

# Microcut CNC horizontal boring & milling center HBM RAM type Series

Best  
Quality



**MICROCUT's CNC horizontal boring & milling center type HBM RAM** is designed with high tensile strength column structure and RAM type spindle with straightness compensation technology "SCT" to ensure rigidity and linearity of RAM when machining. Large operation area with ergonomic control panel provides the comfortable and easy operation.

The main frames are made from high grade Meehanite licensed steel. The rotary table is reinforced with integrated hydraulic clamping force and equipped with four points lock pins to enable heavy loading capacity and large clamping force.

## Distinctive features:

- X/Y-axes provide four-roller type linear guideways with 12 pcs. blocks for X-axis and 16 pcs. blocks for Z-axis for heavy duty loading
- Box way design for Y-axis
- The guideway surface has been processed with induction hardened and ground procedure
- Ø140 mm quill with extendable RAM
- Spindle surface with hardness HRC52-55
- Grade GGG iron casting
- Automatic 2-step speed changer for high torque output
- SCT hydraulic compensation mechanism to ensure linearity of the RAM's spindle and the accuracy of the machine
- C3 class ballscrews with double nuts on X/Y/Z/W axes, which give high axis accuracy and less deforming under axial force

## Standard equipment:

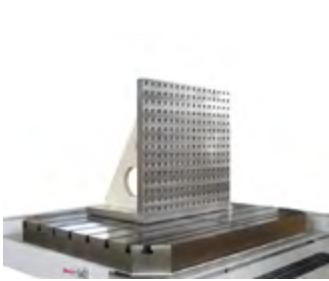
- Heidenhain iTNC530 HSCI, Fanuc 31iMB or Siemens 840D sl control
- CTS preparation
- Spindle oil cooling system
- Chip conveyor incl. water tank and oil skimmer
- Linear scale for three axes
- Heat exchanger
- Measuring system
- Hoist ring set
- Chip auger
- Automatic lubrication system
- CE marking declaration conformity for EU

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## Optional equipment:

- Accessory head interface for RAM
  - Angular block
  - Safety module
  - Air conditioner
  - CTS unit
  - Oil skimmer
- Available controls:  
10,4" colour display Fanuc or Siemens, 15" colour display Heidenhain



Angular block



Table guard  
with folding  
door



Safety module



CTS unit



Oil skimmer

		HBM RAM
Table size	mm	3200 x 3200 (3500 x 3500 opt.)
Table height	mm	2015
Max. table load	T	20 T (40 T opt.)
X-axis travel	mm	4500 (5500/6500 opt.)
Y-axis travel	mm	3200 (4500 opt.)
Z-axis travel (RAM)	mm	800
V-axis travel (column)	mm	2000
W-axis (quill) travel	mm	700
Spindle speed	RPM	35~3000
Spindle output	kW	37/45
Spindle torque	Nm	1942/2362
Spindle gear range		2 steps
Quill diameter (W-axis)	mm	Ø140
Rapid feed rate X/Y/V-axes	m/min.	10/10/10
X-axis guideway type		Linear / 65 mm (roller)
Y-axis guideway type		Box way
Z-axis guideway type		Linear / 65 mm (roller)
ATC arm type- tools	Nos.	60
Weight	kg	12000