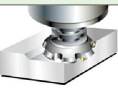


**YANGSEN****YSH SERIES****YSH-800 Horizontal Machining Structure Characteristics:**

- This product installs T design, worktable rotating structure form, ultra-wide guide guideway structure, the standard configuration of large torque, and high-speed motor. You could order exchange worktable separately. Our products are suitable for processing various complex parts. It is the preferred equipment in the field of automobile engines and cavity processing in the 5G field.

**Machine cutting performance:**

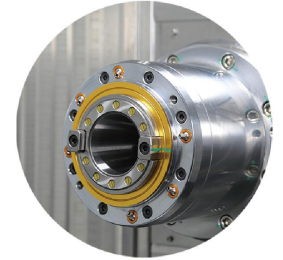
| Surface Milling Steel 45#                                                           |            | Drilling Holes Steel 45#                                                            |            | Tapping Steel 45#                                                                   |            |
|-------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------|------------|
|  |            |  |            |  |            |
| Cutting depth                                                                       | <b>7mm</b> | Cutter diameter                                                                     | <b>Ø82</b> | Tapping                                                                             | <b>M36</b> |
| Cutter                                                                              | Ø120mm*5T  | Cutter                                                                              | Ø82mm*2T   | Cutter                                                                              | M36*3P     |
| Spindle speed                                                                       | 420rpm     | Spindle speed                                                                       | 500rpm     | Spindle speed                                                                       | 120rpm     |
| Feed                                                                                | F500       | Feed                                                                                | F100       | Feed                                                                                | F480       |
| Width                                                                               | 100mm      | Width                                                                               | 82mm       | Width                                                                               | 36mm       |

**YSH-800 Horizontal Machining Frame Machine Characteristics:****Machine bed, Column**

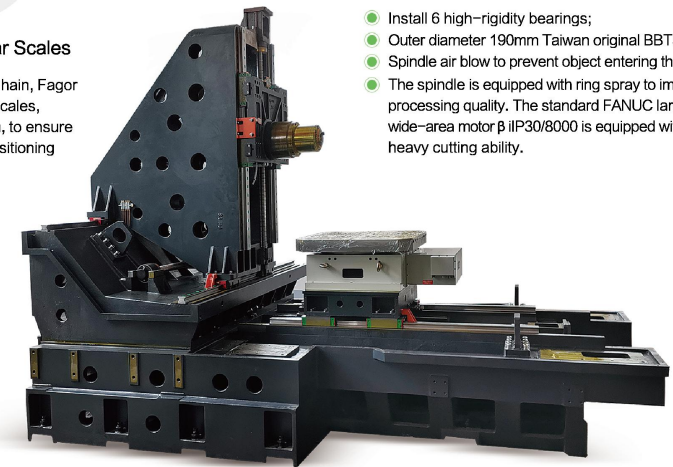
- Equilateral triangle structure of the column, multi-layer stiffeners are arranged to improve the stability of the machine bed.
- Positive T structure bed, X-axis stepped layout, enlarged line guideway span, rigid support.
- Adopt high-strength Rexroth roller guide, high load bearing, stable precision.

**Optical Linear Scales**

- Optional Heidenhain, Fagor Optical Linear Scales, accuracy  $\pm 5\mu m$ , to ensure machine tool positioning accuracy.

**Spindle**

- Install 6 high-rigidity bearings;
- Outer diameter 190mm Taiwan original BBT50 spindle;
- Spindle air blow to prevent object entering the spindle;
- The spindle is equipped with ring spray to improve the processing quality. The standard FANUC large-torque wide-area motor  $\beta$  IP30/8000 is equipped with stronger heavy cutting ability.

**Double exchange table/  
four-axis turntable**

- Realize workpiece exchange and improve processing efficiency;
- The workpiece is placed outside for easy clamping;
- High rigidity alloy turbine, wear-resistant, high positioning accuracy;
- Heavy locking, reduce deformation, resistant to heavy cutting.

**Tool magazine**

- Using Taiwan imported frequency conversion tool magazine, tool change speed is fast and stable.

