

MCH-630

MCV-720

HORIZONTAL MACHINING CENTER

MCV-1020A

MCH-1250

MCV-1020BA

MCV-1200

MCV-1250

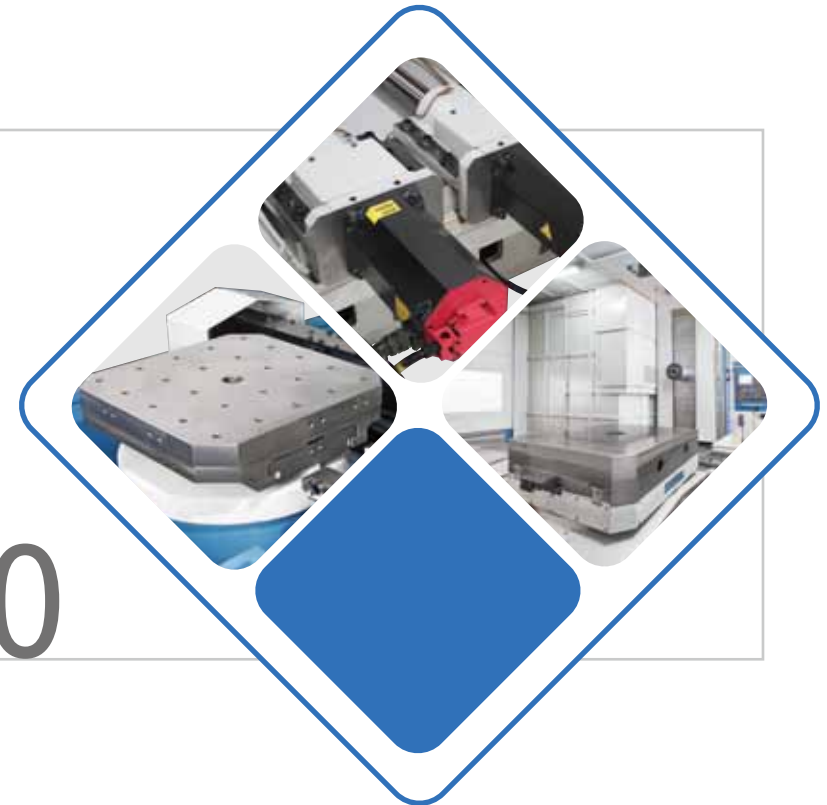
MCV-1450

MCV-1700

MCV-2100

MCV-2600

DCM-2213



DAH LIH MACHINERY INDUSTRY CO., LTD.

No. 3, Kung-Yeh Lane, Fengcheng Road, Nanshih Village,

Wufeng District, Taichung City, 41357, Taiwan.

TEL:886-4-23334567 FAX:886-4-23307567

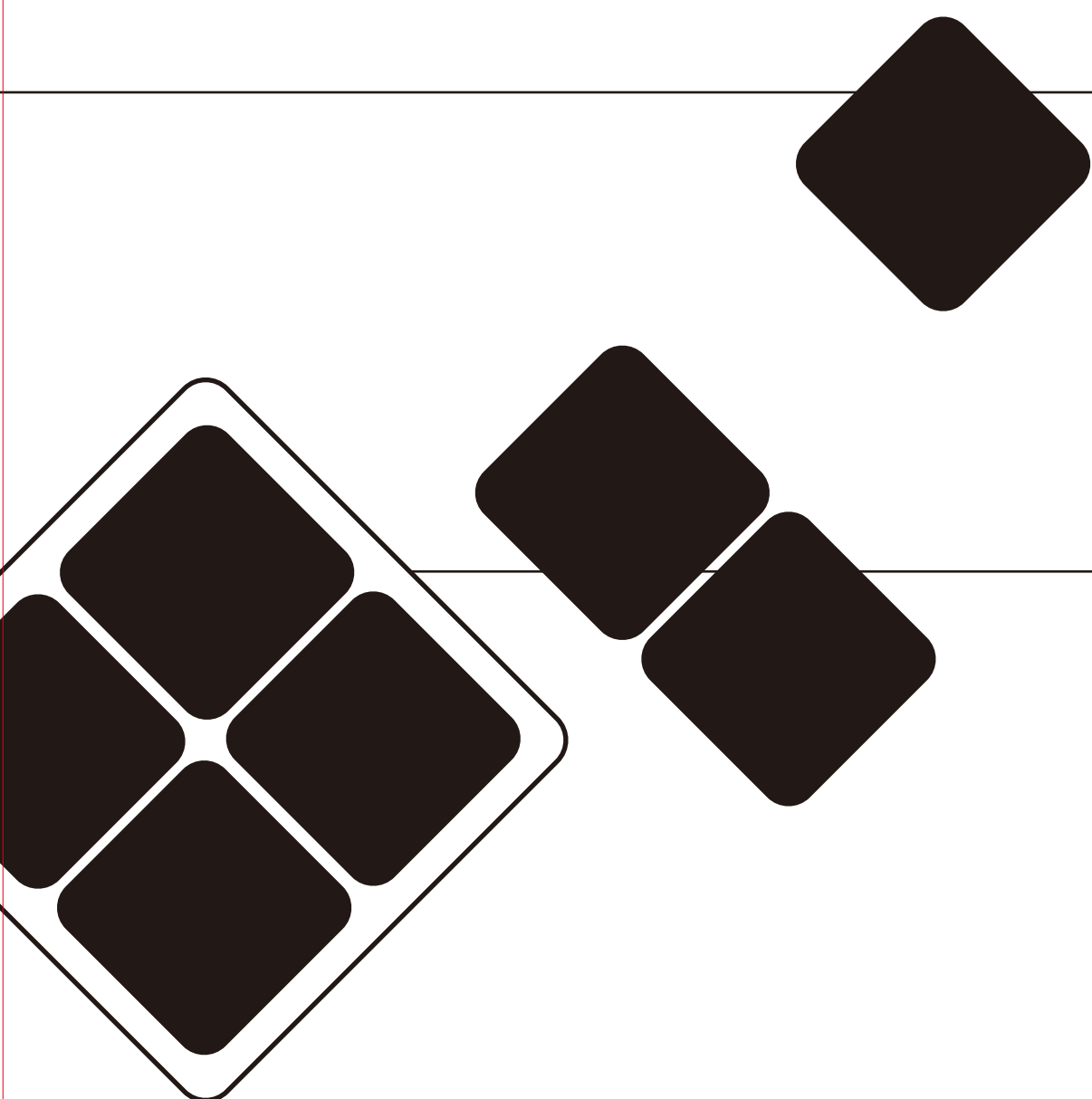
E-mail:export.sale@dahliah.com.tw Http://www.dahliah.com.tw



