19	66	6.3	5	32.52	32.52	32.52
3018	5/16	18	22	72	8	6.3	35.10	35.10	35.10
3216	3/8	16	24	80	10	8	38.80	38.80	38.80
3414	7/16	14	25	85	8	6.3	51.06	51.06	51.06
3613	1/2	13	29	89	9	7.1	57.42	57.42	57.42
3812	9/16	12	30	95	11.2	9	69.12	69.12	69.12
4011	5/8	11	32	102	12.5	10	78.36	78.36	78.36
4211	11/16	11	30	112	14	11.2	155.56	155.56	155.56
4410	3/4	10	37	112	14	11.2	125.00	125.00	125.00
4809	7/8	9	38	118	16	12.5	156.73	156.73	156.73
5208	1"	8	45	130	18	14	235.75	235.75	235.75
5407	1.1/8	7	48	138	20	16	274.27	274.27	274.27
5607	1.1/4	7	51	151	22.4	18	296.91	296.91	296.91
5806	1.3/8	6	57	162	25	20	331.89	331.89	331.89
6006	1.1/2	6	60	170	28	22.4	387.46	387.46	387.46

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION

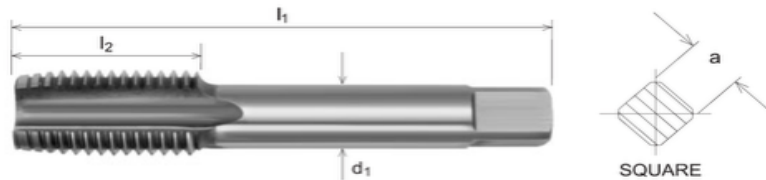


THREAD INSERT TAPS - UNF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom
							Code Prefix	Code Prefix	Code Prefix
							TI224-	TI225-	TI226-
							\$ ea.	\$ ea.	\$ ea.
0448	4	48	11	48	3.15	2.5	33.16	33.16	33.16
0544	5	44	11	48	3.15	2.5	36.60	36.60	36.60
0640	6	40	13	50	3.55	2.8	29.97	29.97	29.97
0836	8	36	13	53	4.5	3.55	31.89	31.89	31.89
1032	10	32	16	58	5	4	32.37	32.37	32.37
1228	12	28	17	62	5.6	4.5	33.95	33.95	33.95
2828	1/4	28	19	66	6.3	5	32.52	32.52	32.52
3024	5/16	24	22	72	8	6.3	35.10	35.10	35.10
3224	3/8	24	24	80	10	8	38.80	38.80	38.80
3420	7/16	20	25	85	8	6.3	51.06	51.06	51.06
3620	1/2	20	29	89	9	7.1	57.42	57.42	57.42
3818	9/16	18	30	95	11.2	9	69.12	69.12	69.12
4018	5/8	18	32	102	12.5	10	78.36	78.36	78.36
4416	3/4	16	37	112	14	11.2	125.00	125.00	125.00
4814	7/8	14	38	118	16	12.5	156.73	156.73	156.73
5212	1"	12	45	130	18	14	235.75	235.75	235.75
5214	1" UNS	14	45	130	18	14	248.91	248.91	248.91
5412	1.1/8	12	48	138	20	16	274.27	274.27	274.27
5612	1.1/4	12	51	151	22.4	18	296.91	296.91	296.91
5812	1.3/8	12	57	162	25	20	331.89	331.89	331.89
6012	1.1/2	12	60	170	28	22.4	387.46	387.46	387.46

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION



THREAD INSERT TAPS - UNEF

HIGH SPEED STEEL - GROUND THREAD

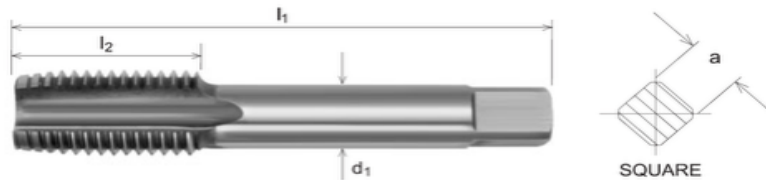
Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom
							Code Prefix	Code Prefix	Code Prefix
							TI244-	TI245-	TI246-
							\$ ea.	\$ ea.	\$ ea.
2832	1/4	32	19	66	6.3	5	53.10	53.10	53.10
3032	5/16	32	22	72	8	6.3	47.31	47.31	47.31
3232	3/8	32	24	80	10	8	51.01	51.01	51.01
3428	7/16	28	25	85	8	6.3	63.26	63.26	63.26
3628	1/2	28	29	89	9	7.1	69.63	69.63	69.63
3824	9/16	24	30	95	11.2	9	86.55	86.55	86.55
4024	5/8	24	32	102	12.5	10	95.80	95.80	95.80
4420	3/4	20	37	112	14	11.2	145.92	145.92	145.92
4820	7/8	20	38	118	16	12.5	177.65	177.65	177.65
5220	1"	20	45	130	18	14	212.34	212.34	212.34

THREAD INSERT TAPS - UN 8 SERIES

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom
							Code Prefix	Code Prefix	Code Prefix
							TI264-	TI265-	TI266-
							\$ ea.	\$ ea.	\$ ea.
5408	1.1/8	8	48	138	20	16	274.32	274.32	274.32
5608	1.1/4	8	51	151	22.4	18	296.72	296.72	296.72
5808	1.3/8	8	57	162	25	20	331.61	331.61	331.61
6008	1.1/2	8	60	170	28	22.4	384.23	384.23	384.23
6208	1.5/8	8	60	170	28	22.4	403.92	403.92	403.92
6408	1.3/4	8	67	187	31.5	25	446.31	446.31	446.31
6608	1.7/8	8	67	187	31.5	25	478.88	478.88	478.88
6808	2"	8	70	200	35.5	28	528.54	528.54	528.54

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION

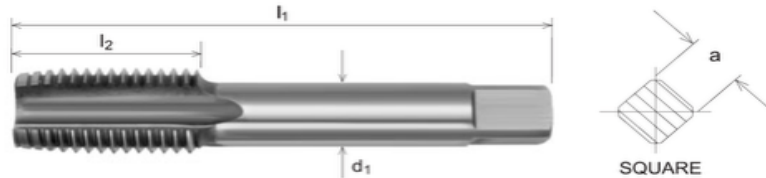


THREAD INSERT TAPS - BSW

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper	Inter	Bottom
							Code Prefix	Code Prefix	Code Prefix
							TI304-	TI305-	TI306-
							\$ ea.	\$ ea.	\$ ea.
2440	1/8	40	11	48	3.15	2.5	53.10	53.10	53.10
2624	3/16	24	16	58	5	4	36.57	36.57	36.57
2820	1/4	20	19	66	6.3	5	35.69	35.69	35.69
3018	5/16	18	22	72	8	6.3	36.58	36.58	36.58
3216	3/8	16	24	80	10	8	42.52	42.52	42.52
3414	7/16	14	25	85	8	6.3	56.31	56.31	56.31
3612	1/2	12	29	89	9	7.1	61.68	61.68	61.68
3812	9/16	12	30	95	11.2	9	79.81	79.81	79.81
4011	5/8	11	32	102	12.5	10	92.15	92.15	92.15
4410	3/4	10	37	112	14	11.2	130.57	130.57	130.57
4809	7/8	9	38	118	16	12.5	167.76	167.76	167.76
5208	1"	8	45	130	18	14	229.38	229.38	229.38
5407	1.1/8	7	48	138	20	16	274.32	274.32	274.32
5607	1.1/4	7	51	151	22.4	18	296.72	296.72	296.72
5806	1.3/8	6	57	162	25	20	331.61	331.61	331.61
6006	1.1/2	6	60	170	28	22.4	384.20	384.20	384.20

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION



THREAD INSERT TAPS - BSF HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	Taper	Inter	Bottom
							Code Prefix	Code Prefix	Code Prefix
							TI324-	TI325-	TI326-
							\$ ea.	\$ ea.	\$ ea.
2632	3/16	32	16	58	5	4	47.88	47.88	47.88
2826	1/4	26	19	66	6.3	5	47.37	47.37	47.37
3022	5/16	22	22	72	8	6.3	50.15	50.15	50.15
3220	3/8	20	24	80	10	8	58.48	58.48	58.48
3418	7/16	18	25	85	8	6.3	79.63	79.63	79.63
3616	1/2	16	29	89	9	7.1	83.71	83.71	83.71
3816	9/16	16	30	95	11.2	9	95.87	95.87	95.87
4014	5/8	14	32	102	12.5	10	119.03	119.03	119.03
4412	3/4	12	37	112	14	11.2	173.50	173.50	173.50
4811	7/8	11	42	124	18	14	196.73	196.73	196.73
5210	1"	10	45	130	18	14	229.38	229.38	229.38
5609	1.1/4	9	51	151	22.4	18	296.71	296.71	296.71

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION

CAPITAL

CUTTING TOOLS



THREAD INSERT TAPS - BSP

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper Code Prefix	Inter Code Prefix	Bottom Code Prefix
							TI404-	TI405-	TI406-
							\$ ea.	\$ ea.	\$ ea.
2428	1/8	28	15	59	8	6.3	74.43	74.43	74.43
2819	1/4	19	19	67	10	8	99.25	99.25	99.25
3219	3/8	19	21	75	12.5	10	132.92	132.92	132.92
3614	1/2	14	26	87	16	12.5	198.51	198.51	198.51
4014	5/8	14	26	91	18	14	233.94	233.94	233.94
4414	3/4	14	28	96	20	16	250.86	250.86	250.86
5211	1"	11	33	109	25	20	318.03	318.03	318.03

THREAD INSERT TAPS - NPT

HIGH SPEED STEEL - GROUND THREAD

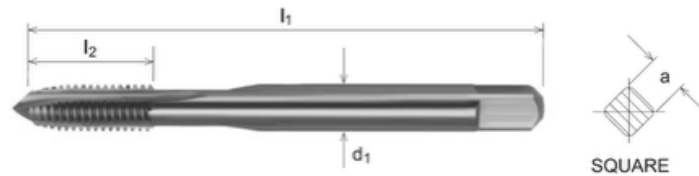
Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper Code Prefix	Inter Code Prefix	Bottom Code Prefix
							TI624-	TI625-	TI626-
							\$ ea.	\$ ea.	\$ ea.
2427	1/8	27	15	59	8	6.3	132.48	132.48	132.48
2818	1/4	18	19	67	10	8	161.46	161.46	161.46
3218	3/8	18	21	75	12.5	10	197.78	197.78	197.78
3614	1/2	14	26	87	16	12.5	224.05	224.05	224.05
4414	3/4	14	28	96	20	16	300.80	300.80	300.80
5211	1"	11.5	33	109	25	20	397.52	397.52	397.52

THREAD INSERT TAPS - BA

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l ₂	l ₁	d ₁	a	Taper Code Prefix	Inter Code Prefix	Bottom Code Prefix
							TI504-	TI505-	TI506-
							\$ ea.	\$ ea.	\$ ea.
0231	2	31.36	16	58	5	4	63.81	63.81	63.81
0438	4	38.46	13	50	3.55	2.8	65.98	65.98	65.98
0647	6	47.85	9.5	44.5	2.8	2.24	69.17	69.17	69.17
0025	0	25.38	19	66	6.3	5	71.50	71.50	71.50

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION



THREAD INSERT GUN NOSE TAPS - METRIC

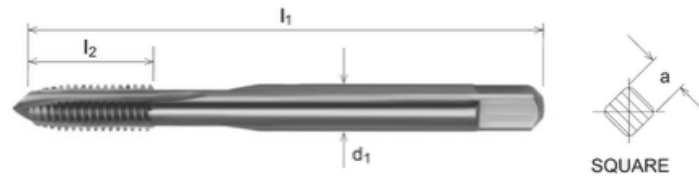
HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
TI108-0251	2.5	0.45	9.5	44.5	2.8	2.24	41.80
TI108-0305	3.0	0.5	11	48	3.15	2.5	43.28
TI108-0356	3.5	0.6	13	50	3.55	2.8	39.49
TI108-0402	4.0	0.7	13	53	4	3.15	37.87
TI108-0508	5.0	0.8	16	58	5	4	37.87
TI108-0610	6.0	1.0	19	66	6.3	5	40.42
TI108-0710	7.0	1.0	19	66	7.1	5.6	41.83
TI108-0810	8.0	1.0	22	72	8	6.3	41.83
TI108-0812	8.0	1.25	22	72	8	6.3	43.51
TI108-0912	9.0	1.25	22	72	9	7.1	52.32
TI108-1012	10	1.25	24	80	10	8	52.32
TI108-1015	10	1.5	24	80	10	8	48.69
TI108-1115	11	1.5	25	85	8	6.3	74.45
TI108-1215	12	1.5	29	89	9	7.1	74.45
TI108-1217	12	1.75	29	89	9	7.1	69.12
TI108-1415	14	1.5	30	95	11.2	9	97.38
TI108-1420	14	2.0	30	95	11.2	9	85.09
TI108-1615	16	1.5	32	102	12.5	10	108.20
TI108-1620	16	2.0	32	102	12.5	10	94.60
TI108-1825	18	2.5	37	112	14	11.2	171.48
TI108-2025	20	2.5	37	112	14	11.2	173.18
TI108-2225	22	2.5	38	118	16	12.5	198.56
TI108-2430	24	3.0	45	130	18	14	198.56
TI108-2730	27	3.0	45	135	20	16	243.87
TI108-3035	30	3.5	48	138	20	16	281.23
TI108-3335	33	3.5	51	151	22.4	18	325.26
TI108-3640	36	4.0	57	162	25	20	371.32
TI108-3940	39	4.0	60	170	28	22.4	404.15
TI108-4245	42	4.5	60	170	28	22.4	447.00
TI108-4545	45	4.5	67	187	31.5	25	520.65
TI108-4850	48	5.0	67	187	31.5	25	555.40

