

CBN GROOVING SERIES

(GY/MG)

FEATURES

- A combination with a high rigidity holder ensures high accuracy and long tool life.

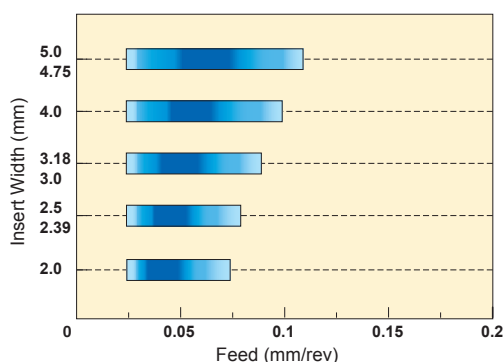
Holder rigidity is essential when grooving hardened steel. The GY series TriForce system offers high rigidity equivalent to a solid type tool. MG has a wide insert location face for high gripping force. The insert and holder combination allows delivery of excellent performance when grooving hardened steel.

- Product line-up for different holder properties

MG for narrow grooves and GY for general grooves are both available to allow selection of the most suitable tool.



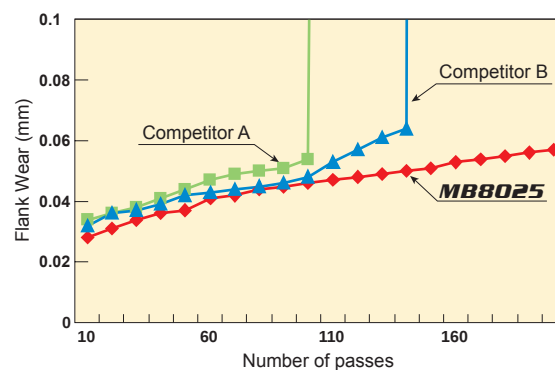
RECOMMENDED CUTTING CONDITIONS



Work Material	Hardness	Grade	Cutting Speed (m/min)	Coolant
H Hardened Steel	35—65HRC	MB8025	100 (60—120)	Dry, Wet

CUTTING PERFORMANCE

- Tool life evaluation for the GY holder



<Cutting Conditions>

Workpiece : Alloy steel (HRC60) Depth of Cut : 0.35mm
Cutting Speed : 120m/min Dry Cutting
Feed : 0.1mm/rev

APPLICATION EXAMPLE

Insert	GY1G0300F020N-GFGS (Grade : MB8025)	MGTR43200 (Grade : MB8025)
Workpiece	Transmission shaft (Alloy steel (HRC58~62)) 	Transmission shaft (Alloy steel (HRC61~65))
Cutting Conditions	Cutting Speed (m/min)	129
	Feed (mm/rev)	0.1
Result	MB8025 Competitor's CBN grade Fracture GY achieves longer tool life without fracturing.	MB8025 Competitor's CBN grade 2.5 times longer tool life than the conventional insert.