022-D2-00-024

1000.02.2015

The Latest and Best Quality Machinery.
DAHLIH®



DAH LIH MACHINERY INDUSTRY CO., LTD.

MCH-630

MCV-720

MCV-1020A

MCV-1020BA

MCV-1200

MCV-1250

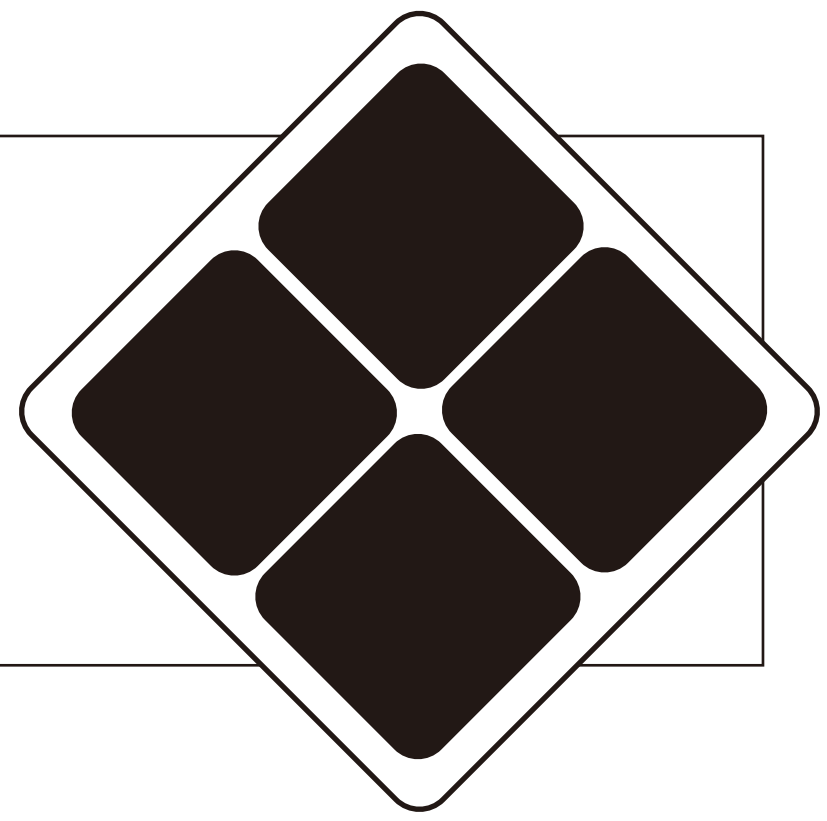
MCV-1450

MCV-1700

MCV-2100

MCV-2600

DCM-2213



The Latest and Best Quality Machinery.
DAHLIH[®]

Extra Large Machining Capacity!

A New Standard in Machining
Efficiency and Accuracy!

MCH-1250

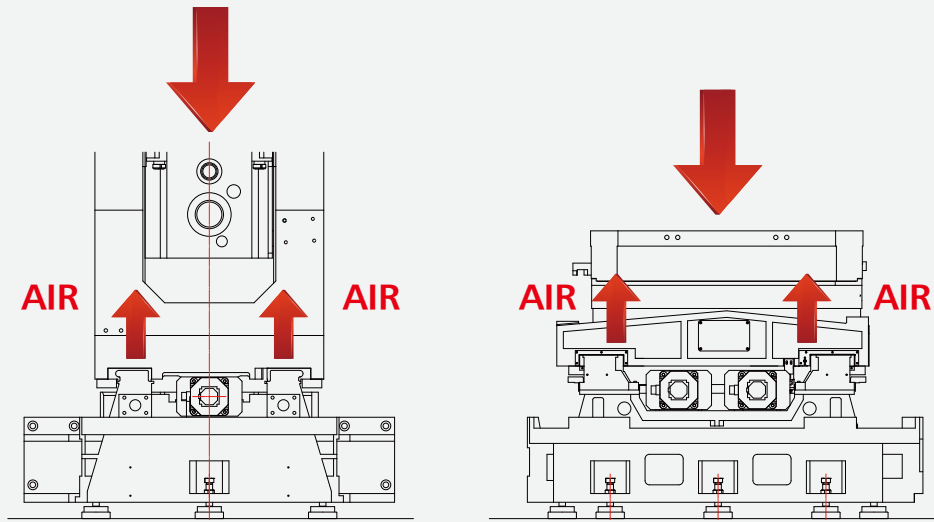
HORIZONTAL MACHINING CENTER
A Perfect Combination of High Speed and High
Precision Machining

