

BORING BARS

MICRO-MINI TWIN

PRECAUTIONS WHEN USING THE MICRO-MINI TWIN

● When using a holder for general purpose / small automatic lathe:

- ① To avoid chipping of the 2nd cutting edge take care when inserting the boring bar into the holder. Refer to fig.1. If the 2nd edge contacts the internal face of the holder there is a possibility that it may chip.

- ② When using this type of holder, there is a possibility that damage to the shank and the 2nd cutting edge can occur. Make sure that the clamping screws are tightened to the set torque value. Additionally make sure that there is no clamping screw near the 2nd cutting edge as this can break the boring bar.

◎ When using Mitsubishi holders

- When using holders with a tool overhang of recommended quantity, ensure that the 3rd clamping screw is removed prior to machining. The set torque value for the clamping screw is 2.0 N·m.

● When using a square type holder:

- ① When installing the boring bar into the holder, tighten the clamp screws after ensuring the flats on the tool holder are parallel to the reference flats on the micro-mini bar. Refer to fig.3.
 ② Make sure that the clamping screws are tightened to the recommended values.
 ③ Do not tighten the clamp screw without a bar in place, otherwise the bridge will be deformed.

Fig.1

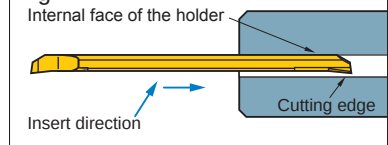


Fig.2

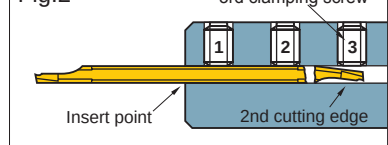
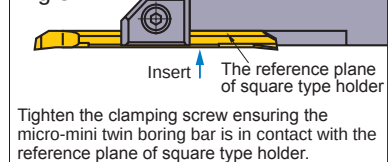


Fig.3



MACHINING METHODS OF THE CR TYPE

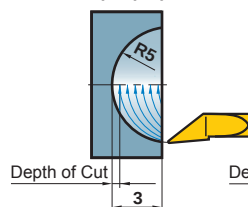
● Profile turning

By drilling a pre-prepared hole, the machining time will be shortened and chip control will be improved.

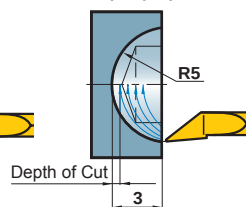
<Cutting Conditions>

Workpiece : DIN S20C
 Holder : CR05RS-01B
 Cutting Speed : 80m/min
 Feed : 0.05mm/rev
 Depth of Cut : 0.05mm
 Wet Cutting

Machining a work piece
without a pre-prepared hole



Machining a work piece
with a pre-prepared hole



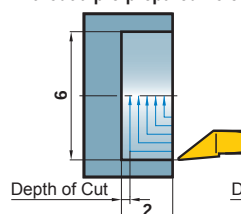
● Inner end facing

By drilling a pre-prepared hole, the machining time will be shortened and chip control will be improved.

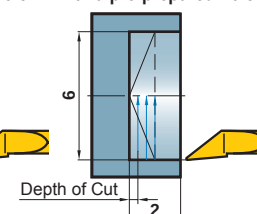
<Cutting Conditions>

Workpiece : DIN S20C
 Holder : CR05RS-01B
 Cutting Speed : 80m/min
 Feed : 0.05mm/rev
 Depth of Cut : 0.05mm
 Wet Cutting

Machining a work piece
without a pre-prepared hole



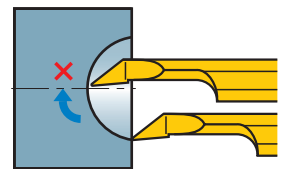
Machining a work piece
with a pre-prepared hole



NOTES FOR USE

Profile turning,
Inner end facing

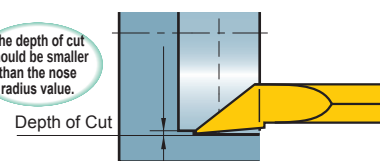
The cutting edge
should not cross
the centre line of the
work piece.



If the cutting edge crosses the centre line of a work piece, the cutting edge can fracture.

Copying

The depth of cut
should be smaller
than the nose
radius value.



With depths of cut larger than the nose radius value, burrs will be formed.