

 **YG Tech.**
Yunil Gear Machine Tech. Co.,LTD

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ISO9001 ISO14001

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YUNIL Machine

Since our inception in 1963, YUNIL MACHINE.
has manufactured various kinds of machine tools, specializing in gear machines.



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GREETINGS

Thanks you for visiting YG Tech,Co.,LTD

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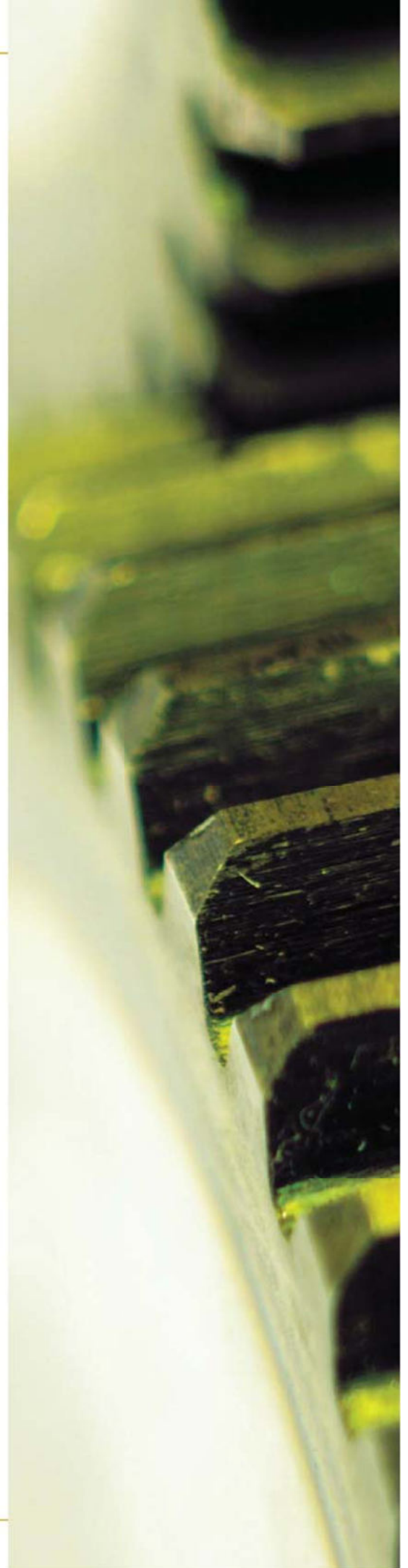
Of this, the GEAR HOBGING MACHINE and the SLOTTING MACHINE have been the most favored product of our many customers; both domestic and overseas.

Based on 50 years of knowledge and experience, YUNIL has finally completed the HERA series C.N.C Hobbing machine.

This machine will satisfy our customers's demands for the highest quality product at the most affordable price.

Our staff aim to meet all of YUNIL's customer requirements whit a commitment to excellence and genuine service.

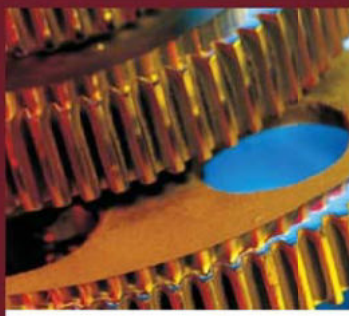
Wehank you in advance!





COMPANY HISTORY

- 1963. 03. • YUNIL Ironworks Established Commenced manufacturing of Hobbing machines
- 1978. 10 • Developed the model: YNL-20 HOBGING MACHINE
- 1986. 05 • Developed the model: YNL-25 HOBEING MACHINE
- 1988. 11 • Developed the model: YNL-40 HOBGING MACHINE
- 1990. 03 • Developed the model: YS-250 A/M SLOTTING MACHINE
- 1991. 06 • Developed the model: YH-350W HOBGING MACHINE
- 2001. 11 • Developed the model: YS-250NC SLOTTING MACHINE
- 2004. 09 • Developed the model: HARA200/35C CNC HOBGING MACHINE
- 2005. 04 • Developed the model: YH-200W HOBGING MACHINE
- 2005. 05 • Completed development of the unmanned automatic system for all machine kinds
- 2009. 03 • Developed the model: HARA-80 CNC HOBGING MACHINE
- 2009.03 • Developed the model: Ys-350NC SCOTTING MACHINE
- 2009.03 • Developed the model: Ys-450NC SCOTTING MACHINE



