

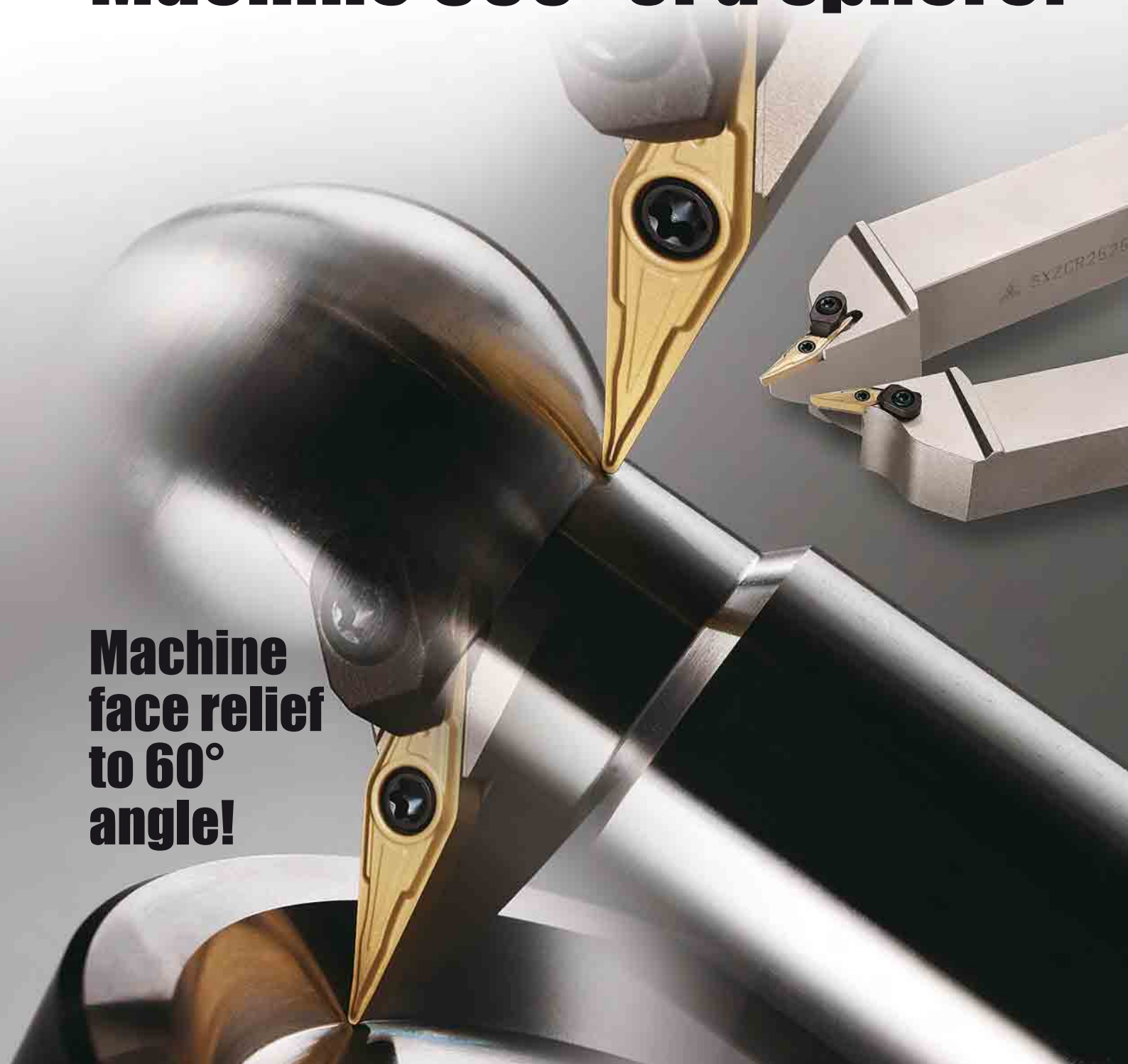
Double Clamp Type Holder for Profiling

***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.

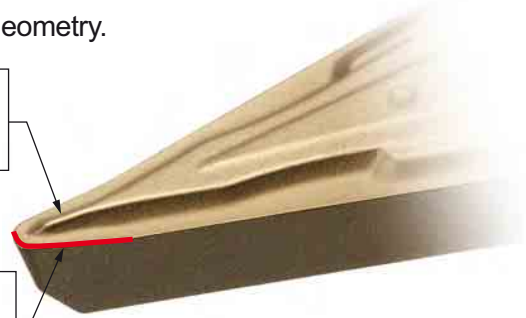


### Insert

Maximum chip control through unique geometry.

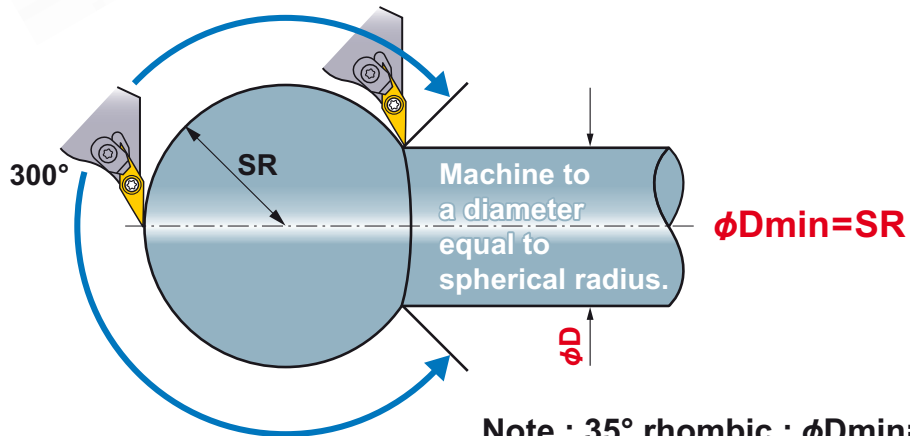
Narrow ridge gives excellent chip disposal.