# YANGSEN

## YSH SERIES

### YSH-700D Horizontal Machining Structure Characteristics:

- This product installs T design, worktable rotating structure form, ultra-wide guide guideway structure, the standard configuration of large torque, and high-speed motor. You could order exchange worktable separately. Our products are suitable for processing various complex parts. It is the preferred equipment in the field of automobile engines and cavity processing in the 5G field.



### Machine cutting performance:

| Surface Milling Steel 45# |            | Drilling Holes Steel 45# |            | Tapping Steel 45# |            |
|---------------------------|------------|--------------------------|------------|-------------------|------------|
| Cutting depth             | <b>7mm</b> | Cutter diameter          | <b>Ø82</b> | Tapping           | <b>M36</b> |
| Cutter                    | Ø120mm*5T  | Cutter                   | Ø82mm*2T   | Cutter            | M36*3P     |
| Spindle speed             | 420rpm     | Spindle speed            | 500rpm     | Spindle speed     | 120rpm     |
| Feed                      | F500       | Feed                     | F100       | Feed              | F480       |
| Width                     | 100mm      | Width                    | 82mm       | Width             | 36mm       |

### YSH-700D Horizontal Machining Frame Machine Characteristics:

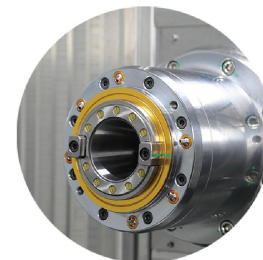
#### Machine bed, Column

- Equilateral triangle structure of the column, multi-layer stiffeners are arranged to improve the stability of the machine bed.
- Positive T structure bed, X-axis stepped layout, enlarged line guideway span, rigid support.
- Adopt high-strength Rexroth roller guide, high load bearing, stable precision.



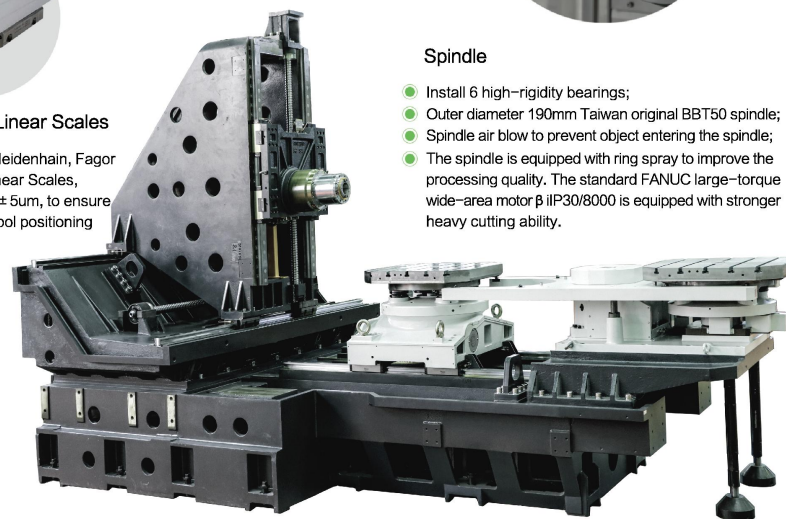
#### Optical Linear Scales

- Optional Heidenhain, Fagor Optical Linear Scales, accuracy  $\pm 5\mu m$ , to ensure machine tool positioning accuracy.



#### Spindle

- Install 6 high-rigidity bearings;
- Outer diameter 190mm Taiwan original BBT50 spindle;
- Spindle air blow to prevent object entering the spindle;
- The spindle is equipped with ring spray to improve the processing quality. The standard FANUC large-torque wide-area motor  $\beta$  IP30/8000 is equipped with stronger heavy cutting ability.



#### Double exchange table/ four-axis turntable

- Realize workpiece exchange and improve processing efficiency;
- The workpiece is placed outside for easy clamping;
- High rigidity alloy turbine, wear-resistant, high positioning accuracy;
- Heavy locking, reduce deformation, resistant to heavy cutting.