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION

CAPITAL

CUTTING TOOLS



THREAD INSERT GUN NOSE TAPS - UNC

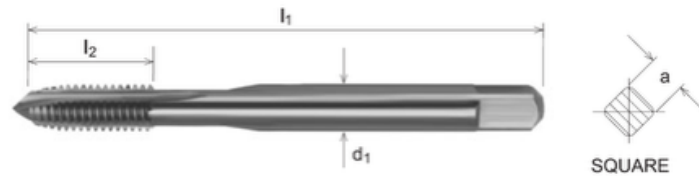
HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
TI208-0440	4	40	11	48	3.15	2.5	41.39
TI208-0540	5	40	11	48	3.15	2.5	41.83
TI208-0632	6	32	13	50	3.55	2.8	37.22
TI208-0832	8	32	13	53	4.5	3.55	37.22
TI208-1024	10	24	16	58	5	4	38.11
TI208-1224	12	24	17	62	5.6	4.5	41.86
TI208-2820	1/4	20	19	66	6.3	5	41.85
TI208-3018	5/16	18	22	72	8	6.3	41.80
TI208-3216	3/8	16	24	80	10	8	49.61
TI208-3414	7/16	14	25	85	8	6.3	64.05
TI208-3613	1/2	13	29	89	9	7.1	71.50
TI208-4011	5/8	11	32	102	12.5	10	95.87
TI208-4410	3/4	10	37	112	14	11.2	151.43
TI208-4809	7/8	9	38	118	16	12.5	190.43
TI208-5208	1"	8	45	130	18	14	248.08

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION

CAPITAL

CUTTING TOOLS

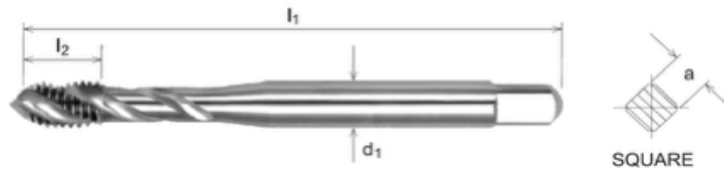


THREAD INSERT GUN NOSE TAPS - UNF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
TI228-0448	4	48	11	48	3.15	2.5	61.47
TI228-0544	5	44	11	48	3.15	2.5	62.51
TI228-0640	6	40	13	50	3.55	2.8	63.81
TI228-0836	8	36	13	53	4.5	3.55	63.81
TI228-1032	10	32	16	58	5	4	37.22
TI228-1228	12	28	17	62	5.6	4.5	41.78
TI228-2828	1/4	28	19	66	6.3	5	41.85
TI228-3024	5/16	24	22	72	8	6.3	41.80
TI228-3224	3/8	24	24	80	10	8	49.61
TI228-3420	7/16	20	25	85	8	6.3	64.05
TI228-3620	1/2	20	29	89	9	7.1	71.50
TI228-4018	5/8	18	32	102	12.5	10	95.87
TI228-4416	3/4	16	37	112	14	11.2	151.43
TI228-4814	7/8	14	38	118	16	12.5	190.43
TI228-5212	1"	12	45	130	18	14	248.08

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION

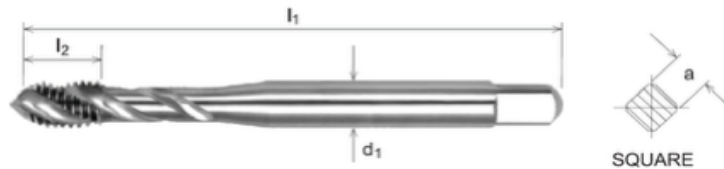


THREAD INSERT SPIRAL FLUTE TAPS - METRIC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	l_2	l_1	d_1	a	\$ ea.
TI109-0251	2.5	0.45	9.5	44.5	2.8	2.24	41.80
TI109-0305	3.0	0.5	11	48	3.15	2.5	43.28
TI109-0356	3.5	0.6	13	50	3.55	2.8	39.49
TI109-0402	4.0	0.7	13	53	4	3.15	37.87
TI109-0508	5.0	0.8	16	58	5	4	37.87
TI109-0610	6.0	1.0	19	66	6.3	5	40.42
TI109-0710	7.0	1.0	19	66	7.1	5.6	41.83
TI109-0810	8.0	1.0	22	72	8	6.3	41.83
TI109-0812	8.0	1.25	22	72	8	6.3	43.51
TI109-0912	9.0	1.25	22	72	9	7.1	52.32
TI109-1012	10	1.25	24	80	10	8	52.32
TI109-1015	10	1.5	24	80	10	8	48.69
TI109-1115	11	1.5	25	85	8	6.3	74.45
TI109-1215	12	1.5	29	89	9	7.1	74.45
TI109-1217	12	1.75	29	89	9	7.1	69.12
TI109-1415	14	1.5	30	95	11.2	9	97.38
TI109-1420	14	2.0	30	95	11.2	9	85.09
TI109-1615	16	1.5	32	102	12.5	10	108.20
TI109-1620	16	2.0	32	102	12.5	10	94.60
TI109-1825	18	2.5	37	112	14	11.2	171.48
TI109-2025	20	2.5	37	112	14	11.2	173.18
TI109-2225	22	2.5	38	118	16	12.5	198.56
TI109-2430	24	3.0	45	130	18	14	198.56
TI109-2730	27	3.0	45	135	20	16	243.87
TI109-3035	30	3.5	48	138	20	16	281.23
TI109-3335	33	3.5	51	151	22.4	18	325.26
TI109-3640	36	4.0	57	162	25	20	371.32
TI109-3940	39	4.0	60	170	28	22.4	404.15
TI109-4245	42	4.5	60	170	28	22.4	447.00
TI109-4545	45	4.5	67	187	31.5	25	520.65
TI109-4850	48	5.0	67	187	31.5	25	555.40

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION

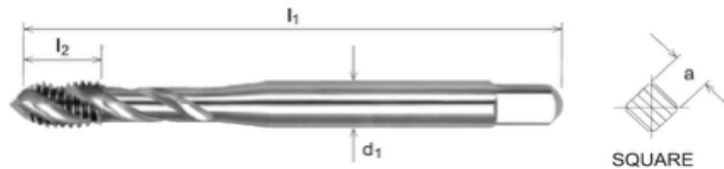


THREAD INSERT SPIRAL FLUTE TAPS - UNC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
TI209-0440	4	40	11	48	3.15	2.5	41.39
TI209-0540	5	40	11	48	3.15	2.5	41.83
TI209-0632	6	32	13	50	3.55	2.8	37.22
TI209-0832	8	32	13	53	4.5	3.55	37.22
TI209-1024	10	24	16	58	5	4	38.11
TI209-1224	12	24	17	62	5.6	4.5	41.86
TI209-2820	1/4	20	19	66	6.3	5	41.85
TI209-3018	5/16	18	22	72	8	6.3	41.80
TI209-3216	3/8	16	24	80	10	8	49.61
TI209-3414	7/16	14	25	85	8	6.3	64.05
TI209-3613	1/2	13	29	89	9	7.1	71.50
TI209-4011	5/8	11	32	102	12.5	10	95.87
TI209-4410	3/4	10	37	112	14	11.2	151.43
TI209-4809	7/8	9	38	118	16	12.5	190.43
TI209-5208	1"	8	45	130	18	14	248.08

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION



THREAD INSERT SPIRAL FLUTE TAPS - UNF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	l_2	l_1	d_1	a	\$ ea.
TI229-0448	4	48	11	48	3.15	2.5	61.47
TI229-0544	5	44	11	48	3.15	2.5	62.51
TI229-0640	6	40	13	50	3.55	2.8	63.81
TI229-0836	8	36	13	53	4.5	3.55	63.81
TI229-1032	10	32	16	58	5	4	37.22
TI229-1228	12	28	17	62	5.6	4.5	41.78
TI229-2828	1/4	28	19	66	6.3	5	41.85
TI229-3024	5/16	24	22	72	8	6.3	41.80
TI229-3224	3/8	24	24	80	10	8	49.61
TI229-3420	7/16	20	25	85	8	6.3	64.05
TI229-3620	1/2	20	29	89	9	7.1	71.50
TI229-4018	5/8	18	32	102	12.5	10	95.87
TI229-4416	3/4	16	37	112	14	11.2	151.43
TI229-4814	7/8	14	38	118	16	12.5	190.43
TI229-5212	1"	12	45	130	18	14	248.08

SPECIAL THREAD REPAIR TAPS FOR COIL INSTALLATION



BUTTON DIES - METRIC COARSE

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	Pitch	\$ ea.	Code	O/D	Size	Pitch	\$ ea.
BDB100-0204	1"	2	0.4	71.29	BDD100-1217	1.1/2	12	1.75	57.99
BDB100-0202	1"	2.2	0.45	71.29	BDD100-1420	1.1/2	14	2.0	57.99
BDB100-0251	1"	2.5	0.45	29.82	BDD100-1620	1.1/2	16	2.0	74.56
BDB100-0305	1"	3	0.5	29.82	BDE100-1015	2"	10	1.5	82.84
BDB100-0356	1"	3.5	0.6	71.29	BDE100-1217	2"	12	1.75	82.84
BDB100-0402	1"	4	0.7	29.82	BDE100-1420	2"	14	2.0	82.84
BDB100-0457	1"	4.5	0.75	34.79	BDE100-1620	2"	16	2.0	82.84
BDB100-0508	1"	5	0.8	29.82	BDE100-1825	2"	18	2.5	82.84
BDB100-0610	1"	6	1.0	29.82	BDE100-2025	2"	20	2.5	82.84
BDB100-0710	1"	7	1.0	36.45	BDE100-2225	2"	22	2.5	96.10
BDB100-0812	1"	8	1.25	29.82	BDE100-2430	2"	24	3.0	96.10
BDB100-0912	1"	9	1.25	36.45	BDG100-2730	3"	27	3.0	215.39
BDB100-1015	1"	10	1.5	29.82	BDG100-3035	3"	30	3.5	215.39
BDB100-1217	1"	12	1.75	29.82	BDG100-3335	3"	33	3.5	215.39
BDD100-0610	1.1/2	6	1.0	56.33	BDG100-3640	3"	36	4.0	215.39
BDD100-0710	1.1/2	7	1.0	90.95	BDG100-3940	3"	39	4.0	215.39
BDD100-0812	1.1/2	8	1.25	56.33	BDH100-4245	4"	42	4.5	411.15
BDD100-0912	1.1/2	9	1.25	90.95	BDH100-4545	4"	45	4.5	411.15
BDD100-1015	1.1/2	10	1.5	56.33	BDH100-4850	4"	48	5.0	411.15
BDD100-1115	1.1/2	11	1.5	74.56					



BUTTON DIES - METRIC COARSE **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	Pitch	\$ ea.	Code	O/D	Size	Pitch	\$ ea.
BDB110-0305	1"	3	0.5	94.20	BDD110-1620	1.1/2	16	2.0	112.66
BDB110-0402	1"	4	0.7	94.20	BDE110-1825	2"	18	2.5	145.80
BDB110-0508	1"	5	0.8	94.20	BDE110-2025	2"	20	2.5	145.80
BDB110-0610	1"	6	1.0	94.21	BDE110-2225	2"	22	2.5	164.59
BDB110-0812	1"	8	1.25	94.21	BDE110-2430	2"	24	3.0	145.80
BDB110-1015	1"	10	1.5	94.21	BDE110-2730	2"	27	3.0	145.80
BDB110-1217	1"	12	1.75	94.21	BDG110-3035	3"	30	3.5	409.06
BDD110-1217	1.1/2	12	1.75	112.66	BDG110-3335	3"	33	3.5	409.06
BDD110-1420	1.1/2	14	2.0	112.66	BDG110-3640	3"	36	4.0	409.06

