Clausing METOSA

Advanced Turning Technology

Shown with optional Turret

G.E. Fanuc 21i T Control with 'Manual Guide', for simple manual operation to complex machining

A Full Line of Quality Constructed, Affordable Priced, CNC Lathes Featuring the Latest Fanuc 21i T Control

Simply the best

Clausing/METOSA CNC Lathes featuring the latest Fanuc 21i T Control

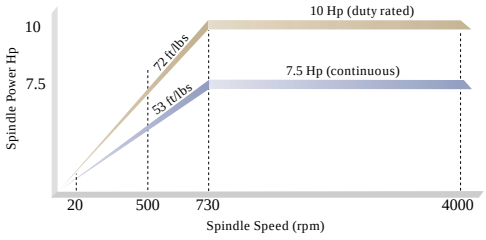
Shown with optional Turret

The Clausing/METOSA CNC Lathes are equipped with the 'new generation' GE Fanuc 21i T. The control configuration is designed for operator convenience and efficiency, and have control mounted electronic handwheels for manual operation.

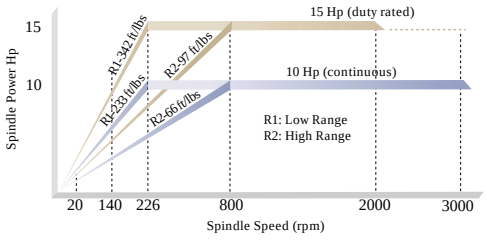
Designed to Clausing's stringent standards and quality manufactured in Europe using the latest technology and the highest quality materials, Clausing/METOSA CNC Lathes have features found only on higher priced machines...

- Heavy-duty construction with cast iron base
- Carriage cross slides and bed ways are hardened and ground for long life and high-speed positioning accuracy
- The special headstock design guarantees quiet operation, a high chip removal rate and excellent quality finish on machined pieces
- An innovative, highly advanced system of automatic speed change ranges
- The heavy-duty main spindle runs on pre-loaded, precision angular contact bearings to insure extremely accurate turning
- The combination of the high speeds of the headstock, slides and carriage, allow the operator to take advantage of the latest machining techniques
- Ballscrews for the X and Z axes are hardened and ground and are mounted in precision bearings for smooth operation and accurate positioning
- Handwheels are mounted on the control panel. The two electronic handwheels allow easy operation of machine when in the manual mode with readouts for X and Z axis position on the control panel
- Maintenance free AC motors used to drive the main spindle and screws
- Automatic lubrication of all slideways and moving parts
- The lathe is completely enclosed allowing a high rate of chip removal
- The modern, well thought out design of the machine allows for operator convenience and free and easy access to any part of the lathe

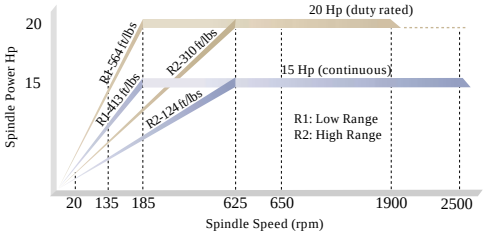
Our powerful spindle drive motor provides exceptional low end torque for a maximum operating range at full horse power...



13" and 14" Swing Model



15" and 17" Swing Model



20" and 24" Swing Model

G.E. Fanuc 21i T Control with 'Manual Guide'

Display shown with 'Manual Guide' main screen

The Clausing/METOSA CNC Lathes has the 'new generation' GE Fanuc 21i T CNC Control. Equipped with 'Manual Guide T' software, the 21i T control allows the operator to generate parts programs quickly and efficiently through easy to understand conversational style cycle prompts.

The GE Fanuc 21i T Control Feature...

- Direct Drawing Dimension Programming, simplifies programming of complex components by using simple radius, line and angle definitions
- Multi-repetitive Cycles G70-G76 for automatic finishing, roughing, drilling, threading and grooving cycles
- Toolpath Graphics for verification of part profile before and during machine cycle
- 10.4" Color LCD Display
- Inch/metric data input
- Absolute/incremental programming in the same block
- Programmable increments from 0.0001" to 999.9999"
- Multiple part program storage up to 63 programs
- 128K part program memory
- Sequence number search
- Background editing
- G10 offset value setting
- Constant surface speed/direct rpm programming
- Decimal point programming
- Optional stop/block delete
- Tool nose radius compensation
- 16 sets of tool offsets
- Menu programming format with operator prompts
- Work coordinate shift
- Absolute encoders
- Manual pulse generator
- RS 232 interface port
- 2 axes contouring with linear and circular interpolation
- Program test using graphical simulation for detecting errors in part programs

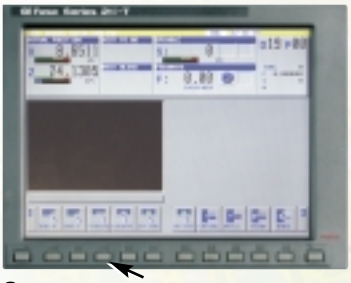
With 'Manual Guide' all procedures carried out manually or combined with cycles, can be learned step-by-step by the CNC control and repeated as required.

Use the field proven machining cycles for complex turning, drilling and milling operations.

- Bar machining
- Threading, ID/OD
- Grooving or face-turning, ID/OD
- Center drilling, drilling, boring, reaming, tapping

Using Cycles for Complex Machining is as Easy as 1-2-3-4

1 From main screen, press Soft Key under Cycle Cutting icon



2 Press Soft Key under desired Cycle icon (Thread Cycle Mode was chosen)

3 Press Soft Key under Inner or Outer icon

4 From the Thread Cycle, the operator inputs data in a well laid out input field, on screen text help with input is available

Available on request the..

