

CUTTING SPEED FORMULAE

1. Employing $\theta^\circ \Rightarrow$ Calculate cutting speed at point P.
(Cutting speed at the cutting depth border for oblique machining)

$$\text{Formula : Cutting Speed} = \frac{\pi \cdot D_1 \cdot \sin \theta \cdot n}{1000} \text{ (m/min)}$$

$$\theta^\circ = \cos^{-1} \left(\frac{D_1 - 2ap}{D_1} \right) + 90 - \alpha$$

n : Spindle Speed (min^{-1})

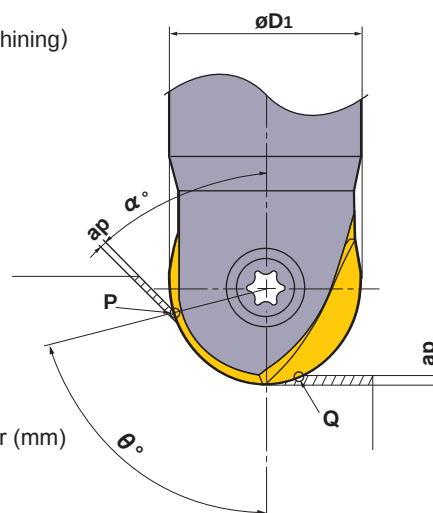
2. Employing $ap \Rightarrow$ Calculate cutting speed at point Q.
(Cutting speed at the cutting depth border)

$$\text{Formula : Cutting Speed} = \frac{2\pi n \sqrt{ap(D_1 - ap)}}{1000} \text{ (m/min)}$$

n : Spindle Speed (min^{-1})

D_1 : Cutting Edge Diameter (mm)

ap : Depth of Cut (mm)



FITTING INSERTS ON HOLDERS

1. Clean the insert seat

Thoroughly clean the insert and seat in the holder body.

2. Fitting the insert

Place the concave mark on the insert uppermost as shown with the clamp screw inserted from above (only SRF type inserts). Fasten the clamp screw while firmly pressing the insert against the insert seat wall. Use of a special anti seize lubricant MK1KS is recommended. Tighten within the recommended torque range.

