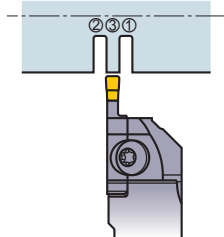


MACHINING RECOMMENDATIONS

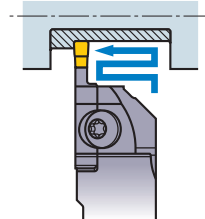
● Notes on multi-functional machining (MF,MS,MM and BM breakers)

Machining narrow grooves



- It is recommended to carry out plunging in several passes. Following the steps above makes it difficult for chips to elongate. This also improves the accuracy of workpiece wall surface.

Machining wide grooves



- It is recommended that cross-feed machining is used.

Machining wide grooves

ROUGHING

① Carry out grooving.

② Retract the tool approx 0.1mm.

③ Carry out cross feed machining.

④ Retract the tool approx 0.1mm.

⑤ Carry out grooving.

⑥ Retract the tool approx 0.1mm.

* Repeat the steps ①–⑥.

FINISHING

⑦ Carry out grooving to the end point of the corner radius.

⑧ Machining of the wall surface, corner radius and bottom face should be carried out in one process.

⑨ Stop at the bottom of the corner radius.

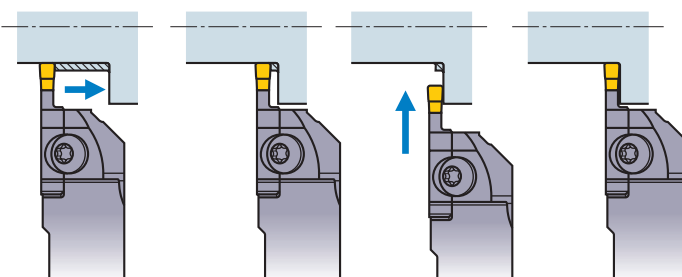
⑩ Machine the counter wall to the corner radius in one process.

⑪ Finish machining.

Precautions when finishing walls

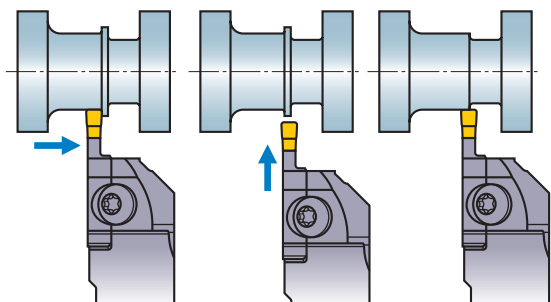
- To produce high accuracy walls using MS or MM breaker insert, do not carry out back turning. Plunging is recommended.

Wall machining



- When machining a wall, chip jamming can occur. In this case, stop cross feed machining just before the wall (at a point less than the insert width) then remove the remaining material by plunging.

Machining of a ring section



- When a ring remains in a cross feed end process, finish cross feed machining 1–1.5mm short of the end point, then remove the ring by plunging.