FAGOR CNC 8055 TC Control

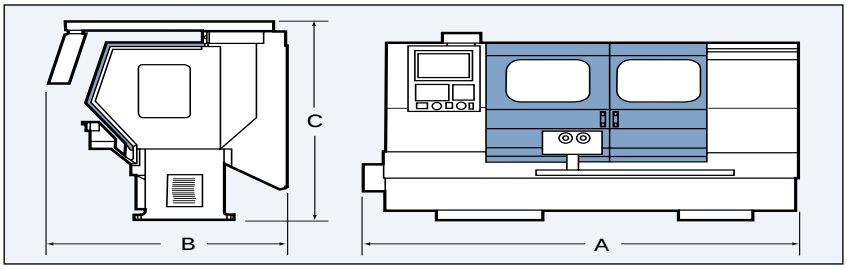
Easy to Operate, No Programming Skills Necessary

Specification:

Model	14"	15"	17"	20"	24"
Swing dia. over bed	14"	15.75"	17.72"	20.86"	24.4"
Swing over carriage	13.19"	14.56"	16.14"	18.2"	22.83"
Swing over cross slide	7.79"	8.26"	10.23"	12.4"	16.34"
Bed width	9.84"	11.81"	11.81"	13.78"	13.78"
Center height	7.09"	7.87"	8.86"	10.24"	12.2"
Front bearing dia.	4.33"	4.92"	4.92"	6.3"	6.3"
Main spindle bore	1.65"	2.04"	2.04"	3.15"	3.15"
Main spindle nose	D1-5	D1-6	D1-6	D1-8	D1-8
Main spindle taper	MT4	MT5	MT5	MT5	MT5
Spindle drive motor (Hp)	7.5	10	10	15	15
No. of spindle speeds	1	2	2	2	2
Variable spindle speeds Range #1 (rpm) Range #2 (rpm)	0-4000	0-700 700-3000	0-700 700-3000	0-650 650-2500	0-650 650-2500
X & Z axes rapid rate (in/min)	393	393	393	393	393
Crossslide width	6.3"	7"	7"	7.48"	7.48"
Cross slide travel	7.2"	10.24"	10.24"	11.8"	11.8""
X & Z axes feed rate (in/min)	0-276	0-276	0-276	0-276	0-276
Z axis ballscrew diameter	1.496"	1.496"	1.496"	1.496"	1.496"
Tailstock quill diameter	1.90"	2.28"	2.28"	2.83"	2.83"
Tailstock quill travel	5.51"	6.10"	6.10"	7.08"	7.08"
Tailstock quill taper	3MT	4MT	4MT	5MT	5MT
Feed force longitudinal (lb/f)	5005	5005	5005	7508	7508
Feed force transverse (lb/f)	2502	2502	2502	2502	2502
Coolant pump motor (Hp)	3/4	3/4	3/4	3/4	3/4

Due to ongoing design improvements specification and design are subject to change.

Dimensions, Center Distance and Weight



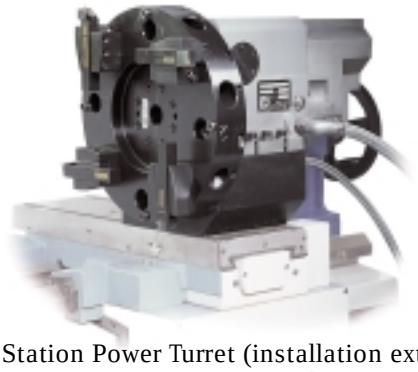
Model No.	A	B	C	Center Distance	Weight
CNC1440	113"	59.5"	61"	40"	3703 lbs
CNC1540	117.3"	63.4"	68.1"	40"	4806 lbs
CNC1560	159.7"	63.4"	68.1"	60"	5049 lbs
CNC1740	117.3"	63.4"	68.1"	40"	5247 lbs
CNC1760	159.7"	63.4"	68.1"	60"	5842 lbs
CNC2040	116.9"	67.7"	71.7"	40"	6338 lbs
CNC2060	156.3"	67.7"	71.7"	60"	6823 lbs
CNC2080	196.1"	67.7"	71.7"	80"	7285 lbs
CNC2440	116.9"	67.7"	71.7"	40"	7110 lbs
CNC2460	156.3"	67.7"	71.7"	60"	7198 lbs
CNC2480	196.1"	67.7"	71.7"	80"	7738 lbs

Standard Equipment

- Fully enclosed guarding
- Chip collection tray
- Electrical panel for incoming power
- Complete coolant system
- Automatic lubrication of slide ways
- Constant cutting speed including automatic speed change ranges
- Electronic handwheels for the X and Z axes
- Dynamic solid and trajectory graphics
- Profile editor
- Color screen
- Main spindle reducing bushing and fixed centers
- Toolpost
- Machine work light
- Instruction manual
- Wired for power turret

Optional Equipment

- Steady Rest
- Follower Rest
- Pneumatic Tailstock (factory installed)
- Hydraulic Tailstock with Power Unit (factory installed)
- Quick Change Toolpost with 4 Tool Holders
- Hydraulic and pneumatic chucks



- 8 Station Power Turret (installation extra)

- 4 Position Manual Quick Change Toolpost with 8 Positioning Indexes

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