Curved edge effective for back turning.



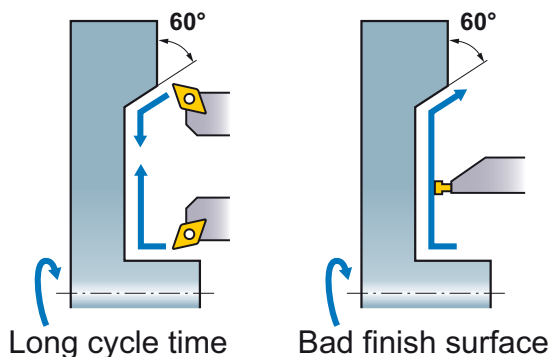
### Benefits

Machine 300° of a sphere.

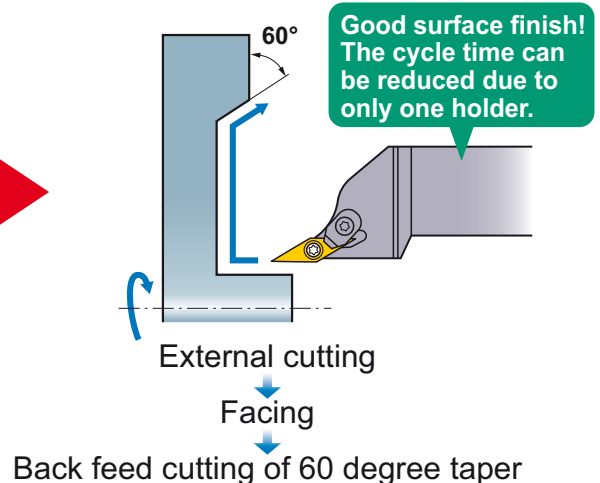


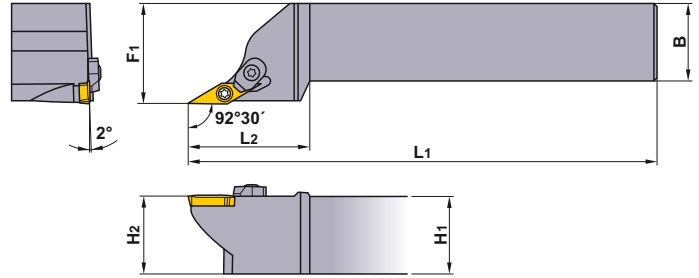
Machine a face relief with up to a 60° incline.

#### 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						
<b>SXZCR/L-102</b>	●	●	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.

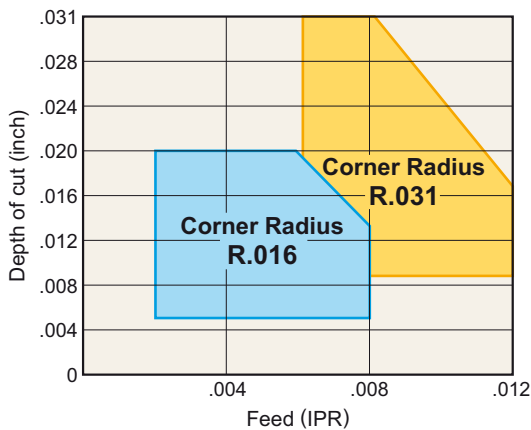
Order Number	Stock		Insert Number	Dimensions (mm)							Clamp Screw	Clamp Bridge	Clamp Bridge Screw	Spring	Wrench
	R	L		H1	B	L1	L2	H2	F1						
<b>SXZCR/L1616H15</b>	●	●	XCMT	22°SVX	16	16	100	35	16	20	TS255	AMS3	AJS3010T10	ASS2	TKY08F TKY10F
2020K15	●	●		22°SVX	20	20	125	35	20	25	TS255	AMS3	AJS3010T10	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	
			<b>UE6020</b>				
	<b>XCMT221SVX</b>	<b>XCMT150304-SVX</b>	●	.250	.125	.016	
	222SVX	150308-SVX	●	.250	.125	.031	

● : Inventory maintained.

## Application Range



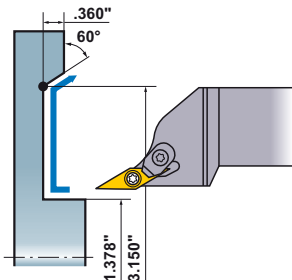
## Recommended Cutting Conditions

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

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

# 25° Profiling System

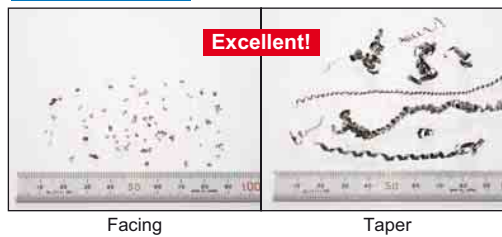
## Application Examples



<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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