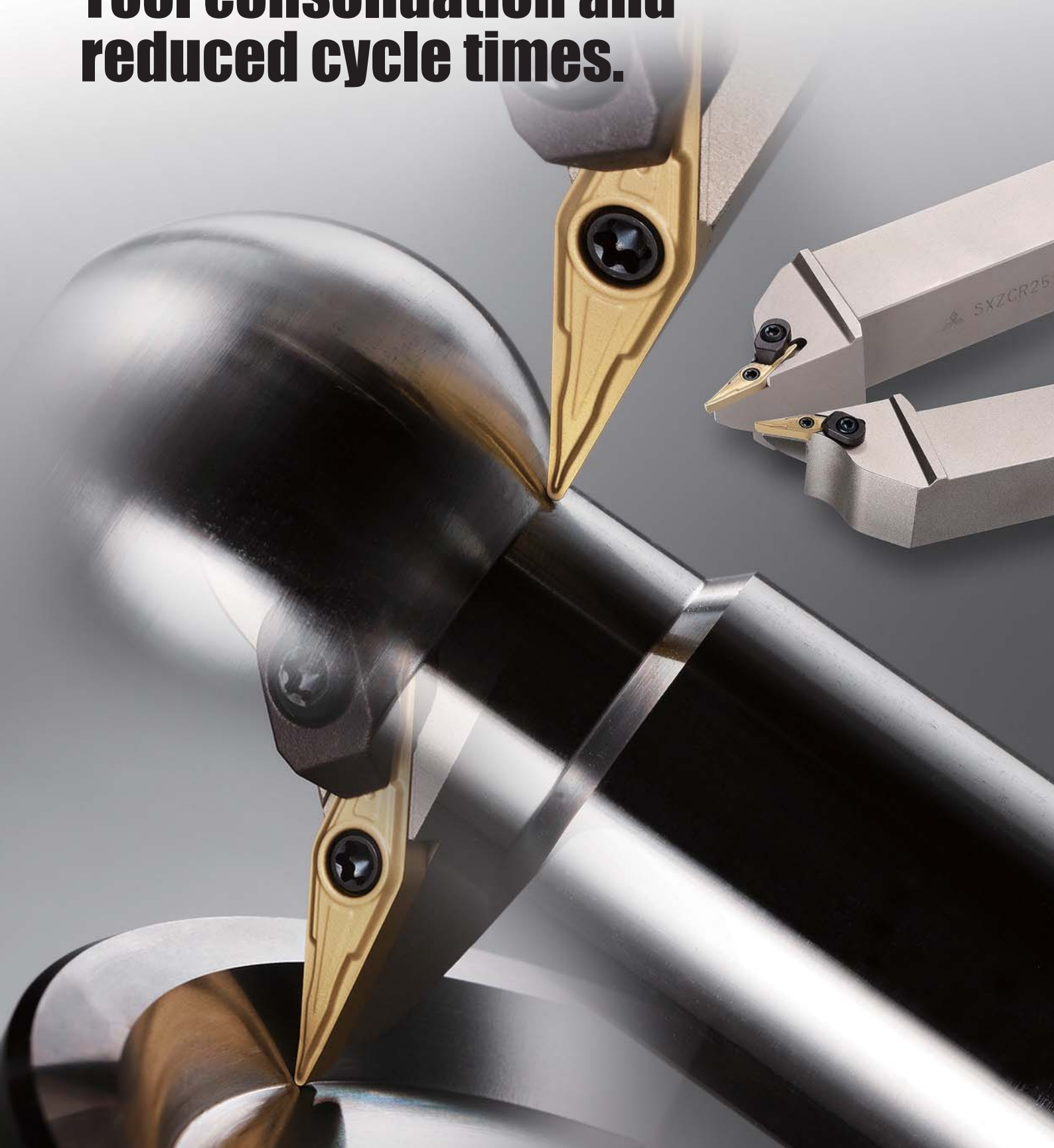


25° rhombic insert for profile machining
up to a 60° inclination.

