



PRECISION MACHINE TOOLS

*Celebrating Over 105 Years
in the Machine Tool Business*



The Best Valued Machine Tools the World Has to Offer

SAWING GRINDING TURNING MILLING DRILLING

The Clausing Difference...

Clausing Industrial is a company which since 1911 has been providing quality machine tools for American Industry. Clausing is dedicated to excellence in machine tool distribution and support services. We have surveyed the global machine tool industry to identify and secure machine tools meeting our exacting quality standards for sales and distribution world wide.

The Clausing line of precision machine tools are the best machine tools the world has to offer at a very affordable price. All Clausing machine tools are built to our design and specifications, to meet the highest quality standards in the industry.

Our engineers and technicians are on hand at the manufacturing facility to assure a high standard of quality in the manufacturing process and that all machines are built to our design and specifications. All our machines are built of the highest quality materials and are CE compliant.

To meet our customers need for quality machine tool products, Clausing machine tools are not only inspected at the manufacturer but are inspected and tested at our state-of-the-art testing facility before shipping.

Our commitment to our customers extends long after the machine is installed. Machinery parts are subject to wear and must be replaced from time to time. Replacement parts must be readily available and reasonably priced. To meet this commitment we have established a separate Service Center, designed solely to support our customers' parts and service needs, with over 50,000 parts on hand, ready to ship within 24 hours. The Service Center has a staff of highly qualified service technicians, factory trained, to service all Clausing Value Machine Tools. Clausing Value products are distributed world wide through a network of 600 Group Distribution Companies.



Newly constructed 20,000 sq ft facility in Kalamazoo, Michigan USA



Newly State-of-the-art inspection and testing facility

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Clausing Drills are equipped with a Spindle

Guard that locks in an upright position, away from spindle nose, for easy tool changes.

**Style A
Floor Drill**

22" x 19.5" (559 x 495mm) Table, 66" (1676mm) column standard and 1/2" cored T-slots on 9" centers for table and base.

SEE MODELS

**Clausing 20" (508mm)
Variable Speed Drills**

Dial to the best rpm for the tool and material while the job is running, with a Clausing Two Speed Variable Speed Drill Press.

- 150 to 2000 rpm... speeds to drill large holes, small holes to spot face, counterbore and ream.
- A flip of the switch changes from low range to high range, perfect for production applications with quick change tooling.
- Greater capacity too with Clausing Two Speed, production rated 1" in cast iron, 3/4" in steel *with optional power feed.*

Handle more jobs ... better, faster with a Clausing 20" (LOW/HIGH drill press).

More Features for Superior Performance...

- **Heavy-duty precision head...** all bearing surfaces are precision bored simultaneously for exact alignment. Eight ball bearings support the drive and spindle, lower spindle bearing has a double row to absorb both radial and thrust loads.
- **3MT spindle...** with 6-1/2" travel, 2-1/2" diameter quill and thread adjustable depth stop.
- 4" column with 3/16" thick wall for great rigidity and accuracy.
- Precision ground 22" x 19" coolant trough table, handles large parts and fixtures.



**Style B
Head & Column
Assembly**

mounted on optional 20-501 Table Assembly*

SEE MODELS

*Shown with optional table assembly

**Powerful
Countershaft Drive**



- Three V-belts and a cog belt transmit positive power to the spindle.

Clausing's heavy-duty drive delivers full power to spindle at all speeds.

Clausing 20" (508mm) Drill Specifications & Electrical Options

Specifications:

Capacity, Hand Feed	1.25" (31.75mm) Dia.
Production Rated, with Optional Power Feed, 1-1/2 Hp Motor	1" (25.4mm) in Cast Iron 3/4" (19mm) in Mild Steel
Drill to Center of Circle	20" (508mm) Dia.
Spindle Nose	No. 3MT, 1.74" (44.2mm) OD
Spindle Travel	6.5" (165mm)
Column	Ground Steel, 4" (102mm) Dia., 3/8" (9.5mm) Thick Wall
Quill (Ground Steel)	2.5" (63.5mm) Dia.
Quill Return Spring, Capacity	40 lbs. (18kg)
TABLE, DRILL PRESS Style A	
Working Surface	22" x 19.5" (559 x 495mm)
Table slots	Two, 15.5" (394mm) Long, for .5" (12.7mm) T-bolt
Table Load Capacity	350 lbs. (159kg)
Table Travel, One Setting	20" (508mm)
Spindle to Table, Maximum	33.125" (841mm)
BASE, DRILL PRESS Style A	
Working Surface, Ground	15.5" x 13" (394 x 330mm)
Base T-slots	Two, 13" (330mm) Long, for .5" T-bolt
Spindle to Base, Maximum	43.375" (1102mm)
DRILL PRESS Style B	
Column Bracket to Center of Spindle	9.25" (235mm)
Column to Center of Spindle	10" (254mm)
Spindle to Table, Max. Distance	25.437" (646mm)
Column Length	43" (1092mm)
Min. Center to Center Distance	20" (508mm)
Motor ... NEMA Frame Sizes	182 and 184
Shipping Weights, Approximate, with Motors	
Drill Press Style A	630 lbs. (286kg)
Drill Press Style B	390 lbs. (177kg)

FLOOR MODELS FURNISHED with: No. 3MT spindle; table elevating mechanism; switch; belt guard; spindle guard. Motors and switches are installed and wired, ready to connect to power.

Design and specifications are subject to change without notice.

Infinitely Variable Speed Countershaft Drive

MODEL SELECTION CHART	Style A	Style B
Motor Furnished	Floor Drill 22" x 19" Table	Head & Column Assembly
Two Speed Infinitely Variable Speeds: 150-2000 rpm 1-1/2 - 3/4 Hp		
2-speed, 3-phase, 220v*	2276	2286-300
2-speed, 3-phase, 440v*	2277	2287-300
Infinitely Variable Speeds: 200-1300 rpm 1-1/2 Hp		
1½ Hp, 3-ph, 1140 rpm	2275	2285-300
Infinitely Variable Speeds: 300-2000 rpm 1-1/2 Hp		
1½ Hp, 1-ph, 1725 rpm	2272	2282-300
1½ Hp, 3-ph, 1725 rpm	2274	2284-300

*Motor, 1½-¾ hp 1800/900 rpm, 60hz. SPECIFY VOLTAGE... When voltage is not specified, motor will be wired on lower voltage. Motors are ball bearing. 3-phase single speed motors are 208/220/440v, 60hz. Single-phase motors are capacitor-start, 115/230v, 60hz.

**Head and Column Models Furnished with: No. 3MT spindle, head elevating mechanism, column, mounting flange, switch and belt guard. Motor and switches are installed and wired, ready to connect to power.

Optional Electrical Equipment*

For Factory Installation Only

NOTE: Magnetic starters protect motor against overload, low and no voltage-Thermal Overload Unit NOT required.

For Single Speed Motor No. 2371 MAGNETIC STARTER.*

Protects motor against overload, low and no voltage. Motor will not automatically restart when power is restored. Transformer provides 110v at start/stop push button. 6 lbs.

No. 2371-15 MAGNETIC STARTER for 3-phase. Includes disconnect switch and 110 volt push-buttons.

No. 2377 REVERSING DRUM SWITCH for 1 & 3-phase.* Protects motor against overload, low and no voltage. Motor will not automatically restart when power is restored. Transformer provides 110v at start/stop push button switch. 6 lbs.

For 2-Speed Motor

No. 2375 MAGNETIC STARTER and REVERSING DRUM SWITCH, with reverse on low speed. * Protects motor against overload, low and no voltage. Motor will not automatically restart when power is restored. Transformer provides 110v at start/stop push button switch. 6 lbs.

*Controls for field installation, and for single phase ... price on application.

Overall Dimensions	Width	Depth	Height
Drill Press Style A	22" (559mm)	36" (914mm)	69" (1753mm)
Drill Press Style B	20" (508mm)	3.25" (870mm)	51.625" (1311mm)



****Style B
Head &
Column
Assembly**
43" (1092mm)
Column Standard

Clausing 20" (508mm) Multiple Spindle Drill Presses

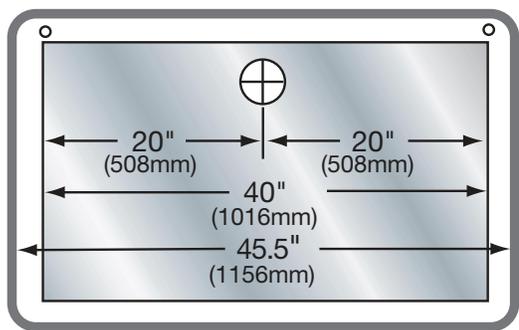
Clausing multiple spindle drills can be custom built with up to four 20" heads. When ordering a multiple spindle drill press use the table model number below, plus the appropriate head and column assemblies for the corresponding number of heads.

Mix and match any number of drill heads as your requirements demand. **Example:** If you wish to have a 3 spindle drill press with three-20" heads you would order (1) 20-503 table assembly and (3) 2286-300 20" head assemblies. Tell us the order to mount the heads and you have the 3-spindle drill you require.

If you have special requests, contact us for a quotation. Special orders priced on application.

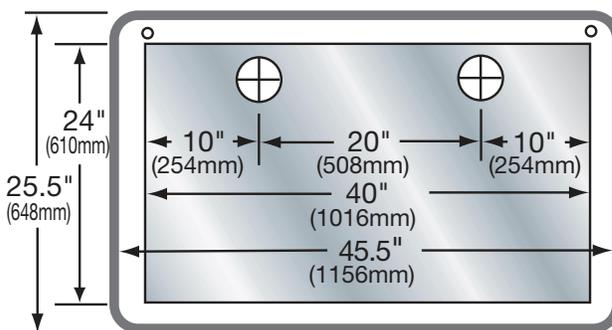


20-501 • 1-Spindle

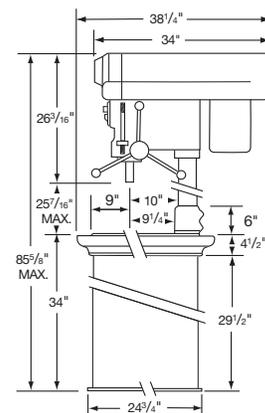


One Piece Table, Two Legs Furnished

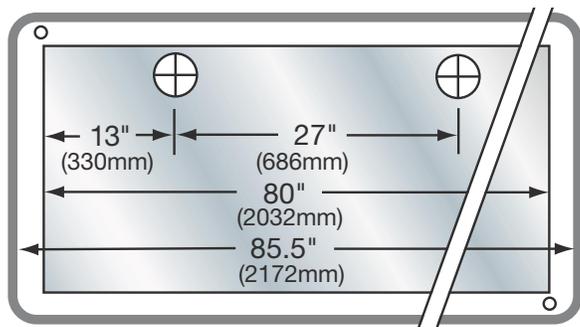
20-502 • 2-Spindle



One Piece Table, Two Legs Furnished

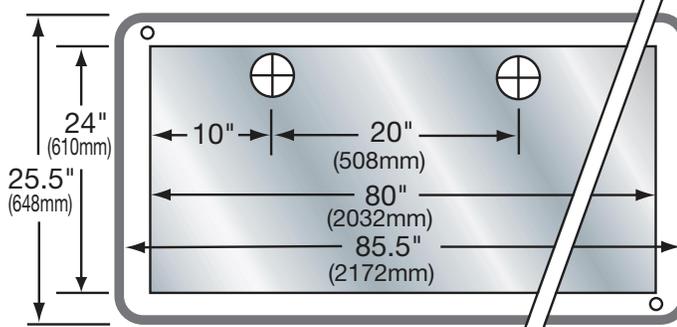


20-503 • 3-Spindle



One Piece Table, Two Legs Furnished

20-504 • 4-Spindle



One Piece Table, Two Legs Furnished

Clausing 20" (508mm) Drill Accessories

Programmable Macro-Driller Power Feed



No. 2215-1 or 2215-1/440 (for 440v machines)

The Programmable Macro-Driller can be installed on any model of Clausing 20" drill press, either at time of purchase or as a retrofit. It allows you to automate hole drilling and is most effective on deep hole 'Peck' drilling. Peck drilling is used to prevent shavings from tangling with the drill bit and breaking it. The up and down motion of 'peck drilling' allows the drill to go slightly deeper into the material then with drawing to pull the chips out of the hole. The Programmable Macro-Driller is easy to program by using the keypad.

Programmable Macro-Driller Specification

Quill Travel:	6.4" (62mm)
Feedrate Range:	0.01 - 120 ipm (0.25 - 3000mm/min)
Peck Steps:	0.001" - 6.4" (0.02 - 162mm)
Maximum Pecks per Hole:	1400
Accurate Hole Depth:	±0.001" (0.02mm)
Maximum Quill Force:	1250 lbs. (568kg)
LED Numerals:	5/8" (15.9mm) High
Control Power:	220/230 volt, 50/60 Hz Single or Three Phase
Max. Drilling Capacity:	3/4" (19mm) in Cast Iron 5/8" (16mm) in Mild Steel

Electric Foot Control

No. 302 Electric Foot Control

No. 302R1 Electric Foot Control with reversing drum switch for single speed drill

No. 302R2 Electric Foot Control with reversing drum switch for two speed drills Start and stop drill from foot pedal



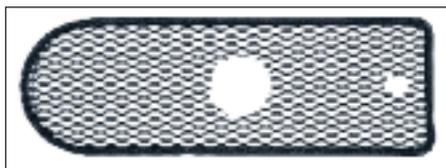
Columns

No. 2294-AMT 66" (1676mm) Column in lieu of 43" (1092mm) Column 78 lbs. (35kg)

No. 2349-AMT 90" (2286mm) Column in lieu of 66" (1676mm) Column 107 lbs. (49kg)

Mesh Guard

No. SK-208
Top Mesh
Belt Guard



Coolant System

No. 7044 Coolant System. 5 gallon capacity, 110 volt, 60 cycle single-phase motor, for single spindle drills. Flexible nozzle with regulator valve, plastic hose, clamps, fittings, cord and plug. 18 lbs.

No. 7044-2 Coolant System. For two (2)

spindle drills. 5 gallon capacity, 110 volt, 60 cycle single-phase motor. Complete with all valves, hose, fittings, cord and plug.

No. 7044-3 Coolant System. For three (3) spindle drills. Like No. 7044-2 except arranged for 3 spindles.

No. 7044-4 Coolant System. For four (4) spindle drills. Like No. 7044-3 except arranged for 4 spindles.



Drill Press Lamp

No. 7022 Lamp.

Cool burn-proof shade, aluminum reflector, switch, 19" (483mm) flexible arm, magnetic base, 6' (1.5m) cord and plug.



Drill Press LED Light

No. 20-LED LED Light

The New Clausing 120v LED Work Light mounts in the slot under the Drill Head behind the spindle.

The three ultra bright LED lights provides ample lighting over the entire work area.



Drill Chuck and Arbor



No. 1897 Key-Type Chuck. Takes 3/16" (4.8mm) to 3/4" (19mm) Drills. Adapts to 3MT Spindle with No. 1898 arbor. 4 lbs. (1.8kg)

No. 1898 Arbor. Adapts No. 1897 to 3MT Spindle. 1 lb. (.5kg)

Electronic DRO

No. 20-900



- Easy to read LCD display
- Data output port
- 0" - 6" measuring range
- 0.005" (0.01mm) resolution
- 59 in./sec. measuring speed

Clausing/Ibarmia Series T Geared-drive Round Column Drills

**A heavy-duty Industrial Drilling Machine,
designed for easy operation with manual feed**

Standard Features and Equipment:

- Drilling capacity in steel: 1" (25mm) maximum
- Drilling capacity in cast iron: 1.18" (30mm) maximum
- Tapping capacity in steel: .71" (18mm) maximum
- Tapping capacity in cast iron: .87" (22mm) maximum
- Depth scale and adjustable depth stop
- **"RS"** models are equipped with automatic feed reversing system for tapping
- Thermomagnetic switch
- Spindle reversing switch
- Automatic tool ejector
- Emergency STOP
- High/Low speed range selector
- Drill guard with microswitch

Optional Equipment:

- Floor Cabinet with Shelves
- Floor Cabinet with Drawer and Door
- Rotating Table (TM/TL Models)
- Cross Slide Table
- Cycle Start Foot Pedal
- Foot Pedal for Reversing
- Work Light with Magnetic Base
- Coolant System with Independent Container



TL25



*Optional
PKB
Cabinets*



TM25



TS25

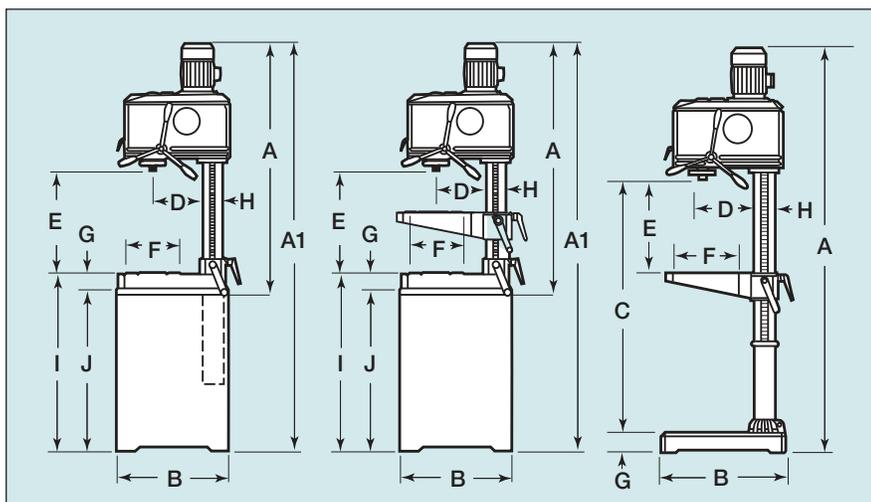
Capacities, Specifications and Dimensions:

Standard Models Auto feed reversing for tapping models	TS25 TS25RS	TM25 TM25RS	TL25 TL25RS
Capacities:			
Maximum Drilling Capacity in Steel	1" (25mm)	1" (25mm)	1" (25mm)
Maximum Drilling Capacity in Cast Iron	1.18" (30mm)	1.18" (30mm)	1.18" (30mm)
Maximum Tapping Capacity in Steel	.71" (18mm)	.71" (18mm)	.71" (18mm)
Maximum Tapping Capacity in Cast Iron	.87" (22mm)	.87" (22mm)	.87" (22mm)
Drill Head:			
Spindle Taper	3MT	3MT	3MT
Quill Diameter	2.44" (62mm)	2.44" (62mm)	2.44" (62mm)
Spindle Travel (Drilling Depth)	4.72" (120mm)	4.72" (120mm)	4.72" (120mm)
Main Motor Power	1/1.5 hp (.73/1.1 Kw)		
No. of Speeds (See Speed Charts)	8	8	8
Dimensions and Weights:			
Height (A)	47.6" (1210mm)	48.4" (1230mm)	75.8" (1925mm)
Height (A1)	79.1" (2010mm)	79.9" (2030mm)	-
Base: Length x Width (B)	22" x 15" (560x380mm)	22" x 15" (560x380mm)	24" x 15" (600x380mm)
Base to Spindle (C)	See (E)	20.9" (530mm)	47.6" (1210mm)
Spindle Center to Column (D)	9.84" (250mm)	9.84" (250mm)	9.84" (250mm)
Spindle to Table (E)			
Minimum	4.33" (110mm)	1.18" (30mm)	4.13" (105mm)
Maximum	19.7" (500mm)	12.6" (320mm)	25.2" (640mm)
Worktable: Length x Width (F)	-	10.6" x 11.8" (270 x 300mm)	
Base Height (G)	3.1" (80mm)	3.1" (80mm)	3.7" (95mm)
Column Diameter (H)	3.94" (100mm)	3.94" (100mm)	3.94" (100mm)
Floor to Top of Base (I)	34.6" (880mm)	34.6" (880mm)	-
Cabinet Height (J)	31.5" (800mm)	31.5" (800mm)	-
Net Weight	298 lbs. (135kg)	364 lbs. (165kg)	408 lbs. (185kg)
Shipping Weight	353 lbs. (160kg)	419 lbs. (419kg)	496 lbs. (225kg)
Shipping Dimension (L x W x H)	20" x 32" x 55" (.5 x .8 x 1.4m)	20" x 32" x 55" (.5 x .8 x 1.4m)	20" x 36" x 75" (.5 x .9 x 2.1m)

Standard Motor: 1800/3600 rpm

Spindle Speeds (rpm)

90-192-300-504-612-1020-1740-3360



Optional Cross Slide Table



SZ32

Clausing/Ibarmia Series Z32 Belt-drive Round Column Drills

With Manual or Mechanical Clutch

Select the Z series step pulley or variable speed belt-drive Industrial Drilling Machine that is right for the job. The SZ32 model is equipped with manual feed and step pulley drive and the AZ32V model is equipped with a mechanical clutch and mechanical variable speed drive.

Standard Features and Equipment:

- Drilling capacity in steel: up to 1.26" (32mm) maximum
- Drilling capacity in cast iron: up to 1.38" (35mm) maximum
- Tapping capacity in steel: up to .87" (30mm) maximum
- Tapping capacity in cast iron: up to 1.18" (30mm) maximum
- Automatic feed reversing system for tapping on "RS" models
- Machine base with 2 T-slots, coolant tank and pump
- Large work table with 3 T-slots
- Feed crank wheel for manual feed
- Depth scale and adjustable depth stop
- Automatic tool ejector
- Spindle reversing switch
- Work light
- Built-in low voltage electrical equipment in machine head
- Emergency STOP
- Drill guard with microswitch

Optional Equipment:

- Rotating Table
- Rotating Table and Tilting Support
- Digital rpm Counter (for "V" Models)
- Union, Dragging Cone and Assembly for Multi-spindle Head
- Wheeled Base
- Cross Slide Table
- Cycle Start Foot Pedal
- Foot Pedal for Reversing
- Work Light with Magnetic Base
- Coolant System with Independent Container



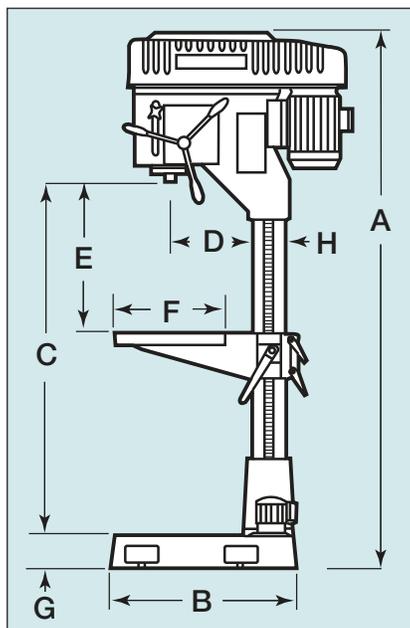
Optional Cross Slide Table



Optional Rotating Table

Capacities, Specifications and Dimensions:

Standard Models Auto feed reversing for tapping models	SZ32	AZ32V AZ32VRS
Capacities:		
Maximum Drilling Capacity in Steel	1.26" (32mm)	1.26" (32mm)
Maximum Drilling Capacity in Cast Iron	1.38" (35mm)	1.38" (35mm)
Maximum Tapping Capacity in Steel	.87" (22mm)	.87" (22mm)
Maximum Tapping Capacity in Cast Iron	1.18" (30mm)	1.18" (30mm)
Drill Head:		
Spindle Taper	3MT	3MT
Quill Diameter	2.56" (65mm)	2.56" (65mm)
Spindle Travel (Drilling Depth)	5.91" (150mm)	5.91" (150mm)
Main Motor Power	1.2/1.8 hp (.9/1.3kw)	1.2/1.8 hp (.9/1.3kw)
Coolant Pump Motor Power	.1 hp (.07kw)	.1 hp (.07kw)
Number of Speeds	10	Infinitely Variable
Number of Automatic Feeds	-	2
Auto Feed Range: in./rev. (mm/rev)	-	.0039/.0079 (0.1-0.2)
Dimensions and Weights:		
Height (A)	76.8" (1950mm)	76.8" (1950mm)
Base: Length x Width (B)	26.8" x 16.5" (680 x 420mm)	26.8" x 16.5" (680 x 420mm)
Base to Spindle (C)	50.59" (1285mm)	50.59" (1285mm)
Spindle Center to Column (D)	11.81" (300mm)	11.81" (300mm)
Spindle to Table (E)		
Minimum	6.7" (170mm)	6.7" (170mm)
Maximum	32.87" (835mm)	32.87" (835mm)
Worktable: Length x Width (F)	15.75" x 18.9" (400 x 480mm)	15.75" x 18.9" (400 x 480mm)
Base Height (G)	4.72" (120mm)	4.72" (120mm)
Column Diameter (H)	4.92" (125mm)	4.92" (125mm)
Net Weight	573 lbs. (260kg)	639 lbs. (290kg)
Shipping Weight	683 lbs. (310kg)	750 lbs. (340kg)
Shipping Dimension (L x W x H)	24" x 44" x 91" (.6 x 1.1 x 2.3m)	24" x 44" x 91" (.6 x 1.1 x 2.3m)



Standard Motor: 2 Speed 900/1800 rpm

Model	Spindle Speeds (rpm)
SZ32	900 rpm: 170-265-415-650-1035 1800 rpm: 340-530-830-1300-2070
AZ32V	Infinitely Variable: 96-1405 rpm

Standard Fixed Table Models

Model	Description (Dimension See Page 29)
1SZ32	23.6" (600mm) Drill with Fixed Table
1AZ32V	23.6" (600mm) Drill with Fixed Table
1AZ32VRS	23.6" (600mm) Drill with Fixed Table and Tapping System

“RS” models are equipped with automatic feed reversing system for tapping.



AZ40

Clausing/Ibarmia Series Z 34/40 Belt-drive Round Column Drills

***With Manual, Mechanical Clutch or
Electromagnetic Clutch Feed Control***

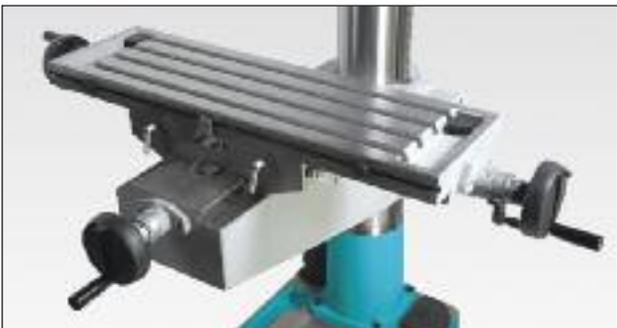
Select the Z series electronic variable speed belt-drive Industrial Drilling Machine that is right for the job. SZ models are equipped with manual feed, AZ models are equipped with a mechanical clutch automatic feed control and the BZ models are equipped with electromagnetic automatic feed control.

Standard Features and Equipment:

- Drilling capacity in steel: up to 1.57" (40mm) maximum
- Drilling capacity in cast iron: up to 1.77" (45mm) maximum
- Tapping capacity in steel: up to 1.30" (33mm) maximum
- Tapping capacity in cast iron: up to 1.54" (39mm) maximum
- Automatic feed reversing system for tapping
- Digital rpm counter
- Machine base with 2 T-slots, coolant tank and pump
- Large rotating work table with 3 T-slots
- Feed crank wheel for manual feed
- Depth scale and adjustable depth stop
- Automatic tool ejector
- Spindle reversing switch
- Work light
- Built-in low voltage electrical equipment in machine head
- Emergency STOP
- Drill guard with microswitch

Optional Equipment:

- Rotating Table
- Rotating Table and Tilting Support
- Union, Dragging Cone and Assembly for Multi-spindle Head
- Wheeled Base
- Cross Slide Table
- Cycle Start Foot Pedal
- Foot Pedal for Reversing
- Work Light with Magnetic Base
- Coolant System with Independent Container



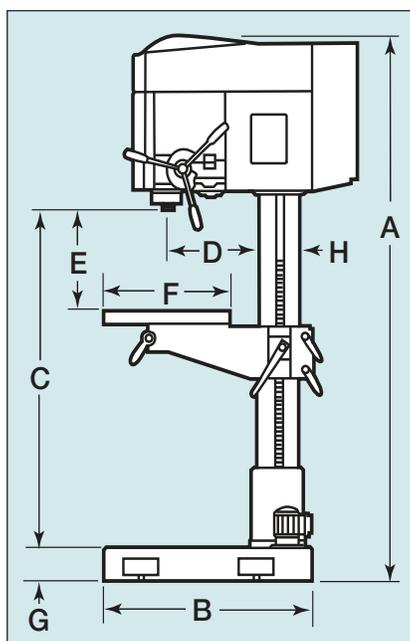
Optional Cross Slide Table



Optional Rotating Table

Capacities, Specifications and Dimensions:

Standard Models	SZ/AZ/BZ34	SZ/AZ/BZ40
Capacities:		
Maximum Drilling Capacity in Steel	1.34" (34mm)	1.57" (40mm)
Maximum Drilling Capacity in Cast Iron	1.57" (40mm)	1.77" (45mm)
Maximum Tapping Capacity in Steel	1.06" (27mm)	1.30" (33mm)
Maximum Tapping Capacity in Cast Iron	1.30" (33mm)	1.54" (39mm)
Drill Head:		
Spindle Taper	4MT	4MT
Quill Diameter	2.95" (75mm)	2.95" (75mm)
Spindle Travel (Drilling Depth)	5.9" (150mm)	7.09" (180mm)
Main Motor Power	3 hp (2.2kw)	4 hp (3kw)
Coolant Pump Motor Power	.1 hp (.07kw)	.1 hp (.07kw)
Spindle Speeds (Electronic Variable Speed)	100-2000 rpm	100-2000 rpm
Number of Automatic Feeds	3	3
Auto Feed Range: in./rev. (mm/rev)	.0039/.0079/.0118 (0.1-0.2-0.3)	.0039/.0079/.0118 (0.1-0.2-0.3)
Dimensions and Weights:		
Height (A)	76.5" (1945mm)	76.8" (1950mm)
Base: Length x Width (B)	29.1" x 16.2" (740 x 412mm)	31.5" x 18.8" (800 x 476mm)
Base to Spindle (C)	48.4" (1230mm)	48.4" (1230mm)
Spindle Center to Column (D)	11.81" (300mm)	13.78" (350mm)
Spindle to Table (E)		
Minimum	1.97" (50mm)	1.97" (50mm)
Maximum	28.5" (725mm)	27.2" (690mm)
Worktable: Length x Width (F)	15.75" x 18.9" (400 x 480mm)	18.9" x 22.05" (480 x 560mm)
Base Height (G)	4.72" (120mm)	4.72" (120mm)
Column Diameter (H)	4.92" (125mm)	5.91" (150mm)
Net Weight	794 lbs. (360kg)	1,014 lbs. (460kg)
Shipping Weight	904 lbs. (410kg)	1,124 lbs. (510kg)
Shipping Dimension (L x W x H)	92" x 24" x 42" (2.34 x .61 x 1.06m)	92" x 24" x 42" (2.34 x .61 x 1.06m)



Standard Motor: 1800 rpm

Model	Spindle Speeds (rpm)
AZ34	Electronic Variable: 100-2000 rpm
AZ40	Electronic Variable: 100-2000 rpm

Optional Spindle Motors

Motor	Speed Range
1800-3600 rpm	340-4140 rpm

Standard Fixed Table Models

Model	Description (Dimension see page 29)
1SZ34	23.6" (600mm) Drill with Fixed Table and Tapping System
1AZ34	23.6" (600mm) Drill with Fixed Table and Tapping System
1BZ34	23.6" (600mm) Drill with Fixed Table and Tapping System
1SZ40	23.6" (600mm) Drill with Fixed Table and Tapping System
1AZ40	23.6" (600mm) Drill with Fixed Table and Tapping System
1BZ40	23.6" (600mm) Drill with Fixed Table and Tapping System



AX32

Clausing/Ibarmia Series X32 Geared-drive Round Column Drills

With Manual or Mechanical Clutch

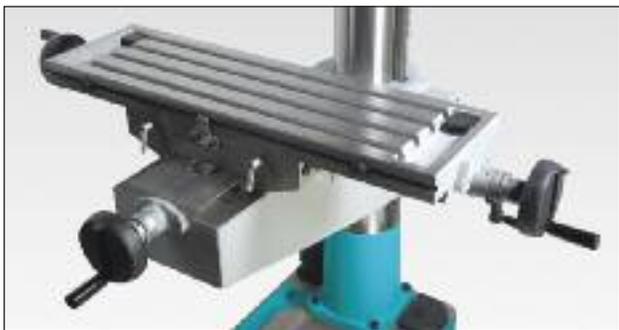
The X series range of easy to operate Industrial Drilling Machines offer a variety of capacities and feeds. Engineered for a long work life the X series drills are a great value. SX models are equipped with manual feed, AX models are equipped with a mechanical clutch automatic feed control.

Standard Features and Equipment:

- Drilling capacity in steel: up to 1.26" (32mm) maximum
- Drilling capacity in cast iron: up to 1.38" (35mm) maximum
- Tapping capacity in steel: up to .87" (18mm) maximum
- Tapping capacity in cast iron: up to 1.18" (22mm) maximum
- Automatic feed reversing system for tapping on "RS" models
- Hardened and ground high quality steel gears
- Speed plate and selecting levers on front of head
- Gear box lubrication by automatic pump
- Machine base with 2 T-slots, coolant tank and pump
- Large work table with 3 T-slots
- Feed crank wheel for manual feed
- Depth scale and adjustable depth stop
- Automatic tool ejector
- Work light
- Built-in low voltage electrical equipment in machine head
- Emergency STOP
- Drill guard with microswitch

Optional Equipment:

- Rotating Table
- Rotating Table and Tilting Support
- Automatic Pitch Control Tapping with Single Speed Brake Motor
- Automatic Pitch Control Tapping with Pneumatic Rapid Approach
- Master Guide Spindle and Nut Set for Automatic Pitch Control Tapping
- Union, Dragging Cone and Assembly for Multi-spindle Heads
- Wheeled Base
- Cross Slide Table
- Cycle Start Foot Pedal • Foot Pedal for Reversing
- Work Light with Magnetic Base
- Coolant System with Independent Container



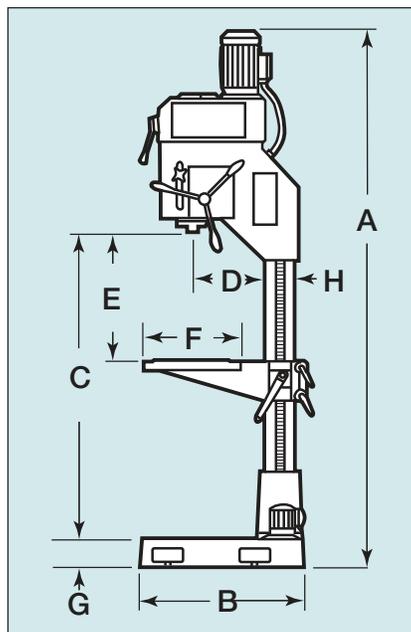
Optional Cross Slide Table



Optional Rotating Table

Capacities, Specifications and Dimensions:

Standard Models Auto feed reversing for tapping models	SX32 SX32RS	AX32 AX32RS
Capacities:		
Maximum Drilling Capacity in Steel	1.26" (32mm)	1.26" (32mm)
Maximum Drilling Capacity in Cast Iron	1.38" (35mm)	1.38" (35mm)
Maximum Tapping Capacity in Steel	.87" (22mm)	.87" (22mm)
Maximum Tapping Capacity in Cast Iron	1.18" (30mm)	1.18" (30mm)
Drill Head:		
Spindle Taper	3MT	3MT
Quill Diameter	2.56" (65mm)	2.56" (65mm)
Spindle Travel (Drilling Depth)	5.91" (150mm)	5.91" (150mm)
Main Motor Power	1.5 hp (1.1kw)	1.5 hp (1.1kw)
Coolant Pump Motor Power	.1 hp (.07kw)	.1 hp (.07kw)
Number of Speeds	9	9
Number of Automatic Feeds	-	2
Auto Feed Range: in./rev. (mm/rev)	-	.0039/.0079 (0.1-0.2)
Dimensions and Weights:		
Height (A)	87.4" (2220mm)	87.4" (2220mm)
Base: Length x Width (B)	26.8" x 16.5" (680 x 420mm)	26.8" x 16.5" (680 x 420mm)
Base to Spindle (C)	50.39" (1280mm)	50.39" (1280mm)
Spindle Center to Column (D)	11.81" (300mm)	11.81" (300mm)
Spindle to Table (E)		
Minimum	5.71" (145mm)	5.71" (145mm)
Maximum	31.89" (810mm)	31.89" (810mm)
Worktable: Length x Width (F)	15.75" x 18.9" (400 x 480mm)	15.75" x 18.9" (400 x 480mm)
Base Height (G)	4.72" (120mm)	4.72" (120mm)
Column Diameter (H)	4.92" (125mm)	4.92" (125mm)
Net Weight	694 lbs. (315kg)	728 lbs. (330kg)
Shipping Weight	794 lbs. (360kg)	827 lbs. (375kg)
Shipping Dimension (L x W x H)	24" x 44" x 91" (.6 x 1.1 x 2.3m)	24" x 44" x 91" (.6 x 1.1 x 2.3m)



Standard Motor: 1800 rpm

Spindle Speeds SX32, AX32

123-180-257-295-432-617-820-1200-1714 rpm

Optional Spindle Motors

Motor	Speed Range
1200 rpm	63-1000 rpm
3600 rpm	250-3480 rpm
900/1800 rpm	63-1000 rpm
1800-3600 rpm	123-3428 rpm

Standard Fixed Table Models

Model	Description (Dimension See Page 29)
1SX32	23.6" (600mm) Drill with Fixed Table
1SX32RS	23.6" (600mm) Drill with Fixed Table and Tapping System
1AX32	23.6" (600mm) Drill with Fixed Table
1AX32RS	23.6" (600mm) Drill with Fixed Table and Tapping System

"RS" models are equipped with automatic feed reversing system for tapping.



BX34

Clausing/Ibarmia Series X 34/40 Geared-drive Round Column Drills

***With Manual, Mechanical Clutch or
Electromagnetic Clutch Feed Control***

The X series range of easy to operate Industrial Drilling Machines offer a variety of capacities and feeds. Engineered for a long work life the X series drills are a great value. SX models are equipped with manual feed, AX models are equipped with a mechanical clutch automatic feed control and the BX models are equipped with electromagnetic automatic feed control.

Standard Features and Equipment:

- Drilling capacity in steel: up to 1.57" (40mm) maximum
- Drilling capacity in cast iron: up to 1.77" (45mm) maximum
- Tapping capacity in steel: up to 1.30" (33mm) maximum
- Tapping capacity in cast iron: up to 1.54" (39mm) maximum
- Automatic feed reversing system for tapping on "RS" models
- Hardened and ground high quality steel gears
- Speed plate and selecting levers on front of head
- Gear box lubrication by automatic pump
- Machine base with 2 T-slots, coolant tank and pump
- Large rotating work table with 3 T-slots
- Feed crank wheel for manual feed
- Depth scale and adjustable depth stop
- Automatic tool ejector
- Work light
- Built-in low voltage electrical equipment in machine head
- Emergency STOP
- Drill guard with microswitch

Optional Equipment:

- Rotating Table and Tilting Support
- Automatic Pitch Control Tapping with Single Speed Brake Motor
- Automatic Pitch Control Tapping with Pneumatic Rapid Approach
- Master Guide Spindle and Nut Set for Automatic Pitch Control Tapping
- Union, Dragging Cone and Assembly for Multi-spindle Heads
- Wheeled Base
- Cross Slide Table • Cycle Start Foot Pedal
- Foot Pedal for Reversing • Work Light with Magnetic Base
- Coolant System with Independent Container



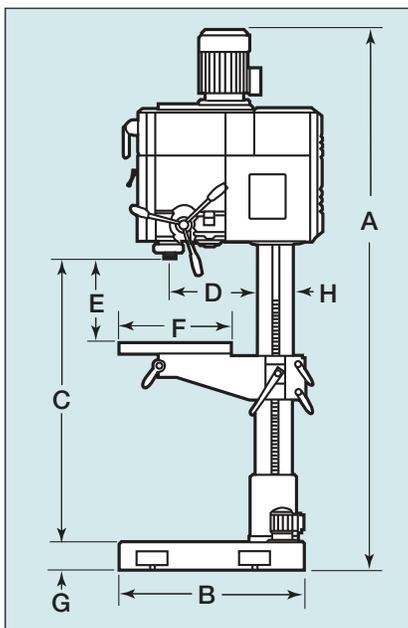
Optional Cross Slide Table



Optional Rotating Table

Capacities, Specifications and Dimensions:

Standard Models Auto feed reversing for tapping models	SX/AX/BX34 SX/AX/BX34RS	SX/AX/BX40 SX/AX/BX40RS
Capacities:		
Maximum Drilling Capacity in Steel	1.34" (34mm)	1.57" (40mm)
Maximum Drilling Capacity in Cast Iron	1.57" (40mm)	1.77" (45mm)
Maximum Tapping Capacity in Steel	1.06" (27mm)	1.30" (33mm)
Maximum Tapping Capacity in Cast Iron	1.30" (33mm)	1.54" (39mm)
Drill Head:		
Spindle Taper	4MT	4MT
Quill Diameter	2.95" (75mm)	2.95" (75mm)
Spindle Travel (Drilling Depth)	5.9" (150mm)	7.09" (180mm)
Main Motor Power	2 hp (1.5kw)	3 hp (2.2kw)
Coolant Pump Motor Power	.1 hp (.07kw)	.1 hp (.07kw)
Number Speeds	9	9
Number of Automatic Feeds	3	3
Auto Feed Range: in./rev. (mm/rev)	.0039/.0079/.0118 (0.1-0.2-0.3)	.0039/.0079/.0118 (0.1-0.2-0.3)
Dimensions and Weights:		
Height (A)	86.4" (2195mm)	90" (2285mm)
Base: Length x Width (B)	29.1" x 16.2" (740 x 412mm)	31.5" x 18.8" (800 x 476mm)
Base to Spindle (C)	48.4" (1230mm)	48.4" (1230mm)
Spindle Center to Column (D)	11.81" (300mm)	13.78" (350mm)
Spindle to Table (E)		
Minimum	1.97" (50mm)	1.97" (50mm)
Maximum	28.5" (725mm)	27.2" (690mm)
Worktable: Length x Width (F)	15.75" x 18.9" (400 x 480mm)	18.9" x 22.05" (480 x 560mm)
Base Height (G)	4.72" (120mm)	4.72" (120mm)
Column Diameter (H)	4.92" (125mm)	5.91" (150mm)
Net Weight	882 lbs. (400kg)	1,081 lbs. (490kg)
Shipping Weight	992 lbs. (450kg)	1,190 lbs. (540kg)
Shipping Dimension (L x W x H)	92" x 24" x 42" (2.34 x .61 x 1.06m)	92" x 24" x 42" (2.34 x .61 x 1.06m)



Standard Motor: 1800 rpm

Model

Spindle Speeds SX/AX/BX34 & SX/AX/BX40

158-233-332-383-559-799-1060-1555-2222 rpm

Standard Fixed Table Models

Model	Description (Dimension see page 29)
1SX34	23.6" (600mm) Drill with Fixed Table
1SX34RS	23.6" (600mm) Drill with Fixed Table and Tapping System
1AX34	23.6" (600mm) Drill with Fixed Table
1AX34RS	23.6" (600mm) Drill with Fixed Table and Tapping System
1BX34	23.6" (600mm) Drill with Fixed Table
1BX34RS	23.6" (600mm) Drill with Fixed Table and Tapping System
1SX40	27.5" (700mm) Drill with Fixed Table
1SX40RS	27.5" (700mm) Drill with Fixed Table and Tapping System
1AX40	27.5" (700mm) Drill with Fixed Table
1AX40RS	27.5" (700mm) Drill with Fixed Table and Tapping System
1BX40	27.5" (700mm) Drill with Fixed Table
1BX40RS	27.5" (700mm) Drill with Fixed Table and Tapping System

“RS” models are equipped with automatic feed reversing system for tapping.



A50

Clausing/Ibarmia Series A Geared-drive Round Column Drills With Mechanical Clutch Automatic Feed Control

The A series of Industrial Drilling Machines are capable of handling heavier workpieces with a wide range of drilling and tapping capacities. Designed for easy operation with a mechanical clutch for precise automatic feed control that can be activated from the feed crank handle or by the lever on the front of the machine head.

Standard Features and Equipment:

- Drilling capacity in steel: up to 1.97" (50mm) maximum
- Drilling capacity in cast iron: up to 2.36" (60mm) maximum
- Tapping capacity in steel: up to 1.42" (36mm) maximum
- Tapping capacity in cast iron: up to 1.65" (42mm) maximum
- Automatic feed reversing system for tapping on "RS" models
- Automatic feed and cut-off by mechanical clutch
- Hardened and ground high quality steel gears
- Speed plate and selecting levers on front of head
- Gear box lubrication by automatic pump
- Machine base with 2 T-slots, coolant tank and pump
- Large rotating work table with 3 T-slots
- Feed crank wheel for manual feed
- Front hand wheel for fine feed work
- Depth scale and adjustable depth stop
- Automatic tool ejector
- Work light
- Built-in low voltage electrical equipment in machine head
- Emergency STOP
- Drill guard with microswitch

Optional Equipment:

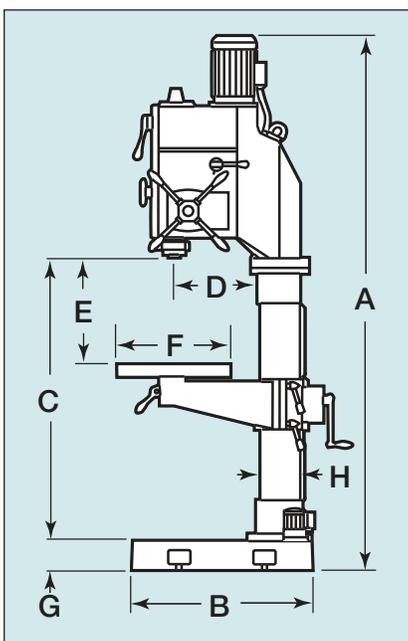
- Rotating Table and Tilting Support
- Automatic Pitch Control Tapping with Single Speed Brake Motor
- Automatic Pitch Control Tapping with Pneumatic Rapid Approach
- Master Guide Spindle and Nut Set for Automatic Pitch Control Tapping
- 50% Lower Feed Range
- Mechanical Spotface Device
- Pneumatic Counterbalance
- Multi-Spindle Head Guide Rod
- Union, Dragging Cone and Assembly for Multi-Spindle Head
- Multi-Spindle Head Guide Rod
- START-STOP and Emergency STOP Pendant Control
- 8" (200mm) Column Riser
- Cross Slide Table
- Cycle Start Foot Pedal
- Foot Pedal for Reversing
- Work Light with Magnetic Base
- Coolant System with Independent Container



Optional Cross Slide Table

Capacities, Specifications and Dimensions:

Standard Models Auto feed reversing for tapping models	A40 A40RS	A50 A50RS
Capacities:		
Maximum Drilling Capacity in Steel	1.38" (35mm)	1.97" (50mm)
Maximum Drilling Capacity in Cast Iron	1.77" (45mm)	2.36" (60mm)
Maximum Tapping Capacity in Steel	1" (27mm)	1.42" (36mm)
Maximum Tapping Capacity in Cast Iron	1.3" (33mm)	1.65" (42mm)
Drill Head:		
Spindle Taper	4MT	4MT
Quill Diameter	2.95" (75mm)	3.46" (88mm)
Spindle Travel (Drilling Depth)	7.87" (200mm)	9.06" (230mm)
Main Motor Power	2 hp (1.5kw)	4 hp (3kw)
Coolant Pump Motor Power	.1 hp (.07kw)	.1 hp (.07kw)
Number of Speeds	9	9
Number of Automatic Feeds	3	4
Auto Feed Range: in./rev. (mm/rev)	.0039/.0079/.0118/(0.1-0.2-0.3)	.0039/.0079/.0118/.0157/(0.1-0.2-0.3-0.4)
Dimensions and Weights:		
Height (A)	92.4" (2390mm)	97.4" (2475mm)
Base: Length x Width (B)	31.5" x 18.5" (800x470mm)	33.9" x 21.7" (860x550mm)
Base to Spindle (C)	47.24" (1200mm)	51.18" (1300mm)
Spindle Center to Column (D)	14.57" (370mm)	14.57" (370mm)
Spindle to Table (E)		
Minimum	4.72" (120mm)	5.91" (150mm)
Maximum	30.71" (780mm)	30.31" (770mm)
Worktable: Length x Width (F)	18.9" x 22.1" (480x560mm)	20.5" x 24.4" (520x620mm)
Base Height (G)	4.72" (120mm)	5.71" (145mm)
Column Diameter (H)	6.3" (160mm)	7.87" (200mm)
Net Weight	1,080 lbs. (490kg)	1,565 lbs. (710kg)
Shipping Weight	1,257 lbs. (570kg)	1,725 lbs. (795kg)
Shipping Dimension (L x W x H)	28" x 40" x 95" (.7 x 1 x 2.4m)	28" x 48" x 103" (.7 x 1.2 x 2.6m)



Standard Motor: 1800 rpm

Model	Spindle Speeds (rpm)
A40	73-103-149-232-325-472-695-976-1415
A50	66-91-133-206-288-418-617-856-1255

Standard Fixed Table Models

Model	Description (Dimension See Page 29)
1A40	29.5" (750mm) Drill with Fixed Table
1A40RS	29.5" (750mm) Drill with Fixed Table and Tapping
1A50	29.1" (740mm) Drill with Fixed Table
1A50RS	29.1" (740mm) Drill with Fixed Table and Tapping

Optional Spindle Motors

Model	Motor	Speed Range
A40	1200 rpm	50-948 rpm
A40	3600 rpm	146-2830 rpm
A40	900/1800 rpm	36-1415 rpm
A40	1800-3600 rpm	73-2830 rpm
A50	1200 rpm	46-878 rpm
A50	3600 rpm	132-2510 rpm
A50	900/1800 rpm	33-1255 rpm
A50	1800-3600 rpm	66-2510 rpm

"RS" models are equipped with automatic feed reversing system for tapping.



B50

Clausing/Ibarmia Series B Geared-drive Round Column Drills With Push-button Electromagnetic Clutch Automatic Feed Control

The B series is a rugged built Industrial Drilling Machine designed to handle large workpieces and offers the widest range of large capacity drilling and tapping. The B series is equipped with an electromagnetic clutch for precise automatic feed control that can be activated from any of the 4 white push-buttons built into the end of the feed crank handles.

Standard Features and Equipment:

- Drilling capacity in steel: 2.75" (70mm) maximum
- Drilling capacity in cast iron: 3.15" (80mm) maximum
- Tapping capacity in steel: 2" (50mm) maximum
- Tapping capacity in cast iron: 2.36" (60mm) maximum
- Automatic feed reversing system for tapping on "RS" models
- Automatic feed and cut-off by electromagnetic clutch
- Hardened and ground high quality steel gears
- Speed plate and selecting levers on front of head
- Gear box lubrication by automatic pump
- Machine base with 2 T-slots, coolant tank and pump
- Large rotating work table with 3 T-slots
- Feed crank wheel for manual feed
- Front hand wheel for fine feed work
- Depth scale and adjustable depth stop
- Automatic tool ejector • Work light
- Built-in low voltage electrical equipment in machine head
- Emergency STOP • Drill guard with microswitch

Optional Equipment:

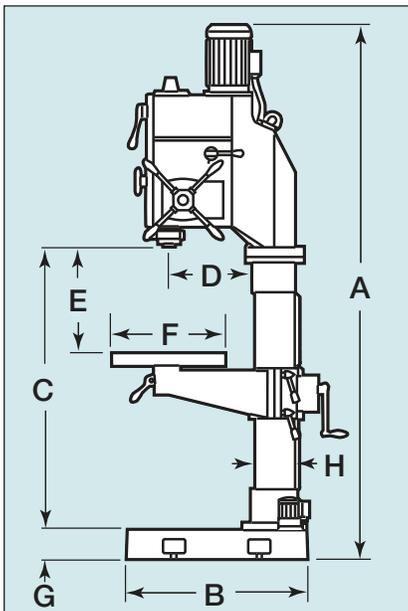
- Rotating Table and Tilting Support
- 8" (200mm) Column Riser
- Automatic Pitch Control Tapping with Single Speed Brake Motor
- Automatic Pitch Control Tapping with Pneumatic Rapid Approach
- Master Guide Spindle and Nut Set for Automatic Pitch Control Tapping
- Pneumatic Counterbalance with Rapid Approach and Retract
- Pneumatic Counterbalance with Rapid Approach and Retract for Tube and Profile Drilling
- Pneumatic Counterbalance with Rapid Approach and Retract with Pitch Controlled Tapping
- 50% Lower Feed Range • Mechanical Spotface Device
- Pneumatic Counterbalance
- Multi-spindle Head Guide Rod
- Union, Dragging Cone and Assembly for Multi-spindle Head
- START-STOP and Emergency STOP Pendant Control
- Cross Slide Table • Work Light with Magnetic Base
- Cycle Start Foot Pedal • Foot Pedal for Reversing
- Coolant System with Independent Container



Optional Cross Slide Table

Capacities, Specifications and Dimensions:

Standard Models Auto feed reversing for tapping models	B40 B40RS	B50 B50RS	B60 B60RS	B70 B70RS
Capacities:				
Maximum Drilling Capacity in Steel	1.57" (40mm)	1.97" (50mm)	2.36" (60mm)	2.75" (70mm)
Maximum Drilling Capacity in Cast Iron	2.17" (50mm)	2.36" (60mm)	2.75" (70mm)	3.15" (80mm)
Maximum Tapping Capacity in Steel	1.3" (33mm)	1.42" (36mm)	1.65" (42mm)	2" (50mm)
Maximum Tapping Capacity in Cast Iron	1.57" (40mm)	1.65" (42mm)	2" (50mm)	2.36" (60mm)
Drill Head:				
Spindle Taper	4MT	4MT	5MT	5MT
Quill Diameter	3.46" (88mm)	3.46" (88mm)	3.54" (90mm)	3.54" (90mm)
Spindle Travel (Drilling Depth)	7.87" (200mm)	9.06" (230mm)	10.24" (260mm)	10.24" (260mm)
Main Motor Power	3 hp (2.2kw)	4 hp (3kw)	5.5 hp (4kw)	7.5 hp (5.5kw)
Coolant Pump Motor Power	.1 hp (.07kw)	.1 hp (.07kw)	.12 hp (.08kw)	.12 hp (.08kw)
Number of Speeds (See Speed Charts)	9	9	12	12
Number of Automatic Feeds	4	6	6	6
	.0039/.0079/.0118/.0157 (0.1-0.2-0.3-0.4)		.0039/.0079/.0118/.0157/.0197/.0236 (0.1-0.2-0.3-0.4-0.5-0.6)	
Dimensions and Weights:				
Height (A)	92.4" (2390mm)	97.4" (2475mm)	103.9" (2640mm)	103.9" (2640mm)
Base: Length x Width (B)	31.9" x 21.3" (810x560mm)	33.9" x 21.7" (860x550mm)	35.8" x 23.2" (910x590mm)	35.8" x 23.2" (910x590mm)
Base to Spindle (C)	49.61" (1280mm)	51.18" (1300mm)	49.21" (1250mm)	49.21" (1250mm)
Spindle Center to Column (D)	15.16" (385mm)	14.57" (370mm)	15.75" (400mm)	15.75" (400mm)
Spindle to Table (E)				
Minimum	5.51" (140mm)	5.91" (150mm)	3.15" (80mm)	3.15" (80mm)
Maximum	30.71" (780mm)	30.71" (770mm)	25.98" (660mm)	25.98" (660mm)
Worktable: Length x Width (F)	18.9" x 22.1" (480x560mm)	20.5" x 24.4" (520x620mm)	23.6" x 27.6" (600x700mm)	23.6" x 27.6" (600x700mm)
Base Height (G)	5.31" (135mm)	5.71" (145mm)	6.3" (160mm)	6.3" (160mm)
Column Diameter (H)	7.09" (180mm)	7.87" (200mm)	8.66" (220mm)	8.66" (220mm)
Net Weight	1,345 lbs. (610kg)	1,587 lbs. (720kg)	1,808 lbs. (820kg)	1,852 lbs. (840kg)
Shipping Weight	1,532 lbs. (695kg)	1,725 lbs. (805kg)	2,025 lbs. (920kg)	2,072 lbs. (940kg)
Shipping Dimension (L x W x H)	28" x 40" x 103" (.7 x .1.2 x 2.6m)	28" x 40" x 103" (.7 x .1.2 x 2.6m)	32" x 52" x 111" (.8 x .1.3 x 2.8m)	32" x 52" x 111" (.8 x .1.3 x 2.8m)



Standard Motor: 1800 rpm

Model	Spindle speeds (rpm)
B40	73-103-149-232-325-472-695-976-1415
B50	66-91-133-206-288-418-617-866-1255
B60	76-96-127-165-238-296-392-513-670-838-1107-1446
B70	62-81-104-133-191-250-321-410-532-683-878-1120

Standard Fixed Table Models

Model	Description (Dimension see page 29)
1B40	29.5" (750mm) with Drill Fixed Table
1B40RS	29.5" (750mm) with Drill Fixed Table and Tapping
1B50	29.1" (740mm) with Drill Fixed Table
1B50RS	29.1" (740mm) with Drill Fixed Table and Tapping

Optional Spindle Motors

Model	Motor	Speed Range
B40	1200 rpm	50-948 rpm
B40	3600 rpm	146-2830 rpm
B40	900/1800 rpm	36-1415 rpm
B40	1800-3600 rpm	73-2830 rpm
B50	1200 rpm	46-878 rpm
B50	3600 rpm	132-2510 rpm
B50	900/1800 rpm	33-1255 rpm
B50	1800-3600 rpm	66-2510 rpm
B60	1200 rpm	54-1012 rpm
B60	3600 rpm	152-2892 rpm
B60	900/1800 rpm	38-1446 rpm
B60	1800-3600 rpm	76-2892 rpm
B70	1200 rpm	40-748 rpm
B70	3600 rpm	124-2440 rpm
B70	900/1800 rpm	31-1120 rpm
B70	1800/3600 rpm	62-2240 rpm

"RS" models are equipped with automatic feed reversing system for tapping.