- » X, Y, Z-axis travel: 1800 x 1500 x 1300 mm
- » Box ways on three axes are excellent for heavy cutting with maximum stability.
- » X, Y, Z-axis are all designed with twin drive system.
- » 3,500 rpm gear-drive spindle.
- » Floating type rotary table.
- » Semi-floating type column / saddle feeds.
- » Linear scales on three axes (standard).



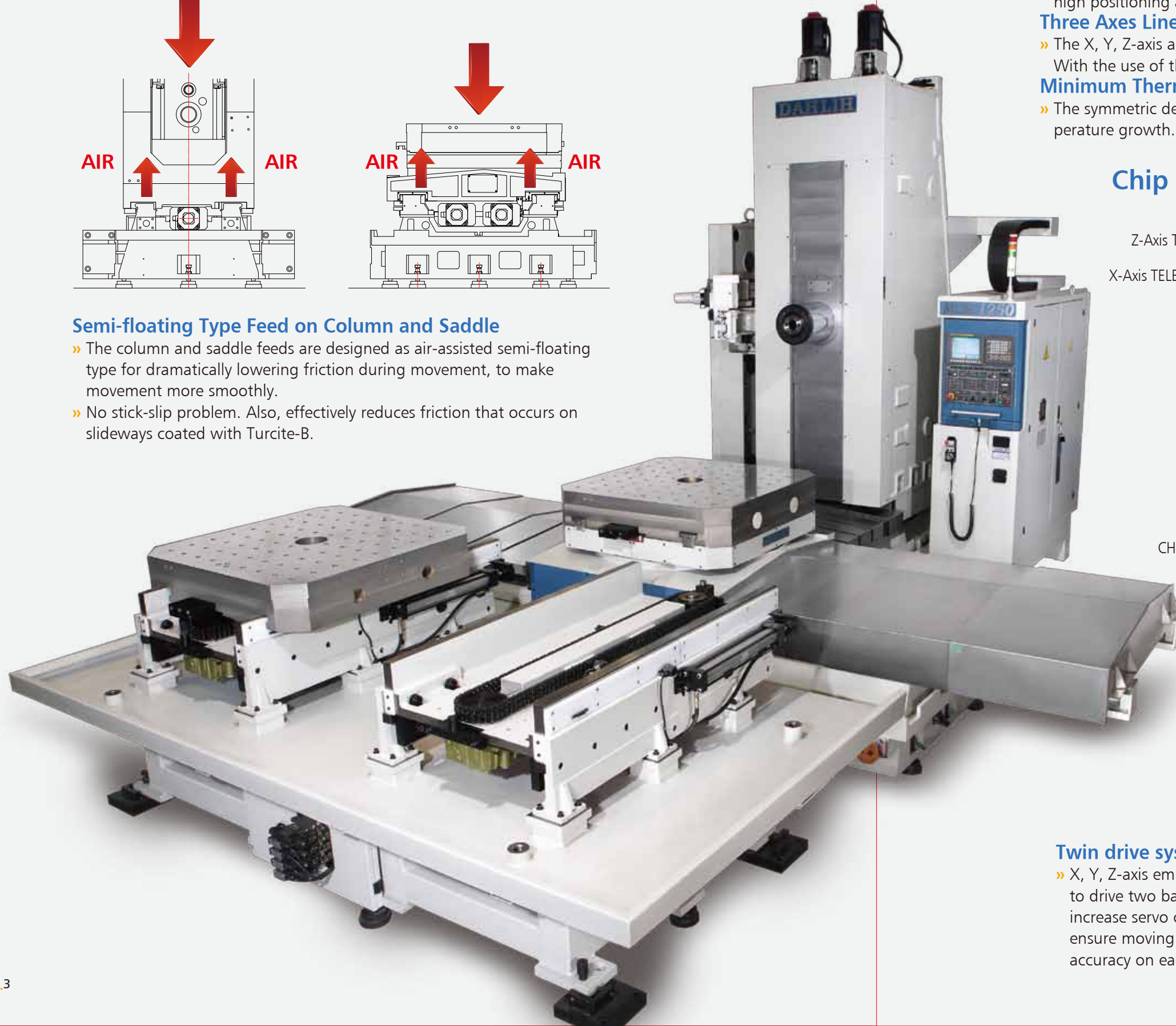
Massive Structure Design

With the unique structure design, the Dah Lih Mch-1250 Horizontal Machining Center presents extraordinary rigidity, stability and dampening capability in heavy cutting operations.