**Tool consolidation and
reduced cycle times.**

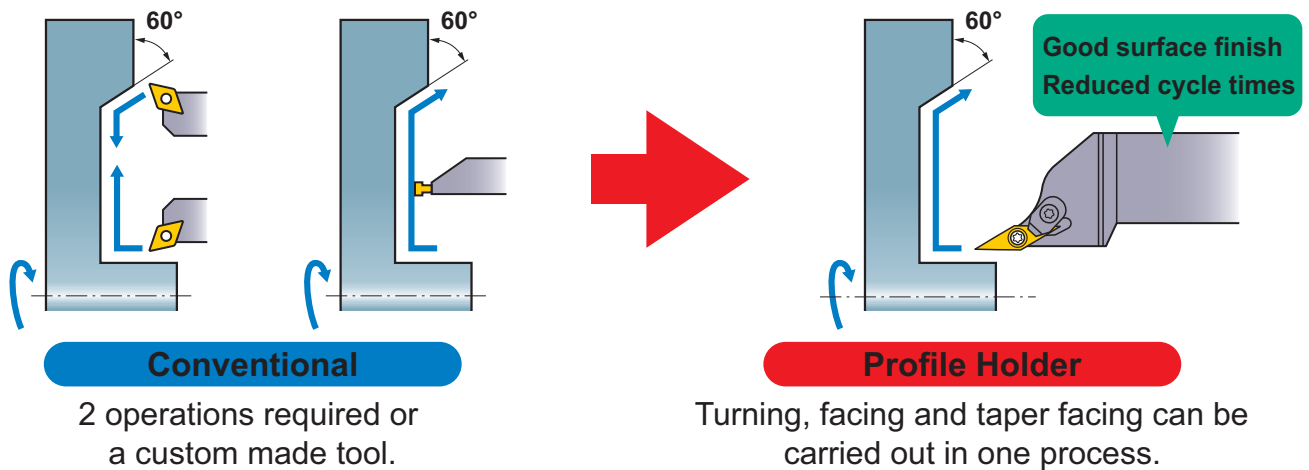


Double Clamp Type Holder for Copying

PROFILE HOLDER

Features

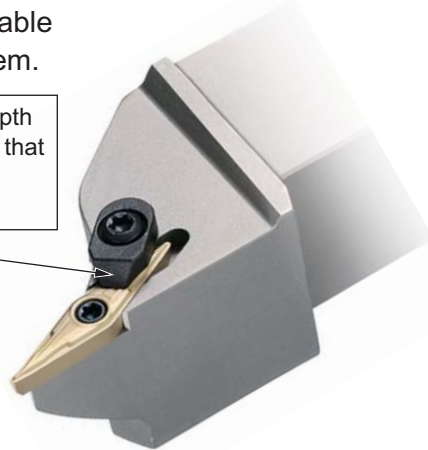
- 25° rhombic insert for profile machining up to a 60° inclination.



Holder

Use of a highly reliable double clamp system.

Use of the shallow-depth clamp bridge ensures that coolant reaches the cutting edge.

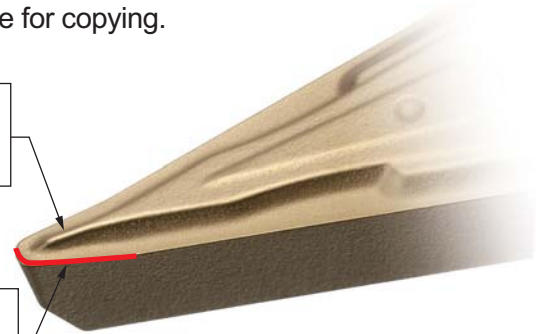


Insert

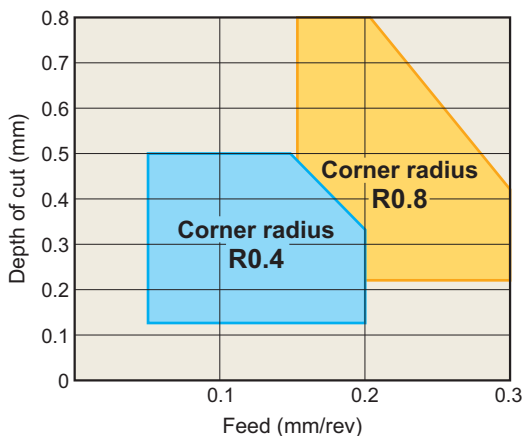
Chip control is improved by having a chip breaker geometry suitable for copying.

Narrow protrusion gives excellent chip disposal.

Curved edge effective for back turning.