BC50VE

Clausing/Ibarmia Series C Belt/Geared-drive Round Column Drills With Push-button Electromagnetic Clutch Automatic Feed Control

The C series of Industrial Drilling Machines are capable of handling heavier workpieces with a wide range of drilling and tapping capacities. Designed for easy operation with an electromagnetic clutch for precise automatic feed control that can be activated from the feed crank handle or by the lever on the front of the machine head.

Standard Features and Equipment:

- Drilling capacity in steel: 1.97" (50mm) maximum
- Drilling capacity in cast iron: 2.36" (60mm) maximum
- Tapping capacity in steel: 1.68" (42mm) maximum
- Tapping capacity in cast iron: 2" (50mm) maximum
- Automatic feed reversing system for tapping
- Automatic feed and cut-off by electromagnetic clutch
- Hardened and ground high quality steel gears
- Speed plate and selecting levers on front of head
- Gear box lubrication by automatic pump
- Machine base with 2 T-slots, coolant tank and pump
- Large rotating work table with 3 T-slots
- Feed crank wheel for manual feed
- Front hand wheel for fine feed work
- Depth scale and adjustable depth stop
- Automatic tool ejector • Work light
- Built-in low voltage electrical equipment in machine head
- Emergency STOP • Drill guard with microswitch

Optional Equipment:

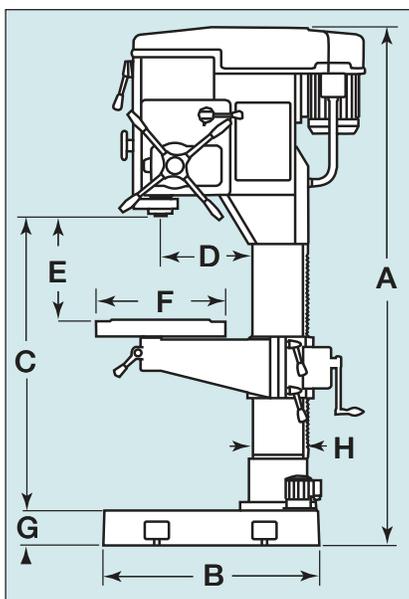
- Rotating Table and Tilting Support
- 8" (203mm) Column Riser
- Automatic Pitch Control Tapping with Single Speed Brake Motor
- Automatic Pitch Control Tapping with Pneumatic Rapid Approach
- Master Guide Spindle and Nut Set for Automatic Pitch Control Tapping
- Pneumatic Counterbalance with Rapid Approach and Retract
- Pneumatic Counterbalance with Rapid Approach and Retract for Tube and Profile Drilling
- Pneumatic Counterbalance with Rapid Approach and Retract with Pitch Controlled Tapping
- 50% Lower Feed Range
- Mechanical Spotface Device
- Pneumatic Counterbalance
- Multi-Spindle Head Guide Rod
- Union, Dragging Cone and Assembly for Multi-Spindle Head
- START/STOP and Emergency STOP Pendant Control
- Cross Slide Table • Work Light with Magnetic Base
- Cycle Start Foot Pedal • Foot Pedal for Reversing
- Coolant System with Independent Container



Optional Cross Slide Table

Capacities, Specifications and Dimensions:

Standard Models	BC40V	BC40VE	BC50V	BC50VE
Capacities:				
Maximum Drilling Capacity in Steel	1.57" (40mm)	1.57" (40mm)	1.97" (50mm)	1.97" (50mm)
Maximum Drilling Capacity in Cast Iron	1.97" (50mm)	1.97" (50mm)	2.36" (60mm)	2.36" (60mm)
Maximum Tapping Capacity in Steel	1.42" (36mm)	1.42" (36mm)	1.65" (36mm)	1.65" (36mm)
Maximum Tapping Capacity in Cast Iron	1.65" (36mm)	1.65" (36mm)	1.97" (50mm)	1.97" (50mm)
Drill Head:				
Spindle Taper	4MT	4MT	4MT	4MT
Quill Diameter	3.46" (87.9mm)	3.46" (87.9mm)	3.46" (87.9mm)	3.46" (87.9mm)
Spindle Travel (Drilling Depth)	7.87" (200mm)	7.87" (200mm)	7.87" (200mm)	7.87" (200mm)
Main Motor Power	4 hp (3kw)	4 hp (3kw)	5.5 hp (4kw)	5.5 hp (4kw)
Coolant Pump Motor Power	.1 hp (.07 kw)	.1 hp (.07kw)	.1 hp (.07kw)	.1 hp (.07kw)
No. of Variable Speeds Ranges and Type	3 mechanical	3 electronic	3 mechanical	3 electronic
Low Range (rpm)	72-240	30-230	72-240	30-230
Med Range (rpm)	240-720	90-730	240-720	90-730
High Range (rpm)	720-2200	190-1500	720-2200	190-1500
Number of Automatic Feeds	4	4	4	4
Auto Feed Range	.0039/.0079/.118/.157 (in./rev.) (0.1/0.2/0.3/0.4 mm/rev)			
Dimensions and Weights:				
Height (A)	81.9" (2080mm)	81.9" (2080mm)	83.5" (2120mm)	83.5" (2120mm)
Base: Length x Width (B)	31.9" x 26.3" (810 x 540mm)	31.9" x 26.3" (810 x 540mm)	33.9" x 21.7" (860 x 550mm)	33.9" x 21.7" (860 x 550mm)
Base to Spindle (C)	46.1" (1170mm)	46.1" (1170mm)	49" (1246mm)	49" (1246mm)
Spindle Center to Column (D)	15.15" (385mm)	15.15" (385mm)	14.56" (370mm)	14.56" (370mm)
Spindle to Table (E)				
Minimum	1.97" (50mm)	1.97" (50mm)	1.57" (40mm)	1.57" (40mm)
Maximum	27.16" (690mm)	27.16" (690mm)	26" (660mm)	26" (660mm)
Worktable: Length x Width (F)	18.9" x 22" (480 x 560mm)	18.9" x 22" (480 x 560mm)	20.5" x 24.4" (520 x 620mm)	20.5" x 24.4" (520 x 620mm)
Base Height (G)	5.31" (135mm)	5.31" (135mm)	5.71" (145mm)	5.71" (145mm)
Column Diameter (H)	7.09" (180mm)	7.09" (180mm)	7.87" (200mm)	7.87" (200mm)
Net Weight	1,455 lbs. (660kg)	1,455 lbs. (660kg)	1,675 lbs. (760kg)	1,675 lbs. (760kg)
Shipping Weight	1,653 lbs. (750kg)	1,653 lbs. (750kg)	1,874 lbs. (850kg)	1,874 lbs. (850kg)
Shipping Dimension (L x W x H)	32" x 51" x 91" (.8 x 1.3 x 2.3m)		36" x 55" x 91" (.9 x 1.4 x 2.3m)	



Standard Motor: 1800 rpm

Model	Spindle Speeds (rpm)
BC40V	Mechanical Variable Speed: 72-1800 rpm
BC50V	Mechanical Variable Speed: 36-1800 rpm
BC40VE	Electronic Variable Speed: 72-1800 rpm
BC50VE	Electronic Variable Speed: 36-1800 rpm

Standard Fixed Table Models

Model	Description
1BC40V	30.3" (770mm) Drill with Fixed Table
1BC50V	29" (736mm) Drill with Fixed Table
1BC40VE	30.3" (770mm) Drill with Fixed Table
1BC50VE	29" (736mm) Drill with Fixed Table

Clausing/Ibarmia Multi Head, Fixed Table and Oversized Table Drills

Clausing Ibarmia Industrial Drilling Machines mounted to a fixed or oversized table offer greater ease in positioning the workpiece and the flexibility to handle bulky or heavy workpieces. Multiple Head drilling machines are ideal for work where the workpiece requires more than one operation. Each drill head on a multiple head drill can be equipped differently to perform the operation required by that head such as... automatic drilling cycle, automatic tapping or other options that may be offered. Drilling machines can be set -up with rotating heads adding flexibility.



3AX32

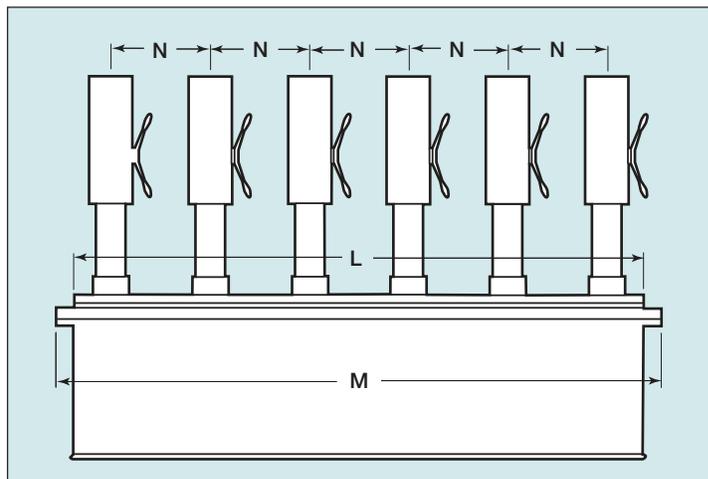
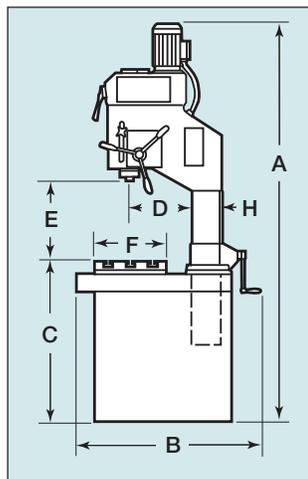
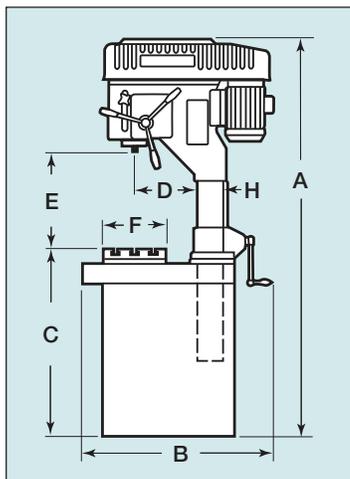
3AX32 23.6" (600mm) Geared-drive 3 head drill.



1B50

1B50 29.1" (740mm) Geared-drive drill mounted to standard fixed table.

Multiple Spindle Dimensional Drawings



Multiple Spindle Models, Size and Dimensions:

Models	Size	A	B	C	D	E		F	H	L	M	N
						min.	max.					
Fixed Table Drills (Includes RS Models)												
1SZ32, 1AZ32V	19.7"(500mm)	89.6"(2275mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	9.8"(250mm)	32.6"(830mm)	15.7"(400mm)	4.9"(125mm)	15.7"(400mm)	23.6"(600mm)	-
1SZ34, 1AZ34, 1BZ34	23.6"(600mm)	87.8"(2230mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	7.8"(200mm)	29.1"(740mm)	15.7"(400mm)	4.9"(125mm)	15.7"(400mm)	23.6"(600mm)	-
1SZ40, 1AZ40, 1BZ40	27.1"(690mm)	88.6"(2230mm)	40.8"(1035mm)	35.4"(900mm)	13.5"(345mm)	7.8"(200mm)	28.1"(715mm)	16.7"(500mm)	6.3"(160mm)	23.6"(600mm)	31.5"(800mm)	-
1SX32, 1AX32	23.6"(600mm)	100"(2540mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	8.6"(220mm)	31.5"(800mm)	15.7"(400mm)	4.9"(125mm)	15.7"(400mm)	23.6"(600mm)	-
1SX34, 1AX34, 1BX34	23.6"(600mm)	97.6"(2480mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	7.8"(200mm)	29.1"(740mm)	15.7"(400mm)	4.9"(125mm)	15.7"(400mm)	23.6"(600mm)	-
1SX40, 1AX40, 1BX40	27.1"(690mm)	100.4"(2550mm)	40.8"(1035mm)	35.4"(900mm)	13.5"(345mm)	7.8"(200mm)	28.1"(715mm)	19.6"(500mm)	6.3"(160mm)	23.6"(600mm)	31.5"(800mm)	-
1A40, 1B40	29.5"(750mm)	107.1"(2720mm)	43.7"(1110mm)	35.4"(900mm)	14.7"(375mm)	9.8"(250mm)	32.6"(830mm)	19.6"(500mm)	7.8"(200mm)	23.6"(600mm)	31.5"(800mm)	-
1A50, 1B50	29.1"(740mm)	108.3"(2750mm)	43.5"(1105mm)	35.4"(900mm)	14.5"(370mm)	9.8"(250mm)	32.6"(830mm)	19.6"(500mm)	7.8"(200mm)	23.6"(600mm)	31.5"(800mm)	-
2 Head Drills												
2SZ32, 2AZ32	23.6"(600mm)	89.6"(2275mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	9.8"(250mm)	32.6"(830mm)	11.8"(300mm)	4.9"(125mm)	35.4"(900mm)	43.3"(1100mm)	19.7"(500mm)
2SZ34, 2AZ34, 2BZ34	23.6"(600mm)	87.8"(2230mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	7.8"(200mm)	29.1"(740mm)	11.8"(300mm)	4.9"(125mm)	35.4"(900mm)	43.3"(1100mm)	19.7"(500mm)
2SZ40, 2AZ40, 2BZ40	27.1"(690mm)	88.6"(2230mm)	40.8"(1035mm)	35.4"(900mm)	13.5"(345mm)	7.8"(200mm)	28.1"(715mm)	15.7"(400mm)	6.3"(160mm)	37.4"(950mm)	45.3"(1150mm)	21.6"(550mm)
2SX32, 2AX32	23.6"(600mm)	100"(2540mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	8.6"(220mm)	31.5"(800mm)	11.8"(300mm)	4.9"(125mm)	35.4"(900mm)	43.3"(1100mm)	19.7"(500mm)
2SX34, 2AX34, 2BX34	23.6"(600mm)	97.6"(2480mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	7.8"(200mm)	29.1"(740mm)	11.8"(300mm)	4.9"(125mm)	35.4"(900mm)	43.3"(1100mm)	19.7"(500mm)
2SX40, 2AX40, 2BX40	27.1"(690mm)	100.4"(2550mm)	40.8"(1035mm)	35.4"(900mm)	13.5"(345mm)	7.8"(200mm)	28.1"(715mm)	15.7"(400mm)	6.3"(160mm)	37.4"(950mm)	45.3"(1150mm)	21.6"(550mm)
2A40, 2B40	29.5"(750mm)	107.1"(2720mm)	43.7"(1110mm)	35.4"(900mm)	14.7"(375mm)	9.8"(250mm)	32.6"(830mm)	15.7"(400mm)	7.8"(200mm)	37.4"(950mm)	45.3"(1150mm)	21.6"(550mm)
2A50, 2B50	29.1"(740mm)	108.3"(2750mm)	43.5"(1105mm)	35.4"(900mm)	14.5"(370mm)	9.8"(250mm)	32.6"(830mm)	15.7"(400mm)	7.8"(200mm)	37.4"(950mm)	45.3"(1150mm)	21.6"(550mm)
3 Head Drills												
3SZ32, 3AZ32V	23.6"(600mm)	89.6"(2275mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	9.8"(250mm)	32.6"(830mm)	11.8"(300mm)	4.9"(125mm)	55.1"(1400mm)	63"(1600mm)	19.7"(500mm)
3SZ34, 3AZ34, 3BZ34	23.6"(600mm)	87.8"(2230mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	7.8"(200mm)	29.1"(740mm)	11.8"(300mm)	4.9"(125mm)	55.1"(1400mm)	63"(1600mm)	19.7"(500mm)
3SZ40, 3AZ40, 3BZ40	27.1"(690mm)	88.6"(2230mm)	40.8"(1035mm)	35.4"(900mm)	13.5"(345mm)	7.8"(200mm)	28.1"(715mm)	15.7"(400mm)	6.3"(160mm)	59.1"(1500mm)	67"(1700mm)	21.6"(550mm)
3SX32, 3AX32	23.6"(600mm)	100"(2540mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	8.6"(220mm)	31.5"(800mm)	11.8"(300mm)	4.9"(125mm)	55.1"(1400mm)	63"(1600mm)	19.7"(500mm)
3SX34, 3AX34, 3BX34	23.6"(600mm)	97.6"(2480mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	7.8"(200mm)	29.1"(740mm)	11.8"(300mm)	4.9"(125mm)	55.1"(1400mm)	63"(1600mm)	19.7"(500mm)
3SX40, 3AX40, 3BX40	27.1"(690mm)	100.4"(2550mm)	40.8"(1035mm)	35.4"(900mm)	13.5"(345mm)	7.8"(200mm)	28.1"(715mm)	15.7"(400mm)	6.3"(160mm)	59.1"(1500mm)	67"(1700mm)	21.6"(550mm)
3A40, 3B40	29.5"(750mm)	107.1"(2720mm)	43.7"(1110mm)	35.4"(900mm)	14.7"(375mm)	9.8"(250mm)	32.6"(830mm)	15.7"(400mm)	7.8"(200mm)	59.1"(1500mm)	67"(1700mm)	21.6"(550mm)
3A50, 3B50	29.1"(740mm)	108.3"(2750mm)	43.5"(1105mm)	35.4"(900mm)	14.5"(370mm)	9.8"(250mm)	32.6"(830mm)	15.7"(400mm)	7.8"(200mm)	59.1"(1500mm)	67"(1700mm)	21.6"(550mm)
4 Head Drills												
4SZ32, 4AZ32	23.6"(600mm)	89.6"(2275mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	9.8"(250mm)	32.6"(830mm)	11.8"(300mm)	4.9"(125mm)	75"(1900mm)	82.6"(2100mm)	19.7"(500mm)
4SZ34, 4AZ34, 4BZ34	23.6"(600mm)	87.8"(2230mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	7.8"(200mm)	29.1"(740mm)	11.8"(300mm)	4.9"(125mm)	75"(1900mm)	82.6"(2100mm)	19.7"(500mm)
4SZ40, 4AZ40, 4BZ40	27.1"(690mm)	88.6"(2230mm)	40.8"(1035mm)	35.4"(900mm)	13.5"(345mm)	7.8"(200mm)	28.1"(715mm)	15.7"(400mm)	6.3"(160mm)	80.7"(2050mm)	88.5"(2250mm)	21.6"(550mm)
4SX32, 4AX32	23.6"(600mm)	100"(2540mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	8.6"(220mm)	31.5"(800mm)	11.8"(300mm)	4.9"(125mm)	75"(1900mm)	82.6"(2100mm)	19.7"(500mm)
4SX34, 4AX34, 4BX34	23.6"(600mm)	97.6"(2480mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	7.8"(200mm)	29.1"(740mm)	11.8"(300mm)	4.9"(125mm)	75"(1900mm)	82.6"(2100mm)	19.7"(500mm)
4SX40, 4AX40, 4BX40	27.1"(690mm)	100.4"(2550mm)	40.8"(1035mm)	35.4"(900mm)	13.5"(345mm)	7.8"(200mm)	28.1"(715mm)	15.7"(400mm)	6.3"(160mm)	80.7"(2050mm)	88.5"(2250mm)	21.6"(550mm)
4A40, 4B40	29.5"(750mm)	107.1"(2720mm)	43.7"(1110mm)	35.4"(900mm)	14.7"(375mm)	9.8"(250mm)	32.6"(830mm)	15.7"(400mm)	7.8"(200mm)	80.7"(2050mm)	88.5"(2250mm)	21.6"(550mm)
4A50, 4B50	29.1"(740mm)	108.3"(2750mm)	43.5"(1105mm)	35.4"(900mm)	14.5"(370mm)	9.8"(250mm)	32.6"(830mm)	15.7"(400mm)	7.8"(200mm)	80.7"(2050mm)	88.5"(2250mm)	21.6"(550mm)
5 Head Drills												
5SZ32, 5AZ32	23.6"(600mm)	89.6"(2275mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	9.8"(250mm)	32.6"(830mm)	11.8"(300mm)	4.9"(125mm)	94.5"(2400mm)	102.4"(2600mm)	19.7"(500mm)
5SZ34, 5AZ34, 5BZ34	23.6"(600mm)	87.8"(2230mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	7.8"(200mm)	29.1"(740mm)	11.8"(300mm)	4.9"(125mm)	94.5"(2400mm)	102.4"(2600mm)	19.7"(500mm)
5SZ40, 5AZ40, 5BZ40	27.1"(690mm)	88.6"(2230mm)	40.8"(1035mm)	35.4"(900mm)	13.5"(345mm)	7.8"(200mm)	28.1"(715mm)	15.7"(400mm)	6.3"(160mm)	102.4"(2600mm)	110.2"(2800mm)	21.6"(550mm)
5SX32, 5AX32	23.6"(600mm)	100"(2540mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	8.6"(220mm)	31.5"(800mm)	11.8"(300mm)	4.9"(125mm)	94.5"(2400mm)	102.4"(2600mm)	19.7"(500mm)
5SX34, 5AX34, 5BX34	23.6"(600mm)	97.6"(2480mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	7.8"(200mm)	29.1"(740mm)	11.8"(300mm)	4.9"(125mm)	94.5"(2400mm)	102.4"(2600mm)	19.7"(500mm)
5SX40, 5AX40, 5BX40	27.1"(690mm)	100.4"(2550mm)	40.8"(1035mm)	35.4"(900mm)	13.5"(345mm)	7.8"(200mm)	28.1"(715mm)	15.7"(400mm)	6.3"(160mm)	102.4"(2600mm)	110.2"(2800mm)	21.6"(550mm)
5A40, 5B40	29.5"(750mm)	107.1"(2720mm)	43.7"(1110mm)	35.4"(900mm)	14.7"(375mm)	9.8"(250mm)	32.6"(830mm)	15.7"(400mm)	7.8"(200mm)	102.4"(2600mm)	110.2"(2800mm)	21.6"(550mm)
5A50, 5B50	29.1"(740mm)	108.3"(2750mm)	43.5"(1105mm)	35.4"(900mm)	14.5"(370mm)	9.8"(250mm)	32.6"(830mm)	15.7"(400mm)	7.8"(200mm)	102.4"(2600mm)	110.2"(2800mm)	21.6"(550mm)
6 Head Drills												
6SZ32, 6AZ32	23.6"(600mm)	89.6"(2275mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	9.8"(250mm)	32.6"(830mm)	11.8"(300mm)	4.9"(125mm)	114"(2900mm)	122"(3100mm)	19.7"(500mm)
6SZ34, 6AZ34, 6BZ34	23.6"(600mm)	87.8"(2230mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	7.8"(200mm)	29.1"(740mm)	11.8"(300mm)	4.9"(125mm)	114"(2900mm)	122"(3100mm)	19.7"(500mm)
6SZ40, 6AZ40, 6BZ40	27.1"(690mm)	88.6"(2230mm)	40.8"(1035mm)	35.4"(900mm)	13.5"(345mm)	7.8"(200mm)	28.1"(715mm)	15.7"(400mm)	6.3"(160mm)	124"(3150mm)	132"(3350mm)	21.6"(550mm)
6SX32, 6AX32	23.6"(600mm)	100"(2540mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	8.6"(220mm)	31.5"(800mm)	11.8"(300mm)	4.9"(125mm)	114"(2900mm)	122"(3100mm)	19.7"(500mm)
6SX34, 6AX34, 6BX34	23.6"(600mm)	97.6"(2480mm)	35.8"(910mm)	35.4"(900mm)	11.8"(300mm)	7.8"(200mm)	29.1"(740mm)	11.8"(300mm)	4.9"(125mm)	114"(2900mm)	122"(3100mm)	19.7"(500mm)
6SX40, 6AX40, 6BX40	27.1"(690mm)	100.4"(2550mm)	40.8"(1035mm)	35.4"(900mm)	13.5"(345mm)	7.8"(200mm)	28.1"(715mm)	15.7"(400mm)	6.3"(160mm)	124"(3150mm)	132"(3350mm)	21.6"(550mm)
6A40, 6B40	29.5"(750mm)	107.1"(2720mm)	43.7"(1110mm)	35.4"(900mm)	14.7"(375mm)	9.8"(250mm)	32.6"(830mm)	15.7"(400mm)	7.8"(200mm)	124"(3150mm)	132"(3350mm)	21.6"(550mm)
6A50, 6B50	29.1"(740mm)	108.3"(2750mm)	43.5"(1105mm)	35.4"(900mm)	14.5"(370mm)	9.8"(250mm)	32.6"(830mm)	15.7"(400mm)	7.8"(200mm)	124"(3150mm)	132"(3350mm)	21.6"(550mm)

Clausing/Ibarmia Round Column Drill Optional Equipment

Model	Description:
7044	Coolant System with Separate Tank (all models)
7022	Work Light with Magnetic Base (all models)
PST	Cycle or Spindle turn START Foot Pedal
PSR	Spindle Reverse Foot Pedal (for tapping)
MCC-KT	Cross Slide Table 13.8" x 10.8" (K/T Series)
MCC-ZX	Cross Slide Table 15" x 8.7" (Z/X Series)
MCC-X40	Cross Slide Table 15" x 8.7" (X40 Series)
MB-5D	Cross Slide Table 16" x 12" (X Model A/B Series)

Series T	(Factory Installed Only)
MG-T	Rotating Table
PKA	Floor Cabinet with 2 Shelves
PKB	Floor Cabinet with Door and Drawer

Series Z	(Factory Installed Only)
MG-Z	Rotating Table
MGI-Z	Tilting Rotating Table
TAK-Z	Digital rpm Read-out (V Models only)
UC-Z	Union, Dragging Cone and Assembly for Multi-spindle Head

Series X	(Factory Installed Only)
MG-X	Rotating Table (X32 Models)
MGI-X	Tilting Rotating Table
RPF-X	Automatic Pitch Controlled Tapping with Single Speed Brake-motor
RPF-ANR-X	Automatic Pitch Controlled Tapping with Pneumatic Rapid Approach
HGP-X	Master Guide Spindle and Nut Set for Automatic Pitch Controlled Tapping
UC-X	Union, Dragging Cone and Assembly for Multi-spindle Head

Series A/B	(Factory Installed Only)
RPF-A	Automatic Pitch Controlled Tapping with Single Speed Brake-motor
RPF-ANR-A	Automatic Pitch Controlled Tapping with Pneumatic Rapid Approach
HGP-A	Master Guide Spindle and Nut Set for Automatic Pitch Controlled Tapping
ACNL-B	Pneumatic Counterbalance with Rapid Approach and Retreat
ACNL-S-B	Pneumatic Counterbalance with Rapid Approach and Retreat for Tube and Profile Drilling
ACNL-RPF-B	Pneumatic Counterbalance with Rapid Approach and Retreat with Controlled Tapping
AR-A	50% Lower Feed Rate Range
DLM-A	Mechanical Spotface Device
CN-A	Pneumatic Counterbalance for Spindle Return
UC-A	Union, Dragging Cone and Assembly for Multi-Spindle Head
GM-A	Multi-Spindle Head Guide Rod
PM-B	START/STOP and Emergency Stop Pendant Control
SC-B	8" Column Riser

Clausing Radial Drills

Models: CL720A

Features and Standard Equipment:

- Limit switch
- High speed gears are made of Nickel-Chrome Steel and are heat-treated and ground for durability
- Powerful 2 Hp spindle drive motor for heavy-duty cutting
- Extra auxiliary dial for spindle feed depth indication, allows review of spindle feed depth, .0394" to 7.874"
- Special spindle balance mechanism, superior to traditional balance mechanism and extends Balance Spring life
- Coolant system
- Low volt and overload protection
- 230/3/60 volt standard ● Tool kit and manuals

Specifications:

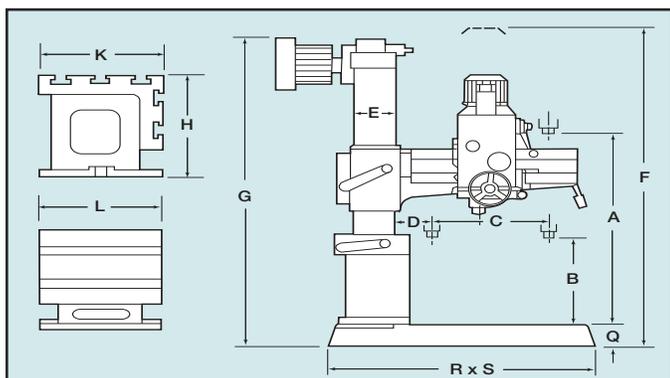
Model	CL720A
Working Area:	
Column Sleeve Dia. (E)	8.28" (210mm)
Column Face to Spindle Center	
Maximum (D+C)	29.5" (750mm)
Minimum (D)	8.7" (220mm)
Spindle Head Travel (C)	20.8" (530mm)
Base Surface to Spindle End	
Maximum (A)	41.7" (1060mm)
Minimum (B)	10.2" (260mm)
Arm Vertical Travel (A-B)	31.5" (800mm)
Arm Rotation (Right & Left)	180°
Baseplate Working Surface	35.5" x 25.3" (902x643mm)
Box Table Area	
Length (L)	23.6" (600mm)
Width (K)	17.5" (445mm)
Height (H)	15" (382mm)
Base Dimensions	
Floor Area (R x S)	49.6" x 25.2" (1260x640mm)
Height (Q)	6.5" (163mm)

Drill Head:	
Spindle Taper	4MT
Spindle Stroke	8.66" (220mm)
Quill Diameter	2.95" (75mm)
Number of Spindle Speeds	6
Spindle Speeds (rpm)	88, 154, 282, 455, 796, 1500
Number of Feeds	3
Spindle Feed Rate (in/rev.)	0.002"/0.0035"/0.006"
(mm/rev.)	.05mm/.09mm/.15mm
Spindle Drive Motor	2 hp (1.5 Kw)
Elevating Motor	1 hp (.75 Kw)
Coolant Pump Motor	1/8 hp (.10 Kw)

Dimensions and Weights:	
Max. Machine Height (F)	85.4" (2170mm)
Base and Column Height (G)	72.8" (1850mm)
Shipping Dim.	
Length	66.1" (1680mm)
Width	32.5" (826mm)
Height	85" (2160mm)
Net Weight	2,469 lbs. (1120kg)
Shipping Weight	2,756 lbs. (1250kg)



Dimensions:



Capacities:

Model	CL720A
Capacity:	
Drilling	
In Steel	1.26" (32mm)
In Cast Iron	2" (50mm)
Tapping	
In Steel	1" (25mm)
In Cast Iron	1.26" (32mm)
Boring	
In Steel	2.75" (70mm)
In Cast Iron	4.06" (105mm)



Clausing Radial Drills

Models: CL820A

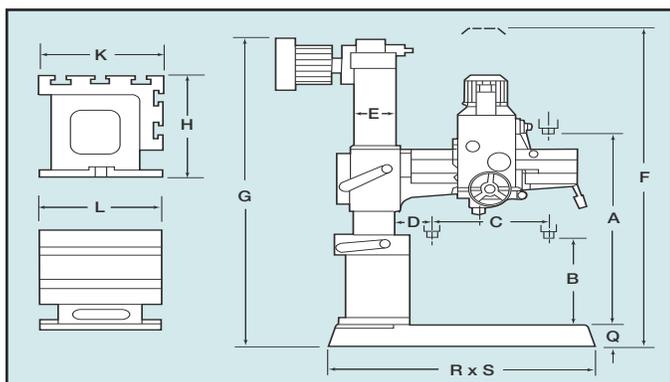
Features and Standard Equipment:

- Limit switch
- High speed gears are made of Nickel-Chrome Steel and are heat-treated and ground for durability
- Powerful 2 Hp spindle drive motor for heavy-duty cutting
- Extra auxiliary dial for spindle feed depth indication, allows review of spindle feed depth, .0394" to 7.874"
- Special spindle balance mechanism, superior to traditional balance mechanism and extends Balance Spring life
- Coolant system
- Low volt and overload protection
- 230/3/60 volt standard ● Tool kit and manuals

Specifications:

Model	CL820A
Working Area:	
Column Sleeve Dia. (E)	8.28" (210mm)
Column Face to Spindle Center	
Maximum (D+C)	33.5" (850mm)
Minimum (D)	8.7" (220mm)
Spindle Head Travel (C)	24.8" (630mm)
Base Surface to Spindle End	
Maximum (A)	47.6" (1270mm)
Minimum (B)	13.8" (350mm)
Arm Vertical Travel (A-B)	33.8" (858mm)
Arm Rotation (Right & Left)	180°
Baseplate Working Surface	35.5" x 25.3" (902x643mm)
Box Table Area	
Length (L)	23.6" (600mm)
Width (K)	17.5" (445mm)
Height (H)	15" (382mm)
Base Dimensions	
Floor Area (R x S)	49.6" x 25.2" (1260x640mm)
Height (Q)	6.5" (163mm)

Dimensions:



Drill Head:	
Spindle Taper	4MT
Spindle Stroke	8.66" (220mm)
Quill Diameter	2.95" (75mm)
Number of Spindle Speeds	6
Spindle Speeds (rpm)	88, 154, 282, 455, 796, 1500
Number of Feeds	3
Spindle Feed Rate (in/rev.)	0.002" 0.0035" 0.006"
	.05mm), (.09mm), (.15mm)
Spindle Drive Motor	2 hp (1.5 Kw)
Elevating Motor	1 hp (.75 Kw)
Coolant Pump Motor	1/8 hp (.10 Kw)

Capacities:

Model	CL820A
Capacity:	
Drilling	
In Steel	1.26" (32mm)
In Cast Iron	2" (50mm)
Tapping	
In Steel	1" (25mm)
In Cast Iron	1.26" (32mm)
Boring	
In Steel	2.75" (70mm)
In Cast Iron	4.06" (105mm)

Dimensions and Weights:	
Max. Machine Height (F)	91.3" (2170mm)
Base and Column Height (G)	79.1" (2010mm)
Shipping Dim.	
Length	66.1" (1680mm)
Width	32.5" (826mm)
Height	86.2" (2190mm)
Net Weight	2,645 lbs. (1200kg)
Shipping Weight	2,954 lbs. (1340kg)



Clausing Radial Drills

Models: CL920A

Features and Standard Equipment:

- Limit switch
- High speed gears are made of Nickel-Chrome Steel and are heat-treated and ground for durability
Powerful 2 Hp spindle drive motor for heavy-duty cutting
- Extra auxiliary dial for spindle feed depth indication, allows review of spindle feed depth, .0394" to 7.874"
- Special spindle balance mechanism, superior to traditional balance mechanism and extends Balance Spring life
- Coolant system
- Low volt and overload protection
- 230/3/60 volt standard ● Tool kit and manuals

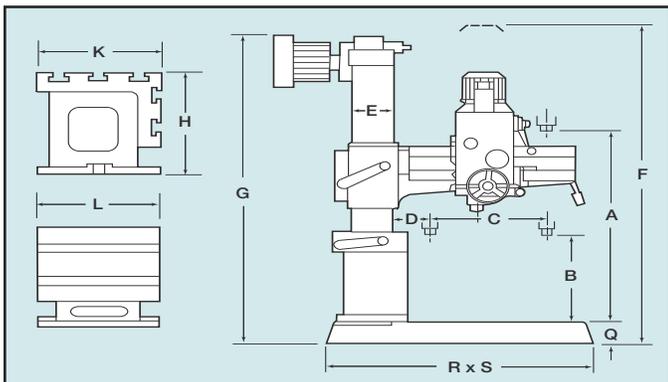
Specifications:

Model	CL920A
Working Area:	
Column Sleeve Dia. (E)	8.28" (210mm)
Column Face to Spindle Center Maximum (D+C)	37.4" (950mm)
Minimum (D)	8.7" (220mm)
Spindle Head Travel (C)	28.7" (730mm)
Base Surface to Spindle End Maximum (A)	47.6" (1210mm)
Minimum (B)	13.8" (350mm)
Arm Vertical Travel (A-B)	33.8" (858mm)
Arm Rotation (Right & Left)	180°
Baseplate Working Surface	35.5" x 25.3" (902x643mm)
Box Table Area Length (L)	23.6" (600mm)
Width (K)	17.5" (445mm)
Height (H)	15" (382mm)
Base Dimensions Floor Area (R x S)	49.6" x 25.2" (1260x640mm)
Height (Q)	6.5" (163mm)

Drill Head:	
Spindle Taper	4MT
Spindle Stroke	8.66" (220mm)
Quill Diameter	2.95" (75mm)
Number of Spindle Speeds	6
Spindle Speeds (rpm)	88, 154, 282, 455, 796, 1500
Number of Feeds	3
Spindle Feed Rate (in/rev.)	0.002"/0.0035"/0.006"
(mm/rev.)	.05mm/.09mm/.15mm
Spindle Drive Motor	2 hp (1.5 Kw)
Elevating Motor	1 hp (.75 Kw)
Coolant Pump Motor	1/8 hp (.10 Kw)

Dimensions and Weights:	
Max. Machine Height (F)	91.3" (2320mm)
Base and Column Height (G)	79.1" (2010mm)
Shipping Dim. Length	71.1" (1806mm)
Width	32.5" (826mm)
Height	86.2" (2190mm)
Net Weight	2,756 lbs. (1250kg)
Shipping Weight	3,086 lbs. (1400kg)

Dimensions:



Capacities:

Model	CL920A
Capacity:	
Drilling In Steel	1.26" (32mm)
In Cast Iron	2" (50mm)
Tapping In Steel	1" (25mm)
In Cast Iron	1.26" (32mm)
Boring In Steel	2.75" (70mm)
In Cast Iron	4.06" (105mm)



Clausing Radial Drills

Model: CL1100

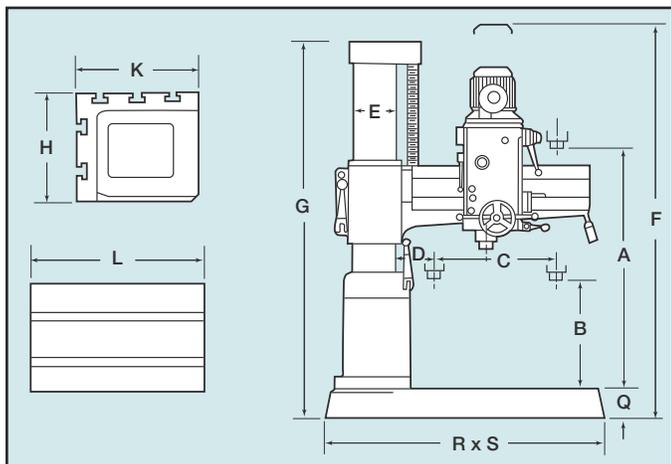
Features and Standard Equipment:

- High-quality cast-iron arm with heat-treated and ground slides for smooth and accurate head positioning
- The bearing bracket for gear-box is fitted with standard bearings to fit arm slide for smooth gear-box operation
- High speed gears are made of Nickel-Chrome Steel and are heat-treated and ground for durability
- Powerful 3 Hp, 2-speed, heavy-duty spindle drive motor
Overload protection device
- The main spindle is balanced by a specially shaped spring
Coolant system
- Low volt and overload protection
- Tool kit and manuals
- 230/3/60 volt standard or other voltages require optional transformer or special order

Specifications:

Model	CL1100
Working Area:	
Column Sleeve Dia. (E)	10.24" (260mm)
Column Face to spindle Center Maximum (D+C)	43.3" (1100mm)
Minimum (D)	11.0" (280mm)
Spindle Head Travel (C)	32.3" (820mm)
Base Surface to Spindle End Maximum (A)	50.0" (1270mm)
Minimum (B)	18.5" (470mm)
Arm Vertical Travel (A-B)	31.5" (800mm)
Arm Rotation (Right & Left)	180°
Baseplate Working Surface	48" x 29.1"(1219 x 739mm)
Box Table Area	
Length (L)	25.1" (640mm)
Width (K)	20.4" (520mm)
Height (H)	16.5" (420mm)
Base Dimensions	
Floor Area (R x S)	67.9" x 28.1"(1725 x 715mm)
Height (Q)	7.1"(180mm)

Dimensions:



Drill Head:	
Spindle Taper	4MT
Spindle Stroke	9.05" (230mm)
Quill Diameter	3.15" (80mm)
Number of Spindle Speeds	12
Spindle Speeds (rpm)	44-1500
Number of Feeds	3
Spindle Feed Rate (in/mm)/rev.)	0.002"(.05mm), 0.0035"(.09mm), 0.006"(.15mm)
Spindle Drive Motor (2-speed)	3 hp (2.25 Kw)
Elevating Motor	1 hp (.75 Kw)
Coolant Pump Motor	1/8 hp (.10 Kw)

Capacities:

Model	CL1100
Capacity:	
Drilling	
In Steel	1.65" (42mm)
In Cast Iron	2.16" (55mm)
Tapping	
In Steel	1" (25mm)
In Cast Iron	1.5" (38mm)
Boring	
In Steel	3.35" (85mm)
In Cast Iron	4.72" (120mm)

Dimensions and Weights:	
Max. Machine Height (F)	99.6" (2530mm)
Base and Column Height (G)	78.7" (2000mm)
Shipping Dim.	
Length	74.0" (1880mm)
Width	34.0" (864mm)
Height	87" (2210mm)
Net Weight	3,968 lbs. (1800kg)
Shipping Weight	4,299 lbs. (1950kg)

Clausing Radial Drills Model: CL1230H

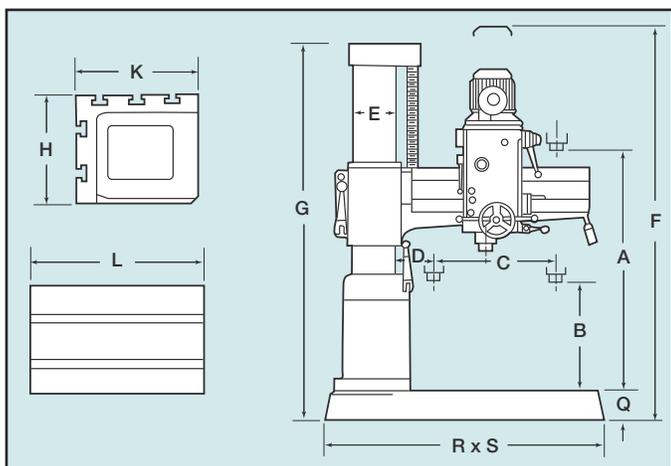
Features and Standard Equipment:

- High-quality cast-iron arm with heat-treated and ground slides for smooth and accurate head positioning
- The bearing bracket for gear-box is fitted with standard bearings to fit arm slide for smooth gear-box operation
- High speed gears are made of Nickel-Chrome Steel and are heat-treated and ground for durability
- Powerful 3 Hp, 2-speed, heavy-duty spindle drive motor
- Overload protection device
- The main spindle is balanced by an adjustable block
- Coolant system
- Low volt and overload protection
- Equipped with hydraulic clamping. With a push of a button you can have arm unclamped then move vertically, or stop then clamp automatically
- Tool kit and manuals
- 230/3/60 volt standard or other voltages require optional transformer or special order

Specifications:



Dimensions:



Capacities:

Model	CL1230H
Capacity:	
Drilling	
In Steel	1.65" (42mm)
In Cast Iron	2.16" (55mm)
Tapping	
In Steel	1" (25mm)
In Cast Iron	1.38" (38mm)
Boring	
In Steel	3.38" (86mm)
In Cast Iron	4.72" (120mm)

Model	CL1230H
Working Area:	
Column Sleeve Dia. (E)	11.81" (300mm)
Column Face to Spindle Center	
Maximum (D+C)	46.1" (1170mm)
Minimum (D)	13.4" (340mm)
Spindle Head Travel (C)	35.0" (890mm)
Base Surface to Spindle End	
Maximum (A)	53.9" (1370mm)
Minimum (B)	19.3" (490mm)
Arm Vertical Travel (A-B)	34.6" (880mm)
Arm Rotation (Right & Left)	180°
Baseplate Working Surface	48" x 29.1"(1219 x 739mm)
Box Table Area	
Length (L)	25.1" (640mm)
Width (K)	20.4" (520mm)
Height (H)	16.5" (420mm)
Base Dimensions	
Floor Area (R x S)	67.9" x 28.1"(1725 x 715mm)
Height (Q)	7.1" (180mm)

Drill Head:	
Spindle Taper	4MT
Spindle Stroke	9.84" (250mm)
Quill Diameter	3.15" (80mm)
Number of Spindle Speeds	2
Spindle Speeds (rpm)	44-1500
Number of Feeds	3
Spindle Feed Rate (in(mm)/rev.)	0.002"(.05mm), 0.0035"(.09mm), 0.006"(.15mm)
Spindle Drive Motor (2-speed)	3 hp (2.25 Kw)
Elevating Motor	1 hp (.75 Kw)
Clamping Motor	1 hp (.75 Kw)
Coolant Pump Motor	1/8 hp (.10 Kw)

Dimensions and Weight:	
Max. Machine Height (F)	109.5" (2780mm)
Base and Column Height (G)	81.1" (2060mm)
Shipping Dim.	
Length	80.1" (2035mm)
Width	32.5" (862mm)
Height	88.2" (2240mm)
Net Weight	4,630 lbs. (2100kg)
Shipping Weight	5,071 lbs. (2300kg)



Shown with Optional Tilt Table

Clausing Radial Drills Model: CLC1250H

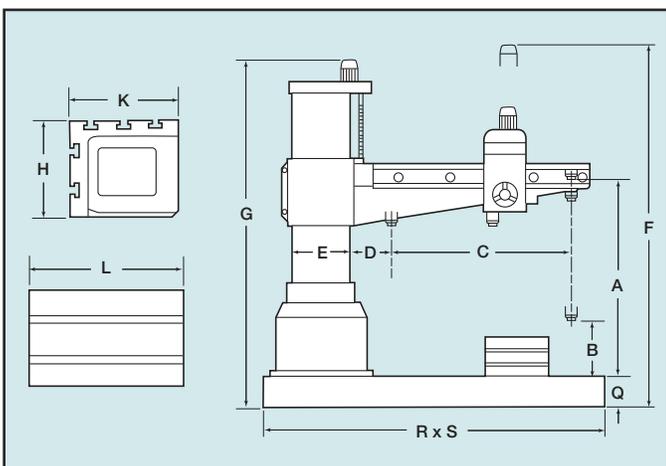
Features and Standard Equipment:

- Equipped with hydraulic separate clamping unit. Vertical movement of arm is coordinated by an IC timer. With a single touch on push button switch, you can have the arm unclamped then move vertically, or stop then clamp automatically. Very easy to operate, and tools will always stay at the same point after tool shifting
- Gears in gear box are cooled by oil cycled by an oil pump to minimize gear wear
- Powerful 5 Hp, 2-speed, heavy-duty spindle drive motor
- Friction type disc clutch absorbs impact force caused by vertical movement of spindle, and protects all transmission units inside gear box. With quick spindle return, the clutch will help speed-up the tapping operation
- Special arm elevating device is provided to prevent arm from falling down abruptly after years of usage
- Coolant system ● Tool kit and manuals
- 230/3/60 volt standard or other voltages require optional transformer or special order

Specifications:

Model	CLC1250H
Working Area:	
Column Sleeve Dia. (E)	11.81" (300mm)
Column Face to Spindle Center	
Maximum (D+C)	49.21" (1250mm)
Minimum (D)	14.17" (360mm)
Spindle Head Travel (C)	35.04" (890mm)
Base Surface to Spindle End	
Maximum (A)	52.95" (1345mm)
Minimum (B)	17.36" (441mm)
Arm Vertical Travel (A-B)	28.1" (715mm)
Arm Rotation (Right & Left)	180°
Baseplate Working Surface	48" x 29.1"(1219 x 739mm)
Box Table Area	
Length (L)	25.1" (640mm)
Width (K)	20.4" (520mm)
Height (H)	16.5" (420mm)
Base Dimensions	
Floor Area (R x S)	70.3" x 30.9"(1785 x 785mm)
Height (Q)	7.8" (190mm)

Dimensions:



Capacities:

Model	CLC1250H
Capacity:	
Drilling	
In Steel	1.97" (50mm)
In Cast Iron	2.36" (60mm)
Tapping	
In Steel	1.57" (40mm)
In Cast Iron	1.97" (50mm)
Boring	
In Steel	4.33" (110mm)
In Cast Iron	6.55" (165mm)

Drill Head:

Spindle Taper	5MT
Spindle Stroke	10.63" (270mm)
Quill Diameter	3.15" (80mm)
Number of Spindle Speeds	12
Spindle Speeds (rpm)	56-1450
Number of Feeds	3
Spindle Feed Rate (in/mm)/rev.)	0.0023"(.06mm), 0.004"(.10mm), 0.008"(.20mm)
Spindle Drive Motor (2-speed)	5 hp (3.8 Kw)
Elevating Motor	1 hp (.75 Kw)
Clamping Motor	1 hp (.75 Kw)
Coolant Pump Motor	1/8 hp (.10 Kw)

Dimensions and Weight:

Max. Machine Height (F)	104.1" (2645mm)
Base and Column Height (G)	81.9" (2080mm)
Shipping Dim.	
Length	81.1" (2060mm)
Width	39.2" (995mm)
Height	88.2" (2240mm)
Net Weight	5,071 lbs. (2300kg)
Shipping Weight	5,512 lbs. (2500kg)

Clausing Radial Drills

Model: CLC1600H

Features and Standard Equipment:

- Equipped with hydraulic separate clamping unit. Vertical movement of arm is coordinated by an IC timer. With a single touch on push button switch, you can have the arm unclamped then move vertically, or stop then clamp automatically. Very easy to operate, and tools will always stay at the same point after tool shifting
- Gears in gear box are cooled by oil cycled by an oil pump to minimize gear wear
- Powerful 5 Hp, 2-speed, heavy-duty spindle drive motor
- Friction type disc clutch absorbs impact force caused by vertical movement of spindle, and protects all transmission units inside gear box. With quick spindle return, the clutch will help speed-up the tapping operation
- Special arm elevating device is provided to prevent arm from falling down abruptly after years of usage
- Coolant system ● Tool kit and manuals
- 230/3/60 volt standard or other voltages require optional transformer or special order

Specifications:

Model	CLC1600H
Working Area:	
Column Sleeve Dia. (E)	12.61" (320mm)
Column Face to Spindle Center	
Maximum (D+C)	63.00" (1600mm)
Minimum (D)	13.78" (350mm)
Spindle Head Travel (C)	49.21" (1250mm)
Base Surface to Spindle End	
Maximum (A)	55.90" (1420mm)
Minimum (B)	18.31" (465mm)
Arm Vertical Travel (A-B)	36.7" (932mm)
Arm Rotation (Right & Left)	180°
Baseplate Working Surface	70.9" x 40.4"(1800 x 1026mm)
Box Table Area	
Length (L)	24.8" (630mm)
Width (K)	19.7" (500mm)
Height (H)	19.7" (500mm)
Base Dimensions	
Floor Area (R x S)	100.4" x 38.2"(2550 x 970mm)
Height (Q)	7.9" (200mm)

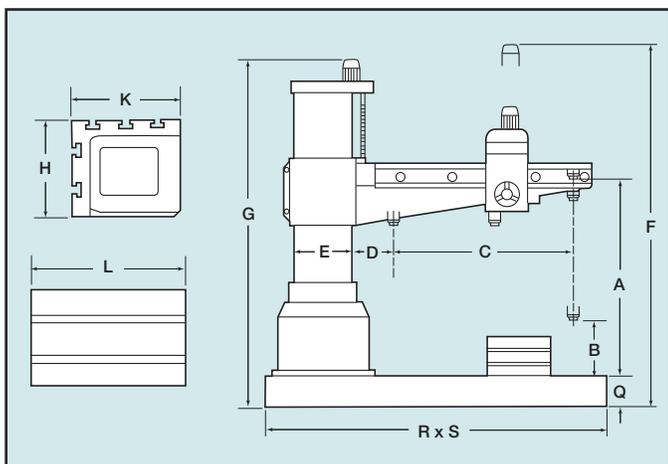
Drill Head:	
Spindle Taper	5MT
Spindle Stroke	10.63" (270mm)
Quill Diameter	3.15" (80mm)
Number of Spindle Speeds	12
Spindle Speeds (rpm)	56-1450
Number of Feeds	3
Spindle Feed Rate (in/mm)/rev.)	0.0023"/(.06mm), 0.004"/(.10mm), 0.008"/(.20mm)
Spindle Drive Motor (2-speed)	5 hp (3.8 Kw)
Elevating Motor	1 hp (.75 Kw)
Clamping Motor	1 hp (.75 Kw)
Coolant Pump Motor	1/8 hp (.10 Kw)

Dimensions and Weight:	
Max. Machine Height (F)	108.7" (2760mm)
Base and Column Height (G)	86.1" (2186mm)
Shipping Dim.	
Length	105.2" (2670mm)
Width	44.1" (1120mm)
Height	94.9" (2410mm)
Net Weight	7,275 lbs. (3300kg)
Shipping Weight	8,378 lbs. (2800kg)



Shown with Optional Tilt Table

Dimensions:



Capacities:

Model	CLC1600H
Capacity:	
Drilling	
In Steel	1.97" (50mm)
In Cast Iron	2.36" (60mm)
Tapping	
In Steel	1.57" (40mm)
In Cast Iron	1.97" (50mm)
Boring	
In Steel	4.33" (110mm)
In Cast Iron	6.55" (165mm)



Clausing Radial Drills Model: CL1600H

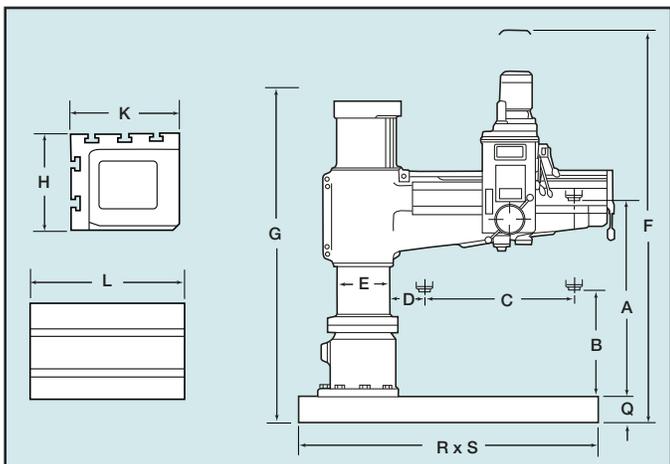
Features and Standard Equipment:

- Equipped with hydraulic separate clamping unit. Vertical movement of arm is coordinated by an IC timer. With a single touch on push button switch, you can have the arm unclamped then move vertically, or stop then clamp automatically. Very easy to operate, and tools will always stay at the same point after tool shifting.
- Gears in gear box are cooled by oil cycled by an oil pump to minimize gear wear.
- Friction type disc clutch absorbs impact force caused by vertical movement of spindle, and protects all transmission units inside gear box. With quick spindle return, the clutch will help speed-up the tapping operation.
- Special automatic tool eject device is supplied to allow you to change tools quickly. (No drifter is required) Special arm elevating device is provided to prevent arm from falling down abruptly after.
- Coolant system ● Tool kit and manuals
- 230/3/60 volt standard

Specifications:

