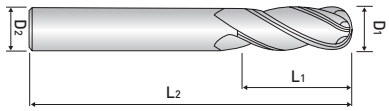
NEO CLASSIC X-STAR

XXB5xxA Series

FINE GRAIN | Plunge | Profile | Variable index

BALL / 4 FLUTES / VARIABLE HELIX / STUB & REGULAR /
TiAlN-SH COATING



TOLERANCE (inch)

D_1 = +0 / -0.0012 (1/8 up to 1/4)
D_1 = +0 / -0.0016 (5/16 up to 3/8)
D_1 = +0 / -0.002 (1/2 up to 1)
D_2 = h6

HARDNESS (HRc)

20 30 40 50 60 70

EDP NO. 4 Flute TiAlN-SH Variable Helix	Cutting Diameter (inch)	Cutting Length (inch)	Overall Length (inch)	Shank Diameter (inch)
XXB504A XXB524A	D1	L1	L2	D2
XXB504A008	1/8	1/2	2	1/8
XXB504A012	3/16	5/8	2 1/4	3/16
XXB524A016	1/4	3/8	4	1/4
XXB504A016	1/4	3/4	2 1/2	1/4
XXB504A020	5/16	3/4	2 1/2	5/16
XXB524A024	3/8	1/2	4	3/8
XXB504A024	3/8	7/8	2 1/2	3/8
XXB524A032	1/2	5/8	5	1/2
XXB504A032	1/2	1	3	1/2
XXB504A033	1/2	1 1/4	3 1/4	1/2
XXB524A041	5/8	3/4	6	5/8
XXB504A040	5/8	1 1/4	3 1/2	5/8
XXB524A049	3/4	1	6	3/4
XXB504A048	3/4	1 1/2	4	3/4
XXB504A064	1	1 1/2	4	1

Applicable Working Material

○ : GOOD ◎ : BEST

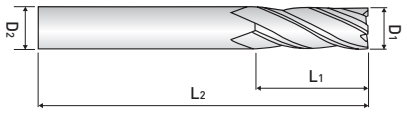
SERIES	CARBON STEELS LOW (1010, 1018)	CARBON STEELS MED (1035, 1045)	CARBON STEELS HIGH (1065)	ALLOY STEELS (4140, 4340)	DIE STEELS	STAINLESS STEELS 300	STAINLESS STEELS 400	STAINLESS STEELS 17-4 PH	CAST IRON	ALUMINUM (6061, 7075)	ALUMINUM CASTINGS	NICKEL ALLOYS INCONNEL	TITANIUM (6A14V)	HARDENED STEELS 35 HRC	HARDENED STEELS 35-45 HRC	HARDENED STEELS 45-50 HRC	HARDENED STEELS 50-70 HRC	MAGNESIUM	BRASS BRONZE	GRAPHITE	COBALT CHROME
All	◎	◎	◎	◎	○	◎	◎	◎				○	○	○	○				○		

NEO CLASSIC X-STAR

XE5xxA Series

MG FINE GRAIN | Slotting | Side milling | Variable index

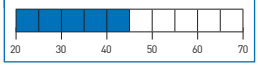
SQUARE / 4 & 5 FLUTE / VARIABLE HELIX / STUB & REGULAR /
AlTiN OR TiAlN-SH COATING



TOLERANCE (inch)

D_1 = +0 / -0.0012 (1/8 up to 1/4)
D_1 = +0 / -0.0016 (1/4 up to 3/8)
D_1 = +0 / -0.002 (13/32 up to 1)
D_2 = h6

HARDNESS (HRc)