BUTTON DIES - METRIC COARSE OVERSIZE

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	Pitch	O/S	\$ ea.
BDB146-1015	1"	10	1.5	+ 0.4	118.20
BDD146-1217	1.1/2	12	1.75	+ 0.4	124.92
BDD146-1420	1.1/2	14	2.0	+ 0.4	148.17
BDD146-1620	1.1/2	16	2.0	+ 0.4	157.60
BDE146-1825	2"	18	2.5	+ 0.4	177.62
BDE146-2025	2"	20	2.5	+ 0.4	186.58
BDE146-2225	2"	22	2.5	+ 0.4	229.74
BDE146-2430	2"	24	3.0	+ 0.4	251.05



BUTTON DIES - METRIC

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	Pitch	\$ ea.	Code	O/D	Size	Pitch	\$ ea.
BDB100-0204	1"	2.0	0.4	71.29	BDB120-1007	1"	10	0.75	66.27
BDB100-0202	1"	2.2	0.45	71.29	BDB120-1010	1"	10	1.0	66.27
BDB100-0251	1"	2.5	0.45	29.82	BDB120-1012	1"	10	1.25	66.27
BDB120-0303	1"	3.0	0.35	82.84	BDB100-1015	1"	10	1.5	29.82
BDB100-0305	1"	3.0	0.5	29.82	BDB120-1107	1"	11	0.75	82.84
BDB100-0356	1"	3.5	0.6	71.29	BDB120-1110	1"	11	1.0	82.84
BDB120-0405	1"	4.0	0.5	66.27	BDB120-1112	1"	11	1.25	71.24
BDB100-0402	1"	4.0	0.7	29.82	BDB100-1115	1"	11	1.5	43.59
BDB120-0455	1"	4.5	0.5	34.79	BDB120-1207	1"	12	0.75	71.24
BDB100-0457	1"	4.5	0.75	71.29	BDB120-1210	1"	12	1.0	82.84
BDB120-0505	1"	5.0	0.5	66.27	BDB120-1212	1"	12	1.25	66.27
BDB120-0507	1"	5.0	0.75	82.84	BDB120-1215	1"	12	1.5	66.27
BDB100-0508	1"	5.0	0.8	29.82	BDB100-1217	1"	12	1.75	29.82
BDB120-0510	1"	5.0	1.0	66.27	BDB120-1307	1"	13	0.75	82.84
BDB120-0605	1"	6.0	0.5	66.27	BDB120-1310	1"	13	1.0	82.84
BDB120-0607	1"	6.0	0.75	66.27	BDB120-1312	1"	13	1.25	82.84
BDB100-0610	1"	6.0	1.0	29.82	BDB120-1315	1"	13	1.5	82.84
BDB120-0612	1"	6.0	1.25	66.27	BDD100-0610	1.1/2	6.0	1.0	56.33
BDB120-0705	1"	7.0	0.5	82.84	BDD120-0612	1.1/2	6.0	1.25	92.21
BDB120-0707	1"	7.0	0.75	66.27	BDD100-0710	1.1/2	7.0	1.0	90.95
BDB100-0710	1"	7.0	1.0	36.45	BDD120-0712	1.1/2	7.0	1.25	92.21
BDB120-0712	1"	7.0	1.25	82.84	BDD120-0810	1.1/2	8.0	1.0	92.21
BDB120-0805	1"	8.0	0.5	82.84	BDD100-0812	1.1/2	8.0	1.25	56.33
BDB120-0807	1"	8.0	0.75	66.27	BDD120-0815	1.1/2	8.0	1.5	92.21
BDB120-0810	1"	8.0	1.0	66.27	BDD120-0910	1.1/2	9.0	1.0	79.53
BDB100-0812	1"	8.0	1.25	29.82	BDD100-0912	1.1/2	9.0	1.25	90.95
BDB120-0815	1"	8.0	1.5	82.84	BDD120-0915	1.1/2	9.0	1.5	92.21
BDB120-0905	1"	9.0	0.5	82.84	BDD120-1010	1.1/2	10	1.0	79.53
BDB120-0907	1"	9.0	0.75	66.27	BDD120-1012	1.1/2	10	1.25	76.21
BDB120-0910	1"	9.0	1.0	66.27	BDD100-1015	1.1/2	10	1.5	56.33
BDB100-0912	1"	9.0	1.25	43.59	BDD120-1110	1.1/2	11	1.0	92.21
BDB120-0915	1"	9.0	1.5	66.27	BDD120-1112	1.1/2	11	1.25	92.21



BUTTON DIES - METRIC

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	Pitch	\$ ea.	Code	O/D	Size	Pitch	\$ ea.
BDD100-1115	1.1/2	11	1.5	74.59	BDD120-1910	1.1/2	19	1.0	92.21
BDD120-1210	1.1/2	12	1.0	92.21	BDD120-1912	1.1/2	19	1.25	92.21
BDD120-1212	1.1/2	12	1.25	76.21	BDD120-1915	1.1/2	19	1.5	92.21
BDD120-1215	1.1/2	12	1.5	76.21	BDD120-2010	1.1/2	20	1.0	79.53
BDD100-1217	1.1/2	12	1.75	57.99	BDD120-2012	1.1/2	20	1.25	79.53
BDD120-1220	1.1/2	12	2.0	92.21	BDD120-2015	1.1/2	20	1.5	76.21
BDD120-1307	1.1/2	13	0.75	92.21	BDD120-2020	1.1/2	20	2.0	79.53
BDD120-1310	1.1/2	13	1.0	92.21	BDD100-2025	1.1/2	20	2.5	90.95
BDD120-1312	1.1/2	13	1.25	92.21	BDD100-2110	1.1/2	21	1.0	92.21
BDD120-1315	1.1/2	13	1.5	92.21	BDD100-2210	1.1/2	22	1.0	92.21
BDD120-1407	1.1/2	14	0.75	92.21	BDE120-1015	2"	10	1.5	82.84
BDD120-1410	1.1/2	14	1.0	79.53	BDE120-1210	2"	12	1.0	153.77
BDD120-1412	1.1/2	14	1.25	79.53	BDE120-1215	2"	12	1.5	153.77
BDD120-1415	1.1/2	14	1.5	76.21	BDE100-1217	2"	12	1.75	82.84
BDD120-1417	1.1/2	14	1.75	92.21	BDE120-1410	2"	14	1.0	153.77
BDD100-1420	1.1/2	14	2.0	57.99	BDE120-1415	2"	14	1.5	153.77
BDD120-1510	1.1/2	15	1.0	79.53	BDE120-1417	2"	14	1.75	153.77
BDD120-1512	1.1/2	15	1.25	92.21	BDE100-1420	2"	14	2.0	82.84
BDD120-1515	1.1/2	15	1.5	79.53	BDE120-1610	2"	16	1.0	153.77
BDD120-1610	1.1/2	16	1.0	79.53	BDE120-1615	2"	16	1.5	153.77
BDD120-1612	1.1/2	16	1.25	92.21	BDE100-1620	2"	16	2.0	82.84
BDD120-1615	1.1/2	16	1.5	76.21	BDE120-1810	2"	18	1.0	153.77
BDD100-1620	1.1/2	16	2.0	74.56	BDE120-1815	2"	18	1.5	153.77
BDD120-1710	1.1/2	17	1.0	79.53	BDE120-1820	2"	18	2.0	153.77
BDD120-1712	1.1/2	17	1.25	92.21	BDE100-1825	2"	18	2.5	82.84
BDD120-1715	1.1/2	17	1.5	79.53	BDE120-2010	2"	20	1.0	153.77
BDD120-1810	1.1/2	18	1.0	79.53	BDE120-2012	2"	20	1.25	153.77
BDD120-1812	1.1/2	18	1.25	79.53	BDE120-2015	2"	20	1.5	129.23
BDD120-1815	1.1/2	18	1.5	79.53	BDE120-2020	2"	20	2.0	153.77
BDD120-1817	1.1/2	18	1.75	92.21	BDE100-2025	2"	20	2.5	82.84
BDD120-1820	1.1/2	18	2.0	79.76	BDE120-2110	2"	21	1.0	153.77
BDD100-1825	1.1/2	18	2.5	90.95	BDE120-2112	2"	21	1.25	153.77



BUTTON DIES - METRIC

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	Pitch	\$ ea.	Code	O/D	Size	Pitch	\$ ea.
BDE120-2115	2"	21	1.5	153.77	BDG120-3010	3"	30	1.0	381.49
BDE120-2120	2"	21	2.0	153.77	BDG120-3015	3"	30	1.5	265.09
BDE120-2210	2"	22	1.0	135.86	BDG120-3020	3"	30	2.0	265.09
BDE120-2212	2"	22	1.25	153.77	BDG120-3030	3"	30	3.0	381.49
BDE120-2215	2"	22	1.5	129.23	BDG100-3035	3"	30	3.5	215.39
BDE120-2220	2"	22	2.0	135.86	BDG120-3210	3"	32	1.0	381.49
BDE100-2225	2"	22	2.5	96.10	BDG120-3215	3"	32	1.5	182.25
BDE120-2310	2"	23	1.0	153.77	BDG120-3220	3"	32	2.0	381.49
BDE120-2315	2"	23	1.5	153.77	BDG120-3310	3"	33	1.0	381.49
BDE120-2410	2"	24	1.0	153.77	BDG120-3315	3"	33	1.5	381.49
BDE120-2412	2"	24	1.25	153.77	BDG120-3320	3"	33	2.0	381.49
BDE120-2415	2"	24	1.5	135.86	BDG120-3330	3"	33	3.0	381.49
BDE120-2420	2"	24	2.0	129.23	BDG100-3335	3"	33	3.5	215.39
BDE120-2425	2"	24	2.5	153.77	BDG120-3510	3"	35	1.0	381.49
BDE100-2430	2"	24	3.0	96.10	BDG120-3610	3"	36	1.0	381.49
BDE120-2510	2"	25	1.0	153.77	BDG120-3615	3"	36	1.5	381.49
BDE120-2512	2"	25	1.25	153.77	BDG120-3620	3"	36	2.0	381.49
BDE120-2515	2"	25	1.5	129.23	BDG120-3630	3"	36	3.0	381.49
BDE120-2517	2"	25	1.75	153.77	BDG100-3640	3"	36	4.0	215.39
BDE120-2520	2"	25	2.0	153.77	BDG120-3810	3"	38	1.0	381.49
BDE120-2610	2"	26	1.0	153.77	BDG120-3815	3"	38	1.5	381.49
BDE120-2615	2"	26	1.5	135.86	BDG120-3910	3"	39	1.0	381.49
BDE120-2620	2"	26	2.0	153.77	BDG120-3915	3"	39	1.5	381.49
BDE120-2710	2"	27	1.0	153.77	BDG100-3940	3"	39	4.0	215.39
BDE120-2720	2"	27	2.0	135.86	BDG120-4010	3"	40	1.0	381.49
BDE120-2810	2"	28	1.0	153.77	BDG120-4015	3"	40	1.5	182.25
BDE120-3010	2"	30	1.0	153.77	BDH100-4245	4"	42	4.5	411.15
BDG100-2730	2"	27	3.0	215.39	BDH100-4545	4"	45	4.5	411.15
BDG120-2710	2"	27	1.0	381.49	BDH100-4850	4"	48	5.0	411.15
BDG120-2715	2"	27	1.5	381.49	BDH120-5015	4"	50	1.5	411.14
BDG120-2720	2"	27	2.0	264.58					



