

Double Clamp Type Holder for Profiling
25° Profiling System

25° rhombic insert for profiling and face relief.

Machine 300° of a sphere!

**Machine
face relief
to 60°
angle!**



Double Clamp Type Holder for Profiling

25° Profiling System

Features

Holder

Double clamping for secure retention.

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

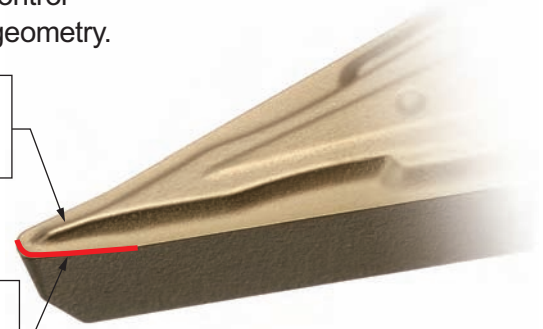


Insert

Maximum chip control through unique geometry.

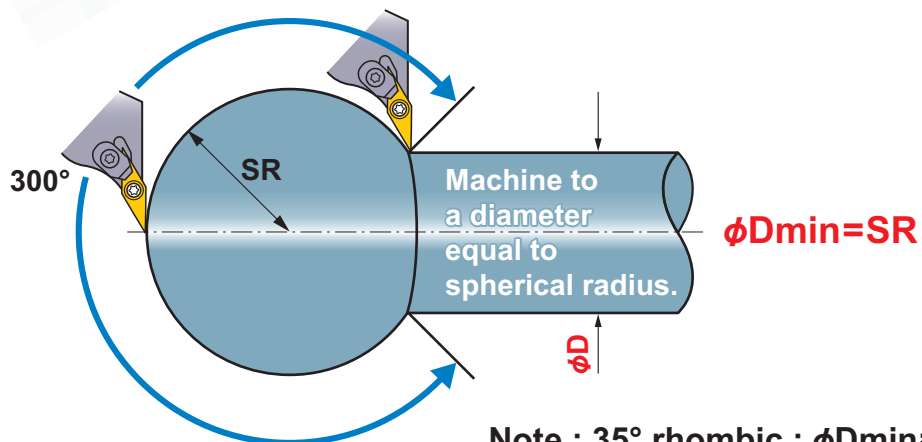
Narrow ridge gives excellent chip disposal.

Curved edge effective for back turning.



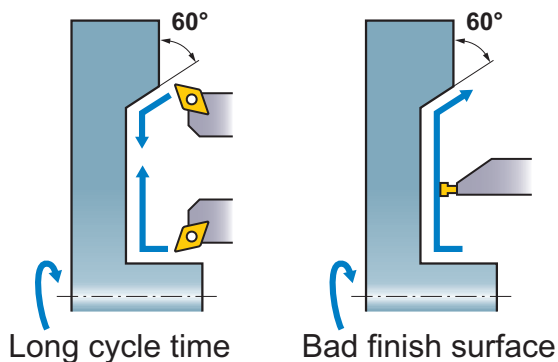
Benefits

Machine 300° of a sphere.

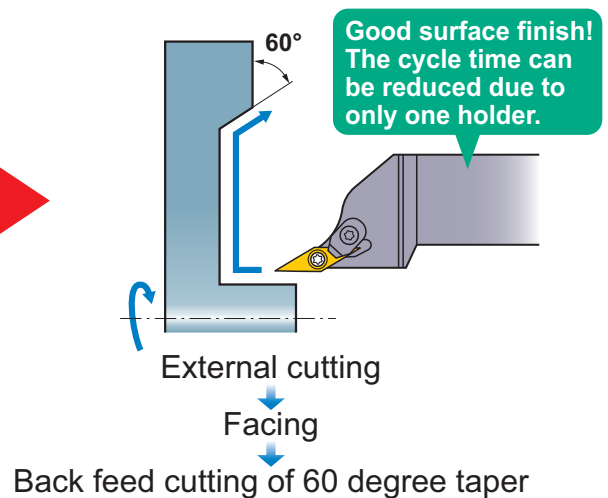


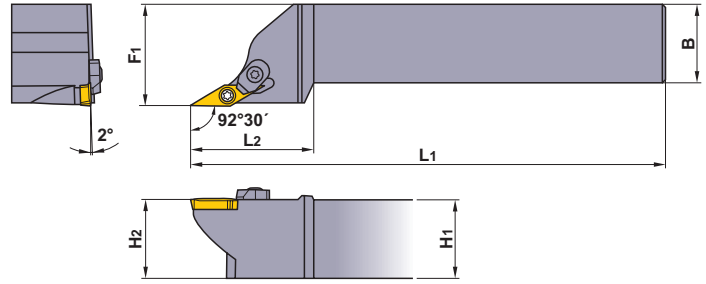
Machine a face relief with up to a 60° incline.

Conventional cutting



NEW method by Profile Holder





Inch Holder

Right hand holder shown.

