

COMBi-U7

BED TYPE CNC MILLING MACHINE



COMBi-U7



| Machine Specification | | COMBi-U7 |
|-----------------------|---|-------------------------------------|
| TABLE | Surface | 1800 x 700mm |
| | T-slot | No.5 x 20mm |
| | Distance between T-slot | 125 mm |
| | Max. permissible load | 3000Kg |
| TRAVEL | Longitudinal travel | 1600mm |
| | Cross travel | 750mm |
| | Vertical travel | 900mm |
| FEED | Axis feed rate | 10000mm/min |
| | Rapid feed rate | X,Y: 16000 Z:12000mm/min |
| SPINDLE | Taper | 50 |
| | Speed | 4000rpm, 2 steps (0~1000,1001~4000) |
| | Distance from column to vertical spindle center | 730mm |
| | Distance from column to horizontal spindle nose | 825mm |
| MOTOR | Spindle drive motor | 20 / 30 Kw |
| | Feed drive motor | X: 22, Y: 26, Z: 18 Nm |
| ATC 24 tool | Max. tool weight | 20 kg |
| | Max. tool length | 350mm |
| | Max. tool @™ when adjacent tool present | 110mm |
| | Max. tool @™ when adjacent tool absent | 200mm |
| WEIGHT | Approx. machine net weight | 13 ton |

The contents of the catalogue are subject to change without prior notice.



- Table longitudinal and cross movement bed type milling machine with universal head guarantees stability and high accuracy as well as diversified machining.
- Universal head with ZF gear box can make a strong machining.

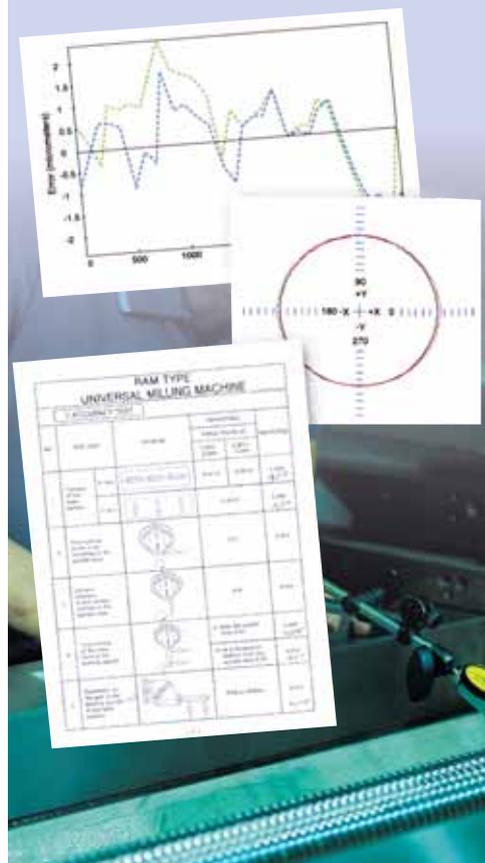


KIHEUNG Quality Machine

KIHEUNG's every machine is tested with 100% actual machining to check the cutting power.

Furthermore, geometric accuracy is tested during assembly and after assembly.

Final geometric accuracy test report is delivered together with the machine.



