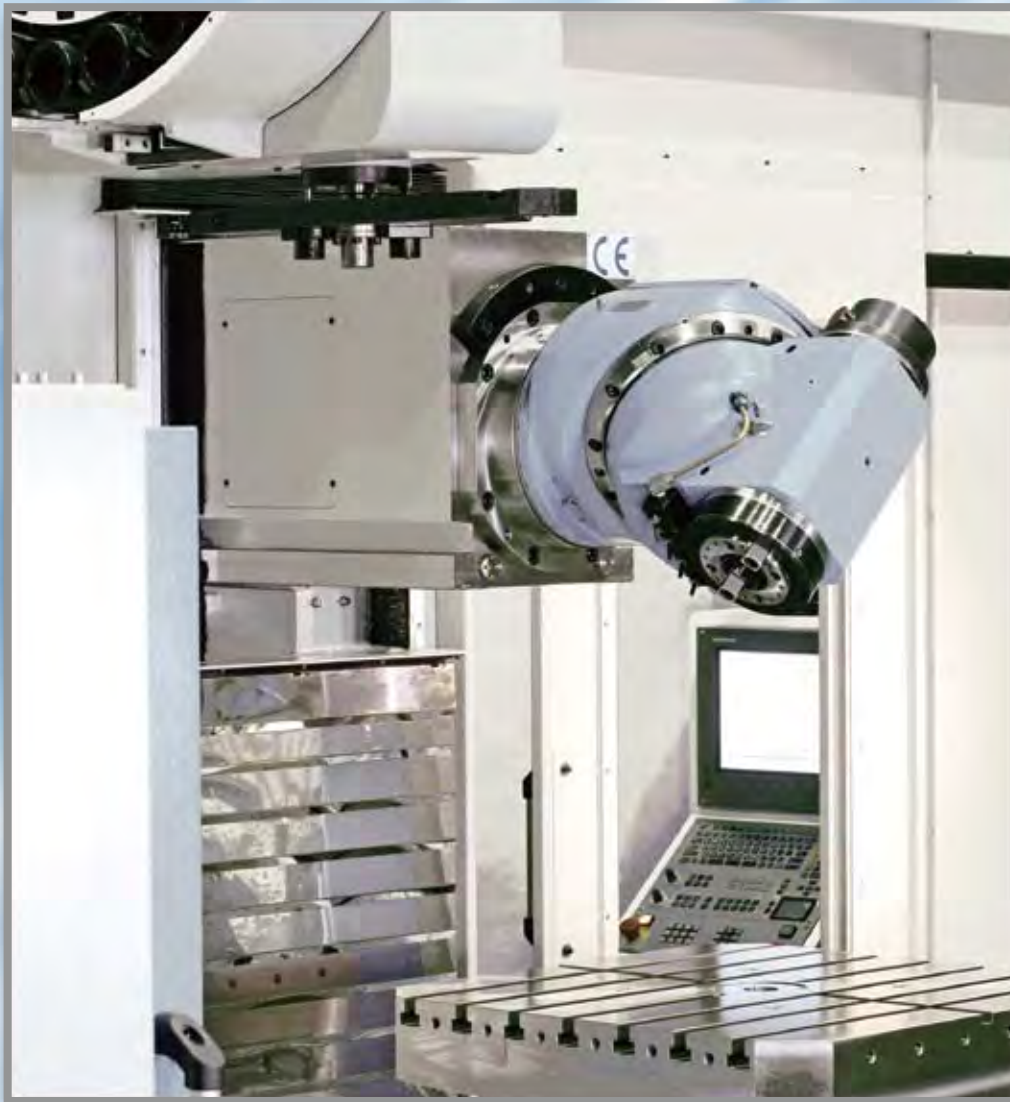


Eumach

Always A Step Ahead



FBE-1500 / 2000 / 2600 / 3000 / 4000

**Bed Type Universal Milling Machine
CE CERTIFIED**

A PROFESSIONAL CNC MACHINES MANUFACTURER

The newest EUMACH bed type univ innovations in rigidity, accuracy,

- Ideal for large molds, forging dies, and heavy work pieces up to 9000kg weight.
- Machine multi-sides of workpiece with a single set-up. (with optional milling head & rotary table)
- Universal multi angle universal milling head with hydraulic tool clamping.
- Hydraulic counterbalance on vertical movement.