EDP NO.		Cutting Diameter (inch)	Cutting Length (inch)	Overall Length (inch)	Shank Diameter (inch)
4 Flute	5 Flute				
AlTiN	TiAlN-SH				
Variable Helix	Variable Helix				
XE504A -	XE505A XE515A	D1	L1	L2	D2
XE504A008	-	1/8	3/8	1 1/2	1/8
XE504A010	-	5/32	7/16	2	3/16
XE504A012S	-	3/16	3/8	2	3/16
XE504A012	-	3/16	7/16	2	3/16
XE504A014	-	7/32	7/16	2 1/2	1/4
-	XE505A016	1/4	3/8	2	1/4
XE504A016	-	1/4	1/2	2 1/2	1/4
-	XE515A016	1/4	5/8	2 1/2	1/4
XE504A017	-	1/4	3/4	2 1/2	1/4
XE504A018	-	9/32	5/8	2 1/2	5/16
-	XE515A018	9/32	5/8	2 1/2	5/16
-	XE505A020	5/16	7/16	2	5/16
XE504A020	-	5/16	13/16	2 1/2	5/16
XE504A020F	-	5/16	13/16	2 1/2	5/16
-	XE515A020	5/16	13/16	2 1/2	5/16
XE504A022	-	11/32	13/16	2 1/2	3/8
-	XE515A022	11/32	13/16	2 1/2	3/8
-	XE505A024	3/8	1/2	2	3/8
XE504A024	-	3/8	7/8	2 1/2	3/8
XE504A024F	-	3/8	7/8	2 1/2	3/8
-	XE515A024	3/8	7/8	2 1/2	3/8
-	XE515A026	13/32	7/8	2 3/4	7/16
XE504A026	-	13/32	15/16	2 3/4	7/16
-	XE505A028	7/16	9/16	2 1/2	7/16
XE504A028	-	7/16	1	2 3/4	7/16
-	XE515A028	7/16	1	2 3/4	7/16
XE504A030	-	15/32	1	3	1/2
-	XE515A030	15/32	1	3	1/2
-	XE505A032	1/2	5/8	2 1/2	1/2
XE504A032	-	1/2	1	3	1/2
XE504A032F	-	1/2	1	3	1/2
-	XE515A032	1/2	1 1/4	3	1/2
XE504A033	-	1/2	1 1/4	3 1/4	1/2

Applicable Working Material

○ : GOOD ◎ : BEST

SERIES	CARBON STEELS LOW (1010, 1018)	CARBON STEELS MED (1035, 1045)	CARBON STEELS HIGH (1065)	ALLOY STEELS (4140, 4340)	DIE STEELS	STAINLESS STEELS 300	STAINLESS STEELS 400	STAINLESS STEELS 17-4 PH	CAST IRON	ALUMINUM (6061, 7075)	ALUMINUM CASTINGS	NICKEL ALLOYS INCONNEL	TITANIUM (6A14V)	HARDENED STEELS 35 HRC	HARDENED STEELS 35-45 HRC	HARDENED STEELS 45-50 HRC	HARDENED STEELS 50-70 HRC	MAGNESIUM	BRASS BRONZE	GRAPHITE	COBALT CHROME
XE504A	◎	◎	◎	◎	○	◎	◎	◎				○	○						○		
All	◎	◎	◎	◎	○	◎	◎	◎				◎	○	○	○	○			○		

NEO CLASSIC X-STAR

XE5xxA Series

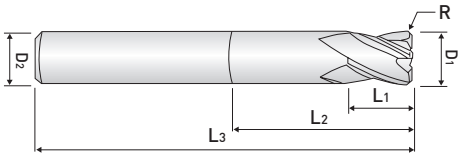
EDP NO.		Cutting Diameter (inch)	Cutting Length (inch)	Overall Length (inch)	Shank Diameter (inch)
4 Flute	5 Flute				
AlTiN	TiAlN-SH				
Variable Helix	Variable Helix				
XE504A -	XE505A XE515A	D1	L1	L2	D2
XE504A033F	-	1/2	1 1/4	3 1/4	1/2
XE504A036	-	9/16	1 1/8	3 1/2	9/16
XE504A036F	-	9/16	1 1/8	3 1/2	9/16
-	XE515A036	9/16	1 1/4	3 1/2	9/16
-	XE505A040	5/8	3/4	3	5/8
XE504A040	-	5/8	1 1/4	3 1/2	5/8
XE504A040F	-	5/8	1 1/4	3 1/2	5/8
-	XE515A040	5/8	1 1/4	3 1/2	5/8
-	XE505A048	3/4	1	3	3/4
XE504A048	-	3/4	1 1/2	4	3/4
XE504A048F	-	3/4	1 1/2	4	3/4
-	XE515A048	3/4	1 1/2	4	3/4
-	XE505A064	1	1	4	1
XE504A064	-	1	1 1/2	4	1
-	XE515A064	1	1 1/2	4	1

