

CE

**JESSEY**<sup>®</sup>

*Come to **JESSEY**<sup>®</sup>  
for the Superiority in  
Turning Technology !*



**JAGUAR**

**ENC LATHES**

High Productivity Quality and Profitability

# Quality Through Techn

## 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.



**1650 ENC**



**2060 ENC**



### POWERFUL AS A CNC; SIMPLE TO USE AS A DRO.

#### FAGOR 8040TC (STANDARD)

With 10.4" Mono LCD Monitor and full Alphanumeric keyboard.

#### SIMPLE:

- Totally intuitive operator-machine interaction.
- Operation defined by symbol keys, without programming knowledge.
- Interactive graphic data entry and graphic emulation of the operation.

#### PROFITABLE:

- Minimum set-up times.
- Part-operation sequence storage.
- Automatic part repetition for lot work.
- Upload/download part program to a peripheral via RS-232C.

#### FLEXIBLE:

- As a DRO when working manually.
- As a positioning device when working semiautomatically.
- As a CNC when carrying out automatic operation.
- Able to execute ISO-code part programs.

#### FEATURES:

- Manual Modes including Axes position, Feedrate, Spindle speed.
- Selected tool ETC..
- Coordinate preset.
- Home search (I0).
- Tool selection.
- Control of the spindle.
- CSS operation.
- 2 handwheels operation.
- Automatic operation.
- Complete set with Analog ACS AC Servo System.

# Technology

## The State - of - The - Art ENC

- 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 electrical handwheels on control panel for manual operation as conventional lathes.
- The FAGOR 8040TC CNC COMPACT controller be selected as standard equipment, FAGOR 8055TC or ANILAM 4200T or FANUC Oi-TC 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.



### 2280 ENC



#### ANILAM 4200T (OPTIONAL)

- With 14" color CRT.
- 12" TFT color Flat Panel.
- Overlay Alphanumeric keyboard & function keys and manual keypads.
- 1.44 MB Floppy disk & RS 232 port & Printer port.
- Canned cycles, conversational G-code.
- Built-in PLC.
- 20 inputs/12 outputs.
- Automatic tool calibration with 99 tool offsets.
- Graphic simulation of tool path, rapid and feed move display.
- ISO editor and program upload/download.
- Complete set with AC Servo System.

# LATHES

## Lathes from JESCO.

- 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.



### 30160 ENC



#### **FAGOR 8055TC CNC COMPACT (OPTIONAL)**

**The latest model with the best prgraming functions; with a 11" color LCD monitor and full Alphanumeric keyboard.**

**Containing the newest features then 8040TC as belows:**

- User part program with comments.
- With user defined cycles (Macros) & profile editor.
- Cycles editing by displaying icons with helping messages.
- The screen shows the form of the selected tool.
- 2 levels Taper cycles, 4 levels Grooving cycles, 4 levels threading cycles, 5 Drilling + Tapping cycles, Positioning cycles, 2 profiling cycles..etc..
- Complete set with Digital SERCOS AC Servo System.

