

DISCOVER OUR

MILLING



Milling

NOMENCLATURE

CROMSON «ENDMILL»

- FLUTES

DIAMETER

CREM-Ti-5RC-0500-R010 Cr95

APPLICATIONS

AL- Aluminum
ALR- Aluminum Roughing
DM- Die & Mold
HD- Hard Material
HF- High Feed
SA (SAX)- Super Alloy
ST- Steel
SST- Stainless Steel
Ti- Titanium
TiX- Titanium HP
TP- Taper (NPT)

TOOL TYPE

S- Stub Length
M- Medium Length
R- Reg. Length
L- Long Length
E- Extended Length
N- Necking

C- Cylindrical Shank
W- Weldon Shank



RADIUS/CHAMFER

BN- Ball Nose
C- Chamfer
R- Radius
SQ- Square

COATING

Cr20- Uncoated
Cr35- AlCrN
Cr55- TiAlN
Cr75- TiAlN+
Cr95- TiAlCN

Summary application chart-Milling




























































Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	RECORD ST	STAR SST	ALLIANCE TI
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	350 425			
Medium carbon steels <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375			
Tool & die steels <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375			
Tool steel 39HRc to 48HRc	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	225 275			
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 375			
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	275 350			
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300			
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	400 500			
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 400			
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D	250 325			
Aluminum alloys 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D	800 1000			
Titanium alloys 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300			
High temperature alloys Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D	70 95			



Highly recommended

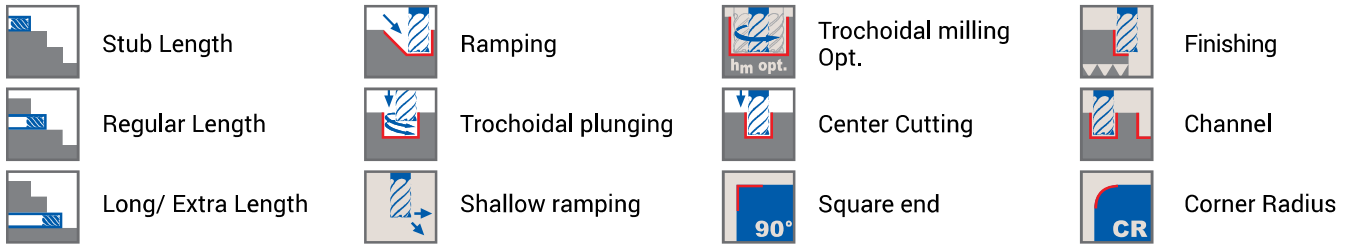


Suitable for some applications

PISTON HD	TURBINE SRGH	OXYGEN HF	TAPER-MILL TP	DRIVER DM	MOTION AL	BOSS ALR	MAGNAT STX	PERFORMANCE TIX	BOOSTER SA
									
									
									
									
									
									
									
									
									
									
									
									
									

** The machining values shown are guidelines.
The optimum data for a particular machining process should be determined in trials or during machining.

Explanation of Milling symbols



Grades chart & Milling application

CROMSON offers a variety of coating upon special request to meet the demands of every customer's needs and unique application demands. Through extensive testing, research and real world applications, CROMSON has worked to develop a full range of high performance coatings. These coating options allow us to address a multitude of situations with optimal results.

Please refer to the chart below for the various coatings available.

CROMSON GRADE	Cr20	Cr35	Cr55	Cr75	Cr95
Proprietary	Uncoated	AlCrN	TiAlN	TiAlN+	TiAlCN
Coating process		PVD	PVD	PVD	PVD
Layer structure		Nano structure	Nano structure	Nano structure	Nano structure
Hardness (HV)		3000	3300	3300	3060
Coefficient of friction (fetting)		0.25	0.30-0.35	0.25	0.35
Thermal stability (C)		1100	900	900	1000
General Information		New generation PVD coating providing a high level of wear and abrasion resistance in combination with a micro grain carbide substrate for use in all ferrous materials at elevated cutting speed.	A thick PVD coating on a balanced wear resistance/tough fine grain carbide substrate provides users with predictable consistent results in general purpose applications in all materials.	In combination with a tough submicron grain carbide substrate and advanced PVD coating technology a high level of security and wear resistance is seen in demanding applications in titanium and steel up to 52 HRC.	New generation PVD coating providing a high level of wear. lower coefficient of friction combination with a micro grain carbide substrate for use in stainless steel and nickel-based high temperature alloys.

