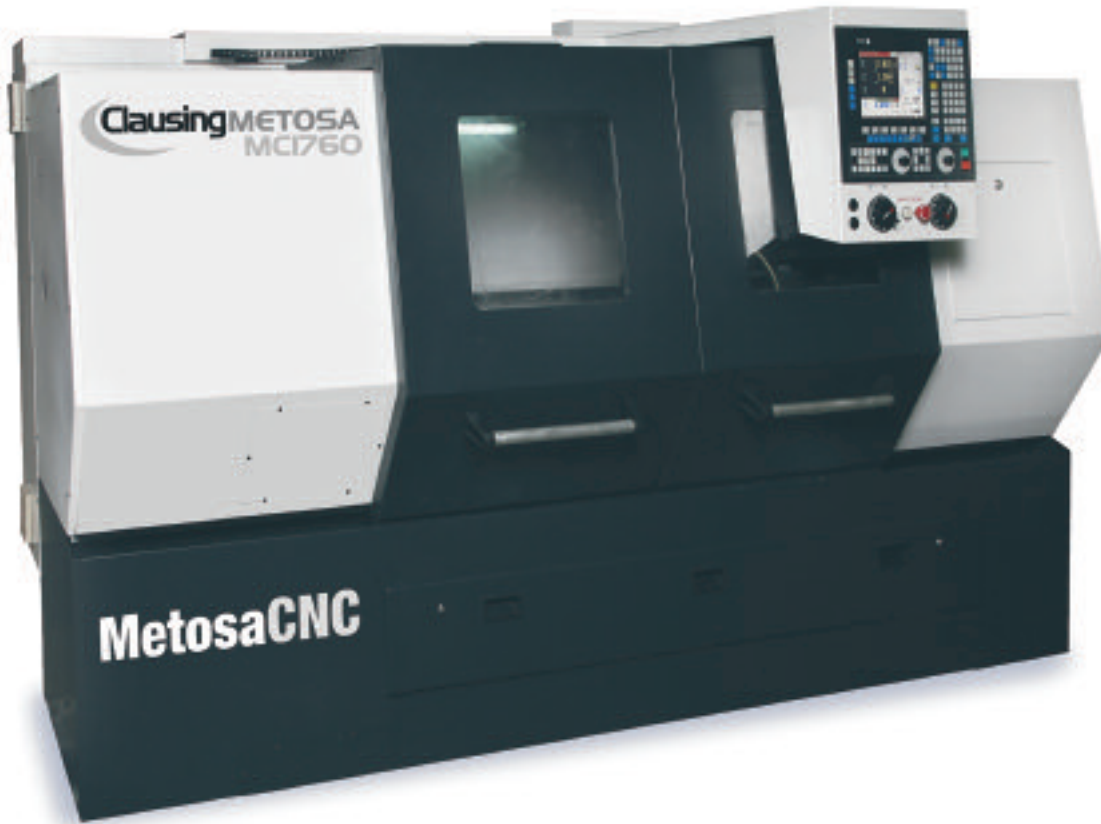


MetosaCNC A Low Cost, Versatile CNC Lathe

Clausing/Metosa CNC Lathes - the most versatile low-cost CNC lathe solution available. Designed and built with the features and power to handle your toughest jobs.



Clausing MetosaCNC Lathe Features

- **Fagor 8055i TC Control Package** offers great value and reliability with many standard features to simplify operation and increase productivity
- **USB Drive Port** for fast and reliable program uploads and downloads
- **Ethernet Communication Port** allows easy networking and part program transfers
- **Hardened and Ground** (43-47 Rockwell C) slides and guide ways for carriage and bed assures long life and allows high speed axis positioning
- **Rigid Main Spindle** with high precision angular contact bearings, pre-loaded and greased for life, guarantees extremely accurate machining
- **Center Driven Spindle** - drive belt runs between front and rear spindle bearings reducing spindle vibration and evenly spreads motor torque over the spindle bearings
- **Variable Speed AC Spindle Drive Motor** offers exceptional machining power
- **Rail Mounted Console** enables the control to be positioned for maximum operator convenience
- **Two MPG Handwheels** for easy manual operation
- **Auto Lubrication** maintains proper lubrication to all critical machine components
- **Built in Coolant System** with manual and programmable on-off
- **Precision Hardened and Ground Ballscrews** for smooth performance and accuracy
- **Interlocking Guards** for safety and a clean work environment
- **4-way Electric Auto Toolpost** for quick setups and automatic tool changes on 14" and 17" models
- **8 Station Disc Power Turret** for more tool flexibility and automatic tool changes on 20" models, (optional 14" & 17" models)
- **Constant Surface Speed** for increased tool performance and improved surface finishes