HERA200
HERA350
HERA500
HERA750
HERA1000

6-AXIS CNC GEAR HOBGING MACHINE SUITABLE FOR SMALL PRODUCTION

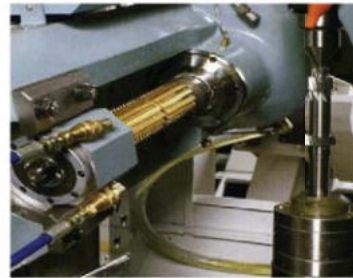
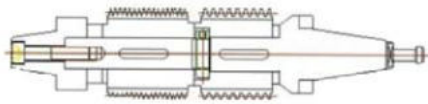
6-AXIS C.N.C GEAR HOBGING MACHINE

- Strong cutting capacity
- Easy to train how to operate this machine and operate it through a large 12-inch LCD screen and the program only for hobbing
- Control system (SINUMERIK 840D) with enough storage (256MB) and excellent control capacity
- Decrease in the time of entering data because it is easy to call gear data already saved
- Very easy to perform orientation by using the orientation return function of table spindle and hob spindle.
- Strong structure of keeping precision even if external impact or distortion occurs.



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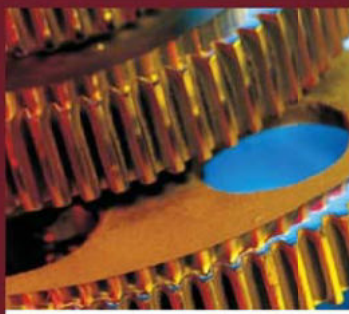


STANDARD UNIT SPECIFICATIONS

1. Hob arbor (arbor, sleeve, collar)
2. Coolant supply unit
3. Chip conveyor
4. Hydraulic tank (70L)
5. Automatic lubrication pump (Intermittent lub tank (4L))
6. Entire cover (Full splash guard)
7. C.N. C controller (SINUMERIK 840D, SIEMENS)
8. Work light
9. Leveling kits
10. Basic tools (Standard tools & box)