Model	CL1600H
Working Area:	
Column Sleeve Dia. (E)	17" (432mm)
Column Face to Spindle Center Maximum (D+C)	62.2" (1580mm)
Minimum (D)	17.3" (440mm)
Spindle Head Travel (C)	44.9" (1140mm)
Base Surface to Spindle End Maximum (A)	63" (1600mm)
Minimum (B)	15" (380mm)
Arm Vertical Travel (A-B)	48" (1220mm)
Arm Rotation (Right & Left)	180°
Baseplate Working Surface	70.9" x 40.4" (1800 x 1026mm)
Box Table Area	
Length (L)	27.6" (700mm)
Width (K)	19.7" (500mm)
Height (H)	15.9" (405mm)
Base Dimensions	
Floor Area (R x S)	97.6" x 41.3" (2480 x 1050mm)
Height (Q)	8.26" (210mm)
Drill Head:	
Spindle Taper	5MT
Spindle Stroke	14.6" (370mm)
Quill Diameter	3.94" (100mm)
Number of Spindle Speeds	12
Spindle Speeds (rpm)	40-1920
Number of Steps	6
Spindle Feed Rate (in(mm)/rev.)	0.003"(.07mm)-0.038"(.96mm)
Spindle Drive Motor (1-speed)	7.5 hp (5.6 Kw)
Elevating Motor	2 hp (1.5 Kw)
Clamping Motor	1 hp (.75 Kw)
Coolant Pump Motor	1/8 hp (.10 Kw)
Dimensions and Weight	
Max. Machine Height (F)	124.8" (3170mm)
Base and Column Height (G)	107.7" (2660mm)
Shipping Dim.	
Length	112.2" (2850mm)
Width	55.1" (1400mm)
Height	115.7" (2940mm)
Net Weight	10,805 lbs. (4900kg)
Shipping Weight	11,245 lbs. (5100kg)

Dimensions:



Capacities:

Model	CL1600H
Capacity:	
Drilling	
In Steel	2.6" (65mm)
In Cast Iron	2.75" (70mm)
Tapping	
In Steel	1.97" (50mm)
In Cast Iron	2.36" (60mm)
Boring	
In Steel	5" (126mm)
In Cast Iron	7.28" (185mm)

Clausing Radial Drills

Model: CL2000H

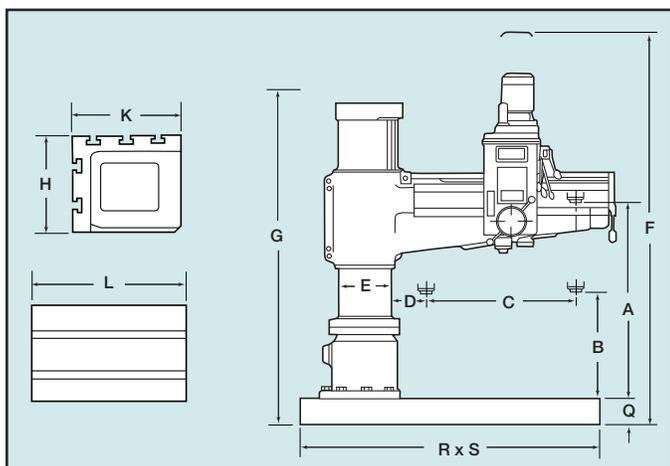
Features and Standard Equipment:

- Equipped with hydraulic separate clamping unit. Vertical movement of arm is coordinated by an IC timer. With a single touch on push button switch, you can have the arm unclamped then move vertically, or stop then clamp automatically. Very easy to operate, and tools will always stay at the same point after tool shifting. Gears in gear box are cooled by oil cycled by an oil pump to minimize gear wear.
- Friction type disc clutch absorbs impact force caused by vertical movement of spindle, and protects all transmission units inside gear box. With quick spindle return, the clutch will help speed-up the tapping operation.
- Special arm elevating device is provided to prevent arm from falling down abruptly after years of usage.
- Coolant system
- Tool kit and manuals
- 230/3/60 volt standard

Specifications:



Dimensions:



Capacities:

Model	CL2000H
Capacity:	
Drilling	
In Steel	2.6" (65mm)
In Cast Iron	2.75" (70mm)
Tapping	
In Steel	1.97" (50mm)
In Cast Iron	2.36" (60mm)
Boring	
In Steel	5" (126mm)
In Cast Iron	7.28" (185mm)

Model	CL2000H
Working Area:	
Column Sleeve Dia. (E)	17" (432mm)
Column Face to Spindle Center	
Maximum (D+C)	78.7" (2000mm)
Minimum (D)	19.3" (490mm)
Spindle Head Travel (C)	59.4" (1510mm)
Base Surface to Spindle End	
Maximum (A)	74.8" (1900mm)
Minimum (B)	19.7" (500mm)
Arm Vertical Travel (A-B)	55.1" (1400mm)
Arm Rotation (Right & Left)	180°
Baseplate Working Surface	
Box Table Area	
Length (L)	39.3" (1000mm)
Width (K)	31.5" (800mm)
Height (H)	19.7" (500mm)
Base Dimensions	
Floor Area (R x S)	114.5" x 43.3" (2908 x 1102mm)
Height (Q)	98.4" (250mm)
Drill Head:	
Spindle Taper	5MT
Spindle Stroke	14.6" (370mm)
Quill Diameter	3.94" (100mm)
Number of Spindle Speeds	12
Spindle Speeds (rpm)	35-1890
Number of Steps	6
Spindle Feed Rate (in(mm)/rev.)	0.003"(.07mm)-0.038"(.96mm)
Spindle Drive Motor (1-speed)	7.5 hp (5.6 Kw)
Elevating Motor	3 hp (2.25 Kw)
Clamping Motor	1 hp (.75 Kw)
Coolant Pump Motor	1/8 hp (.10 Kw)
Dimensions and Weight	
Max. Machine Height (F)	124.8" (3470mm)
Base and Column Height (G)	116.5" (2960mm)
Shipping Dim.	
Length	122.2" (3105mm)
Width	55.1" (1400mm)
Height	127.5" (3240mm)
Net Weight	13,448 lbs. (6100kg)
Shipping Weight	14,550 lbs. (6600kg)



Clausing Radial Drills Model: CLC2500

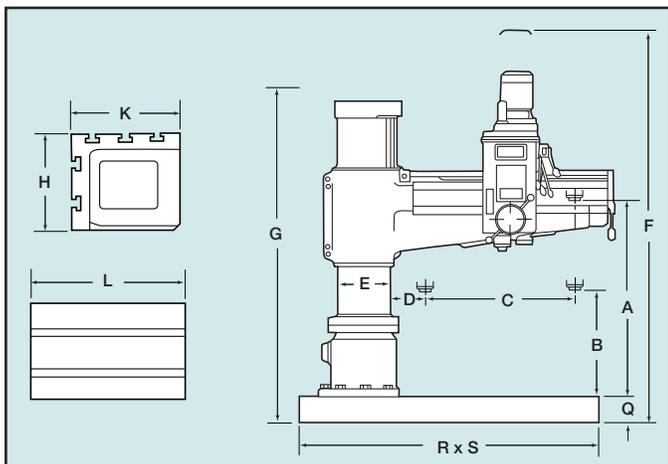
Features and Standard Equipment:

- Equipped with hydraulic separate clamping unit. Vertical movement of arm is coordinated by an IC timer. With a single touch on push button switch, you can have the arm unclamped then move vertically, or stop then clamp automatically. Very easy to operate, and tools will always stay at the same point after tool shifting
- Gears in gear box are cooled by oil cycled by an oil pump to minimize gear wear
- Friction type disc clutch absorbs impact force caused by vertical movement of spindle, and protects all transmission units inside gear box. With quick spindle return, the clutch will help speed-up the tapping operation
- Special arm elevating device is provided to prevent arm from falling down abruptly after years of usage
- Coolant system
- Tool kit and manuals
- 230/3/60 volt standard

Specifications:

Model	CLC2500
Working Area:	
Column Sleeve Dia. (E)	21.65" (550mm)
Column Face to Spindle Center Maximum (D+C)	98.4" (2500mm)
Minimum (D)	19.7" (500mm)
Spindle Head Travel (C)	78.7" (2000mm)
Base Surface to Spindle End Maximum (A)	78.7" (2000mm)
Minimum (B)	21.6" (550mm)
Arm Vertical Travel (A-B)	57.1" (1450mm)
Arm Rotation (Right & Left)	180°
Baseplate Working Surface Box Table Area	86.8" x 43.4" (2205 x 1102mm)
Length (L)	39.4" (1000mm)
Width (K)	31.5" (800mm)
Height (H)	22" (560mm)
Base Dimensions Floor Area (R x S)	138.6" x 55.1" (3520 x 1400mm)
Height (Q)	12.6" (320mm)
Drill Head:	
Spindle Taper	6MT
Spindle Stroke	17.7" (450mm)
Quill Diameter	3.94" (100mm)
Number of Spindle Speeds	16
Spindle Speeds (rpm)	16-1250
Number of Steps	16
Spindle Feed Rate (in/mm)/rev.)	0.0015"(.04mm)-0.126"(3.20mm)
Spindle Drive Motor (1-speed)	10 hp (7.5 Kw)
Elevating Motor	5 hp (3.6 Kw)
Coolant Pump Motor	1/4 hp (.18 Kw)
Dimensions and Weight:	
Max. Machine Height (F)	157" (3990mm)
Base and Column Height (G)	151.6" (2660mm)
Shipping Dim. Length	158" (4000mm)
Width	63" (1600mm)
Height	151.6" (3850mm)
Net Weight	24,250 lbs. (11000kg)
Shipping Weight	27,557 lbs. (12500kg)

Dimensions:



Capacities:

Model	CLC2500
Capacity:	
Drilling In Steel	3.15" (80mm)
In Cast Iron	3.98" (100mm)
Tapping In Steel	2.56" (65mm)
In Cast Iron	2.95" (75mm)
Boring In Steel	6" (150mm)
In Cast Iron	10" (250mm)



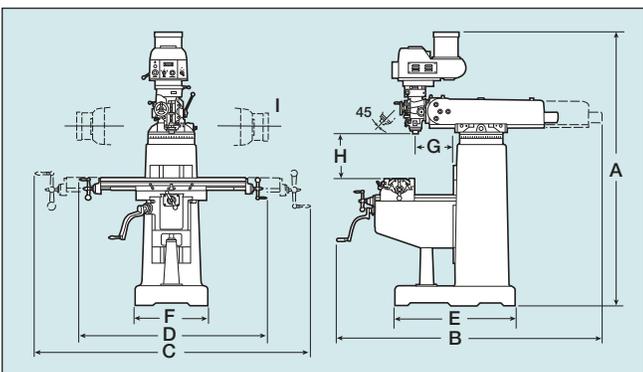
Clausing EVS Vertical Mills Models: 400EVS, 450EVS, 500EVS Specifications:

Model	400EVS	450EVS	500EVS
Table:			
Table Size	10" x 50" (254 x 1270mm)	10" x 54" (254 x 1372mm)	11" x 58" (254 x 11473mm)
No. of T-slots	3	3	3
T-slot Width	.63" (16mm)	.63" (16mm)	.63" (16mm)
T-slot Center Distance	2.48" (63mm)	2.48" (63mm)	2.48" (63mm)
Travels:			
X Axis, Longitudinal	37.2" (945mm)	39.75" (1008mm)	42.75" (1085mm)
Y Axis, Cross	16" (406mm)	16" (406mm)	16" (406mm)
Z Axis, Knee	16" (406mm)	16" (406mm)	17.7" (450mm)
Ram Travel	22" (559mm)	22" (559mm)	22" (559mm)
Ram Swivel	360°	360°	360°
Spindle to Column	5.9"-28.9" (150 - 734mm)	5.8"-28.9" (147 - 734mm)	5.3"-27.2" (135 - 691mm)
Spindle Nose to Table	3.54"-19.7" (90 - 500mm)	3.54"-19.7" (90 - 500mm)	1.57"-19.2" (40 - 489mm)
Spindle:			
Spindle Drive Motor	3 hp (2.25kw)	3 hp (2.25kw)	5 hp (3kw)
Spindle Speed Range	50-5000 rpm	50-5000 rpm	50-5000 rpm
Spindle Taper	R-8 or ISO30	R-8 or ISO30	R-8 or ISO30
Quill Travel	5" (127mm)	5" (127mm)	5" (127mm)
Quill Diameter	3.28" (83mm)	3.38" (83mm)	3.38" (83mm)
Quill Feed (in/rev) (mm/rev)	.00157"/.00315"/.006" (.004/.08/.152)		
Head Tilt (Front or Back)	45°	45°	45°
Head Tilt (Left or Right)	90°	90°	90°
Dimensions & Weights:			
Column Turret Diameter	15.75" (400mm)	15.75" (400mm)	16.54" (420mm)
Knee width	13.75" (349mm)	15.35" (390mm)	15.35" (390mm)
Knee Bearing Length	17.72" (450mm)	17.72" (450mm)	19.69" (500mm)
Saddle Length	20.08" (510mm)	25.59" (650mm)	25.59" (650mm)
Table Bearing Length	11.26" (286mm)	11.26" (286mm)	11.02" (280mm)
Ram/Turret Bearing Length	17.72" (450mm)	17.72" (450mm)	17.72" (450mm)
Machine Weight	2,640 lbs. (1198kg)	2,750 lbs. (1247kg)	3,300 lbs. (1497kg)
Shipping Weight	3,040 lbs. (1379kg)	3,150 lbs. (1429kg)	3,700 lbs. (1678kg)

Specifications and design subject to change without notice.

Standard Features...

- Totally enclosed electrics with Yaskawa A.C. inverter variable speed drive
- Quick and accurate rpm setting
- Head mounted, easy to use control panel
- LCD spindle speed display
- Up to 5 hp spindle motor standard
- Spindle brake with auto power off
- Carbon steel, hardened and ground, chrome plated quill
- Coolant system
- Up to 11" x 58" (254x11473mm) table size
- Meehanite castings for superior rigidity
- Hardened and ground table with 3 ground T-slots
- Double nut leadscrew for easy backlash adjustment
- All ways are hardened and ground with Turcite B coating on X and Y axis ways for wear resistance



Model	400EVS	450EVS	500EVS
A Height	88.6" (2250mm)	88.6" (2250mm)	90.6" (2300mm)
B Depth w/Ram Travel	78" (1980mm)	78" (1980mm)	82.7" (2100mm)
C Width w/Table Travel	102" (2590mm)	105" (2667mm)	110" (2795mm)
D Width	66" (1676mm)	70" (1778mm)	74" (1880mm)
E Base Depth	39" (990mm)	39" (990mm)	44" (1118mm)
F Base Width	23.6" (600mm)	23.6" (600mm)	25" (635mm)
G Spindle to Column	5.9"-28.9"(150-735mm)	5.9"-28.9"(150-735mm)	5.3"-27.2"(135-690mm)
H Spindle to Table	3.54"-19.7"(90-500mm)	3.54"-19.7"(90-500mm)	1.57"-19.2"(40-488mm)
I Head Tilt	90° Right or Left		

Clousing Mechanical Variable Speed Vertical Knee Mills



2VS

9" x 49" Table • 3 hp Spindle Motor

3VS

10" x 54" Table • 3 hp Spindle Motor

4VSQ

10" x 54" Table • 5 hp Spindle Motor

Here are more reasons for putting the Clausing vertical mill to work in Your Toolroom...

If you're looking for a Heavy-duty Standard Vertical Milling Machine, at an affordable price, the Clausing knee mills are what you're looking for.

Designed for precision, the Clausing Mills deliver all the power, precision and versatility you need to handle most milling jobs in your toolroom.

The Clausing Knee Mills are one of the heaviest in it's class and is equipped with a powerful spindle drive motor and an infinitely variable speed drive offering a speed range of 60 to 4300 rpm.

These mills offer features often found only on higher priced milling machines...

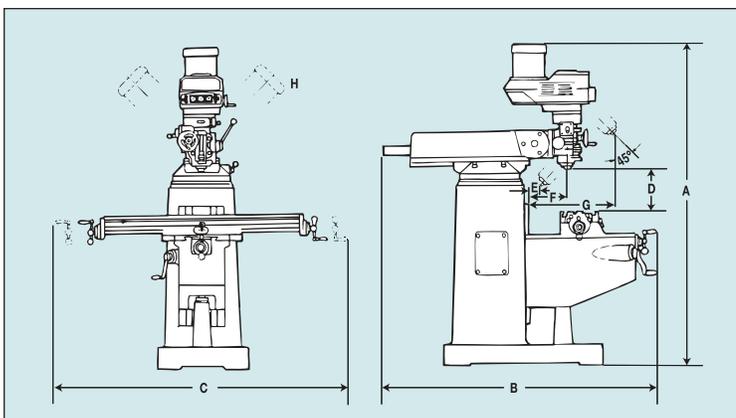
Standard Features...

- Meehanite castings for superior rigidity and wear resistance
- Hardened & ground X,Y & Z ways
- X/Y ways coated with Turcite B
- Column & knee way covers
- T-slots are ground to provide reference edge for positioning your workpiece
- Hardened & ground table surface
- Hardened & ground spindle
- Chromed & ground quill
- Chromed X, Y & Z leadscrews
- Double nut leadscrew for backlash compensation
- ABEC 7/CP4 spindle bearings
- Coolant system w/pump & switch
- Flexible segmented coolant nozzle
- Chromed Y screw covers and one-piece wipers
- 7/16" imperial drawbar (2VS, 3VS)
- M16 metric drawbar with ISO-40 spindle (4VSQ)
- 3 hp AC motor (2VS & 3VS)
- 5 hp AC motor (4VSQ)
- AC rapid vertical drive (4VSQ)
- Mechanical Variable speed drive
- Articulating head for compound angles
- Worm gear angular positioning of head in two directions
- Lever-operated manual rapid quill movement
- Handwheel for fine quill feed
- Adjustable automatic feed disengagement for quill feed
- Micrometer depth stop
- Reversing switch for clockwise or counter clockwise operation
- R-8 or ISO-30 spindle (2VS & 3VS)
- ISO-40 spindle (4VSQ)
- Spindle brake (hand operated)
- One-shot lubrication
- Halogen work light
- Tool kit, test and accuracy chart
- Operations manual/parts list
- Knee assist on (4VSQ)

Specifications:

Model	2VS	3VS	4VSQ
Table & Ways			
Table Size	9" x 49" (230x1245mm)	10" x 54" (254x11370mm)	10" x 54" (254x11370mm)
No. of T-Slots	3	3	3
T-Slot Width	.63 (16mm)	.63 (16mm)	.63 (16mm)
T-Slot Center Distance	2.08" (52mm)	2.48" (63mm)	2.48" (63mm)
Table Ways	Dovetail	Dovetail	Dovetail
Knee Ways	Dovetail	Square	Square
Column Ways	Dovetail	Dovetail	Square
Travels			
X Longitudinal	38.18" (970mm)	39.56" (1005mm)	41.33" (1050mm)
Y Cross	14.17" (360mm)	15.55" (395mm)	15.35" (390mm)
Z Knee	13.97" (355mm)	15.55" (395mm)	13.97" (355mm)
Ram	18.50" (470mm)	22.04" (560mm)	21.85" (555mm)
Motors & Spindle			
Spindle Motor	3 hp (2.25kw)	3 hp (2.25kw)	5 hp (2.25kw)
Amp. Draw 208v.	11	10.5	18.5
Amp. Draw 230v.	10.5	10.5	9.3
Amp. Draw 460v.	5.2	5.2	9.3
Variable Spindle Speed rpm	75-4350	75-4350	75-4350
Low Range rpm	85-780	85-780	85-780
High Range rpm	515-4350	515-4350	515-4350
Main Spindle Taper	R-8 or ISO30	R-8 or ISO30	ISO40
Spindle Travel	5" (127mm)	5" (127mm)	5" (127mm)
Quill Feed (in/rev.) (mm/rev)	.0015/.0031/.006 (.004/.008/.015mm)	.0015/.0031/.006 (.004/.008/.015mm)	.0015/.0031/.006 (.004/.008/.015mm)
Quill Diameter	3.38" (85mm)	3.38" (85mm)	4.13" (105mm)
Construction & Weight			
Column Turret Diameter	14.96" (380mm)	14.96" (380mm)	15.35" (390mm)
Knee Width	11.42" (290mm)	11.42" (290mm)	13.39" (340mm)
Column Bearing Length	16.54" (420mm)	17.91" (455mm)	16.93" (430mm)
Saddle/Table Bearing Length	19.88" (505mm)	20.28" (515mm)	20.28" (515mm)
Ram/Turret Bearing Length	16.14" (410mm)	17.32" (440mm)	17.13" (435mm)
Ram Length	28.94" (735mm)	41.73" (1060mm)	33.46" (850mm)
Table Load	665 lbs. (302kg)	665 lbs. (302kg)	1,108 lbs. (503kg)
Net Weight	2,100 lbs. (950kg)	2,985 lbs. (1350kg)	3,210 lbs. (1450kg)

Specifications are subject to change without notice.



MODEL	2VS	3VS	4VSQ
A Height	89" (2255mm)	88" (2230mm)	89" (2255mm)
B Depth	66" (1675mm)	71" (1790mm)	106" (2700mm)
C Width	99" (2520mm)	76" (1920mm)	78" (1970mm)
D Table to Spindle	3.15"-17.12" (80-435mm)	3.94"-19.01" (100-483mm)	4.52"-18.50" (115-470mm)
E 45° Inward	0-19.68" (0-500mm)	1.57"-16.53" (40-420mm)	0-18.89" (0-480mm)
F Spindle ø to Column	4.53"-23.03" (115-585mm)	9.45"-29.92" (240-760mm)	7.28"-29.13" (185-740mm)
G 45° Outward	6.89"-29.39" (175-645mm)	12.20"-27.16" (310-690mm)	7.48"-29.33" (190-745mm)
H Head Tilt	90° Right & Left		

Clausing Horizontal & Vertical Universal Mills

MILLING



Shown with optional DRO

Model 2500UM

Model 2500M

Clausing Horizontal & Vertical Universal Knee Mills are heavy-duty, reliable, extremely accurate and very versatile machines. These heavy-duty cast iron mills can be used for one-off pieces as well as small to medium size production runs, making them ideal for maintenance tool rooms, job shops or tool and die shops. A wide range of spindle speeds combined with infinitely variable feed rates makes cutting ferrous and non-ferrous metals highly efficient.

MODEL 2500UM is equipped with a vertical spindle motor and a horizontal spindle motor with a fixed quill

MODEL 2500M is equipped with a vertical spindle motor and a horizontal spindle motor with a traveling quill

MODEL 2500U is equipped with a vertical spindle motor only with a fixed quill

MODEL 2500QM is equipped with a vertical spindle motor and a horizontal spindle motor with a traveling quill



Model 2500U Head



Model 2500QM Head



Table rotates 45° right & left

Standard Features and Equipment:

- X, Y & Z infinitely variable speed is achieved by a inverter through the gear box and controlled at the operator friendly control panel
- Rapid traverse on X, Y & Z axis
- Variable speed on X, Y & Z axis
- High quality meehanite casting for superior rigidity and wear resistance
- All gears and shafts are hardened
- Large 13.7" x 59" (350 x 1500mm) table with 5 T-slots
- Table swivels 45° left and right
- Extra large square and dovetail square slide ways for greater accuracy
- All slide ways and table are hardened and ground
- Turcite coated Y axis for wear resistance
- Double clamps on all square slide ways
- Motorized overarm with a 5.5 hp (3.75kw) motor
- 1" (27mm) long horizontal ISO-40 milling arbor
- Horizontal & vertical manual drawbars
- Automatic coolant system and coolant pump
- Tool box and service tools

Specifications:

Model	2500UM	2500U	2500QM	2500M
Table				
Table Area	13.7" x 59" (350 x 1500mm)			
Table Load Capacity	1,540 lbs. (700kg)	1,540 lbs. (700kg)	1,540 lbs. (700kg)	1,540 lbs. (700kg)
Number of T-slots	5	5	5	5
Distance Between T-slots	2.36" (60mm)	2.36" (60mm)	2.36" (60mm)	2.36" (60mm)
Table Rotation	45° right/left	45° right/left	45° right/left	45° right/left
Travel				
X Longitudinal	46" (1150mm)	46" (1150mm)	46" (1150mm)	46" (1150mm)
X Longitudinal optional 72" TBL	59" (1499mm)	59" (1499mm)	59" (1499mm)	59" (1499mm)
Y Cross	15.75" (400mm)	15.75" (400mm)	15.75" (400mm)	15.75" (400mm)
Z Knee	20" (500mm)	20" (500mm)	20" (500mm)	20" (500mm)
Distance from Spindle to Overarm	6" (155mm)	6" (155mm)	6" (155mm)	6" (155mm)
Spindle (Horizontal)				
Spindle Taper	ISO40	ISO40	ISO40	ISO40
Diameter of the Main Shaft Nose	3.5"-5.06" (88.88-128.57mm)	3.5"-5.06" (88.88-128.57mm)	3.5"-5.06" (88.88-128.57mm)	3.5"-5.06" (88.88-128.57mm)
Milling Arbor	1" (27mm)	1" (27mm)	1" (27mm)	1" (27mm)
Number Spindle Speeds	12	12	12	12
Spindle Speed Range	40-1800 rpm	40-1800 rpm	40-1800 rpm	40-1800 rpm
Feeds				
Longitudinal and Cross Feeds	0.4"-47" (10-1208mm)	0.4"-47" (10-1208mm)	0.4"-47" (10-1208mm)	0.4"-47" (10-1208mm)
Vertical Feed	0.2-23" (5-604mm)	0.2-23" (5-604mm)	0.2-23" (5-604mm)	0.2-23" (5-604mm)
Rapid Traverse				
Longitudinal and Cross Feeds	47"/min. (1208mm/min.)	47"/min. (1208mm/min.)	47"/min. (1208mm/min.)	47"/min. (1208mm/min.)
Vertical Feed	23" (804mm)/min.	23" (804mm)/min.	23" (804mm)/min.	23" (804mm)/min.
Spindle Drive				
Main Spindle Motor	7.5 hp (5kw)	7.5 hp (5kw)	7.5 hp (5kw)	7.5 hp (5kw)
Feed Motor	2.5 hp (1.5kw)	2.5 hp (1.5kw)	2.5 hp (1.5kw)	2.5 Hp (1.5kw)
Coolant				
Coolant Pump	1/8 hp (.10kw)	1/8 hp (.10kw)	1/8 hp (.10kw)	1/8 hp (.10kw)
Spindle (Vertical)				
Spindle Taper	ISO40	-	ISO40	ISO40
Quill Diameter	-	-	4.13" (105mm)	4.92" (125mm)
Quill Travel	-	-	4.92" (125mm)	3.94" (100mm)
Number of Speeds	12	-	-	12
Variable Spindle Speed	35-1600 rpm	-	70-3500 rpm V.S.	35-1600 rpm
Spindle Motor	5.5 hp (3.75kw)	-	5.5 hp (3.75kw)	5.5 hp (3.75kw)
Weight				
Net Weight	7,040 lbs. (3200kg)	7,040 lbs. (3200kg)	7,040 lbs. (3200kg)	7,040 lbs. (3200kg)
Shipping Weight	7,770 lbs. (3500kg)	7,770 lbs. (3500kg)	7,770 lbs. (3500kg)	7,770 lbs. (3500kg)
Dimensions				
Shipping Dimensions	70" x 89" x 88" (1778 x 2260 x 2235mm)	70" x 89" x 88" (1778 x 2260 x 2235mm)	70" x 89" x 88" (1778 x 2260 x 2235mm)	70" x 89" x 88" (1778 x 2260 x 2235mm)

MILLING

Add Productivity with Clausing Mill Accessories & DROs

Spindle Assembly

Part No.	Description and Model	Weight
ISOR8	R-8 Spindle for 2VS & 3VS	10 lbs.
ISO30	# 30 Spindle for 2VS & 3VS	15 lbs.
ISO40	# 40 Spindle for 4VSQ	15 lbs.
EVS124	R-8 Spindle for 400EVS, 450EVS & 500EVS	15 lbs.
EVS124A	R-8 Spindle Only for 400EVS, 450EVS & 500EVS	10 lbs.
EVS125	NT 30 Spindle for 400EVS, 450EVS & 500EVS	15 lbs.
EVS125A	NT 30 Spindle Only for 400EVS, 450EVS & 500EVS	10 lbs.



Chip Tray

Part No.	Description and Model	Weight
2VS001	Chip Tray for 2VS	15 lbs.
2VS001A	Chip Tray for 3VS	15 lbs.
4VSQ001A	Chip Tray for 4VSQ	15 lbs.
EVS120	Chip Tray for 400EVS	15 lbs.
EVS120A	Chip Tray for 450EVS & 500EVS	15 lbs.



Clamping Kit

52 pc. Clamping Kit for all models.
Part No. 2VS010



Right Angle Milling Attachment

Part No.	Description, Spindle or Model	Weight
4VS031	Rt. Angle Milling Attachment for 4VSQ	20 lbs.
EVS126	Rt. Angle Milling Attachment, R-8 Spindle for EVS400	20 lbs.
EVS126A	Rt. Angle Milling Attachment, #30 Spindle for EVS400	20 lbs.
EVS126B	Rt. Angle Milling Attachment, #40 Spindle for EVS400	20 lbs.
EVS127	Rt. Angle Milling Attachment, R-8 Spindle for EVS450	20 lbs.
EVS127A	Rt. Angle Milling Attachment, #30 Spindle for EVS450	20 lbs.
EVS127B	Rt. Angle Milling Attachment, #40 Spindle for EVS450	20 lbs.
EVS128	Rt. Angle Milling Attachment, R-8 Spindle for EVS500	20 lbs.
EVS128A	Rt. Angle Milling Attachment, #30 Spindle for EVS500	20 lbs.
EVS128B	Rt. Angle Milling Attachment, #40 Spindle for EVS500	20 lbs.

Milling Chuck Kit

Milling Chuck Kit with 7 ER collets, in sizes 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" & 1" in carrying case.



Part No.	Description and Spindle	Weight
2VS020	Milling Chuck Kit for R-8 Spindle	6 lbs.
2VS021	Milling Chuck Kit for #30 Spindle	6 lbs.
2VS022	Milling Chuck Kit for #40 Spindle	6 lbs.



Horizontal Milling Attachment

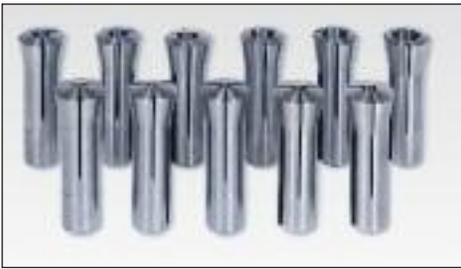
Right Angle Milling attachment required

Part No.	Description, Spindle or Model	Weight
2VS030	Horizontal Milling Attachment, R-8 & #30 Spindle	20 lbs.
2VS030A	Horizontal Milling Attachment, #40 Spindle	20 lbs.
EVS129	Horiz. Mill Arbor Support for 400EVS, 450EVS & 500EVS	15 lbs.
EVS129	1" Milling Arbor for 400EVS, 450EVS & 500EVS	10 lbs.

Riser Blocks



Part No.	Description and Model	Weight
2VS040P	4" Riser Block for 2VS	75 lbs.
2VS041P	6" Riser Block for 2VS	90 lbs.
2VS042P	8" Riser Block for 2VS	100 lbs.
3VS044P	4" Riser Block for 3VS	75 lbs.
3VS040P	8" Riser Block for 3VS	100 lbs.
4VSQ044	4" Riser Block for 3VS	75 lbs.
4VSQ040	8" Riser Block for 3VS	100 lbs.
EVS123	6" Riser Block for 400EVS 450EVS	90 lbs.
EVS123A	8" Riser Block for 400EVS & 450EVS	100 lbs.
EVS223	6" Riser Block for 500EVS	90 lbs.
EVS224	8" Riser Block for 500EVS	100 lbs.



R-8 Round Collet Sets

Part No.	Description
Z384-SET-1	R-8 Metric Set 2mm - 20mm by 1mm, 19 Collets
Z384-SET-5	R-8 Inch Set 1/8" - 3/4" by 32nds, 21 Collets
Z384-SET-6	R-8 Inch Set 1/8" - 3/4" by 16ths, 11 Collets
Z384-SET-7	R-8 Inch Set 1/8" - 3/4" by 8ths, 6 Collets



Power Feeds

Part No.	Description and Model	Weight
2VSX150	X-Axis Servo Feed for 2VS, 3VS & 4VSQ	20 lbs.
2V SXA	X-Axis Align Power for 2VS, 3VS & 4VSQ	20 lbs.
2VSY150	Y-Axis Servo Feed for 2VS, 3VS & 4VSQ	20 lbs.
2VSYA	Y-Axis Align Power for 2VS, 3VS & 4VSQ	20 lbs.
2VSK140	Knee Servo Feed for 2VS & 3VS	20 lbs.
2VSKA	Knee Align Power for 2VS & 3VS	20 lbs.

ACU-RITE® 200S Digital Readout

As the industry standard in digital readout systems, the Acu-Rite 200S offers state-of-the-art features for milling applications.



DRO Features

- 2 or 3 axes
- 5.7" transmissive LCD display
- Feed Rate Display
- Multiple language support
- Absolute/incremental
- Near-zero warning
- Help function
- 16 Tool Offsets/Diameter
- Preset and zero reset
- 4 function calculator/trig calculator
- Instant Inch/mm conversion
- Position-trac TM
- Bolt hole pattern calculations with graphics (full and partial circles/linear patterns)
- Centerline calculation enables you to establish workpiece zero and midpoints
- Edge finder input
- I/O (option)



Power Drawbar

Part No.	Description and Spindle	Weight
2VS8408	Power Drawbar for R-8 Spindle	25 lbs.
2VS8430	Power Drawbar Kit for #30 Spindle	25 lbs.
2VS8440	Power Drawbar Kit for #40 Spindle	25 lbs.



FAGOR Innova 40i DRO for 2, 3 and 4 Axes Milling Machines

DRO Features

- Linear and angular axes
- Easy setup and diagnosis
- Feedback signal monitoring
- Linear and multi-point compensation
- Radius or diameter display
- Preset and zero setting of the axes
- Incremental and distance-coded reference marks
- Tool radius compensation
- Direct mm/inch conversion
- Fine/coarse axis resolution
- Buzzer
- Absolute / Incremental measurement
- Easy software update through USB adapter
- Alarms for excessive feed rate and travel limit overrun
- "Display OFF" mode
- Calculator
- 3D color display of tool path
- Bolt Hole drilling calculation
- Up to 50 part references (datum points)
- Linear drilling calculation
- Part centering
- Part alignment
- Axis coupling



NEWALL DP700 Digital Readout

The DP700 is a powerful and intuitive DRO that is housed in a rugged, ergonomically designed casting.

DRO Features

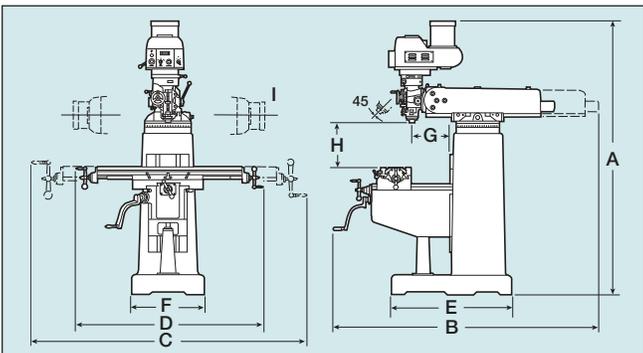
- Solid cast construction
- Long life membrane keypad
- Clean, crisp LEDs
- Intuitive message window
- Wide viewing angle
- Safe, low voltage external Power supply
- Five year warranty
- Customized canned cycles
- ABS/inc
- Digifind
- Metric/inch
- Zero approach
- Tool offsets
- Taper
- Summing
- Bolt hole circle
- Arc contouring
- Polar co-ordinates
- Line hole
- Programmable memory
- Feed-rate display
- Linear and segmented error Compensation
- RS232 output
- Undo function



Shown with FAGOR CNC Control

Standard Features...

- Choice of two or full three axes CNC control
- Manual operation with DRO, semi-automatic operation with two or three axes operation
- Up to 5 Hp spindle motor standard
- Spindle brake with auto power off
- Totally enclosed electrics with Yaskawa A.C. inverter variable speed drive
- Carbon steel, hardened and ground, chrome plated quill
- Coolant system
- Up to 11" x 58" (254x1270mm) table size
- Meehanite castings for superior rigidity
- Hardened and ground table with 3 ground T-slots
- Double nuts for easy backlash adjustment
- Up to 38.2" (970mm) X axis travel, 16" (406mm) Y axis travel, 17.7" (450mm) knee travel and 4.75" (120mm) quill travel
- All ways are hardened and ground with Turcite B coating on X and Y axis ways for wear resistance and smooth operation



Clausing CNC EVS Vertical Mills Models: 400EVSCNC, 450EVSCNC & 500EVSCNC

A Line of Affordable Heavy-duty CNC Electronic Variable Speed (EVS) Vertical Knee Mills with A Wide Range of CNC Control Options.



The LCD Display allows the operator to select spindle speeds quickly and accurately

Specifications:

Model	400EVSCNC	450EVSCNC	500EVSCNC
Table:			
Table Size	10" x 50" (254x1270mm)	10" x 54" (254x1270mm)	11" x 58" (279x1270mm)
No. of T-slots	3	3	3
T-slot Width	.63" (16mm)	.63" (16mm)	.63" (16mm)
T-slot Center Distance	2.48" (63mm)	2.48" (63mm)	2.76" (70mm)
Table Load Capacity	700 lbs. (318kg)	880 lbs. (400kg)	990 lbs. (450kg)
Travels:			
X Axis, Longitudinal	32.3" (820mm)	31.9" (810mm)	35.5" (902mm)
Y Axis, Cross	16" (406mm)	16" (406mm)	16" (406mm)
Z Axis, Knee	16" (406mm)	16" (406mm)	17.7" (450mm)
Ram Travel	22" (559mm)	22" (559mm)	22" (559mm)
Ram Swivel	360°	360°	360°
Spindle to Column (G)	5.9"-28.9" (150-734mm)	5.9"-28.9" (150-734mm)	5.3"-27.3" (135-691mm)
Spindle Nose to Table (H)	3.54"-19.7" (90-500mm)	3.54"-19.7" (90-500mm)	1.57"-19.2" (40-489mm)
Spindle Head:			
Spindle Drive Motor	3 hp (2.25kw)	3 hp (2.25kw)	5 hp (3.5kw)
Spindle Speed Range	50-5000 rpm	50-5000 rpm	50-5000 rpm
Spindle Taper	R-8 or ISO30	R-8 or ISO30	R-8 or ISO30
Quill Travel	4.75" (120mm)	4.75" (120mm)	4.75" (120mm)
Quill Diameter	3.28" (83mm)	3.38" (83mm)	3.38" (83mm)
Quill Feed	.00157/.00315/.006in/rev (0.04/.08/.152mm/min)		
Head Tilt (Front or Back)	45°	45°	45°
Head Tilt (Left or Right 2 Axis only) (I)	90°	90°	90°
Dimensions & Weight:			
Column Turret Diameter	15.75" (400mm)	15.75" (400mm)	16.54" (420mm)
Knee Width	13.75" (349mm)	15.35" (390mm)	15.35" (390mm)
Knee Bearing Length	17.72" (450mm)	17.72" (450mm)	19.69" (500mm)
Saddle Length	20.08" (510mm)	25.59" (650mm)	25.59" (650mm)
Table Bearing Length	11.26" (286mm)	11.26" (286mm)	11.02" (250mm)
Ram/Turret Bearing Length	17.72" (450mm)	17.72" (450mm)	17.72" (450mm)
Height (A)	88.6" (2250mm)	88.6" (2250mm)	90.6" (2300mm)
Depth w/Ram Travel (B)	78" (1980mm)	78" (1980mm)	82.7" (2100mm)
Width w/Table Travel (C)	102" (2590mm)	105" (2667mm)	110" (2795mm)
Width (D)	66" (1676mm)	70" (1778mm)	74" (1880mm)
Base Depth (E)	39" (990mm)	39" (990mm)	44" (1118mm)
Base Width (F)	23.6" (600mm)	23.6" (600mm)	25" (635mm)
Machine Weight	2,640 lbs. (1198kg)	2,750 lbs. (1247kg)	3,300 lbs. (1497kg)
Shipping Weight	3,040 lbs. (1379kg)	3,150 lbs. (1429kg)	3,700 lbs. (1678kg)

Specifications and design subject to change without notice.



Shown with
ACU-RITE MILLPWR CNC Control

Standard Features...

- Meehanite castings for superior rigidity and wear resistance
- Hardened & ground X, Y & Z ways
- X/Y ways coated with Turcite B
- Column & knee way covers
- T-slots are ground to provide reference edge for positioning your workpiece
- Hardened & ground table surface
- Hardened & ground spindle
- Chromed & ground quill
- Hardened and ground X, Y & Z ballscrews
- ABEC 7/CP4 spindle bearings
- Coolant system w/pump & switch
- Flexible segmented coolant nozzle
- Chromed Y screw covers and one-piece wipers
- AC rapid vertical drive (4VSQCNC)
- Variable speed drive
- Articulating head for compound angles (limited by number of axes)
- Worm gear angular positioning of head in two directions
- Lever-operated manual rapid quill movement (mill power only)
- Handwheel for fine quill feed (on 2 axis systems)
- Adjustable automatic feed disengagement for quill feed in both directions (2 axis only)
- Micrometer depth stop (2 axis only)
- Spindle reversing switch for clockwise or counter clockwise operation
- R-8 or ISO-30 spindle (2VSCNC & 3VSCNC)
- ISO-40 spindle (4VSQCNC)
- Spindle brake (hand operated)
- One-shot lubrication
- Tool kit, test and accuracy chart
- Operations manual/parts list

Clausing CNC Vertical Mills Models: 2VSCNC, 3VSCNC & 4VSQCNC

A Line of Affordable Heavy-duty Precision CNC Vertical Knee Mills with A Wide Range of 2 or 3 Axes CNC Control Options and Features Found Only on Higher Priced Machines.

Clausing CNC Mills can be Operated as Manual Machines with a DRO, Semi-automatic Operation or Full X, Y and Z axes CNC Operation.

Specifications:

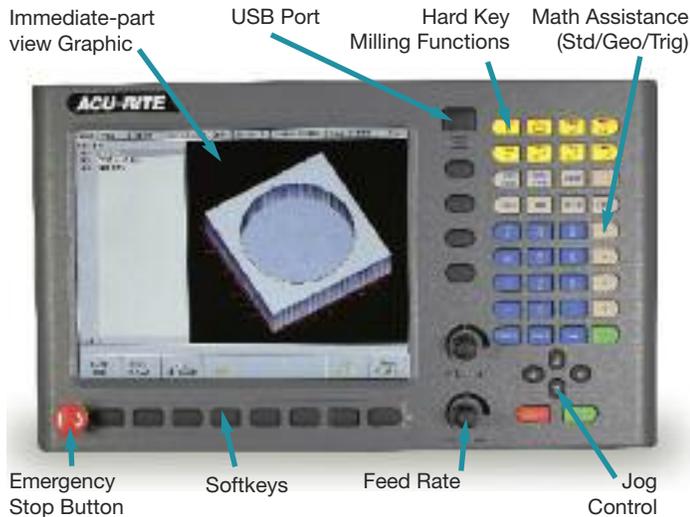
Model	2VSCNC	3VSCNC	4VSQCNC
Table & Ways:			
Table Size	9" x 49" (228x1244mm)	10" x 54" (254x1372mm)	10" x 54" (254x1372mm)
No. of T-Slots	3	3	3
T-Slot Width	.63" (16mm)	.63" (16mm)	.63" (16mm)
T-Slot Center Distance	2.48" (63mm)	2.48" (63mm)	2.48" (63mm)
Table Ways	Dovetail	Dovetail	Dovetail
Knee Ways	Dovetail	Square	Square
Column Ways	Dovetail	Dovetail	Square
Travels:			
X Longitudinal	30" (762mm)	33" (838mm)	33" (838mm)
Y Cross	11.5" (292mm)	15.5" (394mm)	16" (406mm)
Knee	16" (406mm)	17.7" (450mm)	17.7" (450mm)
Ram	18.5" (470mm)	20.5" (520mm)	26.75" (680mm)
Motors & Spindle:			
Motor Variable	3 hp (2.2kw)	3 hp (2.2kw)	5 hp (3.7kw)
Variable Spindle Speed rpm			
Low Range	60-500	60-500	60-500
High Range	550-4300	550-4300	550-4300
Main Spindle Taper	R-8 or ISO30	R-8 or ISO30	ISO40
Spindle Travel	5" (127mm)	5" (127mm)	5" (127mm)
Quill Feed	.0015/.003/.006in/rev. (.004/.008/.015mm/rev)		
Quill Diameter	3.38" (127mm)	3.38" (127mm)	4.13" (105mm)
Construction:			
Column Turret Diameter	14.96" (380mm)	16.33" (415mm)	16.33" (415mm)
Knee Width	11.81" (300mm)	14.17" (360mm)	14.96" (380mm)
Column Bearing Length	16.83" (427mm)	18.11" (460mm)	19.7" (500mm)
Saddle/Table Bearing Length	19.88" (305mm)	20.47" (520mm)	20.47" (520mm)
Ram/Turret Bearing Length	17.51" (445mm)	17.51" (445mm)	20.67" (525mm)
Ram Length	32.75" (832mm)	32.75" (832mm)	38.63" (980mm)
Table Load	700 lbs. (316kg)	880 lbs. (400kg)	990 lbs. (450kg)
Net Weight	2250 lbs. (1020kg)	2970 lbs. (1348kg)	3630 lbs. (1647kg)

Specifications subject to change without notice.

Clausing CNC Vertical Mill CNC Control Options

ACU-RITE® MILLPWRG2

**Full Three axes*
CNC Control** *(in G Code only)



Hardware Features

- Precision Ground and Hardened Ball Screws
- Powerful AC Servo Motors Assemblies
- Closed Loop Feedback using ACU-RITE Precision Glass Scales with (1µm/.00004 Resolution)
- 10" Flat Panel, Color, LCD Display
- Large Internal Part Program Storage Capacity
- RS-232 Port for Downloading from an Offline Source
- Remote Stop/Go Switch • USB and Ethernet
- Maximum Table Feedrate of 100 IPM

Features and Benefits

- 3 axes Control/4-axes Readout Optional
- Conversational Menu-prompted Programming
- Position-Trac™/Find Home: Quickly find workpiece zero after power loss • 3-D, Tactile-Feel, Color Keypad
- ACU-RITE Precision Glass Scales for better accuracy, repeatability, high resolution, closed loop feedback and proven reliability
- Jog Control: One axis or two axes simultaneously
- Remote Stop/Go Switch, with hand-held switch
- Travel Limits: With software
- Engrave: Alphanumeric references into parts
- Tool Offset Compensation • Tool Library
- Hard Key Milling Functions: Select routine functions (lines, arcs, rectangles, circles, etc.)
- Bolthole Calculations: Calculate full & partial circles
 - Linear row/column • Rectangle frame
 - Rectangle array • Mirror/Repeat/Rotate
- Custom Pocket • Skew: Save time aligning parts
- Bend • Explode • Feed Rate Override • DXF File Input
- Teach Position • Edit Capabilities • Reference Tables
- Math Functions: Standard • Trigonometry • Geometry • rpm

FAGOR  **8055i MC CNC Control**



The Fagor 8055i MC Control System is one of the most versatile CNC in existence due to its Dual Operating System. In one mode, it is a very powerful ISO G-code control System and in the other mode Icon conversational programming with highly interactive graphics.

Icon Conversational Programming

- 26 canned cycles... Slot Milling, Profile Milling, Multiple Drilling cycles, Boring cycles, Reaming cycles, Arc bolt hole cycles, Random position cycles, Grid Pattern position cycles and more
- Mirror Imaging • Automatic chamfer blending
- Arc defined by three points • Automatic radius blending
- Part Scaling (in part or whole)
- Programming in absolute arc center coordinates
- Main plane selection • Individual plane selections
- Definition of lower work area limits
- Zero offsets and auto-deletion of offsets referencing
- Automatic machine home sequence
- Preset of coordinate values • Preset of polar origin

G Code Programming

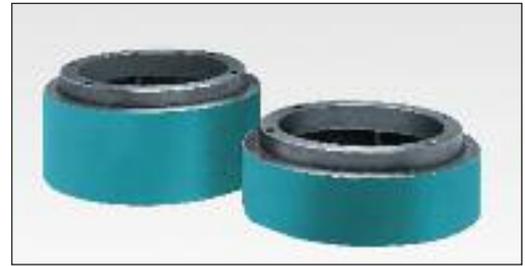
- DNC (RS232) • Geometric help • Execution mode
- MDI mode (Manual Data Input) • Teach-in mode
- Play back mode • Single block mode • Manual mode
- Background editing mode • Mid program start
- Automatic tool calibration mode
- Tool inspection mode with auto-return
- Programmable spindle speed (SUP models)
- Number of main programs: 999,999 *3
- Repeat of sections of program
- Part zero offsets • Number of nesting levels: 15
- Feedrate: 0.00001 to 7900 inches/min.
- Machining canned cycles in all planes
- User defined canned cycles • On board graphic editor
- Override control for feed rate and spindle

Clausing CNC Vertical Knee Mill Control Options & Accessories



Chip Tray

Part No.	Description and Model	Weight
2VS001P	Chip Tray for 2VS	15 lbs.
3VS001P	Chip Tray for 3VS	15 lbs.
3VS001P	Chip Tray for 4VSQ	15 lbs.
EVS120	Chip Tray for 400EVS	15 lbs.
EVS120A	Chip Tray for 450EVS & 500EVS	15 lbs.



Riser Blocks

Part No.	Description and Model	Weight
2VS040P	4" Riser Block for Model 2VS	75 lbs.
2VS041P	6" Riser Block for Model 2VS	90 lbs.
2VS042P	8" Riser Block for Model 2VS	100 lbs.
3VS044P	4" Riser Block for Model 3VS	75 lbs.
3VS040P	8" Riser Block for Model 3VS	100 lbs.
4VSQ044	4" Riser Block for Model 4VS	75 lbs.
4VSQ040	8" Riser Block for Model 3VS	100 lbs.
EVS123	6" Riser Block for Models 400 & 450	90 lbs.
EVS123A	8" Riser Block for Models 400 & 450	100 lbs.
EVS223	6" Riser Block for Model 500	90 lbs.
EVS223A	8" Riser Block for Model 500	100 lbs.



Power Drawbar

Part No.	Description and Spindle	Weight
2VS8408-CNC	Power Drawbar for R-8 Spindle	25 lbs.
2VS8430-CNC	Power Drawbar Kit for #30 Spindle	25 lbs.
2VS8440-CNC	Power Drawbar Kit for #40 Spindle	25 lbs.



Clamping Kit

52 pc. Clamping Kit for all models.
Part No. 2VS010



Right Angle Milling Attachment

Milling Chuck Kit

Milling Chuck Kit with 7 ER collets, in sizes 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" & 1" in carrying case.



Horizontal Milling Attachment

Right Angle Milling Attachment required for Right Angle Milling Attachment

Part No.	Description, Spindle or Model	Weight
4VS031	Rt. Angle Milling Attachment for 4VSQ	20 lbs.
EVS126	Rt. Angle Milling Attachment, R-8 Spindle for EVS400	20 lbs.
EVS126A	Rt. Angle Milling Attachment, #30 Spindle for EVS400	20 lbs.
EVS126B	Rt. Angle Milling Attachment, #40 Spindle for EVS400	20 lbs.
EVS127	Rt. Angle Milling Attachment, R-8 Spindle for EVS450	20 lbs.
EVS127A	Rt. Angle Milling Attachment, #30 Spindle for EVS450	20 lbs.
EVS127B	Rt. Angle Milling Attachment, #40 Spindle for EVS450	20 lbs.
EVS128	Rt. Angle Milling Attachment, R-8 Spindle for EVS500	20 lbs.
EVS128A	Rt. Angle Milling Attachment, #30 Spindle for EVS500	20 lbs.
EVS128B	Rt. Angle Milling Attachment, #40 Spindle for EVS500	20 lbs.

Part No.	Description, Spindle or Model	Weight
2VS030	Horizontal Milling Attachment, R-8 & #30 Spindle	20 lbs.
2VS030A	Horizontal Milling Attachment, #40 spindle	20 lbs.
EVS129	Horiz. Mill Arbor Support for 400EVS, 450EVS & 500EVS	15 lbs.
EVS129	1" Milling Arbor for 400EVS, 450EVS & 500EVS	10 lbs.

MILLING



Clausing Standard Bed Mills Models: 4BVS40, 6BVS40

Specifications:

Model	4BVS40	6BVS40
Table Size	10" x 54" (254x1371mm)	15" x 60" (380x1524mm)
Table Load Capacity	1,500 lbs. (680kg)	1,800 lbs. (817kg)
Number of T-Slots	3	3
T-Slot Width	.63" (16mm)	.709" (18mm)
T-Slot Center Distance	2.48" (63mm)	3.15" (80mm)
Table Ways (X Axis) Turcite B Coated	Dovetail	Dovetail
Bed Ways (Y Axis) Turcite B Coated	Square	Square
Column Ways (Z Axis)	Square	Square
Travels		
Longitudinal (X Axis)	30.51" (775mm)	41.34" (1050mm)
Cross (Y Axis)	17.52" (445mm)	19.69" (500mm)
Vertical (Z Axis)	19.69" (500mm)	23.62" (600mm)
Quill Diameter	4.13" (105mm)	4.13" (105mm)
Quill Travel	5" (127mm)	5" (127mm)
Head Tilt (Left or Right)	90°	90°
Feedrate X & Y Axes	.71-31 (in/min) (18-788mm/min)	1.1-43.3 (in/min) (88-1100mm/min)
Feedrate Z Axis	.71-31 (in/min) (18-788mm/min)	.71-31 (in/min) (18-788mm/min)
X & Y Axes AC Motor with Brake	1/2 hp (.37kw)	1 hp (.75kw)
Z Axis AC Motor with Brake	1/2 hp (.37Kw)	1/2 hp (.37Kw)
Spindle		
Motor (mechanical V.S.)	5 Hp (3.7kw)	5 Hp (3.7kw)
Spindle Speeds (Infinitely Variable)	70-4300 rpm	70-4300 rpm
No. of Speed Ranges	2	2
Low Gear Range	70-500 rpm	70-500 rpm
High Gear Range	570-4300 rpm	570-4300 rpm
Spindle Taper	NT 40	NT 40
Quill feed	.0016/.003/.006in/rev(0.04/0.08/0.15mm/rev)	
Construction		
Height	78.74" (2000mm)	85.43" (2170mm)
Working Width	71.46" (1815mm)	92.91" (2360mm)
Working Depth	66.14" (1680mm)	76.77" (1950mm)
Width Across Column Ways	11.73" (298mm)	11.73" (298mm)
Length of Saddle on Bed	25.98" (660mm)	47.24" (1200mm)
Width Across Bed Ways	16.53" (420mm)	20.47" (520mm)
Spindle Nose to Table	3.15"-22.83" (80-580mm)	3.93"-27.55" (100-700mm)
Center of Spindle to Column ways	17.32" (440mm)	20.47" (520mm)
Floor to Table Surface	36.2" (920mm)	37" (940mm)
Table to Column Ways	3.15"-20.87" (80-530mm)	2.05"-21.73" (52-552mm)
Ball Screw Dia./Pitch	1.26"/.2" (32/5mm)	1.26"/.2" (32/5mm)
Ball Screw Class	C7	C7
Gross Weight (Approximately)	4,400 lbs. (2000kg)	6,600 lbs. (3000kg)

Standard Features...

- Powerful 5 hp (3.7kw) spindle drive motor
- Mechanical variable speed drive with 2 speed ranges
- Hardened and ground spindle with NT 40 taper
- Hardened and chromed quill with 5"(127mm) travel
- CP4 ABEC7 angular contact spindle bearings
- C7 double nut X/Y/Z axes 1.26"(32mm) diameter ballscrew
- Hardened and ground table surface
- Ground T-slots to provide accurate reference edge
- Hardened and ground, square X/Y ways
- Turcite B coating on saddle X/Y axes ways
- Meehanite castings for superior rigidity and wear resistance
- Stainless steel front Y axis way cover
- Rubber Z axis and rear Y/Z axes way covers
- Automatic lubrication with alarm
- Transformer
- Long arm halogen work light
- Coolant system with pump
- Tools, toolbox and parts

Machine Control, Design and Specifications are subject to change without notice.



