

For MG Grooving Tool Holders

CBN INSERTS

A combination of the MG holder and CBN.

- Installation of the insert into high rigidity MG holder allows for excellent surface finishes and long tool life.
- A versatile MB8025 grade is utilized, making it suitable for a wide range of applications.

Inserts

Order Number	Stock	Groove Width W₃ (mm)	Dimensions (mm)				Geometry
	CBN		L ₃	D ₁	S ₁	Re	
	MB8025						
	R						
MGTR43125	●	1.25	2.0	12.7	4.76	0.2	<p>Right hand insert only.</p>
43150	●	1.50	3.5	12.7	4.76	0.2	
43200	●	2.00	3.5	12.7	4.76	0.2	
43250	●	2.50	4.0	12.7	4.76	0.2	
43300	●	3.00	4.0	12.7	4.76	0.2	
43350	●	3.50	5.0	12.7	4.76	0.2	
43400	●	4.00	5.0	12.7	4.76	0.2	

MG Tool Holders

External Grooving

MG tool holders are available in right hand only.

Order Number	Stock	Insert Number	Groove Width W₃ (mm)	Max. *1 Groove Depth ap (mm)	Dimensions (mm)				
	R				H ₁	B	L ₁	H ₂	F ₁
MGHR2020K4315	●	MGTR 43125 43400	1.25	2.0	20	20	125	20	20.2
2020K4323	●		1.5 ≤ W ₃ ≤ 2.3	3.5					
2020K4333	●		2.3 < W ₃ ≤ 3.3	4.0					
2525M4315	●		3.3 < W ₃ ≤ 4.0	5.0	25	25	150	25	25.2
2525M4323	●		1.25	2.0					
2525M4333	●		1.5 ≤ W ₃ ≤ 2.3	3.5					
2525M4323	●		2.3 < W ₃ ≤ 3.3	4.0	25	25	150	25	25.2
2525M4333	●	3.3 < W ₃ ≤ 4.0	5.0						

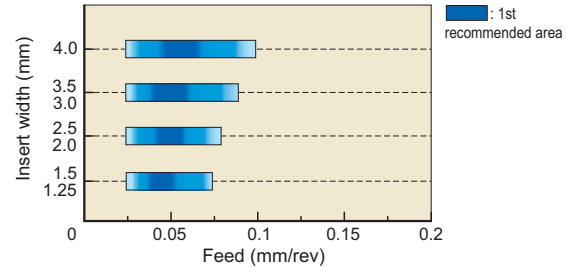
● : Inventory maintained.

*1 Dimensions with the CBN insert installed into the body.

Recommended Cutting Conditions

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

● Recommended feed rate



Application Examples

Insert	MGTR43200 (MB8025)	MGTR43300 (MB8025)
Workpiece	JIS SCr420 (61-65HRC) 	JIS SCM415 (59HRC)
Component	Transmission shaft	Transmission shaft
Cutting Conditions	Cutting Speed (m/min)	100
	Feed (mm/rev)	0.05
Coolant	Wet	Wet
Results	<p>2.5 times longer tool life than competitor's CBN inserts.</p>	<p>Competitor's CBN inserts tended to break, but MB8025 enabled prolonged tool life without fracturing.</p>

For Your Safety

● Don't handle inserts and chips without gloves. ● Please machine within the recommended application range and exchange expired tools with new ones in advance of breakage. ● Please use safety covers and wear safety glasses. ● When using compounded cutting oils, please take fire precautions. ● When attaching inserts or spare parts, please use only the correct wrench or spanner.

MITSUBISHI MATERIALS CORPORATION



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(Tools specifications subject to change without notice.)