CARBIDE END MILL

STAR SST SERIES

- ⊙ High performance end mills feature differential flute spacing along with variable helix angle
- ⊙ Eccentric relief is suited for high strength steels, cast iron and stainless steel application
- ⊙ Cr35 AlCrN (PVD) coating design for high level of wear resistance for the 4 and 5 flutes design
- ⊙ Edge preparation and post coat process assure a longer tool life than most common brands on the market
- ⊙ Corner protection will also give an edge on this series
- ⊙ 7 flute designs have been developed for trochoidal milling applications and are offered in our new grade Cr75 TiAlN+ (PVD) for high wear resistance in demanding applications like titanium and steel up to 52 HRc
- ⊙ h6 tolerance for conventional and shrink fit applications
- ⊙ Available in stub, standard and extra long lengths

Work Material	Operation	Axial DOC	Radial DOC	Speed (SFM)
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D	1 x D	325
		1.5 x D	0.5 x D	375
Tool steel 39HRc to 48HRc	Slotting Peripheral - Rough	.75 x D	1 x D	225
		1 x D	0.5 x D	275
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D	1 x D	300
		1.5 x D	0.5 x D	375
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D	1 x D	275
		1 x D	0.5 x D	350
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D	1 x D	250
		1 x D	0.5 x D	300
Cast iron Grey	Slotting Peripheral - Rough	1 x D	1 x D	400
		1.5 x D	0.5 x D	500
Cast iron Ductile	Slotting Peripheral - Rough	1 x D	1 x D	300
		1.5 x D	0.5 x D	400
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D	1 x D	250
		1 x D	.75 x D	325
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D	1 x D	250
		1 x D	0.5 x D	300
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D	1 x D	70
		1 x D	.25 x D	95

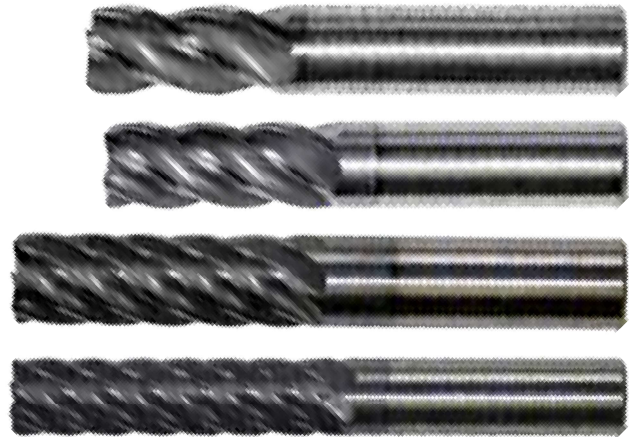


CARBIDE END MILL - SQUARE OR RADIUS

TECHNICAL DETAILS

Tool Diameter Range 0.125-1.000 in

Shank tolerance h6
 Cutter tolerance (+0.00-0.002 in) +0.00-0.05 mm
 Number of flutes 4, 5 or 7
 Coating AlCrN (Cr35) ou TiAlN+ (Cr75)
 Center cutting Yes
 Variable pitch Variable
 Variable helix Variable
 Helix angle 35° to 38°



70
40
0 HARDNESS (HRC)



