



willis

JAGUAR

ENC LATHES



High Productivity Quality and Profitability

Come to ***willis*** for the
Superiority in Turning Technology !

▶▶ Quality Through Technology The State

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THE SIMPLICITY OF A CONVENTIONAL LATHE THE PRECISION AND QUALITY OF A CNC

- The rigid construction bed are induction hardened over HRC 50 and precision ground provides heavy duty turning and fine finishing at high accuracy.
- The main spindle is supported by selected and preloaded super precision bearings to ensure high accuracy through full speed ranges.
- The main spindle, shafts and gears in the headstock are made by high grade alloy steel, are hardened and precision ground for high speed running at lower noise level.
- The automatic lubrication pump equipped on apron provides all slide-ways and two axes ballscrews lubricants continually.
- The hardened and precision ground ballscrews for X & Z axes are mounted on high precision bearings to enable sensitive movement.
- Both X & Z axes equipped with Individual electronic handwheels on control panel for manual operation as conventional lathes.
- The FAGOR 8055/A CNC COMPACT controller be selected as standard equipment, or FANUC Oi-TC or SIEMENS 810D controller may selected as optional.
- Widely & semi-enclosed front chuck & chip guard equipped with interlock switches according to EC regulation provides safety and easy operation.
- Full length rear splash guard and front moveable chip trolley provides chip and coolants safety and easy clean.
- A designed openable door on rear splash guard provide for X-axis and home switches maintenance and adjustment easily.
- The powerful inverter motor for main spindle are driven by YASKAWA VS-616 G7 vector control and multi-function all-digital type Inverter.
- Both X & Z axes are equipped with selected controller whole package AC servo motors with its own power supply and monodrives.
- The EUCHNER automation sensor equipped on spindle speed changer to provide the exactly positions of speed range for spindle infinitely variable speed selection correctly.
- Electronic positional stops in X & Z axes and tailstock to avoid any over travels. The modular input/output (I/O) card evidence all control system performance for maintenance and trouble shooting easily.



- of - The - Art ENC Lathes from *willis*



1550 ENC



1850 ENC



2060 ENC



2040 ENC

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2280 ENC



2680 ENC



3080 ENC

Control System

FAGOR 8055 i/A-TC Control System with 11" Color LCD Monitor and full Alphanumeric keyboard.

SIEMENS 810DE Control 10.4" TFT color display with optimized keyboard and joystick, moveable MPG Handwheel for operation.

FANUC 0i-TC Control System with 10.4" Color LCD, Manual Guide i Function.



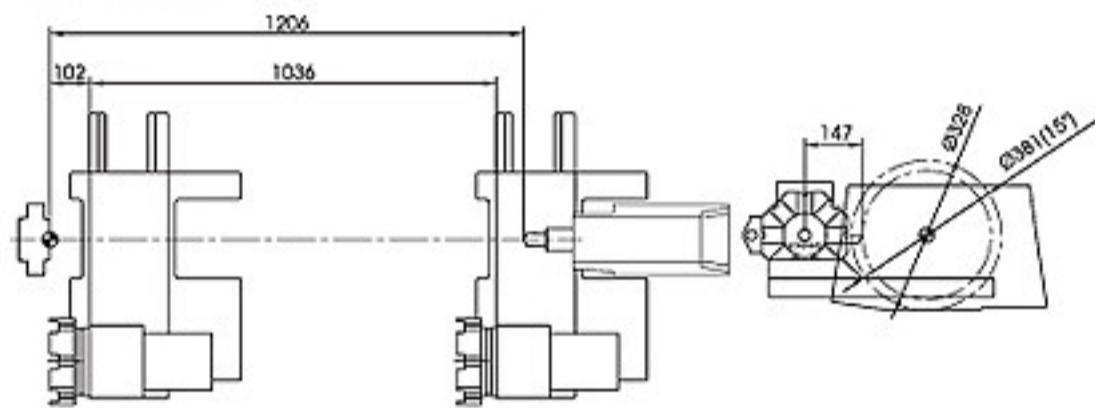
Electric Specifications:

| | FAGOR 8055i-A | FAGOR 8055i-A | FANUC 0i TC | SIEMENS 810D |
|--|------------------------------------|---------------------|---|-------------------|
| 1550/1850 | | | | |
| X Axis Servo Motor | FXM32 (5.1Nm) | FXM32 (5.1Nm) | Bis4 (3.5Nm) | 1FK7042 (3Nm) |
| Z Axis Servo Motor | FXM33 (7.3Nm) | FXM33 (7.3Nm) | Bis12 (11Nm) | 1FK7060 (6Nm) |
| Main Spindle Motor | 7.5 Inverter motor, OPT.10HP | FM7-A075 (7.5/11KW) | Bis8 (7.5/11Kw) | 1PH7107 (9/12KW) |
| 2040/2060/2080/20120/2240/2260/2280/22120 | | | | |
| X Axis Servo Motor | FXM32 (5.1Nm) | FXM32 (5.1Nm) | Bis4 (3.5Nm) | 1FK7042 (3Nm) |
| Z Axis Servo Motor | FXM33 (7.3Nm) | FXM33 (7.3Nm) | Bis12 (11Nm) | 1FK7060 (6Nm) |
| Main Spindle Motor | 10 Inverter motor, OPT.15HP | FM7-A075 (7.5/11KW) | Bis8 (7.5/11Kw) | 1PH7107 (9/12KW) |
| 2660/2680/26120/26160/3060/3080/30120/30160 | | | | |
| X Axis Servo Motor | FXM33 (7.3Nm) | FXM33 (7.3Nm) | Bis12 (11Nm) | 1FK7063 (11Nm) |
| Z Axis Servo Motor | FXM53 (11.9Nm) | FXM53 (11.9Nm) | Bis22 (20Nm) | 1FK7083 (16Nm) |
| Main Spindle Motor | 20HP Inverter motor OPT. - 30HP | FM7-A110 (11/15KW) | Bis12 (11/15Kw) OPT. - α 22i (26/26KW) | 1PH7133 (12/16KW) |

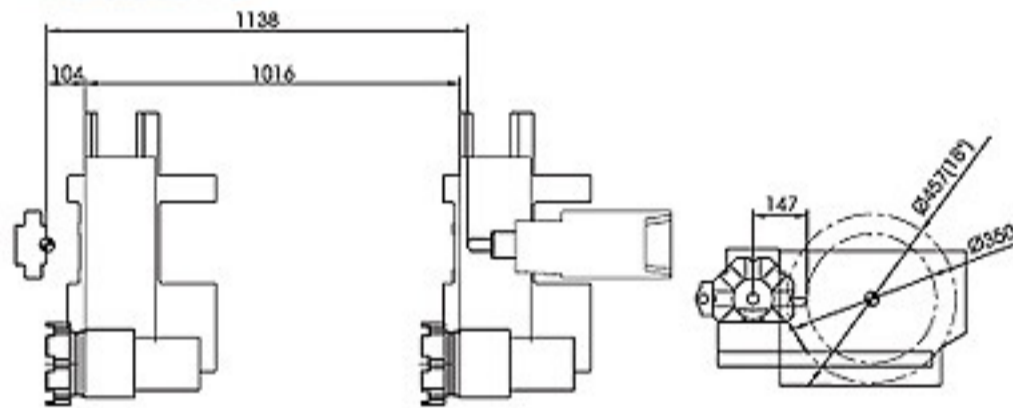
• The above specifications subject to change without prior notice.

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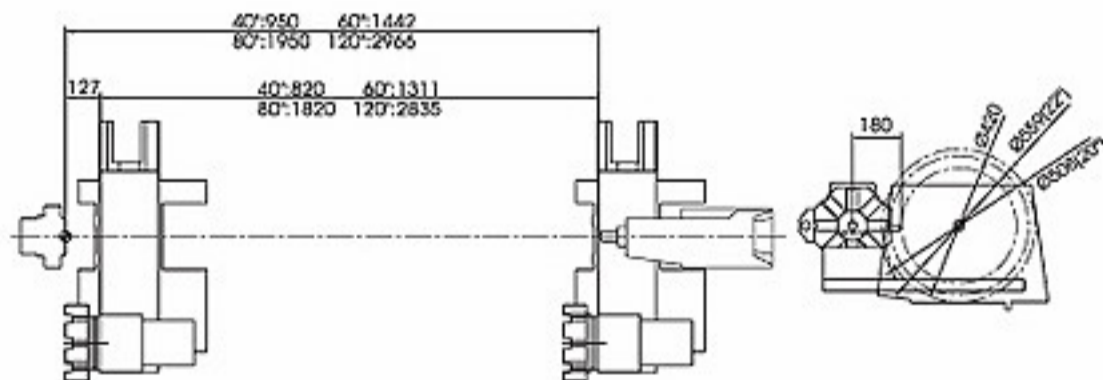
1550ENC