FINE GRAIN | Slotting | Side milling | Ramping | Variable index

NEO CLASSIC X-STAR

XR5xxA Series

CORNER RADIUS / 4 & 5 FLUTE / VARIABLE HELIX /
STUB & REGULAR / AlTiN OR TiAlN-SH COATING



TOLERANCE (inch)

D_1 = +0 / -0.0012 (1/8 up to 1/4)
D_1 = +0 / -0.0016 (1/4 up to 3/8)
D_1 = +0 / -0.002 (13/32 up to 1)
D_2 = h6
R = ±0.001

HARDNESS (HRc)

20 30 40 50 60 70

EDP NO.		Cutting Diameter (inch)	Corner Radius (inch)	Cutting Length (inch)	Neck Length (inch)	Overall Length (inch)	Shank Diameter (inch)
4 Flute	5 Flute						
AlTiN-H	TiAlN-SH						
Variable Helix	Variable Helix						
XR504A XR514A XR524A -	XR505A XR515A XR525A XR535A	D1	R	L1	L2	L3	D2
XR504A008010	-	1/8	0.010	1/4	-	1 1/2	1/8
XR514A008010	-	1/8	0.010	3/8	-	1 1/2	1/8
XR504A010010	-	5/32	0.010	5/16	-	2	3/16
XR504A012010	-	3/16	0.010	3/8	-	2	3/16
XR514A012010	-	3/16	0.010	7/16	-	2	3/16
XR514A012020	-	3/16	0.020	7/16	-	2	3/16
XR514A012030	-	3/16	0.030	7/16	-	2	3/16
XR504A014015	-	7/32	0.015	3/8	-	2	1/4
-	XR505A016015	1/4	0.015	3/8	-	2	1/4
-	XR505A016030	1/4	0.030	3/8	-	2	1/4
XR504A016015	-	1/4	0.015	7/16	-	2	1/4
XR504A016015F	-	1/4	0.015	7/16	-	2	1/4
XR514A016010	-	1/4	0.010	1/2	-	2 1/2	1/4
XR514A016015	-	1/4	0.015	1/2	-	2 1/2	1/4
XR514A016030	-	1/4	0.030	1/2	-	2 1/2	1/4
XR524A016030	-	1/4	0.030	1/2	-	4	1/4
-	XR515A016015	1/4	0.015	5/8	-	2 1/2	1/4
-	XR515A016030	1/4	0.030	5/8	-	2 1/2	1/4
XR514A017010	-	1/4	0.010	3/4	-	2 1/2	1/4
XR514A017015	-	1/4	0.015	3/4	-	2 1/2	1/4
XR514A017030	-	1/4	0.030	3/4	-	2 1/2	1/4
XR514A017030F	-	1/4	0.030	3/4	-	2 1/2	1/4
-	XR525A016015	1/4	0.015	3/4	2 1/8	4	1/4
-	XR525A016030	1/4	0.030	3/4	2 1/8	4	1/4
XR514A018015	XR515A018015	9/32	0.015	5/8	-	2 1/2	5/16
-	XR515A018030	9/32	0.030	5/8	-	2 1/2	5/16
-	XR505A020015	5/16	0.015	7/16	-	2	5/16
-	XR505A020030	5/16	0.030	7/16	-	2	5/16
XR504A020020	-	5/16	0.020	1/2	-	2	5/16
XR514A020020	-	5/16	0.020	13/16	-	2 1/2	5/16
-	XR515A020015	5/16	0.015	13/16	-	2 1/2	5/16
-	XR515A020030	5/16	0.030	13/16	-	2 1/2	5/16