► FBE-1500 with 1500 / 1000 / 950(1500)mm travel & optional 24 ATC

versal milling machine, with further versatility and performance!



► FBE-2000 with 2000 / 1000 / 950(1500)mm travel & optional automatic universal milling head & CNC rotary Table & tail stock & 24 ATC

- Y axis cross travel either box guide 1000mm or roller guide 1250mm.
- 3 axis with box type harden ground guide ways or roller type linear bearing guide ways at customer's choice.



▶ FBE-2600 with 2600 / 1000(1250) / 950(1500)mm travel & optional automatic universal milling head & 24 ATC

▶ swivel control panel can be easily swiveling to the machine rear side, even with optional top closed full guarding.



▶ Super wide interior space for optional top closed sliding roof machines.



▶ FBE-4000 with 4000 / 1000(1250) / 950(1500)mm travel & optional top closed sliding roof full splash guard & auto. orthogonal milling head & 24 ATC



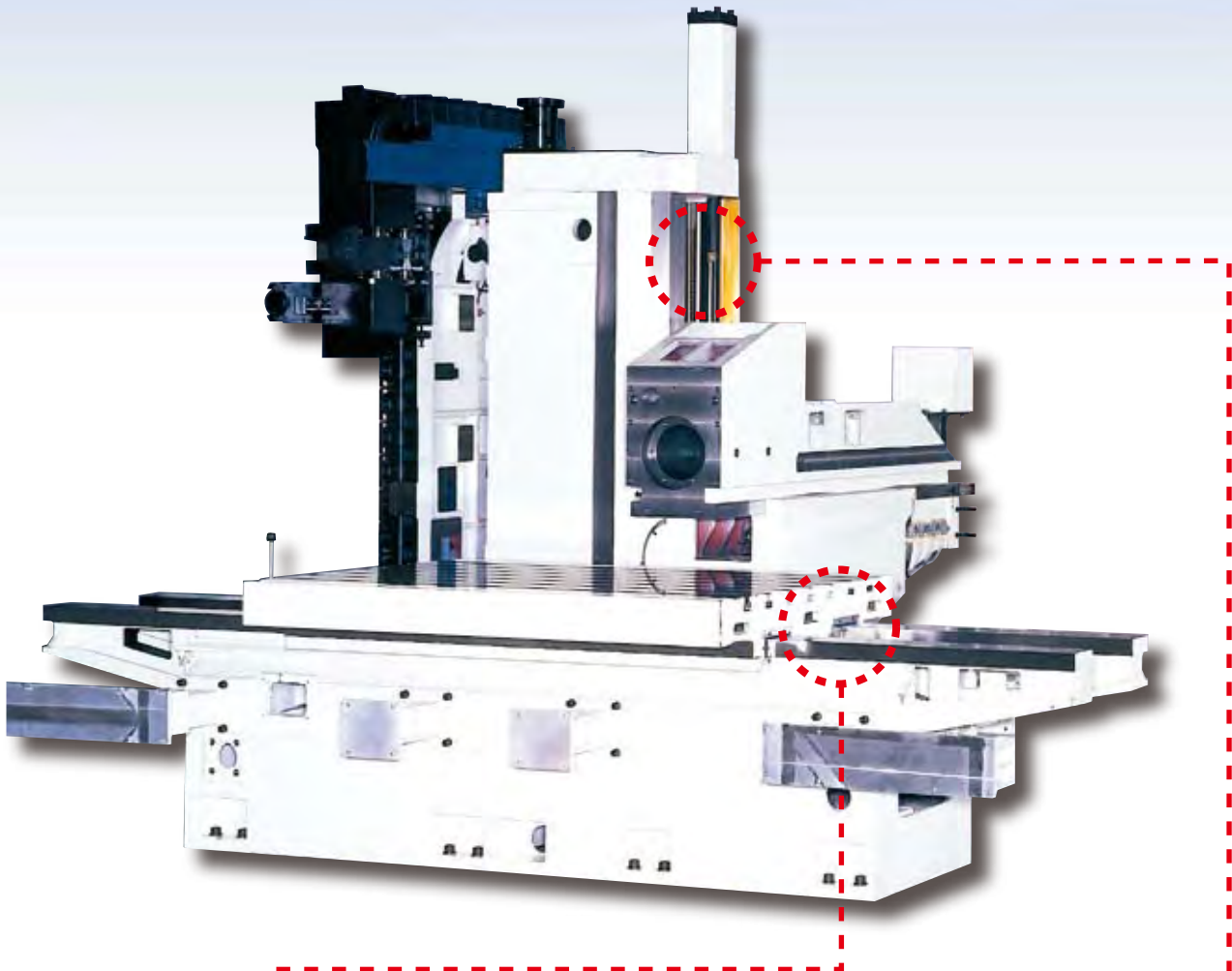
▶ FBE-3000 with 3000 / 1000(1250) / 950(1500)mm travel & optional universal milling head & 24 ATC