## MACHINE SPECIFICATION

MODELS	1550ENC	1650/1850ENC	2060/2080ENC	2260/2280ENC	
Swing over bed	390 (15.25)	400 (15.75)/460(18)	510 (20)	560 (22)	
Distance between centres	1250 (50)	1250 (50)	1500 (60)/2000 (80)	1500 (60)/2000 (80)	
Max. longitudinal travel	1100 (43.3)	1100 (43.3)	1400 (55)/1900 (74.8)	1400 (55)/1900 (74.8)	
Max. turning length	975 (38.4)	990 (39)	1300 (51.2)/1810 (71.26)	1300 (51.2)/1810 (71.26)	
Swing over cross-slide	240 (9.5)	245 (9.6)/295(11.8)	340 (13.5)	390 (15.5)	
Swing in gap	610 (24)	585 (23)/635(25)	760 (30)	810 (32)	
Gap width from faceplate	150 (6)	165 (6.5)	230 (9)	230 (9)	
Spindle bore	54 (2.125)	54 (2.125)	80 (3.125)	80 (3.125)	
Spindle nose	D-1-6 (A-1-6)	D-1-6 (A-1-6)	D-1-8 (A-1-8)	D-1-8 (A-1-8)	
Spindle nose bush	MT.6 x MT.4	MT.6 x MT.4	MT.7 x MT.5	MT.7 x MT.5	
Spindle speeds: Low range	12-335rpm	13-390rpm	20-200rpm	20-200rpm	
Medium range	---	196-1135rpm	201-575rpm	201-575rpm	
High range	168-3500rpm	568-3500rpm	576-1800rpm	576-1800rpm	
Tailstock travel	155 (6.125)	140 (5.5)	200 (8)	200 (8)	
Tailstock diameter	58.5 (2.3)	73 (2.87)	75 (3)	75 (3)	
Tailstock taper	MT.4	MT.5	MT.5	MT.5	
Width of bed	270(11)	318(12.5)	345(13)	345(13)	
Cross-slide(X) ball screw	Ø20 x p.5	Ø20 x p.5	Ø25 x p.5	Ø25 x p.5	
AC 5.1Nm or Equivalent					
Longitudinal(Z) ball screw	Ø32 x p.5	Ø32 x p.5	Ø40 x p.10	Ø40 x p.10	
AC 7.3Nm or Equivalent					
Cross-slide Rapid (Optional)	7M/min. 10M/min.	7M/min. 10M/min.	7M/min. 10M/min.	7M/min. 10M/min.	
Longitudinal Rapid (Optional)	6M/min. 9M/min.	6M/min. 9M/min.	7M/min. 10M/min.	7M/min. 10M/min.	
Main Inverter Motor	5.5kw (7.5HP)	5.5kw (7.5HP) / 7.5kw(10HP)-OPT.	7.5kw (10HP) / 11.25kw (15HP) • 15kw(20HP)-OPT.		11.2
Inverter (Yaskawa G7)	7.5kw (10HP)	7.5kw (10HP)	7.5kw (10HP) / 11.25kw (15HP) • 15kw(20HP)-OPT.		11.2
Headstock lubricate pump	0.125kw (1/8HP)	0.125kw (1/8HP)	0.125kw (1/8HP)	0.125kw (1/8HP)	
Cutting Fluid Coolant Pump	0.125kw(1/8HP)	0.1875kw(1/4HP)	0.1875kw(1/4HP)	0.1875kw(1/4HP)	
Slide-ways lubricate pump	4W	4W	4W	4W	
Overall Length	3276(129)	3276(129)	3708(146)/3988(158)	3708(146)/3988(158)	
Overall width	2006(79)	2006(79)	2006(79)	2006(79)	
Overall Height	2006(79)	2006(79)/2057(81)	2209(87)	2260(89)	
Net weight	1800kgs.	2000/2200kgs.	2800/3000kgs.	2900/3200kgs.	
Gross weight	2300kgs.	2500/2700kgs.	3400/3600kgs.	3700/3900kgs.	

• The above specifications subject to change without prior notice.

## STANDARD EQUIPMENT

- Control unit: equipped with FAGOR 8040TC CNC COMPACT for all models.
- X & Z Axes equipped with AC Servo Motors.
- Spindle Encoder.
- Automatic lubrication pump for slide-ways and ballscrews.
- Cutting fluid coolant system.
- Full length rear splash guard.
- Front chuck & chip safety guard.
- Front moveable chip trolley.
- ISO quick change toolpost with 4 toolholders.
- Halogen lamp or fluorescent lamp.
- RS-232 port.
- High speed and precision 3-jaw scroll chuck for all models.
- Centers and center sleeve.
- Leveling blocks.
- Service tools and toolbox.
- Operation, programming and instruction manuals.