Clousing Standard Bed Mills

Models: SUP4BVS40, SUP6BVS40, SUP8BVS40

Specifications:

Model	SUP4BVS40	SUP6BVS40	SUP8BVS40
Table Size	10" x 54" (254x1371mm)	15" x 60" (380x1524mm)	16.75" x 62" (425x1575mm)
Table Load Capacity	1,500 lbs. (680kg)	1,800 lbs. (817kg)	2,000 lbs. (907kg)
Number of T-Slots	3	3	4
T-Slot Width	.63" (16mm)	.709" (18mm)	.709" (18mm)
T-Slot Center Distance	2.48" (63mm)	3.15" (80mm)	3.15" (80mm)
Table Ways (X Axis) Turcite B Coated	Dovetail	Dovetail	Dovetail
Bed Ways (Y Axis) Turcite B Coated	Square	Square	Square
Ways (Z Axis)	Square	Square	Square
Travels			
Longitudinal (X Axis)	30.51" (775mm)	41.34" (1050mm)	47.24" (1200mm)
Cross (Y Axis)	17.52" (445mm)	19.69" (500mm)	22.83" (580mm)
Vertical (Z Axis)	19.69" (500mm)	23.62" (600mm)	23.62" (600mm)
Quill Diameter	4.13" (105mm)	4.13" (105mm)	4.33" (110mm)
Quill Travel	5" (127mm)	5" (127mm)	6" (152mm)
Head Tilt (Left or Right)	90°	90°	90°
Feedrate X & Y Axes	.71-31 (in/min) (18-788mm/min)	1.1-43.3 (in/min) (28-1100mm/min)	1.1-43.3 (in/min) (28-1100mm/min)
Feedrate Z Axis	.71-31 (in/min) (18-788mm/min)	.71-31 (in/min) (18-788mm/min)	.71-31 (in/min) (18-788mm/min)
X & Y Axes AC Motor with Brake	1/2 hp (.36kw)	1 hp (.75kw)	1 hp (.75kw)
Z Axis AC Motor with Brake	1/2 hp (.36kw)	1/2 hp (.36kw)	1/2 hp (.36kw)
Spindles			
Motor (Inverter V.S.)	5 hp (3.7kw)	5 hp (3.7kw)	7.5 hp (5kw)
Spindle Speeds (Infinitely Variable)	65-5160 rpm	65-5160 rpm	70-4300 rpm
No. of Speed Ranges	2	2	2
Low Gear Range	65-590 rpm	65-590 rpm	70-500 rpm
High Gear Range	575-5160 rpm	575-5160 rpm	570-4300 rpm
Spindle Taper	NT 40	NT 40	NT 40
Quill feed (in/rev) (mm/rev)	.0016/.003/.006 (0.04/0.08/0.15)	.0016/.003/.006 (0.04/0.08/0.15)	.0016/.003/.006 (0.04/0.08/0.15)
Construction			
Height	78.74" (2000mm)	85.43" (2170mm)	84.65" (2150mm)
Working Width	71.46" (1815mm)	92.91" (2360mm)	98.03" (2490mm)
Working Depth	66.14" (1680mm)	76.77" (1950mm)	80.71" (2050mm)
Width Across Column Ways	11.73" (298mm)	11.73" (298mm)	11.73" (298mm)
Length of Saddle on Bed	25.98" (660mm)	47.24" (1200mm)	53.15" (1350mm)
Width Across Bed Ways	16.53" (420mm)	20.47" (520mm)	22.83" (580mm)
Spindle Nose to Table	3.15"-22.83" (80-580mm)	3.93"-27.55" (100-700mm)	3.93"-27.55" (100-700mm)
Center of Spindle to Column Ways	17.32" (440mm)	20.47" (520mm)	23.62" (600mm)
Floor to Table Surface	36.2" (920mm)	37" (940mm)	34.3" (871mm)
Table to Column Ways	3.15"-20.87" (80-530mm)	2.05"-21.73" (52-552mm)	.79"-23.62" (20-600mm)
Ball Screw Dia./Pitch	1.26"/.2" (32/5mm)	1.26"/.2" (32/5mm)	1.26"/.2" (32/5mm)
Ball Screw Class	C7	C7	C7
Gross Weight (Approximately)	4,400 lbs. (2000kg)	6,600 lbs. (3000kg)	7,260 lbs. (3300kg)

Standard Features...

- Powerful 5 hp (3.7kw) spindle motor SUP4BVS & SUP6BVS and 7.5 hp (3.7kw) spindle motor SUP8BVS
- Inverter variable speed drive with 2 speed ranges
- Hardened and ground spindle with NT 40 taper
- Hardened and chromed quill with 5" (127mm) travel
- CP4 ABEC7 angular contact spindle bearings
- C7 double nut X/Y/Z axes 1.26" (32mm) diameter precision ballscrew
- Hardened and ground table surface
- Ground T-slots to provide accurate reference edge
- Hardened and ground, square X/Y ways
- Turcite B coating on saddle X/Y axes ways
- Meehanite castings for superior rigidity and wear resistance
- Telescopic Z axis ballscrew cover
- Z axis accordion way covers
- Rubber rear Y/Z axes way covers
- Stainless steel front Y axis way cover
- Coolant system with pump
- Long arm halogen work light
- Transformer
- Automatic lubrication system with alarm
- Tools, toolbox and parts

Machine Control, Design and Specifications are subject to change without notice.



Clausing CNC Bed Mills Models: 4BVSCNC40, 6BVSCNC40

Specifications:

Model	4BVSCNC40	6BVSCNC40
Table Size	10" x 54" (254x1371mm)	15" x 60" (380x1525mm)
Table Load Capacity	1,500 lbs. (680kg)	1,800 lbs. (817kg)
Number of T-Slots	3	3
T-Slot Width	.63" (16mm)	.709" (18mm)
T-Slot Center Distance	2.48" (63mm)	3.15" (80mm)
Table Ways (X Axis)	Dovetail	Dovetail
Bed Ways (Y Axis)	Square	Square
Column Ways (Z Axis)	Square	Square

TRAVELS

Longitudinal (X Axis)	30.51" (775mm)	41.3" (1049mm)
Cross (Y Axis)	17.5" (446mm)	19.6" (498mm)
Vertical (Z Axis)	19.69" (498mm)	23.62" (600mm)
Quill Diameter	4.13" (105mm)	4.13" (105mm)
Quill Travel	5" (127mm)	5" (127mm)
Head Tilt (Left or Right)	90°	90°
Rapid Traverse Rate X & Y	100 in/min (2540mm/min)	100 in/min (2540mm/min)
Rapid Traverse Rate Z	75 in/min (1905mm/min)	75 in/min (1905mm/min)
Programmable Feedrate X & Y	0-100 in/min (0-2540mm/min)	0-100 in/min (0-2540mm/min)
Programmable Feedrate Z	0-75 in/min (0-1905mm/min)	0-75 in/min (0-1905mm/min)
Feedrate Override (5% Increments)	5%-150%	5%-150%

SPINDLE

Motor	5 hp (3.7Kw)	5 hp (3.7hw)
Spindle Speeds (Infinitely Variable)	70-4300 rpm	70-4300 rpm
No. of Speed Ranges	2	2
Low Gear Range	70-500 rpm	70-500 rpm
High Gear Range	570-4300 rpm	570-4300 rpm
Spindle Taper	NT 40	NT 40
Quill Feed	.0016/.003/.006in/rev. (0.04/0.08/0.15mm/rev.)	

CONSTRUCTION

Height	89.76" (2280mm)	99" (2515mm)
Width	71.46" (1815mm)	92.91" (2360mm)
Depth	66.14" (1680mm)	76.77" (1950mm)
Working Width	100" (2540mm)	131" (3327mm)
Working Depth	74" (1880mm)	90" (2286mm)
Width Across Column Ways	11.73" (298mm)	11.73" (298mm)
Length of Saddle on Bed	25.98" (660mm)	47.24" (1200mm)
Width Across Bed Ways	16.53" (420mm)	20.47" (520mm)
Spindle Nose to Table	3.15"-22.83" (80-580mm)	3.93"-27.55" (100-700mm)
Center of Spindle to Column Ways	17.32" (440mm)	20.47" (520mm)
Floor to Table Surface	36.2" (919mm)	37" (940mm)
Table to Column Ways (min/max.)	3.15"-20.87" (80-530mm)	2.05"-21.73" (52-552mm)
Ball Screw Dia.	1.26"/.2" (32/5mm)	1.26"/.2" (32/5mm)
Ball Screw Class	C7	C7
Gross Weight (Approximately)	4,400 lbs. (1996kg)	6,600 lbs. (2994kg)

ACU-RITE®

MILLPWR Three axes
CNC Control

Hardware Features

- Precision Ground and Hardened Ball Screws
- Powerful AC Servo Motors Assemblies
- Closed Loop Feedback using ACU-RITE Precision Glass Scales with (1µm/.00004 Resolution)
- 10" Flat Panel, Color, LCD Display
- Large Internal Part Program Storage Capacity
- RS-232 Port for Downloading from an Offline Source
- Remote Stop/Go Switch • USB and Ethernet
- Maximum Table Feedrate of 100 IPM

Standard Features...

- Hardened and ground spindle with NT 40 taper
- Hardened and chromed quill with 5" (127mm) travel
- CP4 ABEC7 angular contact spindle bearings
- C7 double nut X/Y/Z axes 1.26" (32mm) diameter ballscrew
- Hardened and ground table surface
- Ground T-slots to provide accurate reference edge
- Hardened and ground, square X/Y axes ways
- Turcite B coating on saddle X/Y axes ways
- Meehanite castings for superior rigidity
- Telescopic Z axis ballscrew cover
- Z axis accordion way cover
- Stainless steel front Y axis way cover
- Rubber rear Y/Z axes way covers
- X/Y axes handwheels • Table guarding
- Automatic lubrication with alarm
- Heavy-duty chip tray and rear splash guard

Machine Control, Design and Specifications are subject to change without notice.



Clausing Bed Mills

Models: SUP4BVSCNC40, SUP6BVSCNC40, SUP8BVSCNC40

Specifications:

Standard Features...

- Available with FAGOR 8055i, or ACU-RITE MILLPWR
- Powerful 5 hp spindle motor on SUP4BVS & SUP6BVS
- 7.5 hp spindle motor on SUP8BVS
- Inverter variable speed drive with 2 speed ranges
- Hardened and ground spindle with NT 40 taper
- Hardened and chromed quill with 5" travel
- CP4 ABEC7 angular contact spindle bearings
- C7 double nut X/Y/Z axes 1.26" diameter ballscrew
- Hardened and ground table surface
- Ground T-slots to provide accurate reference edge
- Hardened and ground, square X/Y ways
- Turcite B coating on saddle X/Y axes ways
- Meehanite castings for superior rigidity and wear resistance
- Telescopic Z axis ballscrew cover
- Z axis accordion way cover
- Stainless steel front Y axis way cover
- Rubber rear Y/Z axes way covers
- Heavy-duty overhead control arm
- X/Y axes handwheels
- Coolant system with pump
- Automatic lubrication with alarm
- Heavy-duty chip tray, rear splash guard and table guarding
- Transformer
- Long arm halogen work light
- Tools, toolbox and parts

Model	SUP4BVSCNC40	SUP6BVSCNC40	SUP8BVSCNC40
Table Size	10" x 54" (254x1371mm)	15" x 60" (380x1524mm)	16.75" x 62" (425x1575mm)
Table Load Capacity	1,500 lbs. (680kg)	1,800 lbs. (817kg)	2,000 lbs. (907kg)
Number of T-Slots	3	3	4
T-Slot Width	.63" (16mm)	.709" (18mm)	.709" (18mm)
T-Slot Center Distance	2.48" (63mm)	3.15" (80mm)	3.15" (80mm)
Table Ways (X Axis) Turcite B Coated	Dovetail	Dovetail	Dovetail
Bed Ways (Y Axis) Turcite B Coated	Square	Square	Square
Ways (Z Axis)	Square	Square	Square

Travels

Longitudinal (X Axis)	30.51" (775mm)	41.34" (1050mm)	47.24" (1200mm)
Cross (Y Axis)	17.52" (445mm)	19.69" (500mm)	22.83" (580mm)
Vertical (Z Axis)	19.69" (500mm)	23.62" (600mm)	23.62" (600mm)
Quill Diameter	4.13" (105mm)	4.13" (105mm)	4.33" (105mm)
Quill Travel	5" (127mm)	5" (127mm)	6" (127mm)
Head Tilt (Left or Right)	90°	90°	90°
Rapid Traverse Rate X & Y Axes	100 (in/min) (2540mm/min)	100 (in/min) (2540mm/min)	100 (in/min) (2540mm/min)
Feedrate Z Axis	75 (in/min) (1905mm)	75 (in/min) (1905mm)	75 (in/min) (1905mm)
Programmable Feedrate X & Y	0-100 in/min (0-2540mm/min)		
Programmable Feedrate X & Y	0-75 in/min (0-1905mm/min)		
Feedrate Override (5% Increments)	5%-150%	5%-150%	5%-150%

Spindle

Motor (Inverter V.S.)	5 hp (3.7kw)	5 hp (3.7kw)	7.5 hp (5kw)
Spindle Speeds (Infinitely Variable)	65-5160 rpm	65-5160 rpm	70-4300 rpm
No. of Speed Ranges	2	2	2
Low Gear Range	65-590 rpm	65-590 rpm	70-500 rpm
High Gear Range	575-5160 rpm	575-5160 rpm	570-4300 rpm
Spindle Taper	NT 40	NT 40	NT 40
Quill feed (in/rev) (mm/rev)	.0016/.003/.006 (0.04/0.08/0.15)	.0016/.003/.006 (0.04/0.08/0.15)	.0016/.003/.006 (0.04/0.08/0.15)

Construction

Height	78.74" (2000mm)	85.43" (2170mm)	84.65" (2150mm)
Width	71.46" (1815mm)	92.91" (2360mm)	98.03" (2490mm)
Depth	66.14" (1680mm)	76.77" (1950mm)	80.71" (2050mm)
Working Width	100" (2540mm)	131" (3327mm)	140" (3556mm)
Working Depth	74" (1880mm)	90" (2286mm)	100" (2540mm)
Width Across Column Ways	11.73" (298mm)	11.73" (298mm)	11.73" (298mm)
Length of Saddle on Bed	25.98" (660mm)	47.24" (1200mm)	53.15" (1350mm)
Width Across Bed Ways	16.53" (420mm)	20.47" (520mm)	22.83" (580mm)
Center of Spindle to Column Ways	17.32" (440mm)	20.47" (520mm)	23.62" (600mm)
Spindle Nose to Table	3.15" - 22.83" (80-580mm)	3.93" - 27.55" (52-552mm)	3.93" - 27.55" (20-600mm)
Floor to Table Surface	36.2" (920mm)	37" (940mm)	34.3" (871mm)
Table to Column Ways	3.15"-20.87" (80-530mm)	2.05"-21.73" (100-700mm)	.79"-23.62" (100-700mm)
Ball Screw Dia./Pitch	1.26"/.2" (32/5mm)	1.26"/.2" (32/5mm)	1.26"/.2" (32/5mm)
Ball Screw Class	C7	C7	C7
Gross Weight (Approximately)	4,400 lbs. (2000kg)	6,600 lbs. (3000kg)	7,260 lbs. (3300kg)

Machine Control, Design and Specifications are subject to change without notice.

Clausing Standard Bed Mill DROs & Accessories

ACU-RITE® 200S Digital Readout

As the industry standard in digital readout systems, the Acu-Rite 200S offers state-of-the-art features for milling applications.



DRO Features

- 2 or 3 axes
- 5.7" transmissive LCD display
- Feed rate display
- Multiple language support
- Absolute/incremental
- Near-zero warning
- Help function
- 16 tool offsets/diameter
- Preset and zero reset
- 4 Function calculator/trig calculator
- Instant inch/mm conversion
- Position-Trac™
- Bolthole pattern calculations with graphics (full and partial circles/linear patterns)
- Centerline calculation enables you to establish workpiece zero and midpoints
- Edge finder input
- I/O (option)

NEWALL

DP700 Digital Readout

The DP700 is a powerful and intuitive DRO that is housed in a rugged, ergonomically designed casting.



DRO Features

- Solid cast construction
- Long life membrane keypad
- Clean, crisp LEDs
- Intuitive message window
- Wide viewing angle
- Safe, low voltage external Power supply
- Five year warranty
- Customized canned cycles
- ABS/inc
- Digifind
- Metric/inch
- Zero approach
- Tool offsets
- Taper
- Summing
- Bolt hole circle
- Arc contouring
- Polar co-ordinates
- Line hole
- Programmable memory
- Feed-rate display
- Linear and segmented error Compensation
- RS232 output
- Undo function



FAGOR

Innova 40i DRO for 2, 3 and 4 Axes Milling Machines

DRO Features

- Linear and angular axes
- Easy setup and diagnosis
- Feedback signal monitoring
- Linear and multi-point compensation
- Radius or diameter display
- Preset and zero setting of the axes
- Incremental and distance-coded reference marks
- Tool radius compensation
- Instant inch/mm conversion
- Fine/coarse axis resolution
- Buzzer
- Absolute / Incremental measurement
- Easy software update through USB adapter
- Alarms for excessive feed rate and travel limit overrun
- "Display OFF" mode
- Calculator
- 3D color display of tool path
- Bolt-hole drilling calculation
- Up to 50 part references (datum points)
- Linear drilling calculation
- Part centering
- Part alignment
- Axis coupling

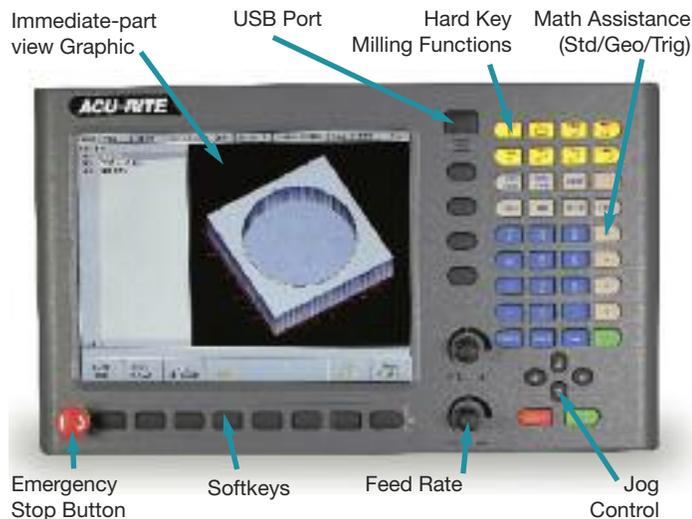
Clausing Standard Bed Mill Accessories

Part No.	Description	Mill Model
4VS001A	3 Piece Chip Tray	4BVS
4VS001B	Heavy-Duty Chip Tray	4BVS
4VS007	Auto Lube with Alarm	4BVS & SUP4BVS
4VS008	Coolant/Oil Skimmer	4BVS & SUP4BVS
4VS009	Z-Axis Concertina Cover	4BVS
4VS011	H.D. Back Chip Guard	4BVS & SUP4BVS
4VS012	Table Guard	4BVS & SUP4BVS
4VS013	Table Guard with Interlock	4BVS & SUP4BVS
4VS014	Quill Guard with Lock	4BVS & SUP4BVS
4VS015	Air Power Draw Bar	4BVS & SUP4BVS
6VS001A	3 Piece Chip Tray	6BVS
6VS001B	Heavy-Duty Chip Tray	6BVS
6VS005	7.5 hp Inverter Motor	6BVS & SUP6/8BVS
6VS007	Auto Lube with Alarm	6BVS & SUP6/ 8BVS
6VS008	Coolant/Oil Skimmer	6BVS
6VS009	Z-Axis Concertina Cover	6BVS
6VS011	H.D. Back Chip Guard	6BVS & SUP6/8BVS
6VS012	Table Guard	6BVS
6VS013	Table Guard with Interlock	6BVS
6VS014	Quill Guard with Lock	6BVS & 8BVS
6VS015	Air Power Draw Bar	6BVS & 8BVS

Clausing CNC Bed Mill CNC Controls Options and Accessories

ACU-RITE® MILLPWRG2

**Full Three axes*
CNC Control *(in G Code only)**



Hardware Features

- Precision Ground and Hardened Ball Screws
- Powerful AC Servo Motors Assemblies
- Closed Loop Feedback using ACU-RITE Precision Glass Scales with (1µm/.00004 Resolution)
- 10" Flat Panel, Color, LCD Display
- Large Internal Part Program Storage Capacity
- RS-232 Port for Downloading from an Offline Source
- Remote Stop/Go Switch • USB and Ethernet
- Maximum Table Feedrate of 100 IPM

Features and Benefits

- 3 axes Control/4-axes Readout Optional
- Conversational Menu-prompted Programming
- Position-Trac™/Find Home: Quickly find workpiece zero after power loss • 3-D, Tactile-Feel, Color Keypad
- ACU-RITE Precision Glass Scales for better accuracy, repeatability, high resolution, closed loop feedback and proven reliability
- Jog Control: One axis or two axes simultaneously
- Remote Stop/Go Switch, with hand-held switch
- Travel Limits: With software
- Engrave: Alphanumeric references into parts
- Tool Offset Compensation • Tool Library
- Hard Key Milling Functions: Select routine functions (lines, arcs, rectangles, circles, etc.)
- Bolthole Calculations: Calculate full & partial circles
 - Linear row/column • Rectangle frame
 - Rectangle array • Mirror/Repeat/Rotate
- Custom Pocket • Skew: Save time aligning parts
- Bend • Explode • Feed Rate Override • DXF File Input
- Teach Position • Edit Capabilities • Reference Tables
- Math Functions: Standard • Trigonometry • Geometry • rpm

FAGOR  **8055i MC CNC Control**



The Fagor 8055i MC Control System is one of the most versatile CNC in existence due to its Dual Operating System. In one mode, it is a very powerful ISO G-code control System and in the other mode Icon conversational programming with highly interactive graphics.

Icon Conversational Programming

- 26 canned cycles... Slot Milling, Profile Milling, Multiple Drilling cycles, Boring cycles, Reaming cycles, Arc bolt hole cycles, Random position cycles, Grid Pattern position cycles and more
- Mirror Imaging • Automatic chamfer blending
- Arc defined by three points • Automatic radius blending
- Part Scaling (in part or whole)
- Programming in absolute arc center coordinates
- Main plane selection • Individual plane selections
- Definition of lower work area limits
- Zero offsets and auto-deletion of offsets referencing
- Automatic machine home sequence
- Preset of coordinate values • Preset of polar origin

G Code Programming

- DNC (RS232) • Geometric help • Execution mode
- MDI mode (Manual Data Input) • Teach-in mode
- Play back mode • Single block mode • Manual mode
- Background editing mode • Mid program start
- Automatic tool calibration mode
- Tool inspection mode with auto-return
- Programmable spindle speed (SUP models)
- Number of main programs: 999,999 *3
- Repeat of sections of program
- Part zero offsets • Number of nesting levels: 15
- Feedrate: 0.00001 to 7900 inches/min.
- Machining canned cycles in all planes
- User defined canned cycles • On board graphic editor
- Override control for feed rate and spindle

MILLING

Clausing CNC Bed Mill Options

Model	Control Description & Spindle
4BVSCNC40	3-Axes ACU-RITE MILLPWR and #40 Spindle
SUP4BVSCNC/MP	3-Axes ACU-RITE MILLPWR and #40 Spindle
SUP4BVSCNCFG	3-Axes w/4th drive Fagor 8055i and #40 Spindle
6BVSCNC40	3-Axes ACU-RITE MILLPWR and #40 Spindle
SUP6BVSCNC/MP	3-Axes ACU-RITE MILLPWR and #40 Spindle
SUP6BVSCNCFG	3-Axes w/4th drive Fagor 8055i and #40 Spindle
SUP8BVSCNC/MP	3-Axes ACU-RITE MILLPWR and #40 Spindle
SUP8BVSCNCFG	3-Axes w/4th drive Fagor 8055i and #40 Spindle

Clausing CNC Bed Mill Accessories

Part No.	Description	Mill Model
2VS010	52 Piece Clamping Kit	All Models
2VS022	Milling Chuck Kit w/7 Collets NMTB 40 Spindle	All Models
4VS205	Coolant Oil Skimmer	4BVS & SUP4BVS
4VSCNC5	Table Guard with Interlock	4BVS & SUP4BVS
6VS205	Coolant Oil Skimmer	6BVS & SUP6BVS
6VSCNC3	4th Axis Hand Wheel	6BVS & SUP6BVS
6VSCNC5	Table Guard with Interlock	6BVS & SUP6BVS
6VSCNC2	7.5 hp Motor/Inverter	SUP6BVS
8VS205	Coolant Oil Skimmer	8BVS & SUP8BVS
8VSCNC3	4th Axis Hand Wheel	8BVS & SUP8BVS
8VSCNC5	Table Guard with Interlock	8BVS & SUP8BVS
8VS203FG	4th Axis Motor & Cables FAGOR 8055i	SUP4, 6 & 8BVS

Milling Chuck Kit

Milling Chuck Kit with 7 ER collets, in sizes 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" & 1" in carrying case.



Clamping Kit

52 pc. Clamping Kit for all models. Part No. 2VS010

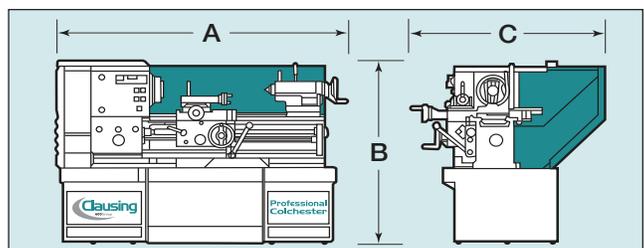


Clausing/Colchester 'PROFESSIONAL' Series 13" (320mm) & 15" (400mm) Variable Speed Lathes

Specifications:

Model	13" VS	15" VS
Capacity		
Height of Center	6.7" (170mm)	7.67" (195mm)
Swing Over Bed	13.75" (350mm)	15.75" (400mm)
Swing in Gap	21" (533mm)	23" (584mm)
Width in Front of Faceplate	6.5" (165mm)	6.5" (165mm)
Swing Over Cross Slide	7.75" (197mm)	9.75" (248mm)
Bedway Width	12.5" (318mm)	12.5" (318mm)
Headstock		
Spindle Bore	1.65" (42mm)	2.12" (54mm)
Spindle Nose (Camlock)	D1-4	D1-6
Spindle Nose Taper	3MT	4MT
Number of Spindle Speeds	3	3
Spindle Speed Range (rpm)	15-3250	14-2500
Low Range (rpm)	17-340	15-275
Mid Range (rpm)	45-1010	40-795
High Range (rpm)	150-3250	125-2500
Cross/Top Slide		
Travel of Cross Slide	9.8" (249mm)	9.8" (249mm)
Width of Cross Slide	7.09" (180mm)	7.09" (180mm)
Travel of Top Slide	5.5" (140mm)	5.5" (140mm)
Width of Top Side	3.54" (90mm)	3.93" (100mm)
Tailstock		
Quill Travel	5.5" (140mm)	5.5" (140mm)
Quill Diameter	2.48" (63mm)	2.87" (73mm)
Quill Taper	4MT	5MT
Feeds and Threading		
Longitudinal Feed Range (in)	0.014-0.048 in/rev	0.0014-0.048 in/rev
(mm)	0.35-1.22mm/rev	0.036-1.2mm/rev
Cross Feed Range (in)	0.0007-0.024 in/rev	0.00035-0.024 in/rev
(mm)	.018-0.61mm/rev	.0089/-0.61mm/rev
Number of Inch Pitches	56	56
Range of Inch Pitches	2-56 tpi	2-56 tpi
Number of Metric Pitches	20	51
Range of Metric Pitches	0.2-14mm	0.2-14mm
Number of Diametral Pitches	20	20
Range of Diametral Pitches	8-56	8-56
Number of Module Pitches	51	20
Range of Module Pitches	0.2-3.5	0.2-3.5
Motor		
Spindle Motor	10 hp (7.5kw)	10 hp (7.5kw)

Specifications and design are subject to change without notice.



Standard Features...

- **AC Inverter Variable Speed Spindle Drive** state-of-the-art AC Spindle Drive featuring surface mount technology to give compact size and high reliability... 4 years parts and labor warranty on drive
- **Interlocked End Guard Door** with easy access for maintenance and changing end train gears
- **Leadscrew Reversing Box** for faster thread cutting – reversal of the leadscrew with the spindle running at low speed (must retract tool from cut or thread damage can occur)
- **Easy to read Index Plate** makes it simple to select the proper feed rate or threads (must retract tool from cut or thread damage can occur)
- **Three Headstock Gear Ranges** for a wide spread of constant power – 33 to 1 – better than most CNC lathes
- **Infinitely Variable Spindle Speeds** you can get the right spindle speed very quickly with a response like a CNC lathe, displayed on headstock
- **Electromagnetic Spindle Brake**
- **Forced Lubrication System** the spindle bearings, gears and shafts are lubricated by a forced lubrication system
- **Precision Gamet Tapered Roller Spindle Bearings**
- **Chuck Guard** with limit switch
- **Anti-Friction Carriage Ways.** Low-friction "Moglice" PTFE material between the saddle and bed for minimal bedwear and longer machine life
- **Saddle Mounted Chip Guard and Full Rear Splash Guard**
- **Extra Wide Heavy-Duty Cast Iron Bed** with triangular webs for exceptional torsional stiffness and excellent chip clearance
- **Heavy-Duty Tailstock** for excellent rigidity – with extra heavy-duty quill
- **Covered Leadscrew** protects leadscrew from chips
- **Wheeled Chip Bin** has a large capacity for easy chip disposal
- **Hardened and Ground Bedways** - all bedways are induction hardened and precision ground
- **Cast Iron Base** provides the maximum support for the bed combined with sloping top surfaces to prevent the accumulation of coolant

Standard Equipment...

- Spindle Center Cushing • Two Morse Taper Dead Centers • Rear Splash Guard • Chuck Guard
- Leadscrew Cover • Electric Coolant Pump, Tank and Fitting • Coolant System • Inch Threading Dial
- Set of Wrenches and Keys • Instruction and Parts Manual • Accuracy Chart • Emergency Stop Button
- Lockable Isolator Switch • Forward/Reverse/Stop Switch • One Shot Saddle and Cross Slide Lubrication
- 230v or 460v 3ph, 208v and other voltages available with optional transformer

Models and Dimensions:

Model	Swing and Center Distance	A	B	C	Weight
8016VSJ	13" (320mm) x 25" (635mm)	75" (1900mm)	51" (1300mm)	44" (1120mm)	2,790 lbs. (1266kg)
8044VSJ	15" (400mm) x 50" (1270mm)	99" (2515mm)	51" (1300mm)	44" (1120mm)	3,300 lbs. (1497kg)



Clausing/Colchester 'PROFESSIONAL' Series 18" (460mm) & 21" (554mm) Variable Speed Lathes

Specifications:

Standard Features...

- **State-of-the-art AC Spindle Drive** features surface mount technology to give compact size and high reliability
- **Interlocked end guard door** for easy access for maintenance and changing end train gears
- **Faster Thread Cutting** - Reversal of the Leadscrew with the spindle running at low speed (must retract tool from cut or thread damage can occur)
- **An Easy-to-Read Index Plate** makes it simple to select the proper feed or threads (must retract tool from cut or thread damage can occur)
- **Three Headstock Gear Ranges** a wide spread of constant power - 33 to 1 - better than most CNC lathes
- **Infinitely Variable Spindle Speeds** displayed on headstock
- **Electromagnetic Spindle Brake**
- **Spindle Bearings, Gears and Shafts** are lubricated by a forced lubrication system
- **Precision Gamet Tapered Roller Spindle Bearings**
- **Chuck Guard with Limit Switch**
- **Carriage Ways Coated with "Moglice" PTFE** for minimal bedwear and longer machine life
- **Saddle Mounted Chip Guard and Full Rear Splash Guard**
- **Extra Wide Heavy-duty Cast Iron Bed** with triangular webs for torsional stiffness and excellent chip clearance
- **2 Axis Rapid Traverse** available from one lever mounted on saddle
- **Heavy-Duty Tailstock** with extra heavy-duty quill
- **Single Piece Leadscrew Cover** protects leadscrew from chips
- **Large Capacity Rollout Chip Bin** for easy chip disposal
- **All Bedways are Induction Hardened and Precision Ground**
- **Heavyweight Cast Iron Bases** provide the maximum support for the bed combined with sloping top surfaces to prevent the accumulation of coolant

Standard Equipment...

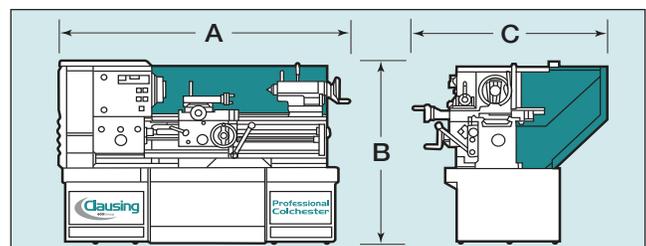
- Spindle Center Bushing • Two Morse Taper Dead Centers • Rear Splash Guard • Chuck Guard
- Leadscrew Cover • Electric Coolant Pump, Tank and Fitting • Coolant System
- Set of Wrenches and Keys • Instruction and Parts Manual • Accuracy Chart • Emergency Stop Button
- Lockable Isolator Switch • Inch Threading Dial • Forward/Reverse/Stop Switch
- Rapid Power Traverse to Cross Slide and Carriage • Saddle Mounted Controls and Power Meter
- 230v 3 phu, 208v or 460v 3 ph available with optional transformer

Models and Dimensions:

Model	Swing and Center Distance	A	B	C	Weight
8054VSJ	18" (460mm) x 60" (1500mm)	120" (3000mm)	51" (1300mm)	57" (1450mm)	5,765 lbs. (2615kg)
8055VSJ	18" (460mm) x 80" (2000mm)	140" (3556mm)	51" (1300mm)	57" (1450mm)	6,170 lbs. (2799kg)
8115VSJ	21" (460mm) x 60" (1500mm)	120" (3000mm)	51" (1300mm)	57" (1450mm)	5,886 lbs. (2670kg)
8116VSJ	21" (554mm) x 80" (2000mm)	140" (3556mm)	51" (1300mm)	57" (1450mm)	6,283 lbs. (2850kg)
8119VSJ	21" (554mm) x 120" (3000mm)	180" (4572mm)	51" (1300mm)	57" (1450mm)	7,960 lbs. (3611kg)

Model	18" VS	21" VS
Capacity		
Height of Center	9" (229mm)	11.02" (280mm)
Swing Over Bed	18.1" (460mm)	21.81" (554mm)
Swing in Gap	28.74" (730mm)	32.68" (830mm)
Width in Front of Faceplate	8.5" (216mm)	8.5" (216mm)
Swing Over Cross Slide	10.62" (216mm)	14.57" (370mm)
Bedway Width	15.75" (400mm)	15.75" (400mm)
Headstock		
Spindle Bore	3" (76mm)	4.09" (104mm)
Spindle Nose (Camlock)	D1-8	D1-11
Spindle Nose Taper	5MT	5MT
Number of Spindle Speeds	3	3
Spindle Speed Range (rpm)	20-2000	18-1800
Low Range (rpm)	20-225	18-200
Mid Range (rpm)	60-675	55-605
High Range (rpm)	175-2000	160-1800
Cross/Top Slide		
Travel of Cross Slide	11.81" (249mm)	11.81" (249mm)
Width of Cross Slide	8" (203mm)	8" (203mm)
Travel of Top Slide	7.5" (190mm)	7.5" (190mm)
Width of Top Slide	4" (102mm)	4" (102mm)
Tailstock		
Quill Travel	5.7" (1458mm)	5.7" (145mm)
Quill Diameter	3.74" (95mm)	3.74" (95mm)
Quill Taper	6MT	6MT
Feeds and Threading		
Longitudinal Feed Range (in) (mm)	0.0016-0.11 in/rev .041-2.79mm/rev	0.0016-0.11 in/rev .041-2.79mm/rev
Cross Feed Range (in) (mm)	0.0008-0.055in/rev .02-1.4mm/rev	0.0008-0.055in/rev .02-1.4mm/rev
Number of Inch Pitches	73	73
Range of Inch Pitches	2-84 tpi	2-84 tpi
Number of Metric Pitches	51	27
Range of Metric Pitches	0.2-14mm	0.2-14mm
Number of Diametral Pitches	27	27
Range of Diametral Pitches	8-72	8-72
Number of Module Pitches	27*	51
Range of Module Pitches	0.2-3.5	0.2-3.5
Motor		
Spindle Motor	15 hp (10kw)	15 hp (10kw)

Specifications and design are subject to change without notice.





Clausing/Colchester 13" (320mm) Swing, Gap Bed, Geared Head Lathe Specifications:

Model	8026J/8027J
Capacity	
Swing Over Bed	13" (330mm)
Swing Over Cross Slide	8.26" (210mm)
Center Distance (8026J)	25" (625mm)
Center Distance (8027J)	40" (1000mm)
Swing in Gap	19" (480mm)
Width, Gap in Front of Faceplate	4.5" (117mm)
Headstock	
Spindle Nose	D1-4 Camlock
Through Hole	1.5" (38mm)
Spindle Nose Taper	3MT
Number of Speeds	12
Max. Spindle Speed	40 - 2500 rpm
Feeds and Threading	
Longitudinal Feeds (16)	0.001" - 0.039" (.03-1mm)
Leadscrew Diameter	1.13" - 4 tpi
Number of English Threads	35
Range of English Threads	2 - 56 tpi
Number of Diametral Threads	18
Range of Diametral Threads	8 - 56
Number of Metric Threads	39
Range of Metric Threads	0.2 - 14mm
Cross/Top Slide	
Cross Slide Travel	7.5" (190mm)
Cross Slide Width	5.5" (140mm)
Top Side Travel	3.63" (92mm)
Top Slide Travel	3.25" (82mm)
Tailstock	
Tailstock Spindle Diameter	1.63" (42mm)
Tailstock Travel	4.38" (110mm)
Center	3MT
Motor & Weight	
Motor	3 hp (2.2kw)
Weight (8026J)	1,680 lbs. (762kg)
Weight (8027J)	3,300 lbs. (1500kg)

Specifications are subject to change without notice.

Standard Equipment...

- Center Bush
- Two 3MT Centers
- Inch Threading Dial
- Accuracy Chart
- Splash Guard
- Coolant System
- Set of Wrenches and Keys
- Parts and Instruction Manuals

Standard Features...

- **Headstock:** The rugged headstock is designed to provide maximum power for roughing cuts, and smooth, quiet power for fine finishing. The 12 all-gear speeds, from 40 to 2500 rpm, handle a wide variety of work at top efficiency. All headstock gears are hardened and ground and headstock shafts are splined and turn on anti-friction bearings. Increased mass and rigidity of the headstock mean much less transmission noise and less deflection than previous models. Spindle bearings, gears, shafts and headstock clutches are lubricated by a pumped bath of oil.
- **Universal Gear Box:** A broad range of feed and thread selections are available by using three selector levers and an 8-position rotary dial. Feed selections automatically disengage the leadscrew drive and independent torque-limiting clutches give accidental overload protection on both the leadscrew and spline shaft. All gears are hardened and shafts turn on anti-friction bearings.
- **Bed and Base:** The sturdy bed is manufactured from close-grained cast iron, which is induction hardened and ground. The combined vee and flat configuration gives optimum kinematic guiding of the slideways...allowing both precise, accurate machining and vibration-free cutting. The control base is rigidly constructed and incorporates a readily accessible coolant tank mounted at the rear of the machine.
- **Apron, Saddle and Slides:** For optimum precision, the cross slide runs along a dovetail guide, and both saddle and cross slide are provided with adjustable gib strips. For heavy cutting, either the saddle or cross slide can be locked and anti-backlash adjustment is provided on the cross slide nut. Bed wipers and an apron mounted one-shot lubrication pump are provided as standard. The cast iron apron is totally enclosed and splash bath lubricated. A double halfnut assembly is provided for maximum life and screwcutting accuracy. The drop-out worm feed control is mechanically interlocked to prevent simultaneous halfnut and spline shaft engagement.

Clausing/Colchester 15" (400mm) Swing, Gap Bed, Geared Head Lathe

Specifications:



Model	8043
Capacity	
Height of Center	7.68 (195mm)
Swing Over Bed	15.75" (400mm)
Swing in Gap	23" (584mm)
Width in Front of Faceplate	6.5" (165mm)
Swing Over Cross Slide	9.75" (248mm)
Center Distance	50" (1270mm)
Bed Width	12.5" (318mm)
Headstock	
Spindle Bore	2.12" (54mm)
Spindle Nose (Camlock)	D1-6
Spindle Nose Taper	4MT
Number of Speeds	16
Spindle Speed (rpm)	25-2000
Cross/Top Slide	
Travel of Cross Slide	9.8" (249mm)
Width of Cross Slide	7.09" (180mm)
Travel of Top Slide	5.1" (130mm)
Width of Top Slide	2.8" (73mm)
Tailstock	
Tailstock Quill Diameter	2.8" (71mm)
Center	5MT
Quill Travel	5.5" (140mm)
Feed and Threading	
Longitudinal Feed Range (in/rev)	.0014"-.096" (.035-2.45mm)
Cross Feed Range (in/rev)	.0007"-.048" (.018-1.22mm)
Number of English Threads	56
Range of English Threads	2-56 tpi
Number of Metric Threads	51
Range of Metric Threads	.2-14mm
Number of Diametral Pitches	20
Range of Diametral Pitches	8-56 DP
Number of Module Pitches	20
Range of Module Pitches	8-56 DP
Leadscrew Diameter	1.25/4 tpi
Motor	
Drive Motor	7.5 hp (5kw)
Dimensions & Weight	
Length	99" (2515mm)
Height	51" (1295mm)
Width	49" (1245mm)
Weight	3,300 lbs. (1496kg)

Due to ongoing design improvements specifications are subject to change without notice.

Standard Features...

- Fully-geared headstock with 16 spindle speeds from 25 - 2000 rpm
- All headstock gears are hardened and ground
- Headstock shafts are splined and turn on anti-friction bearings
- Spindle bearings, gears and shafts are lubricated by a forced lubrication system
- A broad range of Feed and Thread selections are available by using three selector levers and an 8-position rotary dial
- Precision Gamet spindle bearings
- Cross slide runs along a dovetail guide
- Bed wipers and an apron mounted one-shot lubrication pump
- The cast iron apron is totally enclosed and splash bath lubricated
- Gap Bed with easy-to-remove bed blocks
- 50" center distances
- Equipped with chuck guard, full splash guard and leadscrew cover
- Clutch drive, reverse leadscrew with spindle turning for faster thread cutting
- Extra wide bed provides accuracy and minimal wear
- A one year warranty and backed by the Clausing Service Center dedicated to support our customers with parts and service

Standard Equipment...

- Chuck Guard • Accuracy Chart
- Covered Leadscrew • Lockable Isolator Switch
- Electric Coolant Pump, Tank and Fittings
- Emergency Stop Button • End Guard Limit Switch
- Forward/Reverse/Stop Switch
- Splash Guard • Tee Slotted Top Slide
- One Shot Saddle and Cross Slide Lubrication
- Pullout Chip Bin • Thread Indicator
- Tool Box with Wrenches and Dead Centers
- Instruction and Spare Parts Manual
- 110 Volts at Control



Clausing/Colchester 'MAGNUM' Series 26" (660mm) & 32" (813mm) Variable Speed Lathes

Specifications:

	Magnum 26"	Magnum 32"
Capacity		
Height of Center	46.65" (1185mm)	49.68" (1262mm)
Swing Over Bed	23.3" (670mm)	32.3" (820mm)
Swing in Gap	35.8" (910mm)	41.7" (1060mm)
Width in Front of Gap	9.44" (240mm)	9.44" (240mm)
Swing Over Cross Slide	16.9" (430mm)	22.8" (580mm)
Bedway Width	18.9" (480mm)	18.9" (480mm)
Cross/Top Slide		
Travel of Cross Slide	16" (406mm)	16" (406mm)
Width of Cross Slide	11" (280mm)	11" (280mm)
Travel of Top Slide	6.5" (165mm)	6.5" (165mm)
Width of Top Slide	7" (180mm)	7" (180mm)
Tailstock		
Quill Travel	12" (300mm)	12" (145mm)
Quill Diameter	4.125" (1055mm)	4.125" (1055mm)
Quill Taper	6MT	6MT
Feeds and Threading		
Longitudinal Feed Range (in)	0.002-0.16 in/rev	0.002-0.16 in/rev
(mm)	.05-3.2mm/rev	.05-3.2mm/rev
Cross Feed Range (in)	0.001-0.08in/rev	0.001-0.08in/rev
(mm)	.025-1.6mm/rev	.025-1.6mm/rev
Number of Inch Pitches	51	51
Range of Inch Pitches	2-84 tpi	2-84 tpi
Number of Metric Pitches	59	59
Range of Metric Pitches	0.2-14mm	0.2-14mm
Number of Diametral Pitches	27	27
Range of Diametral Pitches	8-72	8-72
Number of Module Pitches	20	20
Range of Module Pitches	0.2-3.5	0.2-3.5
Motor		
Spindle Motor	30 hp (20kw)	30 hp (20kw)

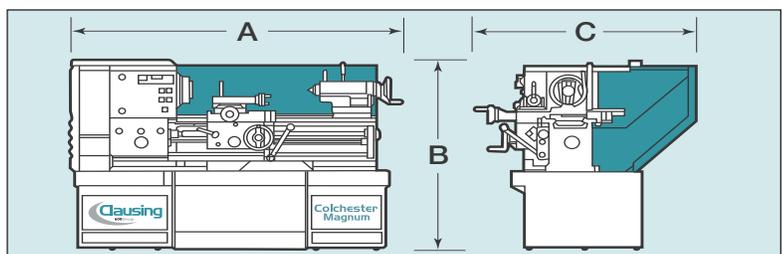
Standard Features...

- State-of-the-art AC Spindle Drive features surface mount technology for high reliability
- 30Hp Spindle Motor, 3 Speed Range Headstock with spindle speeds 18-1800 allows optimum cutting speeds for a wide range of machining applications
- Optional 6" and 9" Spindle Bores with Rear Chuck Adapters for long part machining applications
- One-piece cast iron bed on cast iron plinths provides a solid foundation ensuring maximum stability and rigidity under heavy machining applications
- Rollout Chip Pans for easy chip removal and cleaning maintenance, Optional Chip Conveyors available
- Carriage Ways coated with "Moglice" PTEE for minimal bedwear and longer machine life
- Clausing/Colchester Magnum Lathes are available with 60", 80", 120", and 160" Distance Between Centers
- Machines are built to CE safety standards
- Standard equipment includes: Coolant System, Tailstock, Full length Splash Guard, Interlock Chuck Guard, and Worklight

Models and Dimensions:

Model	Swing and Center Distance	A	B	C	Weight Approx
8215VSJ	26" x 60" (660mm) x (1500mm)	151.5" (3850mm)	70.8" (1800mm)	74.8" (1900mm)	8,820 lbs. (4000kg)
8216VSJ	26" x 80" (660mm) x (2032mm)	171.2" (4350mm)	70.8" (1800mm)	74.8" (1900mm)	9,480 lbs. (4300kg)
8219VSJ	26" x 120" (660mm) x (3048mm)	210" (5350mm)	70.8" (1800mm)	74.8" (1900mm)	11,245 lbs. (5100kg)
8220VSJ	26" x 160" (660mm) x (4064mm)	250" (6350mm)	70.8" (1800mm)	74.8" (1900mm)	12,786 lbs. (5800kg)
8315VSJ	32" x 60" (813mm) x (1500mm)	151.5" (3850mm)	70.8" (1800mm)	74.8" (1900mm)	10,362 lbs. (4700kg)
8316VSJ	26" x 80" (813mm) x (2032mm)	171.2" (4350mm)	70.8" (1800mm)	74.8" (1900mm)	11,464 lbs. (5200kg)
8319VSJ	26" x 120" (813mm) x (3048mm)	210" (5350mm)	70.8" (1800mm)	74.8" (1900mm)	14,109 lbs. (6400kg)
8320VSJ	26" x 160" (813mm) x (4064mm)	250" (6350mm)	70.8" (1800mm)	74.8" (1900mm)	16,535 lbs. (7500kg)

Headstock	26" Standard	26" Option #1	32" Standard	32" Option #1	32" Option #2
Spindle Bore	4.09" (104mm)	6" (155mm)	4.09" (104mm)	6" (155mm)	9" (230mm)
Spindle Nose (Camlock)	D1-11	A2-11	D1-11	A2-11	A2-15
Spindle Nose Taper	8MT	7MT	8MT	7MT	-
Number of Spindle Speeds	3	3	3	3	3
Spindle Speed Range (rpm)	18-1800	15-1800	18-1800	15-1800	8-600
Low Range (rpm)	18-200	15-102	18-200	15-102	8-63
Mid Range (rpm)	55-605	45-306	55-605	45-306	21-229
High Range (rpm)	160-1800	118-800	160-1800	118-800	56-600



Specifications and design are subject to change without notice.

Clausing/Colchester Lathe Accessories

Live Center

Revolving Center is concentric within .0002" T.I.R. 60° point rotates on roller bearings.



Part No.	Fits Lathe Models	Weight
12-510	13" Swing Geared Head Lathes	2 lbs.
15-710	13" Swing Variable Speed Lathes	3 lbs.
17-910	15" Swing Geared Head & Variable Speed Lathes	9 lbs.
18-910	18" thru 32" Swing Variable Speed Lathe	9 lbs.



Steady Rest

The Steady Rest provides support for long or slender work and allows heavy cuts without chatter. Capacities are sized for lathe models.

Part No.	Fits Lathe Models	Capacity Min-Max	Fingers	Weight
3-513	13" Swing Geared Head Lathes	3/8"-5-1/2"	Bronze	37 lbs.
13-472VS	13" Swing Variable Speed Lathes	3/8"-5-1/2"	Bronze Tip & Roller	37 lbs.
15-755N	15" Swing Geared Head & Variable Speed Lathes	3/8"-6-3/8"	Bronze Tip & Roller	45 lbs.
18-812	18" Swing Variable Speed Lathes	3/8"-9-3/8"	Bronze Tip & Roller	58 lbs.
21-860	21" Swing Variable Speed Lathes	6-1/8"-15"	Bronze Tip & Roller	115 lbs.
21-412VS	21" Swing Variable Speed Lathes	3/8"-9"	Bronze Tip & Roller	115 lbs.
26-412VS	26" Swing Variable Speed Lathes	1.9" - 8.26	Roller Tip	115 lbs.
26-860	26" Swing Variable Speed Lathes	7.8" - 14.9"	Roller Tip	125 lbs.
32-412VS	32" Swing Variable Speed Lathes	1.9" - 8.26	Roller Tip	115 lbs.
32-860	32" Swing Variable Speed Lathes	7.8" - 14.9"	Roller Tip	125 lbs.
32-861	32" Swing Variable Speed Lathes	1.78" - 19.69"	Roller Tip	145 lbs.



Follower Rest

The Follower Rest mounts on the carriage and moves with it, providing workpiece support close to the cutting tool... making it ideal for long slender parts which must be machined between centers.

Part No.	Fits Lathe Models	Capacity Min-Max	Fingers	Weight
3-514	13" Swing Geared Head Lathes	3/8"-3"	Bronze	16 lbs.
13-471VS	13" Swing Variable Speed Lathes	3/8"-3"	Bronze Tip & Roller	16 lbs.
15-754N	15" Swing Geared Head & Variable Speed Lathes	3/8"-6-3/8"	Bronze Tip & Roller	28 lbs.
18-811	18" Swing Variable Speed Lathes	3/8"-9-3/8"	Bronze Tip & Roller	37 lbs.
21-411VS	21" Swing Variable Speed Lathes	3/8"-4-1/4"	Bronze Tip & Roller	37 lbs.
26-411VS	26" Swing Variable Speed Lathe	.79" - 6.3"	Roller Tip	40 lbs.
32-411VS	32" Swing Variable Speed Lathe	.79" - 6.3"	Roller Tip	45 lbs.

Taper Attachment

The Taper Attachment is fitted to the rear of the carriage and permits taper turning without disengaging the cross feed screw. It is easy to set-up and does not interfere with normal operation. The slide is graduated in degrees of taper with a range of 10° on either side of center. Maximum taper is 4" per foot.



Part No.	Fits Lathe Models	Capacity Per Setting	Weight
3-521	13" Swing Geared Head Lathes	10"	39 lbs.
13-410VS	13" & 15" Swing Geared Head & Variable Speed Lathes	12"	39 lbs.
18-810	18" & 21" Variable Speed Lathes	15"	94 lbs.
26-810	26 Variable Speed Lathes	15"	105 lbs.
32-810	26 Variable Speed Lathes	15"	105 lbs.



Halogen Work Light

Part No. FV-9070G

Aloris Quick Change Tool Post

Precision engineered to assure accuracy. Advanced design provides built-in quick tool changing versatility with positive rigidity to meet the most exacting working tolerance.



Quickly and easily installed on any engine lathe, bench or CNC lathe, for a wide range of operations... from fine precision work to heavy-duty cutting.

The Aloris Quick Change Tool Post is shipped with four (4) Tool Holders: 2 Turning and Facing Holders; 1 Boring, Turning and Facing Holders; 1 Morse Taper Holder.

Part No.	Fits Lathe Models	Weight
3-503A	13" Swing Geared Head Lathes	29 lbs.
13-775A	13" Swing Variable Speed Lathes	32 lbs.
15-775A	15" Swing Geared Head & Variable Speed Lathes	35 lbs.
17-875A	18" Swing Variable Speed Lathes	69 lbs.
21-475A	21" Swing Variable Speed Lathes	69 lbs.
26-475A	26" Swing Variable Speed Lathes	69 lbs.
32-475A	32" Swing Variable Speed Lathes	69 lbs.

Five Position Carriage Stop

This stop is useful for turning multiple diameter work, and is mounted on the apron. Each of the five screw stops can be indexed to contact the stop pin mounted on the bed vee. Accurate indexing is provided by a steel ball under spring tension.



One Position Carriage Stop

This hardened stop clamps on the front bed way at any position determined by the operator, allowing repetitive cuts to the same position.

Part No.	Fits Lathe Models	Weight
3-516	13" Swing Geared Head Lathes	2 lbs.
13-435VS	13" & 15" Swing Geared Head & Variable Speed Lathes	3 lbs.
17-832	18" & 21" Swing Variable Speed Lathes	5 lbs.

Aloris Tool Post Extra Tool Holders



Part No.	Tool Holder Type
15-775A-1	Aloris Extra Straight Holder 1"
15-775A-2	Aloris Extra V-Holder 1", 13/16" Bore Bar
15-775A-4D	Aloris 1-1/4" Boring Bar Holder
15-775A-41D	Aloris 1-1/2" Boring Bar Holder
15-775A-5	Aloris Extra 3MT Holder
15-775A-71	Aloris Extra Cutoff Holder 2" height
15-77A-BSL-187	Aloris Cutoff Blade Self-Locking Throw Awway 3/16"

Part No.	Fits Lathe Models	Weight
3-518	13" Swing Geared Head Lathes	4 lbs.
13-438VS	13" & 15" Swing Geared Head & Variable Speed Lathes	4 lbs.
18-831	18" & 21" Swing Variable Speed Lathes	6 lbs.
26-831	26" Swing Variable Speed Lathes	6 lbs.
32-831	32" Swing Variable Speed Lathes	6 lbs.

(Use with Carriage Stop or Micro Carriage Stop, sold separately)



Micro Position Carriage Stop

This hardened stop clamps on the front bed way at any position determined by the operator, allowing repetitive cuts to the same position.

Part No.	Fits Lathe Models	Weight
3-517	13" Swing Geared Head Lathes	2 lbs.
13-436VS	13" & 15" Swing Geared Head & Variable Speed Lathes	3 lbs.
17-833	18" & 21" Swing Variable Speed Lathes	5 lbs.
26-833	26" Swing Variable Speed Lathes	5 lbs.
32-833	32" Swing Variable Speed Lathes	5 lbs.

TURNING

The Last Word in Toolroom Lathe Productivity...Pick from One of These Three World Leading Digital Readout Systems Available with Constant Surface Speed.



ACU-RITE® 300S LCD Digital Readout Available with Constant Surface Speed (CSS)... 200S LCD for Standard 2 Axis Systems

The 300S Color digital readout is the ultimate in efficiency. This Intuitive, user-friendly readout comes equipped with machine specific software and easy to read, full color, flat screen 5.7" LCD display.

The ultimate in efficiency and turning productivity, utilizing state-of-the-art features...

- Simplify cutting metric threads on lathes with inch leadscrews with the NEW Thread Assist function (optional 1000 line encoder required)
- 16 Tool Offsets for easy compensation of different tool sizes
- Lock Axis feature, used in conjunction with tool offsetting, lets the operator establish tool offsets with the tool under load, resulting in reduced deflection
- Instant radius/diameter conversion reduces math errors and allows operator to machine to print
- Posit-Trac™; a unique feature that lets you easily, quickly and accurately re-establish workpiece zero after power loss
- 2, 3 or 4-axes 5.7" flat-screen LCD display
- Preset and zero reset
- Near-zero warning
- Instant inch/mm conversion
- Linear and non-linear error compensation
- Taper calculator
- Die-cast metal construction
- RS-232-C/V.24 serial port data interface

- Multiple program names with numerous steps
- Multiple display views - DR01 & DR02
- Job clock
- Feed rate display
- Advanced skew compensation
- Multiple language supports
- Absolute/incremental
- Help function
- 4 function calculator

Precision Glass Scales

ACU-RITE precision glass scales withstand the elements found in the harshest machine shop environments. As a result, our precision glass scales resist changes in size, shape or density due to temperature and humidity variation.

- Exceptional accuracy $\pm .00006"$ (1.5 μ m)
- Available in lengths from 1"–773" (25.4–19634mm)
- Resolution from .00002"–.0005" (.05–10 μ m)

TURNING

NEWALL

DP700 DRO Outstanding Features with Leading Edge Technology



The DP700 is a powerful and intuitive DRO that is housed in a rugged, ergonomically designed casting. The DRO features all of the essential functions for turning.