Semi-floating Type Feed on Column and Saddle

- » The column and saddle feeds are designed as air-assisted semi-floating type for dramatically lowering friction during movement, to make movement more smoothly.
- » No stick-slip problem. Also, effectively reduces friction that occurs on sideways coated with Turcite-B.



Traveling column

- » The column is a double-wall construction, which combined with large span of box ways to enhance its unique stability during cutting.

Box Ways on Three Axes

- » Box ways in X, Y, Z-axis provide a firm support for the structure while reducing vibration to a minimum.

Pretensioned Ball Screws

- » The precision ball screws are pretensioned to minimize thermal deformation, so as to ensure high positioning accuracy.

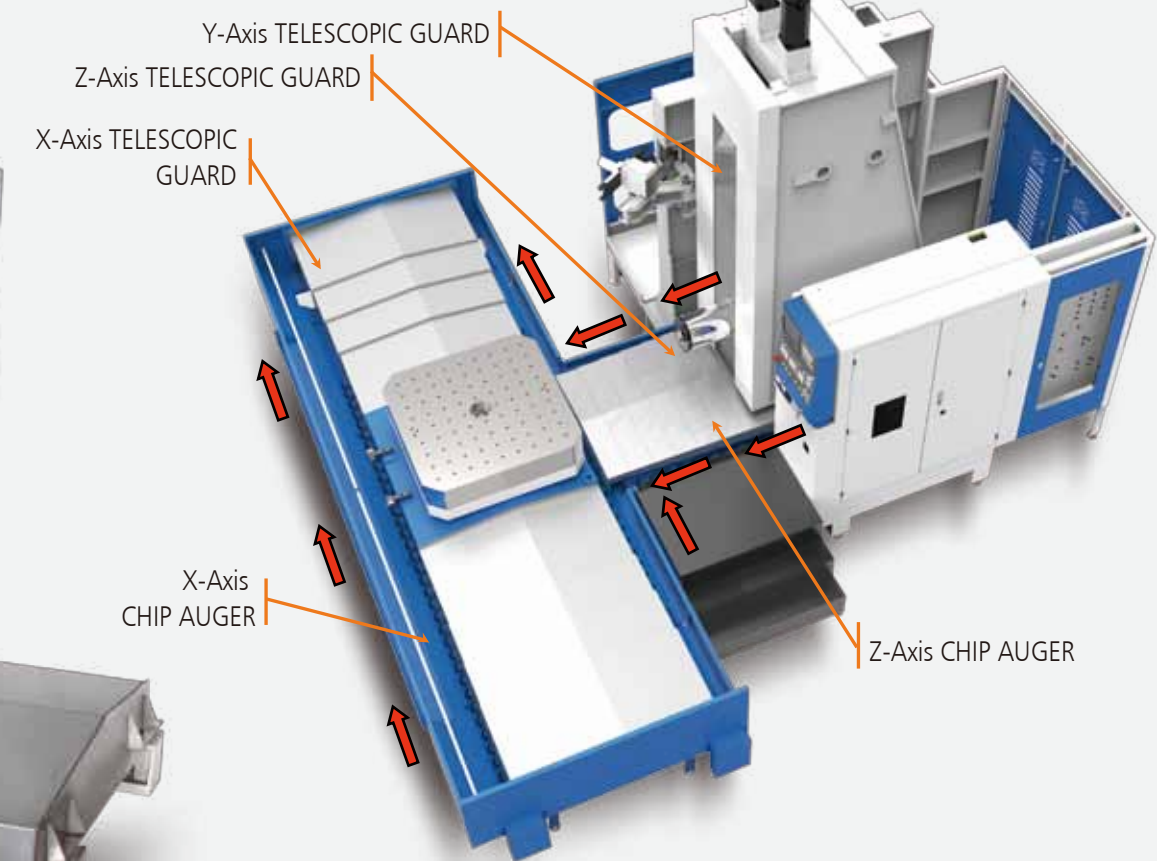
Three Axes Linear Scales

- » The X, Y, Z-axis are all equipped with linear scales, providing close-loop feedback control. With the use of the linear scales, high positioning accuracy on 3 axes is guaranteed.

Minimum Thermal Deformation

- » The symmetric design of the machine structure eliminates thermal deformation due to temperature growth.