BUTTON DIES - METRIC **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	Pitch	\$ ea.	Code	O/D	Size	Pitch	\$ ea.
BDB110-0305	1"	3.0	0.5	94.20	BDD130-1410	1.1/2	14	1.0	112.66
BDB130-0405	1"	4.0	0.5	94.20	BDD130-1412	1.1/2	14	1.25	106.04
BDB110-0402	1"	4.0	0.7	94.20	BDD130-1415	1.1/2	14	1.5	106.04
BDB130-0475	1"	4.0	0.75	108.28	BDD110-1420	1.1/2	14	2.0	127.46
BDB130-0505	1"	5.0	0.5	94.20	BDD130-1510	1.1/2	15	1.0	119.26
BDB110-0508	1"	5.0	0.8	94.20	BDD130-1515	1.1/2	15	1.5	119.26
BDB130-0605	1"	6.0	0.5	94.20	BDD130-1610	1.1/2	16	1.0	112.66
BDB130-0609	1"	6.0	0.9	108.28	BDD130-1615	1.1/2	16	1.5	106.04
BDB110-0610	1"	6.0	1.0	106.24	BDD110-1620	1.1/2	16	2.0	127.46
BDB130-0705	1"	7.0	0.5	108.28	BDE130-1810	2"	18	1.0	176.45
BDB110-0710	1"	7.0	1.0	106.24	BDE130-1815	2"	18	1.5	176.45
BDB130-0805	1"	8.0	0.5	108.28	BDE130-1820	2"	18	2.0	112.66
BDB130-0810	1"	8.0	1.0	108.28	BDE110-1825	2"	18	2.5	164.59
BDB110-0812	1"	8.0	1.25	106.24	BDE130-2010	2"	20	1.0	176.45
BDB130-0910	1"	9.0	1.0	108.28	BDE130-2015	2"	20	1.5	176.45
BDB110-0912	1"	9.0	1.25	106.24	BDE130-2020	2"	20	2.0	176.45
BDB130-0915	1"	9.0	1.5	108.28	BDE110-2025	2"	20	2.5	164.59
BDB130-1007	1"	10	0.75	108.28	BDE130-2215	2"	22	1.5	176.45
BDB130-1010	1"	10	1.0	91.12	BDE130-2220	2"	22	2.0	176.45
BDB130-1012	1"	10	1.25	91.12	BDE110-2225	2"	22	2.5	164.59
BDB110-1015	1"	10	1.5	106.24	BDE130-2415	2"	24	1.5	176.45
BDB130-1110	1"	11	1.0	108.29	BDE130-2420	2"	24	2.0	176.45
BDB110-1115	1"	11	1.5	106.24	BDE110-2430	2"	24	3.0	145.80
BDB130-1210	1"	12	1.0	91.12	BDE110-2730	2"	27	3.0	164.59
BDB130-1212	1"	12	1.25	91.12	BDG130-3020	3"	30	2.0	409.06
BDB130-1215	1"	12	1.5	91.12	BDG110-3035	3"	30	3.5	409.06
BDB110-1217	1"	12	1.75	106.24	BDG110-3335	3"	33	3.5	409.06
BDD110-1217	1.1/2	12	1.75	127.46	BDG110-3640	3"	36	4.0	409.06



BUTTON DIES - UNC

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB200-0164	1"	1	64	66.04	BDD200-3414	1.1/2	7/16	14	72.03
BDB200-0256	1"	2	56	66.04	BDD200-3613	1.1/2	1/2	13	57.99
BDB200-0348	1"	3	48	51.95	BDD200-3812	1.1/2	9/16	12	57.99
BDB200-0440	1"	4	40	43.24	BDD200-4011	1.1/2	5/8	11	61.30
BDB200-0540	1"	5	40	43.24	BDD200-4410	1.1/2	3/4	10	74.56
BDB200-0632	1"	6	32	43.24	BDE200-3018	2"	5/16	18	74.56
BDB200-0832	1"	8	32	39.76	BDE200-3216	2"	3/8	16	92.21
BDB200-1024	1"	10	24	39.76	BDE200-3414	2"	7/16	14	92.21
BDB200-1224	1"	12	24	39.76	BDE200-3613	2"	1/2	13	74.56
BDB200-2820	1"	1/4	20	29.82	BDE200-3812	2"	9/16	12	92.21
BDB200-3018	1"	5/16	18	29.82	BDE200-4011	2"	5/8	11	92.21
BDB200-3216	1"	3/8	16	29.82	BDE200-4410	2"	3/4	10	74.56
BDB200-3414	1"	7/16	14	38.87	BDE200-4809	2"	7/8	9	96.10
BDB200-3613	1"	1/2	13	38.87	BDE200-5208	2"	1"	8	96.10
BDD200-0440	1.1/2	4	40	72.03	BDG200-5407	3"	1.1/8	7	248.52
BDD200-2820	1.1/2	1/4	20	72.03	BDG200-5607	3"	1.1/4	7	248.52
BDD200-3018	1.1/2	5/16	18	72.03	BDG200-5806	3"	1.3/8	6	248.52
BDD200-3216	1.1/2	3/8	16	72.03	BDG200-6006	3"	1.1/2	6	248.52

BUTTON DIES - UNC LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB210-2820	1"	1/4	20	86.15	BDD210-3613	1.1/2	1/2	13	112.66
BDB210-3018	1"	5/16	18	86.15	BDD210-3812	1.1/2	9/16	12	132.54
BDB210-3216	1"	3/8	16	86.15	BDD210-4011	1.1/2	5/8	11	112.66
BDD210-2820	1.1/2	1/4	20	127.46	BDE210-4410	2"	3/4	10	132.89
BDD210-3018	1.1/2	5/16	18	127.46	BDE210-4809	2"	7/8	9	188.31
BDD210-3216	1.1/2	3/8	16	112.66	BDE210-5208	2"	1"	8	188.31
BDD210-3414	1.1/2	7/16	14	132.54					



BUTTON DIES - UNF

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB220-0080	1"	0	80	66.04	BDD220-4018	1.1/2	5/8	18	74.56
BDB220-0172	1"	1	72	66.04	BDD220-4416	1.1/2	3/4	16	74.56
BDB220-0264	1"	2	64	54.23	BDE220-3420	2"	7/16	20	92.20
BDB220-0356	1"	3	56	43.24	BDE220-3620	2"	1/2	20	76.18
BDB220-0448	1"	4	48	43.24	BDE220-3818	2"	9/16	18	76.18
BDB220-0544	1"	5	44	43.24	BDE220-4018	2"	5/8	18	76.18
BDB220-0640	1"	6	40	43.24	BDE220-4416	2"	3/4	16	76.18
BDB220-0836	1"	8	36	43.24	BDE220-4814	2"	7/8	14	96.10
BDB220-1032	1"	10	32	33.14	BDE220-5212	2"	1"	12	96.10
BDB220-1228	1"	12	28	33.14	BDE220-5214	2"	1" UNS	14	129.23
BDB220-2828	1"	1/4	28	29.82	BDG220-5312	3"	1.1/16	12	300.39
BDB220-3024	1"	5/16	24	29.82	BDG220-5412	3"	1.1/8	12	231.95
BDB220-3224	1"	3/8	24	29.82	BDG220-5512	3"	1.3/16	12	300.39
BDB220-3420	1"	7/16	20	38.11	BDG220-5612	3"	1.1/4	12	231.95
BDD220-2828	1.1/2	1/4	28	57.99	BDG220-5712	3"	1.5/16	12	300.39
BDD220-3024	1.1/2	5/16	24	57.99	BDG220-5812	3"	1.3/8	12	231.95
BDD220-3224	1.1/2	3/8	24	57.99	BDG220-6012	3"	1.1/2	12	306.51
BDD220-3420	1.1/2	7/16	20	57.99	BDG220-6212	3"	1.5/8	12	388.24
BDD220-3620	1.1/2	1/2	20	57.99	BDG220-6412	3"	1.3/4	12	306.51
BDD220-3818	1.1/2	9/16	18	57.99					

BUTTON DIES - UNF LEFT HAND

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB230-1032	1"	10	32	86.15	BDD230-3420	1.1/2	7/16	20	132.54
BDB230-2828	1"	1/4	28	86.15	BDD230-3620	1.1/2	1/2	20	112.66
BDB230-3024	1"	5/16	24	86.15	BDD230-3818	1.1/2	9/16	18	132.54
BDB230-3224	1"	3/8	24	86.15	BDD230-4018	1.1/2	5/8	18	112.66
BDD230-2828	1.1/2	1/4	28	127.46	BDE230-4416	2"	3/4	16	145.80
BDD230-3024	1.1/2	5/16	24	127.46	BDE230-4814	2"	7/8	14	168.99
BDD230-3224	1.1/2	3/8	24	112.66	BDE230-5212	2"	1"	12	168.99



BUTTON DIES - UNEF

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB240-1232	1"	12	32	62.96	BDD240-4024	1.1/2	5/8	24	87.81
BDB240-2832	1"	1/4	32	62.96	BDD240-4224	1.1/2	11/16	24	103.40
BDB240-3032	1"	5/16	32	62.96	BDE240-4420	2"	3/4	20	170.70
BDB240-3232	1"	3/8	32	62.96	BDE240-4620	2"	13/16	20	170.70
BDD240-3428	1.1/2	7/16	28	87.81	BDE240-4820	2"	7/8	20	149.11
BDD240-3628	1.1/2	1/2	28	87.81	BDE240-5020	2"	15/16	20	170.69
BDD240-3824	1.1/2	9/16	24	87.81	BDE240-5220	2"	1"	20	149.11

BUTTON DIES - UNS

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB280-2824	1"	1/4	24	115.14	BDD280-4418	1.1/2	3/4	18	152.82
BDB280-3032	1"	.302	32	115.14	BDE280-4016	2"	5/8	16	192.60
BDB280-3632	1"	1/2	32	115.14	BDE280-4424	2"	3/4	24	192.60
BDD280-3416	1.1/2	7/16	18	152.82	BDE280-4816	2"	7/8	16	192.60
BDD280-3618	1.1/2	1/2	18	152.82	BDE280-4818	2"	7/8	18	192.60
BDD280-3624	1.1/2	1/2	24	152.82	BDE280-5216	2"	1"	16	192.60
BDD280-4216	1.1/2	11/16	16	152.82	BDE280-5316	2"	1.1/16	16	192.60
BDD280-4218	1.1/2	11/16	18	152.82	BDG280-5720	3"	1.5/16	20	349.61
BDD280-4224	1.1/2	11/16	24	152.82					

BUTTON DIES - BSW

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB300-2440	1"	1/8	40	43.24	BDD300-4011	1.1/2	5/8	11	66.27
BDB300-2532	1"	5/32	32	58.51	BDD300-4410	1.1/2	3/4	10	66.27
BDB300-2624	1"	3/16	24	43.24	BDE300-3612	2"	1/2	12	74.56
BDB300-2724	1"	7/32	24	58.51	BDE300-3812	2"	9/16	12	74.56
BDB300-2820	1"	1/4	20	29.82	BDE300-4011	2"	5/8	11	74.56
BDB300-3018	1"	5/16	18	29.82	BDE300-4410	2"	3/4	10	74.56
BDB300-3216	1"	3/8	16	29.82	BDE300-4809	2"	7/8	9	94.44
BDD300-2820	1.1/2	1/4	20	76.26	BDE300-5208	2"	1"	8	94.44
BDD300-3018	1.1/2	5/16	18	76.26	BDG300-5407	3"	1.1/8	7	265.09
BDD300-3216	1.1/2	3/8	16	66.27	BDG300-5607	3"	1.1/4	7	265.09
BDD300-3414	1.1/2	7/16	14	66.27	BDG300-5806	3"	1.3/8	6	265.09
BDD300-3613	1.1/2	1/2	13	66.27	BDG300-6006	3"	1.1/2	6	265.09
BDD300-3812	1.1/2	9/16	12	66.27					



BUTTON DIES - BSW LEFT HAND
HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB310-2624	1"	3/16	24	99.70	BDD310-3414	1.1/2	7/16	14	127.47
BDB310-2820	1"	1/4	20	91.12	BDD310-3613	1.1/2	1/2	13	127.47
BDB310-3018	1"	5/16	18	91.12	BDD310-4011	1.1/2	5/8	11	127.47
BDB310-3216	1"	3/8	16	91.12					

BUTTON DIES - BSF
HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB320-2632	1"	3/16	32	49.13	BDD320-4412	1.1/2	3/4	12	74.56
BDB320-2826	1"	1/4	26	41.42	BDE320-3616	2"	1/2	16	99.41
BDB320-3022	1"	5/16	22	41.42	BDE320-3816	2"	9/16	16	99.41
BDB320-3220	1"	3/8	20	41.42	BDE320-4014	2"	5/8	14	99.41
BDD320-2826	1.1/2	1/4	26	90.96	BDE320-4412	2"	3/4	12	99.41
BDD320-3022	1.1/2	5/16	22	90.96	BDE320-4811	2"	7/8	11	99.41
BDD320-3220	1.1/2	3/8	20	74.56	BDE320-5210	2"	1"	10	99.41
BDD320-3418	1.1/2	7/16	18	74.56	BDG320-5409	3"	1.1/8	9	270.06
BDD320-3616	1.1/2	1/2	16	74.56	BDG320-5609	3"	1.1/4	9	270.06
BDD320-3816	1.1/2	9/16	16	74.56	BDG320-6008	3"	1.1/2	8	270.06
BDD320-4014	1.1/2	5/8	14	74.56					