- Solid cast construction
- Long life membrane keypad
- Clean, crisp LEDs
- Intuitive message window
- Wide viewing angle
- Safe, low voltage external power supply
- Five year warranty
- Customized canned cycles
- ABS/Inch
- Digifind
- Metric/Inch
- Zero approach
- Tool offsets
- Taper
- Summing
- Bolt hole circle
- Arc contouring
- Polar co-ordinates
- Line hole
- Programmable memory
- Feed-rate display
- Linear and segmented error Compensation
- RS232 output
- Undo function



FAGOR **Innova 40i DRO, with color TFT screen**

The Innova 40i for lathe applications offers the operator graphic assistance that no other DRO can offer such as taper calculation, the combination of the Z1 and Z2 axes or the 16 datum points for as many tool offsets that you can store.

The FAGOR DRO offers the user features that make the operators job easier

- TFT color LCD display
- High clarity view from any angle
- NEW Threading software (TPI and metric threads)
- Solid graphics & 3D Simulation
- Conversational graphic help screen
- Friendly and intuitive operations
- Easy set-up and diagnosis
- “Distance to Go” bar for easy positioning
- Up to 16 tool offsets with hold feature
- Built-in calculator with auto recall
- Feedback alarms
- Taper calculation
- Combining the Z1 and Z2 axes
- Software travel limits for safety
- Re-Set, Pre-Set, direct mm/inch conversion
- FAGOR Warranty: 3 years and lifetime on the glass



Pratt Burnerd Self-Centering Universal 3-Jaw SETRITE™ Chucks

Pratt Burnerd Universal Setrite 3-Jaw Chucks are precision manufactured with a .0005 TIR repeatability on duplicate parts. The steel body allows high metal removal rates. 3-Jaw Setrite Chucks are supplied with two-piece

American standard tongue and groove reversible jaws. Chucks have nitride hardened scroll and hardened pinion. All chucks have a two year warranty.



Pratt Burnerd Self-Centering Universal 6-Jaw SETRITE™ Chucks

Pratt Burnerd Universal Setrite 6-Jaw Chucks are precision manufactured with a .0005 TIR repeatability on duplicate parts. The steel body allows high metal removal rates. 6-Jaw Setrite Chucks are supplied with two-piece American standard

tongue and groove reversible jaws. Chucks have nitride hardened scroll and hardened pinion. All chucks have a two year warranty.

Part No.	Dia.	Lathe Type & Size	Spindle Size	Max. rpm	Weight
0625321	6"	13" Swing Geared Head & Variable Speed Lathes	D1-4	4900	26 lbs.
0825321	8"	13" Swing Geared Head & Variable Speed Lathes	D1-4	4200	49 lbs.
0825323	8"	15" Swing Geared Head & Variable Speed Lathes	D1-6	4200	49 lbs.
1025323	10"	15" Swing Geared Head & Variable Speed Lathes	D1-6	3300	71 lbs.
1025324	10"	18" Swing Variable Speed Lathes	D1-8	3300	71 lbs.
1225324	12"	18" Swing Variable Speed Lathes	D1-8	2300	112 lbs.
1225325	12"	21" Swing Variable Speed Lathes	D1-11	2300	112 lbs.
1525325	15"	21" Swing Variable Speed Lathes	D1-11	2000	146 lbs.

Part No.	Dia.	Lathe Type & Size	Spindle Size	Max. rpm	Weight
0626321	6"	13" Swing Geared Head & Variable Speed Lathes	D1-4	4900	27 lbs.
0826321	8"	13" Swing Geared Head & Variable Speed Lathes	D1-4	4200	49 lbs.
0826323	8"	15" Swing Geared Head & Variable Speed Lathes	D1-6	4200	49 lbs.
1026323	10"	15" Swing Geared Head & Variable Speed Lathes	D1-6	3300	76 lbs.
1026324	10"	18" Swing Variable Speed Lathes	D1-8	3300	76 lbs.
1226324	12"	18" Swing Variable Speed Lathes	D1-8	2300	116 lbs.
1226325	12"	21" Swing Variable Speed Lathes	D1-11	2300	116 lbs.
1526325	15"	21" Swing Variable Speed Lathes	D1-11	2000	205 lbs.



Pratt Burnerd 4-Jaw Medium Duty Independent Chucks

Pratt Burnerd
Independent Chucks

are precision manufactured and supplied with Ductile iron bodies, hardened operating screws and solid reversible hard jaws. Special jaw and jaw way design adds extra bearing surfaces, increasing chuck life and rigidity. Pratt Burnerd Independent Chucks come with a two year warranty.



Slotted Face Plates

Part No.	Dia.	Lathe Type & Size	Spindle	Weight
13-403	12"	13" Swing Variable Speed Lathes	D1-4	45 lbs.
13-500	12"	13" Swing Geared Head Lathes	D1-4	45 lbs.
13-404	18"	13" Swing Variable Speed Lathes	D1-4	60 lbs.
13-502	18"	13" Swing Geared Head Lathes	D1-4	60 lbs.
15-703	14"	15" Swing Geared Head & Variable Speed Lathes	D1-6	50 lbs.
15-704	21"	15" Swing Geared Head & Variable Speed Lathes	D1-6	108 lbs.
17-803	17"	18" Swing Variable Speed Lathes	D1-8	120 lbs.
17-804	28"	18" Swing Variable Speed Lathes	D1-8	229 lbs.
21-403	20"	21" Swing Variable Speed Lathes	D1-11	130 lbs.
21-404	27"	21" Swing Variable Speed Lathes	D1-11	205 lbs.

Part No.	Dia.	Lathe Type & Size	Spindle Size	Weight
0814421	8"	13" Swing Geared Head & Variable Speed Lathes	D1-4	31 lbs.
1014421	10"	13" Swing Geared Head & Variable Speed Lathes	D1-4	43 lbs.
1014423	10"	15" Swing Geared Head & Variable Speed Lathes	D1-6	43 lbs.
1214423	12"	15" Swing Geared Head & Variable Speed Lathes	D1-6	72 lbs.
1214424	12"	18" Swing Variable Speed Lathes	D1-8	72 lbs.
1414524	14"	18" Swing Variable Speed Lathes	D1-8	126 lbs.
1614525	16"	21" Swing Variable Speed Lathes	D1-11	180 lbs.

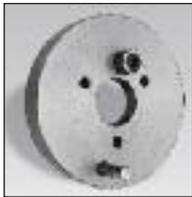
5C Front Mounted Hand Wheel Speed Collet Chuck

Fast and easy, front hand wheel operation reduces operator fatigue with accurate maximum cone TIR .0005". Easy installation, no drawtubes or linkages required. One year warranty.



Part No.	Lathe Type & Size	Spindle	Weight
PB23-D4	13" Swing Variable Speed Lathes	D1-4	15 lbs.
PB23-D6	15" Swing Geared Head & Variable Speed Lathes	D1-6	17 lbs.
PB23-D8	18" Swing Variable Speed Lathes	D1-8	23 lbs.
PB33-D11	21" Swing Variable Speed Lathes	D1-11	27 lbs.

Drive Plates



Part No.	Lathe Type & Size	Weight
13-600VS	13" Geared Head & Variable Speed Lathes	40 lbs.
15-600N	15" Geared Head & Variable Speed Lathes	50 lbs.
18-600N	18" Variable Speed Lathes	50 lbs.

Air Powered Front Mounted 5C Dead Length Collet

Easily convert any lathe into a production machine. No hydraulic system required. No draw tube or air feed tubes restricting spindle bore. No rear cylinders and cylinder adapters. Repeats on duplicate parts \pm .00015.



Part No.	Lathe Type & Size	Spindle	Weight
ATL206-5CD4	13" Swing Variable Speed Lathes	D1-4	22 lbs.
ATL206-5CD6	15" Swing Geared Head & Variable Speed Lathes	D1-6	22 lbs.
ATL206-5CD8	18" Swing Variable Speed Lathes	D1-8	22 lbs.

Air Powered Front Mounted B42 Dead Length Collet

Repeats on duplicate parts \pm .00015. No hydraulic system required. No draw tube or air feed tubes restricting spindle bore. No rear cylinders and cylinder adapters. Easily convert any lathe into a production machine.



Part No.	Lathe Type & Size	Spindle	Weight
ATL207-B42D4	13" Swing Variable Speed Lathes	D1-4	35 lbs.
ATL206-B42D6	15" Swing Geared Head & Variable Speed Lathes	D1-6	35 lbs.
ATL206-B42D8	18" Swing Variable Speed Lathes	D1-8	35 lbs.

Air Powered Front Mounted 16C Dead Length Collet

No hydraulic system required. No draw tube or air feed tubes restricting spindle bore. No rear cylinders and cylinder adapters. Easily convert any lathe into a production machine. Repeats on duplicate parts \pm .00015.



Part No.	Lathe Type & Size	Spindle	Weight
ATL207-16CD4	13" Swing Variable Speed Lathes	D1-4	30 lbs.
ATL207-16CD6	15" Swing Geared Head & Variable Speed Lathes	D1-6	30 lbs.
ATL207-16CD8	18" Swing Variable Speed Lathes	D1-8	30 lbs.

Air Powered Front Mounted B60 Dead Length Collet

No hydraulic system required. Repeats on duplicate parts \pm .00015. No draw tube or air feed tubes restricting spindle bore. No rear cylinders and cylinder adapters. Easily convert any lathe into a production machine.



Part No.	Lathe Type & Size	Spindle	Weight
ATL207-B60D4	13" Swing Variable Speed Lathes	D1-4	46.6 lbs.
ATL206-B60D6	15" Swing Geared Head & Variable Speed Lathes	D1-6	46.6 lbs.
ATL206-B60D8	18" Swing Variable Speed Lathes	D1-8	46.6 lbs.

Pratt Burnerd Key-Operated Collet Chucks



This extremely accurate, .001" repeatability, economical chuck is completely sensitive for any gripping pressure. Its compact, efficient design is equipped with ball bearings and hardened

and ground components for lasting precision. Capacities from 1/6" through 2-1/2"

Part No.	Description	Lathe Type & Size	Bar Stock Capacity	Collet Capacity	Collet Type	Weight
6012-31300	KC15 D4	13" Swing Geared Head Lathes	1/16"-1-1/2"	1-1/2"	EC	18 lbs.
6012-52100	KC25 D6	15" Swing Geared Head Lathes	1/2"-2-1/2"	2-1/2"	EE	60 lbs.
6012-52100	KC25 D6	15" Swing Variable Speed Lathes	1/2"-2-1/2"	2-1/2"	EE	60 lbs.
6012-62100	KC25 D8	18" Swing Variable Speed Lathes	1/2"-2-1/2"	2-1/2"	EE	65 lbs.
6012-72100	KC25 D11	21" Swing Variable Speed Lathes	1/2"-2-1/2"	2-1/2"	EE	65 lbs.

Pratt Burnerd Multi-Size Collets

for Key-Operated Chuck

The Pratt Burnerd multi-size collets provide an accurate, efficient and economical means of holding work, while eliminating the need for decimal, metric or special size collets. Each multi-size collet has a stepless gripping range of .125" with an extended range of $\pm .010$ " of size... accommodating both undersize and oversize work.

Most multi-size collets handle hex as well as round stock. Pratt Burnerd multi-size collets are very accurate, with no distortion. Gripping pressure is adjustable and the full-grip blades permit machining up to collet face. Accuracy is .0005" maximum eccentricity at the nose.



EC Collets		EE Collets	
1/16-3/16	3150-30200	1/2-5/8	3150-50600
1/8-1/4	3150-30300	5/8-3/4	3150-50700
1/4-3/8	3150-30400	3/4-7/8	3150-50800
3/8-1/2	3150-30500	7/8-1	3150-50900
1/2-5/8	3150-30600	1-1 1/8	3150-51000
5/8-3/4	3150-30700	1 1/8-1 1/4	3150-51100
3/4-7/8	3150-30800	1 1/4-1 3/8	3150-51200
7/8-1	3150-30900	1 3/8-1 1/2	3150-51300
1-1 1/8	3150-31000	1 1/2-1 5/8	3150-51400
1 1/8-1 1/4	3150-31100*	1 5/8-1 3/4	3150-51500
1 1/4-1 3/8	3150-31200	1 3/4-1 7/8	3150-51600
1 3/8-1 1/2	3150-31300	1 7/8-2	3150-51700
SET	3160-31300	2-2 1/8	3150-51800
		2 1/8-2 1/4	3150-51900
		2 1/4-2 3/8	3150-52000*
		2 3/8-2 1/2	3150-52100*
		SET	3160-52100

*For round stock only

Crawford 5C Round Collets



Part No.	Sizes
0123-R (<i>R=Size</i>)	1/8" thru 1-1/8 by 64ths
5C Round Collet Sets	
0123-SET-4	1/16" thru 1-1/16" by 64ths
0123-SET-5	1/16" thru 1-1/16" by 32nds
0123-SET-6	1/16" thru 1-1/16" by 16ths
0123-SET-7	1/8" thru 1" by 8ths
7659	Collet Rack for 13" and 15" lathes

Crawford 16C Round Collets



Part No.	Sizes
G119-R (<i>R=Size</i>)	1/16" thru 1-5/8 by 16ths

Crawford B-42 Round Collets



Part No.	Sizes
4728-R (<i>R=Size</i>)	1/16" thru 1-5/8 by 16ths

Crawford B-60 Round Collets



Part No.	Sizes
4291-R (<i>R=Size</i>)	1/16" thru 2-5/16 by 16ths

Clausing MA Series Geared Head Heavy-Duty Large Swing Lathes



The Clausing MA series large swing geared head engine lathes are engineered to allow the accurate and efficient machining of large components. A wide range of optional accessories make these machines suitable for most industrial applications, including job shops, oil field, power utilities and ship building.

Machine Standard Features:

- 12 Geared Head Spindle Speeds allow optimum cutting speed for a wide range of machining applications. Speed range 12 to 1000 rpm.
- 20 Hp Spindle Motor for exceptional machining power.
- All gears are made from chromium molybdenum steel treated with cementation and precision ground for long-life and dependability.
- One-piece cast iron bed from the ways to floor provides a solid foundation to ensure maximum stability and rigidity under heavy machining operations.
- 18" Bed Width, Hardened and Ground, support the saddle and carriage assembly allowing superior positioning and repeatability accuracy.
- Turcite 'B' is fitted between saddle and bed to greatly reduce friction and stick-slip for smooth operation and superior surface finishes. The low friction Turcite 'B' also minimizes bed wear and extends the life of the machine.
- Immersing Style Lead Screw reduces abrasion.
- 4-way Rapid Traverse for positioning and set up.
- 4-way Power Feed for longitudinal, cross and compound feeds.
- Tailstock with 4.18" manual positioning for ease of setup and operation.
- 4.1" Spindle Bore supported with taper spindle bearings provides outstanding spindle performance and load carrying capabilities. Optional spindle bores available.
- Coolant system for tool life and part cooling.
- Automatic lubrication system to all guideways.
- Guarding powder coated for durability.

Standard Equipment:

- Hardened and Ground Bed Ways
- Hardened and Ground Gears
- Chuck Guard with Limit Switch
- 20 hp Motor with Inverter Drive
- Geared Head Spindle Speeds, 12-1000 rpm
- 11" Capacity Steady Rest
- Follower Rest
- 4-Way Rapid Traverse
- 4-Way Power Feed
- 4-Way, 8-Position Tool Post
- 1.75" Lead Screw
- Lead Screw Cover
- Coolant System
- Automatic Lubrication System
- Thread Dial
- Manual Tailstock w/ Manual Movement and Anti Slip Lock
- Lockable Main Switch
- Halogen Work Light
- Leveling Screws and Pads
- Tools, Tool Box, Operation Manual

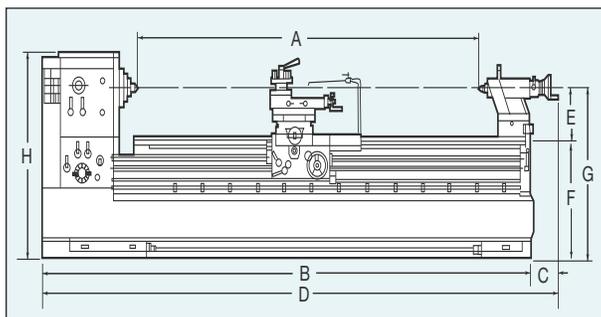
Specifications:

Model	MA26	MA30
Capacity		
Swing Over Bed	26.7" (680mm)	30.7" (780mm)
Swing Over Cross Slide	17.32" (440mm)	21.25" (540mm)
Swing in Gap	38.12" (970mm)	42.12" (1070mm)
Gap (in Front of Faceplate)	19" (482mm)	19" (482mm)
Headstock		
Spindle Nose	A2-11	A2-11
Spindle Bore	4.13" (105mm)	4.13" (105mm)
Spindle Taper		
Headstock	Geared Head	Geared Head
No. Spindle Speeds	12	12
Spindle Speed (rpm)	12-1000*	12-1000*
Min. Spindle Speed for Full Power	45 rpm	45 rpm
Construction		
Bed Type	One Piece	One Piece
Bed Width	18" (458mm)	18" (458mm)
Bed Height Over Bed	13.38" (340mm)	15.35" (390mm)
Cross Slide Travel	15.35" (390mm)	15.38" (390mm)
Compound Slide Travel	9.5" (240mm)	9.5" (240mm)
Leadscrew Diameter	1.77" (45mm)	1.77" (45mm)
Thread and Feed Box		
No. of Longitudinal Feeds	28	28
Range (in)	0.0019-0.027 in/rev	0.0019-0.027 in/rev
(mm)	0.05-0.7mm/rev	0.05-0.7mm/rev
No. of Cross Feeds	28	28
Range (in)	0.00019-0.1.38 in/rev	0.00019-0.1.38 in/rev
(mm)	0.025-0.35mm/rev	0.025-0.35mm/rev
No. of Inch Threads	36	36
Range	2-28 tpi	2-28 tpi
No. of Metric Threads	65	65
Range	0.8-14mm	0.8-14mm
No. of Modular Thread	22	22
Range	0.5-7 Mod	0.5-7 Mod
No. of Diametral Pitch Threads	36	36
Range	4-56 DP	4-56 DP
Tailstock		
Quill Diameter	8.26" (210mm)	8.26" (210mm)
Quill Travel	4.13" (105mm)	4.13" (105mm)
Center Taper	6MT	6MT
Motors		
Spindle Motor	20 hp (11kw)	15 hp (11kw)
Rapid Feed Motor	1/4 hp (.19kw)	1/4 hp (.19kw)
Pump Motor	1/8 hp (.09kw)	1/8 hp (.09kw)

(Specifications subject to change without notification)

*Spindles Speeds (rpm): 12, 20, 29, 40, 55, 85, 120, 175, 300, 445, 650, 1000

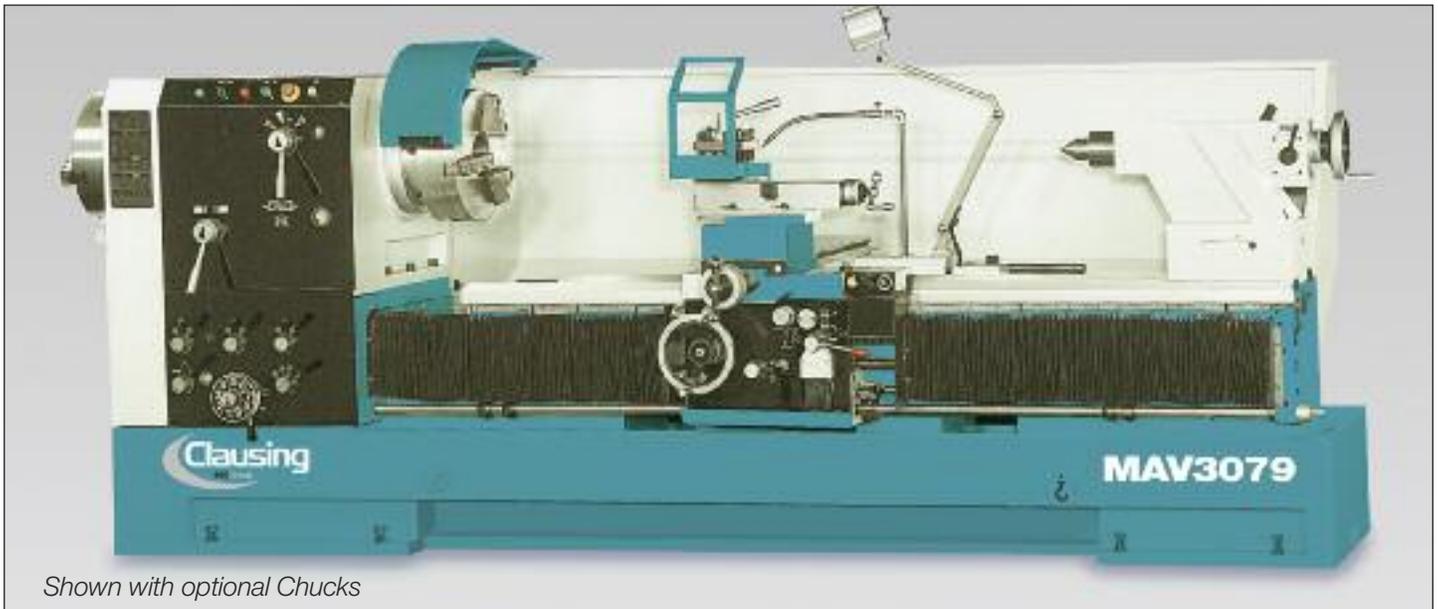
Dimensions, Center Distance and Weight:



Model	E	F	G	H
MA26	13.38" (340mm)	29.9" (760mm)	43.30" (1100mm)	55.1" (1400mm)
MA30	15.35" (390mm)	29.9" (760mm)	45.27" (1150mm)	57.1" (1450mm)

Model	Width	Center A	B	C	D	Net Weight	Gross Weight
MA26/3079	48.8" (1240mm)	79" (2000mm)	148" (3750mm)	5.9" (150mm)	154" (3900mm)	8,598 lbs. (3900kgs)	9,149 lbs. (4150kgs)
MA26/30118	48.8" (1240mm)	118" (3000mm)	187" (4750mm)	5.9" (150mm)	193" (4900mm)	9,921 lbs. (4500kgs)	10,692 lbs. (4850kgs)
MA26/30157	48.8" (1240mm)	157" (4000mm)	226" (5750mm)	5.9" (150mm)	232" (5900mm)	11,243 lbs (5100kgs)	12,345 lbs. (5600kgs)

Clausing MAV Series Variable Speed Heavy-Duty Large Swing Lathes



The Clausing MAV series large swing variable speed engine lathes are engineered to allow the accurate and efficient machining of large components. A wide range of optional accessories make these machines suitable for most industrial applications, including job shops, oil field, power utilities and ship building.

Machine Standard Features:

- Variable Spindle Speeds allow optimum cutting speed for a wide range of machining applications. Speed range from 14 to 1000 rpm
- 20 Hp Spindle Motor for exceptional machining power.
- All gears are made from chromium molybdenum steel treated with cementation and precision ground for long-life and dependability.
- One-piece cast iron bed from the ways to floor provides a solid foundation to ensure maximum stability and rigidity under heavy machining operations.
- 18" Bed Width, Hardened and Ground, support the saddle and carriage assembly allowing superior positioning and repeatability accuracy.
- Turcite 'B' is fitted between saddle and bed to greatly reduce friction and stick-slip for smooth operation and superior surface finishes. The low friction Turcite 'B' also minimizes bed wear and extends the life of the machine.
- Immersing Style Lead Screw reduces abrasion.
- 4-way Rapid Traverse for positioning and set up.
- 4-way Power Feed for longitudinal, cross and compound feeds.
- Tailstock with 4.18" manual positioning for ease of setup and operation.
- 4.1" Spindle Bore supported with taper spindle bearings provides outstanding spindle performance and load carrying capabilities. Optional spindle bores available.
- Coolant system for tool life and part cooling.
- Automatic lubrication system to all guideways.
- Guarding powder coated for durability.

Standard Equipment:

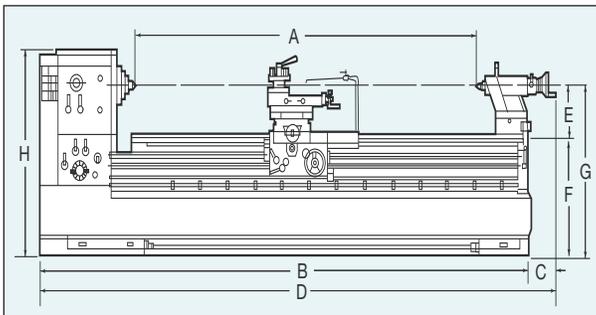
- Hardened and Ground Bed Ways
- Hardened and Ground Gears
- Chuck Guard with Limit Switch
- 20 hp Motor with Inverter Drive
- Variable Spindle Speeds, 14-1000 rpm, Auto 3 Range Manual Speed Change
- 11" Capacity Steady Rest
- Follower Rest
- 4-Way Rapid Traverse
- 4-Way Power Feed
- 4-Way, 8-Position Tool Post
- 1.75" Lead Screw
- Lead Screw Cover
- Coolant System
- Automatic Lubrication System
- Thread Dial
- Manual Tailstock with Manual Movement and Anti Slip Lock
- Lockable Main Switch
- Halogen Work Light
- Leveling Screws and Pads
- Tools, Tool Box, Operation Manual

Specifications:

Model	MAV26	MAV30
Capacity		
Swing Over Bed	26.7" (680mm)	30.7" (780mm)
Swing Over Cross Slide	17.32" (440mm)	21.25" (540mm)
Swing in Gap	38.12" (970mm)	42.12" (1070mm)
Gap (in Front of Faceplate)	19" (482mm)	19" (482mm)
Headstock		
Spindle Nose	A2-11	A2-11
Spindle Bore	4.13" (105mm)	4.13" (105mm)
Spindle Taper		
Headstock	Variable Speed	Variable Speed
Speed Range 1	14-45 rpm	14-45 rpm
Speed Range 2	60-180 rpm	60-180 rpm
Speed Range 3	306-1000 rpm	306-1000 rpm
Min. Spindle Speed for Full Power	45 rpm	45 rpm
Construction		
Bed Type	One Piece	One Piece
Bed Width	18" (458mm)	18" (458mm)
Bed Height Over Bed	13.38" (340mm)	15.35" (390mm)
Cross Slide Travel	15.35" (390mm)	15.38" (390mm)
Compound Slide Travel	9.5" (240mm)	9.5" (240mm)
Leadscrew Diameter	1.77" (45mm)	1.77" (45mm)
Thread and Feed Box		
No. of Longitudinal Feeds	28	28
Range (in)	0.0019-0.027 in/rev	0.0019-0.027 in/rev
(mm)	0.05-0.7 mm/rev	0.05-0.7 mm/rev
No. of Cross Feeds	28	28
Range (in)	0.00019-0.1.38 in/rev	0.00019-0.1.38 in/rev
(mm)	0.025-0.35 mm/rev	0.025-0.35 mm/rev
No. of Inch Threads	36	36
Range	2-28 TPI	2-28 TPI
No. of Metric Threads	65	65
Range	0.8-14 mm	0.8-14 mm
No. of Modular Thread	22	22
Range	0.5-7 Mod	0.5-7 Mod
No. of Diametral Pitch Threads	36	36
Range	4-56 DP	4-56 DP
Tailstock		
Quill Diameter	8.26" (210mm)	8.26" (210mm)
Quill Travel	4.13" (105mm)	4.13" (105mm)
Center Taper	6MT	6MT
Motors		
Spindle Motor	20 hp (11kw)	20 hp (11kw)
Rapid feed Motor	1/4 hp (.19kw)	1/4 hp (.19kw)
Pump Motor	1/8 hp (.09kw)	1/8 hp (.09kw)

(Specifications subject to change without notification)

Dimensions, Center Distance and Weight:



Model	E	F	G	H
MAV26	13.38" (340mm)	29.9" (760mm)	43.30" (1100mm)	55.1" (1400mm)
MAV30	15.35" (390mm)	29.9" (760mm)	45.27" (1150mm)	57.1" (1450mm)

Model	Width	Center A	B	C	D	Net Weight	Gross Weight
MAV26/3079	48.8" (1240mm)	79" (2000mm)	148" (3750mm)	5.9" (150mm)	154" (3900mm)	8,598 lbs. (3900kgs)	9,149 lbs. (4150kgs)
MAV26/30118	48.8" (1240mm)	118" (3000mm)	187" (4750mm)	5.9" (150mm)	193" (4900mm)	9,921 lbs. (4500kgs)	10,692 lbs. (4850kgs)
MAV26/30157	48.8" (1240mm)	157" (4000mm)	226" (5750mm)	5.9" (150mm)	232" (5900mm)	11,243 lbs (5100kgs)	12,345 lbs. (5600kgs)
MAV26/30197	48.8" (1240mm)	196" (5000mm)	266" (6750mm)	5.9" (150mm)	272" (6900mm)	13,889 lbs. (6300kgs)	15,432 lbs. (7000kgs)
MAV26/30236	48.8" (1240mm)	236" (6000mm)	305" (7750mm)	5.9" (150mm)	311" (7900mm)	15,432 lbs. (7000kgs)	16,975 lbs. (7700kgs)
MAV26/30275	48.8" (1240mm)	275" (7000mm)	345" (8750mm)	5.9" (150mm)	350" (8900mm)	16,975 lbs. (7700kgs)	18,519 lbs. (8400kgs)
MAV26/30315	48.8" (1240mm)	315" (8000mm)	384" (9750mm)	5.9" (150mm)	390" (9900mm)	18,519 lbs. (8400kgs)	20,282 lbs. (9200kgs)

Clausing MA & MAV Heavy-Duty Large Swing Lathes Accessories



Pratt Burnerd Self-Centering Universal 3-Jaw SETRITE™ Chucks

Pratt Burnerd Universal Setrite 3-Jaw Chucks are precision manufactured with a .0005 TIR repeatability on duplicate parts. The steel body allows high metal removal rates. 3-Jaw Setrite Chucks are supplied with

two-piece American standard tongue and groove reversible jaws. Chucks have nitride hardened scroll and hardened pinion. All chucks have a two year warranty.

Part No.	Dia.	Lathe Type & Size	Spindle Size	Max. rpm	Weight
1525313	15"	MA/MAV 26 Series Lathes	A-11	2000	146 lbs.
1825313	18"	MA/MAV 26/30 Series Lathes	A-11	1300	270 lbs.
2425313	24"	MA/MAV 30 Series Lathes	A-11	850	550 lbs.



Pratt Burnerd Self-Centering Universal 6-Jaw SETRITE™ Chucks

Pratt Burnerd Universal Setrite 6-Jaw Chucks are precision manufactured with a .0005 TIR repeatability on duplicate parts. The steel body allows high metal removal rates. 6-Jaw Setrite Chucks are supplied with

two-piece American standard tongue and groove reversible jaws. Chucks have nitride hardened scroll and hardened pinion. All chucks have a two year warranty.

Part No.	Dia.	Lathe Type & Size	Spindle Size	Max. rpm	Weight
1526313	15"	MA/MAV 26 series lathes	A-11	1300	205 lbs.
1826313	18"	MA/MAV 26/30 series lathes	A-11	1100	290 lbs.
2425313	24"	MA/MAV 30 series lathes	A-11	700	570 lbs.



Atlas 4-Jaw Independent Series 432 Heavy-Duty Steel Body Chucks

Atlas 4-Jaw Independent Chucks are precision manufactured and supplied with steel bodies, hardened and ground operating screws and two-piece reversible American Standard tongue and groove jaws. Atlas 4-Jaw

Independent Chucks come with a one year warranty.

Part No.	Dia.	Lathe Type & Size	Spindle Size
1843-2A11	18"	MA/MAV 26/30 Series Lathes	A-11
2043-2A11	20"	MA/MAV 26/30 Series Lathes	A-11



Atlas 4-Jaw Universal Series 743 Steel Body Chucks

Atlas 4-Jaw Universal Chucks have a maximum .003 TIR using nominating pinion, .001 repeatability using nominating pinion, two-piece American Standard tongue and groove jaws, nitride hardened and ground scroll, hardened pinions.

Atlas 4-Jaw Universal Chucks come with a one year warranty.

Part No.	Dia.	Lathe Type & Size	Spindle Size
1673-2A11	16"	MA/MAV 26 Series Lathes	A-11
2073-2A11	20"	MA/MAV 26/30 Series Lathes	A-11
2473-2A11	20"	MA/MAV 30 Series Lathes	A-11

Live Center

Revolving center is concentric within .0002" T.I.R. 60° point rotates on roller bearings.



Part No.	Fits Lathe Models	Weight
18-910	MA/MAV26 & MA/MAV30 Series Lathes	9 lbs.

Taper Attachment

Part No.	Fits Lathe Models
MA26-T800	Taper Turning Attachment for MA/MAV 26
MA30-T800	Taper Turning Attachment for MA/MAV 30

Traveling Splash Guard

Part No.	Fits Lathe Models
MA26-G1000	Traveling Splash Guard for MA/MAV 26
MA30-G1000	Traveling Splash Guard for MA/MAV 30

NEWALL *Digital Readouts offer unmatched performance with revolutionary features that will increase productivity*



Linear Encoders... Consistent accuracy and reliability even under the harshest shop condition...



Based on the principle of electromagnetics, Newall's Spherosyn® and Microsyn® encoders are truly innovative design in which all of the electronic and measuring components are sealed and protected.



DP700 DRO Outstanding Features with Leading Edge Technology

- Solid cast construction
- Long life membrane keypad
- Clean, crisp LEDs
- Intuitive message window
- Wide viewing angle
- Safe, low voltage external power supply
- Five year warranty
- Customized canned cycles
- ABS/Inch
- Digifind
- Metric/Inch
- Zero approach
- Tool offsets
- Taper
- Summing
- Bolt hole circle
- Arc contouring
- Polar co-ordinates
- Line hole
- Programmable memory
- Feed-rate display
- Linear and segmented error compensation
- RS232 output
- Undo function

The DP700 is a powerful and intuitive DRO that is housed in a rugged, ergonomically designed casting. The DRO features all of the essential functions for turning.



Steady Rest

The Steady Rest provides support for long or slender work and allows heavy cuts without chatter. Capacities are sized for lathe models.

Part No.	Fits Lathe Models	Capacity
MA10-S26A	Closed Steady Rest for MA/MAV 26	16.5"
MA10-S26B	Closed Steady Rest for MA/MAV 26	21.6"
MA10-S30A	Closed Steady Rest for MA/MAV 30	16.5"
MA10-S30B	Closed Steady Rest for MA/MAV 30	21.6"

Due to on going design improvements or customer requirements, design and specifications are subject to change without notice.



Clausing High Speed Precision Variable Speed Toolroom Lathe

Specifications:

Model	CT618VS
Spindle Capacity	
With Chuck	6"
With Expanding Collets	3"
With Round 5C Collets	1-16"
With Hexagon 5C Collets	7/8"
With Square 5C Collets	3/4"
With Step Chuck	1-1/16"
Capacity	
Swing Over Bed	11" (280mm)
Swing Over Carriage	9" (229mm)
Swing Over Crossslide	5.9" (150mm)
Center Distance	18" (457mm)
Headstock	
Spindle Nose Diameter	2.185" (55.5mm)
Spindle Nose I.D./O.D.	5C (10°) / 4° Taper
Spindle Speeds (Variable)	50-4000 RPM
Inverter Spindle Motor	3 Hp
Hole Through Spindle	1/1/4" (31.8mm)
Bar Stock Diameter (5C Collet)	1/1/16" (27mm)
Carriage	
Cross slide trave	5.9" (150mm)
Carriage Power Feed Range	.196 - 4 in/min
Cross Slide Power Feed Range (Variable)	.314 - 7 in/min
Quick Action Compound Slide Travel	0.098 (2.5mm)
Compound slide travel	2.99" (76mm)
Tailstock	
Spindle Travel	3.7" (94mm)
Threading	
Range of Threads English	11 to 108 TPI
Range of Threads Metric	.275 to 2.7mm
Coolant	
Coolant Pump	1/8 Hp
Speeds & Feeds	
Feed Inverter	1/2 Hp
Dimensions	
Weight (Approx.)	2,200 lbs. (998kg)
Shipping Weight (Approx.)	2,310 lbs. (1048kg)
Length x Height x Width	73" x 30" x 67" (1854 x 762 x 1702mm)

Standard Features...

- Spindle run out within 50 millionths of an inch
- Hardened and precision ground spindle mounted on high-precision preloaded angular contact ball bearings maximizes rigidity and sustained precision.
- Infinitely variable spindle speed provides desired speed on demand.
- EVS model has 3 Hp motor with current vector inverter drive for increased low-end torque.
- Fast lever collet closer allows chucking with one single movement.
- Independent electric variable feeds for carriage and cross slide provide freedom of operation.
- Hardened and precision ground alloy steel bed ways resist wear.
- Turcite-B slideway bearing surface between carriage and bed.
- Inch / Metric quick change gearbox
- Inch / Metric dual dial and quick action compound slide for threading.
- Automatic thread length control



Clausing High Speed Precision Variable Speed Toolroom Lathe with Digital Threading Control

Specifications:

Model	CT618DT
Spindle Capacity	
With Chuck	6"
With Expanding Collets	3"
With Round 5C Collets	1-16"
With Hexagon 5C Collets	7/8"
With Square 5C Collets	3/4"
With Step Chuck	1-1/16 "
Capacity	
Swing Over Bed	11" (280mm)
Swing Over Carriage	9" (229mm)
Swing Over Crossslide	5.9" (150mm)
Center Distance	18" (457mm)
Headstock	
Spindle Nose Diameter	2.185" (55.5mm)
Spindle Nose I.D./O.D.	5C (10°) / 4° Taper
Spindle Speeds (Variable)	50-4000 RPM
Inverter Spindle Motor	3 Hp
Hole Through Spindle	1/1/4" (31.8mm)
Bar Stock Diameter (5C Collet)	1/1/16" (27mm)
Carriage	
Cross slide trave	5.9" (150mm)
Carriage Power Feed Range	.196 - 4 in/min
Cross Slide Power Feed Range (Variable)	.314 - 7 in/min
Quick Action Compound Slide Travel	0.098 (2.5mm)
Compound slide travel	2.99" (76mm)
Tailstock	
Spindle Travel	3.7" (94mm)
Threading	
Range of Threads English	11 to 108 TPI
Range of Threads Metric	.275 to 2.7mm
Coolant	
Coolant Pump	1/8 Hp
Speeds & Feeds	
Feed Inverter	1/2 Hp
Dimensions	
Weight (Approx.)	2,200 lbs. (998kg)
Shipping Weight (Approx.)	2,310 lbs. (1048kg)
Length x Height x Width	73" x 30" x 67" (1854 x 762 x 1702mm)

Standard Features...

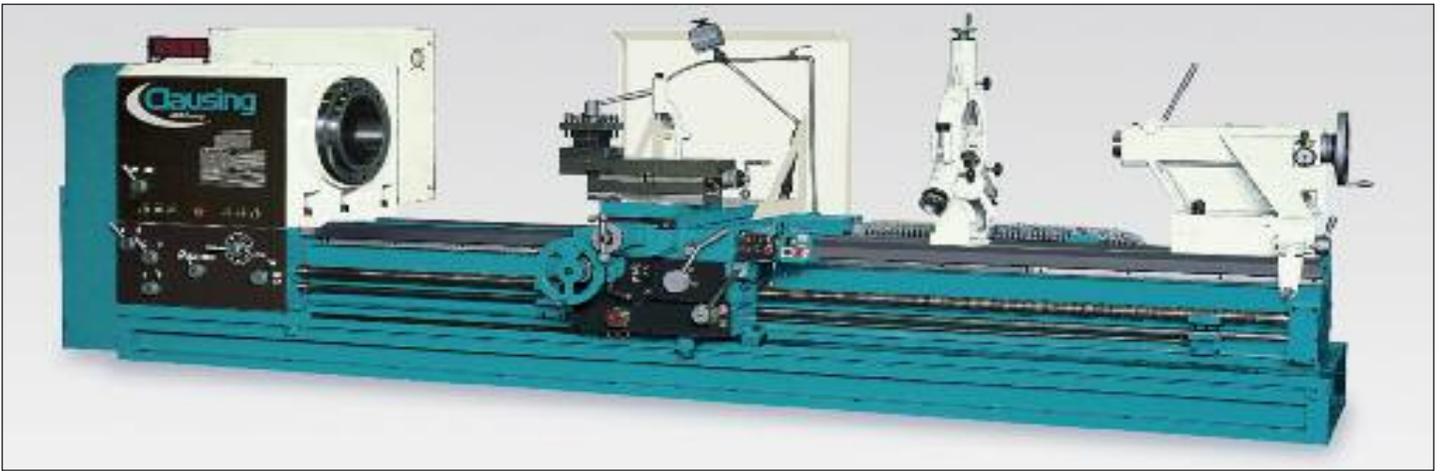
- Digital Threading Control replaces traditional threading gearboxes with microprocessor-controlled, servo-driven leadscrew, in the past when a machinist was faced with a workpiece that called for thread pitch not supported on a conventional lathe, he had to locate and order a custom gear set and take the time to swap out the gears in the gearbox. This is not economically justifiable unless the volume is large enough.
- Designed to eliminates this time-consuming workaround. With the new digital threading system, the user's threading wishes can be easily and immediately realized. Type in the desired thread pitch on the numeric keypad on the touch screen LCD control panel and then start the threading cycle as on other conventional lathes.
- CT618DT's system controls and synchronizes main spindle rotation and Z-axis feed rate to produce a precise threading cycle for the given TPI or mm thread pitch. Besides being able to cut thread pitches not previously available on manual lathes, noise and vibration are significantly reduced because there are actually no more gears in the gearbox.
- CT618DT already has a custom IC and an LCD panel to enable threading control, the next logical step is to integrate DRO functions for an all-in-one versatile machine. This has been done. DRO capabilities are built-in and come standard at no extra charge. This features linear scales on the X and Z axes from Mitutoyo.
- is ideal for super high precision lathe work on small parts (usually those that fit in 5C collets).

With Integrated DRO Functions:

- Flat panel LCD display shows spindle RPM and tool feed rate to let operator easily select best turning conditions.
- LCD displays electric current value to easily check for turning overload.
- Rapid retract function shortens threading cycle.
- Guaranteed Circular Accuracy to 50 millionths of an inch.
- Infinitely variable spindle speed from 50-4000 RPM.
- Full bearing carriage with Turcite-B coated slideway bearing material between carriage and bed.
- Fast lever collet chucking with one single movement.
- The spindle is mounted on high precision preloaded angular contact ball bearing eliminating radial and end play.
- Solid hardened and ground alloy tool steel bed.
- Powerful 3 Hp motor with current vector inverter drive increases low end torque.

TURNING

Clausing MA Series and MB Series Large Swing Lathes



MA Series

Machining Range...

Capacity

- Swing over bed: 34.6" (880mm) 39.7" (1000mm) 44.6" (1135mm) 50" (1275mm)
- Swing over cross slide: 24" (610mm) 29" (740mm) 34.3" (870mm) 39.7" (1010mm)
- Swing in gap: 53" (1340mm) 57.9" (1470mm) 63" (1600mm) 68.5" (1740mm)
- Gap width from headstock: 23.6" (600mm)
- Center height over bed: 17.3" (400mm) 19.85" (505mm) 22.3" (568mm) 25" (638mm)
- Center height from floor: 44.1" (1120mm) 46.7" (1185mm) 49.1" (1248mm) 51.8" (1315mm)
- Center distance: 63" (1600mm) to 476" (12100mm) (see dimension & center distance chart)
- Maximum weight between centers: 8,800 lbs. (4000kg)
- Maximum weight with steady rest: 11,000 lbs. (5000kg)
- Maximum unsupported weight in chuck: 5,500 lbs. (2500kg)
- Small closed steady rest (optional): 1.2" (30mm) to 15.7" (400mm)
- Large closed steady rest (optional): 13.8" (350mm) to 27.6" (700mm)
- Follower rest (optional): 1.5" (40mm) to 7" (178mm)

Bed

- Bed width: 22" (560mm) with standard auxiliary guides: 25.5" (650mm)
- Bed height from floor: 26.77" (680mm)
- 1.97" (50mm) leadscrew, leadscrew/feed rod support on 122" (3100mm) and longer models

Headstock

- Spindle bore on 34.6" (880mm) swing: 6" (153mm) standard, up to 14.17" (360mm) optional
- Spindle bore on 39.7" (1010mm), 44.6" (1135mm) and 50" (1275mm) swings: 6" (153mm) standard, up to 16.14" (410mm) optional
- Spindle nose: A2-11 to A2-28
- Spindle speed range: 18 step manual gear change on 6" (153mm) - 10.03" (255mm) spindle bore models, 4 range auto change variable speed with CSS on 12.5" (318mm) and larger spindle bore models (optional on 6" (153mm) - 10.03" (255mm) spindle bore models)
- Spindle speeds: 8-800 rpm 18 step manual gear box, 4-1000 rpm auto variable speed (see spindle and speed range chart)
- Spindle drive motor: 30 hp standard

Carriage

- Cross-slide travel: 26.4" (670mm) • Compound rest travel: 17.7" (450mm)
- 4 way, 8 position tool post with T-slots

Tailstock

- Quill diameter: 4.5" (115mm) • Quill travel: 7.87" (200mm)
- Quill taper: 6MT • Bearing surface on bed ways: 19.75" (500mm)
- Manual tailstock with saddle pin body movement

MB Series

Machining Range...

Capacity

- Swing over bed: 44.6" (1135mm) 50" (1275mm) 60" (1527mm) 70" (1790mm)
- Swing over cross slide: 31.9" (810mm) 37" (950mm) 47" (1200mm) 57" (1460mm)
- Swing in gap: 65" (1650mm) 70" (1780mm) 80" (2040mm) 90" (2300mm)
- Gap width from headstock: 23.6" (600mm)
- Center height over bed: 22.3" (568mm) 25" (638mm) 30" (764mm) 35" (895mm)
- Center height from floor: 49.1" (1246mm) 51.8" (1315mm) 56.8" (1442mm) 61.8" (2330mm)
- Center distance: 69" (1750mm) to 482" (12250mm) (see dimension & center distance chart)
- Maximum weight between centers: 11,000 lbs. (5000kg)
- Maximum weight with steady rest: 13,200 lbs. (6000kg)
- Maximum unsupported weight in chuck: 6,600 lbs. (3000kg)
- Small closed steady rest (optional): 1.2" (30mm) to 15.75" (400mm)
- Large closed steady rest (optional): 13.8" (350mm) to 27.6" (700mm)
- Follower rest (optional): 1.5" (40mm) to 7" (178mm)

Bed

- Bed width: 28" (712mm) with standard auxiliary guides: 32" (812mm)
- Bed height from floor: 26.77" (680mm)
- 1.97" (50mm) leadscrew, leadscrew/feed rod support on 128" (3250mm) and longer models

Headstock

- Spindle bore: 6" (153mm) standard, up to 24.02" (610mm) optional
- Spindle nose: A2-11 to A2-28
- Spindle speed range: 18 step manual gear change on 6" (153mm) and 9" (230mm) spindle bore models, 4 range auto change variable speed with CSS on 10.03" (255mm) and larger spindle bore models (optional on 6" (153mm) and 9" (230mm) spindle bore models)
- Spindle speeds: 8-800 rpm 18 step manual gear box, 4-1000 rpm auto variable speed (see spindle and speed range chart)
- Spindle drive motor: 40 hp standard

Carriage

- Cross-slide travel: 31.5" (800mm)
- Compound rest travel: 17.7" (450mm)
- 4 way, 8 position tool post with T-slots

Tailstock

- Quill diameter: 5.7" (145mm)
- Quill travel: 7.87" (200mm) • Quill taper: 6MT
- Bearing surface on bed ways: 23.5" (600mm)
- Manual tailstock with saddle pin body movement

TURNING

Clausing MH Series and MK Series Large Swing Lathes



MH Series

Machining Range...

Capacity

- Swing over bed: 50" (1275mm) 60" (1527mm) 70" (1790mm) 80" (2040mm)
- Swing over cross slide: 35" (885mm) 44.7" (1137mm) 55" (1400mm) 65" (1650mm)
- Center height over bed: 25" (638mm) 30" (764mm) 35" (895mm) 40" (1020mm)
- Center height from floor: 54" (1372mm) 59" (1500mm) 64" (1625mm) 69" (1752mm)
- Center distance: 93" (2370mm) to 487" (12370mm)
(see dimension & center distance chart)
- Maximum weight between centers: 17,600 lbs. (8000kg)
- Maximum weight with steady rest: 22,200 lbs. (10000kg)
- Maximum unsupported weight in chuck: 9,900 lbs. (4500kg)
- Small closed steady rest (optional): 1.2" (30mm) to 15.75" (400mm)
- Small open steady rest (optional): 1.2" (30mm) to 15.75" (400mm)
- Large closed steady rest (optional): 13.8" (350mm) to 27.56" (700mm)
- Large open steady rest (optional): 13.8" (350mm) to 27.56" (700mm)

Bed

- Bed width: 40" (1020mm), with standard auxiliary guides: 45.7" (1160mm)
- Bed height from floor: 29" (740mm)
- 1.97" (50mm) leadscrew, leadscrew/feed rod support on 132" (3352mm) and longer models

Headstock

- Spindle bore: 6" (153mm) standard, up to 24.02" (610mm) optional
- Spindle nose: A2-11 to A2-28
- Spindle speed range: 4 auto change variable speed ranges with CSS
- 4-1000 rpm auto variable speed (see spindle and speed range chart)
- Spindle drive motor: 50 hp standard

Carriage

- Cross-slide travel: 43.3" (1100mm)
- Compound rest travel: 17.7" (450mm)
- 4 way, 8 position tool post with T-slots

Tailstock

- Quill diameter: 9.25" (235mm)
- Quill travel: 7.87" (200mm)
- Quill taper: 6MT
- Bearing surface on bed ways: 26" (660mm)
- Hydraulic tailstock with rotating quill and hydraulic body movement

MK Series

Machining Range...

Capacity

- Swing over bed: 70" (1790mm) 80" (2040mm) 90" (2290mm) 100" (2540mm)
- Swing over cross slide: 53" (1350mm) 63" (1590mm) 73" (1840mm) 82" (2090mm)
- Center height over bed: 35" (895mm) 40" (1020mm) 45" (1145mm) 50" (1270mm)
- Center height from floor: 49" (1245mm) 52" (1320mm) 58" (1475mm) 62" (1575mm)
- Center distance: 81" (2060mm) to 474" (12060mm)
(see dimension & center distance chart)
- Maximum weight between centers: 33,000 lbs. (15000kg)
- Maximum weight with steady rest: 37,400 lbs. (17000kg)
- Maximum unsupported weight in chuck: 19,800 lbs. (900kg)
- Small closed steady rest (optional): 1.2" (30mm) to 15.75" (400mm)
- Small open steady rest (optional): 1.2" (30mm) to 15.75" (400mm)
- Large closed steady rest (optional): 13.8" (350mm) to 27.56" (700mm)
- Large open steady rest (optional): 13.8" (350mm) to 27.56" (700mm)
- Extra large closed steady rest (optional): 26.6" (675mm) to 39.4" (1000mm)
- Extra large closed steady rest (optional): 26.6" (675mm) to 39.4" (1000mm)

Bed

- Bed width: 47.5" (1210mm), with standard auxiliary guides: 54" (1370mm)
- Bed height from floor: 30" (760mm)
- 2.36" (60mm) leadscrew, leadscrew/feed rod support on 120" (3048mm) and longer models

Headstock

- Spindle bore: 9" (230mm) standard, up to 24.02" (610mm) optional
- Spindle nose: A2-15 to A2-28
- Spindle speed range: 4 auto change variable speed ranges with CSS
- 4-700 rpm auto variable speed (see spindle and speed range chart)
- Spindle drive motor: 75 hp standard

Carriage

- Cross-slide travel: 51" (1300mm)
- Compound rest travel: 19.7" (500mm)
- 4 way, 12 position tool post with T-slots

Tailstock

- Quill diameter: 11" (280mm)
- Quill travel: 10" (250mm)
- Quill taper: 6MT
- Bearing surface on bed ways: 44" (1120mm)
- Hydraulic tailstock with rotating quill and hydraulic body movement

Clausing Manual Large Swing Lathes Standard Equipment

MA Series

- Chuck guard with limit switch
- 30 hp spindle drive motor
- Auto power off with 2 adjustable position stops
- Mechanical safety device • Lockable main switch
- Electrical cabinet ventilation fans • Electromagnetic spindle brake
- 6 way rapid traverse • 6 way power feed
- 4 way 8 position tool post with T-slots • 2 dead centers
- Steel leadscrew cover • Coolant system • Auto lube
- Thread dial • QIK Threading system and A.P.I. threads
- Manual tailstock with saddle pin body movement and anti slip lock
- Gears and bed ways hardened and ground
- Traveling splash guard • Built-in air power supply tube
- Halogen work light
- Leveling screws and pads
- Tools, tool box and operation manual

MB Series

- Chuck guard with limit switch
- 40 hp spindle drive motor
- Auto power off with 2 adjustable position stops
- Mechanical safety device • Lockable main switch
- Electrical cabinet ventilation fans • Electromagnetic spindle brake
- 6 way rapid traverse • 6 way power feed
- 4 way 8 position tool post with T-slots • 2 dead centers
- Steel leadscrew cover • Coolant system • Auto lube
- Thread dial • QIK Threading system and A.P.I. threads
- Manual tailstock with saddle pin body movement and anti slip lock
- Gears and bed ways hardened and ground
- Traveling splash guard • Built-in air power supply tube
- Halogen work light
- Leveling screws and pads
- Tools, tool box and operation manual

MH Series

- Chuck guard with limit switch
- 50 hp motor with inverter variable speed motor
- 4 range auto change variable speed with CSS
- Auto power off with 2 adjustable position stops
- Mechanical safety device • Lockable main switch
- Electrical cabinet ventilation fans • Electromagnetic spindle brake
- 6 way rapid traverse
- 6 way power feed
- 4 way 8 position tool post with T-slots • 2 dead centers
- Steel leadscrew cover • Coolant system • Auto lube
- Thread dial • QIK threading system and A.P.I. threads
- Hydraulic tailstock with with rotating quill, hydraulic movement and anti-slip lock
- Gears and bed ways hardened and ground
- Traveling splash guard
- Built-in air power supply tube
- Halogen work light
- Leveling screws and pads
- Tools, tool box and operation manual

MK Series

- Chuck guard with limit switch
- 75 hp motor with inverter variable speed motor
- 4 range auto change variable speed with CSS
- Auto power off with 2 adjustable position stops
- Mechanical safety device • Lockable main switch
- Electrical cabinet ventilation fans • Electromagnetic spindle brake
- 6 way rapid traverse
- 6 way power feed
- 4 way 12 position tool post with T-slots • 2 dead centers
- Steel leadscrew cover • Coolant system • Auto lube
- Thread dial • QIK Threading system and A.P.I. threads
- Hydraulic tailstock with rotating quill, hydraulic movement and anti-slip lock
- Gears and bed ways hardened and ground
- Traveling splash guard
- Built-in air power supply tube
- Halogen work light
- Leveling screws and pads
- Tools, tool box and operation manual

Feed and Thread Range Spindle Bore and Speed Range

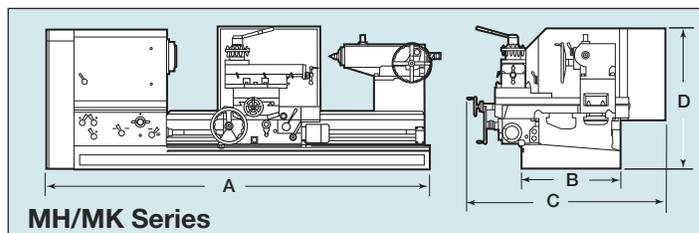
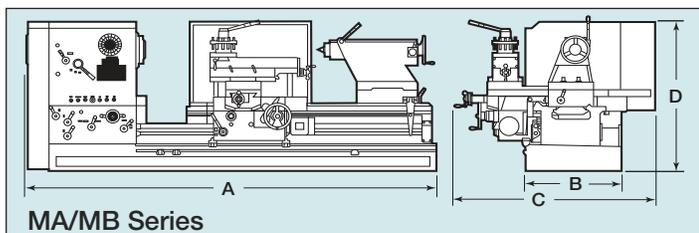
Longitudinal Feeds	0.0018-0.1in/rev (0.045-2.55mm/rev)
Cross Feeds	0.0009-0.05(in/rev) (0.023-1.28mm/rev)
Longitudinal Rapid Feeds	80in/min (2000mm/min)
Cross Rapid Feeds	40in/min (2000mm/min)
No. of Metric Threads	60
Range (mm)	1-56
No. of Inch Threads	60
Range (tpi)	1/2-28
No. of Module Threads	60
Range (mod)	0.25-14
No. of Diametral Pitch Threads	60
Range (mm)	2-112
Leadscrew Pitch (tpi)	2

Spindle Bore Size	6.02" (153mm)	9.05" (230mm)	10.03" (255mm)	12.18" (309mm)	14.17" (360mm)	16.14" (410mm)	21.06" (535mm)	24.02" (610mm)
Spindle Nose	A2-11	A2-15	A2-15	A2-20	A2-20	A2-28	A2-28	A2-32
Front Spindle Bearing	7.87" (200mm)	12" (305mm)	14" (355mm)	15" (381mm)	16.12" (409mm)	19.25" (489mm)	23.5" (596mm)	27.5" (698mm)
Speed Range #1 (rpm)	18-130	16-120	13-95	12-85	10-75	8-50	6-40	4-25
Speed Range #2 (rpm)	35-260	30-200	25-185	23-170	20-150	15-100	12-80	8-50
Speed Range #3 (rpm)	85-550	70-420	60-400	55-300	50-250	35-200	30-180	20-140
Speed Range #4 (rpm)	165-1000	150-700	120-600	110-400	95-350	65-300	50-250	40-220
18 Step Gear Box								
Spindle Speeds (rpm)	8-11-15-19-25-35-50-68-87-100-120-145-215-320-410-480-620-800							
*Optional 1000 (rpm)	10-15-19-25-31-43-65-85-105-130-150-180-270-400-500-590-780-1000							
*Optional 1200 (rpm)	12-17-23-30-38-52-78-105-130-155-180-215-325-480-610-700-930-1200							

*Optional 1000 and 1200 rpm 18 step gear box require refrigerated electrical cabinet.