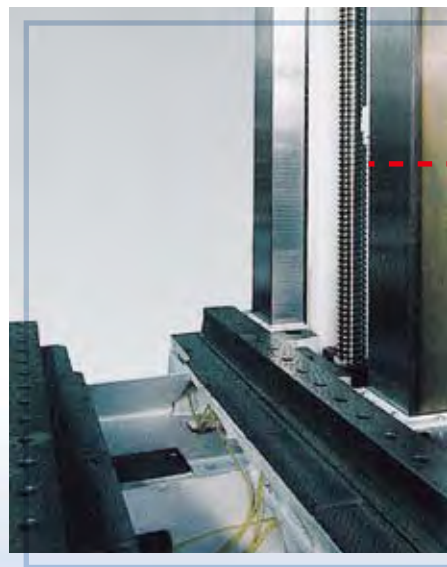


Rigid & robust casting frame :

Box type hardened ground guide ways –
Y axis cross travel 1000mm

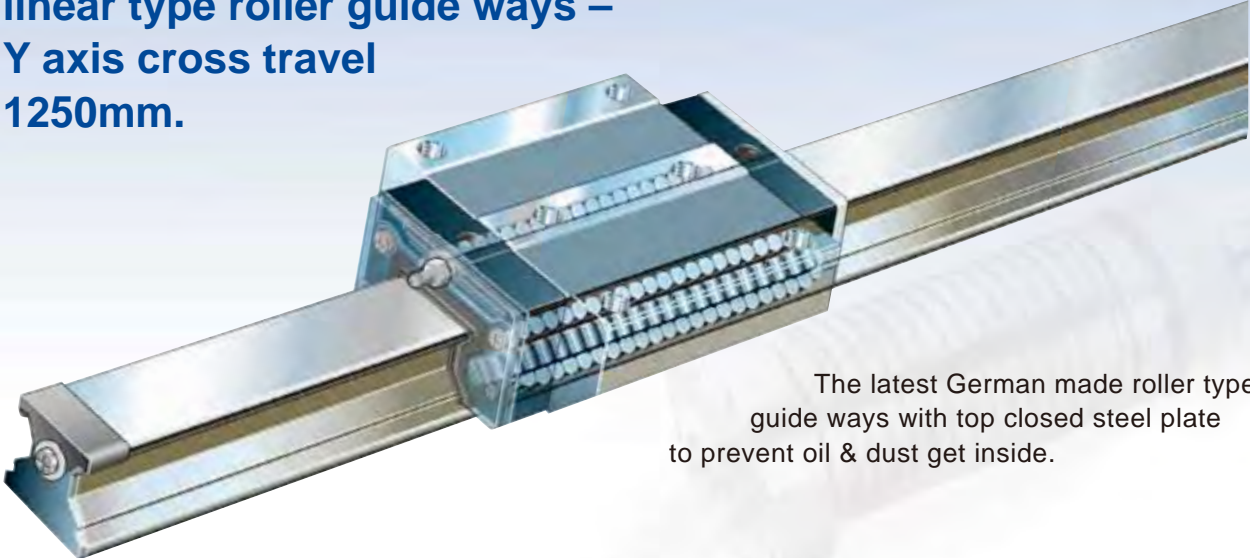


► Due to the precisely defined and constant clamping of the guide, a stable and exactly defined gap size is generated between bed guideway and table saddle (Turcite-B coated and specially shaved), independently of the respective table load.