BUTTON DIES - BSF LEFT HAND
HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB330-2826	1"	1/4	26	91.12	BDB330-3616	1"	1/2	16	99.70
BDB330-3022	1"	5/16	22	91.12	BDD330-3816	1.1/2	9/16	16	127.47
BDB330-3220	1"	3/8	20	91.12					

BUTTON DIES - BSP
HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB400-2228	1"	1/16	28	99.03	BDE400-3219	2"	3/8	19	99.41
BDB400-2428	1"	1/8	28	39.76	BDE400-3614	2"	1/2	14	99.41
BDD400-2428	1.1/2	1/8	28	74.56	BDE400-4014	2"	5/8	14	99.41
BDD400-2819	1.1/2	1/4	19	74.56	BDE400-4414	2"	3/4	14	99.41
BDD400-3219	1.1/2	3/8	19	74.56	BDE400-4814	2"	7/8	14	170.89
BDD400-3614	1.1/2	1/2	14	74.56	BDE400-5211	2"	1"	11	130.89
BDE400-2428	2"	1/8	28	99.41	BDG400-5611	3"	1.1/4	11	347.93
BDE400-2819	2"	1/4	19	99.41	BDG400-6011	3"	1.1/2	11	381.07



BUTTON DIES - BSPT

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB460-2228	1"	1/16	28	100.91	BDE460-3219	2"	3/8	19	145.80
BDB460-2428	1"	1/8	28	86.15	BDE460-3614	2"	1/2	14	145.80
BDD460-2428	1.1/2	1/8	28	120.95	BDE460-4414	2"	3/4	14	145.80
BDD460-2819	1.1/2	1/4	19	120.95	BDE460-5211	2"	1"	11	174.77
BDD460-3219	1.1/2	3/8	19	120.95	BDG460-5611	3"	1.1/4	11	323.08
BDE460-2819	2"	1/4	19	145.80					

BUTTON DIES - BSB BRASS

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB340-2826	1"	1/4	26	49.13	BDD340-3826	1.1/2	9/16	26	113.96
BDB340-3026	1"	5/16	26	57.99	BDD340-4026	1.1/2	5/8	26	99.41
BDB340-3226	1"	3/8	26	57.99	BDE340-4426	2"	3/4	26	195.28
BDD340-3426	1"	7/16	26	80.13	BDE340-4826	2"	7/8	26	195.28
BDD340-3626	1.1/2	1/2	26	99.41	BDE340-5226	2"	1"	26	170.65

BUTTON DIES - NPT

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB620-2227	1"	1/16	27	86.15	BDE620-3218	2"	3/8	18	145.80
BDB620-2427	1"	1/8	27	86.15	BDE620-3614	2"	1/2	14	145.80
BDB620-2418	1"	1/4	18	102.44	BDE620-4414	2"	3/4	14	145.80
BDD620-2427	1.1/2	1/8	27	120.95	BDE620-5211	2"	1"	11.5	174.75
BDD620-2818	1.1/2	1/4	18	120.95	BDG620-5611	3"	1.1/4	11.5	220.36
BDD620-3218	1.1/2	3/8	18	120.95	BDG620-6011	3"	1.1/2	11.5	220.36
BDE620-2818	2"	1/4	18	145.80					

BUTTON DIES - BA

HIGH SPEED STEEL - GROUND THREAD

Code	O/D	Size	TPI	\$ ea.	Code	O/D	Size	TPI	\$ ea.
BDB500-0128	1"	1	28.25	45.04	BDB500-0438	1"	4	38.46	74.80
BDB500-0231	1"	2	31.36	45.04	BDB500-0543	1"	5	43.10	76.58
BDB500-0334	1"	3	34.84	70.11	BDB500-0647	1"	6	47.85	78.79



DIE NUTS - METRIC COARSE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	AF	\$ ea.	Code	Size	Pitch	AF	\$ ea.
DN100-0305	3.0	0.5	18	54.76	DN100-3335	33	3.5	66	364.50
DN100-0402	4.0	0.7	18	54.76	DN100-3640	36	4.0	70	397.63
DN100-0508	5.0	0.8	18	54.76	DN100-3940	39	4.0	70	422.52
DN100-0610	6.0	1.0	18	32.86	DN100-4245	42	4.5	80	439.06
DN100-0710	7.0	1.0	22	44.99	DN100-4545	45	4.5	80	463.91
DN100-0812	8.0	1.25	21	44.99	DN100-4850	48	5.0	80	480.48
DN100-0912	9.0	1.25	22	46.99	DN100-5250	52	5.0	85	622.83
DN100-1015	10	1.5	24	49.00	DN100-5655	56	5.5	90	698.84
DN100-1115	11	1.5	27	54.76	DN100-6055	60	5.5	100	708.82
DN100-1217	12	1.75	28	64.31	DN100-6460	64	6.0	105	714.68
DN100-1420	14	2.0	33	74.94	DN100-6860	68	6.0	110	770.31
DN100-1620	16	2.0	33	88.23	DN100-7260	72	6.0	115	844.45
DN100-1825	18	2.5	38	88.23	DN100-7660	76	6.0	120	873.28
DN100-2025	20	2.5	38	94.87	DN100-8060	80	6.0	125	1081.31
DN100-2225	22	2.5	43	94.87	DN100-8506	85	6.0	135	1092.12
DN100-2430	24	3.0	52	154.93	DN100-9060	90	6.0	135	1141.02
DN100-2730	27	3.0	57	215.39	DN100-9560	95	6.0	145	1377.90
DN100-3035	30	3.5	57	306.51	DN100-1060	100	6.0	150	1431.45

DIE NUTS - METRIC COARSE **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	AF	\$ ea.	Code	Size	Pitch	AF	\$ ea.
DN110-0407	4.0	0.7	18	105.26	DN110-2430	24	3.0	52	168.99
DN110-0508	5.0	0.8	18	105.26	DN110-2730	27	3.0	60	366.62
DN110-0610	6.0	1.0	19	105.26	DN110-3035	30	3.5	60	383.07
DN110-0812	8.0	1.25	21	105.26	DN110-3335	33	3.5	60	416.05
DN110-1015	10	1.5	24	108.23	DN110-3640	36	4.0	60	453.12
DN110-1217	12	1.75	28	108.23	DN110-3940	39	4.0	75	512.85
DN110-1420	14	2.0	33	114.17	DN110-4245	42	4.5	75	521.09
DN110-1620	16	2.0	33	114.17	DN110-4545	45	4.5	75	541.68
DN110-1825	18	2.5	41	132.27	DN110-4850	48	5.0	85	566.39
DN110-2025	20	2.5	38	180.99	DN110-5250	52	5.0	85	638.49
DN110-2225	22	2.5	43	180.99					



DIE NUTS - METRIC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	AF	\$ ea.	Code	Size	Pitch	AF	\$ ea.
DN100-0305	3.0	0.5	19	54.76	DN120-1415	14	1.5	33	99.41
DN120-0405	4.0	0.5	19	57.99	DN100-1420	14	2.0	36	74.94
DN100-0402	4.0	0.7	19	54.76	DN120-1510	15	1.0	33	118.38
DN120-0455	4.5	0.5	19	57.99	DN120-1512	15	1.25	33	118.38
DN120-0505	5.0	0.5	18	57.99	DN120-1515	15	1.5	36	118.38
DN120-0507	5.0	0.75	18	72.02	DN120-1520	15	2.0	36	117.99
DN100-0508	5.0	0.8	19	54.76	DN120-1610	16	1.0	33	99.41
DN120-0607	6.0	0.75	19	74.56	DN120-1612	16	1.25	41	118.38
DN100-0610	6.0	1.0	19	32.85	DN120-1615	16	1.5	33	99.41
DN100-0612	6.0	1.25	18	74.56	DN100-1620	16	2.0	41	88.23
DN120-0707	7.0	0.75	21	74.56	DN120-1710	17	1.0	38	118.39
DN100-0710	7.0	1.0	22	44.99	DN120-1712	17	1.25	41	118.38
DN120-0807	8.0	0.75	22	74.56	DN120-1715	17	1.5	38	118.38
DN120-0810	8.0	1.0	21	74.56	DN120-1810	18	1.0	38	99.41
DN100-0812	8.0	1.25	22	44.99	DN120-1812	18	1.25	41	118.38
DN120-0910	9.0	1.0	22	91.72	DN120-1815	18	1.5	38	99.41
DN100-0912	9.0	1.25	22	46.99	DN120-1820	18	2.0	38	118.38
DN120-1010	10	1.0	24	74.56	DN100-1825	18	2.5	38	88.23
DN120-1012	10	1.25	24	74.56	DN120-1910	19	1.0	38	118.38
DN100-1015	10	1.5	27	49.00	DN120-1912	19	1.25	41	118.38
DN120-1110	11	1.0	27	91.72	DN120-1915	19	1.5	41	118.38
DN120-1112	11	1.25	26	91.72	DN120-2010	20	1.0	38	157.40
DN100-1115	11	1.5	27	54.76	DN120-2012	20	1.25	41	118.38
DN120-1210	12	1.0	28	74.56	DN120-2015	20	1.5	38	99.41
DN120-1212	12	1.25	28	91.12	DN120-2020	20	2.0	41	157.40
DN120-1215	12	1.5	28	91.12	DN100-2025	20	2.5	41	94.87
DN100-1217	12	1.75	36	64.31	DN120-2110	21	1.0	41	167.91
DN120-1310	13	1.0	36	118.38	DN120-2112	21	1.25	41	167.91
DN120-1312	13	1.25	28	118.38	DN120-2115	21	1.5	43	167.91
DN120-1315	13	1.5	36	118.38	DN120-2210	22	1.0	50	167.91
DN120-1410	14	1.0	36	99.41	DN120-2212	22	1.25	50	167.92
DN120-1412	14	1.25	33	99.41	DN120-2215	22	1.5	43	144.14



DIE NUTS - METRIC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	AF	\$ ea.	Code	Size	Pitch	AF	\$ ea.
DN120-2220	22	2.0	50	167.91	DN120-3220	32	2.0	60	416.05
DN100-2225	22	2.5	50	94.87	DN120-3310	33	1.0	66	380.98
DN120-2310	23	1.0	43	167.91	DN120-3315	33	1.5	66	380.98
DN120-2312	23	1.25	50	167.91	DN120-3320	33	2.0	66	416.05
DN120-2315	23	1.5	50	182.39	DN120-3330	33	3.0	66	416.05
DN120-2410	24	1.0	50	167.91	DN100-3335	33	3.5	60	364.49
DN120-2412	24	1.25	52	167.92	DN120-3415	34	1.5	60	416.05
DN120-2415	24	1.5	52	165.68	DN120-3515	35	1.5	66	448.99
DN120-2420	24	2.0	50	165.68	DN120-3615	36	1.5	66	479.88
DN120-2425	24	2.5	52	167.91	DN120-3620	36	2.0	70	448.99
DN100-2430	24	3.0	50	154.93	DN120-3630	36	3.0	70	448.99
DN120-2510	25	1.0	52	167.91	DN100-3640	36	4.0	60	397.64
DN120-2512	25	1.25	52	153.77	DN120-3715	37	1.5	70	479.88
DN120-2515	25	1.5	52	165.68	DN120-3815	38	1.5	70	479.88
DN120-2520	25	2.0	50	257.00	DN120-3820	38	2.0	70	479.88
DN120-2610	26	1.0	52	266.95	DN120-3915	39	1.5	70	479.88
DN120-2615	26	1.5	52	266.95	DN120-3920	39	2.0	70	479.88
DN120-2620	26	2.0	50	266.95	DN120-3930	39	3.0	70	479.88
DN120-2710	27	1.0	57	286.48	DN100-3940	39	4.0	70	422.52
DN120-2715	27	1.5	57	286.48	DN120-4015	40	1.5	70	414.20
DN120-2720	27	2.0	57	241.24	DN120-4215	42	1.5	80	514.90
DN100-2730	27	3.0	60	215.39	DN120-4220	42	2.0	80	514.90
DN120-2810	28	1.0	57	302.33	DN120-4230	42	3.0	80	514.90
DN120-2815	28	1.5	57	302.33	DN120-4240	42	4.0	75	514.90
DN120-2915	29	1.5	60	329.89	DN100-4245	42	4.5	75	439.06
DN120-3010	30	1.0	57	334.95	DN120-4250	42	5.0	75	514.90
DN120-3015	30	1.5	57	289.94	DN120-4515	45	1.5	80	531.39
DN120-3020	30	2.0	57	298.23	DN120-4520	45	2.0	80	531.39
DN120-3030	30	3.0	57	298.23	DN120-4530	45	3.0	80	531.39
DN100-3035	30	3.5	60	306.51	DN120-4540	45	4.0	75	531.39
DN120-3210	32	1.0	57	366.85	DN100-4545	45	4.5	75	463.91
DN120-3215	32	1.5	57	323.08	DN120-4550	45	5.0	75	531.39