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72000770	CREM-SST-4RC-0125- SQ Cr35	1/8	1/2	2	---	Cr35	4
72000775	CREM-SST-4RC-0125-R010- Cr35	1/8	1/2	2	.010	Cr35	4
72000780	CREM-SST-4RC-0187- SQ Cr35	3/16	5/8	2	---	Cr35	4
72000785	CREM-SST-4RC-0187-R015- Cr35	3/16	5/8	2	.015	Cr35	4
72000790	CREM-SST-4EC-0187- SQ Cr35	3/16	7/8	2.1/2	---	Cr35	4
72000795	CREM-SST-4RC-0250- SQ Cr35	1/4	3/4	2.1/2	---	Cr35	4
72000800	CREM-SST-4RC-0250-R020- Cr35	1/4	3/4	2.1/2	.020	Cr35	4
72000805	CREM-SST-4RC-0250-R030- Cr35	1/4	3/4	2.1/2	.030	Cr35	4
72000810	CREM-SST-4RC-0250-R060- Cr35	1/4	3/4	2.1/2	.060	Cr35	4
72000815	CREM-SST-4LC-0250- SQ Cr35	1/4	1.1/4	3	---	Cr35	4
72000820	CREM-SST-4LC-0250-R020- Cr35	1/4	1.1/4	3	.020	Cr35	4
72000825	CREM-SST-4RC-0312- Cr35	5/16	13/16	2.1/2	---	Cr35	4
72000830	CREM-SST-4RC-0312-R020- Cr35	5/16	13/16	2.1/2	.020	Cr35	4
72000835	CREM-SST-4RC-0375- SQ Cr35	3/8	7/8	2.1/2	---	Cr35	4
72000840	CREM-SST-4RC-0375-R020- Cr35	3/8	7/8	2.1/2	.020	Cr35	4
72000845	CREM-SST-4RC-0375-R030- Cr35	3/8	7/8	2.1/2	.030	Cr35	4
72000850	CREM-SST-4RC-0375-R060- Cr35	3/8	7/8	2.1/2	.060	Cr35	4
72000855	CREM-SST-4RC-0375-R120- Cr35	3/8	7/8	2.1/2	.120	Cr35	4
72000860	CREM-SST-4EC-0375- SQ Cr35	3/8	1.1/8	3	---	Cr35	4
72000865	CREM-SST-4EC-0375-R020- Cr35	3/8	1.1/8	3	.020	Cr35	4
72000870	CREM-SST-4LC-0375- SQ Cr35	3/8	1.1/2	3.1/2	---	Cr35	4
72000875	CREM-SST-4LC-0375-R030- Cr35	3/8	1.1/2	3.1/2	.030	Cr35	4
72000880	CREM-SST-4RC-0437- SQ Cr35	7/16	1	2.3/4	---	Cr35	4
72000885	CREM-SST-4RC-0500- SQ Cr35	1/2	1	3	---	Cr35	4
72000890	CREM-SST-4RC-0500-R030- Cr35	1/2	1	3	.030	Cr35	4
72000895	CREM-SST-4RC-0500-R060- Cr35	1/2	1	3	.060	Cr35	4
72000900	CREM-SST-4EC-0500- SQ Cr35	1/2	1.1/4	3	---	Cr35	4
72000905	CREM-SST-4EC-0500-R020- Cr35	1/2	1.1/4	3	.020	Cr35	4
72000910	CREM-SST-4EC-0500-R030- Cr35	1/2	1.1/4	3	.030	Cr35	4
72000915	CREM-SST-4EC-0500-R060- Cr35	1/2	1.1/4	3	.060	Cr35	4
72000920	CREM-SST-4EC-0500-R090- Cr35	1/2	1.1/4	3	.090	Cr35	4

EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72000925	CREM-SST-4EC-0500-R120- Cr35	1/2	1.1/4	3	.120	Cr35	4
72000930	CREM-SST-4MC-0500- SQ Cr35	1/2	1.5/8	3.1/2	---	Cr35	4
72000935	CREM-SST-4LC-0500- SQ Cr35	1/2	2	4	---	Cr35	4
72000940	CREM-SST-4LC-0500-R030- Cr35	1/2	2	4	.030	Cr35	4
72000945	CREM-SST-4RC-0562- SQ Cr35	9/16	1.1/4	3.1/2	---	Cr35	4
72000950	CREM-SST-4RC-0625- SQ Cr35	5/8	1.1/4	3.1/2	---	Cr35	4
72000955	CREM-SST-4RC-0625-R030- Cr35	5/8	1.1/4	3.1/2	.030	Cr35	4
72000960	CREM-SST-4RC-0625-R060- Cr35	5/8	1.1/4	3.1/2	.060	Cr35	4
72000965	CREM-SST-4EC-0625- SQ Cr35	5/8	1.5/8	3.1/2	---	Cr35	4
72000970	CREM-SST-4EC-0625-R030- Cr35	5/8	1.5/8	3.1/2	.030	Cr35	4
72000975	CREM-SST-4RC-0750- SQ Cr35	3/4	1.1/2	4	---	Cr35	4
72000980	CREM-SST-4RC-0750-R030- Cr35	3/4	1.1/2	4	.030	Cr35	4
72000985	CREM-SST-4RC-0750-R060- Cr35	3/4	1.1/2	4	.060	Cr35	4
72000990	CREM-SST-4RC-0750-R090- Cr35	3/4	1.1/2	4	.090	Cr35	4
72000995	CREM-SST-4RC-0750-R120- Cr35	3/4	1.1/2	4	.120	Cr35	4
72001000	CREM-SST-4EC-0750- SQ Cr35	3/4	1.3/4	4	---	Cr35	4
72001005	CREM-SST-4EC-0750-R030- Cr35	3/4	1.3/4	4	.030	Cr35	4
72001010	CREM-SST-4EC-0750-R060- Cr35	3/4	1.3/4	4	.060	Cr35	4
72001015	CREM-SST-4EC-0750-R120- Cr35	3/4	1.3/4	4	.120	Cr35	4
72001020	CREM-SST-4MC-0750- SQ Cr35	3/4	2.3/8	5	---	Cr35	4
72001025	CREM-SST-4RC-1000- SQ Cr35	1	1.1/2	4	---	Cr35	4
72001030	CREM-SST-4RC-1000-R030- Cr35	1	1.1/2	4	.030	Cr35	4
72001035	CREM-SST-4RC-1000-R060- Cr35	1	1.1/2	4	.060	Cr35	4
72001040	CREM-SST-4RC-1000-R120- Cr35	1	1.1/2	4	.120	Cr35	4
72001045	CREM-SST-5RC-0187- SQ Cr35	3/16	5/8	2	---	Cr35	5
72001050	CREM-SST-5RC-0187-R015- Cr35	3/16	5/8	2	.015	Cr35	5
72001055	CREM-SST-5EC-0187- SQ Cr35	3/16	7/8	2.1/2	---	Cr35	5
72001060	CREM-SST-5RC-0250- SQ Cr35	1/4	3/4	2.1/2	---	Cr35	5
72001065	CREM-SST-5RC-0250-R020- Cr35	1/4	3/4	2.1/2	.020	Cr35	5
72001070	CREM-SST-5RC-0250-R030- Cr35	1/4	3/4	2.1/2	.030	Cr35	5
72001075	CREM-SST-5RC-0250-R060- Cr35	1/4	3/4	2.1/2	.060	Cr35	5
72001080	CREM-SST-5RC-0312- SQ Cr35	5/16	13/16	2.1/2	---	Cr35	5
72001085	CREM-SST-5RC-0312-R020- Cr35	5/16	13/16	2.1/2	.020	Cr35	5
72001090	CREM-SST-5RC-0375- SQ Cr35	3/8	7/8	2.1/2	---	Cr35	5
72001095	CREM-SST-5RC-0375-R020- Cr35	3/8	7/8	2.1/2	.020	Cr35	5
72001100	CREM-SST-5RC-0375-R030- Cr35	3/8	7/8	2.1/2	.030	Cr35	5
72001105	CREM-SST-5RC-0375-R060- Cr35	3/8	7/8	2.1/2	.060	Cr35	5
72001110	CREM-SST-5RC-0375-R120- Cr35	3/8	7/8	2.1/2	.120	Cr35	5
72001115	CREM-SST-5EC-0375- SQ Cr35	3/8	1.1/8	3	---	Cr35	5
72001120	CREM-SST-5EC-0375-R020- Cr35	3/8	1.1/8	3	.020	Cr35	5
72001125	CREM-SST-5RC-0500- SQ Cr35	1/2	1	3	---	Cr35	5
72001130	CREM-SST-5RC-0500-R030- Cr35	1/2	1	3	.030	Cr35	5
72001135	CREM-SST-5RC-0500-R060- Cr35	1/2	1	3	.060	Cr35	5
72001140	CREM-SST-5EC-0500- SQ Cr35	1/2	1.1/4	3	---	Cr35	5
72001145	CREM-SST-5EC-0500-R020- Cr35	1/2	1.1/4	3	.020	Cr35	5
72001150	CREM-SST-5EC-0500-R030- Cr35	1/2	1.1/4	3	.030	Cr35	5
72001155	CREM-SST-5EC-0500-R060- Cr35	1/2	1.1/4	3	.060	Cr35	5
72001160	CREM-SST-5EC-0500-R090- Cr35	1/2	1.1/4	3	.090	Cr35	5
72001165	CREM-SST-5EC-0500-R120- Cr35	1/2	1.1/4	3	.120	Cr35	5
72001170	CREM-SST-5RC-0562- SQ Cr35	9/16	1.1/4	3.1/2	---	Cr35	5