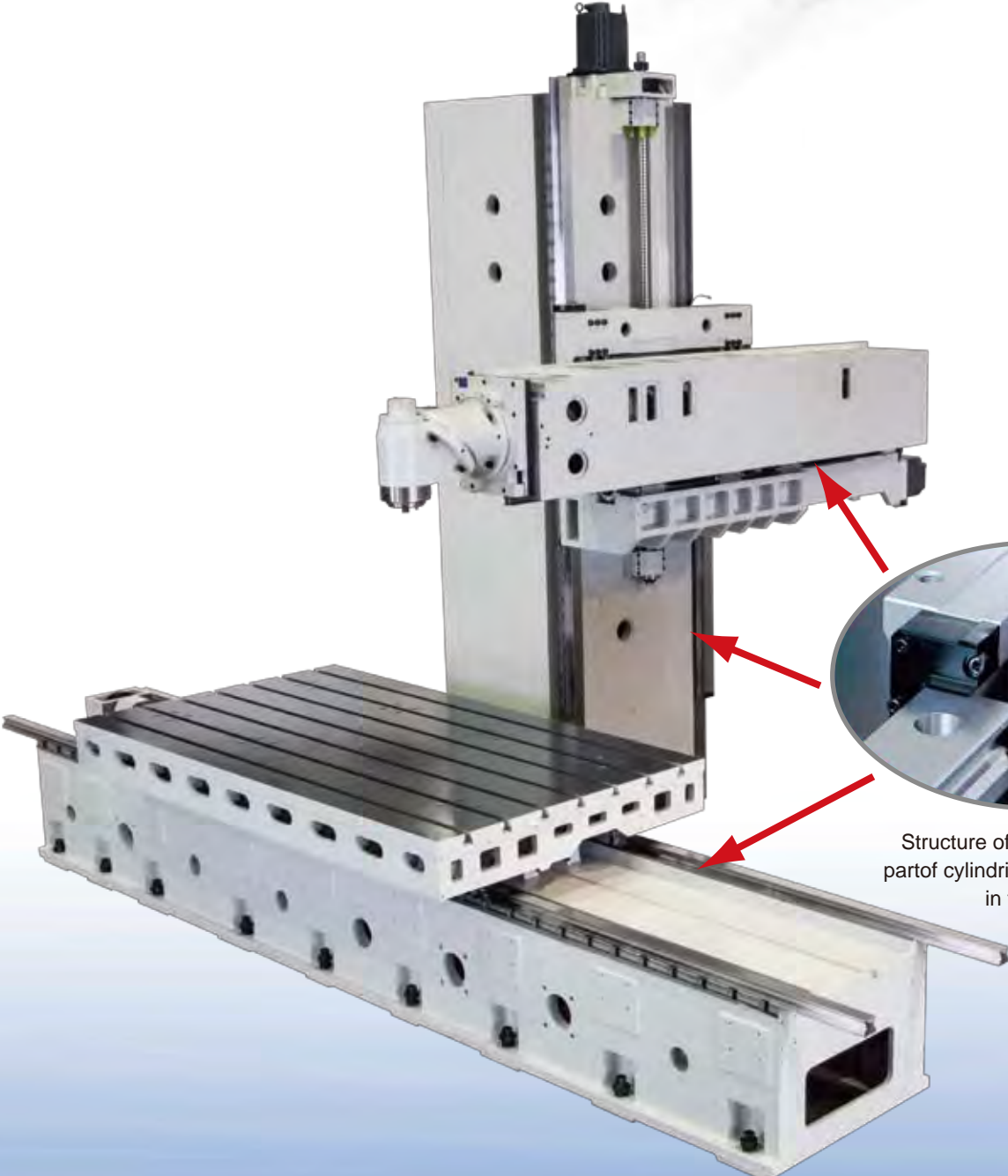


► The generously dimensioned guideways ensure a high permanent precision supported by specially hardened vertical and horizontal guideways at column and milling carriage, while the counter-guideways are coated with Turcite-B.

**linear type roller guide ways –
Y axis cross travel
1250mm.**



The latest German made roller type guide ways with top closed steel plate to prevent oil & dust get inside.