Due to on going design improvements or customer requirements, design and specifications are subject to change without notice.

Clausing Manual Large Swing Lathes Center Dimensions and Weight



MA Series

Center Distance	63" (1600mm)	82" (2100mm)	122" (3100mm)	160" (4100mm)	200" (5100mm)	240" (6100mm)	279" (7100mm)	318" (8100mm)	358" (9100mm)	397" (10100mm)	437" (11100mm)	476" (12100mm)
Length A	145" (3690mm)	165" (4190mm)	204" (5190mm)	244" (6190mm)	283" (7180mm)	322" (8190mm)	362" (9190mm)	401" (10901mm)	440" (11190mm)	480" (12190mm)	519" (13190mm)	559" (14190mm)
Base Width B	34.6" (880mm)											
Overall Width C	71" (1800mm)											
Height D	35" (880mm) swing - 54" (1370mm)			40" (1010mm) swing - 56" (1422mm)			45" swing (1135mm) - 59" (1500mm)			50" swing (1275mm) - 62" (1575mm)		
Weight lbs.(kg)												
35" Swing	20,900 (9480)	22,000 (9980)	24,200 (10980)	26,400 (11975)	28,600 (12975)	30,800 (13970)	33,000 (14970)	35,200 (15970)	37,400 (16965)	39,600 (17965)	41,800 (18960)	44,000 (19960)
40" Swing	21,670 (9830)	22,770 (10330)	24,970 (11330)	27,170 (12325)	29,370 (13325)	31,570 (14320)	33,770 (15320)	35,970 (16315)	38,170 (17315)	40,370 (18405)	42,570 (19310)	44,770 (20310)
45" Swing	22,440 (10180)	23,540 (10675)	25,740 (11675)	27,940 (12675)	30,140 (13675)	32,340 (14670)	34,540 (15670)	36,740 (16665)	38,940 (17665)	41,140 (18665)	43,340 (19660)	45,540 (20660)
50" Swing	23,440 (10635)	24,310 (11027)	26,510 (12025)	28,710 (13025)	30,910 (14020)	33,110 (15020)	35,310 (16065)	37,510 (17015)	39,710 (18015)	41,910 (19010)	44,110 (20010)	46,310 (21010)

MB Series

Center Distance	69" (1750mm)	88" (2550mm)	128" (3250mm)	167" (4250mm)	206" (5250mm)	246" (6250mm)	285" (7250mm)	324" (8250mm)	364" (9250mm)	403" (10250mm)	443" (11250mm)	482" (12250mm)
Length A	158" (4010mm)	178" (4510mm)	217" (5510mm)	256" (6510mm)	296" (7510mm)	335" (8510mm)	374" (9510mm)	414" (10510mm)	453" (11510mm)	493" (12510mm)	532" (13510mm)	571" (14510mm)
Base Width B	37.4" (950mm)											
Overall Width C	78" (1990mm)											
Height D	45" (1135mm) swing - 62" (1550mm)			50" (1275mm) swing - 64" (1625mm)			60" (1527mm) swing - 69" (1757mm)			70" (1790mm) swing - 74" (1880mm)		
Weight lbs.(kg)												
45" Swing	27,280 (12375)	29,040 (13175)	32,560 (14770)	36,080 (16365)	39,600 (17965)	43,120 (19560)	46,640 (21155)	50,160 (22750)	53,680 (24350)	57,200 (25945)	60,720 (27545)	64,240 (29140)
50" Swing	28,160 (12775)	29,920 (13575)	33,440 (15170)	36,960 (16765)	40,480 (18365)	44,000 (19960)	47,520 (21555)	51,040 (23150)	54,560 (24750)	58,080 (26345)	61,600 (27945)	65,120 (29540)
60" Swing	30,100 (13655)	31,680 (14370)	35,200 (15970)	38,720 (17365)	42,240 (19160)	45,760 (20760)	49,280 (22355)	52,800 (23950)	56,320 (25560)	59,840 (27145)	63,360 (28740)	66,880 (30340)
70" Swing	31,680 (14370)	33,440 (15170)	36,960 (16765)	40,480 (18365)	44,000 (19960)	47,520 (21555)	51,040 (23150)	54,560 (24750)	58,080 (26345)	61,600 (27945)	65,120 (29540)	68,640 (31135)

MH Series

Center Distance	93" (2370mm)	132" (3370mm)	172" (4370mm)	210" (5370mm)	250" (6370mm)	290" (7370mm)	329" (8370mm)	368" (9370mm)	408" (10370mm)	447" (11370mm)	487" (12370mm)
Length A	215" (5450mm)	254" (6450mm)	293" (7450mm)	333" (8450mm)	372" (9450mm)	411" (10450mm)	451" (11450mm)	490" (12450mm)	529" (13450mm)	569" (14450mm)	608" (15450mm)
Base Width B	49.6" (1290mm)										
Overall Width C	105" (2660mm)										
Height D	50" swing (1275mm) - 72" (1830mm)		60" (1527mm) swing - 77" (1955mm)			70" (1790mm) swing - 83" (2110mm)		80" (2040mm) swing - 88" (2235mm)			
Weight lbs.(kg)											
50" Swing	36,740 (16665)	42,240 (19160)	47,740 (21655)	53,240 (24150)	58,740 (26645)	64,240 (29140)	69,740 (31635)	75,240 (34130)	80,740 (36625)	86,240 (39120)	91,740 (41620)
60" Swing	38,940 (17665)	44,440 (20160)	49,940 (22655)	55,440 (25150)	60,940 (27645)	66,440 (30137)	71,940 (32635)	77,440 (35130)	82,940 (37625)	88,440 (40120)	93,940 (42615)
70" Swing	41,140 (18665)	46,640 (21155)	52,140 (23650)	57,640 (26145)	63,140 (28640)	68,640 (31135)	74,140 (33630)	79,640 (36125)	85,140 (38620)	90,640 (41115)	96,140 (43610)
80" Swing	43,340 (19660)	48,840 (22155)	54,340 (24650)	59,840 (27145)	65,340 (29640)	70,840 (32135)	76,340 (34630)	81,840 (37125)	87,340 (39620)	92,840 (42115)	98,340 (44610)

MK Series

Center Distance	81" (2060mm)	120" (3060mm)	160" (4060mm)	199" (5060mm)	238" (6060mm)	278" (7060mm)	317" (8060mm)	356" (9060mm)	396" (10060mm)	435" (12060mm)	474" (13060mm)
Length A	215" (5450mm)	254" (6450mm)	293" (7450mm)	333" (8450mm)	372" (9450mm)	411" (10450mm)	451" (11450mm)	490" (12450mm)	529" (13450mm)	569" (14450mm)	608" (15450mm)
Base Width B	57.9" (1470mm)										
Overall Width C	101" (2815mm)										
Height D	70" (1790mm) swing - 78" (1980mm)		80" (2040mm) swing - 83" (2110mm)			90" swing (2290mm) - 88" (2235mm)		100" (2540mm) swing - 94" (2390mm)			
Weight lbs.(kg)											
70" Swing	49,940 (22655)	58,740 (26645)	67,540 (30640)	76,340 (34630)	85,140 (38620)	93,940 (42615)	102,740 (46605)	111,540 (50595)	120,340 (54590)	129,140 (58575)	137,940 (62210)
80" Swing	53,240 (24150)	62,040 (28145)	70,840 (32135)	79,640 (36125)	88,440 (40120)	97,240 (44110)	106,040 (48100)	114,840 (52095)	123,640 (56085)	132,440 (60075)	141,240 (64070)
90" Swing	56,540 (25650)	65,340 (29640)	74,140 (33630)	82,940 (37625)	91,740 (41615)	100,540 (45605)	109,340 (49595)	118,140 (53590)	126,940 (57580)	135,740 (61575)	144,540 (65565)
100" Swing	59,840 (27145)	68,640 (31135)	77,440 (35130)	86,240 (39120)	95,040 (43110)	103,840 (47105)	112,670 (51185)	121,440 (55190)	130,240 (59080)	139,040 (63070)	147,840 (67060)

Due to on going design improvements or customer requirements, design and specifications are subject to change without notice.

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Clausing CL Series and CB Series CNC Large Swing Lathes



CL Series

Machining Range...

Capacity

- Swing over bed: 35" (880mm) 40" (1010mm) 45" (1135mm) 50" (1275mm)
- Swing over cross slide: 20" (510mm) 25" (640mm) 30" (765mm) 35" (880mm)
- Center height over bed: 17.5" (440mm) 20" (505mm) 22.5" (568mm) 25" (638mm)
- Center height from floor: 44" (1125mm) 47" (1190mm) 49" (1250mm) 52" (1315mm)
- Center distance: 62" (1575mm) to 476" (12100mm)
- Max. weight between centers: 11,000 lbs. (5000kg)
- Max. weight between centers with steady rest: 13,200 lbs. (6000kg)
- Max. unsupported weight in chuck: 5,500 lbs. (5500kg)
- Small closed steady rest capacity (optional): 1.18" (30mm) to 15.75" (400mm)
- Large closed steady rest capacity (optional): 13.8" (350mm) to 27.56" (700mm)

Bed

- Bed width: 22" (360mm) with 2 bed ways
- Bed height from floor: 26.8" (680mm)

Headstock

- Spindle bore 35" (880mm) swing:
6" (30mm) standard, up to 14.17" (380mm) optional
- Spindle bore 40" (1010mm), 45" (1135mm) & 50" (1275mm) swings:
6" (30mm) standard up to 16.14" (410mm) optional
- Spindle nose: A2-11 to A2-28
- Spindle speed ranges: 4 auto change variable speed
- Spindle speeds: 8-1000 rpm (see spindle and speed range chart)
- Spindle drive motor: 40/50 hp (30/37kw) standard, 50/60 Hp (37.5/45kw) optional

Turret

- Turret: 4-way HP350 auto H4
- Number of tool stations: 4 automatic
- Tool shank cross section: 1.25" (32x32mm)
- Tool shank diameter: 2.5" (60mm)

Travel

- Cutting feed rate: X axis 0.00004-9.84 in/rev (0.001-250 mm/rev),
Z axis 0.00004-15.75 in/rev (0.001-400 mm/rev)
- Rapid travel: X axis 236.16" in/min (6 m/min), Z axis 314.88" in/min (8 m/min)
- Ballscrew diameter: X axis 1.57" (40mm), Z axis 2.48" (63mm)

Tailstock

- Quill: built-in type, rotating tailstock quill with 6MT taper
- Quill diameter: 9.25" (235mm)
- Quill travel: 7.87" (200mm)

CB Series

Machining Range...

Capacity

- Swing over bed: 45" (1135mm) 50" (1275mm) 60" (1527mm) 70" (1790mm)
- Swing over cross slide: 28" (710mm) 33" (850mm) 43" (1102mm) 53" (1135mm)
- Center height over bed: 22.3" (568mm) 25" (638mm) 30" (764mm) 35" (895mm)
- Center height from floor: 49.1" (1248mm) 51.8" (1315mm) 56.8" (1440mm) 61.1" (1550mm)
- Center distance: 70" (1780mm) to 488" (12400mm)
- Max. weight between centers: 14,300 lbs. (6500kg)
- Max. weight between centers with steady rest: 16,500 lbs. (7500kg)
- Max. unsupported weight in chuck: 6,600 lbs. (3000kg)
- Small closed steady rest capacity (optional): 1.18" (30mm) to 15.75" (400mm)
- Large closed steady rest capacity (optional): 13.8" (350mm) to 27.56" (700mm)

Bed

- Bed width: 28" (712mm) with 2 bed ways
- Bed height from floor: 26.8" (680mm)

Headstock

- Spindle bore: 6" (30mm) standard, up to 24.02" (610mm) optional
- Spindle nose: A2-11 to A2-35
- Spindle speed ranges: 4 auto change variable speed
- Spindle speeds: 4-1000 rpm (see spindle bore and speed range chart)
- Spindle drive motor: 50/60 hp (37.5/40kw)

Turret

- Turret: 4-way HP350 auto H4
- Number of tool stations: 4 automatic
- Tool shank cross section: 1.25" (32x32mm)
- Tool shank diameter: 2.5" (60mm)

Travel

- Cutting feed rate: X axis 0.00004-9.84 in/rev (0.001-250 mm/rev),
Z axis 0.00004-15.75 in/rev (0.001-400 mm/rev)
- Rapid travel: X axis 236.16" in/min (6 m/min), Z axis 314.88" in/min (8 m/min)
- Ball screw diameter: X axis 1.77" (45mm), Z axis 3.15" (80mm)

Tailstock

- Quill: built-in type, rotating tailstock quill with 6MT taper
- Quill diameter: 9.25" (235mm)
- Quill travel: 7.87" (200mm)

Clausing CC Series and CK Series Large Swing Lathes



CC Series

Machining Range...

Capacity

- Swing over bed: 35" (880mm) 40" (1010mm) 45" (1135mm) 50" (1275mm)
- Swing over cross slide: 26" (660mm) 27" (686mm) 32" (810mm) 37" (940mm)
- Center height over bed 17.5" (440mm) 20" (510mm) 22.5" (575mm) 25" (638mm)
- Center height from floor 46" (1180mm) 49" (1250mm) 52" (1315mm) 54" (1378mm)
- Center distance: 94" (2400mm) to 488" (12400mm)
- Max. weight between centers: 22,000 lbs. (10000kg)
- Max. weight between centers with steady rest: 26,400 lbs. (12000kg)
- Max. unsupported weight in chuck: 9,900 lbs. (4500kg)
- Small closed steady rest capacity (optional): 1.18" (30mm) to 15.75" (400mm)
- Small open steady rest capacity (optional): 1.18" (30mm) to 15.75" (400mm)
- Large closed steady rest capacity (optional): 13.8" (350mm) to 27.56" (700mm)
- Large open steady rest capacity (optional): 13.8" (350mm) to 27.56" (700mm)

Bed

- Bed width: 40" (1020mm) with 4 bed ways
- Bed height from floor: 29" (740mm)

Headstock

- Spindle bore 35" (880mm) swing: 6" (153mm) standard, up to 14.17" (360mm) optional
- Spindle bore 40" (1010mm) swing: 6" (153mm) standard up to 21.06" (535mm) optional
- Spindle bore 45" (1135mm) and 50" (1275mm) swings: 6" (153mm) standard up to 24.02" (610mm) optional
- Spindle nose: A2-11 to A2-32
- Spindle speed ranges: 4 auto change variable speed
- Spindle speeds: 4-1000 rpm • Spindle drive motor: 50/60 hp (37.5/45kw)

Turret

- Turret: 4-way HP450 auto H4 • Number of tool stations: 4 automatic
- Tool shank cross section: 1.25" (32 x 32mm)
- Tool shank diameter: 2.5" (60mm)

Travel

- Cutting feed rate: X axis 0.00004-9.84 in/rev (0.001-250 mm/rev), Z axis 0.00004-15.75 in/rev (0.001-400 mm/rev)
- Rapid travel: X axis 236.16" in/min (6 m/min), Z axis 314.88" in/min (8 m/min)
- Ball screw diameter: X axis 1.97" (50mm), Z axis 3.15" (80mm)

Tailstock

- Quill: built-in type, rotating tailstock quill with 6MT taper
- Quill diameter: 9.25" (235mm) • Quill travel: 7.87" (200mm)

CK Series

Machining Range...

Capacity

- Swing over bed: 50" (1275mm) 60" (1530mm) 70" (1800mm) 80" (2040mm)
- Swing over cross slide: 29" (745mm) 39" (1000mm) 50" (1270mm) 60" (1515mm)
- Center height over bed 25" (638mm) 30" (765mm) 35" (900mm) 40" (1020mm)
- Center height from floor 55" (1398mm) 60" (1525mm) 65" (1660mm) 70" (1780mm)
- Center distance: 82" (2100mm) to 476" (12100mm)
- Max. weight between centers: 33,000 lbs. (15000 kg)
- Max. weight between centers with steady rest: 37,400 lbs. (17000kg)
- Max. unsupported weight in chuck: 19,800 lbs. (9000kg)
- Small closed steady rest capacity (optional): 1.18" (30mm) to 15.75" (400mm)
- Small open steady rest capacity (optional): 1.18" (30mm) to 15.75" (400mm)
- Large closed steady rest capacity (optional) : 13.8" (350mm) to 27.56" (700mm)
- Large open steady rest capacity (optional): 13.8" (350mm) to 27.56" (700mm)

Bed

- Bed width: 47.5" (1210mm) with 4 bed ways
- Bed height from floor: 30" (760mm)

Headstock

- Spindle bore: 9.05" (230mm) standard, up to 24.02" (610mm) optional
- Spindle nose: A2-15 to A2-32
- Spindle speed ranges: 4 auto change variable speed
- Spindle speeds: 4-1000 rpm (see spindle bore and speed range chart)
- Spindle drive motor: 80/100 hp (60/70kw)

Turret

- Turret: 4-way HP450 auto H4
- Number of tool stations: 4 automatic
- Tool shank cross section: 1.25" (32 x 32mm)
- Tool shank diameter: 2.5" (60mm)

Travel

- Cutting feed rate: X axis 0.00004-9.84 in/rev (0.001-250 mm/rev), Z axis 0.00004-15.75 in/rev (0.001-400 mm/rev)
- Rapid travel: X axis 236.16" in/min (6 m/min), Z axis 314.88" in/min (8 m/min)
- Ball screw diameter: X axis 2.36" (60mm), Z axis 3.93" (100mm)

Tailstock

- Quill: built-in type, rotating tailstock quill with 6MT taper
- Quill diameter: 11" (280mm)
- Quill travel: 10" (250mm)

TURNING

Clausing CNC Large Swing Lathes Standard Equipment

CL Series

- Fanuc 18 T Control or Fanuc 21i T Teach-in Control with 10.4" (264mm) screen
- 40/50 hp (30/37kW) Fanuc AC spindle drive motor
- Electrical cabinet refrigerator • Spindle oil cooling refrigerator
- 4 speed range, auto change, variable speed spindle drive
- HP350 auto H4, 4 way tool turret
- Front and rear belt type chip conveyor with cart
- Programmable hydraulic tailstock with rotating quill and hydraulic body movement
- Steel ballscrew cover up to 160" (4100mm) and telescopic ballscrew cover on 200" (5100mm) and longer
- 5 hp X and Z axis servo motor
- Full guarding with interlock, 2 doors on 62" (1575mm) to 160" (4100mm) centers, 3 doors on 200" (5100mm) centers and longer
- Halogen work light • Coolant system
- 3 hp (2.2kW) hydraulic pump motor
- Auto lube • 2 centers
- Hardened and ground bed ways • Hardened and ground gears
- Leveling screws and pads • Tools, tool box and operation manual

CB Series

- Fanuc 18 T Control or Fanuc 21i T Teach-in Control with 10.4" (264mm) screen
- 50/60 hp (37/45 kW) Fanuc AC spindle drive motor
- Electrical cabinet refrigerator • Spindle oil cooling refrigerator
- 4 speed range, auto change, variable speed spindle drive
- HP350 auto H4, 4 way tool turret
- Front and rear belt type chip conveyor with cart
- Programmable hydraulic tailstock with rotating quill and hydraulic body movement
- Steel ballscrew cover up to 160" (4100mm) and telescopic ballscrew cover on 200" (5100mm) and longer
- 6 hp (4.5 kW) X and Z axis servo motor
- Full guarding with interlock, 2 doors on 70" (1780mm) to 173" (4400mm) centers, 3 doors on 212" (5400mm) centers and longer
- Halogen work light • Coolant system
- 3 hp (2.2 kW) hydraulic pump motor
- Auto lube • 2 centers
- Hardened and ground bed ways • Hardened and ground gears
- Leveling screws and pads • Tools, tool box and operation manual

CC Series

- Fanuc 18 T Control or Fanuc 21i T Teach-in Control with 10.4" (264mm) screen
- 50/60 hp (37/45kW) Fanuc AC spindle drive motor
- Electrical cabinet refrigerator • Spindle oil cooling refrigerator
- 4 speed range, auto change, variable speed spindle drive
- HP450 auto H4, 4 way tool turret
- Front and rear belt type chip conveyor with cart
- Programmable hydraulic tailstock with rotating quill and hydraulic body movement
- Steel ballscrew cover up to 133" (3400mm) and telescopic ballscrew cover on 173" (4400mm) and longer
- 6 Hp (4.5 kW) X and Z axis servo motor
- Full guarding with interlock, 2 doors on 94" (2400mm) to 173" (4400mm) centers, 3 doors on 212" (5400mm) centers and longer
- Halogen work light • Coolant system
- 3 hp (2.2kW) hydraulic pump motor
- Auto lube • 2 centers
- 4 hardened and ground bed ways • Hardened and ground gears
- Leveling screws and pads
- Tools, tool box and operation manual

CK Series

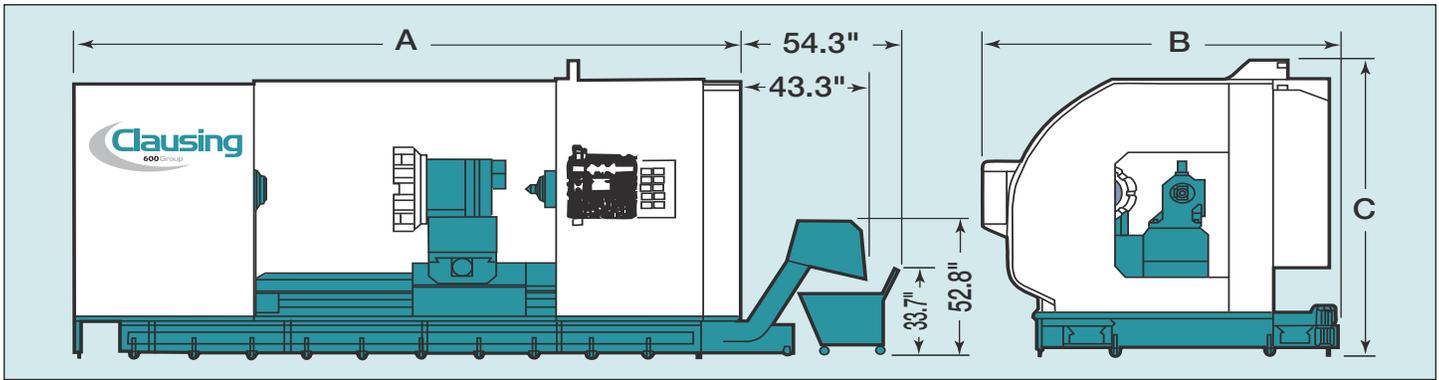
- Fanuc 18 T Control or Fanuc 21i T Teach-in Control with 10.4" (264mm) screen
- 80/100 hp (60/75 kW) Fanuc AC spindle drive motor
- Electrical cabinet refrigerator • Spindle oil cooling refrigerator
- 4 speed range, auto change, variable speed spindle drive
- HP450 auto H4, 4 way tool turret
- Front and rear belt type chip conveyor with cart
- Programmable hydraulic tailstock with rotating quill and hydraulic body movement
- Steel ballscrew cover up to 82" (2100mm) and telescopic ballscrew cover on 122" (3100mm) and longer
- 8 hp (6 kW) X axis servo motor
- 11 hp (7.7 kW) Z axis servo motor
- Full guarding with interlock, 2 doors on 82" (2100mm) to 160" (4100mm) centers, 3 doors on 200" (5100mm) centers and longer
- Halogen work light • Coolant system
- 5 hp (3.5 kW) hydraulic pump motor
- Auto lube • 2 centers
- 4 hardened and ground bed ways • Hardened and ground gears
- Leveling screws and pads
- Tools, tool box and operation manual

Spindle Bore & Speed Range

Spindle Bore Size	6.02" (153mm)	9.05" (230mm)	10.03" (255mm)	12.5" (318mm)	14.17" (360mm)	16.14" (410mm)	21.06" (535mm)	24.02" (610mm)
Spindle Nose	A2-11	A2-15	A2-15	A2-20	A2-20	A2-28	A2-28	A2-32
Front Spindle Bearing	7.9" (200mm)	12" (305mm)	14" (355mm)	15" (381mm)	16.1" (409mm)	19.2" (488mm)	23.5" (596mm)	27.5" (698mm)
Speed Range #1 (rpm)	18-130	16-120	13-95	12-85	10-75	8-50	6-40	4-25
Speed Range #2 (rpm)	35-260	30-200	25-185	23-170	20-150	15-100	12-80	8-50
Speed Range #3 (rpm)	85-550	70-420	60-400	55-300	50-250	35-200	30-180	20-140
Speed Range #4 (rpm)	165-1000	150-700	120-600	110-400	95-350	65-300	50-250	40-220

Due to on going design improvements or customer requirements, design and specifications are subject to change without notice.

Clausing CNC Large Swing Lathes Center Dimensions and Weight



CL Series

Center Distance	62" (1575mm)	82" (2100mm)	122" (3100mm)	160" (4100mm)	200" (5100mm)	240" (6100mm)	279" (7100mm)	318" (8100mm)	358" (9100mm)	397" (10100mm)	437" (11100mm)	476" (12100mm)
Length A	187" (4750mm)	207" (5260mm)	246" (6250mm)	286" (7115mm)	325" (8255mm)	365" (9270mm)	404" (10260mm)	443" (11250mm)	483" (12270mm)	522" (13260mm)	562" (14275mm)	601" (15265mm)
Overall Width B	106" (2690mm)											
Height C	99" (2500mm)											
Weight in lbs. (kg)												
35" Swing	27,500 (12474kg)	28,600 (12973kg)	30,800 (13970kg)	33,000 (14968kg)	35,200 (15966kg)	37,400 (16965kg)	39,600 (17962kg)	41,800 (18960kg)	44,000 (19958kg)	46,200 (20956kg)	48,400 (21954kg)	50,600 (22952kg)
40" Swing	28,270 (12823kg)	29,370 (13322kg)	31,570 (14320kg)	33,770 (15318kg)	35,970 (16225kg)	38,170 (17313kg)	40,370 (18311kg)	42,570 (19309kg)	44,770 (20307kg)	46,970 (21305kg)	49,170 (22303kg)	51,370 (23301kg)
45" Swing	29,040 (13172kg)	30,140 (13671kg)	32,340 (14669kg)	34,540 (15667kg)	36,740 (16665kg)	38,940 (17663kg)	41,140 (18661kg)	43,340 (19659kg)	45,540 (20656kg)	47,740 (21654kg)	49,940 (22652kg)	52,140 (23650kg)
50" Swing	29,810 (13522kg)	30,910 (14020kg)	33,110 (15018kg)	35,310 (16016kg)	37,510 (16923kg)	39,710 (18021kg)	41,910 (19101kg)	44,110 (20008kg)	46,310 (21006kg)	48,510 (22004kg)	50,710 (23002kg)	52,910 (24000kg)

CB Series

Center Distance	70" (1780mm)	94" (2400mm)	133" (3400mm)	173" (4400mm)	212" (5400mm)	252" (6400mm)	291" (7400mm)	330" (8400mm)	370" (9400mm)	409" (10400mm)	448" (11400mm)	488" (12400mm)
Length A	195" (4955mm)	219" (5565mm)	258" (6555mm)	298" (7570mm)	337" (8560mm)	376" (9550mm)	416" (10565mm)	455" (11555mm)	495" (12575mm)	534" (13565mm)	573" (14555mm)	612" (15545mm)
Overall Width B	121" (3070mm)											
Height C	120" (3030mm)											
Weight in lbs. (kg)												
45" Swing	33,880 (15368kg)	35,640 (16166kg)	39,160 (17765kg)	42,680 (19360kg)	46,200 (20956kg)	49,720 (22553kg)	53,240 (24150kg)	56,760 (25746kg)	60,280 (27343kg)	63,800 (28940kg)	67,320 (30536kg)	70,840 (32133kg)
50" Swing	34,760 (15767kg)	36,520 (16565kg)	40,040 (18162kg)	43,560 (19759kg)	47,080 (21355kg)	50,600 (22952kg)	54,120 (24549kg)	57,640 (26145kg)	61,160 (27742kg)	64,680 (29338kg)	68,200 (30935kg)	71,720 (32532kg)
60" Swing	36,520 (16565kg)	38,280 (17363kg)	41,800 (18960kg)	45,320 (20557kg)	48,840 (22154kg)	52,360 (23750kg)	55,880 (25346kg)	59,400 (26942kg)	62,920 (28539kg)	66,440 (30137kg)	69,960 (31734kg)	73,480 (33330kg)
70" Swing	38,280 (17363kg)	40,040 (18162kg)	43,360 (19668kg)	47,080 (21355kg)	50,600 (22952kg)	54,120 (24548kg)	57,640 (26145kg)	61,160 (27742kg)	64,680 (29339kg)	68,200 (30935kg)	71,720 (32532kg)	75,240 (34129kg)

CC Series

Center Distance	94" (2400mm)	133" (3400mm)	173" (4400mm)	212" (5400mm)	252" (6400mm)	291" (7400mm)	330" (8400mm)	370" (9400mm)	409" (10400mm)	448" (11400mm)	488" (12400mm)
Length A	215" (5460mm)	255" (6475mm)	294" (7465mm)	334" (8485mm)	372" (9450mm)	412" (10465mm)	452" (11480mm)	491" (12470mm)	530" (13460mm)	570" (14480mm)	609" (15470mm)
Overall Width B	108" (2750mm)	108" (2750mm)									
Height C	102" (2600mm)	102" (2600mm)									
Weight in lbs. (kg)											
35" Swing	45,540 (20657kg)	51,040 (23151kg)	56,540 (25646kg)	62,040 (28141kg)	67,540 (30636kg)	73,040 (33131kg)	78,540 (35626kg)	84,040 (38120kg)	89,540 (40615kg)	95,040 (43110kg)	100,540 (45605kg)
40" Swing	47,740 (21655kg)	53,240 (24150kg)	58,740 (26644kg)	64,240 (29139kg)	69,740 (31634kg)	75,240 (34129kg)	80,740 (36624kg)	86,240 (39118kg)	91,740 (41613kg)	97,240 (44108kg)	102,740 (46603kg)
45" Swing	49,940 (22652kg)	55,440 (25147kg)	60,940 (27642kg)	66,440 (30137kg)	71,940 (32631kg)	77,440 (35126kg)	82,940 (37622kg)	88,440 (40116kg)	93,940 (42611kg)	99,440 (45105kg)	104,940 (47601kg)
50" Swing	52,140 (23651kg)	57,640 (26145kg)	63,140 (28640kg)	68,640 (31135kg)	74,140 (33629kg)	79,640 (36125kg)	85,140 (38619kg)	90,640 (41114kg)	96,140 (43609kg)	101,640 (46104kg)	107,140 (48599kg)

CK Series

Center Distance	82" (2100mm)	122" (3100mm)	160" (4100mm)	200" (5100mm)	240" (6100mm)	279" (7100mm)	318" (8100mm)	358" (9100mm)	397" (10100mm)	437" (11100mm)	476" (12100mm)
Length A	231" (5870mm)	270" (6860mm)	309" (7770mm)	349" (8865mm)	388" (9855mm)	428" (10870mm)	467" (11860mm)	506" (12850mm)	546" (13870mm)	585" (14860mm)	625" (15875mm)
Overall Width B	121" (3070mm)	121" (3070mm)	121" (3070mm)	121" (3070mm)	121" (3070mm)	121" (3070mm)	121" (3070mm)				
Height C	120" (3030mm)	120" (3030mm)	120" (3030mm)	120" (3030mm)	120" (3030mm)	120" (3030mm)	120" (3030mm)				
Weight in lbs. (kg)											
50" Swing	58,740 (26644kg)	67,540 (30636kg)	76,340 (34627kg)	85,140 (38619kg)	93,940 (42611kg)	102,740 (46603kg)	111,540 (50594kg)	120,340 (54586kg)	129,140 (58580kg)	137,940 (62570kg)	146,740 (66561kg)
60" Swing	62,040 (28141kg)	70,840 (32133kg)	79,640 (36124kg)	88,440 (40116kg)	97,240 (44108kg)	106,040 (48100kg)	114,840 (52091kg)	123,640 (56083kg)	132,440 (60074kg)	141,240 (64066kg)	150,040 (68058kg)
70" Swing	65,340 (29638kg)	74,140 (33630kg)	82,940 (37622kg)	91,740 (41613kg)	100,540 (45605kg)	109,340 (49597kg)	118,140 (53588kg)	126,940 (57580kg)	135,740 (61572kg)	144,540 (65563kg)	153,340 (69555kg)
80" Swing	68,640 (31135kg)	77,440 (35127kg)	86,240 (39118kg)	95,040 (43110kg)	103,840 (47109kg)	112,640 (51094kg)	121,440 (55085kg)	130,240 (59077kg)	139,040 (63068kg)	147,840 (67060kg)	156,640 (71052kg)

Due to on going design improvements or customer requirements, design and specifications are subject to change without notice.

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TURNING

Manual Lathe Optional Equipment

- 'CE' Telemechanique Electrics
- 40 hp Spindle Drive Motor (MA Series)
- 50 hp Spindle Drive Motor (MB Series)
- 75 hp Spindle Drive Motor (MH Series)
- 100 hp Spindle Drive Motor (MK Series)
- Spindle Bore up to 14.17" (360mm) on 34.6" (880mm) swing and 16.14" (410mm) on 39.7" (1010mm) Swing and Larger (MA Series)
- Spindle Bore up to 24.02" (610mm) (MB, MH & MK Series)
- 4 Range Auto Change Variable Speed with CSS for 6" (153mm) / 9" (230mm) & 10" (255mm) Bore Models (MA & MB Series)
- Dual Chuck Adapter
- Closed Steady Rest 1.2" (30mm) to 15.75" (400mm)
- Closed Steady Rest 13.8" (350mm) to 27.56" (700mm)
- Open Steady Rest 1.2" (30mm) to 15.75" (400mm) (MH & MK Series)
- Open Steady Rest 13.8" (350mm) to 27.56" (700mm) (MH & MK Series)
- Follower Rest 1.5" (40mm) to 7" (178mm) (MA & MB Series)
- Full Length Rear Splash Guard
- Full Guarding
- Belt Chip Conveyor with Cart
- 30" (762mm) 4-Jaw American Type, Ground, Thick Body Chuck (MA & MB Series)
- 36" (915mm) 4-Jaw American Type, Ground, Thick Body Chuck (MA & MB Series)
- 40" (1016mm) 4-Jaw English Type Chuck
- 45" (1143mm) 4-Jaw English Type Chuck
- 50" (1270mm) 4-Jaw English Type Chuck
- 40" (1016mm) 4-Jaw Ground, Thick Steel Body Chuck (MH & MK Series)
- 46" (1168mm) 4-Jaw Ground, Thick Steel Body Chuck (MH & MK Series)
- 50" (1270mm) 4-Jaw Ground, Thick Steel Body Chuck (MH & MK Series)
- 60" (1524mm) 4-Jaw Ground, Thick Steel Body Chuck (MH & MK Series)
- 70" (1778mm) 4-Jaw Ground, Thick Steel Body Chuck (MH & MK Series)
- 80" (2032mm) 4-Jaw Ground, Thick Steel Body Chuck (MH & MK Series)
- 50" (1270mm) 4-Jaw English Type Chuck (MH & MK Series)
- 55" (1397mm) 4-Jaw English Type Chuck (MK Series)
- 60" (1524mm) 4-Jaw English Type Chuck (MK Series)
- 70" (1778mm) 4-Jaw English Type Chuck (MK Series)
- 80" (2032mm) 4-Jaw English Type Chuck (MK Series)
- 90" (2286mm) 4-Jaw English Type Chuck (MK Series)
- 100" (2540mm) 4-Jaw English Type Chuck (MK Series)
- Special Long Jaws
- Taper Attachment
- Full Length Hydraulic Profile Cutting System Including Semi-Auto Threading
- Full Length Tracer
- Semi-Auto Threading
- Micro Stop

CNC Lathe Optional Equipment

- 50/60 hp Spindle Drive Motor (CL Series)
- Spindle Bore up to 14.17" (360mm) on 35" (880mm) swing, 16.14" (410mm) on 40" (1010mm) swing and larger (CL Series)
- Spindle Bore up to 24.02" (610mm) (CB, CC & CK Series)
- Dual Chuck Adapter
- Closed Steady Rest 1.2" (30mm) to 15.75" (400mm)
- Closed Steady Rest 13.8" (350mm) to 27.56" (700mm)
- Open Steady Rest 1.2" (30mm) to 15.75" (400mm) (CC & CK Series)
- Open Steady Rest 13.8" (350mm) to 27.56" (700mm) (CC & CK Series)
- Follower Rest
- Hydraulic Steady Rest
- Linear Scale
- Drill Attachment for Tailstock
- Heavy-duty Baruffaldi TB 320 8 Station Turret
- Heavy-duty Baruffaldi TB 320 8 Station Turret with VDI Tooling
- Baruffaldi TBMA 320 C-Axes Live Tooling (10/15 Hp Motor)
- Special Order Diplomatic V8 8 Station Turret
- Special Order Diplomatic V8 8 Station Turret with VDI Tooling

TURNING

"Clousing Large Swing Standard or CNC Lathe Machine Profile Survey"

forms are available on our web site for download:

www.clousing-industrial.com



Clausing Precision Manual Surface Grinders

Precision Manual Surface Grinders with Table Sizes: 6" x 18" & 8" x 18"

Standard Features...

- High precision cartridge spindle
- Anti-wear guide ways coated with "TURCITE-B"
- Enlarged column and base create high stability & rigidity
- Automatic lube system to lubricate lead-screws and guideways for greater longevity
- Timing belt table drive which has enclosed high tensile steel cores that ensure smoother table movement and longevity
- Heavy-duty cast iron construction
- 230/3/60v or 460/3/60v standard other voltages may require transformer or special order

Specifications:

Model	CSG618H	CSG818H
Table Size	6" x 18" (152 x 457mm)	8" x 18" (203 x 457mm)
Max. Grinding Length (Longitudinal)	18.9" (480mm)	18.9" (480mm)
Max. Grinding Width (Crosswise)	7" (178mm)	8.9" (228mm)
Max. Distance from Table Surface to Spindle Centerline	18" (450mm)	18" (450mm)
Standard Magnetic Chuck Size	6" x 18" (150 x 450mm)	8" x 18" (200 x 460mm)
Longitudinal Movement of Table		
Max. Travel (Manual)	20" (510mm)	20" (510mm)
Crossfeed Transverse Travel		
Max. Manual Transverse Travel	7.68" (195mm)	9.84" (250mm)
Handwheel Per Revolution	0.2" (5mm)	0.2" (5mm)
Handwheel Per Graduation	0.0005" (.0127mm)	0.0005" (.0127mm)
Wheelhead Vertical Downfeed		
Handwheel Per Revolution	.05" (1mm)	.05" (1mm)
Handwheel Per Graduation	.0002" (.005mm)	.0002" (.005mm)
Grinding Spindle Drive		
Speed (rpm)	3450	3450
Power rating	2 hp (1.5kw)	2 hp (1.5kw)
Standard Grinding Wheel		
Diameter	8" (203mm)	8" (203mm)
Width	.5" - .75" (13-19mm)	.5" - .75" (13-19mm)
Bore	1.25" (31.75mm)	1.25" (31.75mm)
Total Space Required (L x W x H)	71.3" x 44.6" x 65.4" (1810 x 1133 x 1660mm)	71.3" x 50.6" x 66.1" (1810 x 1285 x 1680mm)
Weight		
Net Weight	1,587 lbs. (720kg)	2,332 lbs. (1060kg)
Gross Weight	1,873 lbs. (850kg)	2,662 lbs. (1210kg)
Rated Power, Approx.	2 hp (1.5kw)	2 hp (1.5kw)
Packing Dimensions (L x W x H)	51" x 45" x 76" (1300 x 1140 x 1930mm)	76.4" x 55" x 76" (1940 x 1400 x 1930mm)

Manual Handfeed on X, Y and Z axis. *Design and specifications are subject to change without notice.*



Clausing Precision Hydraulic Surface Grinders

Specifications:

Model	CSG2A618	CSG3A618	CSG2A818
Table Size	6" x 18" (152 x 460mm)	6" x 18" (152 x 460mm)	8" x 18" (203 x 460mm)
Max. Grinding Length (Longitudinal)	18.9" (480mm)	18.9" (480mm)	18.9" (480mm)
Max. Grinding Width (Crosswise)	7" (178mm)	7" (178mm)	8.9" (228mm)
Max. Distance from Table Surface to Spindle Centerline (Standard Column) (Optional Column)	18" (460mm) -	18" (460mm) -	18" (460mm) -
Standard Magnetic Chuck Size	6" x 18" (150 x 450mm)	6" x 18" (150 x 450mm)	8" x 18" (200 x 450mm)
Longitudinal Movement of Table			
Max. Travel (Hydraulic)	18.9" (480mm)	18.9" (480mm)	18.9" (480mm)
Max. Travel (Manual)	20" (510mm)	20" (510mm)	20" (510mm)
Table Speed Infinitely Variable	196"-1102"/min (5-28m/min)	196"-1102"/min (5-28m/min)	196"-984"/min. (5-25m/min.)
Crossfeed Transverse Travel			
Auto Transverse Increment	.04" - .4" (1-10mm)	.04" - .4" (1-10mm)	.04" - .4" (1-10mm)
Max. Auto Transverse Travel	7" (180mm)	7" (180mm)	9.25" (235mm)
Max. Manual Transverse Travel	7.68" (195mm)	7.68" (195mm)	9.84" (250mm)
Handwheel Per Revolution	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)
Handwheel Per Graduation	0.0005" (.0127mm)	0.0005" (.0127mm)	0.0005" (.0127mm)
Wheelhead Vertical Downfeed			
Rapid Travel Approx.	-	10" (250mm)/min	-
Handwheel Per Revolution	.05" (1mm)	.05" (1mm)	.05" (1mm)
Handwheel Per Graduation	.0001" (.0025mm)	.0001" (.0025mm)	.0001" (.0025mm)
Grinding Spindle Drive			
Speed (rpm)	3450	3450	3450
Power Rating	2 hp (1.5kw)	2 hp (1.5kw)	2 hp (1.5kw)
Standard Grinding Wheel			
Diameter	8" (203mm)	8" (203mm)	8" (203mm)
Width	.5" - .75" (13-19mm)	.5" - .75" (13-19mm)	.5" - .75" (13-19mm)
Bore	1.25" (31.75mm)	1.25" (31.75mm)	1.25" (31.75mm)
Hydraulic Motor (Power Rating)	1 hp x 6P	1 hp x 6P	1 hp x 6P
Crossfeed Motor (Power Rating)	40W x 6P	40W x 6P	40W x 6P
Elevating Motor (Power Rating)	-	40W x 4P	-
Total Space Required (L x W x H)	71.3" x 44.6" x 65.4" (1810 x 1133 x 1660mm)	71.3" x 44.6" x 65.4" (1810 x 1133 x 1660mm)	71.3" x 50.6" x 66.1" (1810 x 1285 x 1680mm)
Weight			
Net Weight	1,808 lbs. (820kg)	1,874 lbs. (850kg)	2,579 lbs. (1170kg)
Gross Weight	2,138 lbs. (970kg)	2,204 lbs. (1000kg)	2,954 lbs. (1340kg)
Rated Power, Approx.	3 hp (2.3kw)	3 hp (2.3kw)	3 hp (2.3kw)
Packing Dimensions	78" x 56" x 76" (1980 x 1420 x 1930mm)	78" x 56" x 76" (1980 x 1420 x 1930mm)	75" x 64" x 76" (1890 x 1630 x 1930mm)

Standard Features...

- 2A hydraulic longitudinal feed, motor drive cross feed
- 3A same as 2A plus motorized rapid up/down
- High precision cartridge spindle
- Anti-wear guide ways coated with "TURCITE-B"
- Enlarged column and base create high stability & rigidity
- Automatic lube system to lubricate lead-screws and guideways for greater longevity
- Timing belt table drive which has enclosed high tensile steel cores that ensure smoother table movement and longevity
- Rigid cast iron construction
- Micro down feed standard on 2A & 3A 1020 to 2040 machines
- 230/3/60v or 460/3/60v standard other voltages may require transformer or special order

Design and specifications are subject to change without notice.

2A: Longitudinal Hydraulics and Motorized Crossfeed

3A: Longitudinal Hydraulics, Motorized Crossfeed and Motorized Rapid Up/Down

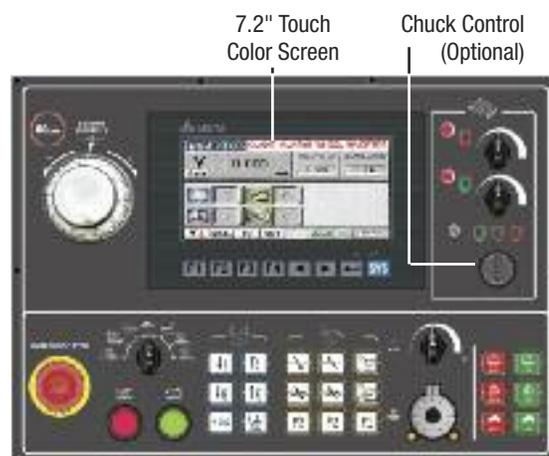
	CSG3A818	CSG2A1020	CSG3A1020	CSG2A1224	CSG3A1224	CSG3A1228	CSG3A1236	CSG3A1632	CSG3A1640
	8" x 18" (203 x 460mm)	10" x 20" (254 x 508mm)	10" x 20" (254 x 508mm)	11.81" x 23.62" (300 x 600mm)	11.81" x 23.62" (300 x 600mm)	12" x 28" (305 x 712mm)	12" x 36" (305 x 915mm)	16" x 32" (406 x 813mm)	16" x 40" (406 x 1020mm)
	19" (480mm)	20.47" (520mm)	20.47" (520mm)	23.6" (600mm)	23.62" (520mm)	23.6" (600mm)	36" (915mm)	32" (813mm)	40" (1020mm)
	9" (228mm)	11" (280mm)	11" (280mm)	11.81" (300mm)	11.81" (300mm)	13" (330mm)	13" (330mm)	16" (410mm)	16" (410mm)
	18" (460mm) -	19.68" (500mm) 23.62" (600mm)	19.68" (500mm) 23.62" (600mm)	23" (585mm) -	23" (585mm) -	24.8" (630mm) 28.35" (720mm)	24.8" (630mm) 28.35" (720mm)	24.8" (630mm) 28.35" (720mm)	24.8" (630mm) 28.35" (720mm)
	8" x 18" (200 x 450mm)	10" x 20" (250 x 500mm)	10" x 20" (250 x 500mm)	11.81" x 23.63" (300 x 600mm)	11.81" x 23.63" (300 x 600mm)	11.81" x 27.56" (300 x 700mm)	11.81" x 35.43" (300 x 900mm)	15.75" x 31.5" (400 x 800mm)	15.75" x 39.37" (400 x 1000mm)
	19" (480mm)	22.83" (580mm)	22.83" (580mm)	25.59" (650mm)	25.59" (650mm)	30" (760mm)	37.8" (960mm)	35" (890mm)	41.73" (1060mm)
	20" (510mm)	24.41" (620mm)	24.41" (620mm)	28.74" (730mm)	28.74" (730mm)	32.68" (830mm)	39.37" (1000mm)	36.61" (930mm)	43.31" (1100mm)
	196"-984"/min. (5-25m/min.)	196"-984"/min. (5-25m/min.)	196"-984"/min. (5-25m/min.)	196"-984"/min. (5-25m/min.)	196"-984"/min. (5-25m/min.)	196"-984"/min. (5-25m/min.)	196"-984"/min. (5-25m/min.)	196"-984"/min. (5-25m/min.)	196"-984"/min. (5-25m/min.)
	.04" - .4" (1-10mm)	.04" - .5" (1-13mm)	.04" - .5" (1-13mm)	.04" - .75" (1-19mm)	.04" - .75" (1-19mm)	.04 - 1" (1-25mm)			
	9.25" (235mm)	10.63" (270mm)	10.63" (270mm)	12.2" (310mm)	12.2" (310mm)	13.78" (350mm)	13.78" (350mm)	17" (430mm)	17" (430mm)
	9.84" (250mm)	11.81" (300mm)	11.81" (300mm)	13.39" (340mm)	13.39" (340mm)	15" (380mm)	15" (380mm)	18" (460mm)	18" (460mm)
	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)
	0.0005" (.0127mm)	0.001" (.025mm)	0.001" (.025mm)	0.001" (.025mm)	0.001" (.025mm)	0.001" (.025mm)	0.001" (.025mm)	0.001" (.025mm)	0.001" (.025mm)
	10" (250mm)/min	-	6" (150mm)/min	-	6" (150mm)/min	6" (150mm)/min	6" (150mm)/min	6" (150mm)/min	6" (150mm)/min
	.05 (1mm)	.04" (1mm)	.04" (1mm)	.04" (1mm)	.04" (1mm)	.04" (1mm)	.04" (1mm)	.04" (1mm)	.04" (1mm)
	.0001" (.0025mm)	.0005" (.0127mm)	.0005" (.0127mm)	.0005" (.0127mm)	.0005" (.0127mm)	.0005" (.0127mm)	.0005" (.0127mm)	.0005" (.0127mm)	.0005" (.0127mm)
	3450	3450	3450	1750	1750	1750	1750	1750	1750
	2 hp	3 hp	3 hp	5 hp	5 hp	7.5 hp	7.5 hp	7.5 hp	7.5 hp
	8" (203mm)	8" (203mm)	8" (203mm)	12" (304mm)	12" (304mm)	14" (355mm)	14" (355mm)	14" (355mm)	14" (355mm)
	.5" - .75" (13-19mm)	.75" - 1" (19-25mm)	.75" - 1" (19-25mm)	1.25" (31.75mm)	1.25" (31.75mm)	2" (50mm)	2" (50mm)	2" (50mm)	2" (50mm)
	1.25" (31.75mm)	1.25" (31.75mm)	1.25" (31.75mm)	3" (76.2mm)	3" (76.2mm)	5" (127mm)	5" (127mm)	5" (127mm)	5" (127mm)
	1 hp x 6P	2 hp x 6P	2 hp x 6P	2 hp x 6P	2 hp x 6P	3 hp x 6P	3 hp x 6P	3 hp x 6P	3 hp x 6P
	40W x 6P	80W x 6P	80W x 6P	80W x 6P	80W x 6P	80W x 6P	80W x 6P	80W x 6P	80W x 6P
	40W x 4P	-	80W x 6	-	80W x 6P	1/4 hp x 6P	1/4 hp x 6P	1/4 hp x 6P	1/4 hp x 6P
	71" x 50.6" x 66" (1810 x 1285 x 1680mm)	94.5" x 57" x 68.9" (2400 x 1450 x 1750mm)	94.5" x 57.5" x 68.9" (2400 x 1450 x 1750mm)	106.3" x 63" x 73" (2700 x 1600 x 1850mm)	106.3" x 63" x 73" (2700 x 1600 x 1850mm)	116" x 78" x 81" (2950 x 1970 x 2050mm)	140" x 78" x 81" (3550 x 1970 x 2050mm)	130" x 87" x 81" (3290 x 2200 x 2050mm)	158" x 87" x 81" (4020 x 2200 x 2050mm)
	2,657 lbs. (1205kg) 3,031 lbs. (1375kg)	3,916 lbs. (1780kg) 4,695 lbs. (2130kg)	3,990 lbs. (1810kg) 4,762 lbs. (2160kg)	4,299 lbs. (1950kg) 4,960 lbs. (2250kg)	4,387 lbs. (1990kg) 5,038 lbs. (2290kg)	6,659 lbs. (3020kg) 7,760 lbs. (3520kg)	7,341 lbs. (3330kg) 8,157 lbs. (3700kg)	7,496 lbs. (3400kg) 8,818 lbs. (4000kg)	8,818 lbs. (4000kg) 9,920 lbs. (4500kg)
	3 Hp (2.3kw)	5 Hp (3.7kw)	5.2 Hp (3.9kw)	7.5 Hp (5.6kw)	8.25 Hp (6.1kw)	11 Hp (8.2kw)	11 Hp (8.2kw)	11 Hp (8.2kw)	11 Hp (8.2kw)
	75" x 56" x 76" (1890 x 1430 x 1930mm)	91" x 72" x 83" (2290 x 1830 x 2100mm)	98" x 82" x 83" (2480 x 2060 x 2100mm)	93" x 84" x 83" (2340 x 2130 x 2100mm)	98" x 84" x 83" (2480 x 2140 x 2100mm)	98" x 90" x 87" (2500 x 2290 x 2220mm)	118" x 90" x 88" (3000 x 2290 x 2220mm)	111" x 91" x 88" (2800 x 2290 x 2220mm)	128" x 90" x 87" (3250 x 2290 x 2220mm)

GRINDING

Clausing Precision ASDIII Automatic Surface Grinders



Model CSG1640ASDIII shown with optional paper/coolant system

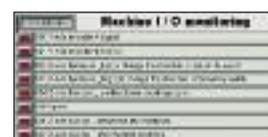


7.2" Touch Color Screen

Chuck Control (Optional)



Starting Picture



Machine I / O Monitoring

ASDIII Series Operation Panel

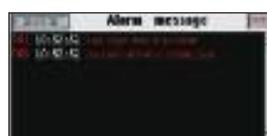
Delta PLC Digital Control features a



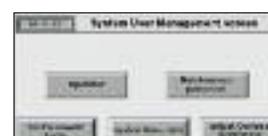
Grinding Size Input



Grinder Condition Input



Alarm Message



System Data

7.2" color touch screen and is equipped with the exclusive EQUIPTOP picture mode working system, easy to learn and operate.

Standard Features...

