Recommended Cutting Conditions

KTN / KTNS

Workpiece Material	Recommended Insert Grade (Cutting Speed: m/min)			
	Cermet	PVD Coated Carbide		Carbide
	TC60	**PR930**	**PR1115**	**GW15 (KW10)**
Carbon Steel	☆ 100~150	☆ 100~150	★ 100~150	-
First ap (Radial)	under 0.3mm	under 0.3mm	under 0.3mm	
Alloy Stee	☆ 100~150	☆ 100~150	★ 100~150	-
First ap (Radial)	under 0.3mm	under 0.3mm	under 0.3mm	
Stainless Steel	☆ 60~80	☆ 60~80	★ 60~80	-
First ap (Radial)	under 0.25mm	under 0.25mm	under 0.25mm	
Cast Iron	-	-	-	★ 100
First ap (Radial)				under 0.3mm
Non-ferrous Metals	-	-	-	★ 150~400
First ap (Radial)				under 0.3mm

SIN / CIN

Workpiece Material	Recommended Insert Grade (Cutting Speed: m/min)			
	Cermet	PVD Coated Carbide		Carbide
	TC60	**PR930**	**PR1115**	**GW15 (KW10)**
Carbon Steel	☆ 100~150	☆ 100~150	★ 100~150	-
First ap (Radial)	under 0.3mm	under 0.3mm	under 0.3mm	
Alloy Steel	☆ 100~150	☆ 100~150	★ 100~150	-
First ap (Radial)	under 0.3mm	under 0.3mm	under 0.3mm	
Stainless Steel	☆ 60~80	☆ 60~80	★ 60~80	-
First ap (Radial)	under 0.25mm	under 0.25mm	under 0.25mm	
Cast Iron	-	-	-	★ 100
First ap (Radial)				under 0.3mm
Non-ferrous Metals	-	-	-	★ 150~400
First ap (Radial)				under 0.3mm

- For TNN06IR / 08IR, please lower it to a figure under 40% of above condition list

KTT

Workpiece Material	Recommended Insert Grade (Cutting Speed: m/min)			
	Cermet	PVD Coated Carbide		Carbide
	TC60	**PR930**	**PR1115**	**KW10**
Carbon Steel	☆ 100~150	☆ 100~150	★ 100~150	-
First ap (Radial)	under 0.3mm	under 0.3mm	under 0.3mm	
Alloy Steel	☆ 100~150	☆ 100~150	★ 100~150	-
First ap (Radial)	under 0.3mm	under 0.3mm	under 0.3mm	
Stainless Steel	☆ 60~80	☆ 60~80	★ 60~80	-
First ap (Radial)	under 0.25mm	under 0.25mm	under 0.25mm	
Cast Iron	-	-	-	★ 100
First ap (Radial)				under 0.3mm
Non-ferrous Metals	-	-	-	★ 150~400
First ap (Radial)				under 0.3mm

S...STWP (-E)

Workpiece Material	Recommended Insert Grade (Cutting Speed: m/min)				
	Cermet		PVD Coated Cermet		Carbide
	TN6020	**TN60**	**PV7020**	**PV60**	**KW10**
Carbon Steel	☆ 100~150	☆ 100~150	★ 100~150	☆ 100~150	-
First ap (Radial)	under 0.25mm	under 0.25mm	under 0.25mm	under 0.25mm	
Alloy Steel	☆ 100~150	☆ 100~150	★ 100~150	☆ 100~150	-
First ap (Radial)	under 0.25mm	under 0.25mm	under 0.25mm	under 0.25mm	
Stainless Steel	-	-	-	-	-
First ap (Radial)					
Cast Iron	-	-	-	-	★ 100
First ap (Radial)					under 0.25mm
Non-ferrous Metals	-	-	-	-	★ 150~400
First ap (Radial)					under 0.25mm

KTTX / S-KTTX

Workpiece Material	Recommended Insert Grade (Cutting Speed: m/min)			
	Cermet	PVD Coated Carbide		Carbide
	TC60	**PR930**	**PR1115**	**KW10**
Carbon Steel	☆ 100~150	☆ 100~150	★ 100~150	-
First ap (Radial)	under 0.3mm	under 0.3mm	under 0.3mm	
Alloy Steel	☆ 100~150	☆ 100~150	★ 100~150	-
First ap (Radial)	under 0.3mm	under 0.3mm	under 0.3mm	
Stainless Steel	☆ 60~80	☆ 60~80	★ 60~80	-
First ap (Radial)	under 0.25mm	under 0.25mm	under 0.25mm	
Cast Iron	-	-	-	★ 100
First ap (Radial)				under 0.3mm
Non-ferrous Metals	-	-	-	★ 150~400
First ap (Radial)				under 0.3mm

KITG

Workpiece Material	Recommended Insert Grade (Cutting Speed: m/min)			
	Cermet	PVD Coated Carbide		Carbide
	TC60	**PR930**	**PR1115**	**KW10**
Carbon Steel	☆ 100~150	☆ 100~150	★ 100~150	-
First ap (Radial)	under 0.3mm	under 0.3mm	under 0.3mm	
Alloy Steel	☆ 100~150	☆ 100~150	★ 100~150	-
First ap (Radial)	under 0.3mm	under 0.3mm	under 0.3mm	
Stainless Steel	☆ 60~80	☆ 60~80	★ 60~80	-
First ap (Radial)	under 0.25mm	under 0.25mm	under 0.25mm	
Cast Iron	-	-	-	★ 100
First ap (Radial)				under 0.3mm
Non-ferrous Metals	-	-	-	★ 150~400
First ap (Radial)				under 0.3mm

Indicates
★ : 1st Recommendation ☆ : 2nd Recommendation

- Coolant is recommended.
- In case of using cermet insert, honing the edge with a hand lapper enables higher stability.
- In case of threading stainless steel, please set two to three passes more than previous description of <ap - passes>.