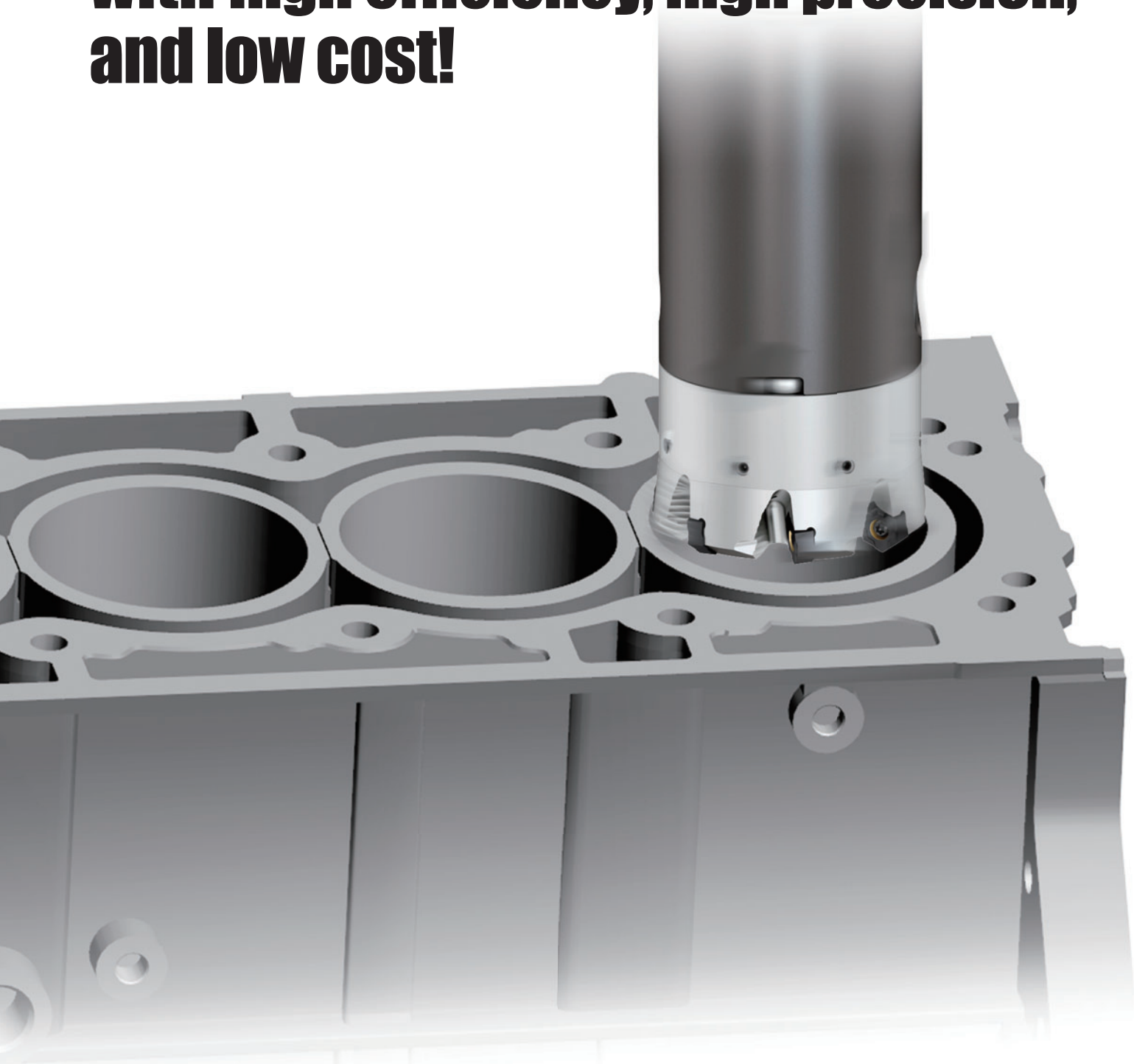


Boring Cutter

***BMR***

New  
Product

**For cylinder block,  
Hexagonal double-sided inserts  
with high efficiency, high precision,  
and low cost!**



## Boring Cutter

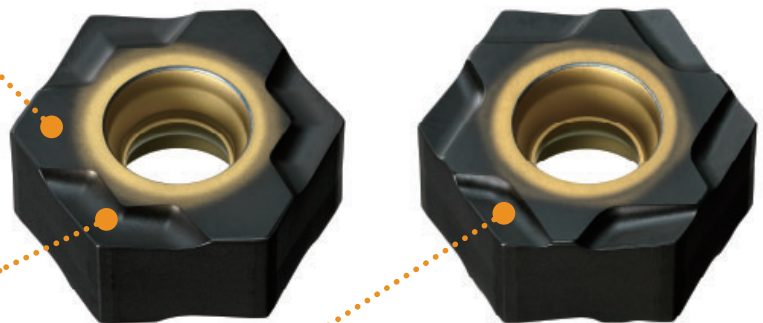
# BMR

Inventory maintained of highly rigid  
6-corner type and economical  
12-corner type inserts



### High Clamping Rigidity

High feed processing possible with improved fracture resistance.



### Double Positive Breaker

Reduced cutting resistance. Supports open deck work. Effective finished surface due to wiper edge.

### 12-Corner Type with Right Hand

Economical 12-corner type that preserves comparable insert rigidity of the 6-corner type by securing the seating surface directly below where the cutting force is absorbed.

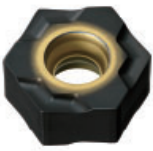
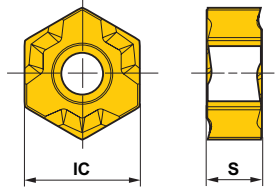
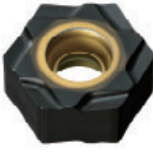
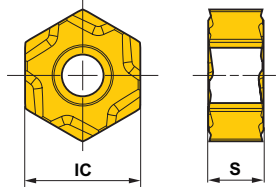


## Body with Peripheral Cutting Edge Run-out Regulator

With peripheral cutting edge regulating function for possible use of economical M-class inserts.

\* The bodies are only available by special order.

### INSERT


Shape	Order Number	Grade	Hand	Cutting edge	Stock	Dimensions (mm)		Geometry
						IC	S	
	<b>HNMX1206EN06-R</b>	<b>MC5015</b>	–	6	●	12.7	6.0	
	<b>HNMX1206ER12-R</b>	<b>MC5015</b>	R	12	●	12.7	6.0	