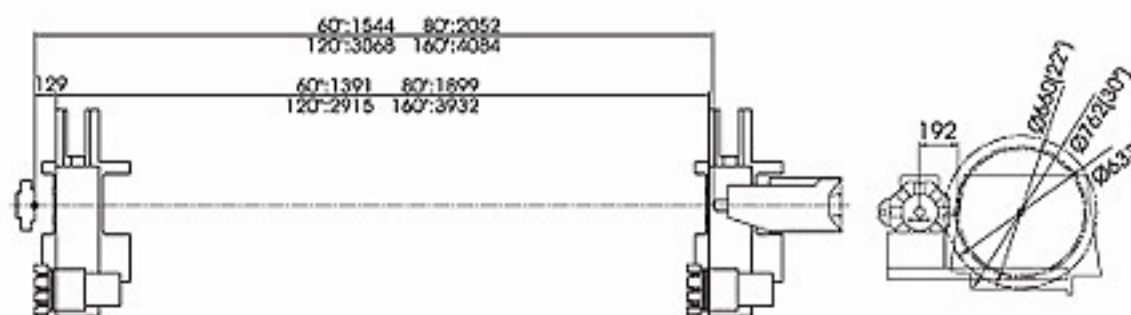
1850ENC



2040/2060/2080/20120 2240/2260/2280/22120



2660/2680/26120/26160 3060/3080/30120/30160



MODEL

CAPACITY

Swing over bed

Swing over cross slide

Swing in gap

Distance between center

Gap width from faceplate

HEADSTOCK

Spindle nose

Spindle bore

| | |
|----------------|--------------|
| Spindle speeds | Low range |
| | Medium range |
| | High range |

Spindle nose bush

TAILSTOCK

Quill travel

Quill diameter

Quill taper

BED

Bed width

Max. longitudinal travel

Max. turning length

GENERAL INFORMATION

Overall length

Overall width

Overall height

Net weight (Approx. kgs)

Gross weight (Approx. kgs)

Standard Equipment:

- FAGOR 8055/A-TC Control
- Spindle Inverter Motor & YASKAWA Inverter
- Automatic lubrication pump for slideways and ballscrews
- Automatic spindle speed gear change
- Cutting fluid coolant system
- Full Enclosed End Guard
- Headstock / Gearbox Oil Cooler Design

SPECIFICATIONS

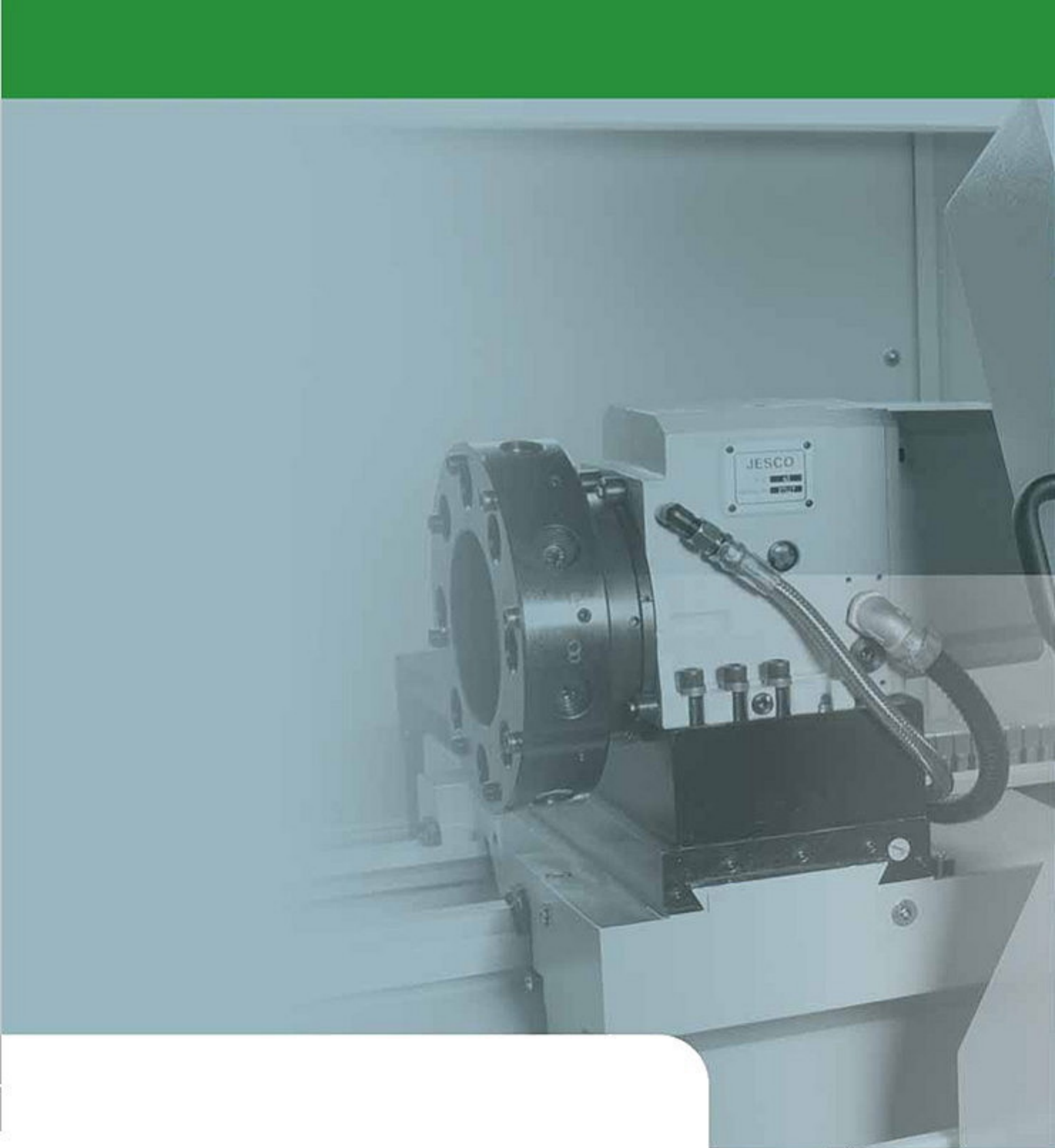
unit: mm(Inch)