DIE NUTS - METRIC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	AF	\$ ea.	Code	Size	Pitch	AF	\$ ea.
DN120-4815	48	1.5	80	541.68	DN100-6055	60	5.5	100	708.82
DN120-4820	48	2.0	80	541.68	DN120-6060	60	6.0	105	708.82
DN120-4830	48	3.0	80	541.68	DN120-6315	63	1.5	105	726.09
DN120-4840	48	4.0	85	541.68	DN100-6460	64	6.0	105	714.68
DN100-4850	48	5.0	85	480.48	DN100-6860	68	6.0	110	770.31
DN120-5015	50	1.5	80	622.83	DN120-7020	70	2.0	115	984.88
DN120-5220	52	2.0	80	622.83	DN100-7260	72	6.0	115	844.45
DN120-5230	52	3.0	90	622.83	DN100-7660	76	6.0	120	873.28
DN120-5240	52	4.0	85	622.83	DN100-8060	80	6.0	125	1081.31
DN100-5250	52	5.0	90	622.83	DN100-8506	85	6.0	135	1092.12
DN120-5620	56	2.0	90	697.44	DN100-9060	90	6.0	140	1141.02
DN120-5640	56	4.0	90	697.44	DN100-9560	95	6.0	145	1377.90
DN100-5655	56	5.5	90	698.84	DN100-1060	100	6.0	150	1431.45

DIE NUTS - METRIC OVERSIZE

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	O/S	AF	\$ ea.	Code	Size	Pitch	O/S	AF	\$ ea.
DN146-0812.3	8	1.25	+0.3	21	74.56	DN146-1620.4	16	2.0	+0.4	33	119.29
DN146-1015.3	10	1.5	+0.3	24	74.56	DN146-2025.3	20	2.5	+0.3	38	149.11
DN146-1015.4	10	1.5	+0.4	24	74.56	DN146-2025.4	20	2.5	+0.4	38	149.11
DN146-1217.3	12	1.75	+0.3	28	86.15	DN146-2430.3	24	3.0	+0.3	52	207.10
DN146-1217.4	12	1.75	+0.4	28	86.15	DN146-2430.4	24	3.0	+0.4	52	207.10
DN146-1620.3	16	2.0	+0.3	33	119.29	DN146-3035.4	30	3.5	+0.4	60	398.07



DIE NUTS - METRIC **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	AF	\$ ea.	Code	Size	Pitch	AF	\$ ea.
DN130-0810	8.0	1.0	22	120.40	DN130-2012	20	1.25	41	198.72
DN130-1010	10	1.0	24	120.40	DN130-2015	20	1.5	38	198.72
DN130-1012	10	1.25	24	120.40	DN130-2020	20	2.0	41	198.72
DN130-1110	11	1.0	27	120.40	DN130-2215	22	1.5	43	198.72
DN130-1210	12	1.0	36	120.40	DN130-2220	22	2.0	50	198.72
DN130-1212	12	1.25	36	124.96	DN100-2230	22	3.0	50	198.72
DN130-1215	12	1.5	28	124.96	DN130-2415	24	1.5	50	214.05
DN130-1412	14	1.25	36	129.17	DN130-2420	24	2.0	50	214.05
DN130-1415	14	1.5	33	129.17	DN130-2515	25	1.5	50	214.05
DN130-1612	16	1.25	41	129.17	DN130-3020	30	2.0	60	400.63
DN130-1615	16	1.5	33	129.17	DN130-3320	33	2.0	60	435.07
DN130-1812	18	1.25	41	148.71	DN130-3615	36	1.5	60	469.24
DN130-1815	18	1.5	38	148.71	DN130-3620	36	2.0	60	469.24
DN130-1820	18	2.0	41	148.71	DN130-4515	45	1.5	75	559.83



DIE NUTS - UNC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN200-0632	6	32	18	63.18	DN200-4809	7/8	9	43	115.98
DN200-0832	8	32	18	49.70	DN200-5208	1"	8	52	149.11
DN200-1024	10	24	18	49.70	DN200-5407	1.1/8	7	57	248.52
DN200-1224	12	24	18	57.99	DN200-5607	1.1/4	7	57	298.23
DN200-2820	1/4	20	18	36.45	DN200-5806	1.3/8	6	66	347.93
DN200-3018	5/16	18	21	41.42	DN200-6006	1.1/2	6	70	381.07
DN200-3216	3/8	16	24	49.70	DN200-6405	1.3/4	5	80	577.33
DN200-3414	7/16	14	26	57.99	DN200-6804	2"	4.5	80	497.04
DN200-3613	1/2	13	28	62.96	DN200-7204	2.1/4	4.5	90	657.93
DN200-3812	9/16	12	33	82.84	DN200-7604	2.1/2	4	90	731.69
DN200-4011	5/8	11	33	82.84	DN200-8004	2.3/4	4	100	799.28
DN200-4410	3/4	10	38	94.44	DN200-8404	3"	4	100	882.55

DIE NUTS - UNC **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN210-2820	1/4	20	19	99.88	DN210-4011	5/8	11	41	185.17
DN210-3018	5/16	18	22	106.77	DN210-4410	3/4	10	41	188.31
DN210-3216	3/8	16	27	106.77	DN210-4809	7/8	9	43	224.23
DN210-3414	7/16	14	27	123.57	DN210-5208	1"	8	50	251.26
DN210-3613	1/2	13	36	167.96	DN210-5607	1.1/4	7	60	393.40
DN210-3812	9/16	12	36	182.39	DN210-6006	1.1/2	6	70	481.94



DIE NUTS - UNF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN220-0836	8	36	17	49.82	DN220-5412	1.1/8	12	57	256.81
DN220-1032	10	32	17	49.82	DN220-5512	1.3/16	12	60	378.97
DN220-1228	12	28	18	49.82	DN220-5612	1.1/4	12	57	298.23
DN220-2828	1/4	28	18	36.45	DN220-5712	1.5/16	12	66	376.91
DN220-3024	5/16	24	21	41.42	DN220-5812	1.3/8	12	66	339.65
DN220-3224	3/8	24	24	49.70	DN220-6012	1.1/2	12	70	372.78
DN220-3420	7/16	20	26	57.99	DN220-6112	1.9/16	12	70	486.09
DN220-3620	1/2	20	28	62.96	DN220-6212	1.5/8	12	70	508.74
DN220-3818	9/16	18	33	82.84	DN220-6412	1.3/4	12	80	430.77
DN220-4018	5/8	18	41	82.84	DN220-6612	1.7/8	12	80	541.68
DN220-4416	3/4	16	38	94.44	DN220-6812	2"	12	90	497.04
DN220-4814	7/8	14	43	127.57	DN220-7212	2.1/4	12	95	615.82
DN220-5212	1"	12	52	149.11	DN220-7412	2.3/8	12	95	665.10
DN220-5214	1" UNS	14	52	154.08	DN220-7612	2.1/2	12	100	696.16
DN220-5312	1.1/16	12	57	348.08	DN220-8412	3"	12	100	882.53

DIE NUTS - UNF **LEFT HAND**

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN230-2828	1/4	28	18	105.86	DN230-5412	1.1/8	12	60	364.56
DN230-3024	5/16	24	22	113.18	DN230-5512	1.3/16	12	60	389.27
DN230-3224	3/8	24	27	113.18	DN230-5612	1.1/4	12	60	399.56
DN230-3420	7/16	20	27	130.97	DN230-5812	1.3/8	12	70	407.82
DN230-3620	1/2	20	36	140.83	DN230-6012	1.1/2	12	70	488.13
DN230-3818	9/16	18	33	185.18	DN230-6212	1.5/8	12	70	523.41
DN230-4018	5/8	18	41	165.52	DN230-6412	1.3/4	12	80	541.68
DN230-4416	3/4	16	38	166.32	DN230-6612	1.7/8	12	80	560.21
DN230-4814	7/8	14	43	224.22	DN230-6812	2"	12	80	595.22
DN230-5212	1"	12	50	251.24	DN230-7212	2.1/4	12	95	636.31
DN230-5212	1" 14 UNS	14	50	251.24	DN230-7612	2.1/2	12	100	719.58
DN230-5312	1.1/16	12	60	354.26					



DIE NUTS - UNEF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN240-2832	1/4	32	19	135.87	DN240-5020	15/16	20	50	190.84
DN240-3032	5/16	32	21	138.34	DN240-5220	1"	20	52	194.59
DN240-3232	3/8	32	24	140.31	DN240-5318	1.1/16	18	60	324.49
DN240-3428	7/16	28	26	140.31	DN240-5418	1.1/8	18	57	347.80
DN240-3628	1/2	28	28	151.50	DN240-5518	1.3/16	18	60	355.58
DN240-3824	9/16	24	36	171.07	DN240-5618	1.1/4	18	57	384.73
DN240-4024	5/8	24	33	177.49	DN240-5718	1.5/16	18	70	421.20
DN240-4224	11/16	24	41	181.21	DN240-5818	1.3/8	18	66	591.72
DN240-4420	3/4	20	38	185.22	DN240-6018	1.1/2	18	70	628.49
DN240-4620	13/16	20	38	188.13	DN240-6218	1.5/8	18	80	671.75
DN240-4820	7/8	20	43	189.00	DN240-6418	1.3/4	18	80	716.77

DIE NUTS - UNS

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN280-2824	1/4	24	18	78.82	DN280-4818	7/8	18	50	195.09
DN280-3040	5/16	40	21	118.96	DN280-5016	15/16	16	50	196.74
DN280-3424	7/16	24	26	154.21	DN280-5216	1"	16	52	198.15
DN280-3624	1/2	24	28	159.23	DN280-5218	1"	18	52	198.15
DN280-3632	1/2	32	28	159.23	DN280-5224	1"	24	52	198.15
DN280-3820	9/16	20	36	177.34	DN280-5416	1.1/8	16	60	260.97
DN280-4016	5/8	16	41	186.99	DN280-5516	1.3/16	16	60	281.74
DN280-4020	5/8	20	33	186.99	DN280-5614	1.1/4	14	60	389.53
DN280-4216	11/16	16	38	191.54	DN280-5616	1.1/4	16	60	389.53
DN280-4218	11/16	18	38	191.54	DN280-5814	1.3/8	14	70	414.07
DN280-4424	3/4	24	41	196.01	DN280-5816	1.3/8	16	70	414.07
DN280-4616	13/16	16	50	193.48	DN280-7616	2.1/2	16	100	731.69
DN280-4816	7/8	16	50	195.09	DN280-7816	2.5/8	16	100	783.60



DIE NUTS - 8 UN SERIES

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN260-5408	1.1/8	8	57	298.23	DN260-6808	2"	8	90	467.22
DN260-5608	1.1/4	8	57	298.23	DN260-7208	2.1/4	8	95	657.93
DN260-5808	1.3/8	8	66	339.65	DN260-7408	2.3/8	8	100	711.87
DN260-6008	1.1/2	8	70	414.20	DN260-7608	2.1/2	8	105	731.69
DN260-6208	1.5/8	8	70	435.74	DN260-8008	2.3/4	8	115	799.28
DN260-6408	1.3/4	8	80	430.77	DN260-8408	3"	8	120	882.54
DN260-6608	1.7/8	8	80	449.00					

DIE NUTS - BSW

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN300-2440	1/8	40	19	49.70	DN300-4410	3/4	10	38	94.44
DN300-2624	3/16	24	18	49.70	DN300-4809	7/8	9	43	111.01
DN300-2724	7/32	24	19	49.70	DN300-5208	1"	8	50	114.42
DN300-2820	1/4	20	19	36.45	DN300-5407	1.1/8	7	60	281.66
DN300-3018	5/16	18	21	41.42	DN300-5607	1.1/4	7	60	298.23
DN300-3216	3/8	16	27	48.51	DN300-5806	1.3/8	6	70	364.50
DN300-3414	7/16	14	27	57.99	DN300-6006	1.1/2	6	70	422.49
DN300-3612	1/2	12	28	66.27	DN300-6205	1.5/8	5	70	521.09
DN300-3812	9/16	12	36	82.84	DN300-6405	1.3/4	5	80	463.91
DN300-4011	5/8	11	41	82.84	DN300-6804	2"	4.5	80	497.04