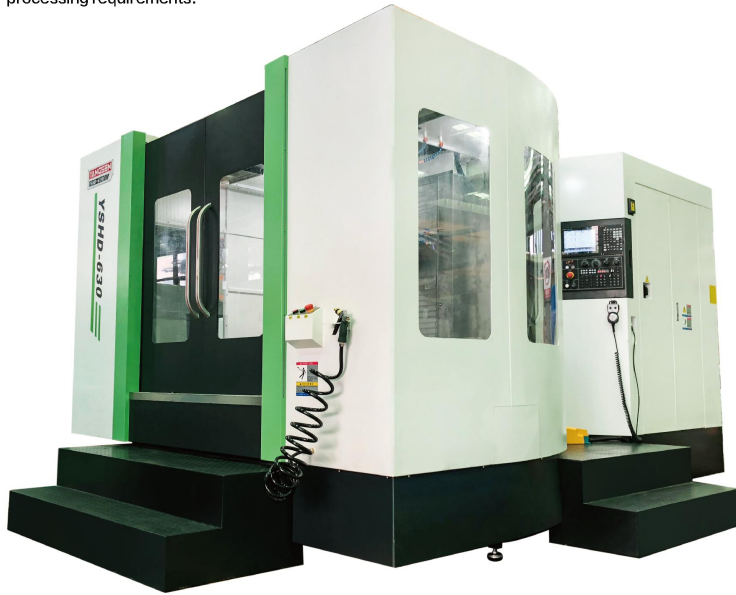


#### Tool magazine

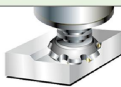
- Umbrella type 45T frequency conversion ATC

## YSHD-630 Horizontal Machining Structure Characteristics:

- One piece T-type base structure with rib construction for unprecedented rigidity. Suitable for complex processing of box parts, in the processing process can automatically exchange the tool, can be a clamping four face milling, drilling, reaming, boring, reaming, tapping, modern machine tools and control concept, compact structure design, to ensure high efficiency and high precision of single or small batch product processing requirements.



## Machine cutting performance:

| Surface Milling Steel 45# |                                                                                     | Drilling Holes Steel 45# |                                                                                     | Tapping Steel 45# |                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------|
| Cutting depth             |  | Cutter diameter          |  | Tapping           |  |
| <b>6mm</b>                |                                                                                     | <b>Ø82</b>               |                                                                                     | <b>M36</b>        |                                                                                     |
| Cutter                    | Ø120mm*5T                                                                           | Cutter                   | Ø78mm*2T                                                                            | Cutter            | M36*3P                                                                              |
| Spindle speed             | 420rpm                                                                              | Spindle speed            | 500rpm                                                                              | Spindle speed     | 120rpm                                                                              |
| Feed                      | F500                                                                                | Feed                     | F80                                                                                 | Feed              | F480                                                                                |
| Width                     | 90mm                                                                                | Width                    | 78mm                                                                                | Width             | 36mm                                                                                |

## YSHD-630 Horizontal Machining Frame Machine Characteristics:

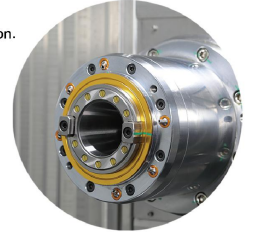
### Machine bed, Column

- One piece T-type base structure with rib construction for unprecedented rigidity.
- Wood casting is made of aluminum-wood combination, resin sand casting and HT300 cast iron.
- Design adopted FEM analysis for layout of M-type ribs, ensure their strength and rigidity, optimized the performance indicators of each component, ensure the stability of accuracy.



