

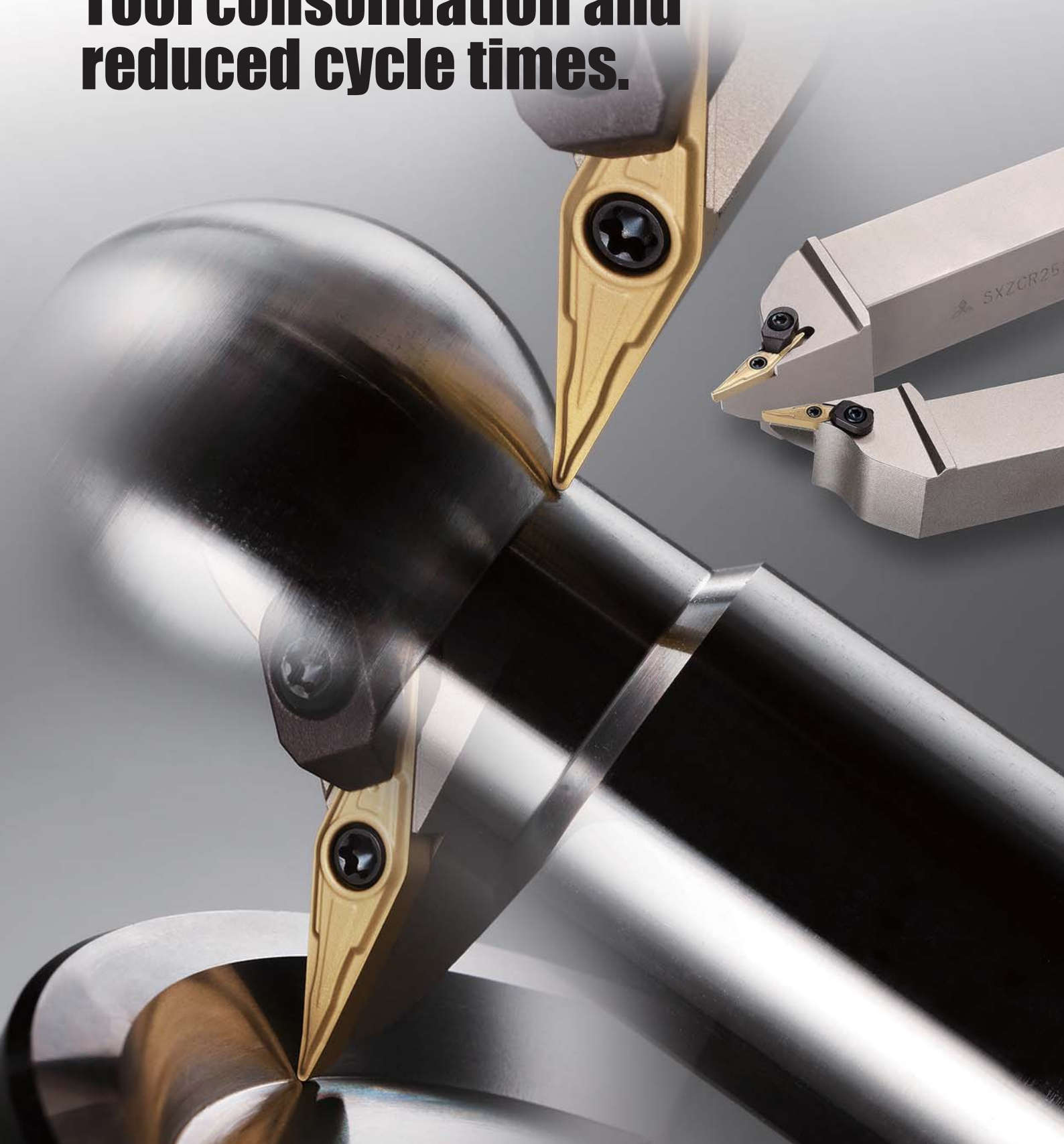
Holder
addition

Double Clamp Type Holder for Copying

PROFILE HOLDER

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

Holder

Use of a highly reliable double clamp system.