Chip Removing System

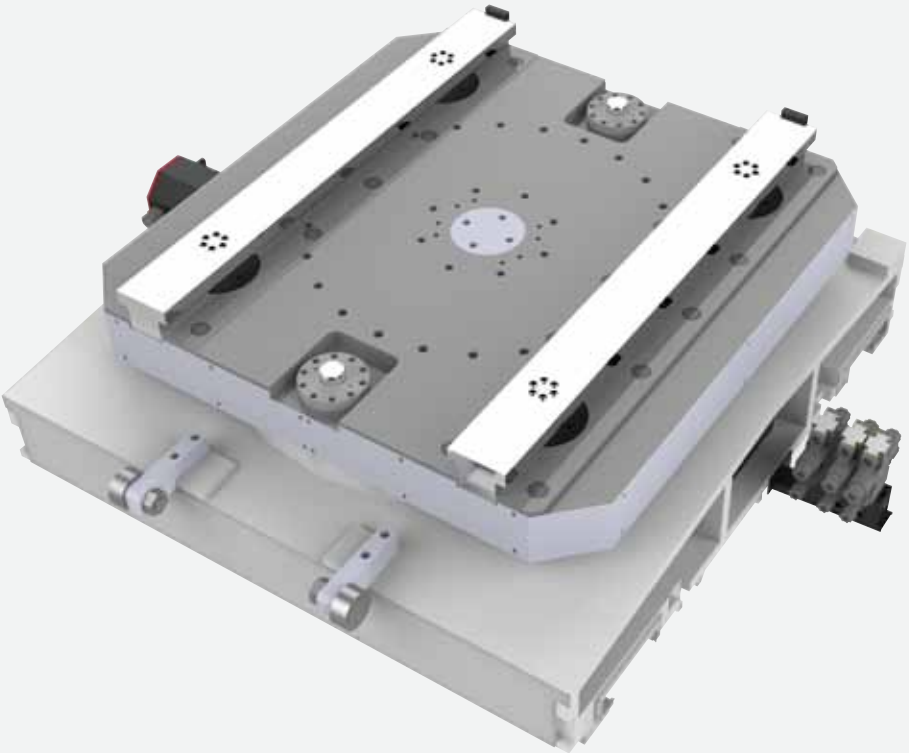


Twin drive system on X, Y, Z-axis

- » X, Y, Z-axis employ two servo motors to drive two ball screws, to not only increase servo control inertia but also ensure moving stability and positioning accuracy on each axis.

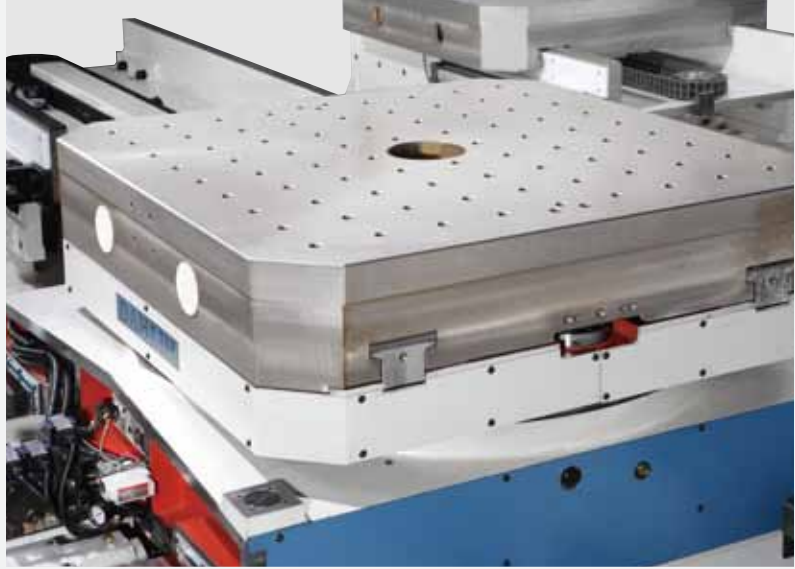
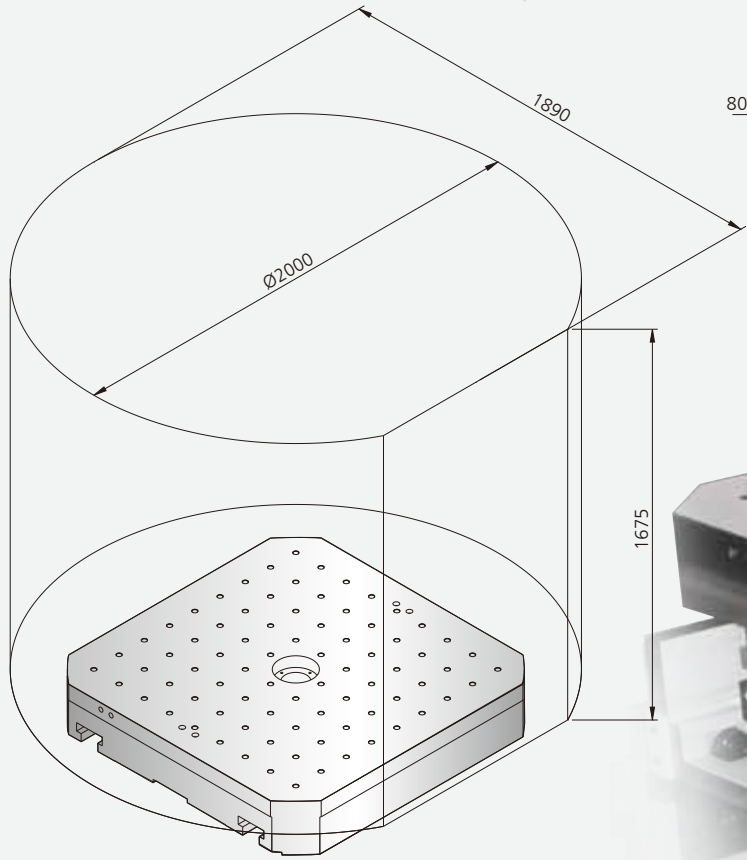
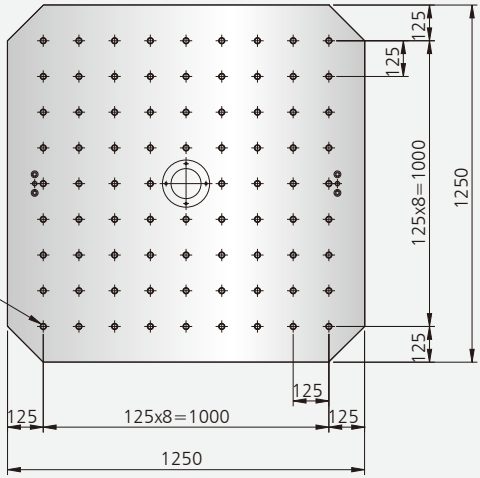


