

◆ Recommended Cutting Conditions

Workpiece Material	fz (mm/t)	Recommended Insert Grade (Cutting Speed Vc: m/min)											
		Cermet			PVD Coated Carbide						Carbide		
		TN60	TN100M	TC60	PR630	PR730	PR830			PR660	PR905	PW30	KW10
Stainless Steel	-												
Carbon Steel	0.1~0.15					★ 80~150				☆ 60~130			
Alloy Steel	0.08~0.12					★ 80~150				☆ 60~130			
Mold Steel	0.05~0.1					☆ 60~100				★ 60~100			
Cast Iron	0.1~0.15										★ 80~150		☆ 80~120
Non-ferrous Metals	0.1~0.15												★ 100~300

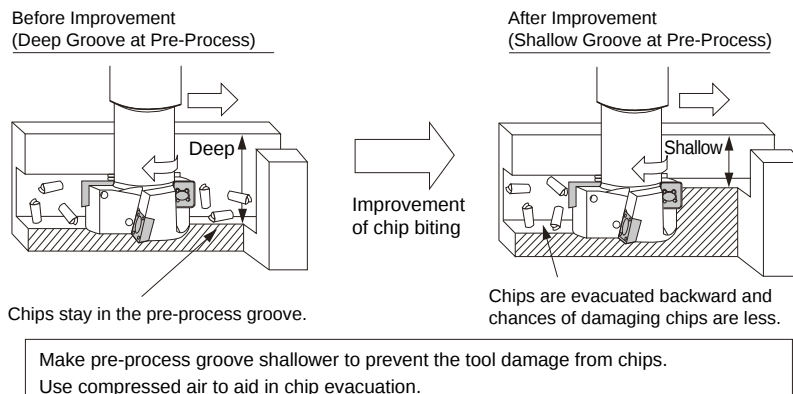
★ : 1st Recommendation ☆ : 2nd Recommendation

Toolholder Description (T Slot Nominal Size)	Steel			Cast Iron		
	Recommended Groove Shape at Pre-process	Recommended T-Slotting Conditions	Recommended conditions to prevent chattering	Recommended Groove Shape at Pre-process	Recommended T-Slotting Conditions	Recommended conditions to prevent chattering
METS21-S25(-H) (Nominal Size 12)	C=1~3mm 	Vc= 120 fz= 0.1 (n= 1820) (Vf= 182)	Vc= 60 fz= 0.15 (n= 920) (Vf= 137)	C= over 1mm 	Vc= 120 fz= 0.12 (n= 1820) (Vf= 218)	Vc= 80 fz= 0.15 (n= 1210) (Vf= 182)
METS25-S25(-H) (Nominal Size 14)	C=1~3mm 	Vc= 120 fz= 0.1 (n= 1530) (Vf= 306)	Vc= 60 fz= 0.15 (n= 760) (Vf= 228)	C= over 1mm 	Vc= 120 fz= 0.12 (n= 1530) (Vf= 367)	Vc= 80 fz= 0.15 (n= 1020) (Vf= 306)
METS32-S32(-H) (Nominal Size 18)	C=1~3mm 	Vc= 100 fz= 0.1 (n= 1000) (Vf= 200)	Vc= 60 fz= 0.15 (n= 600) (Vf= 180)	C= over 1mm 	Vc= 120 fz= 0.12 (n= 1190) (Vf= 286)	Vc= 80 fz= 0.15 (n= 800) (Vf= 240)
METS40-S32(-H) (Nominal Size 22)	C=9mm 	Vc= 80 fz= 0.15 Chattering is likely when set to shallower than C=9mm.	Vc= 60 fz= 0.15 (n= 480) (Vf= 144)	C= over 9mm 	Vc= 120 fz= 0.15 (n= 960) (Vf= 228)	Vc= 80 fz= 0.15 (n= 640) (Vf= 192)
METS50-S32(-H) (Nominal Size 28)	Not recommended for steel because of chattering				Vc= 120 fz= 0.15 (n= 760) (Vf= 228)	Vc= 80 fz= 0.15 (n= 510) (Vf= 153)

[Cutting Speed: Vc (m/min), Spindle Revolution: n (min⁻¹), Feed Rate fz (mm/t), Table Feed Vf (mm/min)]

- Chattering is likely when f is less than fz=0.1mm/t. Keep feed rate between fz=0.1~0.15mm/t.
For cast iron machining, the bigger the C-dimension becomes, the less chattering occurs.

◆ How to prevent damaging Chips when Steel machining



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Milling