OPTIONAL UNIT

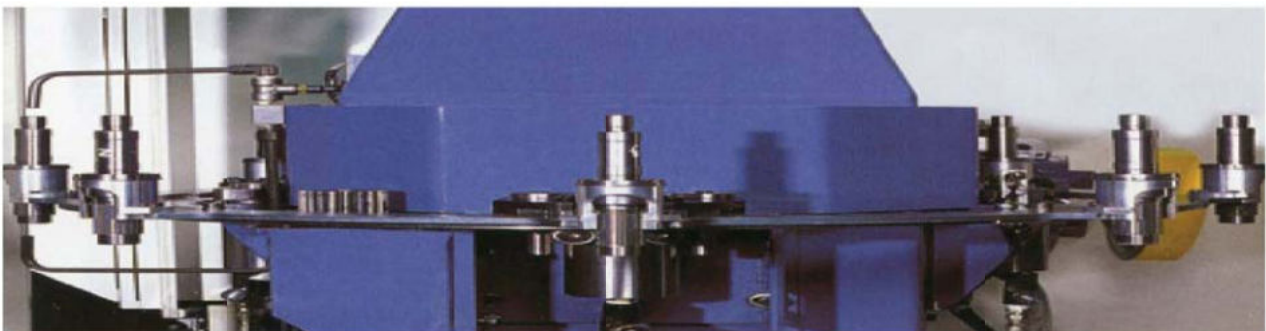
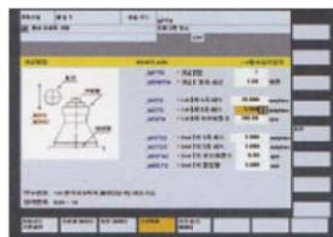
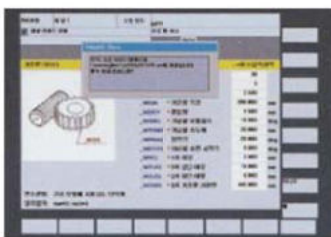
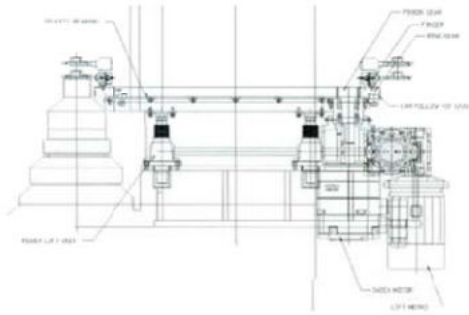
1. Auto tool lock device (Auto draw bar attachment)
2. Auto door
3. Dust collector (Oil mist collector)
4. Magnetic chip conveyor
5. Deburring device
6. Hydraulic automatic clamping device
7. Automatic supply unit
8. Loader (stocker)
9. Work rest (Steady rest for shaft)
10. Tool setting device
11. Coolant washing unit
12. Dry cutting attachment
13. Protective device for hob during power failure (X-axis retract at power failure)
14. Spindle orientation function (B-axis, C-axis)
15. Control panel dehumidifier and cooler (air-conditioner)
16. External counter (work, tool, check)
17. Jig & fixture



HERA200
HERA350
HERA500
HERA750
HERA1000

STRONG CONTROLLER

- Precision controller
- Easy to operate due to its interactive program (HMI)
- A variety Loading/Unloading System,
- Capable of responding to all the artifacts of Jig & Fixture provides abundant,



YUNIL Machine

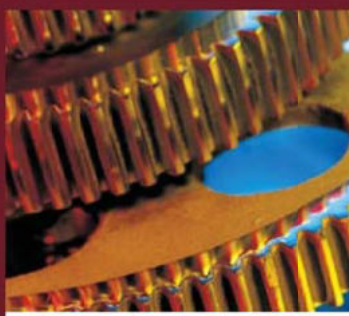
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SPECIFICATION

Descriptions	HERA 200	HERA 350	HERA 500
Maximum workpiece diameter	200mm	350mm	500mm
Maximum module	M4	M6	M8(M10)
Maximum axial travel	250mm	350mm	400mm
Workhead spindle speed range	5~300rpm	5~300rpm	3~240rpm
Min./max. hob diameter	∅120	∅150	∅180
Min./Max/hob length, toothac	180mm	180mm	220mm
Maximum hob shift travel	180mm	180mm	200mm
Total swivel range	±45°	±45°	±45/-30
Hob speed range	50~1000rpm	50~1000rpm	10~600rpm
Hob spindle power	29Nm	39Nm	Ac 18kw
Floor space	2700 x 3000 x 2700	2700 x 3100 x 2800	3050 x 3800 x 2800
Net weight	9,500kg	10,500kg	13,000kg

Descriptions	HERA 750	HERA1000
Maximum workpiece diameter	750mm	1,000mm
Maximum module	M12	M12(M16)
Maximum axial travel	550mm	650mm
Workhead spindle speed range	3~40rpm	3~40rpm
Min./max. hob diameter	∅200	∅200
Min./Max/hob length, toothac	250mm	250mm
Maximum hob shift travel	220mm	220mm
Total swivel range	+35/-30	+35/-30
Hob speed range	30~300rpm	25~250rpm
Hob spindle power	Ac22kw	Ac30kw
Floor space	3600 x 4200 x 3400	3800 x 4500 x 3600
Net weight	17,000kg	18,500kg