Order Number	Stock		Insert Number	Dimensions (inch)							Clamp Screw	Clamp Bridge	Clamp Bridge Screw	Spring	Wrench
	R	L		H1	B	L1	L2	H2	F1						
SXZCR/L-102	●	●	XCMT	22°SVX	.625	.625	4.000	1.378	.625	.750	TS255	AMS3	AJS3010T10	ASS2	TKY08F TKY10F
-122	●	●		22°SVX	.750	.750	4.500	1.378	.750	1.000	TS255	AMS3	AJS3010T10	ASS2	TKY08F TKY10F
-162	●	●		22°SVX	1.000	1.000	6.000	1.575	1.000	1.250	TS255	AMS3	AJS3010T10	ASS2	TKY08F TKY10F

Metric Holder

Right hand holder shown.

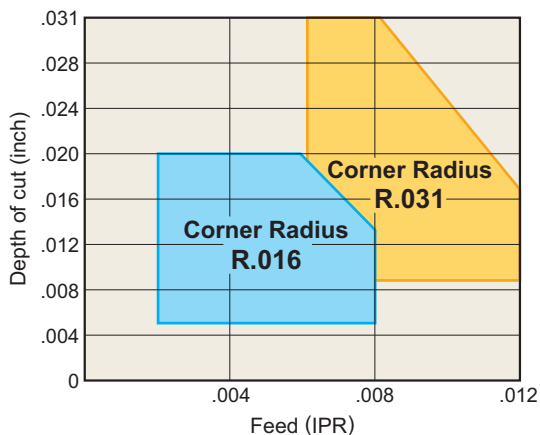
Order Number	Stock		Insert Number	Dimensions (mm)							Clamp Screw	Clamp Bridge	Clamp Bridge Screw	Spring	Wrench
	R	L		H1	B	L1	L2	H2	F1						
SXZCR/L1616H15	●	●	XCMT	22°SVX	16	16	100	35	16	20	TS255	AMS3	AJS3010T10	ASS2	TKY08F TKY10F
2020K15	●	●		22°SVX	20	20	125	35	20	25	TS255	AMS3	AJS3010T10	ASS2	TKY08F TKY10F
2525M15	●	●		22°SVX	25	25	150	40	25	32	TS255	AMS3	AJS3010T10	ASS2	TKY08F TKY10F

Insert

Shape	Order Number	(ISO) Number	Stock	Dimensions (inch)			Geometry
			Coated	D1	S1	Re	
			UE6020				
	XCMT221SVX	XCMT150304-SVX	●	.250	.125	.016	
	222SVX	150308-SVX	●	.250	.125	.031	

● : Inventory maintained.

Application Range



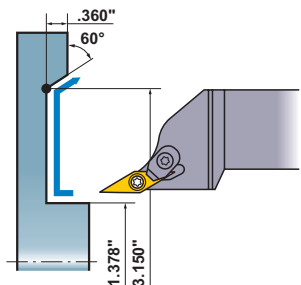
Recommended Cutting Conditions

Work Material	Hardness	Grade	Cutting Speed (SFM)
P Mild Steel	≤180HB	UE6020	490—1150
General Steel	150—250HB	UE6020	330—820

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

25° Profiling System

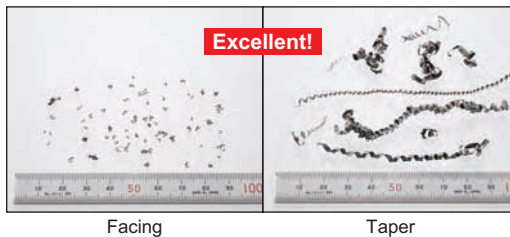
Application Examples



<Cutting Conditions>

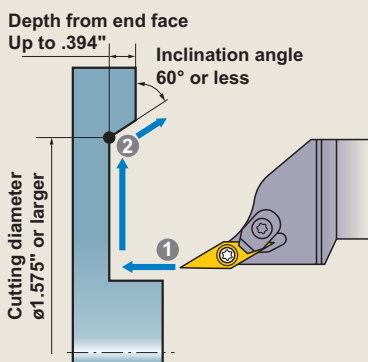
Workpiece : 1045
 Insert : XCMT221SVX
 Grade : UE6020
 Holder : SXZCR-162
 Cutting at boss : Cutting Speed=655SFM,
 Depth of cut=.008inch,
 Feed=.002IPR, Wet cutting
 Cutting from face to taper : Cutting Speed=655SFM,
 Depth of cut=.008inch,
 Feed=.008IPR, Wet cutting

Chip Geometry



Operational Guidance

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)

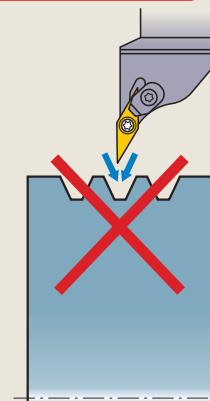
- To reduce the contact length of chips, the depth of cut should be below half the nose radius.
- To prevent interference between the tool and the workpiece, the cutting diameter should be 1.575" or larger, inclination angle 60° or less and depth from the end face up to .394".

When changing inserts

- When indexing the inserts, it is recommended to preset 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 driver.



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