DIE NUTS - BSF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN320-2632	3/16	32	19	54.67	DN320-4412	3/4	12	41	106.04
DN320-2728	7/32	28	19	68.35	DN320-4811	7/8	11	50	124.26
DN320-2826	1/4	26	18	38.11	DN320-5210	1"	10	50	157.40
DN320-3022	5/16	22	21	46.39	DN320-5409	1.1/8	9	60	298.23
DN320-3220	3/8	20	24	53.02	DN320-5609	1.1/4	9	60	323.08
DN320-3418	7/16	28	27	66.27	DN320-6008	1.1/2	8	70	356.21
DN320-3616	1/2	16	36	71.24	DN320-6407	1.3/4	7	80	429.68
DN320-3816	9/16	16	33	86.15	DN320-6807	2"	7	80	479.33
DN320-4014	5/8	14	33	86.15					



DIE NUTS - BSB BRASS

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN340-2626	3/16	26	19	52.83	DN340-4426	3/4	26	41	135.61
DN340-2826	1/4	26	18	52.83	DN340-4626	13/16	26	50	182.04
DN340-3026	5/16	26	22	75.60	DN340-4826	7/8	26	43	199.56
DN340-3226	3/8	26	27	75.60	DN340-5026	15/16	26	50	224.00
DN340-3426	7/16	26	26	91.47	DN340-5226	1"	26	50	237.74
DN340-3626	1/2	26	36	97.43	DN340-5426	1.1/8	26	60	244.93
DN340-3826	9/16	26	36	102.21	DN340-5626	1.1/4	26	60	281.97
DN340-4026	5/8	26	41	107.49	DN340-5826	1.3/8	26	60	311.18
DN340-4226	11/16	26	41	117.12					

DIE NUTS - BSP

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN400-2428	1/8	28	24	77.77	DN400-5211	1"	11	66	244.70
DN400-2819	1/4	19	28	57.99	DN400-5611	1.1/4	11	70	374.14
DN400-3219	3/8	19	33	82.84	DN400-6011	1.1/2	11	80	386.51
DN400-3614	1/2	14	43	112.66	DN400-6811	2"	11	100	576.65
DN400-4014	5/8	14	50	144.14	DN400-7611	2.1/2	11	120	783.89
DN400-4414	3/4	14	52	196.24	DN400-8411	3"	11	135	882.55

DIE NUTS - BS CYCLE 60°

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN360-2826	1/4	26	19	58.12	DN360-3426	7/16	26	27	98.85
DN360-3026	5/16	26	22	80.09	DN360-3626	1/2	26	36	106.71
DN360-3226	3/8	26	27	80.09					



DIE NUTS - BSPT

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN460-2228	1/16	28	24	103.40	DN460-5211	1"	11	57	275.41
DN460-2428	1/8	28	43	86.15	DN460-5212	1.1/4	11	70	405.92
DN460-2819	1/4	19	28	122.60	DN460-6011	1.1/2	11	85	538.46
DN460-3219	3/8	19	33	124.26	DN460-6811	2"	11	100	662.72
DN460-3614	1/2	14	43	198.63	DN460-7611	2.1/2	11	120	871.73
DN460-4014	5/8	14	50	207.94	DN460-8411	3"	11	135	970.39
DN460-4414	3/4	14	52	208.76					

DIE NUTS - NPT

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
DN620-2427	1/8	27	24	86.15	DN620-5211	1"	11.5	57	275.41
DN620-2818	1/4	18	28	119.29	DN620-5611	1.1/4	11.5	70	405.92
DN620-3218	3/8	18	33	124.26	DN620-6011	1.1/2	11.5	85	538.46
DN620-3614	1/2	14	43	198.63	DN620-6811	2"	11.5	100	662.72
DN620-4414	3/4	14	52	203.79					



WARRAGUL TYPE DIES - METRIC

HIGH SPEED STEEL - GROUND THREAD

Code	Size	Pitch	AF	\$ ea.	Code	Size	Pitch	AF	\$ ea.
WD120-1615	16	1.5	2.3/8	223.67	WD120-3215	32	1.5	2.3/8	223.67
WD120-2015	20	1.5	2.3/8	223.67	WD120-4015	40	1.5	2.3/8	223.67
WD120-2515	25	1.5	2.3/8	223.67					

WARRAGUL TYPE DIES - BSPF

HIGH SPEED STEEL - GROUND THREAD

Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
WD400-2819	1/4	19	2.3/8	223.67	WD400-4414	3/4	14	2.3/8	223.67
WD400-3219	3/8	19	2.3/8	223.67	WD400-5211	1"	11	2.3/8	223.67
WD400-3614	1/2	14	2.3/8	223.67					

WARRAGUL TYPE DIES - BSPT

HIGH SPEED STEEL - GROUND THREAD

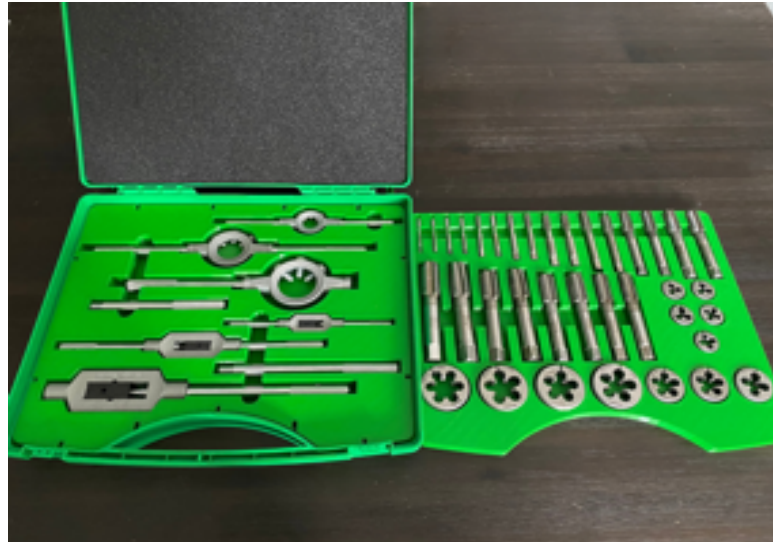
Code	Size	TPI	AF	\$ ea.	Code	Size	TPI	AF	\$ ea.
WD460-2819	1/4	19	2.3/8	223.67	WD460-4414	3/4	14	2.3/8	223.67
WD460-3219	3/8	19	2.3/8	223.67	WD460-5211	1"	11	2.3/8	223.67
WD460-3614	1/2	14	2.3/8	223.67					



WARRAGUL TYPE DIE SETS

Code	Sizes	\$ ea.
WD100	M16 x 1.5, M20 x 1.5, M25 x 1.5, M32 x 1.5, M40 x 1.5	1075.33

EACH SET INCLUDES ONE WARRAGUL TYPE DIE PER SIZE LISTED ABOVE



TAP & DIE SETS

HIGH SPEED STEEL - GROUND THREAD

Code	Thread Form	Sizes	\$ ea.
SETS INCLUDE 2 TAP WRENCHES & 2 DIE STOCKS			
TDS-600	METRIC	M4, M5, M6, M8, M10, M12, M14, M16	968.14
TDS-700	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1085.66
TDS-800	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1167.17

SETS INCLUDE 3 TAP WRENCHES & 3 DIE STOCKS			
TDS-100	METRIC	M4, M5, M6, M8, M10, M12, M14, M16, M18, M20, M22, M24	1780.53
TDS-200	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1793.15
TDS-300	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1813.07

SETS DO NOT INCLUDE ANY TAP WRENCHES OR DIE STOCKS			
TDS-150	METRIC	M4, M5, M6, M8, M10, M12, M14, M16, M18, M20, M22, M24	1418.89
TDS-250	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1431.51
TDS-350	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1493.50

EACH SET INCLUDES A TAPER TAP, BOTTOM TAP & BUTTON DIE PER SIZE LISTED ABOVE
AS WELL AS SIZE RELEVANT HOLDERS FOR BOTH TAPS AND DIES AS LISTED ABOVE



TAP & BUTTON DIE SETS

HIGH SPEED STEEL - GROUND THREAD

Code	Thread Form	Sizes	\$ ea.
TBDS100-0312	METRIC	M3, M4, M5, M6, M8, M10, M12	620.32
TBDS220-1036	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2	761.42
TBDS200-1036	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2	778.44
TBDS300-2636	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2	800.33
TBDS320-2636	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2	814.94
TBDS100-0316	METRIC	M3, M4, M5, M6, M8, M10, M12, M14, M16	997.38
TBDS220-1040	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1052.12
TBDS200-1040	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1070.36
TBDS300-2640	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1088.60
TBDS320-2640	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1210.23
TBDS100-0324	METRIC	M3, M4, M5, M6, M8, M10, M12, M14, M16, M18, M20, M24	1885.29
TBDS220-1052	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1988.68
TBDS200-1052	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2000.84
TBDS300-2652	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2049.49
TBDS320-2652	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2373.03

EACH SET INCLUDES A TAPER TAP, INTER TAP, BOTTOM TAP & BUTTON DIE PER SIZE LISTED ABOVE



TAP & DIE NUT SETS

HIGH SPEED STEEL - GROUND THREAD

Code	Thread Form	Sizes	\$ ea.
TDNS100-0312	METRIC	M3, M4, M5, M6, M8, M10, M12	749.25
TDNS220-1036	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2	783.31
TDNS200-1036	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2	824.66
TDNS300-2636	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2	829.53
TDNS320-2636	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2	937.78
TDNS100-0316	METRIC	M3, M4, M5, M6, M8, M10, M12, M14, M16	1142.12
TDNS220-1040	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1179.83
TDNS200-1040	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1153.06
TDNS300-2640	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1160.37
TDNS320-2640	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	1421.87
TDNS100-0324	METRIC	M3, M4, M5, M6, M8, M10, M12, M14, M16, M18, M20, M24	2092.07
TDNS220-1052	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2132.21
TDNS200-1052	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2107.88
TDNS300-2652	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2152.89
TDNS320-2652	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	2529.94

EACH SET INCLUDES A TAPER TAP, INTER TAP, BOTTOM TAP & DIE NUT PER SIZE LISTED ABOVE



TAP & DRILL SETS

HIGH SPEED STEEL - GROUND THREAD

Code	Thread Form	Sizes	\$ ea.
TDRS100-0312	METRIC	M3, M4, M5, M6, M8, M10, M12	342.65
TDRS220-1036	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2	361.24
TDRS200-1036	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2	363.68
TDRS300-2636	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2	391.65
TDRS320-2636	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2	391.65
TDRS100-0316	METRIC	M3, M4, M5, M6, M8, M10, M12, M14, M16	508.42
TDRS220-1040	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	526.67
TDRS200-1040	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	551.00
TDRS300-2640	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	577.76
TDRS320-2640	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	577.76
TDRS100-0324	METRIC	M3, M4, M5, M6, M8, M10, M12, M14, M16, M18, M20, M24	1100.77
TDRS220-1052	UNF	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1128.74
TDRS200-1052	UNC	10G, 12G, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1131.17
TDRS300-2652	BSW	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1173.75
TDRS320-2652	BSF	3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"	1283.22

EACH SET INCLUDES A TAPER TAP, BOTTOM TAP & HSS DRILL PER SIZE LISTED ABOVE

CAPITAL

CUTTING TOOLS



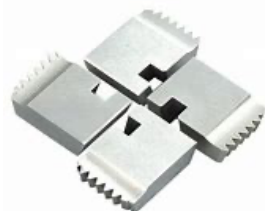
DIE STOCKS

Code	Size	\$ ea.
8X0-21	13/16	34.40
8X0-25	1"	22.48
8X0-33	1.5/16	77.89
8X0-38	1.1/2	50.67
8X0-50	2"	70.72
8X0-64	2.1/4	177.06
8X0-70	2.1/2	286.48
8X0-76	3"	202.48
8X0-100	4"	537.60
8X0-150	5"	709.38



ADJUSTABLE TAP WRENCHES

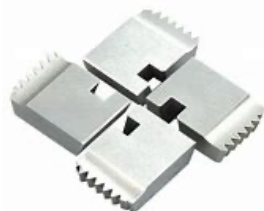
Code	Size	\$ ea.
8AT-A	1mm – 6mm	49.95
8AT-B	1mm – 8mm	49.95
8AT-C	4mm – 12mm	52.90
8AT-D	5mm – 20mm	85.28
8AT-E	11mm – 27mm	129.37
8AT-F	13mm – 32mm	225.38
8AT-G	18mm – 42mm	326.83
8AT-H	25mm – 50mm	403.78