Fagor 8055i TC CNC Control

Features conversational programming with graphics, Rigid Tapping, Ethernet communication port, 4Mb memory and much more.



Fagor's user-friendly conversational CNC controls offer many powerful and versatile programming features. The extensive use of graphics makes programming and operation easy. Set-up time is minimized for both experienced and beginning operators. Both conversational and G-code commands can be mixed in a single part program.

The Fagor 8055i TC control allows editing one program while executing another. An on-board profile editor with graphic support allows complex contours to be generated with a minimal amount of information taken straight from the blue print – no need to trig or calculate data.

The tool inspection features allows the operator to interrupt the machining cycle to check tool condition, replace if necessary, reposition the axes and resume execution of the program at the point of interruption.

Control Features

- “Conversational” Programming
- On Board Profile Editor
- Multi Repetitive Cycles for automatic finishing, roughing, drilling, threading and grooving cycles
- 10.4” Color LCD display • Toolpath or solid graphics
- Programmable increments: 0.0001” min., 999.9999” max.
- Thread cutting leads: 0.00001” min., 4.0” max.
- Multiple part program storage • 4mb Memory
- Constant Surface Speed/Direct rpm programming
- Menu programming format with operator prompts
- Two axes linear and circular interpolation
- Tool inspection • Inch/metric data input
- Rigid Tapping • Text Search
- Full Alpha/Numeric Keyboard
- Background Editing • Thread repair cycle
- Decimal Point Programming
- Optional Stop and Block Skip
- Full ISO G-code programming
- Conversational cycles can mix with G-code

Clausing MetosaCNC Lathe and SmartLathe Standard Equipment

- Transformer for customers stated voltage
- Horizontal 4-position electric turret (non bi-directional) on 14" & 17" swing models
- 8 Station Power Turret on 20" swing models
- Complete enclosure and chip tray
- Constant Surface Speed

- Electronic handwheels
- Low Voltage worklight
- CE compliant • Fixed Centers
- Main Spindle reducing bushing
- Operating Manual
- Manual tailstock

- 8 Station Power Turret, optional on 14" & 17" swing models, standard on 20" swing models