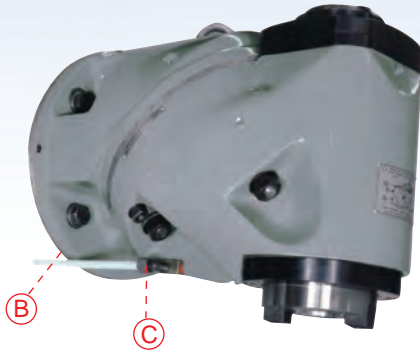


Structure of the re-circulating part of cylindrical rollers arranged in four rows

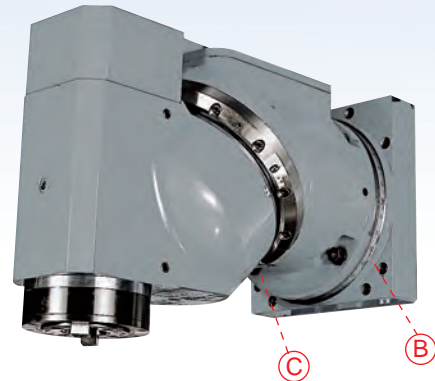


Versatile various milling heads & t

Attachment type :

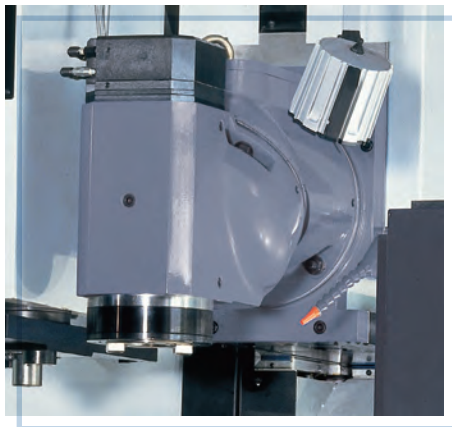


Standard manual head
B axis : manual
C axis : manual

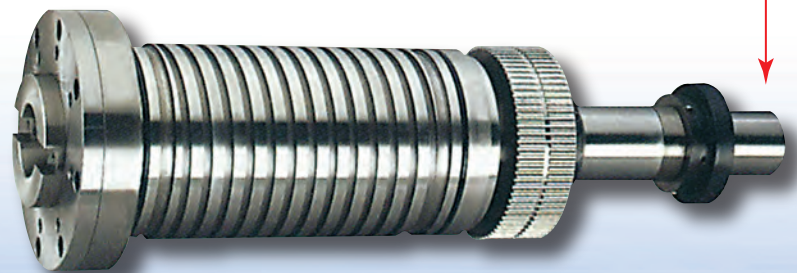
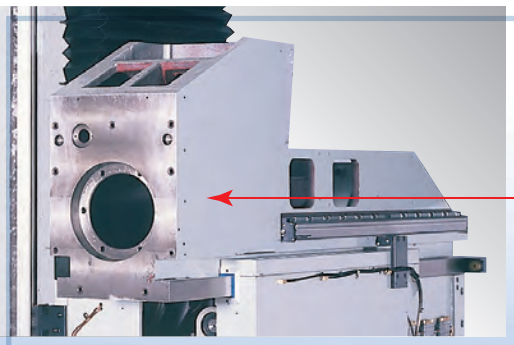
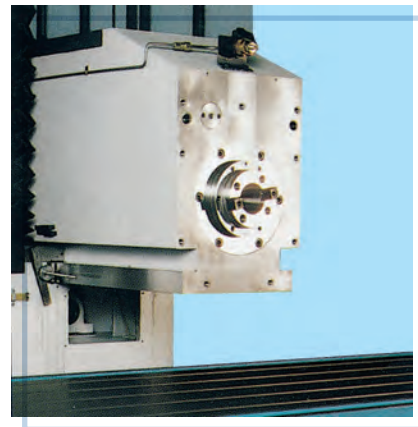