Pallet Changer



Accurate Pallet Positioning (B-axis)

» The pallet rests on 20 precision roller with two locational pins clamping is by 4 hydraulic cylinders to provide excellent pallet surface accuracy.



SERVO CHANGE Rotary Table (B-axis)

» Table rotation is driven by a servo motor and three – piece coupling is also applied to achieve high indexing accuracy.
 » Direct loading design increases loading capacity.

Table Indexing Accuracy

» Standard indexing unit is 1°.
 » 0.001° continuous indexing is optional.



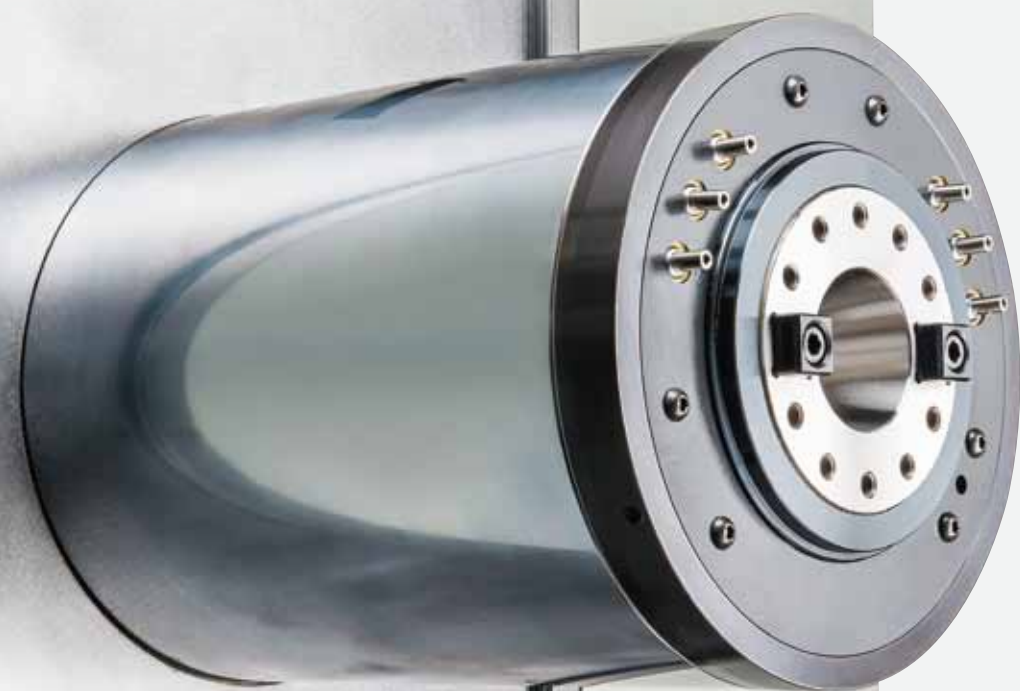
Automatic Pallet Changer

» The pallet changer employs a motor to drive chain for pushing and pulling pallets. The pallet is a fixed type and a platform can be used together for added convenience in workpiece loading and unloading.