COVENTRY STYLE CHASER DIES - "S" RAKE - METRIC

HIGH SPEED STEEL - GROUND THREAD

Code Prefix:		CV12 -	CV20 -	CV25 -	CV32-	CV38-	CV50-
		Sectional Size	Sectional Size	Sectional Size	Sectional Size	Sectional Size	Sectional Size
		1/2 x 1/4	3/4 x 5/16	7/8 x 3/8	1" x 7/16	1.1/8 x 1/2	1.1/2 x 5/8
		Head	Head	Head	Head	Head	Head
		1/2	3/4	1"	1.1/4	1.1/2	2"
Code	Thread Form	\$ ea.	\$ ea.	\$ ea.	\$ ea.	\$ ea.	\$ ea.
0407	4 x 0.7	165.96					
0508	5 x 0.8	165.96	244.77	276.42			
0610	6 x 1.0	165.96	244.77	276.42			
0812	8 x 1.25	165.96	244.77	276.42			
1015	10 x 1.5	165.96	244.77	276.42	357.06		
1217	12 x 1.75	165.96	244.77	276.42	357.06	420.39	
1420	14 x 2.0	165.96	244.77	276.42	357.06	420.39	
1620	16 x 2.0	165.96	244.77	276.42	357.06	420.39	
1825	18 x 2.5		244.77	276.42	357.06	420.39	
2025	20 x 2.5		244.77	276.42	357.06	420.39	
2225	22 x 2.5			276.42	357.06	420.39	
2430	24 x 3.0			276.42	357.06	420.39	
2730	27 x 3.0				357.06	420.39	
3035	30 x 3.5				357.06	420.39	
3335	33 x 3.5					420.39	756.34
3640	36 x 4.0				357.06	420.39	756.34
3940	39 x 4.0						756.34
4245	42 x 4.5						756.34



COVENTRY STYLE CHASER DIES - "S" RAKE - UNC & UNF

HIGH SPEED STEEL - GROUND THREAD

Code Prefix:		CV12 -	CV20 -	CV25 -	CV32-	CV38-	CV50-
		Sectional Size	Sectional Size	Sectional Size	Sectional Size	Sectional Size	Sectional Size
		1/2 x 1/4	3/4 x 5/16	7/8 x 3/8	1" x 7/16	1.1/8 x 1/2	1.1/2 x 5/8
		Head	Head	Head	Head	Head	Head
		1/2	3/4	1"	1.1/4	1.1/2	2"
Code	UNC	\$ ea.	\$ ea.	\$ ea.	\$ ea.	\$ ea.	\$ ea.
2820	1/4 x 20	165.96	244.77				
3018	5/16 x 18	165.96	244.77				
3216	3/8 x 16	165.96	244.77	276.42			
3414	7/16 x 14	165.96	244.77	276.42			
3613	1/2 x 13	165.96	244.77	276.42	357.06		
3812	9/16 x 12		244.77	276.42	357.06		
4011	5/8 x 11		244.77	276.42	357.06		
4410	3/4 x 10		244.77	276.42	357.06		
4809	7/8 x 9			276.42	357.06	420.39	
5208	1" x 8			276.42	357.06	420.39	
UNF							
2828	1/4 x 28	165.96	244.77				
3024	5/16 x 24	165.96	244.77				
3224	3/8 x 24	165.96	244.77	276.42			
3420	7/16 x 20	165.96	244.77	276.42			
3620	1/2 x 20	165.96	244.77	276.42	357.06		
3818	9/16 x 18		244.77	276.42	357.06		
4018	5/8 x 18		244.77	276.42	357.06		
4416	3/4 x 16		244.77	276.42	357.06		
4814	7/8 x 14			276.42	357.06	420.39	
5212	1" x 12			276.42	357.06	420.39	
5412	1.1/8 x 12				357.06	420.39	
5612	1.1/4 x 12				357.06	420.39	



TANGENTIAL CHASER DIES

HIGH SPEED STEEL - GROUND THREAD

Code Prefix:		C2 -	C3 -	C93 -	C94-	C10-	C11-
		Sectional Size	Sectional Size	Sectional Size	Sectional Size	Sectional Size	Sectional Size
		1" X 4"	1.1/2 X 5"	1.3/64 X 3"	1.3/64 X 4"	1.109 X 4"	1.1/4 X 4"
Code	Thread Form	\$ ea.	\$ ea.	\$ ea.	\$ ea.	\$ ea.	\$ ea.
10100	1.0mm Pitch	414.87		403.13	417.53	417.53	489.51
10125	1.25mm Pitch	414.87		403.13	417.53	417.53	489.51
10150	1.5mm Pitch	414.87		403.13	417.53	417.53	489.51
10175	1.75mm Pitch	414.87		403.13	417.53	417.53	489.51
10200	2.0mm Pitch	414.87		403.13	417.53	417.53	489.51
10250	2.5mm Pitch	414.87		403.13	417.53	417.53	489.51
10300	3.0mm Pitch	414.87	647.98	403.13	417.53	417.53	489.51
10350	3.5mm Pitch	414.87	647.98	403.13	417.53	417.53	489.51
10400	4.0mm Pitch	414.87	647.98	403.13	417.53	417.53	489.51
10450	4.5mm Pitch		647.98				
10500	5.0mm Pitch		647.98				
10550	5.5mm Pitch		647.98				
10600	6.0mm Pitch		647.98				
2005	5 UN		647.98				
2006	6 UN		647.98				
2007	7 UN		647.98				
2008	8 UN	414.87	647.98				
2009	9 UN	414.87	647.98				
2010	10 UN	414.87	647.98	403.13	417.53	417.53	489.51
2011	11 UN	414.87		403.13	417.53	417.53	489.51
2012	12 UN	414.87		403.13	417.53	417.53	489.51
2013	13 UN	414.87		403.13	417.53	417.53	489.51
2014	14 UN	414.87		403.13	417.53	417.53	489.51
2016	16 UN	414.87		403.13	417.53	417.53	489.51
2018	18 UN	414.87		403.13	417.53	417.53	489.51
2020	20 UN	414.87		403.13	417.53	417.53	489.51



ROUND TOOLBITS

HSS Co - METRIC

Code	O/D	Length	\$ ea.	Code	O/D	Length	\$ ea.
G707-03100	3	100	10.80	G707-1080	10	80	21.43
G707-03160	3	150	13.08	G707-10100	10	100	25.74
G707-03510	3.5	100	10.23	G707-10125	10	125	29.42
G707-03516	3.5	150	13.08	G707-10160	10	150	33.57
G707-0463	4	63	4.06	G707-10200	10	200	44.80
G707-0480	4	80	4.55	G707-1263	12	63	24.53
G707-04100	4	100	8.10	G707-1280	12	80	31.19
G707-04160	4	150	13.08	G707-12100	12	100	33.86
G707-04510	4.5	100	8.81	G707-12125	12	125	42.08
G707-04516	4.5	150	13.08	G707-12160	12	150	46.47
G707-0540	5	40	4.50	G707-12200	12	200	59.41
G707-0563	5	63	5.51	G707-14125	14	125	68.51
G707-0580	5	80	8.67	G707-14160	14	150	77.50
G707-05100	5	100	11.48	G707-16100	16	100	57.99
G707-0663	6	63	7.91	G707-16125	16	125	77.50
G707-0680	6	80	8.50	G707-16160	16	150	86.16
G707-06100	6	100	13.64	G707-16200	16	200	98.09
G707-06200	6	200	17.82	G707-18100	18	100	96.98
G707-0840	8	40	11.59	G707-18160	18	150	102.19
G707-0863	8	63	12.92	G707-18200	18	200	159.06
G707-0880	8	80	14.52	G707-19100	19	100	99.12
G707-08100	8	100	19.31	G707-20100	20	100	103.58
G707-08125	8	125	21.50	G707-20125	20	125	106.47
G707-08160	8	150	23.03	G707-20160	20	150	121.72
G707-08200	8	200	25.46	G707-20200	20	200	165.86
G707-1040	10	40	15.89	G707-25200	25	200	194.71
G707-1063	10	63	17.76				



ROUND TOOLBITS

HSS Co - IMPERIAL

Code	O/D	Length	\$ ea.	Code	O/D	Length	\$ ea.
G708-0122	1/8	2"	4.92	G708-0374	3/8	4"	30.10
G708-0125	1/8	2.1/2"	5.85	G708-0376	3/8	6"	35.04
G708-0123	1/8	3"	8.50	G708-0435	7/16	3"	46.47
G708-0182	3/16	2"	4.71	G708-0504	1/2	4"	64.30
G708-0185	3/16	2.1/2"	5.77	G708-0506	1/2	6"	77.58
G708-0183	3/16	3"	9.69	G708-0624	5/8	4"	64.49
G708-0184	3/16	4"	11.48	G708-0626	5/8	6"	89.48
G708-0255	1/4	2.1/2"	7.51	G708-0754	3/4	4"	109.87
G708-0253	1/4	3"	11.90	G708-0756	3/4	6"	138.48
G708-0254	1/4	4"	14.10	G708-0758	3/4	8"	164.06
G708-0313	5/16	3"	22.09	G708-1006	1"	6"	176.39
G708-0314	5/16	4"	25.57	G708-1008	1"	8"	205.07
G708-0373	3/8	3"	22.50				



SQUARE TOOLBITS

HSS Co - METRIC

Code	W	Length	\$ ea.	Code	W	Length	\$ ea.
G709-0440	4	40	5.91	G709-10125	10	125	43.74
G709-0463	4	63	7.94	G709-10160	10	150	47.80
G709-0480	4	80	10.32	G709-10200	10	200	56.04
G709-04100	4	100	13.93	G709-1263	12	63	33.22
G709-0540	5	40	6.44	G709-1280	12	80	38.30
G709-0563	5	63	9.33	G709-12100	12	100	44.08
G709-0580	5	80	11.48	G709-12125	12	125	67.31
G709-05100	5	100	14.36	G709-12160	12	150	73.14
G709-0640	6	40	7.92	G709-12200	12	200	96.83
G709-0663	6	63	11.27	G709-14100	14	100	67.36
G709-0680	6	80	12.54	G709-14125	14	125	92.77
G709-06100	6	100	14.40	G709-14160	14	150	110.48
G709-06125	6	125	19.60	G709-14200	14	200	141.22
G709-06160	6	150	21.46	G709-16100	16	100	73.94
G709-06200	6	200	30.98	G709-16125	16	125	98.01
G709-0840	8	40	14.29	G709-16160	16	150	112.38
G709-0863	8	63	16.32	G709-16200	16	200	145.26
G709-0880	8	80	18.64	G709-18160	18	150	139.58
G709-08100	8	100	21.67	G709-18200	18	200	185.08
G709-08125	8	125	29.51	G709-20160	20	150	146.09
G709-08160	8	150	33.04	G709-20200	20	200	198.03
G709-08200	8	200	44.52	G709-20250	20	250	232.12
G709-1063	10	63	21.96	G709-25160	25	150	159.14
G709-1080	10	80	25.23	G709-25200	25	200	258.76
G709-10100	10	100	29.50	G709-25250	25	250	302.15



SQUARE TOOLBITS

HSS Co - IMPERIAL

Code	W	Length	\$ ea.	Code	W	Length	\$ ea.
G709-0185	3/16	2.1/2"	8.70	G709-0378	3/8	8"	73.70
G709-0183	3/16	3"	9.76	G709-0434	7/16	4"	47.69
G709-0184	3/16	4"	14.48	G709-0436	7/16	6"	53.15
G709-0255	1/4	2.1/2"	11.05	G709-0503	1/2	3"	43.81
G709-0253	1/4	3"	12.86	G709-0504	1/2	4"	49.57
G709-0254	1/4	4"	17.04	G709-0506	1/2	6"	55.58
G709-0256	1/4	6"	37.03	G709-0508	1/2	8"	89.69
G709-0258	1/4	8"	39.97	G709-0624	5/8	4"	70.81
G709-0315	5/16	2.1/2"	12.58	G709-0625	5/8	5"	98.28
G709-0313	5/16	3"	15.22	G709-0626	5/8	6"	109.86
G709-0314	5/16	4"	20.44	G709-0628	5/8	8"	135.46
G709-0316	5/16	6"	44.30	G709-0754	3/4	4"	68.49
G709-0318	5/16	8"	55.10	G709-0755	3/4	5"	74.80
G709-0373	3/8	3"	18.09	G709-0756	3/4	6"	134.40
G709-0374	3/8	4"	24.21	G709-0876	7/8	6"	194.52
G709-0375	3/8	5"	35.77	G709-1006	1"	6"	222.54
G709-0376	3/8	6"	49.81	G709-1008	1"	8"	299.93