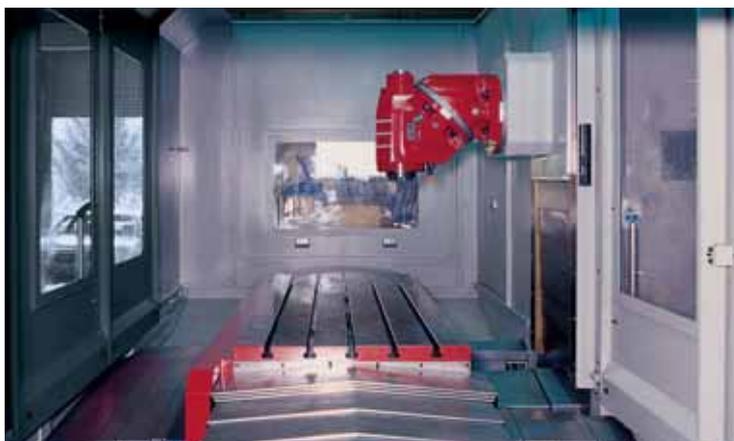
COMBi-U7



- Operator Panel can be placed at rear when horizontal machining

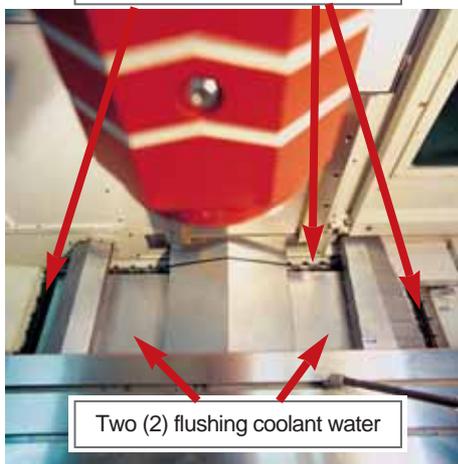


- 350 ℓ coolant water tank
- Oil cooler with tank for cooling the head and ZF gear box

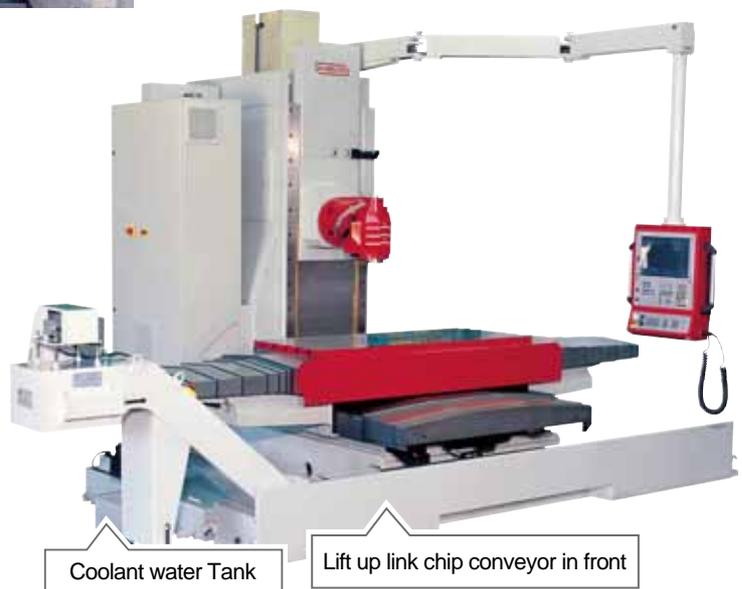


- Complete enclosure with two (2) sliding door in front and one (1) sliding door at rear prevent chips and water from splashing outside to the machine

Three (3) chip screws:
 - One (1) longitudinal chip screw
 - Two (2) cross chip screws



Two (2) flushing coolant water



Coolant water Tank

Lift up link chip conveyor in front

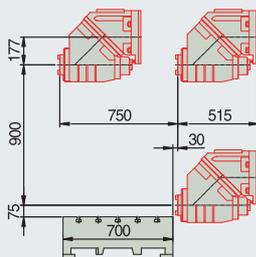
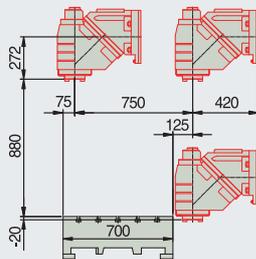
- Two flushing coolant water, Three chip screws (one longitudinal, two cross) deliver chips and coolant water quickly to the lift up link chip conveyor in front.



■ Universal Head

Universal head consisting of upper head and lower head can be turned to the desired angle, which is suitable for combined angle milling.

M Head

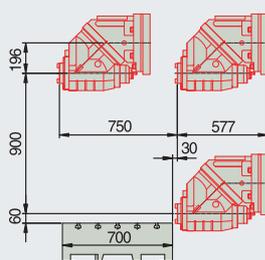
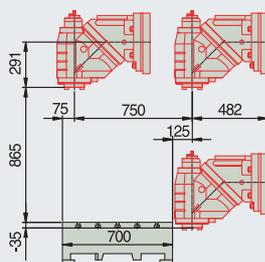


■ **M Head:** Manual positioning

■ **A2 Head:** Automatic 2 positioning : Horizontal / Vertical (Optional)