Optional VH-2 head
B axis : manual
C axis : automatic 2 positions vertical & horizontal

Removes head



to be

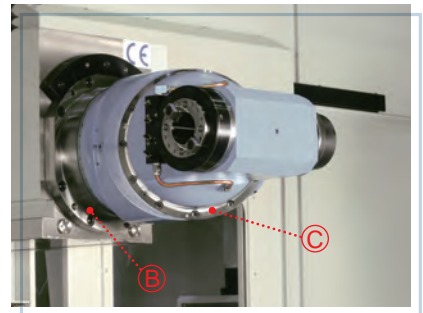
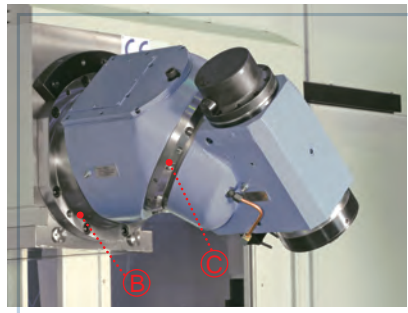
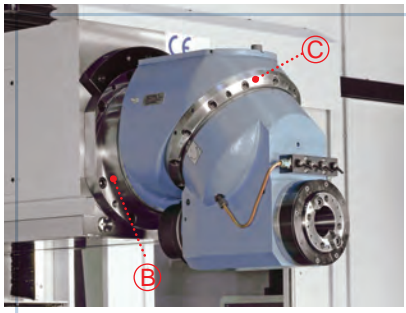
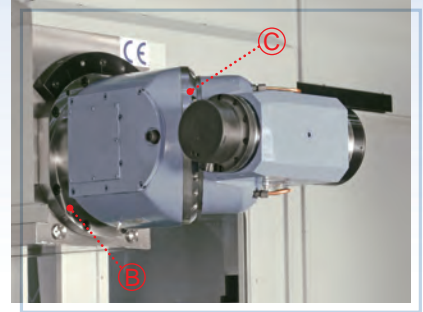
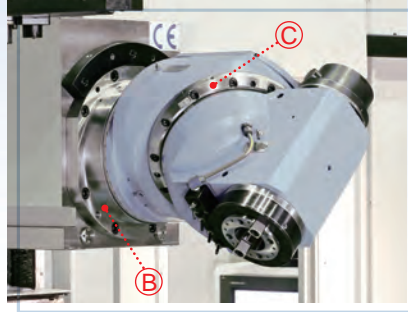
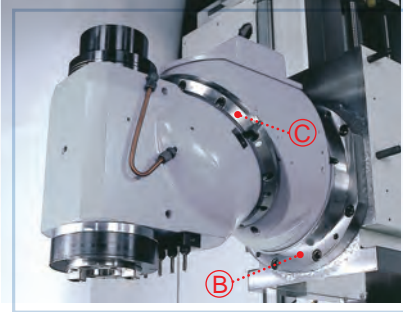


Remove the standard manual milling head (or opt. VH-2 head), a standard horizontal milling spindle is inside of the sliding ram it increases minimum 500mm working distance from such horizontal spindle to work piece by just removing universal milling head !

flexible spindle solution :