Applicable Working Material

○ : GOOD ◎ : BEST

SERIES	CARBON STEELS LOW (1010, 1018)	CARBON STEELS MED (1035, 1045)	CARBON STEELS HIGH (1065)	ALLOY STEELS (4140, 4340)	DIE STEELS	STAINLESS STEELS 300	STAINLESS STEELS 400	STAINLESS STEELS 17-4 PH	CAST IRON	ALUMINUM (6061, 7075)	ALUMINUM CASTINGS	NICKEL ALLOYS INCONNEL	TITANIUM (6A14V)	HARDENED STEELS 35 HRC	HARDENED STEELS 35-45 HRC	HARDENED STEELS 45-50 HRC	HARDENED STEELS 50-70 HRC	MAGNESIUM	BRASS BRONZE	GRAPHITE	COBALT CHROME
XR5x4A Series	◎	◎	◎	◎	○	◎	◎	◎				○	○						○		
XR5x5A Series	◎	◎	◎	◎	○	◎	◎	◎				◎	○	○	○	○			○		

NEO CLASSIC X-STAR

XR5xxA Series

>>Continue

EDP NO.		Cutting Diameter (inch)	Corner Radius (inch)	Cutting Length (inch)	Neck Length (inch)	Overall Length (inch)	Shank Diameter (inch)
4 Flute	5 Flute						
AlTiN-H	TiAlN-SH						
Variable Helix	Variable Helix						
XR504A XR514A XR524A -	XR505A XR515A XR525A XR535A	D1	R	L1	L2	L3	D2
XR524A020020	-	5/16	0.020	13/16	-	4	5/16
-	XR525A020015	5/16	0.015	1	2 1/8	4	5/16
-	XR525A020030	5/16	0.030	1	2 1/8	4	5/16
XR514A022020	-	11/32	0.020	13/16	-	2 1/2	3/8
-	XR515A022015	11/32	0.015	13/16	-	2 1/2	3/8
-	XR515A022030	11/32	0.030	13/16	-	2 1/2	3/8
-	XR505A024015	3/8	0.015	1/2	-	2	3/8
-	XR505A024030	3/8	0.030	1/2	-	2	3/8
XR504A024020	-	3/8	0.020	5/8	-	2	3/8
XR504A024020F	-	3/8	0.020	5/8	-	2	3/8
XR514A024010	-	3/8	0.010	7/8	-	2 1/2	3/8
XR514A024015	XR515A024015	3/8	0.015	7/8	-	2 1/2	3/8
XR514A024015F	-	3/8	0.015	7/8	-	2 1/2	3/8
XR514A024020	-	3/8	0.020	7/8	-	2 1/2	3/8
XR514A024020F	-	3/8	0.020	7/8	-	2 1/2	3/8
XR514A024030	XR515A024030	3/8	0.030	7/8	-	2 1/2	3/8
XR514A024030F	-	3/8	0.030	7/8	-	2 1/2	3/8
XR514A024060	-	3/8	0.060	7/8	-	2 1/2	3/8
XR524A024020	-	3/8	0.020	7/8	-	5	3/8
-	XR525A024015	3/8	0.015	1	2 1/8	4	3/8
-	XR525A024030	3/8	0.030	1	2 1/8	4	3/8
-	XR535A024015	3/8	0.015	1 1/4	3 3/8	6	3/8
-	XR535A024030	3/8	0.030	1 1/4	3 3/8	6	3/8
-	XR515A026015	13/32	0.015	7/8	-	2 3/4	7/16
-	XR515A026030	13/32	0.030	7/8	-	2 3/4	7/16
-	XR505A028015	7/16	0.015	9/16	-	2 1/2	7/16
-	XR505A028030	7/16	0.030	9/16	-	2 1/2	7/16
XR504A028020	-	7/16	0.020	5/8	-	2 1/2	7/16
XR514A028020	XR515A028020	7/16	0.020	1	-	2 3/4	7/16
XR514A028020F	-	7/16	0.020	1	-	2 3/4	7/16
XR514A028030	XR515A028030	7/16	0.030	1	-	2 3/4	7/16
XR524A028020	-	7/16	0.020	1	-	6	7/16
-	XR525A028030	7/16	0.030	1 1/4	2 1/8	4	7/16
-	XR535A028020	7/16	0.020	1 1/2	3 3/8	6	7/16
-	XR535A028030	7/16	0.030	1 1/2	3 3/8	6	7/16
-	XR515A030015	15/32	0.015	1	-	3	1/2
-	XR515A030030	15/32	0.030	1	-	3	1/2
-	XR505A032015	1/2	0.015	5/8	-	2 1/2	1/2
XR504A032030	XR505A032030	1/2	0.030	5/8	-	2 1/2	1/2
XR504A032030F	-	1/2	0.030	5/8	-	2 1/2	1/2
-	XR525A032015SP	1/2	0.015	0.778	0.7	3	1/2
XR514A032010	-	1/2	0.010	1	-	3	1/2
XR514A032020	-	1/2	0.020	1	-	3	1/2