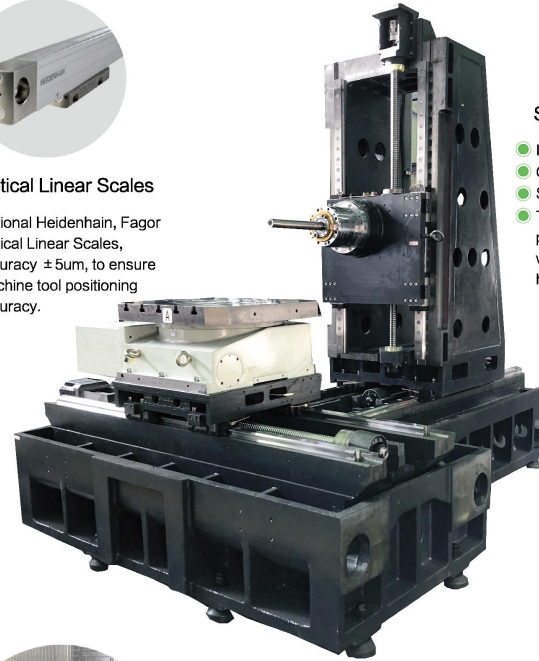
### Optical Linear Scales

- Optional Heidenhain, Fagor Optical Linear Scales, accuracy  $\pm 5\mu m$ , to ensure machine tool positioning accuracy.



### Spindle

- Install 6 high-rigidity bearings;
- Outer diameter 190mm Taiwan original BBT50 spindle;
- Spindle air blow to prevent object entering the spindle;
- The spindle is equipped with ring spray to improve the processing quality. The standard FANUC large-torque wide-area motor  $\beta$  iIP30/8000 is equipped with stronger heavy cutting ability.



### Double exchange table/ four-axis turntable

- CNC rotary table adopts high rigidity nickelo alloy copper turbine, durable wear resistance, high segmentation stability;
- Double strong locking device, large locking surface, heavy cutting resistance;
- Positioning with three high-precision clutch teeth, repeated positioning accuracy of 5".



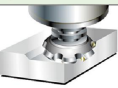
### ATC

- Standard 24T, DISC-type. optional: 40T/60T chain type.

**YANGSEN****YSHD SERIES****YSHD-1250 Horizontal Machining Structure Characteristics:**

- One piece T-type base structure with rib construction for unprecedented rigidity. Suitable for complex processing of box parts; can be a clamping four face milling, drilling, reaming, boring, reaming, tapping, and other processes. High Rigidity Structural Design, to ensure high efficiency and high precision of single or small batch products processing requirements.

**Machine cutting performance:**

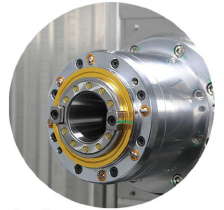
| Surface Milling Steel 45#                                                                                                                                                                                                           | Drilling Holes Steel 45#                                                                                                                                                                                                           | Tapping Steel 45#                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>Cutting depth<br/><b>7mm</b></p> <p>Cutter      Ø120mm*5T</p> <p>Spindle speed      420rpm</p> <p>Feed      F600</p> <p>Width      100mm</p> |  <p>Cutter diameter<br/><b>Ø82</b></p> <p>Cutter      Ø88mm*2T</p> <p>Spindle speed      480rpm</p> <p>Feed      F80</p> <p>Width      88mm</p> |  <p>Tapping<br/><b>M36</b></p> <p>Cutter      M36*3P</p> <p>Spindle speed      120rpm</p> <p>Feed      F480</p> <p>Width      36mm</p> |