Application range

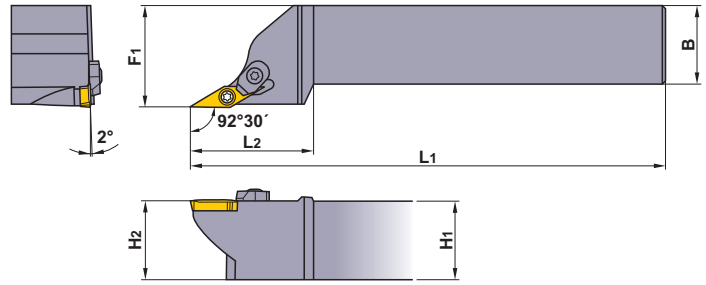


Recommended Cutting Conditions

Work Material	Hardness	Grade	Cutting Speed (m/min)	
P	Mild Steel	≤180HB	UE6020	150–350
	General Steel	150–250HB	UE6020	100–250

Note) The above cutting conditions are general guide lines. Adjustments may be necessary depending on machine rigidity, workpiece geometry and clamping.

Double Clamp Type Holder for Copying



Holder

Right hand holder shown.

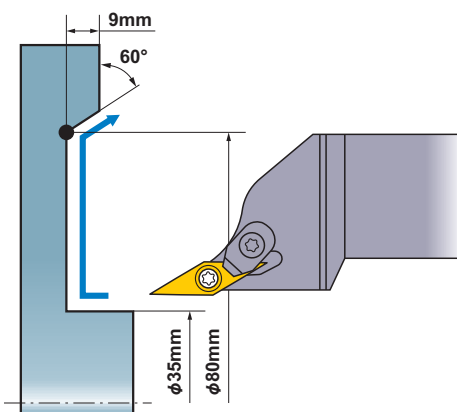
Order Number	Stock		Insert Number	Dimensions (mm)							Clamp Screw	Clamp Bridge	Clamp Bridge Screw	Spring	Wrench		
	R	L		H1	B	L1	L2	H2	F1								
SXZCR/L1616H15	●	●	XCMT	1503	●	SVX	16	16	100	35	16	20	TS255	AMS3	AJS3010T10	ASS2	TKY08F TKY10F
2020K15	●	●		1503	●	SVX	20	20	125	35	20	25	TS255	AMS3	AJS3010T10	ASS2	TKY08F TKY10F
2525M15	●	●		1503	●	SVX	25	25	150	40	25	32	TS255	AMS3	AJS3010T10	ASS2	TKY08F TKY10F

Insert

Shape	Order Number	Stock	Dimensions (mm)				Geometry
		Coated	D1	S1	Re	D2	
		UE6020					
	XCMT150304-SVX	●	6.35	3.18	0.4	2.85	
	150308-SVX	●	6.35	3.18	0.8	2.85	

● : Inventory maintained.

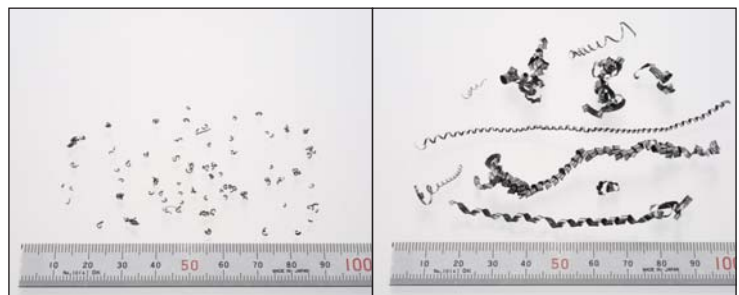
Application examples



<Cutting Conditions>

Workpiece : DIN Ck45
 Insert : XCMT150304-SVX
 Grade : UE6020
 Holder : SXZCR2525M15
 Axial direction : Cutting Speed=200m/min,
 Depth of cut=0.2mm,
 Feed=0.05mm/rev, Wet cutting
 To end face, 30° face: Cutting Speed=200m/min,
 Depth of cut=0.2mm,
 Feed=0.2mm/rev, Wet cutting

Chip Geometry



Facing

Facing an inclination



Surface finish

2 passes with left and right hand tool holders needed for conventional machining.
 With the profile holder only a single operation is needed. Reduced cycle time and better surface finish achieved because of improved chip control.