Gearbox Driven Spindle

3,500 RPM Gear driven Spindle

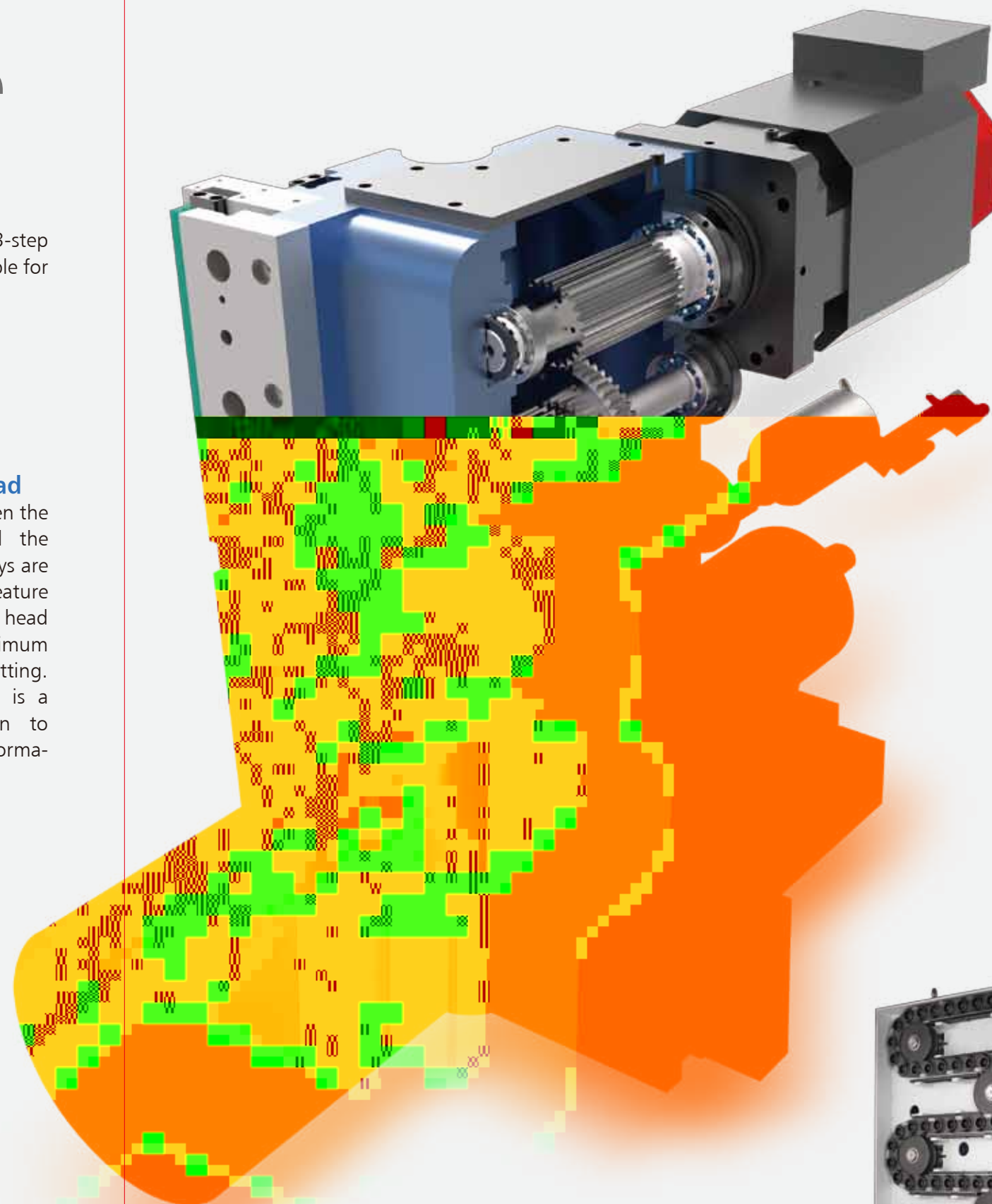
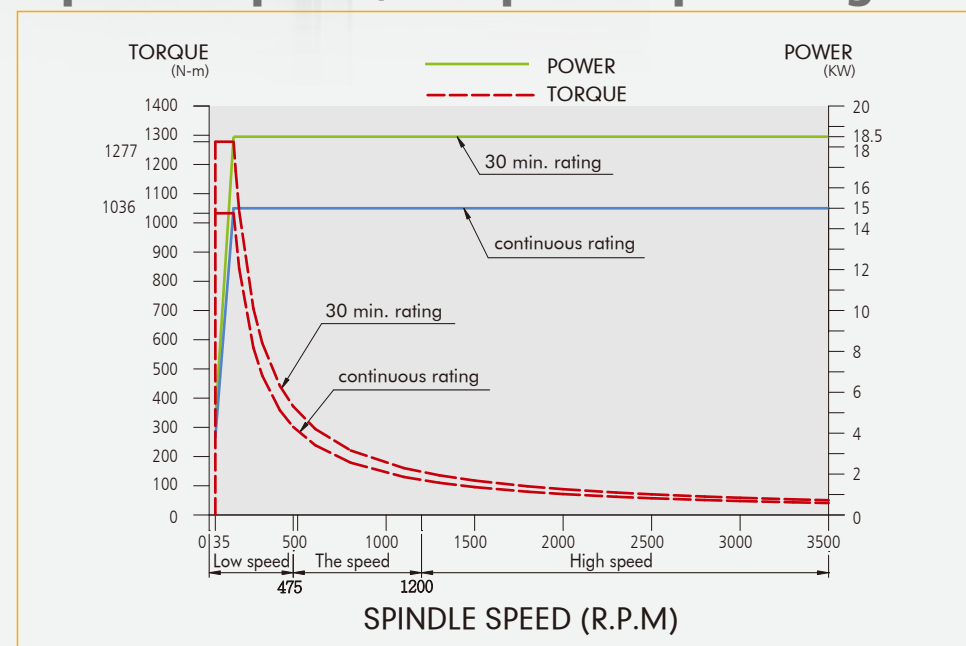
- » The spindle is supported by Ø120mm NN type double-row ball bearing with gear drive, and provides 3-step speed change. It produces great torque output of 132.7 kgf-m at 135rpm, making the machine suitable for heavy cutting.
- » The spindle and gears are forced cooling to reduce thermal growth while ensuring accuracy.



Rigid Spindle Head

- » The contact between the spindle head and the column slidway ways are 6 surfaces. This feature enables the spindle head to maintain maximum stability in heavy cutting.
- » The spindle head is a symmetrical design to reduce thermal deformation to a minimum.