**YSHD-1250 Horizontal Machining Frame Machine Characteristics:****Machine bed, Column**

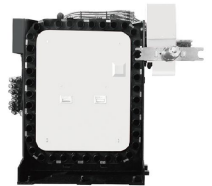
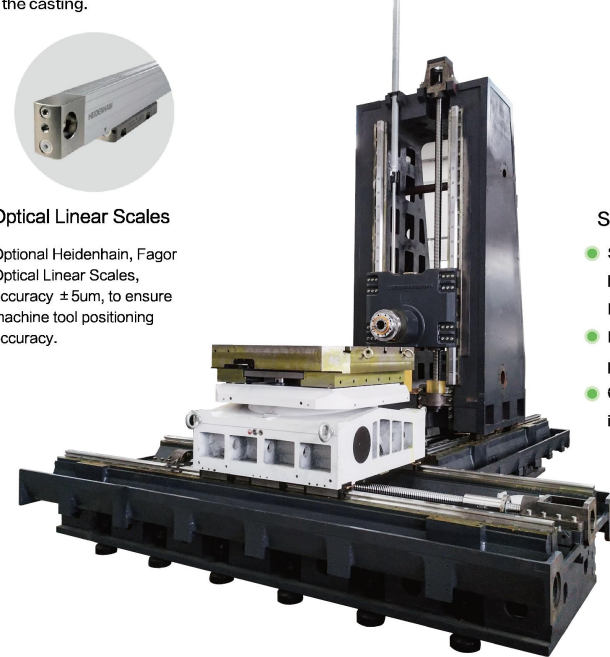
- The CNC rotary table worm gear type, four tapered clamping positioning mechanism, super clamping force to ensure the stability of the worktable and positioning precision.
- Strong blowing system depends on the tapered positioning to blow out strong air column, clear up iron chips, and ensure the clamping stability as well as position precision of worktable by means of the airtight detection of tapered hole.
- One piece T-type base structure with rib construction for unprecedented rigidity. The reasonable fabric optimized the chip removal structure and improved the guide lubrication recovery system, and improved the overall rigidity and appearance quality of the casting.

**Optical Linear Scales**

- Optional Heidenhain, Fagor Optical Linear Scales, accuracy  $\pm 5\mu m$ , to ensure machine tool positioning accuracy.

**Spindle**

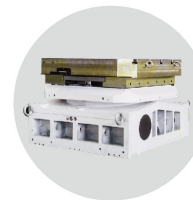
- Spindle motor equipped with high-torque wide-range motor, BBT50/190 spindle made in Taiwan.
- Labyrinth and labyrinth blow protection design.
- 6000rpm speed, ensure high-rigidity and high-accuracy.

**ATC**

- Hydraulic arm-type ATC: Optional 24T/40T/60T

**Single pallet**

- Adopt high rigidity Nickel alloy copper turbine, durable wear resistance, high segmentation stability;
- double strong locking device, large locking surface, heavy cutting resistance;
- Three pieces of high precision clutch teeth positioning, high repeated positioning accuracy.



**YANGSEN****YSH SERIES****YSH-1000D Horizontal Machining Structure Characteristics:**

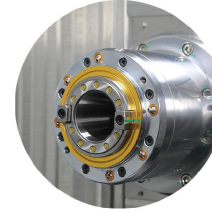
- One piece T-type base structure with rib construction for unprecedented rigidity. Suitable for complex processing of box parts; can be a clamping four face milling, drilling, reaming, boring, reaming, tapping, and other processes. High Rigidity Structural Design, to ensure high efficiency and high precision of single or small batch products processing requirements.

**Machine cutting performance:**

| Surface Milling Steel 45# |            | Drilling Holes Steel 45# |            | Tapping Steel 45# |            |
|---------------------------|------------|--------------------------|------------|-------------------|------------|
| Cutting depth             | <b>7mm</b> | Cutter diameter          | <b>Ø82</b> | Tapping           | <b>M36</b> |
| Cutter                    | Ø120mm*5T  | Cutter                   | Ø88mm*2T   | Cutter            | M36*3P     |
| Spindle speed             | 420rpm     | Spindle speed            | 480rpm     | Spindle speed     | 120rpm     |
| Feed                      | F600       | Feed                     | F80        | Feed              | F480       |
| Width                     | 100mm      | Width                    | 88mm       | Width             | 36mm       |

**YSH-1000D Horizontal Machining Frame Machine Characteristics:****Machine bed, Column**

- The CNC rotary table worm gear type, four tapered clamping positioning mechanism, super clamping force to ensure the stability of the worktable and positioning precision.
- Strong blowing system depends on the tapered positioning to blow out strong air column, clear up iron chips, and ensure the clamping stability as well as position precision of worktable by means of the airtight detection of tapered hole.
- One piece T-type base structure with rib construction for unprecedented rigidity. The reasonable fabric optimized the chip removal structure and improved the guide lubrication recovery system, and improved the overall rigidity and appearance quality of the casting.

**Spindle**

- Spindle motor equipped with high-torque wide-range motor, BBT50/190 spindle made in Taiwan.
- Labyrinth and labyrinth blow protection design.
- 6000rpm speed, ensure high-rigidity and high-accuracy.