YNL20
YNL25

YNL SERIES - YNL20, YNL25 AUTO CYCLE GEAR HOBGING MACHINE

FEATURES

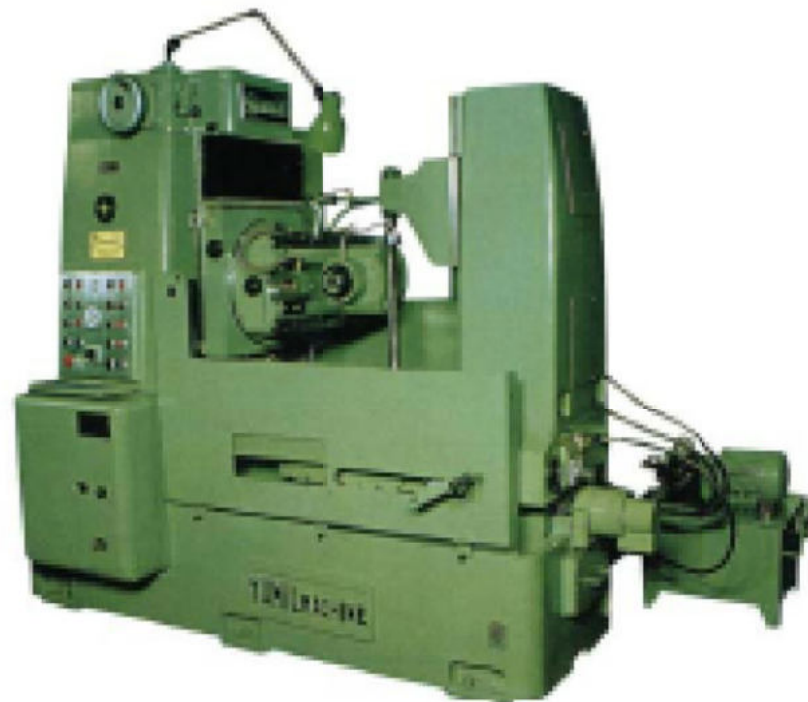
1. Slide part of any high-frequency heat treatment (HRS 68-72) and then treated polishing.
2. Made the production even in fully automatic hydraulic operation suitable.
3. Control Box is connected to circuitry inside the PC is almost no failure rate, semi-eligibility.
4. Hydraulic tank, hydraulic significance was maximum life of semi-permanent candidate.
5. Internal Gear minimize the noise Gringding hwahayeo integrity and durability are very excellent.
6. Suitable for powerful cutting machine with a stable weight.

STANDARD Acc'ys

- | | |
|-------------------------------------|-------|
| 1. Electrical equipment | 1set |
| 2. Coolant supply system | 1unit |
| 3. Replacement gear(feed, index) | 1set |
| 4. Accessory tools & box | 1set |
| 5. Hob arbors (22,225/25,4/31,75mm) | 1set |
| 6. Works arbors | 1pcs |
| 7. Hyd.support lift | 1set |

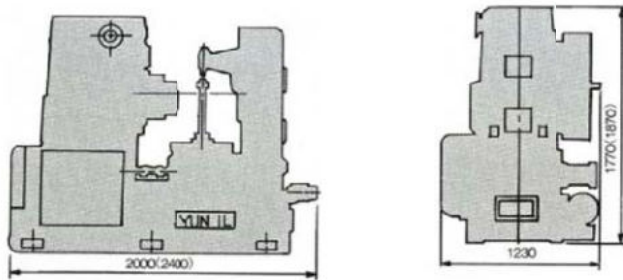
OPTIONAL Acc'ys

1. Chip conveyor attachment
 2. Two-cut cycle attachment
 3. Hydraulic crowning attachment(pending)
 4. Counter system
- *Specification listed in this catalog may be changed without notice