0 HARDNESS (HRC) 40 70

70
40

0 HARDNESS (HRC)

EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72001175	CREM-SST-5RC-0625- SQ Cr35	5/8	1.1/4	3.1/2	---	Cr35	5
72001180	CREM-SST-5RC-0625-R030- Cr35	5/8	1.1/4	3.1/2	.030	Cr35	5
72001185	CREM-SST-5RC-0625-R060- Cr35	5/8	1.1/4	3.1/2	.060	Cr35	5
72001190	CREM-SST-5EC-0625- SQ Cr35	5/8	1.5/8	3.1/2	---	Cr35	5
72001195	CREM-SST-5EC-0625-R030- Cr35	5/8	1.5/8	3.1/2	.030	Cr35	5
72001200	CREM-SST-5RC-0750- SQ Cr35	3/4	1.1/2	4	---	Cr35	5
72001205	CREM-SST-5RC-0750-R030- Cr35	3/4	1.1/2	4	.030	Cr35	5
72001210	CREM-SST-5RC-0750-R060- Cr35	3/4	1.1/2	4	.060	Cr35	5
72001215	CREM-SST-5RC-0750-R090- Cr35	3/4	1.1/2	4	.090	Cr35	5
72001220	CREM-SST-5RC-0750-R120- Cr35	3/4	1.1/2	4	.120	Cr35	5
72001225	CREM-SST-5EC-0750- SQ Cr35	3/4	1.3/4	4	---	Cr35	5
72001230	CREM-SST-5EC-0750-R030- Cr35	3/4	1.3/4	4	.030	Cr35	5
72001235	CREM-SST-5EC-0750-R060- Cr35	3/4	1.3/4	4	.060	Cr35	5
72001240	CREM-SST-5EC-0750-R120- Cr35	3/4	1.3/4	4	.120	Cr35	5
72001245	CREM-SST-5RC-1000- SQ Cr35	1	1.1/2	4	---	Cr35	5
72001250	CREM-SST-5RC-1000-R030- Cr35	1	1.1/2	4	.030	Cr35	5
72001255	CREM-SST-5RC-1000-R060- Cr35	1	1.1/2	4	.060	Cr35	5
72001260	CREM-SST-5RC-1000-R120- Cr35	1	1.1/2	4	.120	Cr35	5
72001265	CREM-SST-7LC-C0375- SQ Cr75	3/8	1.1/8	3	---	Cr75	7
72001270	CREM-SST-7LC-C0375-R030- Cr75	3/8	1.1/8	3	.030	Cr75	7
72001275	CREM-SST-7LC-C0375-R060- Cr75	3/8	1.1/8	3	.060	Cr75	7
72001280	CREM-SST-7LC-C0500- SQ Cr75	1/2	1.1/2	3.1/2	---	Cr75	7
72001285	CREM-SST-7LC-C0500-R030- Cr75	1/2	1.1/2	3.1/2	.030	Cr75	7
72001290	CREM-SST-7LC-C0500-R060- Cr75	1/2	1.1/2	3.1/2	.060	Cr75	7
72001295	CREM-SST-7LC-C0625- SQ Cr75	5/8	1.7/8	4	---	Cr75	7
72001300	CREM-SST-7LC-C0625-R030- Cr75	5/8	1.7/8	4	.030	Cr75	7
72001305	CREM-SST-7LC-C0750- SQ Cr75	3/4	2.1/4	5	---	Cr75	7
72001310	CREM-SST-7LC-C0750-R030- Cr75	3/4	2.1/4	5	.030	Cr75	7
72001315	CREM-SST-7LC-C0750-R060- Cr75	3/4	2.1/4	5	.060	Cr75	7
72001320	CREM-SST-7LC-C0750-R120- Cr75	3/4	2.1/4	5	.120	Cr75	7
72001325	CREM-SST-7LC-C1000- SQ Cr75	1	3	6	---	Cr75	7
72001330	CREM-SST-7LC-C1000-R030- Cr75	1	3	6	.030	Cr75	7
72001335	CREM-SST-7LC-C1000-R060- Cr75	1	3	6	.060	Cr75	7
72001340	CREM-SST-7LC-C1000-R120- Cr75	1	3	6	.120	Cr75	7
72001345	CREM-SST-7EC-C0375- SQ Cr75	3/8	1.1/2	3	---	Cr75	7
72001350	CREM-SST-7EC-C0375-R030- Cr75	3/8	1.1/2	3	.030	Cr75	7
72001355	CREM-SST-7EC-C0375-R060- Cr75	3/8	1.1/2	3	.060	Cr75	7
72001360	CREM-SST-7EC-C0500- SQ Cr75	1/2	2	3.1/2	---	Cr75	7
72001365	CREM-SST-7EC-C0500-R030- Cr75	1/2	2	3.1/2	.030	Cr75	7
72001370	CREM-SST-7EC-C0500-R060- Cr75	1/2	2	3.1/2	.060	Cr75	7
72001375	CREM-SST-7EC-C0625- SQ Cr75	5/8	2.1/2	4	---	Cr75	7
72001380	CREM-SST-7EC-C0625-R030- Cr75	5/8	2.1/2	4	.030	Cr75	7
72001385	CREM-SST-7EC-C0750- SQ Cr75	3/4	3	5	---	Cr75	7
72001390	CREM-SST-7EC-C0750-R120- Cr75	3/4	3	5	.120	Cr75	7
72001395	CREM-SST-7EC-C0750-R030- Cr75	3/4	3	5	.030	Cr75	7
72001400	CREM-SST-7EC-C0750-R060- Cr75	3/4	3	5	.060	Cr75	7
72001405	CREM-SST-7EC-C1000- SQ Cr75	1	4	7	---	Cr75	7
72001410	CREM-SST-7EC-C1000-R120- Cr75	1	4	7	.120	Cr75	7
72001415	CREM-SST-7EC-C1000-R030- Cr75	1	4	7	.030	Cr75	7
72001420	CREM-SST-7EC-C1000-R060- Cr75	1	4	7	.060	Cr75	7