- On ASDIII models, you can set the vertical zero point, start point, finish grinding depth, target point and the grinding wheel rise-up point
- The machine features a simple and clear digital display & touch control panel for easy learning and operation
- Vertical feed powered by dual motors, AC motor for rapid up / down and stepping motor for micro downfeed positioning, slow auto downfeed and slow up / down
- Vertical positioning is displayed on the screen showing present spindle and setting the start point, rough grinding volume, finish grinding volume, downfeed volume for finish grinding, target point, rise up point, intermittent spark-out
- Cross transverse travel powered by DC servo motor, allows step feed and continuous infeed grinding
- The speed of the wheel dressing can be adjusted on the control panel
- Wide, deep base and honeycomb ribbed column on 10, 12, 16 & 20 series, designed for heavy-duty grinding
- High quality, ribbed, cast iron table, saddle and base
- All slideways and screws are fully oiled by an automatic continuous lubrication system to minimize wear on slideways & screws
- High Grade Anti-Wear Slideways... The saddle rides on precision, hand-scraped double V ways, and the table rides on precision hand-scraped V and flat ways coated with "TURCITE-B"
- Precision spindle cartridge, supported by preloaded precision angular contact ball bearings and one NN type roller bearing on 618 & 818 models
- Presettable hydraulic table speed control allows operator to pre-set speed rate so you can have the same speed rate every time the hydraulic table is engaged (10, 12, 16 series)
- Ballscrew for cross travel, powered by DC servo motor
- 230/3/60v or 460/3/60v standard other voltages may require transformer or special order

Specifications:

Model	CSG818ASDIII	CSG1020ASDIII	CSG1224ASDIII	CSG1228ASDIII	CSG1236ASDIII	CSG1632ASDIII	CSG1640ASDIII	CSG2040ASDIII
Table Size	8" x 18" (203 x 460mm)	10" x 20" (254 x 508mm)	12" x 24" (300 x 600mm)	12" x 28" (305 x 712mm)	12" x 36" (305 x 915mm)	16" x 32" (406 x 813mm)	16" x 40" (406 x 1020mm)	20" x 40" (506 x 1020mm)
Max. grinding length (longitudinal)	18.9" (480mm)	20.47" (520mm)	23.62" (600mm)	28" (712mm)	36" (915mm)	32" (813mm)	40" (1020mm)	40" (1020mm)
Max. grinding width (crosswise)	8.9" (228mm)	11" (280mm)	11.81" (300mm)	13" (330mm)	13" (330mm)	16" (410mm)	16" (410mm)	20" (500mm)
Max. distance from table surface to spindle centerline: standard optional	18" (460mm) -	19.68" (500mm) 23.62" (600mm)	23" (585mm) -	24.8" (630mm) 28.35" (720mm)				
Standard magnetic chuck size	8" x 18" (200 x 450mm)	10" x 20" (250 x 500mm)	11.81" x 23.63" (300 x 600mm)	11.81" x 27.56" (300 x 700mm)	11.81" x 35.43" (300 x 900mm)	15.75" x 31.5" (400 x 800mm)	15.75" x 39.37" (400 x 1000mm)	19.68" x 39.37" (500 x 1000mm)
Longitudinal movement of table								
Max. travel (hydraulic)	18.9" (480mm)	22.83" (580mm)	25.59" (650mm)	30" (760mm)	37.8" (960mm)	35" (890mm)	41.73" (1060mm)	41.73" (1060mm)
Max. travel (manual)	20" (510mm)	24.41" (620mm)	28.74" (730mm)	32.68" (830mm)	39.37" (1000mm)	36.61" (930mm)	43.31" (1100mm)	43.31" (1100mm)
Table speed infinitely variable	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)
Crossfeed transverse travel								
Auto transverse increment	.04" - .4" (1-10mm)	.04" - .5" (1-13mm)	.04" - .75" (1-19mm)	.04" - 1" (1-25mm)				
Auto constant feeding speed	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.
Max. auto transverse travel	9.25" (235mm)	10.63" (270mm)	12.2" (310mm)	13.78" (350mm)	13.78" (350mm)	17" (430mm)	17" (430mm)	20" (510mm)
Max. manual transverse travel	9.84" (250mm)	11.81" (300mm)	13.39" (340mm)	15" (380mm)	15" (380mm)	18" (460mm)	18" (460mm)	20.47" (520mm)
Handwheel per revolution	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)
Handwheel per graduation	.0005" (.0127mm)	.0005" (.0127mm)	.0005" (.0127mm)	.0005" (.0127mm)	.0005" (.0127mm)	.0005" (.0127mm)	.0005" (.0127mm)	.0005" (.0127mm)
Wheelhead vertical downfeed								
Automatic infeed	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)
Step feed (JOG)	.00004" (0.001mm)	.00004" (0.001mm)	.00004" (0.001mm)	.00004" (0.001mm)	.00004" (0.001mm)	.00004" (0.001mm)	.00004" (0.001mm)	.00004" (0.001mm)
Rapid travel approx.	6"(150mm)/min	6"(150mm)/min	6"(150mm)/min	6"(150mm)/min	6"(150mm)/min	6"(150mm)/min	6"(150mm)/min	6"(150mm)/min
Slow travel, approx.	.236"(6mm)/min	.236"(6mm)/min	.236"(6mm)/min	.236"(6mm)/min	.236"(6mm)/min	.236"(6mm)/min	.236"(6mm)/min	.236"(6mm)/min
*Minimum display value	.00005" (.0127mm)	.00005" (.0127mm)	.00005" (.0127mm)	.00005" (.0127mm)	.00005" (.0127mm)	.00005" (.0127mm)	.00005" (.0127mm)	.00005" (.0127mm)
Grinding spindle drive								
Speed (rpm)	3450	3450	1750	1750	1750	1750	1750	1750
Power rating	2 Hp (1.5kw)	3 Hp (2.2kw)	5 Hp (3.7kw)	7.5 Hp (5.5kw)				
Standard grinding wheel								
Diameter	8" (203mm)	8" (203mm)	12" (305mm)	14" (355mm)				
Width	.5"-.75" (12.7-19mm)	.75"-.1" (19-25mm)	1.25" (31.75mm)	2" (50mm)				
Bore	1.25" (31.75mm)	1.25" (31.75mm)	3" (76.2mm)	5" (127mm)				
Hydraulic motor (power rating)	1 Hp (.75kw)	2 Hp (1.5kw)	2 Hp (1.5kw)	3 Hp (2.2kw)				
Crossfeed motor (power rating)	1/2 HP 400W	1 HP 750W	1 HP 750W	1 HP 750W	1 HP 750W	1 HP 750W	1 HP 750W	1 HP 750W
Elevating motor (power rating)	60W x 4P	1/4 Hp (.2kw)	1/4 Hp (.2kw)	1/4 Hp (.2kw)	1/4 Hp (.2kw)	1/4 Hp (.2kw)	1/4 Hp (.2kw)	1/4 Hp (.2kw)
Total space required (LxWxH)	71.3" x 44.6" x 65.4" (1810x1285x1680mm)	93.7"x57"x68.9" (2380x1450x1750mm)	106.3"x63"x73" (2700x1600x1850mm)	116"x78"x81" (2950x1970x2050mm)	140"x78"x81" (3550x1970x2050mm)	130"x87"x81" (3290x2200x2050mm)	158"x87"x81" (4020x2200x2050mm)	164"x86.6"x82.7" (4170x2200x2100mm)
Weight								
Net weight	2,657 lbs (1205kg)	3,990 lbs (1810kg)	4,387 lbs (1990kg)	6,659 lbs (3020kg)	7,341 lbs (3330kg)	7,496 lbs (3400kg)	8,818 lbs (4000kg)	10,582 lbs (4800kg)
Gross weight (lbs)	3,031 lbs (1375kg)	4,762 lbs (2160kg)	5,038 lbs (2290kg)	7,760 lbs (3520kg)	8,157 lbs (3700kg)	8,818 lbs (4000kg)	9,920 lbs (4500kg)	11,464 lbs (5200kg)
Rated power, approx.	3.8 Hp (2.9kw)	7 Hp (5.2kw)	8.25 Hp (6kw)	12 Hp (8.9kw)				
Packing dimensions	74"x72"x72" (1880x1830x1960mm)	98"x82"x83" (2480x2080x2100mm)	98"x84"x83" (2480x2140x2100mm)	98"x90"x87" (2500x2290x2220mm)	119"x91"x88" (3000x2290x2220mm)	111"x91"x88" (2800x2290x2220mm)	128"x90"x87" (3250x2290x2220mm)	138"x90"x87" (3500x2290x2220mm)

*ASDIII models have no elevating handwheel but jog buttons per revolution or graduations.

Machine design, control and specifications are subject to change without notice.



Clausing Precision ASDIII Large Capacity Automatic Surface Grinder



Shown with optional MPG, Dynamic Balancer, Coolant System with Auto Paper Feeding Device and Magnetic Separator



ASDIII Series Operation Panel

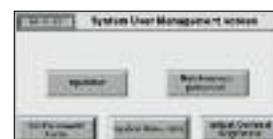
Delta PLC Digital Control features a 7.2" color touch screen and is equipped with the exclusive EQUIPTOP picture mode working system, easy to learn and operate.



Grinder Condition Input



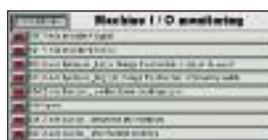
Alarm Message



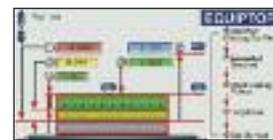
System Data



Starting Picture



Machine I / O Monitoring



Grinding Size Input

Standard Features...

- Large capacity up to 32" x 120" (810 x 3050mm) Table
- Enlarged extra strong ribbed column, ideal for heavy-duty grinding
- Table, saddle and base are constructed of high grade cast iron and ribbed for maximum strength
- Spindle is supported by 4 front and 2 rear precision angular contact ball bearings
- All slideways and ballscrews fully oiled by an automatic continuous lubrication system to minimize wear on slideways and ballscrews
- Longitudinal hydraulic transverse with constant speed function or manual speed handle
Table rides on double V slideways coated with "TURCITE-B" for maximum stability
- Cross traverse travel powered by DC servo motor and ballscrew, allows step feed and continuous infeed grinding.
- Vertical positioning by precision ballscrew
- Pre-set hydraulic table speed control allows operator to pre-set table speed rate and maintain the same speed rate every time the hydraulic table is engaged
- 230/3/60v or 460/3/60v standard other voltages may require transformer or special order

Specifications: (CSG24 Series are Column type construction / CSG32 Series are Cantilever type construction)

Model	CSG2448ASDIII	CSG2460ASDIII	CSG2480ASDIII	CSG3260ASDIII	CSG3280ASDIII	CSG32120ASDIII
Table Size	23.6" x 47.24" (600 x 1200mm)	23.6" x 59" (600 x 1500mm)	23.6" x 78.7" (600 x 2000mm)	31.9" x 60" (810 x 1525mm)	31.8" x 80.7" (810 x 2050mm)	31.8" x 120" (810 x 3050mm)
Max. grinding length (longitudinal)	49.6" (1260mm)	61.4" (1560mm)	81" (2060mm)	61" (1550mm)	80.7" (2050mm)	120" (3050mm)
Max. grinding width (crosswise)	24" (610mm)	24" (610mm)	24" (610mm)	31.9" (810mm)	31.9" (810mm)	31.9" (810mm)
Max. distance from table surface to spindle centerline	Standard 28.3" (720mm) Optional 33.5" (850mm)	28.3" (720mm)	28.5" (720mm)	28.3" (720mm)	28.3" (720mm)	28.3" (720mm)
Standard magnetic chuck size	23.6" x 47.2" (600 x 1200mm)	23.6" x 29.5" ea 2pcs (600 x 750mm) ea 2pcs	23.6" x 39.37" ea 2pcs (600 x 1000mm) ea 2pcs	31.5" x 29.5" ea 2pcs (800 x 750mm) ea 2pcs	31.5" x 39.4" ea 2pcs (800 x 1000mm) ea 2pcs	31.5" x 39.4" ea 3pcs (800 x 1000mm) ea 3pcs
Longitudinal movement of table						
Max. travel (hydraulic)	51.18" (1300mm)	63" (1600mm)	82.7" (2100mm)	63" (1600mm)	82.5" (2100mm)	122" (3100mm)
Max. travel (manual)	53" (1350mm)	64.9" (1650mm)	84.6" (2150mm)	64.9" (1650mm)	84" (2150mm)	124" (3150mm)
Table speed infinitely variable	196"-984"/min. (5-25m/min)	196"-984"/min. (5-25m/min)	196"-984"/min. (5-25m/min)	196"-984"/min. (5-25m/min)	196"-984"/min. (5-25m/min)	196"-984"/min. (5-25m/min)
Column crossfeed transverse travel						
Auto transverse increment (jog)	0.04"-1" (1-25mm)	0.04"-1" (1-25mm)	0.04"-1" (1-25mm)	0.04"-1" (1-25mm)	0.04"-1" (1-25mm)	0.04"-1" (1-25mm)
Auto constant feeding speed	1"-11"/min. (25-280 mm/min)	1"-11"/min. (25-280 mm/min)	1"-11"/min. (25-280 mm/min)	1"-11"/min. (25-280 mm/min)	1"-11"/min. (25-280 mm/min)	1"-11"/min. (25-280 mm/min)
Max. auto transverse travel	26" (660mm)	26" (660mm)	26" (660mm)	33.8" (860mm)	33.8" (860mm)	33.8" (860mm)
Max. manual transverse travel	27" (690mm)	27" (690mm)	27" (690mm)	34.8" (885mm)	34.8" (885mm)	34.8" (885mm)
Handwheel per revolution	0.004" (.1mm)	0.004" (.1mm)	0.004" (.1mm)	0.004" (.1mm)	0.004" (.1mm)	0.004" (.1mm)
Handwheel per graduation	.00004" (.001mm)	.00004" (.001mm)	.00004" (.001mm)	.00004" (.001mm)	.00004" (.001mm)	.00004" (.001mm)
Wheelhead vertical infeed						
Automatic infeed	0.05" (1mm) jogging downfeed 0.25/10000" (0.001mm)					
Step feed (jog)	jogging downfeed: 1-25/10000" (0.001-0.05mm)					
Manual pulse generator (per graduation)	0.00005" (0.001mm)	0.00005" (0.001mm)	0.00005" (0.001mm)	0.00005" (0.001mm)	0.00005" (0.001mm)	0.00005" (0.001mm)
Rapid travel, approx.	18"(460mm)/min.	18"(460mm)/min.	18"(460mm)/min.	18"(460mm)/min.	18"(460mm)/min.	18"(460mm)/min.
Slow travel, approx.	0.25"(6mm)/min.	0.25"(6mm)/min.	0.25"(6mm)/min.	0.25"(6mm)/min.	0.25"(6mm)/min.	0.25"(6mm)/min.
Handwheel per revolution	0.004" (0.1mm)	0.004" (0.1mm)	0.004" (0.1mm)	0.004" (0.1mm)	0.004" (0.1mm)	0.004" (0.1mm)
Handwheel per graduation	0.00004" (0.001mm)	0.00004" (0.001mm)	0.00004" (0.001mm)	0.00004" (0.001mm)	0.00004" (0.001mm)	0.00004" (0.001mm)
Grinding spindle drive						
Speed (rpm)	1750	1750	1750	1750	1750	1750
Power rating	10 Hp (7.5kw)	10 Hp (7.5kw)	10 Hp (7.5kw)	15 Hp (10kw)	15 Hp (10kw)	15 Hp (10kw)
Standard grinding wheel						
Diameter	16" (405mm)	16" (405mm)	16" (405mm)	16" (405mm)	16" (405mm)	16" (405mm)
Width	2" (50mm)	2" (50mm)	2" (50mm)	2" (50mm)	2" (50mm)	3" (50mm)
Bore	5" (127mm)	5" (127mm)	5" (127mm)	5" (127mm)	5" (127mm)	5" (127mm)
Hydraulic motor (power rating)						
Crossfeed motor (power rating)	2.6 Hp (2kw)	2.6 Hp (2kw)	2.6 Hp (2kw)	2.6 Hp (2kw)	2.6 Hp (2kw)	2.6 Hp (2kw)
Elevating motor (power rating)	2.6 Hp (2kw)	2.6 Hp (2kw)	2.6 Hp (2kw)	2.6 Hp (2kw)	2.6 Hp (2kw)	2.6 Hp (2kw)
Total space required (LxWxH)	170"x138"x 93" (4300x3500x2350mm)	193"x138"x 93" (4902x3500x2350mm)	233"x138"x 93" (5900x3500x2350mm)	244"x146"x 109" (6200x3700x2750mm)	284"x146"x 97" (7200x3700x2450mm)	367"x146"x 97" (9300x3700x2450mm)
Net weight (lbs)	14,330 (6500kg)	16,535 (7500kg)	18,740 (8500kg)	29,700 (13500kg)	33,000 (15000kg)	37,400 (17000kg)
Gross weight (lbs)	16,535 (7500kg)	18,740 (8500kg)	20,944 (9500kg)	33,000 (15500kg)	36,300 (16500kg)	41,800 (19000kg)

GRINDING

Clousing Grinder Accessories



Permanent Magnetic Chuck



Electro Magnetic Chuck



Inclinable Permanent Magnetic Chuck



Chuck Control with Demagnetizer



Coolant System



Coolant System with Magnetic Separator



Dust Collector



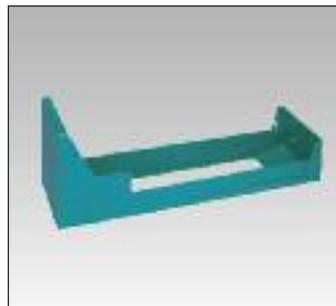
Coolant and Dust Unit



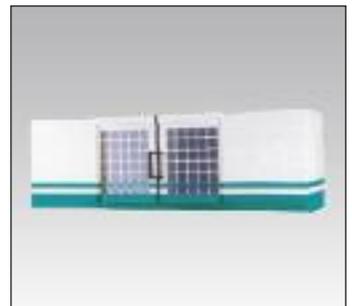
Coolant System with Manual Paper Feeding



Auto Paper Feeding Device with Magnetic Separator



Extra Splash Guard



Full Guarding Splash Guard (10/12/16 Series)



Manual Parallel Dressing Attachment



Electric Parallel Dressing Attachment



Adjustable Speed Rotary Magnetic Chuck

Clousing Grinder Standard Accessories

Diamond Dresser
Auto Lubrication System
Wheel Flange

Grinding Wheel
Balancing Arbor
Wheel Extracting Screw & Nut

Leveling Screws with Blocks
Touch-up Paint
Tool Box and Tools

Chuck control on all models except on 618 & 818 manual and 2A & 3A hydraulic models



Dynamic Balancer



Punch Former



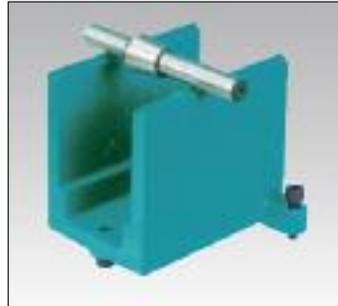
Digital Readout



Spare Wheel Flange



Halogen Work Light



*Balancing Stand
(Double Line)*



Roller Type Balancing Stand



*Micro Crossfeed for
616/818 Series*



*Micro Crossfeed for
10/12/16 Series*



*Micro Down Feed for
10/12/16 Series (STD on 2A
& 3A1020-2040 models)*



*Manual Pulse Generator for
ASDIII Series (stationary in
counsel STD)*



Precision Vice 3" or 4"



Frequency Changer



Swivel Wheel Guard



*Concave/Convex Forming
Dresser*

Clausing/Kalamazoo 8" (200mm) Wet Cutting Bandsaw

Features:

- 1 hp (.75kw) drive motor with magnetic starter and overload protection
- 4 speed step pulley with worm gear speed reducer, worm shaft is hardened and ground
- Totally enclosed transmission
- Heavy-duty hydraulic cylinder with precision ground hinge support
- Pan shaped base with attached coolant tank
- Cast iron bed
- Carbide blade guides with roller bearings
- Two additional bearings to support blade from the top
- Integral coolant system
- Blade brush
- Valve controlled hydraulic cylinder control feed can be adjusted for different types and sizes of material
- Adjustable stock stop
- Simplified control switches mounted on saw head
- Cast iron 0°- 45° vise with manual leadscrew clamping system
- Anti-slip hand wheel
- Easy blade change with front access at waist level
- One general purpose saw blade
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- BT01 Bandsaw Blade Tension Gauge
- P10 Stock Stand Assembly 21" - 30"
- SA8 Roller Table Assembly 10' x 15"
- SA9 Roller Table Assembly 5' x 15"
- BT01 Bandsaw Blade Tension Gauge
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon



Specifications

Model	KC812W
Type	Horizontal Wet Cut
Drive Motor	1 hp (.75kw) 220v 1 ph
Band Wheel Diameter	11" (292mm) Flanged, Cast Iron
Blade Size	1" x .035" x 8'-11" (27 x .9 x 2720mm)
Bed Height	24.8" (639mm)
Blade Speeds (4)	59, 96, 155, 260 fpm (18, 29, 47, 79 M/min)
90° Cutting Capacity	
Round	8" (190mm)
Square	7" (180mm)
Rectangular (H x W)	7" x 14" (180 x 355mm)
45° Cutting Capacity	
Round	7.5" (200mm)
Square	6" (152mm)
Rectangular (H x W)	6" x 9" (152 x 228mm)
Width	59" (1500mm)
Depth	24.6" (625mm)
Height (head-up)	63" (1600mm)
Height (head-down)	38" (965mm)
Net Weight	515 lbs. (234kg)
Shipping Weight	640 lbs. (291kg)
Shipping Dim. (L x W x H)	57" x 30" x 45" (1448 x 762 x 1143mm)

Clausing/Kalamazoo 10" (250mm) Wet Cutting Bandsaw

Features:

- 2 hp (1.5kw) drive motor 230v & 460v 3 ph models and 1.5 hp (1.1kw) drive motor on 110v & 220v 1 ph models
- Magnetic starter with overload protection
- 4 speed step pulley with worm gear speed reducer, worm shaft is hardened and ground (model KC1016W)
- Infinity Variable Speed drive (model KC1016VS)
- Totally enclosed transmission
- Heavy-duty hydraulic cylinder with precision ground hinge support
- Pan shaped base with built-in coolant tank
- Cast iron bed
- Cast iron quick acting 0°- 45° vise with manual leadscrew clamping system
- Carbide blade guides with roller bearings
- Two additional bearings to support blade from the top
- Recirculating coolant system with application through both guides
- Blade brush
- Valve controlled hydraulic cylinder controls feed and can be adjusted for different types and sizes of material
- Adjustable stock stop
- Simplified control switches mounted on saw head
- Anti-slip hand wheel
- Easy blade change with front access at waist level
- One general purpose saw blade
- Tools
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- P10 Stock Stand Assembly 21" - 30"
- SA10 Roller Table Assembly 10' x 18"
- SA11 Roller Table Assembly 5' x 18"
- BT01 Bandsaw Blade Tension Gauge
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon



Speed control and speed chart on variable speed model KC1016VS

Specifications

Model	KC1016W/KC1016VS
Type	Horizontal Wet Cut
Motor KC1016W 4 Speed Drive	1.5 hp (1.1kw) 115v or 220v 1 ph 2 hp (1.5kw) 230v or 460v 3 ph
Motor KC1016VS Variable Speed Drive	1.5 hp (1.1kw) 115v or 220v 1 ph 2 hp (1.5kw) 208/230v or 460v 3 ph
Band Wheel Diameter	15" (381mm) Flanged, Cast Iron
Blade Size	1" x .035" x 11' (27 x .9 x 3350mm)
Bed Height	25" (650mm)
Blade Speeds Step	(4) 75, 121, 190, 305 fpm (23, 37, 58, 93 M/min)
Blade Speeds VS	50-295 fpm (15-90 M/min)
90° Cutting Capacity	
Round	10" (250mm)
Rectangular (H x W)	9" x 14.5" (230 x 368mm)
45° Cutting Capacity	
Round	9" (230mm)
Rectangular (H x W)	9" x 9" (230 x 230mm)
Width	64" (1625mm)
Depth	42" (1067mm)
Height (Head-Up)	69" (1752mm)
Height (Head-Down)	44" (1118mm)
Net Weight	720 lbs. (326kg)
Shipping Weight	885 lbs. (401kg)
Shipping Dim. (L x W x H)	68" x 30" x 45" (1727 x 762 x 1143mm)

Design and specifications are subject to change without notice.

Clausing Kalamazoo 10" (254 mm) Wet Cutting Bandsaw

Features:

- 2 Hp (1.5kw) drive motor with magnetic starter and overload protection
- 4 step blade speeds (KT1018W)
- Infinity variable blade speeds (KT1018VS)
- Quick positioning 45° vise
- Cast iron bed
- Totally enclosed transmission
- Quick and simple speed change
- One general purpose saw blade
- Blade cleaning brush
- Solid carbide blade guides with rollers
- Recirculating coolant system with application through both guides
- Stock stop
- Easily adjusted head feed
- Head control is hydraulic cylinder operated by needle valve
- Two (2) year limited warranty



Speed control and speed chart on variable speed model KT1018VS

Specifications:

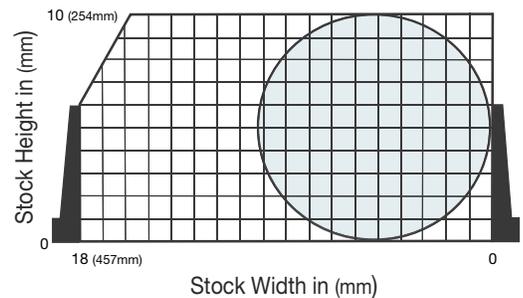
Model	KT1018W/KT1018VS
Type	Horizontal wet cut
Drive Motor	2 Hp (1.5 kw) 110v or 220v 1 Ph 230v or 460v 3 Ph
Blade Wheel Dia.	15.4" (391 mm) flanged, cast iron
Blade	1" x .035" x 11'-2" (27 x .9 x 3465 mm)
Bed Height	21.8" (555mm)
Blade Speeds W model	60, 125, 200, 300 fpm (18, 38, 61, 92 mpm)
Blade Speeds VS model	69 - 321 fpm (21 - 98 mpm)
90° Cutting Capacity	
Round	10" (254mm)
Rectangular	18" x 6" or 16" x 10" (457 x 152 or 406 x 254mm)
45° Cutting Capacity	
Round	8" (203mm)
Rectangular	8" x 6" or 4" x 9" or 3" x 10" (203.2 x 152.4 or 101.6 x 228.6 or 76.2 x 254mm)
Floor Space	61" x 51" (1550 x 1300mm)
Machine Dim. LxWxH	74.8" x 29.1" x 39.4" (1900 x 740 x 1000mm)
Height (head-up)	60.4" (1535mm)
Height (head-down)	39.4" (1000mm)
Net Weight	705 lbs. (320 kg)
Shipping Weight	860 lbs. (390 kg)
Machine Dim. LxWxH	80" x 33.4" x 45" (2032 x 851 x 1143mm)

Accessories

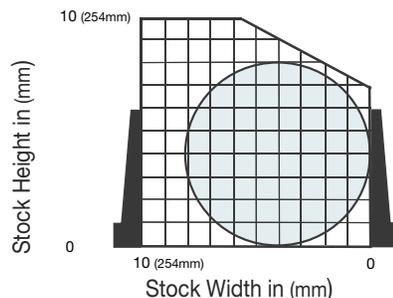
- P10 Stock Stand Assembly 21" - 30"
- SA10 Roller Table Assembly 10' x 18"
- SA11 Roller Table Assembly 5' x 18"
- BT01 Bandsaw Blade Tension Gauge

Cutting Capacities:

Capacity at 90°



Capacity at 45°





Shown with optional Hydraulic Chip Conveyor

Specifications

Model	KC10AX
Motor	3 hp (2.2kw), 230 3ph*
Hydraulic Pump Motor	1 hp (.75kw)
Hydraulic Oil Capacity	10.5 Gallons (40 Liters)
Band Wheel Dia.	15.75" (400mm)
Blade Speeds (Variable Speed)	66-328 fpm (20-100 M/min)
Blade Size	1.25 x .042" x 11'-6" (34 x 1.1 x 3505mm)
Coolant	Recirculating
Coolant Capacity	16.8 Gallons (64 Liters)
90° Cutting Capacity	
Round	10" (250mm)
Rectangular	10" x 11" (250 x 280mm)
Feed Accuracy	±.004" - .008" (±0.1 - 0.2mm)
Length of Remnant Manual	.59" (15mm)
Length of Remnant Automatic	1.97" (50mm)
Minimum Cut Thickness	.354" (9mm)
**Bundle Cutting Width	6.10" to 7.87" (155 to 200mm)
**Bundle Cutting Height	1.97" to 4.72" (50 to 120mm)
Feed Length/Index	15.75" (400mm)
Max. Feed (9 times)	141.75" (3600mm)
Length	84" (2133mm)
Width	69" (1753mm)
Height	62" (1580mm)
Bed Height	26" (660mm)
Net Weight	2,660 lbs. (1206kg)
Shipping Weight	2,830 lbs. (1284kg)

*Other voltages optional may require a transformer or special order..

**When machine is equipped with optional hydraulic bundle cutting attachment.

Design and specifications are subject to change without notice.

Clausing 10" (250mm) Automatic Bandsaw

Designed for rugged production use, the Clausing KC10AX bandsaw offers high production output and heavy-duty performance in both semi-automatic and fully automatic operation. A powerful drive motor provides the power, and the optional hydraulic bundling attachment makes multiple cuts easy. The hydraulic shuttle feed system offers up to nine indexes.

Features:

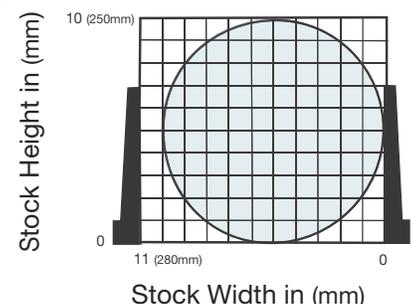
- Full or semi-automatic operation
- Infinitely variable blade speeds
- LED blade speed readout inch/metric
- Vise clamps work piece both sides of blade
- Automatic hydraulic blade tensioning
- Hydraulic down feed
- Automatic height setting feature
- Auto shutoff at end of material or after preset number of cuts
- Front-mounted digital length gauge
- Blade breakage/stoppage switch
- 110v control circuit
- Overload protection
- Recirculating coolant system
- Shuttle vise
- One general purpose saw blade
- Flushing hose for cleanup
- Operator's manual
- Two (2) year limited warranty

Accessories

- CM1000 Chip Conveyor
- CM1001 Hydraulic Bundle Clamps
- VP1200 Variable Vise Pressure System
- SA20 Heavy-Duty Roller Table 10' x 15'
- SA21 Heavy-Duty Roller Table 5' x 15'
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon

Cutting Capacities:

Capacity at 90°



SAWING

Clausing/Kalamazoo 10" (305mm) Automatic NC Bandsaw

Features:

- Oversized hydraulic cylinder
- Hydraulic shuttle vice assembly
- Inverter controlled infinitely variable speed
- Carbide blade guides with roller bearings
- Two additional guides to support the blade from the top
- Automatic hydraulic blade tensioning
- Power driven blade brushes
- Integral coolant system
- Smart NC-100 technology programmable up to 100 different jobs
- Easy recall and execution of stored parts
- Automatic shutoff after preset number of cuts or when out of stock
- 5.7" HMI touch screen incorporating readout on blade speed, blade life, feed vise position and error code display for self-diagnostics
- Automatic kerf loss compensation & computer controlled multiple indexing
- Precision feed pressure & feed rate
- Bundle/single cutting mode switch
- Automatic height setting feature
- Hydraulic front and rear vises
- Cast iron vises with replaceable hardened wear plates
- Chip Conveyor
- Discharge table with built-in coolant return
- Blade slippage or breakage detection
- Adjustable cut-off stock fence
- Additional flushing hose
- One general purpose saw blade
- Built in work light
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- **CM1002** Hydraulic Bundle Clamps
- **VP1200** Variable Vise Pressure System
- **SA20** Heavy-Duty Roller Table 10' x 15"
- **SA21** Heavy-Duty Roller Table 5' x 15"
- **P10** Stock Stand Assembly 21" - 30"
- **CSR1** SAWZIT 1 Gallon
- **CSR5** SAWZIT 5 Gallon



Specifications

Model	KC10NC
Motor	5 hp (3.75kw), 230 3ph*
Hydraulic Pump Motor	1 hp (.75kw)
Hydraulic Oil Capacity	8.2 Gallons (35 Liters)
Blade Speeds (Variable Speed)	66-330 fpm (20-100 M/min)
Blade Size (W x T x L)	1.25" x .042" x 12' (32 x 1.1 x 3657mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	19.9 Gallons (75 Liters)
90° Cutting Capacity	
Round	10.2" (260mm)
Square	10.2" (260mm)
Rectangular	11.8" x 10.2" (300 x 260mm)
Feed Accuracy	±.004" - .008" (±0.1 - 0.2mm)
Length of Remnant Manual	.59" (15mm)
Length of Remnant Automatic	1.97" (50mm)
Minimum Cut Thickness	.354" (9mm)
**Bundle Cutting Width	7.48" to 11.81" (190 to 300mm)
**Bundle Cutting Height	2.0" to 4.7" (50 to 120mm)
Feed Length/Index	15.86" (403mm)
Max. Feed	650" (16510mm)
Length	83" (2108mm)
Width	80" (2032mm)
Height	62" (1530mm)
Bed Height	26" (660mm)
Net Weight	3,300 lbs. (1496kg)
Shipping Weight	3,750 lbs.(1701kg)

*Other voltages optional may require a transformer or special order.

**When machine is equipped with optional hydraulic bundle cutting attachment.

Design and specifications are subject to change without notice.



Clausing 12" (305mm) Wet Cutting Semi-Automatic Miter Bandsaw

Features:

- 0°-45° Miter cutting, make angle cuts without swinging material to be cut
- 2 hp (1.5kw) main drive motor with magnetic starter and overload protection
- Infinitely variable speed drive
- 230/460v 60 cycle 3 phase electricals
- Recirculating coolant system with application through both guides
- Solid carbide blade guides with rollers
- Quick action vise
- Automatic shut-off at end of cut
- Totally enclosed transmission
- Blade cleaning brush
- Cast iron bed
- One general purpose saw blade
- Stock stop
- Easily adjusted head feed with hydraulic power head lift
- Two (2) year limited warranty

Specifications

Model	MS1218VS
Drive Motor	2 hp (1.5kw) 230/460v 3ph
Hydraulic Motor	0.25 hp (.19kw)
Coolant Pump	0.125 hp (.1kw)
Band Wheel Dia.	15.4" (391mm)
Blade Size	1" x .035" x 11'-4.5" (25 x .9 x 3467mm)
Bed Height	21.75" (552mm)
Vise Opening	18" (457mm)
Blade Speeds	80-360 fpm (24-110 M/min) Variable Speed
90° Cutting Capacity	
Round	12" (305mm)
Square	10" x 10" (254 x 254mm)
Rectangular	10" x 16" (254 x 406mm)
45° Cutting Capacity	
Round	8" (203mm)
Square	8" x 8" (203 x 203mm)
Rectangular	8" x 12" (203 x 305mm)
Width	75" (1905mm)
Depth/with stock stop	34"/49.5" (864/1257mm)
Height (head-up)	64" (1626mm)
Height (head-down)	41" (1041mm)
Net Weight	880 lbs. (400kg)
Shipping Weight	1,080 lbs. (490kg)
Shipping Dim. (LxWxH)	78" x 36" x 46" (1981 x 914 x 1168mm)

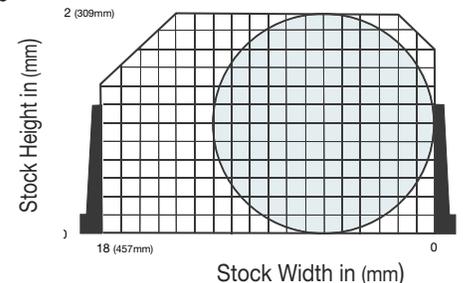
Design and specifications are subject to change without notice.

Accessories

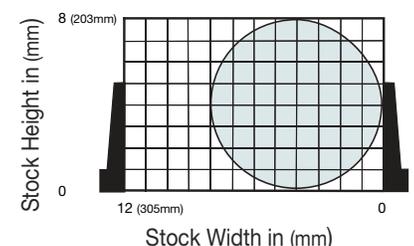
- P10 Stock Stand Assembly 21" - 30"
- SA12 Roller Table Assembly 10' x 18"
- SA13 Roller Table Assembly 5' x 18"
- BT01 Bandsaw Blade Tension Gauge
- CSR1SAWZIT 1 Gallon
- CSR5SAWZIT 5 Gallon

Cutting Capacities:

Capacity at 90°



Capacity at 45°



SAWING

Clausing 12" (305mm) Semi-Automatic Bandsaw

Designed for rugged production use, the Clausing KC12SA bandsaw offers high production output and heavy-duty performance in semi-automatic operation.

Features:

- 5 hp 230/460v 3 ph drive motor
- Semi-automatic operation
- Infinitely variable blade speeds
- LED blade speed readout
- Vise clamps work piece both sides of blade
- Powered hydraulic down feed
- Automatic hydraulic blade tensioning
- Automatic height setting feature
- Auto shutoff at end of cuts
- Blade breakage/stoppage switch
- 110v control circuit
- Overload protection
- Recirculating coolant system
- One general purpose saw blade
- (1) gallon coolant
- Flushing hose for clean up
- Operator's manual
- Two (2) year limited warranty



Speed control and speed chart on variable speed model KC12SA

Specifications

Model	KC12SA
Motor	5 hp (3.75kw), 230/460v 3ph*
Hydraulic Pump Motor	1 hp (.75kw)
Hydraulic Oil Capacity	6.5 Gallons (25 Liters)
Band Wheel Dia.	16" (406mm)
Blade Speeds (Variable Speed)	85-445 fpm (27-135 M/min)
Blade Size	1.25" x .042" x 12'-6" (32 x 1 x 3810mm)
Coolant	Recirculating
Coolant Capacity	10 Gallons (39 Liters)
90° Cutting Capacity	
Round	12.75" (325mm)
Rectangular	12.75" x 12.6" (325 x 320mm)
7.9" x 14.2" (200 x 360mm)	
**Bundle Cutting Width	6.5" to 10" (165 to 254mm)
**Bundle Cutting Height	2" to 8" (51 to 203mm)
Length	47" (812mm)
Width	75" (1905mm)
Height (head-down)	57" (1449mm)
Height (head-up)	73" (1702mm)
Bed Height	29.5" (660mm)
Net Weight	1,540 lbs. (698kg)
Shipping Weight	1,760 lbs. (798kg)

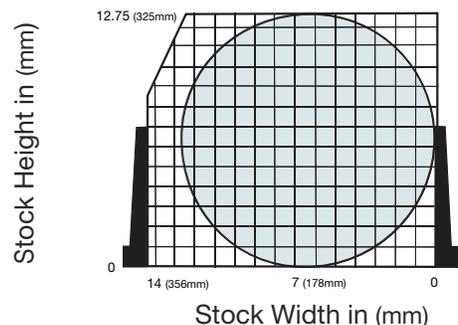
*Other voltages optional may require a transformer or special order.
 Design and specifications are subject to change without notice.

Accessories

- CM1201 Chip Conveyor
- VP1201 Variable Vise Pressure System 1 Vise
- SA20 Heavy-Duty Roller Table 10' x 15"
- SA21 Heavy-Duty Roller Table 5' x 15"
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon

Cutting Capacities:

Capacity at 90°





Shown with optional Hydraulic Bundle Clamp and Variable Vise Pressure System

Specifications

Model	KC12AX
Motor	5 hp (3.75kw), 230/460v 3ph*
Hydraulic Pump Motor	1 hp (.75kw)
Hydraulic Oil Capacity	6.5 Gallons (25 Liters)
Band Wheel Dia.	16" (406mm)
Blade Speeds (Variable Speed)	95-395 fpm (30-120 M/min)
Blade Size	1.25" x .042" x 12'-6" (32 x 1 x 3810mm)
Coolant	Recirculating
Coolant Capacity	10 Gallons (39 Liters)
90° Cutting Capacity	
Round	12.75" (300 mm)
Rectangular	12.75" x 12.6" (300 x 320mm) 7.9" x 14.2" (200 x 360mm)
Feed Accuracy	±.004" - .008" (±0.1 - 0.2mm)
Length of Remnant Manual	.79" (20mm)
Length of Remnant Automatic	1.97" (50mm)
Minimum Cut Thickness	.354" (9mm)
**Bundle Cutting Width	6.5" to 10" (165 to 254mm)
**Bundle Cutting Height	2" to 8" (51 to 203mm)
Feed Length/Index	15.75" (400mm)
Max.Feed (9 times)	141.75" (3600mm)
Length	84" (2133mm)
Width	86" (2184mm)
Height	60" (1524mm)
Height (head-up)	73" (1854mm)
Bed Height	26" (660mm)
Net Weight	2795 lbs. (1268kg)
Shipping Weight	2945 lbs. (1336kg)
Shipping Dim. (L x W x H)	84" x 86" x 60" (2133mm x 2184mm x 1524mm)

*Other voltages optional may require a transformer or special order.

**When machine is equipped with optional hydraulic bundle cutting attachment.

Design and specifications are subject to change without notice.

Clausing 12" (305mm) Automatic Bandsaw

Designed for rugged production use, the Clausing KC12AX bandsaw offers high production output and heavy-duty performance in both semi-automatic and fully automatic operation. A powerful drive motor provides the power, and the optional hydraulic bundling attachment makes multiple cuts easy. The hydraulic shuttle feed system offers up to nine indexes.

Features:

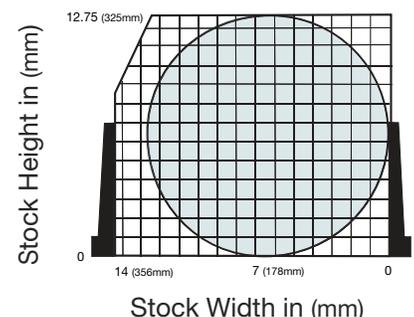
- Full or semi-automatic operation
- Infinitely variable blade speeds
- LED blade speed readout inch/metric
- Vise clamps work piece both sides of blade
- Hydraulic down feed
- Automatic hydraulic blade tensioning
- Automatic height setting feature
- Auto shutoff at end of material or after preset number of cuts
- Front-mounted digital length gauge
- Blade breakage/stoppage switch
- 110v control circuit
- Overload protection
- Recirculating coolant system
- Shuttle vise
- One general purpose saw blade
- Flushing hose for clean up
- Operator's manual
- Two (2) year limited warranty

Accessories

- CM1201 Chip Conveyor
- CM1202 Hydraulic Bundle Clamps
- VP1200 Variable Vise Pressure System
- SA20 Heavy-duty Roller Table 10' x 15"
- SA21 Heavy-duty Roller Table 5' x 15"
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon

Cutting Capacities:

Capacity at 90°



Clausing/Kalamazoo 12" (305mm) Automatic NC Bandsaw

Features:

- Oversized hydraulic cylinder
- Hydraulic shuttle vice assembly
- Inverter controlled infinitely variable speed
- Carbide blade guides with roller bearings
- Two additional guides to support the blade from the top
- Automatic hydraulic blade tensioning
- Power driven blade brushes
- Integral coolant system
- Smart NC-100 technology programmable up to 100 different jobs
- Easy recall and execution of stored parts
- Automatic shutoff after preset number of cuts or when out of stock
- 5.7" HMI touch screen incorporating readout on blade speed, blade life, feed vise position and error code display for self-diagnostics
- Automatic kerf loss compensation & computer controlled multiple indexing
- Precision feed pressure & feed rate
- Bundle/single cutting mode switch
- Automatic height setting feature
- Hydraulic front and rear vises
- Cast iron vises with replaceable hardened wear plates
- Discharge table with built-in coolant return
- Blade slippage or breakage detection
- Adjustable cut-off stock fence
- Additional flushing hose
- One general purpose saw blade
- Built in work light
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- CM1201N Chip Conveyor
- CM1202N Hydraulic Bundle Clamps
- VP1200NC Variable Vise Pressure System
- SA20 Heavy-Duty Roller Table 10' x 15"
- SA21 Heavy-Duty Roller Table 5' x 15"
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon



Specifications

Model	KC12NC
Motor	5 hp (3.75kw), 230v 3ph*
Hydraulic Pump Motor	1 hp (.75kw)
Hydraulic Oil Capacity	6.6 Gallons (25 Liters)
Blade Speeds (Variable Speed)	66-330 fpm (20-100 M/min)
Blade Size (W x T x L)	1.25" x .042" x 12'-6.5" (34 x 1.1 x 3820mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	11.9 Gallons (45 Liters)
90° Cutting Capacity	
Round	11.81" (300mm)
Square	11.81" (300mm)
Rectangular	13.4" x 11.81" (340 x 300mm)
Feed Accuracy	±.004" - .008" (±0.1 - 0.2mm)
Length of Remnant Manual	.79" (20mm)
Length of Remnant Automatic	1.97" (50mm)
Minimum Cut Thickness	.354" (9mm)
**Bundle Cutting Width	7.48" to 11.81" (190 to 300mm)
**Bundle Cutting Height	2.75" to 5.51" (70 to 140mm)
Feed Length/Index	15.86" (403mm)
Max. Feed	255.9" (6500mm)
Length	84" (2133mm)
Width	86" (2184mm)
Height	60" (1524mm)
Height (head-up)	76.7" (1950mm)
Bed Height	26" (660mm)
Net Weight	3,528 lbs. (1600kg)
Shipping Weight	3,970 lbs. (1800kg)

*Other voltages optional. **When machine is equipped with optional hydraulic bundle cutting attachment.

Design and specifications are subject to change without notice.

Clausing 13" (330mm) Semi-Automatic Swivel Head Miter Bandsaw Features:

- Advanced hydraulic system provides dependable power for powered clamping and raising the saw head at end of cut
- Full stroke machine vise for tight clamping of any material from operator's panel
- Operator's panel pivots allowing operator to control saw from the rear of machine
- Swivel sawhead allows the operator to accurately pivot head for angle cuts from 0°, for a 90° cut, to 60°
- Carbide blade guides provide excellent stability for the saw blade
- Variable blade speed
- Power chip brush removes chips from the blade extending blade life
- Integrated coolant system
- Cast iron moveable guide arms provide rigidity and stability for an accurate cut
- Flushing hose
- Adjustable work stop
- Tool box with tools
- One general purpose saw blade
- Manual & parts list
- Two (2) year limited warranty

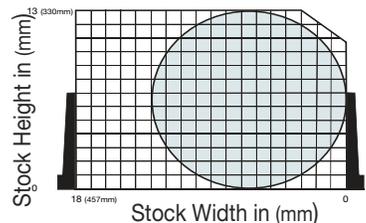
Available in Manual and Automatic Models

Accessories

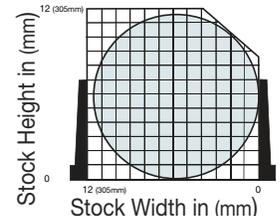
- P10 Stock Stand Assembly 21" - 30"
- SA10 Roller Table Assembly 10' x 18"
- SA11 Roller Table Assembly 5' x 18"
- BT01 Bandsaw Blade Tension Gauge
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon

Cutting Capacities:

Capacity at 90°



Capacity at 45°



Specifications

Model	MS1318SA
Drive Motor	3 hp (2.2kw)*
Hydraulic Motor	.25 hp (.19kw)
Hydraulic Oil Capacity	2 Gallons (7.5 Liters)
Coolant Motor	.125 Hp (.1kw)
Coolant Capacity	7.8 Gallons (7.5 Liters)
Blade Speeds (Inf. Variable)	102-377 fpm (31-115 M/min)
Blade Size	1" x .035" x 13'-7" (25 x .9 x 4150mm)
Swivel Angle Range	0° to 60°
Cutting Capacity	
Round @ 90°	13" (330mm)
Round @ 45°	11.5" (292mm)
Round @ 60°	8.7" (220mm)
Square @ 90°	10.6" (270mm)
Square @ 45°	10.5" (268mm)
Square @ 60°	8.7" (221mm)
Rectangular @ 90°	18.5" x 10.6" (470 x 269mm)
Rectangular @ 45°	10.5" x 10.5" (268 x 268mm)
Rectangular @ 60°	8.7" x 8.7" (220 x 220mm)
Bed Height	33" (838mm)
Dimensions:	
Length	83" (2108mm)
Width	44" (1118mm)
Height	55.5" (1410mm)
Net Weight	1,918 lbs. (870kg)
Shipping Weight	2024 lbs. (918kg)
Shipping Dim (L x W x H)	80" x 48" x 67" (2032mm x 1219mm x 1701mm)

Design and specifications are subject to change without notice.

*Available in 3-phase 230v/460v only



Clausing/Kalamazoo 12.6" (320mm) Automatic NC Twin Column Bandsaw Features:

- Oversized hydraulic cylinder
- Twin column design ensures rigid support during cutting cycle
- Hydraulic shuttle vice assembly
- Inverter controlled infinitely variable speed
- Carbide blade guides with roller bearings
- Two additional guides to support the blade from the top
- Automatic hydraulic blade tensioning
- Power driven blade brushes
- Integral coolant system
- Smart NC-100 technology programmable up to 100 different jobs
- Easy recall and execution of stored parts
- Automatic shutoff after preset number of cuts or when out of stock
- 5.7" HMI touch screen incorporating readout on blade speed, blade life, feed vise position and error code display for self-diagnostics
- Automatic kerf loss compensation & computer controlled multiple indexing
- Precision feed pressure & feed rate
- Bundle/single cutting mode switch
- Automatic height setting feature
- Hydraulic front and rear vises
- Cast iron vises with replaceable hardened wear plates
- Discharge table with built-in coolant return
- Blade slippage or breakage detection
- Adjustable cut-off stock fence
- Additional flushing hose
- One general purpose saw blade
- Built in work light
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Specifications

Model	H1315NC
Motor	5 hp (3.75kw), 230v 3ph*
Hydraulic Pump Motor	1 hp (.75kw)
Hydraulic Oil Capacity	6.6 Gallons (25 Liters)
Blade Speeds (Variable Speed)	66-330 fpm (20-100 M/min)
Blade Size (W x T x L)	1.25" x .042 "x 15'-4" (34 x 1.1 x 4240mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	11.9 Gallons (45 Liters)
90° Cutting Capacity	
Round	12.6" (320mm)
Square	12.6" (320mm)
Rectangular	15" x 12.6" (380 x 320mm)
Feed Accuracy	±.004" - .008" (±0.1 - 0.2mm)
Length of Remnant Manual	.59" (15mm)
Length of Remnant Automatic	1.97" (50mm)
Minimum Cut Thickness	.197" (5mm)
**Bundle Cutting Width	7.48" to 11.81" (190 to 300mm)
**Bundle Cutting Height	2.75" to 5.51" (70 to 140mm)
Feed Length/Index	15.86" (403mm)
Max. Feed	255.9" (6500mm)
Length	79.13" (2010mm)
Width	78.75" (2000mm)
Height	70.3" (1785mm)
Bed Height	31.1" (790mm)
Net Weight	4,409 lbs. (2000kg)
Shipping Weight	4,850 lbs. (2200kg)

Accessories

- CM1301N Chip Conveyor
- CM1302N Hydraulic Bundle Clamps
- VP1200NC Variable Vise Pressure System
- SA20 Heavy-Duty Roller Table 10' x 15"
- SA21 Heavy-Duty Roller Table 5' x 15"
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon

*Other voltages optional may require a transformer or special order.

**When machine is equipped with optional hydraulic bundle cutting attachment.

Design and specifications are subject to change without notice.

Clausing/Kalamazoo 13" (330mm) Automatic NC Swivel Head Miter Bandsaw

Features:

- The swivel sawhead allows cutting at any angle between 90° (straight cut) and 45° (miter cut)
- Precision pivot system facilitates easy and accurate adjustment for angle cuts
- Inverter controlled infinitely variable speed
- Carbide blade guides with roller bearings
- Two additional guides to support the blade from the top
- Automatic hydraulic blade tensioning
- Power driven blade brushes
- Integral coolant system
- Smart NC-100 technology programmable up to 100 different jobs
- Easy recall and execution of stored parts
- Automatic shutoff after preset number of cuts or when out of stock
- 5.7" HMI touch screen incorporating readout on blade speed, blade life, feed vise position and error code display for self-diagnostics
- Automatic kerf loss compensation & computer controlled multiple indexing
- Precision feed pressure & feed rate
- Automatic height setting feature
- Hydraulic front and rear vises
- Cast iron vises with replaceable hardened wear plates
- Computer controlled multiple indexing
- Discharge table with built-in coolant return
- Blade slippage or breakage detection
- Additional flushing hose
- One general purpose saw blade
- Built in work light
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- CM1301M Hydraulic Bundle Clamps
- VP1200NC Variable Vise Pressure System
- SM1302 Buck Boost Transformer 5 Hp
- SA22 Heavy-Duty Roller Table 10' x 19"
- SA23 Heavy-Duty Roller Table 5' x 19"
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon



Specifications

Model	MS1319NC
Motor	5 hp (3.75kw), 230v 3ph*
Hydraulic Pump Motor	1 hp (.75kw)
Hydraulic Oil Capacity	10.4 Gallons (40 Liters)
Blade Speeds (Variable Speed)	66-330 fpm (20-100 M/min)
Blade Size (W x T x L)	1.25" x .042" x 15'-4" (34 x 1.1 x 4670mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	14.3 Gallons (55 Liters)
90° Cutting Capacity	
Round	13" (330mm)
Rectangular	11" x 19.68" (280 x 500mm)
45° Cutting Capacity	
Round	11.5" (290mm)
Rectangular	10.43" x 10.43" (265 x 265mm)
Feed Accuracy	±.004" - .008" (±0.1 - 0.2mm)
Length of Remnant Manual	.275" (70mm)
Length of Remnant Automatic	9.84" (250mm)
Minimum Cut Thickness	.126" (3.2mm)
Feed Length/Index	23.9" (607mm)
Max. Feed	255.9" (6500mm)
Length	114" (2900mm)
Width	102" (2600mm)
Height	86.6" (2200mm)
Bed Height	28.3" (720mm)
Net Weight	3,300 lbs. (1500kg)
Shipping Weight	3,745 lbs. (1700kg)

*Other voltages optional may require a transformer or special order.

Design and specifications are subject to change without notice.



Clausing/Kalamazoo 16.5" (420mm) Automatic NC Twin Column Bandsaw

Features:

- Oversized hydraulic cylinder
- Twin column design ensures rigid support during cutting cycle
- Hydraulic shuttle vice assembly
- Inverter controlled infinitely variable speed
- Carbide blade guides with roller bearings
- Two additional guides to support the blade from the top
- Automatic hydraulic blade tensioning
- Power driven blade brushes
- Integral coolant system
- Smart NC-100 technology programmable up to 100 different jobs
- Easy recall and execution of stored parts
- Automatic shutoff after preset number of cuts or when out of stock
- 5.7" HMI touch screen incorporating readout on blade speed, blade life, feed vise position and error code display for self-diagnostics
- Automatic kerf loss compensation & computer controlled multiple indexing
- Precision feed pressure & feed rate
- Bundle/single cutting mode switch
- Automatic height setting feature
- Hydraulic front and rear vises
- Cast iron vises with replaceable hardened wear plates
- Discharge table with built-in coolant return
- Blade slippage or breakage detection
- Adjustable cut-off stock fence
- Additional flushing hose
- One general purpose saw blade
- Built in work light
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Specifications

Model	H1616NC
Motor	7.5 hp (5.6kw), 230v 3ph*
Hydraulic Pump Motor	2 hp (1.5kw)
Hydraulic Oil Capacity	10.5 Gallons (40 Liters)
Blade Speeds (Variable Speed)	66-328 fpm (20-100 M/min)
Blade Size (W x T x L)	1.5" x .05" x 15'-7.8" (38 x 1.3 x 4770mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	22.5 Gallons (85 Liters)
90° Cutting Capacity	
Round	16.5" (420mm)
Square	16.5" (420mm)
Rectangular	16.5" x 16.5" (420 x 420mm)
Feed Accuracy	±.004" - .008" (±0.1 - 0.2mm)
Length of Remnant Manual	.79" (20mm)
Length of Remnant Automatic	2.55" (65mm)
Minimum Cut Thickness	.197" (5mm)
**Bundle Cutting Width	7.48" to 14.17" (190 to 360mm)
**Bundle Cutting Height	3.94" to 7.08" (100 to 180mm)
Feed Length/Index	19.8" (503mm)
Max. Feed	255.9" (6500mm)
Length	98" (2490mm)
Width	93" (2360mm)
Height	74.4" (1890mm)
Bed Height	27.5" (700mm)
Net Weight	6,614 lbs. (3000kg)
Shipping Weight	7,275 lbs. (3300kg)

Accessories

- CM1601NC Chip Conveyor
- CM1602NC Hydraulic Bundle Clamps
- VP1200NC Variable Vise Pressure System
- SA22 Heavy-Duty Roller Table 10' x 19"
- SA23 Heavy-Duty Roller Table 5' x 19"
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon

*Other voltages optional may require a transformer or special order.

**When machine is equipped with optional hydraulic bundle cutting attachment.

Design and specifications are subject to change without notice.

Clausing/Kalamazoo 16" (420mm) Semi- Automatic Bandsaw

Features:

- Twin column design insures rigid support during cutting cycle by keeping the blade parallel and square to the work piece
- Infinitely variable blade speed
- Digital blade speed indicator
- Carbide blade guides with roller bearings
- Two additional guides to support the blade from the top
- Automatic hydraulic blade tensioning
- Power driven blade brushes
- Integral coolant system
- LCD digital blade speed monitor
- Precision feed pressure & feed rate
- Cast iron vises with replaceable hardened wear plates
- Discharge table with built-in coolant return
- Blade slippage or breakage detection
- Additional flushing hose
- One general purpose saw blade
- Built in work light
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- CM1601H Chip Conveyor
- VP1201 Variable Vise Pressure System 1 Vise
- SA24 Heavy-duty Roller Table 10' x 21"
- SA25 Heavy-duty Roller Table 5' x 21"
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon



Specifications

Model	H1621SA
Motor	7.5 hp (5.5kw), 230v 3ph*
Hydraulic Pump Motor	2 hp (1.5kw)
Hydraulic Oil Capacity	8.75 Gallons (35 Liters)
Blade Speeds (Variable Speed)	66-328 fpm (20-100 M/min)
Blade Size (W x T x L)	1.5" x .050" x 17'-4.7" (41 x 1.3 x 5300mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	23.75 Gallons (95 Liters)
90° Cutting Capacity	
Round	16.5" (420mm)
Square	16.5" (420mm)
Rectangular	16.5" x 21.6" (420 x 550mm)
Length	43.3" (1100mm)
Width	100.4" (2500mm)
Height	74.8" (1900mm)
Bed Height	27.5" (700mm)
Net Weight	3,960 lbs. (1800kg)
Shipping Weight	5,060 lbs. (2300kg)

*Other voltages optional may require a transformer or special order.