YUNIL Machine

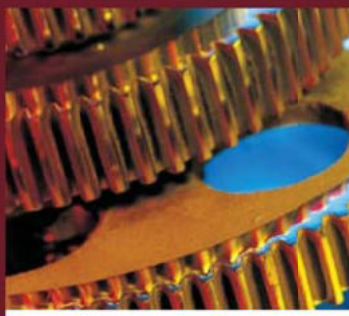
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YNL-20/25 SERIES HOBGING MACHINE SPECIFICATION

Technical Data	YNL-20	YNL-25
MAX. HOBGING CAPACITY(WITHOUT SUPPORT)	660mm	900mm
MAX. HOBGING CAPACITY(WITHOUT SUPPORT)	520mm	800mm
MAX. HOBGING CAPACITY OF MODULE	M9(DP3)	M10(DP2.5)
MAX. TRAVEL OF HOB SADELE	360mm	450mm
MAX. TAPER CUTTING ANGLE	45°	45°
DIAMETER OF TABLE	530mm	570mm
MAX. DIAMETER OF HOB	120mm	130mm
MAX. LENGTH OF HOB	130mm	160mm
HOB SPEED	68~220RPM	42~134RPM
MAIN SPINDLE TAPER	MT 4	MT4
MAIN MOTOR	3.75KW x4P	3.73KW x6P
OUT SIDE DIMENSOIN	3,300x2,200x1,850mm	3,300x2,300x1,900mm
WEIGHT	5,000kg	6,500kg



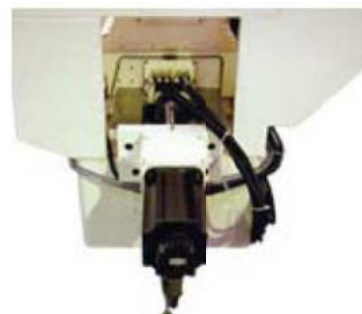


HOBGING MACHINE YH200-W

With precision and durability guaranteed for a long time through a modern design and a high-tech manufacturing system, the YH-200-W is the fruit of our efforts of having manufactured various kinds of hobbing machines for over 45 years.

FEATURES

1. Our Hobbing machine obtains a high-precision and high-speed cutting capacity by utilizing a strong main body.
2. The YH200-W has an anti-dust and anti-abrasion table with a long-time fixation rate and high-speed rotation.
3. The spindle has adopted a strong roller bearing structure with a high fixation rate and a great strength. In addition, as there is no thermal deformation or abrasion even under high-speed and powerful cutting, the YH200-W does not need readjusting and is available for high-precision gear processing. The control of the spindle speed follows the CVT (Continuously Variable Transmission) system and can be set to the optimal cutting speed. (The RPM can be set separately for double cutting.)
4. Various functions such as jumping, double cutting, automatic cycling of the worm gear, automatic loading, unloading and crowning of processed goods, and an automatic door provide for an optimal automatic production line along with PLC control functionality.



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HOBBIING MACHINE YH200-W

Maximum Hobbing Capacity	200 _{mm}
Maximum Hobbing Capacity of Module	M 6
Maximum Travel of Hob Saddle	400 _{mm}
Distance between Hob Center and Work Center	150~350 _{mm}
Table Diameter (Face)	200 _{mm}
Table Through Hole	78 _{mm}
Maximum Hob Diameter Length	150 x 180 _{mm}
Maximum Travel of Hob Shifting	80 _{mm}
Variable Hob R.P.M	60~500 RPM
Feed	Low 0.64~4.22
	High 0.93~6.15
Motor	Main 5.5 kW (4P)
	Rapid 1.5 kW (4P)
Coolant (Cut)	250 W
Coolant (Washing)	250 W
Lubricant (Machine)	0.4kW (4P)
Lubricant (Slide)	25 W
Hob Shift	60 W
Hydraulic Pump	1.5 kW (4P)
Installation Area (W x L x H)	Max. 2065 (W) x 3485 (L) x 2080 (H)
GROSS WEIGHT	APPROX 6000Kg