STAR-SST		Feed (inches Per Tooth)									
Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	1/8	1/4	3/8	1/2	5/8	3/4	1
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	350 425							
Medium carbon steel <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375							
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0006 .0008	.0013 .0017	.0020 .0026	.0027 .0035	.0034 .0044	.0040 .0053	.0054 .0070
Tool steel 39RHc to 48HRc	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	225 275	.0005 .0006	.0010 .0012	.0015 .0017	.0020 .0023	.0025 .0029	.0030 .0035	.0040 .0046
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 375	.0006 .0008	.0012 .0016	.0018 .0024	.0025 .0032	.0031 .0040	.0037 .0048	.0050 .0064
Moderately difficult stainless steel 304, 316, Invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	275 350	.0005 .0007	.0011 .0015	.0016 .0023	.0022 .0032	.0027 .0037	.0033 .0045	.0044 .0064
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0004 .0005	.0009 .0011	.0012 .0016	.0018 .0022	.0022 .0028	.0027 .0033	.0036 .0044
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	400 500	.0006 .0007	.0012 .0015	.0019 .0023	.0025 .0030	.0031 .0037	.0038 .0046	.0050 .0060
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 400	.0006 .0007	.0012 .0014	.0018 .0021	.0023 .0028	.0029 .0035	.0035 .0042	.0046 .0056
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D	250 325	.0004 .0005	.0008 .0011	.0012 .0016	.0015 .0022	.0019 .0027	.0023 .0033	.0030 .0044
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D	800 1000							
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0005 .0006	.0010 .0012	.0015 .0017	.0020 .0023	.0025 .0029	.0030 .0035	.0040 .0046
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D	70 95	.0004 .0005	.0008 .0009	.0012 .0014	.0015 .0018	.0019 .0022	.0024 .0028	.0030 .0036

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.