

Recommended Cutting Conditions

Workpiece Material	Feed Rate fz (ipt)		Recommended Insert Grade Vc (sfm)				
	JS Chipbreaker	JT Chipbreaker	MEGACOAT NANO PR1535	MEGACOAT PR1225 PR1210		PVD Coated Carbide PR830	CVD Coated Carbide CA6535
Carbon Steel	0.002- 0.003 -0.004	0.002- 0.004 -0.005	☆ 390- 590 -820	★ 390- 590 -820	-	☆ 390- 490 -590	-
Alloy Steel	0.002- 0.0025 -0.003	0.002- 0.003 -0.004	☆ 330- 520 -720	★ 330- 520 -720	-	☆ 330- 460 -590	-
Mold Steel	0.002- 0.0025 -0.003	0.002- 0.003 -0.004	☆ 260- 460 -590	★ 260- 460 -590	-	☆ 260- 390 -490	-
Austenitic Stainless Steel	0.001- 0.0015 -0.002	0.002- 0.0025 -0.003	★ 390- 590 -820	☆ 390- 590 -820	-	-	-
Martensitic Stainless Steel	0.001- 0.0015 -0.002	0.002- 0.0025 -0.004	☆ 490- 660 -820	-	-	-	★ 590- 790 -980
Precipitation Hardened Stainless Steel	0.001- 0.0015 -0.002	0.002- 0.0025 -0.004	★ 300- 390 -490	-	-	-	-
Gray Cast Iron	0.002- 0.003 -0.004	0.003- 0.004 -0.006	-	-	★ 390- 590 -820	-	-
Nodular Cast Iron	0.002- 0.0025 -0.003	0.003- 0.004 -0.005	-	-	★ 330- 490 -660	-	-
Ni-base Heat Resistant Alloy	0.001- 0.0015 -0.002	0.002- 0.0025 -0.003	☆ 70- 100 -160	-	-	-	★ 70- 100 -160
Titanium Alloy	0.002- 0.0025 -0.003	0.003- 0.004 -0.005	★ 130- 200 -260	-	☆ 100- 160 -230	-	-

※ Machining with coolant is recommended for Titanium Alloy.

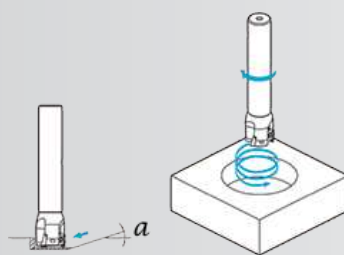
★ 1st Recommendation ☆ 2nd Recommendation

Ramping, Helical Milling

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- Ramping angle is recommended to be α°.
- Refer to each tool's cutting performance list for the depth of helical milling.

Use compressed air during cutting.



Cutting Dia.	Unit	Applicable Inserts	Maximum Ramping Angle (α°)
Ø0.315	inch	BDMT0703 type	Not Recommended
Ø0.400			1.5°
Ø0.472, Ø0.551			2.0°
Ø0.630			3.0°
Ø0.669, Ø0.709	1.5°		
Ø8	metric		Not Recommended
Ø10			1.5°
Ø12, Ø14			2.0°
Ø16			3.0°
Ø17, Ø18			1.5°
Ø20		2.0°	
Ø21		1.8°	
Ø25		1.3°	

Guidance of minimum cutting dia. for helical cutting.

MECX	Toolholder Dia.	Ø8	Ø10	Ø12	Ø14	Ø16	Ø17	Ø18	Ø20
BDMT0703 type	Guidance of minimum cutting dia. for helical cutting.	Helical cutting is not recommended.	Ø14	Ø18	Ø22	Ø26	Ø28	Ø30	Ø34
	Guidance of minimum cutting dia. to have flat bottom by helical cutting.		Ø17	Ø21	Ø25	Ø29	Ø31	Ø33	Ø37

MECX	Toolholder Dia.	Ø21	Ø25
BDMT0703 type	Guidance of minimum cutting dia. for helical cutting.	Ø36	Ø44
	Guidance of minimum cutting dia. to have flat bottom by helical cutting.	Ø39	Ø47