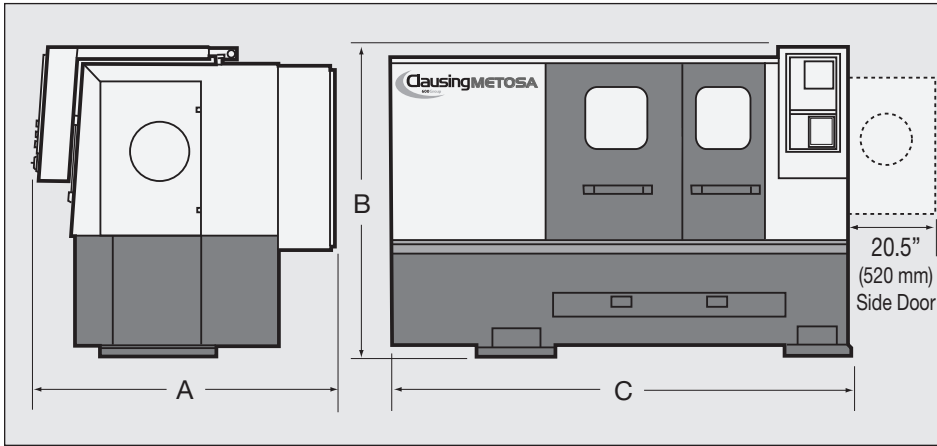


Clausing MetosaCNC Lathe and SmartLathe Specifications

Model	14" Swing	17" Swing	20" Swing
Capacity			
Swing dia. over bed	14.17" (360mm)	17.72" (450mm)	20.47" (520mm)
Swing over cross slide	7.48" (190mm)	10.23" (260mm)	12.20" (310mm)
Center height over bed	7.08" (180mm)	8.86" (225mm)	10.23" (260mm)
Swing over carriage	11.81" (300mm)	14.56" (370mm)	18.11" (460mm)
Construction			
Cross slide width	7" (178mm)	8.1" (206 mm)	8.1" (206 mm)
Type of cross slide ways	Dovetail	Dovetail	Dovetail
Bed width	9.84" (250mm)	11.81" (300mm)	13.77" (350mm)
Type of bed ways	V and flat	V and flat	V and flat
Spindle			
Spindle nose	D1-5	D1-6	D1-8
Spindle bore	1.65" (42mm)	2.54" (65mm)	3.14" (80mm)
Optional spindle bore	-	-	4.13" (105mm)
Spindle Bearing O.D.	4.33" (110mm)	5.9" (150mm)	7.1" (180mm)
Optional spindle bearing O.D.	-	-	8.2" (210mm)
Main spindle taper	4MT	5MT	5MT
Spindle speed	0-4000 rpm	0-3000 rpm	0-2500 rpm
Spindle drive	Variable AC	Variable AC	Variable AC
Spindle Drive Motor (cont./15min)	10/15 Hp (7.5/11 Kw)	12/15 Hp (9/11 Kw)	15/22 Hp (11/16 Kw)
Min. spindle speed for full power	500 rpm	235 rpm	235 rpm
Slide and Carriage			
X & Z axes feed rate in/min-(mm/min)	0"-275.5" (0-7000)	0"-275.5" (0-7000)	0"-275.5" (0-7000)
X & Z axes rapid rate in/min-(m/min)	394" (10)	394" (10)	394" (10)
X-axis ballscrew pitch	5mm	5mm	5mm
Z-axis ballscrew pitch	10mm	10mm	10mm
X-axis ballscrew diameter	.78" (20)	.78" (20)	.78" (20)
Z-axis ballscrew diameter	1.49" (38)	1.49" (38)	1.49" (38)
Crosslide travel	7.6" (195)	10" (260)	12" (310)
Positioning accuracy	±.0002 (.005mm)	±.0002 (.005mm)	±.0002 (.005mm)
Repeatability	±.0001 (.0025mm)	±.0001 (.0025mm)	±.0001 (.0025mm)
Turret			
Tooling type	4-way power block Square 3/4"	4-way power block Square 1"	8-station power disk Square 1"
Optional turret number of stations	8	8	-
Tail Stock			
Tailstock quill diameter	2.68" (68mm)	2.68" (68mm)	3.22" (82mm)
Tailstock quill travel	7.08" (180mm)	7.87" (200mm)	8.66" (220mm)
Tailstock taper	4MT	5MT	5MT

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
SL/MC1430	50" (1270mm)	67" (1700mm)	82" (2080mm)	30" (750mm)	2,866lbs. (1300kg)
SL/MC1440	50" (1270mm)	67" (1700mm)	93" (2357mm)	40" (1000mm)	3,484lbs. (1580kg)
SL/MC1740	53" (1327mm)	70" (1765mm)	101" (2547mm)	40" (1000mm)	4,021lbs. (1820kg)
SL/MC1760	53" (1327mm)	70" (1765mm)	120" (3047mm)	60" (1500mm)	4,792lbs. (2174kg)
SL/MC2040	59" (1490mm)	73" (1850mm)	123" (3124mm)	40" (1000mm)	6,338lbs. (2875kg)
SL/MC2060	59" (1490mm)	73" (1850mm)	143" (3632mm)	60" (1500mm)	6,823lbs. (3095kg)
SL/MC2080	59" (1490mm)	73" (1850mm)	167" (4241mm)	80" (2000mm)	7,385lbs. (3350kg)

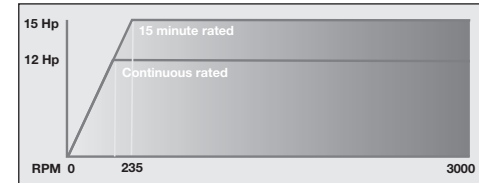
Power Charts

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

14" Swing



17" Swing



20" Swing

