Speeds and Feeds

How To Use This Chart

1. Select your material in the ISO colored chart for your speed ranges.
2. Choose the metric or inch feed table from pages 2 or 3.
3. Select your application column and cutting width row to find your feed ranges.
4. Start with the middle range of the recommended sfm or m/min.

Adjust the sfm and/or feed rate based on your cutting conditions.

For Non-ferrous metals a pecking cycle is recommended for help with breaking chips.

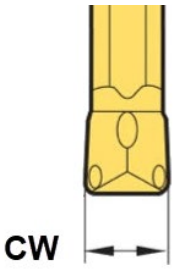
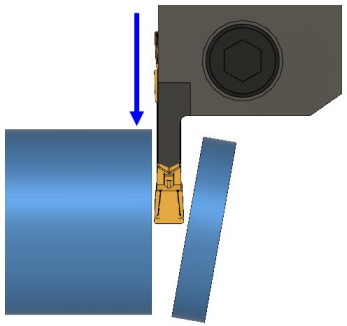
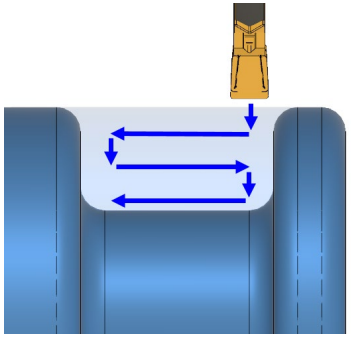
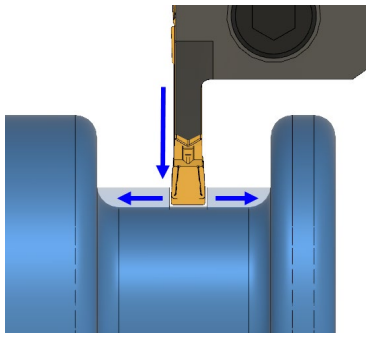
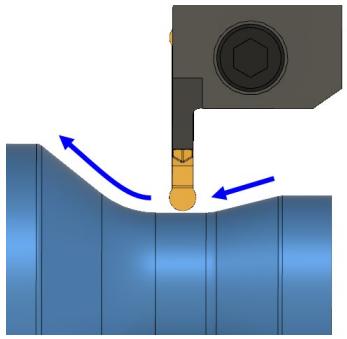
*wet machining recommended with all types of grooving.

Insert Grade HUU20P

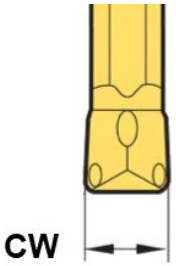
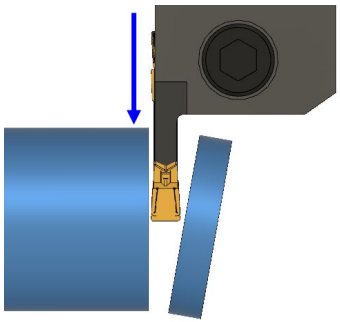
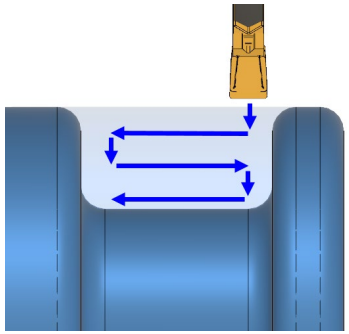
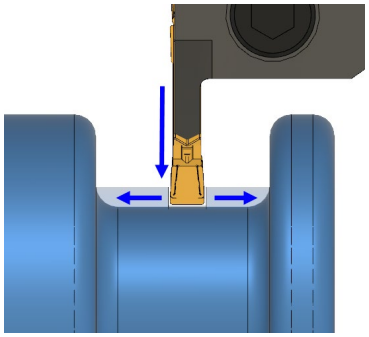
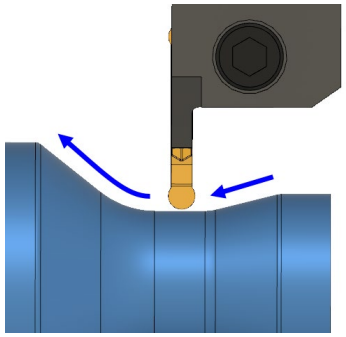
ISO	VDI 3323	Material Description		Speed	
				sfm	m/min
P	P1-5	Non-Alloy Steel	●	490 - 920	150-280
P	P6-9	Low-Alloy Steel	●	360 - 650	110-200
P	P10-11	High-Alloy Steel	●	360 - 620	110-190
P	P11	Cast Steel	●	330 - 560	100-170
M	M12-13	Ferrite, Martensite Stainless Steel	●	330 - 650	100-200
M	M14	Austenite Stainless Steel	●	360 - 720	110-220
K	K15-16	Nodular Cast Iron	●	420 - 720	130-220
K	K17-18	Grey Cast Iron	●	390 - 650	120-200
K	K19-20	Malleable Cast Iron	●	360 - 590	110-180

● Optimal Secondary

Speeds and Feeds

INCH	Recommended Feed Rate ipr					
Insert Width	HMDT and HTG	HMDT - Haas Multi Direction Turn		HTG - Haas Turn and Groove		HRPT - Haas Radius Profile Turn
						
Cutting Width	**Cut off / Parting**	**Turning**	**Grooving**	**Turning**	**Grooving**	**Profiling**
0.118" (3mm)	0.002 - 0.006	0.0025 - 0.006	0.002 - 0.006	0.0025 - 0.008	0.002 - 0.008	0.004 - 0.008
0.157" (4mm)	0.002 - 0.008	0.0025 - 0.010	0.002 - 0.008	0.0025 - 0.012	0.002 - 0.010	0.004 - 0.008
0.196" (5mm)	0.0025 - 0.008	0.004 - 0.010	0.0025 - 0.0085	0.004 - 0.012	0.0025 - 0.010	0.006 - 0.012

Speeds and Feeds

METRIC	Recommended Feed Rate mm/r					
Insert Width	HMDT and HTG	HMDT - Haas Multi Direction Turn		HTG - Haas Turn and Groove		HRPT - Haas Radius Profile Turn
						
Cutting Width	Cut off / Parting	Turning	Grooving	Turning	Grooving	Profiling
3mm	0.05 - 0.15	0.07 - 0.15	0.05 - 0.15	0.07 - 0.2	0.05 - 0.2	0.1 - 0.2
4mm	0.05 - 0.2	0.07 - 0.25	0.05 - 0.2	0.07 - 0.3	0.05 - 0.25	0.1 - 0.2
5mm	0.07 - 0.2	0.1 - 0.25	0.07 - 0.22	0.1 - 0.3	0.07 - 0.25	0.15 - 0.3