NEO CLASSIC X-STAR

XR5xxA Series

>>Continue

EDP NO.		Cutting Diameter (inch)	Corner Radius (inch)	Cutting Length (inch)	Neck Length (inch)	Overall Length (inch)	Shank Diameter (inch)
4 Flute	5 Flute						
AlTiN-H	TiAlN-SH						
Variable Helix	Variable Helix						
XR504A XR514A XR524A -	XR505A XR515A XR525A XR535A	D1	R	L1	L2	L3	D2
XR514A032020F	-	1/2	0.020	1	-	3	1/2
XR514A032030	-	1/2	0.030	1	-	3	1/2
XR514A032030F	-	1/2	0.030	1	-	3	1/2
XR514A032060	-	1/2	0.060	1	-	3	1/2
XR514A032090	-	1/2	0.090	1	-	3	1/2
XR524A032030	-	1/2	0.030	1	-	6	1/2
-	XR515A032020	1/2	0.020	1 1/4	-	3	1/2
-	XR515A032030	1/2	0.030	1 1/4	-	3	1/2
-	XR515A032030F	1/2	0.030	1 1/4	-	3	1/2
-	XR515A032045	1/2	0.045	1 1/4	-	3	1/2
-	XR515A032060	1/2	0.060	1 1/4	-	3	1/2
-	XR515A032090	1/2	0.090	1 1/4	-	3	1/2
XR514A033010	-	1/2	0.010	1 1/4	-	3 1/4	1/2
XR514A033015	-	1/2	0.015	1 1/4	-	3 1/4	1/2
XR514A033030	-	1/2	0.030	1 1/4	-	3 1/4	1/2
XR514A033030F	-	1/2	0.030	1 1/4	-	3 1/4	1/2
XR514A033060	-	1/2	0.060	1 1/4	-	3 1/4	1/2
XR514A033060F	-	1/2	0.060	1 1/4	-	3 1/4	1/2
XR514A033090	-	1/2	0.090	1 1/4	-	3 1/4	1/2
-	XR525A032020	1/2	0.020	1 1/4	2 1/8	4	1/2
-	XR525A032030	1/2	0.030	1 1/4	2 1/8	4	1/2
-	XR525A032020L	1/2	0.020	1 3/8	3 1/8	5	1/2
-	XR525A032030L	1/2	0.030	1 3/8	3 1/8	5	1/2
-	XR535A032020	1/2	0.020	1 1/2	4 1/8	6	1/2
-	XR535A032030	1/2	0.030	1 1/2	4 1/8	6	1/2
XR514A036030	-	9/16	0.030	1 1/8	-	3 1/2	9/16
XR524A036030	-	9/16	0.030	1 1/8	-	6	9/16
-	XR515A036015	9/16	0.015	1 1/4	-	3	9/16
-	XR515A036030	9/16	0.030	1 1/4	-	3	9/16
XR504A040030	XR505A040030	5/8	0.030	3/4	-	3	5/8
XR504A040030F	-	5/8	0.030	3/4	-	3	5/8
-	XR505A040060	5/8	0.060	3/4	-	3	5/8
-	XR515A040030	5/8	0.030	1 1/4	-	3	5/8
-	XR515A040060	5/8	0.060	1 1/4	-	3	5/8
-	XR515A040090	5/8	0.090	1 1/4	-	3	5/8
-	XR515A040125	5/8	0.125	1 1/4	-	3	5/8
XR514A040030	-	5/8	0.030	1 1/4	-	3 1/2	5/8
XR514A040030F	-	5/8	0.030	1 1/4	-	3 1/2	5/8
XR514A040060	-	5/8	0.060	1 1/4	-	3 1/2	5/8
XR514A040090	-	5/8	0.090	1 1/4	-	3 1/2	5/8
XR514A040090F	-	5/8	0.090	1 1/4	-	3 1/2	5/8
XR514A040125	-	5/8	0.125	1 1/4	-	3 1/2	5/8
XR514A040125F	-	5/8	0.125	1 1/4	-	3 1/2	5/8