**Optical Linear Scales**

- Optional Heidenhain, Fagor Optical Linear Scales, accuracy  $\pm 5\mu m$ , to ensure machine tool positioning accuracy.

**Double exchange table**

- Adopt high rigidity Nickel alloy copper turbine, durable wear resistance, high segmentation stability;
- double strong locking device, large locking surface, heavy cutting resistance;
- Three pieces of high precision clutch teeth positioning, high repeated positioning accuracy.

**ATC**

- Hydraulic arm-type ATC: Optional 40T/60T/128T



YSH Series Parameters

| Model          |                               |                    | YSH-500                  | YSH-800        | YSH-500D       | YSH-700D       | YSH-800D       |
|----------------|-------------------------------|--------------------|--------------------------|----------------|----------------|----------------|----------------|
| Subject        | Specifications                | Units              |                          |                |                |                |                |
| Travel         | X/Y/Z axis                    | mm                 | 1100/800/600             | 1300/800/1000  | 1100/750/600   | 1300/800/900   | 1300/800/1200选 |
|                | Spindle Nose to Worktable     | mm                 | 100~700                  | 150~1150       | 140~740        | 150~1050       | 150~950        |
|                | Spindle Center to Column      | mm                 | 50~850                   | 150~950        | 0~750          | 150~950        | 150~950        |
|                | Three-Axis Guideway           | ////               | Roller Linear Guideway   |                |                |                |                |
| Worktable      | Worktable Size (L*W)          | mm                 | 500×500                  | 800×800        | 500×500        | 700×700*2      | 800×800*2      |
|                | Maximum Table Load            | t                  | 0.6                      | 2              | 0.5            | 1.2            | 1.2            |
|                | Table Screw                   | mm                 | ////                     | ////           | ////           | ////           | ////           |
|                | T-Slot                        | no/mm              | 5-18×100                 | 7-18×125       | 5-18×100       | 7-18×125       | 7-18×125       |
|                | Number of Pallet              | pcs                | 1                        | 1              | 1              | 1              | 1              |
|                | Table Indexing                | ////               | 1° /0.001°               | 1° /0.001°     | 1° /0.001°     | 1° /0.001°     | 1° /0.001°     |
|                | Maximum Turning Diameter      | mm                 | φ1000                    | φ1500          | φ700           | φ1100          | φ1000          |
| Spindle        | Spindle Taper                 | type               | BBT-40                   | BBT-50         | BBT-40         | BBT-50         | BBT-50         |
|                | Spindle Speed                 | rpm                | 12000                    | 8000           | 12000          | 8000           | 8000           |
|                | Spindle Drive Type            | ////               | Belt                     |                |                |                |                |
| Feedrate       | Rapid Traverse(X/Y/Z)         | m/min              | 36/36/36                 | 36/36/30       | 36/36/36       | 36/36/30       | 36/36/30       |
|                | Cutting Feedrate(X/Y/Z)       | m/min              | 10                       | 10             | 10             | 10             | 10             |
| Tool Changer   | Automatic Tool Changer        | ////               | Chain Type (Servo Drive) |                |                |                |                |
|                | Type of Tool Shank            | type               | BT-40                    | BT-50          | BT-40          | BT-40          | BT-40          |
|                | Tool Storage Capacity         | tools              | 24                       | 45             | 24             | 45             | 45             |
|                | Max. Tool Diameter (Adjacent) | mm                 | 80                       | 125            | 80             | 125            | 125            |
|                | Max. Tool Diameter (Empty)    | mm                 | 120                      | 250            | 120            | 250            | 250            |
|                | Max. Tool Length              | mm                 | 300                      | 350            | 300            | 350            | 350            |
|                | Max. Tool Weight              | kg                 | 8                        | 25             | 8              | 25             | 25             |
|                | Tool Change Time              | sec                | 4.9                      | 4.2            | 4.9            | 4.2            | 4.2            |
|                |                               |                    |                          |                |                |                |                |
| Motor          | Spindle Motor                 | kw                 | 11/15.0                  | 15/18.5        | 11/15.0        | 15/18.5        | 15/18.5        |
|                | Three-Axis Servo Motor        | kw                 | 3.0/3.0/3.0              | 3.0/3.0/3.0    | 3.0/3.0/3.0    | 3.0/3.0/3.0    | 3.0/3.0/3.0    |
| Accuracy       | Accuracy                      | mm                 | ±0.005                   | ±0.005         | ±0.005         | ±0.005         | ±0.005         |
|                | Repeatability                 | mm                 | ±0.003                   | ±0.003         | ±0.003         | ±0.003         | ±0.003         |
| Power Required | Power Requirement             | kva                | 30                       | 30             | 30             | 35             | 35             |
|                | Air Pressure Requirement      | kg/cm <sup>2</sup> | 6*8                      | 6*8            | 6*8            | 6*8            | 6*8            |
| Others         | External Dimensions (L*W*H)   | mm                 | 4520*3560*3230           | 5839*4636*3050 | 4732*3904*3230 | 7000*5265*3120 | 7000*5265*3120 |
|                | Gross Weight                  | t                  | 9                        | 18.5           | 10             | 21             | 21.5           |