CS  
 LATE  
 ENO  
 ME

Unit: mm (inch)

20120/22120ENC	2660/2680/26120/26160ENC	3060/3080/30120/30160ENC	MODELS
510 (20)/560 (22)	660(26)	760(30)	Swing over bed
3000 (120)	1500(60)/2000(80)/3000(120)/4000(160)		Distance between centres
2900 (114)	1400(55)/1900(74.8)/2900(114)/3900(156)		Max. longitudinal travel
2800 (110)	1300(51.2)/1800(70.9)/2800(110.2)/3800(149.6)		Max. turning length
340 (13.5)/390 (15.5)	460(18)	560(22)	Swing over cross-slide
760 (30)/810 (32)	960(37.8)	1060(41.7)	Swing in gap
230 (9)	300(11.8)		Gap width from faceplate
80 (3.125)	105(4.125)		Spindle bore
D-1-8 (A-1-8)	D-1-11 (A-2-11 Option)		Spindle nose
MT.7 x MT.5	MT.8 x MT.6		Spindle nose bush
20-200rpm	10-106rpm		Spindle speeds: Low range
201-575rpm	37-400rpm		Medium range
576-1800rpm	130-1400rpm		High range
200 (8)	300(12)		Tailstock travel
75 (3)	105(4.125)		Tailstock diameter
MT.5	MT.6		Tailstock taper
345(13)	480(18.9)		Width of bed
Ø25 x p.5	Ø32xp.5		Cross-slide(X) ball screw
AC 7.3Nm	60/80 : AC 7.3Nm	120/160 : AC 9.3Nm	Cross-slide(X) Servo Motor
Ø50 x p.10	Ø50xp.10 (60/80)	Ø63xp.10 (120/160)	Longitudinal(Z) ball screw
AC 11.9Nm	60/80 : AC 11.9Nm	120/160 : AC 17.3Nm	Longitudinal(Z) Servo Motor
7M/min.	7M/min.		Cross-slide Rapid
10M/min.	10M/min.		(Optional)
9M/min.	9M/min.		Longitudinal Rapid
13.5M/min.	13.5M/min.		(Optional)
11.25kw (15HP)/15kw(20HP)-OPT.	15kw(20HP) / 22.75kw(30HP)-OPT.		Main Inverter Motor
11.25kw (15HP)/15kw(20HP)-OPT.	15kw(20HP) / 22.75kw(30HP)-OPT.		Inverter (Yaskawa G7)
0.125kw (1/8HP)	0.125kw(1/8HP)		Headstock lubricate pump
0.1875kw(1/4HP)	0.1875kw(1/4HP)		Cutting Fluid Coolant Pump
4W	4W		Slide-ways lubricate pump
5029(198)	4570(180)/5080(200)/6096(240)/7112(280)		Overall Length
2006(79)	2200(86)		Overall width
2209(87)/2260(89)	2209(87)	2260(89)	Overall Height
3800/4000kgs.	4300/4800/6000/7200kgs	4500/5000/6200/7400kgs	Net weight
4600/4800kgs.	4900/5500/6800/8200kgs	5100/5700/7000/8400kgs	Gross weight

## OPTIONAL EQUIPMENT

- FAGOR 8055TC & SERCOS servo motors.
- ANILAM 4200T & YASKAWA  $\Sigma$  II AC servo motors.
- FANUC 0i-TC &  $\beta$  i servo motors.
- Steady rest or roller type.
- Follow rest or roller type.
- 4-jaw independent chuck.
- Additional toolholders for ISO quick change toolpost.
- Electrical automatic indexing 4-way toolpost.
- Rear type hydraulic turret 8-station automatic tool changer.
- Rolling center.
- Hydraulic hollow chuck.
- Hydraulic tailstock.
- Chip conveyor w/cart.
- Automatic spindle speeds change.
- Full enclosed rear guard.
- Special functions by consult.



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