TECHNICAL ENVIRONMENT

1. The repeated precision of cutting depth is held perfect through the servo motor.
2. Fine adjustments are available by using an M.P.G. (adjustable down to 0.002mm).
3. Using bearings around the head spindle and the table spindle has made it possible to have high resistance to thermal deformation and abrasion even under high-speed rotation.
4. A forced circular oil cooling system was adopted to keep a high fixation rate.
5. The full splash guided system keeps cutting oil from being scattered, and the oil mist collector helps to prevent environmental pollution. (Optional)
6. The pileup of chips was minimized by installing the washing line separately.
7. The CVT (Continuously Variable Transmission) of the Hob rotation speed is made possible by an I.G.B.T inverter. (Optional)

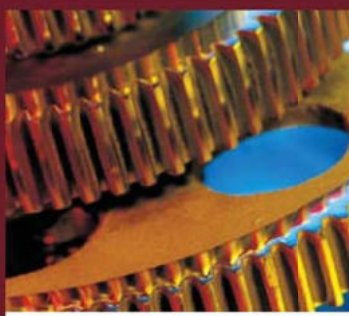
STANDARD PARTS

- Hob arbor (Collar, Sleeve, Nut) ----- 1 set
- Change gear ----- 1 set
- Accessory tools & box ----- 1 set

OPTIONAL PARTS

- Hydraulic jig & fixture
- Chip conveyor
- Crowning attachment
- Automatic door (Air)
- Automatic hob shift equipment
- Worm gear cutting equipment
- Oil cooling system
- Hob spindle variable speed
- Full splash guard
- Auto loading / unloading system
- Work stocker





YS-250NC
YS-300NC
YS-350NC
YS-450NC

YS-250NC(M), YS-300NC HEAVY DUTY PRECISION SLOTING MACHINE

FEATURES

- A tapering process is possible within 10° by adjusting Ram.
- All the slide ways are treated with high-frequency heating and grinding to guarantee durability.
- Semi-permanent durability is guaranteed because of the use of the highest quality components including oilless, special bearings, and finely grinded gears.
- An elaborate design facilitates cutting and precision processing
- The durability of the tools is ensured by installing a hydraulic refueling device and a bite relief device.



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YS-250NC(M) /350NC/400NC/300NC SLOTTING MACHINE SPECIFICATION

Descriptions	YS-250NC(M)	YS-300NC	YS-350NC	YS-450NC
MAXIMUM STROKE	250mm	300mm	350mm	450mm
TILTING OF RAM	0~10°	0~10°	0~10°	0~10°
VERTICAL ADJUSTMENT OF RAM	260mm	230mm	300mm	370mm
RAM GUIDE TO TABLE SURFACE	415mm	500mm	550mm	600mm
RANGE OF STROKE SPEED	21~93SPM	Unauthorized Innovation	Unauthorized Innovation	Unauthorized Innovation
DIAMETER OF TABLE	460mm	∅530	∅580	∅580mm
LONGITUDINAL TRAVERSE	440mm	140mm	600mm	600mm
CROSS TRAVERSE	360mm	360mm	650mm	650mm
MAX. TOOL POST TO COLUMN	500mm	570mm	850mm	900mm
TOOL POST FACE TO COLUMN	450mm	450mm	630mm	650mm
TABLE CENTER TO COLUMN	295~735mm	295~735mm	350~1,000mm	350~1200mm
MAIN MOTOR	2.2Kw(3HP)	5kw Servo Motor	Servo Motor	Servo Motor
MAX. TOOL SHANK SIZE	40mm	∅40mm	∅60mm	∅60mm
FLOOR SPACE	1,205 x 2,165mm	1,360 x 2,200mm	1,360 x 2,200mm	1,360 x 2,200mm
About Net Weight	2,500kg	1,000kg	6,000kg	6,500kg