Standard Accessories

- ★ Arm Type Tool Changer
- ★ Automatic Lubricating System
- ★ Fully Enclosure Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Coolant Tank & Chip Tray
- ★ Daul LED Work Light
- ★ LED 3 Color Warning Light
- ★ M30 Auto Off
- ★ Spindle Nose Air Blow
- ★ Leveling Bolts and Pads

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ Tool Breakage System
- ★ Chain Type Chip Conveyor System
- ★ Oil Mist Collector
- ★ Oil Skimmer
- ★ Rotary Table
- ★ Workpiece & Tool Probe

| Model          |                               |                    | YSHD-630                 | YSHD-1000                  | YSHD-1250              | YSHD-630D                | YSHD-1000D                 | YSHD-1250D             |
|----------------|-------------------------------|--------------------|--------------------------|----------------------------|------------------------|--------------------------|----------------------------|------------------------|
| Subject        | Specifications                | Units              |                          |                            |                        |                          |                            |                        |
| Travel         | X/Y/Z axis                    | mm                 | 1100/750/950             | 2000(选配2500)<br>/1500/1600 | 2500/1500/1600         | 1100/750/950             | 2000(选配2500)<br>/1450/1600 | 2500/1450/1600         |
|                | Spindle Nose to Worktable     | mm                 | 130~1080                 | 350~1950                   | 350~1950               | 120~870                  | 350~1950                   | 350~1950               |
|                | Spindle Center to Column      | mm                 | 120~870                  | 50~1550                    | 350~1700               | 130~1080                 | 0~1450                     | 0~1450                 |
|                | Three-Axis Guideway           | ////               | Roller Linear Guideway   |                            |                        |                          |                            |                        |
| Worktable      | Worktable Size (L*W)          | mm                 | 630*630                  | 1000*1000                  | 1250*1250              | 630×630*2                | 1000×1000*2                | 1250×1250*2            |
|                | Maximum Table Load            | t                  | 0.8                      | 3.0                        | 5.0                    | 1                        | 3.5                        | 3.5                    |
|                | Table Screw                   | mm                 | ////                     | ////                       | ////                   | ////                     | ////                       | ////                   |
|                | T-Slot                        | no/mm              | 5-18x100                 | 5-22x200                   | 5-22×200               | 5-18×100                 | 5-22×200                   | 5-22×200               |
|                | Number of Pallet              | pcs                | 1                        | 1                          | 1                      | 2                        | 2                          | 2                      |
|                | Table Indexing                | ////               | 1° / 0.001°              | 1° / 0.001°                | 1° / 0.001°            | 1° /0.001°               | 1° /0.001°                 | 1° / 0.001°            |
|                | Maximum Turning Diameter      | mm                 | φ1100(1700选配)            | φ2000                      | φ2000                  | φ1100                    | φ2000                      | φ2000                  |
| Spindle        | Spindle Taper                 | type               | BBT-50                   | BBT-50                     | BBT-50                 | BBT-50                   | BBT-50                     | BBT-50                 |
|                | Spindle Speed                 | rpm                | 6000                     | 6000                       | 6000                   | 6000                     | 6000                       | 6000                   |
|                | Spindle Drive Type            | ////               | Belt                     |                            |                        |                          |                            |                        |
| Feedrate       | Rapid Traverse(X/Y/Z)         | m/min              | 30/30/30                 | 10/10/10                   | 10/10/10               | 30/30/30                 | 10/10/10                   | 10/10/10               |