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

For machining of transmissions

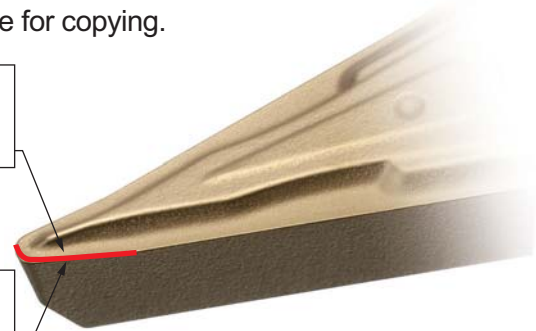


Insert

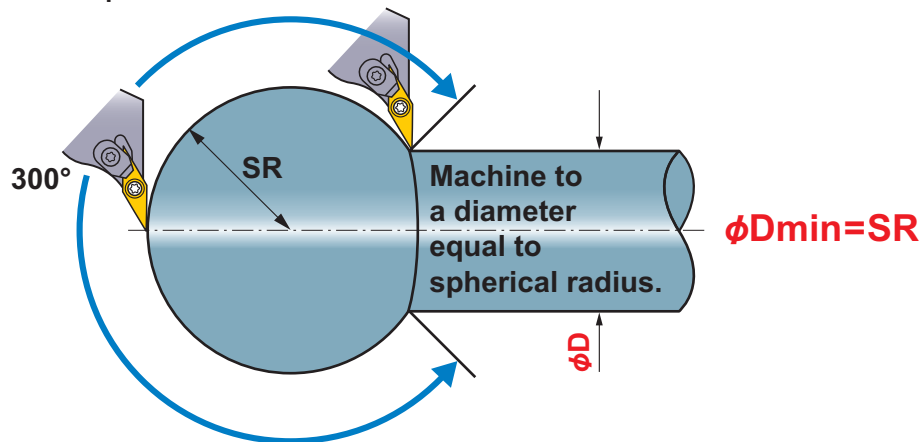
Chip control is improved by having a chip breaker geometry suitable for copying.

Narrow protrusion gives excellent chip disposal.

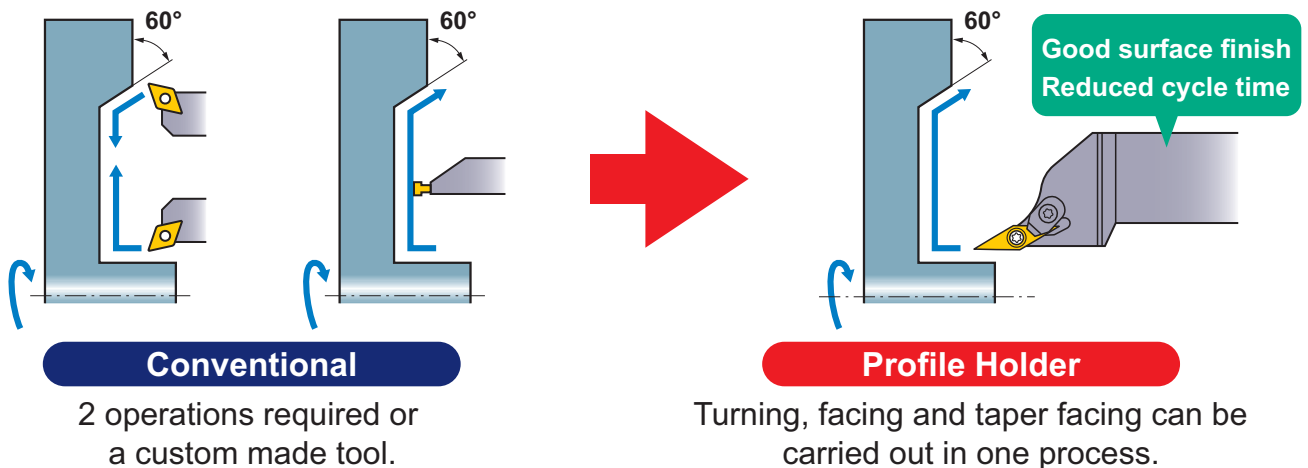
Curved edge effective for back turning.



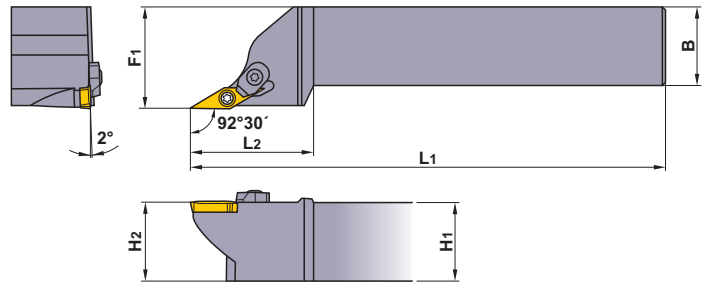
- Machine 300° of a sphere.



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



PROFILE HOLDER



Holder

Right hand holder shown.

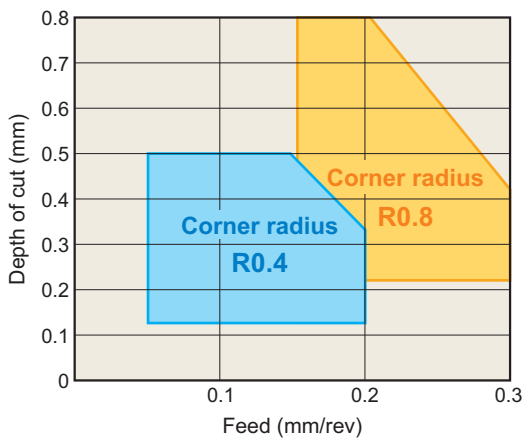
Order Number	Stock		Insert Number	Dimensions (mm)						Clamp Screw	Clamp Bridge	Clamp Bridge Screw	Spring	Wrench	
	R	L		H1	B	L1	L2	H2	F1						
NEW SXZCR/L1616H15	●	●	XCMT	1503-SVX	16	16	100	35	16	20	TS255	AMS3	AJS3010T10	ASS2	TKY08F TKY10F
NEW 2020K15	●	●		1503-SVX	20	20	125	35	20	25	TS255	AMS3	AJS3010T10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

