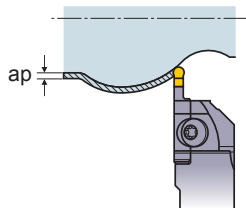


GROOVING SYSTEM

MACHINING RECOMMENDATIONS

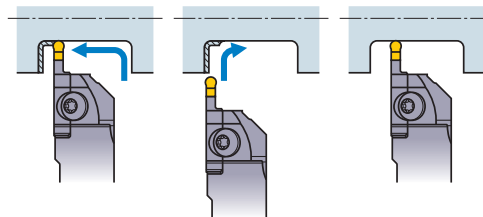
Notes on multi-functional machining (BM breaker)

Copying



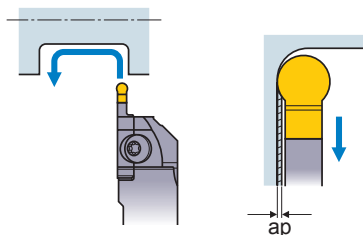
- With the BM breaker insert, 3 dimensional copying is possible. Set the depth of cut (a_p) to 40% less than the insert width.

Roughing



- Use plunging and cross-feed machining. When machining the corner, vibration is likely to occur. To avoid this, reduce the feed by 50%.

Finishing



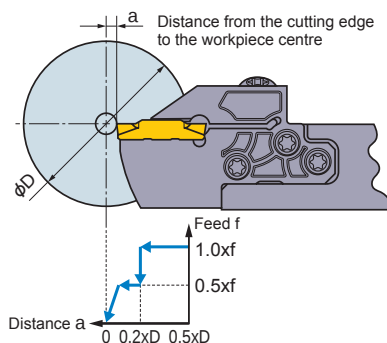
- Carry out finishing in one process. For the depth of cut (a_p) when back turning, refer to the table on the right.

Insert	a_p (mm)
GY2M0200D100N-BM	0.05
GY2M0250E125N-BM	0.10
GY2M0300F150N-BM	0.15
GY2M0318F159N-BM	0.15
GY2M0400G200N-BM	0.20
GY2M0475H238N-BM	0.24
GY2M0500H250N-BM	0.24
GY2M0600J150N-BM	0.30
GY2M0635J318N-BM	0.30
GY2M0800K400N-BM	0.40

Notes for cutting off

Feed

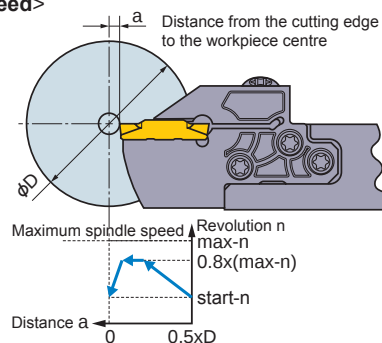
<Feed>



- When the cutting edge approaches the centre, reduce the feed by 50%.
- If necessary, stop the feed prior to reaching the centre of the workpiece to prevent it falling under its own weight.

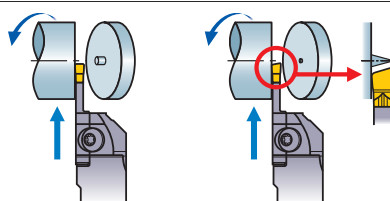
Revolution

<Spindle speed>



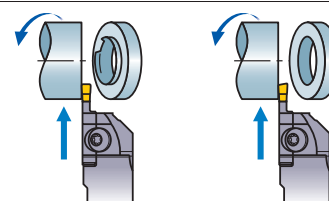
- When using constant cutting speed during a cutting off cycle, it is recommended to limit the spindle speed to 80% of maximum to ensure stability.
- To prevent the workpiece from being expelled, lower the spindle speed before finishing the grooving operation.

Insert



Neutral insert

Handed insert



Neutral insert

Handed insert

- When there is a centre stub on solid bar work or burrs are formed on pipe material, it is possible to decrease them by using a handed insert. With a handed insert, machining tends to be less stable when compared to using a neutral insert. Pay special attention to avoid fracturing of the cutting edge and decrease the feed when necessary.