|                | Cutting Feedrate(X/Y/Z)       | m/min              | 10                       | 10                         | 10                     | 10                       | 10                         | 10                     |
| Tool Changer   | Automatic Tool Changer        | ////               | Chain Type (Servo Drive) | ARM Type (Servo Drive)     | ARM Type (Servo Drive) | Chain Type (Servo Drive) | ARM Type (Servo Drive)     | ARM Type (Servo Drive) |
|                | Type of Tool Shank            | type               | BT-50                    | BT-50                      | BT-50                  | BT-50                    | BT-50                      | BT-50                  |
|                | Tool Storage Capacity         | tools              | 24                       | 40                         | 40                     | 40                       | 40                         | 40                     |
|                | Max. Tool Diameter (Adjacent) | mm                 | 112                      | 125                        | 125                    | 112                      | 125                        | 125                    |
|                | Max. Tool Diameter (Empty)    | mm                 | 200                      | 250                        | 250                    | 200                      | 250                        | 250                    |
|                | Max. Tool Length              | mm                 | 450                      | 600                        | 600                    | 450                      | 600                        | 600                    |
|                | Max. Tool Weight              | kg                 | 18                       | 25                         | 25                     | 18                       | 25                         | 25                     |
|                | Tool Change Time              | sec                | 4.9                      | 14                         | 14                     | 4.9                      | 14                         | 14                     |
|                |                               |                    |                          |                            |                        |                          |                            |                        |
| Motor          | Spindle Motor                 | kw                 | 15/18.5                  | 18.5/22                    | 18.5/22                | 15/18.5                  | 18.5/22                    | 18.5/22                |
|                | Three-Axis Servo Motor        | kw                 | 3.0/3.0/3.0              | 6.0/6.0/6.0                | 6.0/6.0/6.0            | 3.0/3.0/3.0              | 6.0/6.0/6.0                | 6.0/6.0/6.0            |
| Accuracy       | Accuracy                      | mm                 | ±0.005                   | ±0.01                      | ±0.01                  | ±0.005                   | ±0.01                      | ±0.01                  |
|                | Repeatability                 | mm                 | ±0.003                   | ±0.005                     | ±0.005                 | ±0.003                   | ±0.005                     | ±0.005                 |
| Power Required | Power Requirement             | kva                | 30                       | 35                         | 40                     | 35                       | 40                         | 45                     |
|                | Air Pressure Requirement      | kg/cm <sup>2</sup> | 6*8                      | 6*8                        | 6*8                    | 6*8                      | 6*8                        | 6*8                    |
| Others         | External Dimensions (L*W*H)   | mm                 | 4750*2900*2680           | 6830*4940*4470             | 6830*5140*4470         | 6460*3560*2680           | 9000*5588*4498             | 9000*6088*4498         |
|                | Gross Weight                  | t                  | 12                       | 22                         | 23                     | 15                       | 25                         | 28                     |

Standard Accessories

- ★ Arm Type Tool Changer
- ★ Automatic Lubricating System
- ★ Fully Enclosure Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Coolant Tank & Chip Tray
- ★ Daul LED Work Light
- ★ LED 3 Color Warning Light
- ★ M30 Auto Off
- ★ Spindle Nose Air Blow
- ★ Leveling Bolts and Pads

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ Tool Breakage System
- ★ Chain Type Chip Conveyor System
- ★ Oil Mist Collector
- ★ Oil Skimmer
- ★ Rotary Table
- ★ Workpiece & Tool Probe