### RECOMMENDED CUTTING CONDITIONS

Work Material	Tensile Strength	Grade	Cutting Speed $v_c$ (m/min)	Feed per Tooth $f_z$ (mm/t.)	Cutting depth $a_e$ (mm)
<b>K</b> Gray Cast Iron	≤350MPa	<b>MC5015</b>	200 (150–250)	0.2 (0.1–0.25)	≤3.0

\* With feed per cutter, settings are set small for finished surface roughness and large for ideal product life.

## APPLICATION EXAMPLES

Cutter Body		<b>BMR ø85 (7 inserts)</b>	
Insert (Grade)		<b>HNMX1206EN06-R(MC5015)</b>	
Workpiece		FC Cutting diameter : ø85 Cutting depth : 140mm	
Cutting Conditions	Revolution (min-1)	750	
	Cutting Speed (m/min)	200	
	Feed (mm/t.)	0.2	
	Table Feed (mm/min)	1050	
	Depth of Cut (mm)	2.0	
Cutting mode		Wet	
Results		Improve machining efficiency by 2.2x and approximately 5x longer tool life, under conventional conditions. Stable cutting with favorable finished surface roughness and achievable cylindricity.	

The above application examples are customer's application examples, so it can be different from the recommended conditions.

### 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 driver. ●When using rotating tools, please make a trial run to check run-out, vibration and abnormal sounds etc.

## MITSUBISHI MATERIALS CORPORATION

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<http://www.mitsubishicarbide.com/en/>  
 (Tools specifications subject to change without notice.)