NEO CLASSIC X-STAR

XR5xxA Series

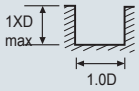
EDP NO.		Cutting Diameter (inch)	Corner Radius (inch)	Cutting Length (inch)	Neck Length (inch)	Overall Length (inch)	Shank Diameter (inch)
4 Flute	5 Flute						
AlTiN-H	TiAlN-SH						
Variable Helix	Variable Helix						
XR504A XR514A XR524A -	XR505A XR515A XR525A XR535A	D1	R	L1	L2	L3	D2
XR524A040060	-	5/8	0.060	1 1/4	-	6	5/8
-	XR525A040030	5/8	0.030	1 1/2	2 1/8	4	5/8
-	XR525A040060	5/8	0.060	1 1/2	2 1/8	4	5/8
-	XR515A040030SP	5/8	0.030	1 5/8	-	3 1/2	5/8
-	XR525A040030L	5/8	0.030	1 3/4	3 1/8	5	5/8
-	XR525A040060L	5/8	0.060	1 3/4	3 1/8	5	5/8
-	XR535A040030	5/8	0.030	2	4	6	5/8
-	XR535A040060	5/8	0.060	2	4	6	5/8
XR504A048030	XR505A048030	3/4	0.030	1	-	3	3/4
XR504A048030F	-	3/4	0.030	1	-	3	3/4
-	XR505A048060	3/4	0.060	1	-	3	3/4
-	XR515A048015	3/4	0.015	1 1/2	-	4	3/4
XR514A048030	XR515A048030	3/4	0.030	1 1/2	-	4	3/4
XR514A048030F	-	3/4	0.030	1 1/2	-	4	3/4
XR514A048040	-	3/4	0.040	1 1/2	-	4	3/4
XR514A048040F	-	3/4	0.040	1 1/2	-	4	3/4
-	XR515A048045	3/4	0.045	1 1/2	-	4	3/4
XR514A048060	XR515A048060	3/4	0.060	1 1/2	-	4	3/4
XR514A048060F	-	3/4	0.060	1 1/2	-	4	3/4
XR514A048090	XR515A048090	3/4	0.090	1 1/2	-	4	3/4
XR514A048090F	-	3/4	0.090	1 1/2	-	4	3/4
-	XR515A048125	3/4	0.125	1 1/2	-	4	3/4
XR524A048040	-	3/4	0.040	1 1/2	-	6	3/4
-	XR525A048015	3/4	0.015	1 7/8	3	5	3/4
-	XR525A048030	3/4	0.030	1 7/8	3	5	3/4
-	XR525A048060	3/4	0.060	1 7/8	3	5	3/4
-	XR535A048015	3/4	0.015	2 1/4	4	6	3/4
-	XR535A048030	3/4	0.030	2 1/4	4	6	3/4
-	XR535A048060	3/4	0.060	2 1/4	4	6	3/4
-	XR535A048030SP	3/4	0.030	3 1/2	-	6	3/4
XR514A064030	XR505A064030	1	0.030	1 1/2	-	4	1
XR514A064030F	-	1	0.030	1 1/2	-	4	1
XR514A064060	XR505A064060	1	0.060	1 1/2	-	4	1
XR514A064060F	-	1	0.060	1 1/2	-	4	1
XR514A064090	XR505A064090	1	0.090	1 1/2	-	4	1
XR524A064030	-	1	0.030	1 1/2	-	6	1
-	XR525A064015	1	0.015	2 1/4	3	5	1
-	XR525A064030	1	0.030	2 1/4	3	5	1
-	XR525A064060	1	0.060	2 1/4	3	5	1
-	XR535A064015	1	0.015	3	4	6	1
-	XR535A064030	1	0.030	3	4	6	1
-	XR535A064060	1	0.060	3	4	6	1

