

◆ Recommended Cutting Conditions

Chipbreaker	Workpiece Material	fz (ipt)	Recommended Insert Grades (Cutting Speed Vc : sfm)			
			MEGACOAT NANO (MEGACOAT)			CVD Coated Carbide
			PR1535	PR1525 (PR1225)	PR1510 (PR1210)	CA6535
GM	Carbon Steel	0.0039 ~ 0.0079 ~ 0.0157	☆ 390 ~ 590 ~ 820	★ 390 ~ 590 ~ 820	-	-
	Alloy Steel	0.0039 ~ 0.0079 ~ 0.0157	☆ 330 ~ 520 ~ 720	★ 330 ~ 520 ~ 720	-	-
	Mold Steel	0.0039 ~ 0.0079 ~ 0.0138	☆ 260 ~ 460 ~ 590	★ 260 ~ 460 ~ 590	-	-
	Austenitic Stainless Steel	0.0039 ~ 0.0079 ~ 0.0157	☆ 330 ~ 520 ~ 660	☆ 330 ~ 520 ~ 660	-	-
	Martensitic Stainless Steel	0.0039 ~ 0.0079 ~ 0.0157	☆ 490 ~ 660 ~ 820	-	-	☆ 590 ~ 790 ~ 980
	Precipitation Hardened Stainless Steel	0.0039 ~ 0.0079 ~ 0.0118	★ 300 ~ 390 ~ 490	-	-	-
	Gray Cast Iron	0.0039 ~ 0.0079 ~ 0.0157	-	-	★ 390 ~ 590 ~ 820	-
	Nodular Cast Iron	0.0039 ~ 0.0079 ~ 0.0138	-	-	★ 330 ~ 490 ~ 660	-
	Ni-base Heat Resistant Alloys	0.0039 ~ 0.0047 ~ 0.0079	☆ 70 ~ 100 ~ 160	-	-	★ 70 ~ 100 ~ 160
SM *1(GL)	Carbon Steel	0.0024 ~ 0.0047 ~ 0.0098	☆ 390 ~ 590 ~ 820	☆ 390 ~ 590 ~ 820	-	-
	Alloy Steel	0.0024 ~ 0.0047 ~ 0.0098	☆ 330 ~ 520 ~ 720	☆ 330 ~ 520 ~ 720	-	-
	Mold Steel	0.0024 ~ 0.0039 ~ 0.0079	☆ 260 ~ 460 ~ 590	☆ 260 ~ 460 ~ 590	-	-
	Austenitic Stainless Steel	0.0024 ~ 0.0047 ~ 0.0098	★ 330 ~ 520 ~ 660	☆ 330 ~ 520 ~ 660	-	-
	Martensitic Stainless Steel	0.0024 ~ 0.0047 ~ 0.0098	☆ 490 ~ 660 ~ 820	-	-	★ 590 ~ 790 ~ 980
	Precipitation Hardened Stainless Steel	0.0024 ~ 0.0047 ~ 0.0098	☆ 300 ~ 390 ~ 490	-	-	-
	Gray Cast Iron	0.0024 ~ 0.0047 ~ 0.0098	-	-	☆ 390 ~ 590 ~ 820	-
	Nodular Cast Iron	0.0024 ~ 0.0039 ~ 0.0079	-	-	☆ 330 ~ 490 ~ 660	-
	Ni-base Heat Resistant Alloys	0.0024 ~ 0.0039 ~ 0.0059	☆ 70 ~ 100 ~ 160	-	-	☆ 70 ~ 100 ~ 160
	Titanium Alloys	0.0024 ~ 0.0031 ~ 0.0059	★ 130 ~ 200 ~ 260	-	-	-
*2GH	Carbon Steel	0.0079 ~ 0.0157 ~ 0.0276	☆ 390 ~ 590 ~ 820	☆ 390 ~ 590 ~ 820	-	-
	Alloy Steel	0.0079 ~ 0.0157 ~ 0.0236	☆ 330 ~ 520 ~ 720	☆ 330 ~ 520 ~ 720	-	-
	Mold Steel	0.0079 ~ 0.0138 ~ 0.0197	☆ 260 ~ 460 ~ 590	☆ 260 ~ 460 ~ 590	-	-
	Austenitic Stainless Steel	0.0079 ~ 0.0118 ~ 0.0157	☆ 330 ~ 520 ~ 660	☆ 330 ~ 520 ~ 660	-	-
	Martensitic Stainless Steel	0.0079 ~ 0.0118 ~ 0.0157	☆ 490 ~ 660 ~ 820	-	-	☆ 590 ~ 790 ~ 980
	Precipitation Hardened Stainless Steel	0.0079 ~ 0.0118 ~ 0.0157	☆ 300 ~ 390 ~ 490	-	-	-
	Gray Cast Iron	0.0079 ~ 0.0157 ~ 0.0276	-	-	☆ 390 ~ 590 ~ 820	-
	Nodular Cast Iron	0.0079 ~ 0.0138 ~ 0.0197	-	-	☆ 330 ~ 490 ~ 660	-
	Ni-base Heat Resistant Alloys	0.0079 ~ 0.0118 ~ 0.0157	☆ 70 ~ 100 ~ 160	-	-	☆ 70 ~ 100 ~ 160

- Values in bold indicate starting value of recommended condition. ★: 1st Recommendation ☆: 2nd Recommendation
- Adjust the cutting speed and the feed rate within the above conditions according to the actual machining situation.
- Machining with coolant is recommended for Ni-base heat resistant alloys and Titanium alloys.
- *1. GL Chipbreaker is recommended for surface finish oriented milling.
- 2. GH Chipbreaker : Fine Pitch ➔ fz ≤ 0.0157 ipt
- Extra Fine Pitch ➔ Not Recommended