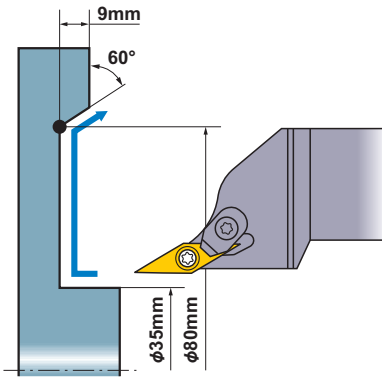


Recommended Cutting Conditions

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

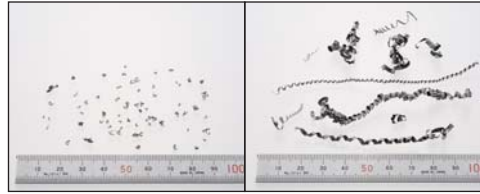
Note) The above cutting conditions are general guide lines. Adjustments may be necessary depending on machine rigidity, workpiece geometry and clamping.

Application Examples



<Cutting Conditions>
 Workpiece : JIS S45C
 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



Smooth surface
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.

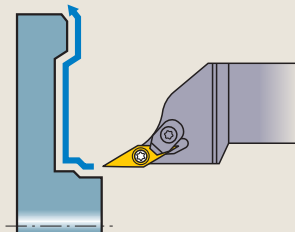
Operational Guidance

Care should be taken to the following when using the profile turning tool holder.

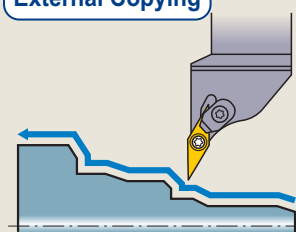
Possible

End Face Copying

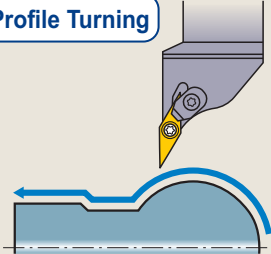
When end face copying, refer to the precautions below.



External Copying

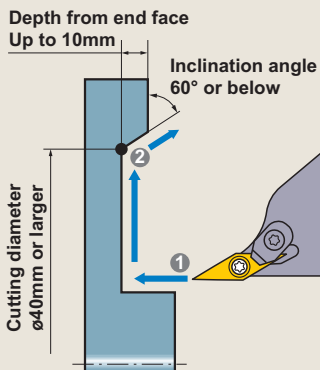


Profile Turning



Notes when end face copying

Pay special attention to the following when 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)

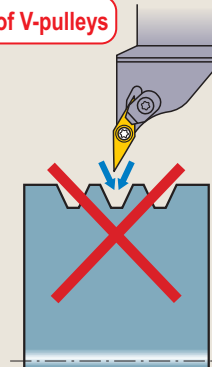
• To reduce the contact length of chips, the depth of cut should be below half the nose radius.
 • To prevent interference between the tool and the workpiece, the cutting diameter should be 40mm or larger, inclination angle 60° or below and depth from the end face up to 10mm.

•When changing inserts

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

Not possible

Machining of V-pulleys



When machining V-pulleys, use a VNMG insert.

For Your Safety

●Don't handle inserts and chips without gloves. ●Please machine within the recommended application range and exchange expired tools with new ones in advance of breakage. ●Please use safety covers and wear safety glasses. ●When using compounded cutting oils, please take fire precautions. ●When attaching inserts or spare parts, please use only the correct wrench or spanner.

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The Scope of the Registration:
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 Production of Cutting Tools,
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MITSUBISHI MATERIALS CORPORATION
Area Marketing & Operations Dept.

KFC bldg., 8F, 1-6-1, Yokoami, Sumida-ku, Tokyo 130-0015, Japan
 TEL +81-3-5819-8772 FAX +81-3-5819-8774

MMC HARTMETALL GmbH

Comeniusstr.2, 40670, Meerbusch GERMANY
 TEL +49-2159-9189-0 FAX +49-2159-918966

MITSUBISHI MATERIALS U.S.A. CORPORATION
Headquarters

17401, Eastman Street, Irvine, California, 92614, USA
 TEL +1-949-862-5100 FAX +1-949-862-5180

MMC METAL SINGAPORE PTE LTD.

10, Arumugam Road, #04-00 Lion Industrial Bldg., 409957, SINGAPORE
 TEL +65-6743-9370 FAX +65-6749-1469

Mitsubishi Carbide Home page : <http://www.mitsubishicarbide.com>
 (Tools specifications subject to change without notice.)