| | 1550 | 1850 | 2040/2060 2080/20120 | 2240/2260 2280/22120 | 2660/2680 26120/26160 | 3060/3080 30120/30160 |
|--|------------|------------|---|-------------------------|---|--------------------------|
| | 390(15.25) | 460(18) | 510(20) | 560(22) | 660(26) | 760(30) |
| | 240(9.5) | 295(11.8) | 340(13.5) | 390(15.5) | 460(18) | 560(22) |
| | 610(24) | 635(25) | 760(30) | 810(32) | 960(37.8) | 1060(41.7) |
| | 1250(50) | 1250(50) | 1000(40)/1500(60)/2000(80)/3000(120) | | 1500(60)/2000(80)/3000(120)/4000(160) | |
| | 150(6) | 165(6.5) | 230(9) | | 300(11.8) | |
| | D1-6(A2-6) | D1-6(A2-6) | D1-8(A2-8) | | D1-11(A2-11) | D1-11(A2-11) A2-11 |
| | 54(2.125) | 54(2.125) | 80(3.125) | | 105 | 105 155-OPT. |
| | 13-340 | 13-392 | 26-266 | | 26-224 | 26-224 10-150 |
| | - | 391-1135 | 267-766 | | 225-670 | 225-670 151-490 |
| | 341-3500 | 1136-3500 | 767-2400 | | 671-2000 | 671-2000 491-1400 |
| | MT6 x MT4 | MT6 x MT4 | MT7 x MT5 | | MT8 x MT6 | MT8 x MT6 - |
| | 155(6.125) | 140(5.5) | 200(8) | | 300(12) | |
| | 58.5(2.3) | 73(2.87) | 75(3) | | 105(4.125) | |
| | MT4 | MT5 | MT5 | | MT6 | |
| | 270(11) | 318(12.5) | 345(13) | | 480(18.9) | |
| | 920(36) | 900(35) | 680(26.8)/1190(46.8)/1700(67)/2710(106.7) | | 1190(46.8)/1700(67)/2710(106.7)/3730(146.8) | |
| | 870(34) | 860(33.8) | 630(24.8)/1140(44.8)/1650(65)/2660(104.7) | | 1140(44.8)/1650(65)/2660(104.7)/3680(144.8) | |
| | 3330(131) | 3330(131) | 2970(117)/3670(145)/4710(164)/5170(204) | | 4200(165)/4700(185)/5700(224)/6700(264) | |
| | 2250(88) | 2250(88) | 2100(83) | | 2250(88) | |
| | 2150(85) | 2150(85) | 2230(88) | | 2260(88) | |
| | 1800 | 2200 | 2600/2800/3000/3800 | 2700/2900/3200/4000 | 4300/4800/6000/7200 | 4500/5000/6200/7400 |
| | 2300 | 2700 | 3200/3400/3600/4600 | 3500/3700/4000/4800 | 4900/5500/6800/8200 | 5100/5700/7000/8400 |

* The above specifications subject to change without prior notice.

Optional Equipment:

- Full length rear splash guard
- Front chuck & chip safety guard
- Front moveable chip trolley
- ISO quick change toolpost
- Working light
- RS-232 Port
- High speed & precision 3-jaw scroll chuck
- Leveling blocks
- Centers and Center Sleeve
- Service Tools & Toolbox
- FANUC Oi-TC Control System
- SIEMENS 810DE Control System
- Hydraulic Hollow Chuck
- Electrical Automatic Indexing 4-Way Toolpost
- Front Mounting Electrical 8-Station Automatic Tool Changer Turret
- Hydraulic Tailstock
- Rotating Center
- Roller Type Steady Rest
- Roller Type Follow Rest
- Chain Type Chip Conveyor with Chip Flush System
- Special functions by consult



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