- • ISO50 DIN 69871
- Hydraulic tool clamp / unclamp
- 4000 spindle rpm with cooling of the head
- Air through Spindle
- Spindle orientation

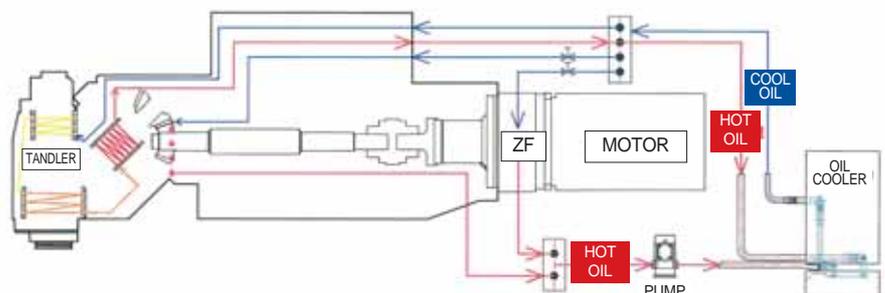
A2 Head



■ Oil cooling

Head and ZF gear box is cooled by oil cooler.

Hot oil inside the upper head (90°) and ZF gear box is delivered quickly to the oil cooler through pump.



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- Strong 4-fold bed guideway (140mm ×2, 80mm ×2) and wide saddle guide way (150mm ×2) with no table overhang guarantees heavy duty machining and high accuracy of X, Y axis.



- Hydraulic balance with cylinder and accumulator for high accuracy of Z axis.



- Universal head with ZF gear box for 2 step automatic gear change for strong machining.