Design and specifications are subject to change without notice.

Clausing/Kalamazoo 16.5" (420mm) Semi- Automatic Hydraulic Swivel Head Miter Bandsaw

Features:

- Swivel sawhead mitering from 90° to 60°
- Rigid and heavy-duty pivot and trunion
- Sturdy cast work table
- 24.5" solid discharge table with coolant return
- Variable speeds from 66 thru 330 fpm
- Carbide blade guides with roller bearings
- Two additional bearings to support blade from the top
- Cast iron guide arm supported by heavy-duty cast iron dovetail
- Automatic hydraulic blade tensioning
- Integral coolant system
- Synchronized blade brush
- Precision feed pressure & feed rate dual valve system
- Conveniently designed control station
- Electrical components located inside the control box with main lockout disconnect
- Work height selector
- Industrial rated hydraulic components
- 36" infeed roller table
- Full stroke machine vises
- Breakage detector
- Built-in adjustable material stop
- Adjustable work light
- Additional flushing hose
- One general purpose saw blade
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- BT01 Bandsaw Blade Tension Gauge
- CM1601M Chip Conveyor
- VP1201 Variable Vise Pressure System
1 Vise
- SA26 Heavy-duty Roller Table 10' x 25"
- SA27 Heavy-duty Roller Table 5' x 25"
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon

Specifications

Model	MS1625SA
Motor	5 hp (3.75kw), 230v 3ph*
Hydraulic Pump Motor	1 hp (.75kw)
Hydraulic Oil Capacity	11.7 Gallons (45 Liters)
Blade Speeds (Variable Speed)	66-328 fpm (20-100 M/min)
Blade Size (W x T x L)	1.25" x .042" x 17'-5" (34 x 1.1 x 5300mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	15.6 Gallons (60 Liters)
90° Cutting Capacity	
Round	16.5" (420mm)
Rectangular	15" x 26.6" (380 x 650mm)
45° Cutting Capacity	
Round	16" (400mm)
Rectangular	16" x 16" (400 x 400mm)
60° Cutting Capacity	
Round	10" (250mm)
Rectangular	16" x 10" (400 x 250mm)
Length	90.6" (2300mm)
Width	114" (2900mm)
Height	98.4" (2500mm)
Bed Height	29.5" (750mm)
Net Weight	2,640 lbs. (1200kg)
Shipping Weight	3,300 lbs. (1500kg)

*Other voltages optional may require a transformer or special order.

Design and specifications are subject to change without notice.

Clausing/Kalamazoo 16" (420mm) Semi- Automatic Bandsaw

Features:

- Twin column design insures rigid support during cutting cycle by keeping the blade parallel and square to the work piece
- Infinitely variable blade speed
- Digital blade speed indicator
- Carbide blade guides with roller bearings
- Two additional guides to support the blade from the top
- Automatic hydraulic blade tensioning
- Power driven blade brushes
- Integral coolant system
- Automatic shut-off at end of cut
- Precision feed pressure & feed rate
- Cast iron vises with replaceable hardened wear plates
- Discharge table with built-in coolant return
- Blade slippage or breakage detection
- Additional flushing hose
- Bi-metal saw blade
- Built in work light
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- **CM1601HA** Chip Conveyor
- **VP1201** Variable Vise Pressure System
1 Vise
- **SA26** Heavy-duty Roller Table 10' x 25"
- **SA27** Heavy-duty Roller Table 5' x 25"
- **SM1303** Buck Boost Transformer 7.5 Hp
- **P10** Stock Stand Assembly 21" - 30"
- **CSR1** SAWZIT 1 Gallon
- **CSR5** SAWZIT 5 Gallon

Specifications

Model	H1628SA
Motor	7.5 hp (5.5kw), 230v 3ph*
Hydraulic Pump Motor	1 hp (.75kw)
Hydraulic Oil Capacity	13 Gallons (50 Liters)
Blade Speeds (Variable Speed)	66-328 fpm (20-100 M/min)
Blade Size (W x T x L)	1.5" x .05" x 17'-11" (41 x 1.3 x 5450mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	10.4 Gallons (40 Liters)
90° Cutting Capacity	
Round	16.5" (420mm)
Square	16.5" (420mm)
Rectangular	13.8" x 27.5" (350 x 700mm)
Length	47" (1200mm)
Width	108" (2750mm)
Height	84.2" (2150mm)
Bed Height	27.5" (700mm)
Net Weight	4,440 lbs. (2017kg)
Shipping Weight	4,720 lbs. (2145kg)

*Other voltages optional may require a transformer or special order.

Design and specifications are subject to change without notice.

Clausing/Kalamazoo 18" (460mm) Automatic Bandsaw

Features:

- Oversized hydraulic cylinder
- Hydraulic shuttle vice assembly
- Inverter controlled infinitely variable speed
- Carbide blade guides with roller bearings
- Two additional guides to support the blade from the top
- Automatic hydraulic blade tensioning
- Power driven blade brushes
- Integral coolant system
- Automatic shutoff at end of material or after preset number of cuts
- LCD digital blade speed monitor
- Precision feed pressure & feed rate
- Bundle/single cutting mode switch
- Automatic height setting feature
- Hydraulic front and rear vises
- Cast iron vises with replaceable hardened wear plates
- PLC controlled multiple indexing
- Discharge table with built-in coolant return
- Blade slippage or breakage detection
- Adjustable cut-off stock fence
- Additional flushing hose
- One general purpose saw blade
- Built in work light
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- CM1801 Chip Conveyor
- CM1802 Hydraulic Bundle Clamps
- VP1200 Variable Vise Pressure System
- SA22 Heavy-duty Roller Table 10' x 19"
- SA23 Heavy-duty Roller Table 5' x 19"
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon



Specifications

Model	KC18AX
Motor	7.5 hp (5.5kw), 230/v 3ph*
Hydraulic Pump Motor	2 hp (1.5kw)
Hydraulic Oil Capacity	10.6 Gallons (40 Liters)
Blade Speeds (Variable Speed)	66-330 fpm (20-100 M/min)
Blade Size (W x T x L)	1.5" x .050" x 15'-4" (41 x 1.3 x 4670mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	21 Gallons (80 Liters)
90° Cutting Capacity	
Round	18" (460mm)
Square	18" (460mm)
Rectangular	18" x 18" (460 x 460mm)
Feed Accuracy	±.004" - .008" (±0.1 - 0.2mm)
Length of Remnant Manual	.79" (20mm)
Length of Remnant Automatic	2.95--" (75mm)
Minimum Cut Thickness	.197" (5mm)
Feed Length/Index	23.6" (600mm)
Max. Feed	252.6" (5400mm)
Length	104.4" (2650mm)
Width	94.5" (2400mm)
Height (head-down)	92.5" (2350mm)
Height (head-up)	76" (1930mm)
Bed Height	29.5" (750mm)
Net Weight	6,160 lbs. (2800kg)
Shipping Weight	6,600 lbs. (3000kg)

*Other voltages optional may require a transformer or special order.

Design and specifications are subject to change without notice.



Clausing/Kalamazoo 20.5" (520mm) Automatic NC Twin Column Bandsaw

Features:

- Oversized hydraulic cylinder
- Hydraulic shuttle vice assembly
- Inverter controlled infinitely variable speed
- Carbide blade guides with roller bearings
- Two additional guides to support the blade from the top
- Automatic hydraulic blade tensioning
- Power driven blade brushes
- Integral coolant system
- Smart NC-100 technology programmable up to 100 different jobs
- Easy recall and execution of stored parts
- Automatic shutoff after preset number of cuts or when out of stock
- 5.7" HMI touch screen incorporating readout on blade speed, blade life, feed vise position and error code display for self-diagnostics
- Automatic kerf loss compensation & computer controlled multiple indexing
- Precision feed pressure & feed rate
- Bundle/single cutting mode switch
- Automatic height setting feature
- Hydraulic front and rear vises
- Cast iron vises with replaceable hardened wear plates
- Discharge table with built-in coolant return
- Blade slippage or breakage detection
- Adjustable cut-off stock fence
- Additional flushing hose
- One general purpose saw blade
- Built in work light
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Specifications

Model	H2022NC
Motor	7.5 hp (5.6kw), 230v 3ph*
Hydraulic Pump Motor	2 hp (1.5kw)
Hydraulic Oil Capacity	10.5 Gallons (40 Liters)
Blade Speeds (Variable Speed)	66-328 fpm (20-100 M/min)
Blade Size (W x T x L)	2" x .063" x 19'-10" (54 x 1.6 x 6040mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	22.5 Gallons (85 Liters)
90° Cutting Capacity	
Round	20.5" (520mm)
Square	20.5" (520mm)
Rectangular	22" x 20.5" (560mm x 520mm)
Feed Accuracy	±.004" - .008" (±0.1 - 0.2mm)
Length of Remnant Manual	.79" (20mm)
Length of Remnant Automatic	3.93" (100mm)
Minimum Cut Thickness	.394" (10mm)
**Bundle Cutting Width	9.84" to 18.5" (250 to 470mm)
**Bundle Cutting Height	5.9" to 12.4" (150 to 315mm)
Feed Length/Index	23.6" (600mm)
Max. Feed	255.9" (6500mm)
Length	114.2" (2900mm)
Width	114.2" (2100mm)
Height	82.7" (2055mm)
Bed Height	27.2" (690mm)
Net Weight	8,157 lbs. (3700kg)
Shipping Weight	9,480 lbs. (4300kg)

Accessories

- CM2001N Chip Conveyor
- CM2002N Hydraulic Bundle Clamps
- VP1200NC Variable Vise Pressure System
- SA26 Heavy-duty Roller Table 10' x 25"
- SA27 Heavy-duty Roller Table 5' x 25"
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon

*Other voltages optional may require a transformer or special order.

**When machine is equipped with optional hydraulic bundle cutting attachment.

Clausing/Kalamazoo 20" (500mm) Semi- Automatic Bandsaw

Features:

- Twin column design insures rigid support during cutting cycle by keeping the blade parallel and square to the work piece
- Infinitely variable blade speed
- Digital blade speed indicator
- Carbide blade guides with roller bearings
- Two additional guides to support the blade from the top
- Automatic hydraulic blade tensioning
- Power driven blade brushes
- Integral coolant system
- Automatic shutoff at end of cut
- LCD digital blade speed monitor
- Precision feed pressure & feed rate
- Cast iron vises with replaceable hardened wear plates
- Discharge table with built-in coolant return
- Blade slippage or breakage detection
- Additional flushing hose
- One general purpose saw blade
- Built in work light
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- **CM2001H** Chip Conveyor
- **VP1201** Variable Vise Pressure System
1 Vise
- **SA26** Heavy-duty Roller Table 10' x 25"
- **SA27** Heavy-duty Roller Table 5' x 25"
- **P10** Stock Stand Assembly 21" - 30"
- **CSR1** SAWZIT 1 Gallon
- **CSR5** SAWZIT 5 Gallon



Specifications

Model	H2030SA
Motor	7.5 hp (5.5kw), 230v 3ph*
Hydraulic Pump Motor	2 hp (.75kw)
Hydraulic Oil Capacity	10 Gallons (40 Liters)
Blade Speeds (Variable Speed)	66-328 fpm (20-100 M/min)
Blade Size (W x T x L)	2" x .063" x 19'-10" (54 x 1.6 x 6040mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	21.5 Gallons (85 Liters)
90° Cutting Capacity	
Round	20" (500mm)
Square	20" (500mm)
Rectangular	20" x 29.5" (500 x 750mm)
Length	55.5" (1410mm)
Width	124" (3150mm)
Height	79" (2010mm)
Bed Height	27.5" (700mm)
Net Weight	4,620 lbs. (2100kg)
Shipping Weight	5,720 lbs. (2600kg)

*Other voltages optional may require a transformer or special order.

Design and specifications are subject to change without notice.



Clausing/Kalamazoo 22" (560) Automatic NC Twin Column Bandsaw

Features:

- Oversized hydraulic cylinder
- Twin column design ensures rigid support during cutting cycle
- Hydraulic shuttle vice assembly
- Inverter controlled infinitely variable speed
- Carbide blade guides with roller bearings
- Two additional guides to support the blade from the top
- Automatic hydraulic blade tensioning
- Power driven blade brushes
- Integral coolant system
- Smart NC-100 technology programmable up to 100 different jobs
- Easy recall and execution of stored parts
- Automatic shutoff after preset number of cuts or when out of stock
- 5.7" HMI touch screen incorporating readout on blade speed, blade life, feed vise position and error code display for self-diagnostics
- Automatic kerf loss compensation & computer controlled multiple indexing
- Precision feed pressure & feed rate
- Bundle/single cutting mode switch
- Automatic height setting feature
- Hydraulic front and rear vises
- Cast iron vises with replaceable hardened wear plates
- Discharge table with built-in coolant return
- Blade slippage or breakage detection
- Adjustable cut-off stock fence
- Additional flushing hose
- One general purpose saw blade
- Built in work light
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Specifications

Model	H2230NC
Motor	10 hp (7.5kw), 230v 3ph*
Hydraulic Pump Motor	2 hp (1.5kw)
Hydraulic Oil Capacity	13 Gallons (50 Liters)
Blade Speeds (Variable Speed)	66-328 fpm (20-100 M/min)
Blade Size (W x T x L)	2" x .063" x 21'-10" (54 x 1.6 x 6665mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	22.5 Gallons (85 Liters)
90° Cutting Capacity	
Round	22" (560mm)
Square	22" (560mm)
Rectangular	30" x 22" (760mm x 560mm)
Feed Accuracy	±.004" - .008" (±0.1 - 0.2mm)
Length of Remnant Manual	.79" (20mm)
Length of Remnant Automatic	6.49" (165mm)
Minimum Cut Thickness	.551" (14mm)
**Bundle Cutting Width	9.84" to 18.5" (250 to 470mm)
**Bundle Cutting Height	6.73" to 10.16" (265 to 400mm)
Feed Length/Index	19.8" (503mm)
Max. Feed	255.9" (6500mm)
Length	92" (2330mm)
Width	153.2" (3890mm)
Height	93.9" (2385mm)
Bed Height	27.2" (690mm)
Net Weight	13,228 lbs. (6000kg)
Shipping Weight	14,550 lbs. (6600kg)

Accessories

- CM2201N Chip Conveyor
- CM2202N Hydraulic Bundle Clamps
- VP1200NC Variable Vise Pressure System
- SA26 Heavy-duty Roller Table 10' x 25"
- SA27 Heavy-duty Roller Table 5' x 25"
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon

*Other voltages optional may require a transformer or special order.

**When machine is equipped with optional hydraulic bundle cutting attachment.

Design and specifications are subject to change without notice.

Clausing/Kalamazoo 24" (620mm) Semi- Automatic Bandsaw

Features:

- Oversized precision ground, large dual columns
- Cross link connecting two columns for enhanced structural strength
- Specially designed gearbox for high lateral pressure
- Heavy-duty inverter blade drive system
- LED speed indicator
- Camlock carbide blade guides with bearing guides
- Two additional guides to support the blade from the top
- Automatic hydraulic blade tensioning device
- Integral coolant system
- Synchronized power driven blade brush
- PLC control
- Ergonomically located independent control station
- Precision feed pressure & feed rate dual valve system
- Work height selector & air gap eliminator
- "Shut off" or "keep on" selector
- Split vise jaws
- Full stroke ductile cast iron split vise
- Hydraulically powered in-feed lift roller for forward and backward feeding
- Ductile cast iron vises with replaceable hardened wear plates
- Proximity switch for sensing blade slippage or breakage
- Blade "clip" device for easy blade change
- Discharge roller work bed with built-in coolant return
- Additional flushing hose
- One general purpose saw blade
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- **CM2401H** Chip Conveyor
- **VP1201** Variable Vise Pressure System 1 Vise
- **SA26** Heavy-duty Roller Table 10' x 25"
- **SA27** Heavy-duty Roller Table 5' x 25"
- **P10** Stock Stand Assembly 21" - 30"
- **CSR1** SAWZIT 1 Gallon
- **CSR5** SAWZIT 5 Gallon



Specifications

Model	H2430SA
Motor	10 hp (7.3kw), 230v 3ph*
Hydraulic Pump Motor	2 hp (1.5kw)
Hydraulic Oil Capacity	12.5 Gallons (50 Liters)
Blade Speeds (Variable Speed)	66-328 fpm (20-100 M/min)
Blade Size (W x T x L)	2" x .063" x 23'-7" (54 x 1.6 x 7200mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	25 Gallons (100 Liters)
90° Cutting Capacity	
Round	24.4" (620mm)
Square	24.4" (620mm)
Rectangular	24.4" x 30" (620 x 760mm)
Length	47.2" (1200mm)
Width	140" (3560mm)
Height	93" (2360mm)
Bed Height	23.6" (700mm)
Net Weight	7,700 lbs. (3500kg)
Shipping Weight	8,580 lbs. (3900kg)

*Other voltages optional may require a transformer or special order.

Design and specifications are subject to change without notice.

Clausing/Kalamazoo 26" (660mm) Semi- Automatic Hydraulic Swivel Head Miter Bandsaw

Features:

- Swivel sawhead mitering from 90° to 60°
- Precision ground, oversized round column design
- 7.5 degree blade cant for longer blade life
- Heavy-duty, rigid saw frame supported by two large bore hydraulic cylinders
- Cross link connecting the two columns for enhanced structural strength
- 45 degree forward & backward swivel with automatic angle lock-in smooth and powerful cutting
- Heavy-duty inverter blade drive system
- Easy-to-read LED speed indicator
- Hydraulically operated carbide blade guides
- Two additional guide bearings for extra support of the blade
- Automatic hydraulic blade tensioning device
- Hydraulically actuated guide arm
- Integral coolant system
- Synchronized power driven blade brush
- Independent control station
- Precision feed pressure & feed rate dual valve system
- "Shut off" or "keep on" selector switch
- Vise pressure detector
- Hydraulically powered material infeed lift roller
- Idle roller work table for material feeding
- Light projection for precise length measurement
- Two full stroke cylinder vises
- Proximity switch for sensing blade slippage or breakage
- Electrical and hydraulic safety interlock
- Conduits protection
- One general purpose saw blade
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- **CM2601M** Chip Conveyor
- **VP1201** Variable Vise Pressure System
1 Vise
- **P10** Stock Stand Assembly 21" - 30"
- **CSR1** SAWZIT 1 Gallon
- **CSR5** SAWZIT 5 Gallon



Specifications

Model	MS2640SA
Motor	10 hp (7.5kw), 230v 3ph*
Hydraulic Pump Motor	3 hp (2.25kw)
Hydraulic Oil Capacity	15.6 Gallons (60 Liters)
Blade Speeds (Variable Speed)	49-295 fpm (15-90 M/min)
Blade Size (W x T x L)	2" x .063" x 27'-2.8" (54 x 1.6 x 8300mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	26 Gallons (100 Liters)
90° Cutting Capacity	
Round	26" (660mm)
Rectangular	20.5" x 40" (520 x 1020mm)
45° Cutting Capacity	
Round	23" (620mm)
Rectangular	20.5" x 24.4" (520 x 620mm)
60° Cutting Capacity	
Round	15.7" (400mm)
Rectangular	21.3" x 15.7" (540 x 400mm)
Length	148" (3750mm)
Width	154" (3900mm)
Height	109" (2765mm)
Bed Height	31.9" (810mm)
Net Weight	9,460 lbs. (4300kg)
Shipping Weight	12,254 lbs. (5570kg)

*Other voltages optional may require a transformer or special order.
Design and specifications are subject to change without notice.

Clausing/Kalamazoo 31.6" (800mm) Semi- Automatic Bandsaw

Features:

- The extra heavy-duty saw frame is supported by two large bore hydraulic cylinders, providing unsurpassed rigidity, and the smoothest cutting possible
- Dual Column design with precision ground columns ensures smooth saw frame movement and consistent cutting force throughout the cutting cycle
- Large diameter cast iron bandwheels
- Inverter drive with infinitely variable blade speeds with blade speed indicator
- Hydraulic controlled tungsten carbide blade guide
- Groove shaped designed blade guides
- Hydraulic controlled blade tension device
- Hydraulic driven guide arm
- Proximity switch for sensing blade slippage or breakage
- Independent wire brush drive system
- Auto "shut off" function automatically stops the machine and shuts down the hydraulic system at the end of the last cut
- Two full stroke cylinder vices
- Discharge table with built-in coolant return
- Heavy-duty machine structure design for heavy cutting jobs
- Precise flow control valve to finely adjust the cutting speed
- Additional flushing hose
- One general purpose saw blade
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- CM3101H Chip Conveyor
- VP1201 Variable Vise Pressure System
1 Vise
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon

Specifications

Model	H3140SA
Motor	15 hp (11.2kw), 230v 3ph*
Hydraulic Pump Motor	3 hp (2.2kw)
Hydraulic Oil Capacity	26 Gallons (100 Liters)
Blade Speeds (Variable Speed)	49-264 fpm (15-80 M/min)
Blade Size (W x T x L)	2.5" x .063" x 28'-10.5" (67 x 1.6 x 8800mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	32 Gallons (120 Liters)
90° Cutting Capacity	
Round	31.5" (800mm)
Square	31.5" (800mm)
Rectangular	31.5" x 39.4" (800 x 1000mm)
Length	90" (2286mm)
Width	169" (4293mm)
Height	105" (2667mm)
Bed Height	25.2" (640mm)
Net Weight	22,000 lbs. (10000kg)
Shipping Weight	23,320 lbs. (10578kg)

*Other voltages optional may require a transformer or special order.

Design and specifications are subject to change without notice.

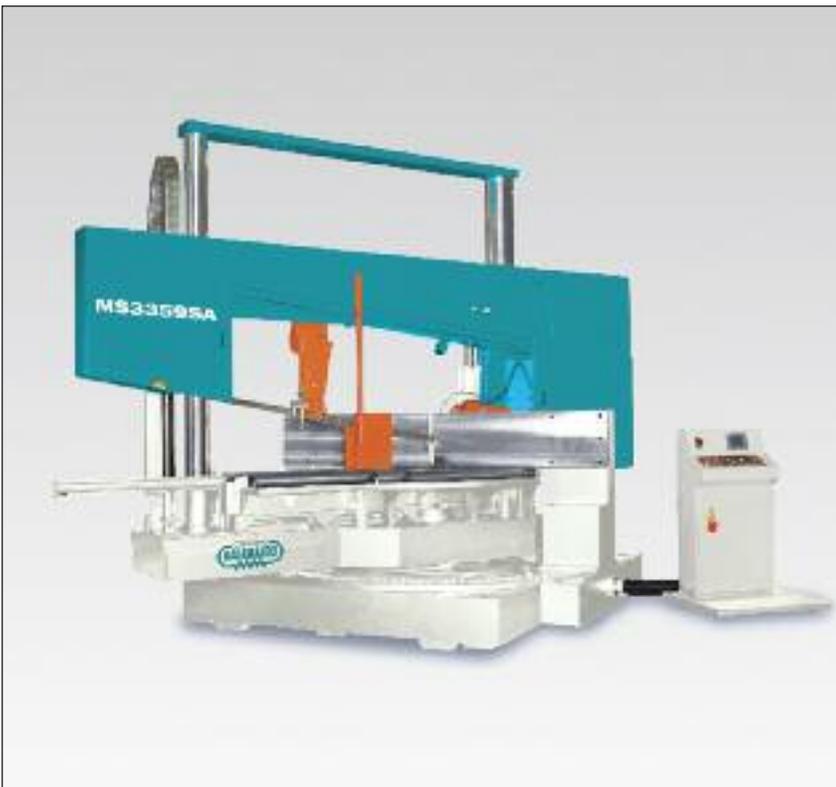
Clausing/Kalamazoo 33.5" (850mm) Semi- Automatic Hydraulic Swivel Head Miter Bandsaw

Features:

- Swivel sawhead mitering from 90° to 60°
- Precision ground, oversized round column design
- 10 degree blade cant for longer blade life
- Heavy-duty, rigid saw frame supported by two large bore hydraulic cylinders
- Cross link connecting the two columns for enhanced structural strength
- 45 degree forward & backward swivel with automatic angle lock-in smooth and powerful cutting
- Heavy-duty inverter blade drive system
- Easy-to-read LED speed indicator
- Hydraulically operated carbide blade guides
- Two additional guide bearings for extra support of the blade
- Automatic hydraulic blade tensioning device
- Hydraulically actuated guide arm
- Integral coolant system
- Synchronized power driven blade brush
- Independent control station
- Precision feed pressure & feed rate dual valve system
- "Shut off" or "keep on" selector switch
- Vise pressure detector
- Hydraulically powered material infeed lift roller
- Idle roller work table for material feeding
- Light projection for precise length measurement
- Two full stroke cylinder vises
- Proximity switch for sensing blade slippage or breakage
- Electrical and hydraulic safety interlock
- Conduits protection
- One general purpose saw blade
- Tool box, leveling pads, and an additional wire brush
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- **CM3301M** Chip Conveyor
- **VP1201** Variable Vise Pressure System
1 Vise
- **P10** Stock Stand Assembly 21" - 30"
- **CSR1** SAWZIT 1 Gallon
- **CSR5** SAWZIT 5 Gallon



Specifications

Model	MS3359SA
Motor	15 hp (11.25kw), 230v 3ph*
Hydraulic Pump Motor	3 hp (2.25kw)
Hydraulic Oil Capacity	20.8 Gallons (80 Liters)
Blade Speeds (Variable Speed)	66-330 fpm (20-100 M/min)
Blade Size (W x T x L)	2.5" x .063" x 39' (67 x 1.6 x 11880mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	39 Gallons (150 Liters)
90° Cutting Capacity	
Round	33.5" (850mm)
Rectangular	29.5" x 59" (750 x 1500mm)
45° Cutting Capacity	
Round	31.5" (800mm)
Rectangular	29.5" x 35.4" (750 x 900mm)
60° Cutting Capacity	
Round	22.8" (580mm)
Rectangular	29.5" x 22.8" (750 x 580mm)
Length	203" (5160mm)
Width	219" (5550mm)
Height	165" (4200mm)
Bed Height	51" (1295mm)
Net Weight	39,600 lbs. (18000kg)
Shipping Weight	46,200 lbs. (21000kg)

*Other voltages optional may require a transformer or special order.

Design and specifications are subject to change without notice.

Clausing/Kalamazoo 43.3" (1100mm) Semi- Automatic Bandsaw

Features:



- The extra heavy-duty saw frame is supported by two large bore hydraulic cylinders, providing unsurpassed rigidity, and the smoothest cutting possible
- Dual Column design with precision ground columns ensures smooth saw frame movement and consistent cutting force throughout the cutting cycle
- Specially designed planetary gear reducer for optimum mechanical efficiency
- Inverter controlled infinitely variable blade speed with blade speed indicator
- Independent wire brush system
- Hydraulically powered guide arm is positioned from the control panel
- Automatic hydraulic blade tension device
- Carbide blade guides are activated hydraulically
- Additional blade guiding bearings for extra support
- Heavy cast iron moveable Guide Arm is hydraulically powered from the control panel
- Auto "shut off" function
- User-friendly control panel
- Precision Feed Pressure control valve with micro-precision adjustment
- Saw Blade Height Selector
- Hydraulic driven work bed with rollers for moving large material safely
- Three sets of vises design. The front and middle vises hold the stock during cutting while the guide vise can be separately controlled to guide the material during feeding cycle
- Stock position cylinder pushes stock away from fixed vise for easy material handling
- Shadow light for material measurement
- Blade breakage and/or slippage detector
- One general purpose saw blade
- Tool box, leveling pads, and an additional wire brush
- Vibration damper
- Operation & parts manual
- Two (2) year limited warranty

Specifications

Model	H4351SA
Motor	15 hp (11.2kw), 230v 3ph*
Hydraulic Pump Motor	3 hp (2.2kw)
Hydraulic Oil Capacity	35 Gallons (160 Liters)
Blade Speeds (Variable Speed)	49-264 fpm (15-80 M/min)
Blade Size (W x T x L)	3" x .063" x 36'-1" (80 x 1.6 x 11000mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	44 Gallons (200 Liters)
90° Cutting Capacity	
Round	43.3" (1100mm)
Square	43.3" (1100mm)
Rectangular	43.3" x 51.2" (1100 x 1300mm)
Length	86.6" (2200mm)
Width	193" (4900mm)
Height	137.8" (3500mm)
Bed Height	24.4" (620mm)
Net Weight	30,140 lbs. (13700kg)
Shipping Weight	33,455 lbs. (15175kg)

*Other voltages optional may require a transformer or special order.

Design and specifications are subject to change without notice.

Accessories

- CM4301H Chip Conveyor
- VP1201 Variable Vise Pressure System
1 Vise
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon

Clausing/Kalamazoo 51" (1300mm) Semi- Automatic Bandsaw

Features:

- The extra heavy-duty saw frame is supported by two large bore hydraulic cylinders, providing unsurpassed rigidity, and the smoothest cutting possible
- Dual Column design with precision ground columns ensures smooth saw frame movement and consistent cutting force throughout the cutting cycle
- Specially designed planetary gear reducer for optimum mechanical efficiency
- Inverter controlled infinitely variable blade speed with blade speed indicator
- Independent wire brush system
- Hydraulically powered guide arm is positioned from the control panel
- Automatic hydraulic blade tension device
- Carbide blade guides are activated hydraulically
- Additional blade guiding bearings for extra support
- Heavy cast iron moveable Guide Arm is hydraulically powered from the control panel
- Auto "shut off" function
- User-friendly control panel
- Precision Feed Pressure control valve with micro-precision adjustment
- Saw Blade Height Selector
- Hydraulic driven work bed with rollers for moving large material safely
- Three sets of vises design. The front and middle vises hold the stock during cutting while the guide vise can be separately controlled to guide the material during feeding cycle
- Stock position cylinder pushes stock away from fixed vise for easy material handling
- Shadow light for material measurement
- Blade breakage and/or slippage detector
- One general purpose saw blade
- Tool box, leveling pads, and an additional wire brush
- Vibration damper
- Operation & parts manual
- Two (2) year limited warranty

Accessories

- CM5101H Chip Conveyor
- VP1201 Variable Vise Pressure System
1 Vise
- P10 Stock Stand Assembly 21" - 30"
- CSR1 SAWZIT 1 Gallon
- CSR5 SAWZIT 5 Gallon



Specifications

Model	H5167SA
Motor	20 hp (11.2kw), 230v 3ph*
Hydraulic Pump Motor	3 hp (2.2kw)
Hydraulic Oil Capacity	35 Gallons (160 Liters)
Blade Speeds (Variable Speed)	49-264 fpm (15-80 M/min)
Blade Size (W x T x L)	3" x .063" x 42'-8" (80 x 1.6 x 13000mm)
Blade Tension	Hydraulic
Coolant	Recirculating
Coolant Capacity	44 Gallons (200 Liters)
90° Cutting Capacity	
Round	51" (1300mm)
Square	51" (1300mm)
Rectangular	51" x 67" (1300 x 1700mm)
Length	118" (3000mm)
Width	232" (5892mm)
Height	166.5" (4228mm)
Bed Height	24.4" (620mm)
Net Weight	48,500 lbs. (22000kg)
Shipping Weight	51,410 lbs. (23320kg)

*Other voltages optional may require a transformer or special order.

Design and specifications are subject to change without notice.

Tilt Frame Miter Saw

The VG450M/VG450MP Heavy-duty Vertical Tilt Frame Miter Bandsaw is a Large Capacity, High Precision Cutting Machine



Model VG450MP
Shown

Saw Features...

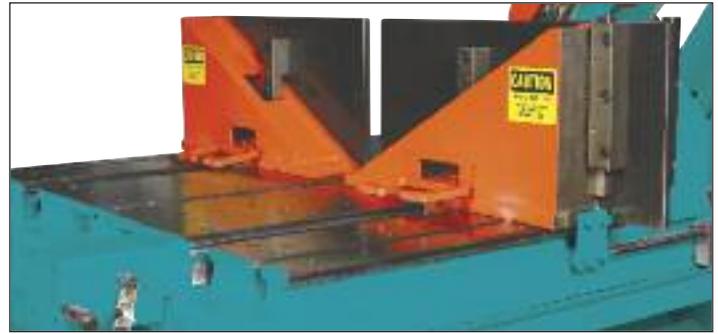
- ◆ **Great versatility, fast and easy set-up...** The saw frame tilts to any angle between 60° left and 60° right.
- ◆ **Large cutting capacity...** Up to 26.4" x 19.1" at 90°, 18.3" x 19.1" at 45° left and right and 12.8" x 19.1" at 60° left and right
- ◆ **Front mounted control panel...** Easily control all sawing functions, miter angle, blade speed, etc.
- ◆ **Cutting control...** Infinitely variable hydraulic cutting pressure controlled from control panel
- ◆ **Canted saw frame...** Saw frame can be manually canted from 0° to 5° forward for more efficient cutting
- ◆ **Flood coolant...** Equipped with a recirculating flood coolant system
- ◆ **Large work area...** By removing the movable front vise jaw, large bulky parts or irregular shaped work pieces can be manually clamped to the large work table
- ◆ **Easy loading and unloading...** Saw frame moves behind fixed back vise jaw to allow easy loading and unloading of workpiece from top or side
- ◆ **Precision guidance...** Precision saw bow guided by solid carbide blade guides with rollers along with a very rigid frame design, produces very precise cuts
- ◆ **Blade tension control...** Equipped with hydraulic blade tension with pressure indicator
- ◆ **Small footprint...** For such a large cutting area, the machine requires only a L 94.5" x W 59.1" footprint

Tilt Frame Miter Saw Standard Features



Model VG450MP Control Shown

The front mounted control panel controls all sawing functions such as, blade speed, easy to read blade speed chart, frame feed and on **Model VG450MP**, hydraulic frame tilt, hydraulic left vise clamp/release, hydraulic guide arm, and has a HMI touch screen that control blade START/STOP, coolant START/STOP, SLOW/FAST mode for material feed and frame tilt, frame angle readout and blade speed readout.



Hydraulic Rack Gear Vice (**standard on model VG450MP**) is operated from the control panel. Independent operation of the left and right jaw or both jaws together.

Model VG450M is equipped with manual left vise, manual guide arm positioning and manual rear mounted hand crank with angle gage for headframe tilting



Hydraulic pressure gauges are mounted in the control panel. This lets the operator easily adjust the blade cutting pressure and on models equipped with a hydraulic vise will let the operator adjust hydraulic vise grip pressure.

Specifications

Model	VG450M/VG450MP		At 5° Frame Cant	
	Height	Width	Height	Width
Cutting Capacity				
90° rectangular	26.4" (670mm)	19.1" (485mm)	24" (610mm)	18.3" (465mm)
45° rectangular right	16.5" (419mm)	19.1" (485mm)	15.7" (400mm)	18.1" (460mm)
45° rectangular left	18.3" (465mm)	19.1" (485mm)	16.1" (410mm)	18.1" (460mm)
60° rectangular right	10" (250mm)	17.5" (445mm)	9.4" (239mm)	17.5" (445mm)
60° rectangular left	12.8" (325mm)	19.1" (485mm)	11.8" (300mm)	17.5" (445mm)
Blade speed (infinitely variable)	66-264 ft/min (20-80 M/min)			
Feed range	0-132 lb/f (0-60 kg/f)			
Work table size	17.7" x 33.4" (450 x 850mm)			
Work table height	39.4" (1000mm)			
Bandwheel diameter	18" (458mm)			
Max. vise opening	19.1" (485mm)			
Jaw size	16.7" x 9.2" (425 x 235mm)			
Coolant capacity	22.1 gallons (85 liters)			
Coolant pump	1/4 hp (.185 kw)			
Blade size	192.1" x 1.25" x .043" (4880 x 32 x 1.1mm)			
Drive motor	5 hp (3.75 kw) (230/460v 3ph)			
Net weight	5705/5815 lbs. (2588/2638kg)			
Shipping weight	6005/6115 lbs. (2724/2774kg)			
Dimensions L / W / H	122" (3098mm) / 89" (2260mm) / 97" (2499mm)			

All specifications subject to change without notice or obligation.

Standard Features

- ◆ Powerful 5 Hp 230/3/60v drive motor
- ◆ Inverter variable speed drive
- ◆ Solid carbide blade guides
- ◆ Flood coolant system
- ◆ Operation and parts manual
- ◆ Hydraulic frame feed

VG450MP Features Only

- ◆ Hydraulic frame tilt positing
- ◆ Hydraulic left vise
- ◆ Hydraulic guide arm
- ◆ Hydraulic blade tension with pressure indicator
- ◆ Digital display of miter angle, 0.1° accuracy

Optional Equipment

- ◆ 7022 Work Light
- ◆ SA-26T 25" x 10" Heavy-Duty Roller Table, Adjustable Height 31" to 39"
- ◆ SA-27T 25" x 5" Heavy-Duty Roller Table, Adjustable Height 31" to 39"
- ◆ VG-RVISE Right Side Manual Vise (Model VG450M only)
- ◆ VG-RVISE-H Right Side Hydraulic Vise (Model VG450MP only)

Clausing Kalamazoo Vertical Bandsaws

Features:

- 230v/460v/60/3 electricals
- Magnetic starter with 110v control circuit and overload protection
- 3 hp (2.2kw) TEFC motor
- Dual range transmission
- 1/2" (13mm) and 3/4" (19mm) Chevron type blade guides with back-up roller
- 26-3/4" (680mm) x 29" (736mm) heavy-duty cast iron table with two-way tilt (15°L & 45°R)
- 26-3/4" (680mm) x 29" (736mm) heavy-duty cast iron table with two-way tilt (15°L & 45°R) four (4) T-Slots on top (hydraulic table only) table travel 13"
- Bonded rubber band wheels
- 110v work light
- Built-in air chip blower
- Blade tension indicator
- Blade speed indicator
- 3/4" (19mm) carbon hardback blade
- Locking band wheel doors
- Operation and parts manual
- Two (2) year limited warranty



Specifications:

Model	V2012F	V2012H	V2812F	V2812H
Throat	20" (508mm)	20" (508mm)	28" (710mm)	28" (710mm)
Work Height	12.75" (325mm)	12.75" (325mm)	12" (305mm)	12" (305mm)
Drive Motor	3 hp (2.2kw)	3 hp (2.2kw)	3 hp (2.2kw)	3 hp (2.2kw)
Blade Length	159"-162" (4040-4115mm)	159"-162" (4040-4115mm)	197"-199" (5004-5055mm)	197"-199" (5004-5055mm)
Blade Width	1/8"-1" (3-25mm)	1/8"-1" (3-25mm)	1/8"-1" (3-25mm)	1/8"-1" (3-25mm)
Blade Speed (fpm)	50-5200	50-5200	50-5200	50-5200
Dimensions				
Length	51" (1295mm)	51" (1295mm)	61" (1550mm)	61" (1550mm)
Width	41" (1040mm)	44" (1117mm)	41" (1040mm)	44" (1117mm)
Height	81" (2057mm)	81" (2057mm)	91" (2311mm)	91" (2311mm)
Net Weight	1,390 lbs. (630kg)	1,500 lbs. (680kg)	1,650 lbs. (748kg)	1,760 lbs. (798kg)
Shipping Weight	1,540 lbs. (698kg)	1,650 lbs. (748kg)	1,800 lbs. (816kg)	1,900 lbs. (861kg)

Optional Equipment

- 1" Capacity Blade Welder, Shear and Flash Grinder
- Rip Fence
- Circle Cutting Attachment
- Miter Gauge
- Workholding Jaws
- 1/8", 1/4", 3/8", 1/2", 5/8", 3/4" and 1" Chevron Guide Inserts

All specifications subject to change without notice or obligation.

Clausing Kalamazoo Large Capacity 14" x 40" Vertical Bandsaws

Features:

- 230/460/60/3 electricals
 - Magnetic starter with 110V control circuit and overload protection
 - 5 hp TEFC motor, with brake (full stop from max. speed within 10 seconds)
 - Dual range transmission
 - 1" (25.4mm) Chevron type blade guides with back-up roller
 - 29" (737mm) W x 27" (686mm) L heavy-duty cast iron table with two-way tilt (15°L & 45°R)
 - 29-1/2" (749mm) W x 27-1/2" (699mm) L heavy-duty cast iron table with two-way tilt (15°L & 45°R) Four (4) T-slots on top (hydraulic table only) table travel 13" (330mm)
 - Auxiliary table 19" (483mm) W x 26-3/4" (679mm) L
 - Bonded rubber band wheels
 - 110V work light
 - Built-in air chip blower
 - Blade tension indicator
 - Blade speed indicator
 - 1" (25.4mm) carbon hardback blade
 - Locking band wheel doors
 - Operation and parts manual
 - Two (2) year limited warranty
- ## Optional Equipment
- 1" Capacity Blade Welder, Shear and Flash Grinder (Carbon stock only)
 - Rip Fence
 - Circle Cutting Attachment
 - Miter Gauge
 - Workholding Jaws
 - 1/8", 1/4", 3/8", 1/2", 5/8", 3/4" and 1" Chevron Guide Inserts



Specifications:

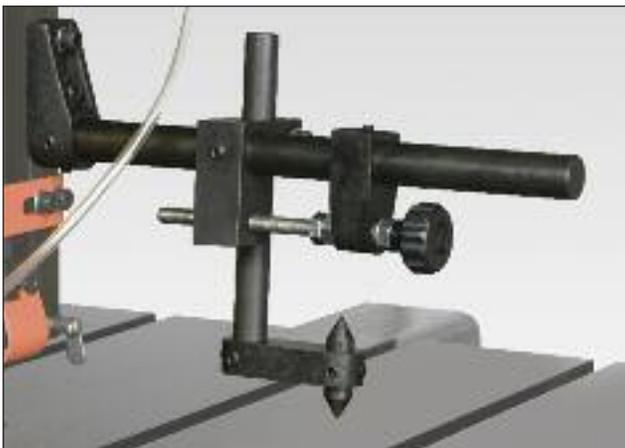
Model	V4014F	V4014H
Throat	40" (1016mm)	40" (1016mm)
Work Height	14" (356mm)	14" (356mm)
Table Height	54" (1372mm)	54" (1372mm)
Drive Motor	5 hp (3.75kw)	5 hp (3.75kw)
Blade Length	260"-263" (6604-6680mm)	260"-263" (6604-6680mm)
Blade Width	1/8"-1 1/4" (3-25mm)	1/8"-1 1/4" (3-25mm)
Blade Speed (fpm)	50-5200	50-5200
Dimensions		
Length	72" (1829mm)	72" (1829mm)
Width	39" (991mm)	39" (991mm)
Height	113" (2870mm)	113" (2870mm)
Net Weight	2,976 lbs. (1350kg)	3,395 lbs. (1540kg)
Shipping Weight	3,395 lbs. (1540kg)	3,627 lbs. (164kg)

All specifications subject to change without notice or obligation.

Clausing Kalamazoo Vertical Bandsaw Accessories



Part No.	Description	Weight
KM388F	Rip Fence, Fixed Table	10 lbs.
KM388H	Rip Fence, Hydraulic Table	10 lbs.



Part No.	Description	Weight
KM260	Circle Cutting Attachment	8 lbs.

Part No.	Description	Weight
KM2002	Workholding Jaw*	37 lbs.

*for H models only



Clausing Kalamazoo Vertical Bandsaw Material Handling

Part No.	Description	Weight
SA24T*	21" x 10' (31" - 39") Heavy-Duty Roller Table	485 lbs.
SA25T*	21" x 5' (31" - 39") Heavy-Duty Roller Table	325 lbs.
SA26T*	25" x 10' (31" - 39") Heavy-Duty Roller Table	500 lbs.
SA27T*	25" x 5' (31" - 39") Heavy-Duty-Roller Table	325 lbs.

*will not fit V4014F/V1014H models



Miter Gauge for Hydraulic Table Shown

Part No.	Description	Weight
KM198	Miter Gauge Fixed Table	30 lbs.
KM198H	Miter Gauge Hydraulic Table	7 lbs.



Clausing Installed Welder, Shear, Grinder (welders only go to 1")

Part No.	Voltage	Weight
SM1975/H	230v	60 lbs.
SM1975/R	460v	60 lbs.



Part No.	Description
KM1250	Chevron Guide Inserts 1/8" (set of 4)
KM2500	Chevron Guide Inserts 1/4" (set of 4)
KM3750	Chevron Guide Inserts 3/8" (set of 4)
KM5000	Chevron Guide Inserts 1/2" (set of 4)
KM7500	Chevron Guide Inserts 3/4" (set of 4)
KM1000	Chevron Guide Inserts 1" (set of 4)

Clausing Kalamazoo Manual Ferrous Cutting Circular Saw

Features:

- 230v/460v/60/3 electricals
- Trigger operated on/off in handle grip
- Totally enclosed fan-cooled motor
- Enclosed worm gear drive for trouble-free operation
- Two speeds for versatility
- Cast iron construction
- Self-centering vise with angle scale
- Head rotates 45 degrees left and right of center
- Flood coolant system
- Heavy-duty sheet metal base
- Adjustable stock stop
- Tool kit
- Circular saw blade
- Operation and maintenance manual
- Two (2) year limited warranty

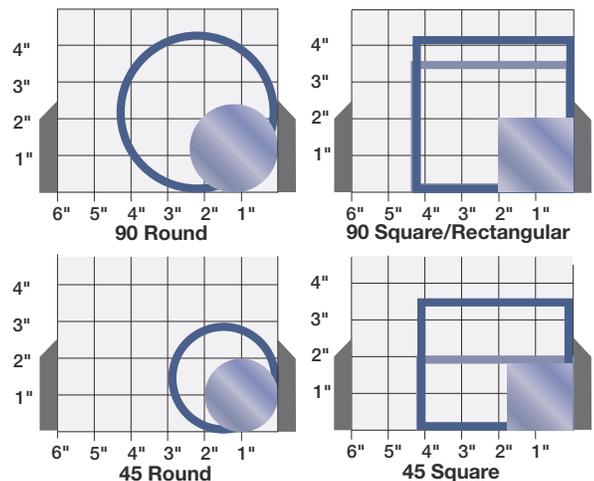
Specifications:

Model	FHC350D
Drive Motor	3/4 hp (2/3kw)
Angles (Left & Right)	45°
Electricals	230v. or 460v. - 3ph
Control	110v.
Coolant Capacity	3.5 gal. (13 liters)
Spindle Speeds	26/52 rpm
Max. Blade Size	10-14" (250-350mm)
Max. Vise Opening	6" (152mm)
Recommended Cutting Capacity	
Round Tube @ 90°	4.33" (110mm)
Round Tube @ 45°	2.95" (75mm)
Square Tube @ 90°	4.33" (110mm)
Square Tube @ 45°	3.54" (90mm)
Rectangular Tube @ 90°	4.33" x 3.54" (110 x 90mm)
Rectangular Tube @ 45°	4.33" x 2" (110 x 50mm)
Round Solid @ 90°	2.36" (60mm)
Round Solid @ 45°	2" (50mm)
Square Solid @ 90°	2" (50mm)
Square Solid @ 45°	1.77" (45mm)
Dimensions	
Machine Dimensions L x W x H	55" x 30" x 66" (1400 x 1050 x 1900mm)
Shipping Dimensions L x W x H	30" x 42" x 66" (750 x 1060 x 1510mm)
Net Weight	660 lbs. (300kg)
Shipping Weight	792 lbs. (360kg)

Optional Equipment:

- 5' Roller Stock Table
- 10' Roller Stock Table
- 37" - 46" Stock Stand
- 1 Gallon SAWZIT Saw Lubrication
- 5 Gallon SAWZIT Saw Lubrication

Capacity Chart:



All specifications subject to change without notice or obligation.

Clausing Kalamazoo Pneumatic Vice Ferrous Cutting Circular Saw

Features:

- 230v/460v/60/3 electricals
- Trigger operated ON/OFF in handle grip
- Totally enclosed fan-cooled motor
- Enclosed worm gear drive for trouble-free operation
- Two speeds for versatility
- Cast iron construction
- Self-centering vise with angle scale
- Head rotates 45 degrees left and right of center
- Flood coolant system
- Heavy-duty sheet metal base
- Adjustable stock stop
- Tool kit
- Circular saw blade
- Operation and maintenance manual
- Two (2) year limited warranty



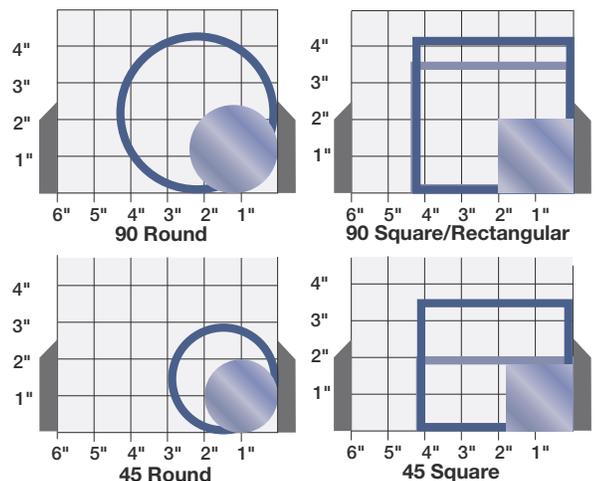
Specifications:

Model	FHC350P
Drive Motor	3/4 hp (2/3kw)
Angles (Left & Right)	45°
Electricals	230v. or 460v. - 3ph
Control	110v.
Coolant Capacity	3.5 gal. (13 liters)
Spindle Speeds	26/52 rpm
Max. Blade Size	10-14" (250-350mm)
Max. Vise Opening	6" (152mm)
Recommended Cutting Capacity	
Round Tube @ 90°	4.33" (110mm)
Round Tube @ 45°	2.95" (75mm)
Square Tube @ 90°	4.33" (110mm)
Square Tube @ 45°	3.54" (90mm)
Rectangular Tube @ 90°	4.33" x 3.54" (110 x 90mm)
Rectangular Tube @ 45°	4.33" x 2" (110 x 50mm)
Round Solid @ 90°	2.36" (60mm)
Round Solid @ 45°	2" (50mm)
Square Solid @ 90°	2" (50mm)
Square Solid @ 45°	1.77" (45mm)
Dimensions	
Machine Dimensions L x W x H	55" x 30" x 60" (1400 x 1050 x 1900mm)
Shipping Dimensions L x W x H	30" x 42" x 66" (750 x 1060 x 1510mm)
Net Weight	660 lbs. (300kg)
Shipping Weight	792 lbs. (360kg)

Optional Equipment:

- 5' Roller Stock Table
- 10' Roller Stock Table
- 37" - 46" Stock Stand
- 1 Gallon SAWZIT Saw Lubrication
- 5 Gallon SAWZIT Saw Lubrication

Capacity Charts:



All specifications subject to change without notice or obligation.

Clausing Kalamazoo Semi-Automatic Ferrous Cutting Circular Saw

Features:

- 230v/460v/60/3 electricals
- Totally enclosed fan-cooled motor
- Enclosed worm gear drive for trouble-free operation
- Two speeds for versatility
- Cast iron construction
- Self-centering vise with angle scale
- Head rotates 45 degrees left and right of center
- Automatic cutting cycle
- Automatic feed rate
- Flood coolant system
- Heavy-duty sheet metal base
- Adjustable stock stop
- Tool kit
- Circular saw blade
- Operation and maintenance manual
- Two (2) year limited warranty



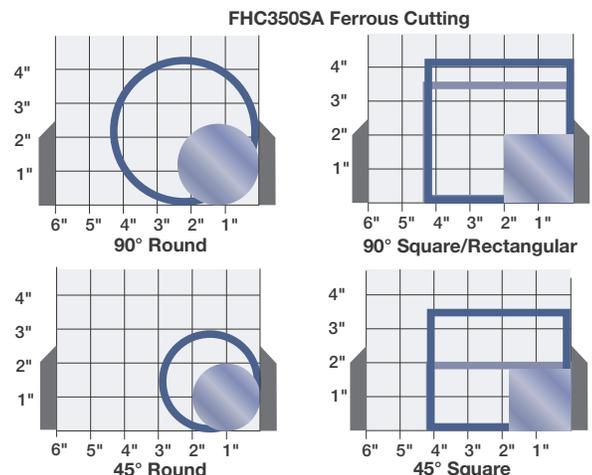
Specifications:

Model	FHC350SA
Drive Motor	3/4 hp (2/3kw)
Angles (left & right)	45°
Electricals	230v. or 460v. - 3ph
Control	110v.
Coolant Capacity	3.5 Gallon (13 Liters)
Spindle Speeds	26/52 rpm
Max. Blade Size	10" - 14" (250 - 350mm)
Max. Vise Opening	6" (152mm)
Cutting Capacity	
Round Tube @ 90°	4.33" (110mm)
Round Tube @ 45°	2.95" (75mm)
Square Tube @ 90°	4.33" (110mm)
Square Tube @ 45°	3.54" (90mm)
Rectangular Tube @ 90°	4.33" x 3.54" (110 x 90mm)
Rectangular Tube @ 45°	4.33" x 2" (110 x 50mm)
Round Solid @ 90°	2.36" (60mm)
Round Solid @ 45°	2" (50mm)
Square Solid @ 90°	2" (50mm)
Square Solid @ 45°	1.77" (45mm)
Dimensions	
Machine Dimensions L x W x H	55" x 30" x 60" (1400 x 1050 x 1900mm)
Shipping Dimensions L x W x H	30" x 42" x 66" (750 x 1060 x 1510mm)
Net Weight	660 lbs. (300kg)
Shipping Weight	792 lbs. (360kg)

Optional Equipment:

- 5' Roller Stock Table
- 10' Roller Stock Table
- 37" - 46" Stock Stand
- 1 Gallon SAWZIT Saw Lubrication
- 5 Gallon SAWZIT Saw Lubrication

Capacity Chart:



All specifications subject to change without notice or obligation.

Clausing "Worksaver" HSS Circular Saw Blades for Ferrous Cutting

Blade No.	Size		TPI	No. of Teeth	Pitch
	In.	mm			
CB99	10	250	10	320	2½
CB100	10	250	8	250	3
CB101	10	250	6	200	4
CB102	10	250	5	160	5
CB103	10	250	4	128	6
CB104	10	250	3	100	8
CB105	10	250	2½	80	10

CB98	11	275	10	350	2½
CB106	11	275	8	280	3
CB107	11	275	6	220	4
CB108	11	275	5	180	5
CB109	11	275	4	140	6
CB110	11	275	3	110	8
CB111	11	275	2½	84	10
CB122	11	275	2	70	12

Blade No.	Size		TPI	No. of Teeth	Pitch
	In.	mm			
CB112	12½	315	8	300	3
CB113	12½	315	6	240	4
CB114	12½	315	5	200	5
CB115	12½	315	4	160	6
CB116	12½	315	3	120	8
CB117	12½	315	2½	100	10
CB118	12½	315	2	80	12
CB119	12½	315	1½	70	14
CB125	14	350	8	350	3
CB126	14	350	6	280	4
CB127	14	350	5	220	5
CB128	14	350	4	180	6
CB129	14	350	3	140	8
CB130	14	350	2½	110	10
CB131	14	350	2	90	12
CB132	14	350	1½	80	14

All arbor holes 1.260" (32mm) with two pin holes. 8mm on 45mm dia. circle and with two pin holes 11mm on 63mm dia. circle and 4 pin holes 9mm on 50mm dia. circle. All blades special oxide coated for extended life. Thickness, 250 = 2.0mm, 275/315/325 = 2.5mm, 350 = 3.0mm.

Carbide Tipped Circular Saw Blades for Aluminum and other Nonferrous Materials (NA models only)

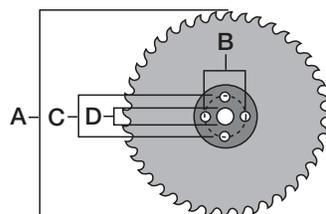
Blade No.	Diameter MM (in.)	No. of Teeth	Teeth per Inch
MB207	350 (14)	120	3
MB208	350 (14)	108	2.5
MB209	350 (14)	84	1.5
MB210	350 (14)	48	1

Our Carbide Tipped Circular Saw Blades have triple chip grinds and 32mm Arbor holes

Clausing Worksaver

Clausing Worksaver Blades are manufactured of the finest quality M2 steel available. These high speed steel blades are oxide treated to retain strength hardness, and facilitate coolant penetration. They have a hardness of 63-65 RC.

- A Diameter (specify)
- B Pinhole size
8mm on 45mm center (2 ea.)
- C Pinhole size
11mm on 63mm center (2 ea.)
- D 32mm



Spindle Speed, Blade Size - Surface Feet Per Minute

Spindle RPM	20	26	30	32	40	52	60	64
Blade Size	Surface feet per minute							
315mm (12.5")	65	85	98	105	130	170	195	210
350mm (14)	72	95	108		144	190	217	

Blade Selection

	inch	.400	.750	1.25	1.50	2.00
● Solid	mm	10	20	30	40	50
○ Tubing	wall" diameter"	.049 3/4	.083 1.0	.125 1.5	.187 2.0	.250 2.5
WORKSAVER blades Teeth per inch						
8	○					
6	●	○				
5				○		
4			●		○	
3				●		○
2½					●	●

Note: At least 2-3 teeth must engage the work at all times and not more than 7.



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