Spindle Speed / Torque Output Diagram



Chain – type Machine

60 Tools Standard / 90/120 tools Optional

- » The magazine is driven by a hydraulic indexing motor for fast rotation and high positioning accuracy.
- » A waiting position of the magazine tool pot allows pre-selection of the next tool to save time.
- » The tool magazine is separately mounted from the machining area to prevent contamination from chip or coolant.



Ultimate Accuracy Through Rigorous Inspection



» Laser interferometer is used for inspecting indexing degree

SPECIFICATIONS, ACCESSORIES AND DIMENSIONS

SPECIFICATIONS

| MODEL | MCH-1250 |
|--------------------------------------------|---------------------------------|
| TABLE | |
| Pallet dimensions | 1250 x 1250 mm |
| Min. indexing angle | 5° |
| Dist. From table to floor | 1300 mm |
| Max. table load | 4000 kgw |
| TRAVEL | |
| X-axis travel | 1800 mm |
| Y-axis travel | 1500 mm |
| Z-axis travel | 1300 mm |
| Dist. from spindle nose to table surface | 350 ~ 1650 mm |
| Dist. from spindle center to table surface | 75 ~ 1575 mm |
| SPINDLE | |
| Spindle nose taper | N.T. 50 |
| Spindle speed | 3500 r.p.m |
| Spindle speed range | 3-step |
| FEED | |
| X, Y, Z-axis cutting feed rates | 1~10000 mm/min |
| X, Y, Z-axis rapid traverse | 15 m/min |
| Min. input increment | 0.001 mm |
| ATC (Automatic Tool Changer) | |
| Tool storage capacity | 60 (90/120) tools |
| Tool shank type | BT50 |
| Max. tool diameter x length | Ø110 x 500 mm |
| Max. tool weight | 20 kgw |
| Max. tool dia. (without adjacent tool) | Ø245 mm |
| Tool selection | Random |
| MOTORS | |
| Spindle motor (30 min. / cont.) | 18.5 kw (25 hp) / 15 kw (20 hp) |
| X-axis servo motor | 3 kw + 3kw |
| Y-axis servo motor | 3 kw + 3kw |
| Z-axis servo motor | 3 kw + 3kw |
| INSTALLATION REQUIREMENT | |
| Space occupied | 10600 x 6700 x 4575 mm |
| Machine weight | 40,000 kg |

Specifications are subject to change without prior notice.

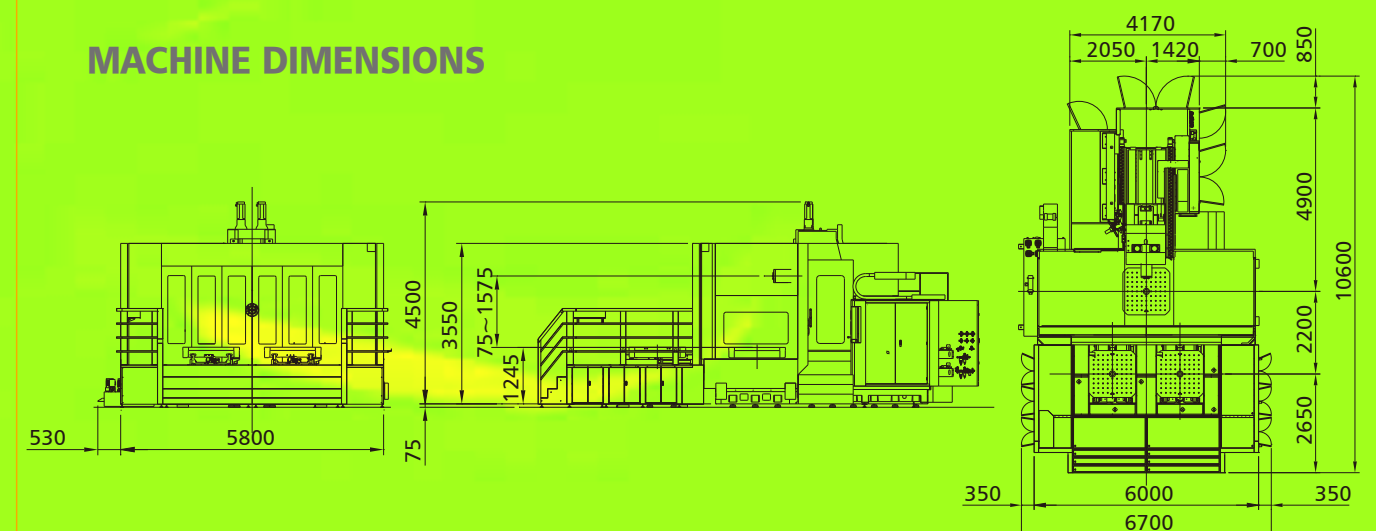
» STANDARD

1. Spindle cooling device
2. Heat exchange
3. Automatic Pallet Change
4. Removable type manual pulse generator
5. Spiral type chip conveyors
6. Automatic power cut-off device
7. Call light
8. Work light
9. Tool box
10. Flat type chip conveyor
11. Linear scales on X.Y.Z axes

» OPTIONS

1. ATC tool storage : 90 / 120 tools
2. Coolant through spindle device
3. Automatic tool length measuring device
4. Automatic centering device
5. 0.001° continuous indexing (B-axis)

MACHINE DIMENSIONS



» Laser interferometer is used for inspecting linear position accuracy