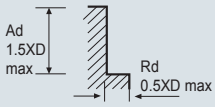
XXB5xxA, XE5xxA & XR5xxA Series

Work Material	Low Carbon Steels				Medical Alloy Steels		Mold & Die Steels		Cast Iron Gray		Cast Iron Ductile	
Hardness	≤ 175 HB		≤ 275 HB		≤ 275 HB		≤ 275 HB		≤ 200 HB		≤ 300 HB	
Cutting Diameter(inch)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	FEED	RPM
1/8	15,585	12	12,835	10	10,695	8	5,500	4	14,515	11	7,335	5
3/16	10,360	20	8,560	17	7,150	14	3,670	8	9,690	19	4,880	9
1/4	7,795	24	6,420	20	5,350	17	2,750	8	7,260	23	3,665	11
5/16	6,235	29	5,135	24	4,280	20	2,200	10	5,805	27	2,935	14
3/8	5,195	39	4,280	32	3,565	27	1,835	13	4,840	36	2,445	18
7/16	4,455	38	3,665	31	3,055	26	1,570	13	4,145	35	2,095	18
1/2	3,895	37	3,210	30	2,675	25	1,375	13	3,630	34	1,835	17
9/16	3,465	35	2,850	29	2,375	24	1,220	12	3,225	32	1,630	16
5/8	3,115	33	2,565	27	2,140	23	1,100	11	2,905	31	1,465	15
3/4	2,600	31	2,140	25	1,785	21	915	11	2,420	29	1,220	14
1	1,950	25	1,605	21	1,335	17	690	9	1,815	24	915	12

Work Material	Cast Iron Malleable		Stainless 300 Series		Stainless 400 Series		Stainless PH Series		Titanium Alloys		High Temp Alloys	
Hardness	≤ 300 HB		≤ 275 HB		≤ 185 HB		≤ 232 HB		≤ 295 HB		≤ 300 HB	
Cutting Diameter(inch)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1/8	4,585	4	9,170	7	12,835	10	7,640	5	9,170	9	2,445	2
3/16	3,070	6	6,080	12	8,550	17	5,080	10	6,080	14	1,600	3
1/4	2,290	7	4,585	14	6,420	22	3,820	12	4,585	16	1,220	3
5/16	1,835	8	3,665	16	5,135	25	3,055	14	3,665	18	980	4
3/8	1,530	11	3,055	16	4,280	25	2,545	14	3,055	18	815	4
7/16	1,310	11	2,620	16	3,665	25	2,185	14	2,620	18	700	4
1/2	1,145	11	2,290	16	3,210	25	1,910	14	2,290	18	610	4
9/16	1,020	10	2,035	20	2,850	29	1,700	17	2,035	20	545	6
5/8	915	9	1,835	16	2,565	25	1,530	14	1,835	18	490	4
3/4	765	9	1,520	15	2,410	22	1,275	12	1,520	16	400	4
1	575	7	1,145	15	1,605	22	955	12	1,145	16	305	3

RPM = rev. / min.
FEED = inch / min.

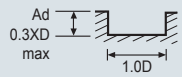


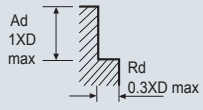


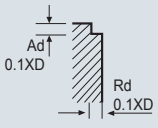
※ Use a rigid and precise machines and holders.
※ Use a suitable cutting oil.

End Cutting / Feed Speed	Slotting		Side Milling		High Speed Cutting	
Work Material	Hardened Steels		Hardened Steels		Hardened Steels	
Hardness	30 ~ 45 HRc		30 ~ 45 HRc		30 ~ 45 HRc	
Cutting Diameter(inch)	RPM	FEED	RPM	FEED	RPM	FEED
1/8	6,573	16	6,573	16	17,121	75
3/16	4,382	16	4,382	16	11,414	78
1/4	3,287	17	3,287	17	8,561	75
5/16	2,629	17	2,629	17	6,848	77
3/8	2,191	17	2,191	17	5,707	75
7/16	1,878	17	1,878	17	4,892	76
1/2	1,643	16	1,643	16	4,280	75
9/16	1,461	16	1,461	16	3,805	75
5/8	1,315	16	1,315	16	3,424	75
3/4	1,096	17	1,096	17	2,854	75
1	822	16	822	16	2,140	73

RPM = rev. / min.
FEED = inch / min.







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※ Use a suitable cutting oil.