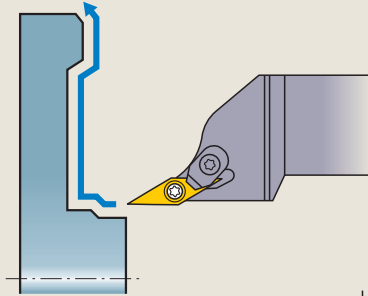
PROFILE HOLDER

Operational Guidance

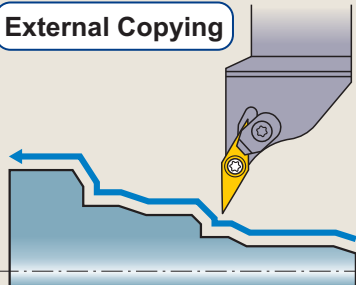
Possible

End Face Copying

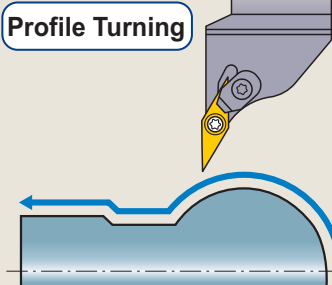
When end face copying, refer to the precautions below.



External Copying

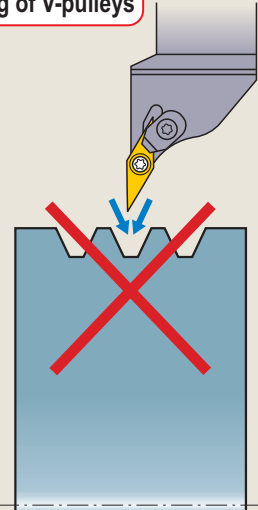


Profile Turning



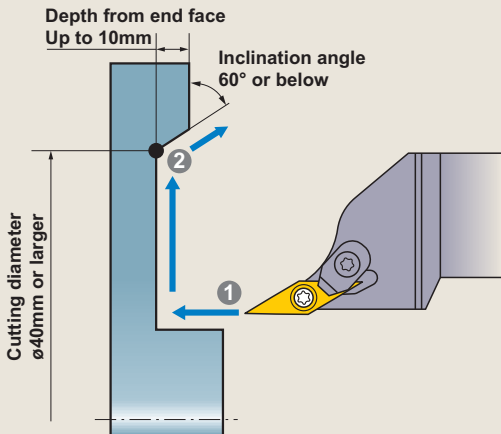
Not possible

Machining of V-pulleys



When machining V-pulleys, use a VNMG insert.

Notes when end face copying



Pay special attention to the following when end face copying.

Machining of an outer diameter (Step ①)

- To prevent burr formation, the depth of cut should be below half the nose radius.

Machining of an inclination (Step ②)

- To reduce the contact length of chips, the depth of cut should be below half the nose radius.
- To prevent interference between the tool and the workpiece, the cutting diameter should be 40mm or larger, inclination angle 60° or below and depth from the end face up to 10mm.

When changing inserts

- When indexing the inserts, it is recommended to reset the cutting edge position to maintain machining accuracy.



www.mitsubishicarbide.com

MMC HARTMETALL GmbH

Comeniusstr. 2, 40670 Meerbusch Germany
Tel. +49-2159-9189-0 Fax +49-2159-918966
e-mail admin@mmchg.de

MMC HARDMETAL U.K. LTD.

Mitsubishi House, Galena Close, Tamworth, Staffs. B77 4AS, U.K.
Tel. +44-1827-312312 Fax +44-1827-312314
e-mail sales@mitsubishicarbide.co.uk

MMC METAL FRANCE s.a.r.l.

6, Rue Jacques Monod, 91400 Orsay, France
Tel. +33-1-69 35 53 53 Fax +33-1-69 35 53 50
e-mail mmfsales@mmc-metal-france.fr

MITSUBISHI MATERIALS ESPAÑA, S.A.

Calle Emperador 2, 46136 Museros/Valencia, Spain
Tel. +34-96-144-1711 Fax +34-96-144-3786
e-mail mme@mmevalencia.com

MMC ITALIA S.r.l.

V.le Delle Industrie 20/5, 20020 Milano Italy
Tel. +39-02 93 77 03 1 Fax +39-02 93 58 90 93
e-mail info@mmc-italia.it

MMC HARDMETAL POLAND SP. z o.o.

Al. Armii Krajowej 61, 50-541 Wrocław, Poland
Tel. +48-71335-16-20 Fax +48-71335-16-21
e-mail sales@mitsubishicarbide.com.pl

MMC HARDMETAL RUSSIA OOO LTD.

UL. Bolschaja Pochtovaja, 36 Bldg.1, 105082 Moscow, Russia
Tel. +7-495-72558-85 Fax +7-495-98139-73
e-mail mmc@carbide.ru