Built in ram types - No more horizontal spindle inside the ram

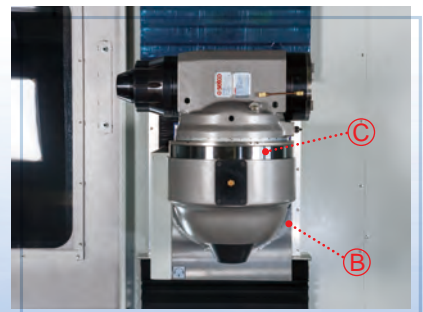
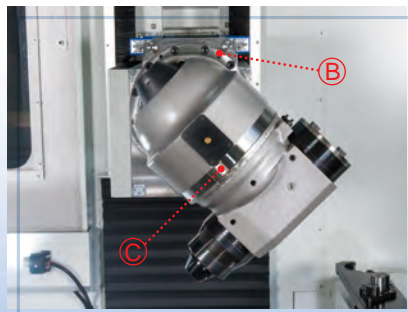
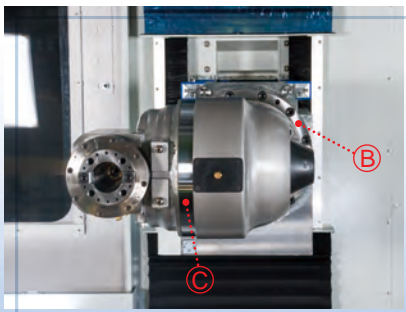
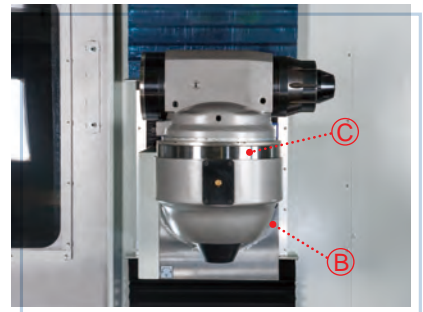
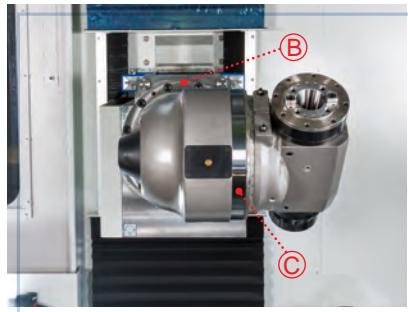
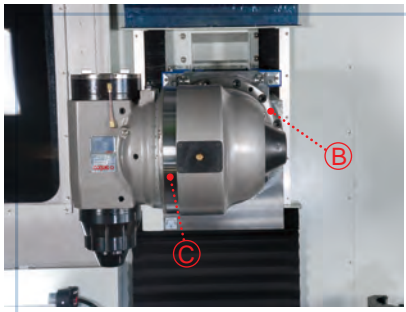
Automatic universal type milling heads :



Optional VH-1 head : B axis : automatic $1^\circ \times 360$ positions, C axis : automatic $1^\circ \times 360$ positions

Optional VH-2.5 head : B axis : automatic $2.5^\circ \times 144$ positions, C axis : automatic $2.5^\circ \times 144$ positions

Automatic orthogonal type milling head :



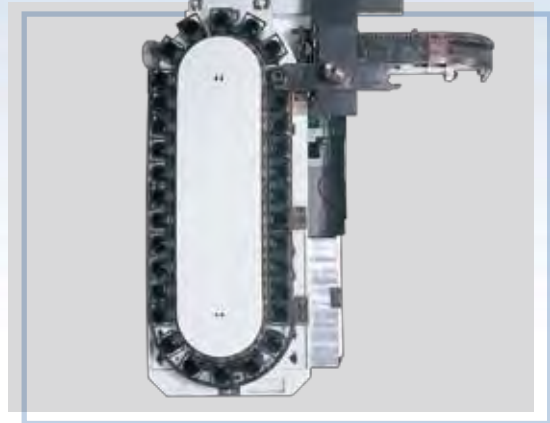
Optional ORT-2.5 head : B axis : automatic $2.5^\circ \times 144$ positions, C axis : automatic $2.5^\circ \times 144$ positions

Optional accessories :

1. Automatic tools changing :



Vertical tool change with 24 stations swing arm type



Horizontal tool change with 32, 40 or 60 stations swing arm rail type

2. Horizontal machine :



3. Full guarding :



▶ Without milling head, just with long nose horizontal spindle.