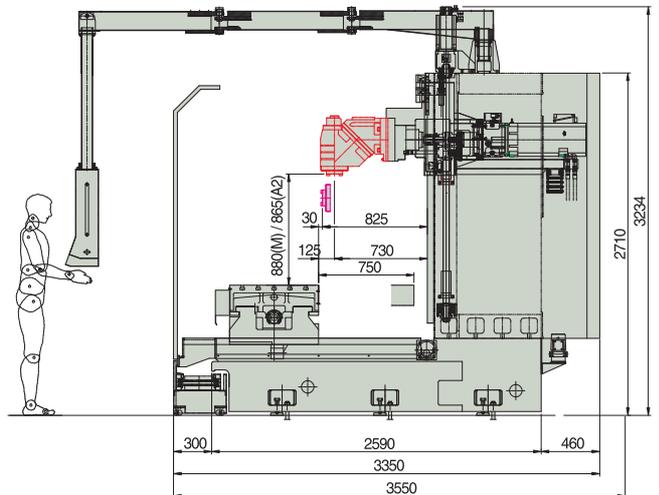
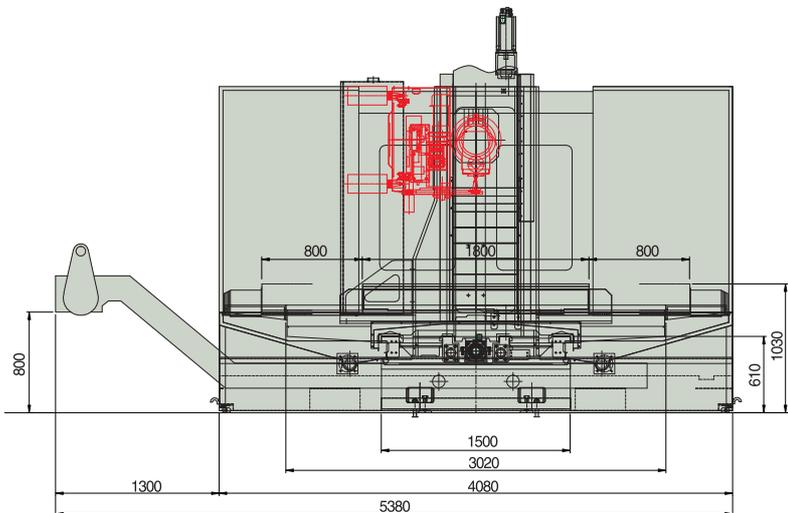
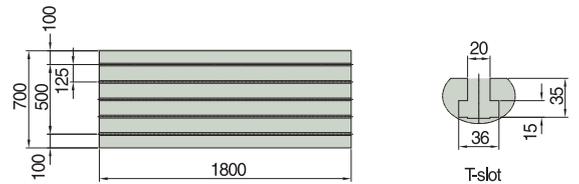
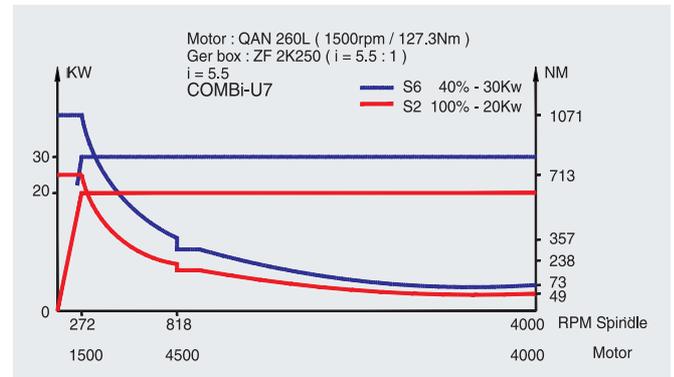
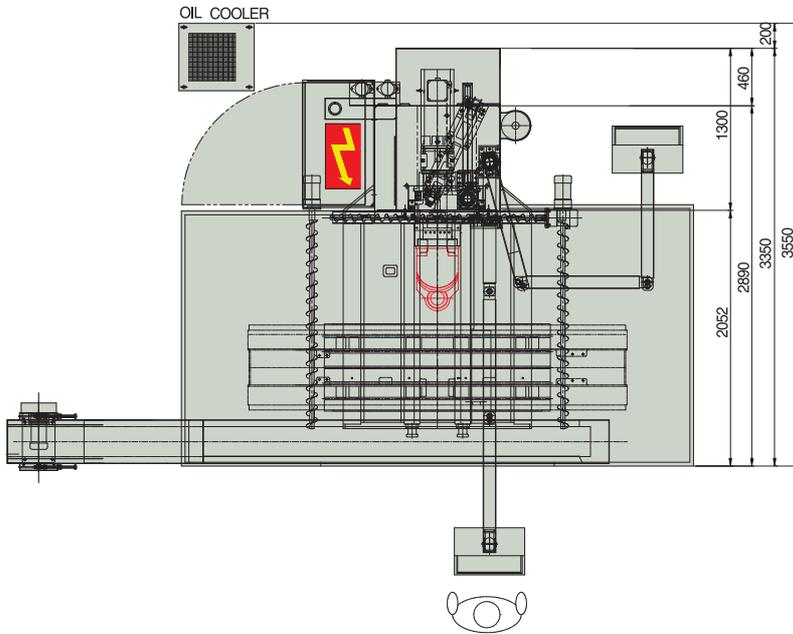
- **Column**
Box type rigid column



- **Headstock**
Strong headstock with 735mm vertical slideway for heavy duty machining



- **Hand Scrapping**
The accuracy of COMBi-U7 is guaranteed by the craft man's art of scrapping measured in micron.



Standard

- Heidenhain TNC620 HSCI, Siemens 828D, Fanuc 32i
- Electronic handwheel (HR410 for Heidenhain CNC)
- 4000 (2 step, 0~1000, 1001~4000) spindle rpm
- ZF gear box
- Spindle orientation for rigid tapping *
- Air through spindle
- Vertical tool changer 24 tools
- 1 longitudinal, 2 cross chip screw inside complete enclosure
- Lift up link chip conveyer in front
- Complete enclosure
- Flood coolant system with tank and 5 bar for nozzle, 7.5 bar coolant pump for flushing
- Automatic power off with M function
- Oil cooler
- Oil skimmer
- M Head (Manual positioning, Spindle nose ISO50, DIN 69871)

Option

- Other CNC
- Linear scale
- Preparation of the 4th axis
- Heidenhain Tool Touch Probe TT140
- Heidenhain Work piece Touch probe TS220
- Heidenhain Work piece Touch probe TS 640 (infrared transmission)
- Renishaw Work piece touch probe RMP60 (radio signal transmission)
- Heidenhain DA300
- Air conditioner for electric cabinet
- Rotary table
- A2 head (Automatic 2 positioning : Vertical/Horizontal, Spindle nose ISO50, DIN69871)
- Coolant through spindle with dual filter, 16 bar





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