MITSUBISHI MITSUBISHI MATERIALS TOOL NEWS

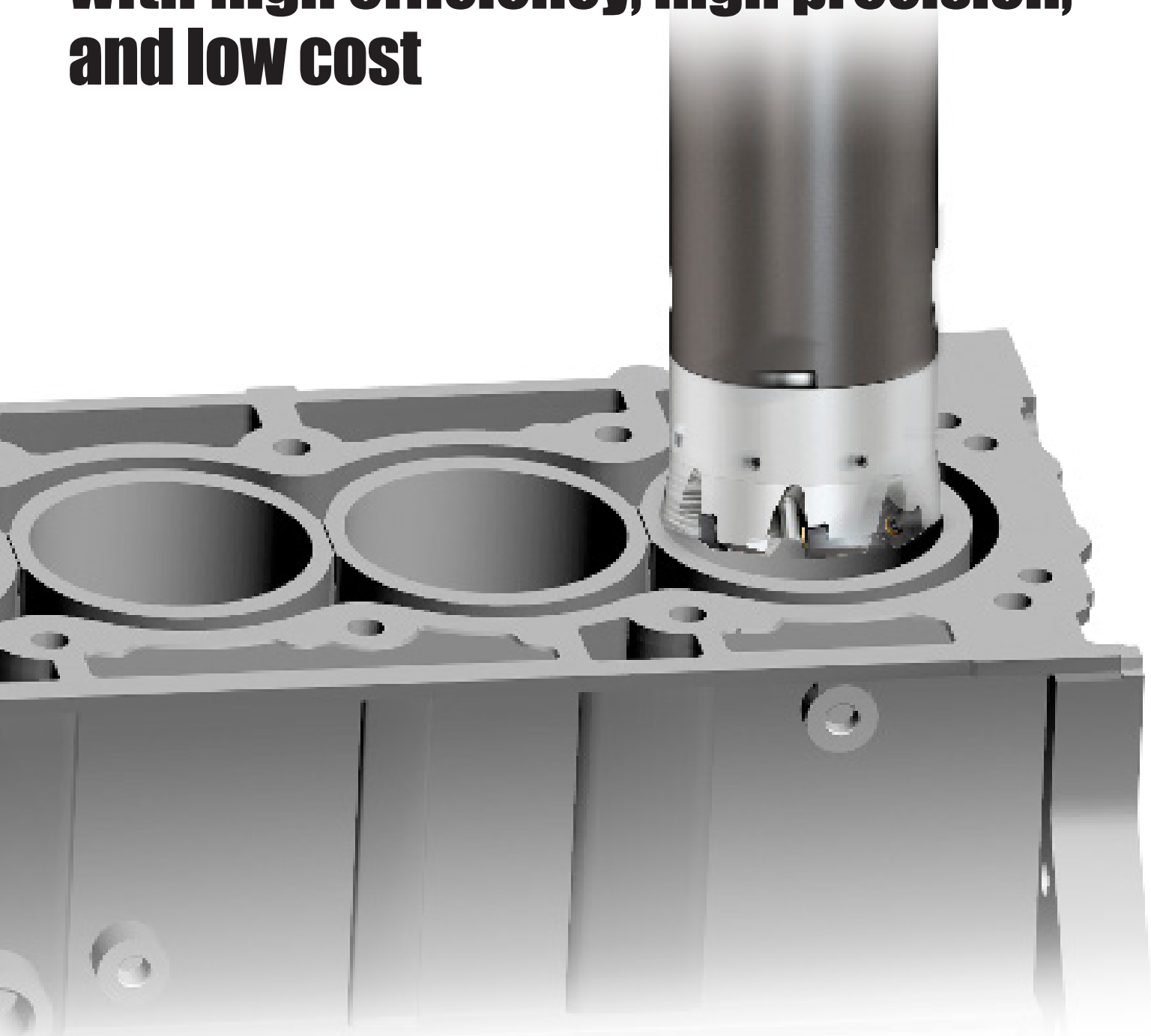
B229A
YOUR GLOBAL CRAFTSMAN STUDIO

Boring Cutter

BMR

New Product

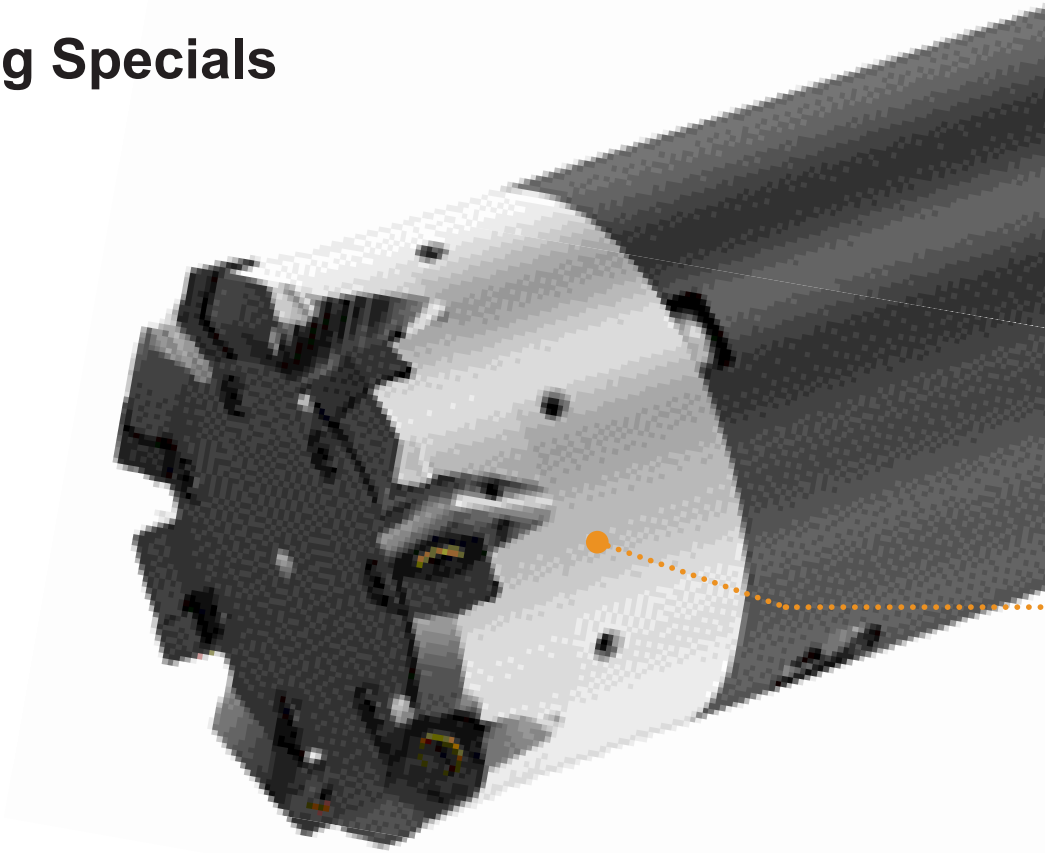
For cylinder blocks, Hexagonal double-sided inserts with high efficiency, high precision, and low cost



Boring Cutter

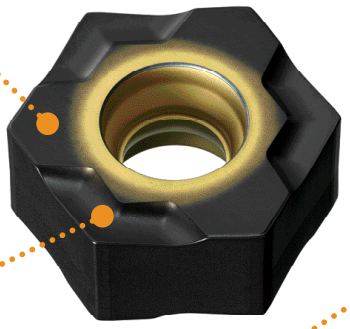
BMR

BMR Engineering Specials



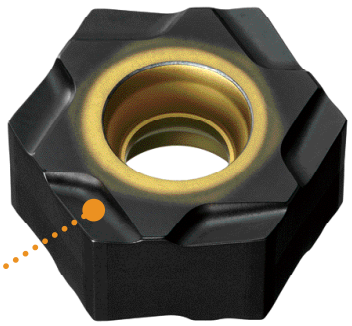
High Clamping Rigidity

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.

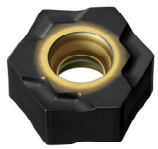
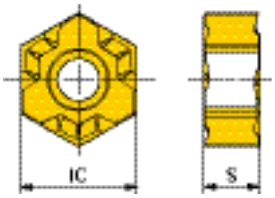
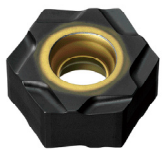
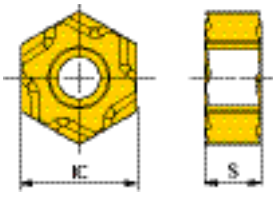
Highly rigid 6-corner type and economical 12-corner type inserts

Body with Peripheral Cutting Edge Run-out adjustable mechanism

Economical M-class insert can be used since run out is adjustable.

* BMR Cutters - Non stock, engineering specials produced to order only.

INSERT

Shape	Order Number	Grade	Hand	Cutting edge	Stock	Dimensions (inch)		Geometry
						IC	S	
	**HNMX1206EN06-R**	**MC5015**	–	6	★	.500	.236	
	**HNMX1206ER12-R**	**MC5015**	R	12	★	.500	.236	

★ : **Inventory maintained in Japan.**

RECOMMENDED CUTTING CONDITIONS

	Work Material	Tensile Strength	Grade	Cutting Speed **vc** (SFM)	Feed per Tooth **fz** (IPT)	Cutting depth **ae** (inch)
K	Gray Cast Iron	<350MPa	**MC5015**	655 (490—820)	.008 (.004—.010)	<.118

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

APPLICATION EXAMPLES

Cutter Body		**BMR ø85 mm (7 inserts)**
Insert (Grade)		**HNMX1206EN06-R(MC5015)**
Workpiece		Gray Cast Iron Cutting diameter : ø3.15 inch Cutting depth : 5.512 inch 
Cutting Conditions	Revolution (RPM)	750
	Cutting Speed (SFM)	655
	Feed (IPT)	.008
	Table Feed (IPM)	41.3
	Depth of Cut (inch)	.079
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.