▶ FBE-4000 with optional top closed full guard.

Technical specifications :

UMT : MM

() inside values are only for Y axis travel 1250mm 3 axis roller guide machines

MODEL	FBE-1500	FBE-2000	FBE-2600	FBE-3000	FBE-4000
Table :					
Length	1600	2100 (2200)	2700 (2800)	3100 (3200)	4100 (4200)
Width	1050	1050 (1200)			
T Slots (size x no)	22H8 x 7 SLOTS				
Top to floor distance	860 (950)				
Load Ton	3	5	6	8	9
Travel :					
X Axes	1500	2000	2600	3000	4000
Y Axes	1000 (1250)				
Z Axes	950 (1500)				
Spindle :					
Taper	BT#50 / SK#50				
Speed	3500RPM				
Spindle motor	17 / 25.5KW-S1 / S6-60% Siemens or 22 / 26KW - S1 / 30 min. Fanuc				
Spindle gearbox ratio	1 : 4				
Spindle torque	650Nm-S1				
Feed rate per minute :					
Cutting	5M (10M)				
Rapid X axis	10M (24M)				10M (15M)
YZ axis	10M (24M)				
Ball screws diameter :					
X axis	Φ50	Φ50 (Φ63)	Φ63 (Φ63)	Φ63 (Φ63)	Φ80 (Φ80)
Y axis	Φ50				
Z axis	Φ50				
Precision class	0.008 / 300				
Axis guide ways :					
Type	Box type harden ground (linear bearing roller guide)				
X axis width	125 x 2pcs (55 x 2pcs)				
Y axis width	81.5 & 67.5one each (55 x 2pcs + 45 x 1pc)				
Z axis width	105 x 2pcs (65 x 2pcs)				
General :					
Net weight Ton	10~12	12~14 (18~20)	13~15 (20~22)	15~18 (22~24)	19~25 (24~26)
Air required	7KG / CM ²				
Power required	30~65KVA				

STANDARD FEATURES & ACCESSORIES

- 3500RPM UNIVERSAL MANUAL MILLING HEAD.
- PROGRAMMABLE COOLANT SYSTEM.
- AUTOMATIC LUBRICATION SYSTEM.
- WORKING LAMP.
- ALARM LAMP FOR ABNORMAL SITUATION.
- INDICATION LAMP FOR DWELL & END OF JOB.
- LEVELLING BOLTS & PADS.
- RS-232 TERMINAL INTERFACE PORT
- MACHINE & CONTROL MANUALS
- TOOLBOX WITH SPANNERS & WRENCHES.
- 3 AXIS LINEAR SCALES, WITH AIR BLAST.
- HEIDENHAIN OR SIEMENS CONTROL.



EUMACH FAMILIES



◦ **VMC-2150**
Vertical machine center
400MM ~ 3200MM X axis travel



◦ **TVMC-2000 / 3000**
Moving column machine center
2320MM & 3320MM X axis travel



◦ **LBM-1500**
High speed bridge type machine center
1100MM ~ 2200MM X axis travel



◦ **GVM-800U**
5 Axes gantry type machining center



◦ **UMC-1000**
5 Axis machine center
1000MM x 800MM x 700MM travel



◦ **MB-1500**
Moving column horizontal machine center
1100MM ~ 2200MM X axis travel



◦ **DVM-4025**
5 Face & double column machine center



◦ **FBE-1500**
Universal milling machine
1500MM ~ 4000MM X axis travel



◦ **FBM-10040**
Floor type milling center
4M~20M X axis travel



Eumach Co.,LTD.

★ Specifications subject to change without notice.
Catalogue No.B0060103

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