

# Clausing Drill Presses

600 Group

*Celebrating Over 100 Years  
in the Machine Tool Business*

*Variable Speed 20" Single and  
Multi-spindle, Belt Drive Industrial  
Drill Presses*



Two Speed Variable Speeds 150-2000rpm  
Variable Speeds 200-1300rpm  
Variable Speeds 300-2000rpm

# Clausing 20"

# Drill Presses

## Infinitely Variable Speed Countershaft Drive...

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" Two Speed 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.

**3 MT spindle...** with 6-1/2" travel, 2-1/2" diameter quill and micrometer depth stop.

4" column with 3/16" thick wall for great rigidity and accuracy. Precision ground 22" x 19" oil through table, handles large parts and fixtures.



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 with 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



### Style B

Head & Column Assembly and 20-501 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.**

## Specifications:

Capacity, hand feed	1.25" (31.75mm) dia.
Production rated, with optional power feed, 11/2 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)
<b>TABLE, DRILL PRESS Style A</b>	
Working surface	22" x 19.5" (559 x 495mm)
Table slots	two, 15.5" (394mm) long, for .5" (12.7mm) T-bolt
Table travel, one setting	20" (508mm)
Spindle to table, maximum	33.125" (841mm)
<b>BASE, DRILL PRESS Style A</b>	
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)
<b>DRILL PRESS Style B</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 <b>Style A</b>	630 lbs. (286kg)
Drill press <b>Style B</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.

## 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 <b>Style A</b>	22" (559mm)	36" (914mm)	69" (1753mm)
Drill Press <b>Style B</b>	20" (508mm)	3.25" (870mm)	51.625" (1311mm)

## Infinitely Variable Speed Countershaft Drive

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

\*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.



**\*\*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 assembly 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 a special request, contact us for a quotation. \*Special orders priced on application.*

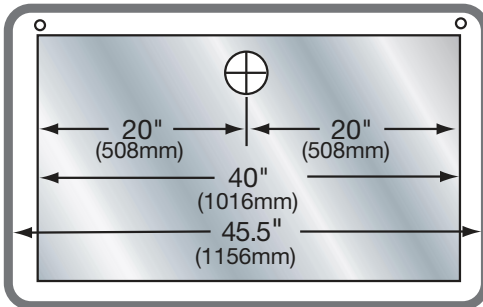


(1) 2286-300 Head & Column Assembly and  
**20-501** 45.5" x 29.5" (1156 x 750mm) Table with Legs



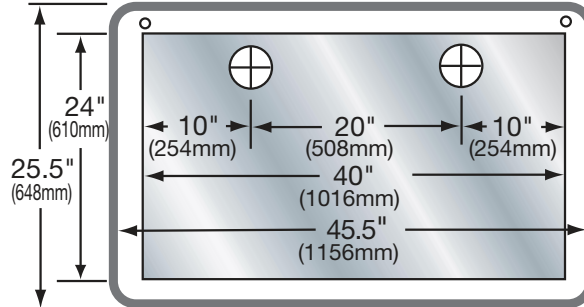
(4) 2286-300 Head & Column Assembly and  
**20-504** 85.5" x 29.5" (2172 x 750mm) Table with Legs

## 20-501 • 1-Spindle

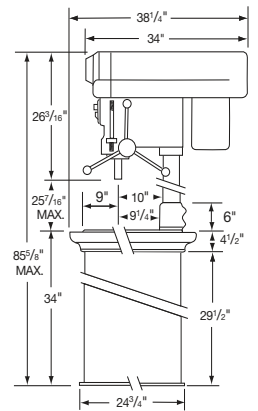


One piece table, two legs furnished

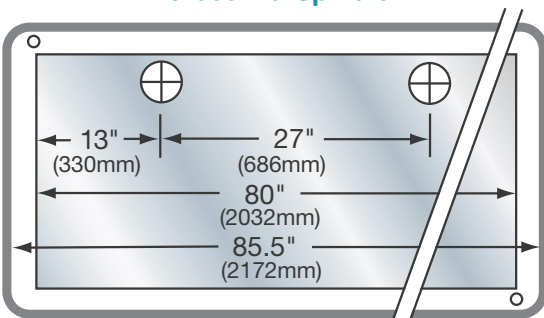
## 20-502 • 2-Spindle



One piece table, two legs furnished

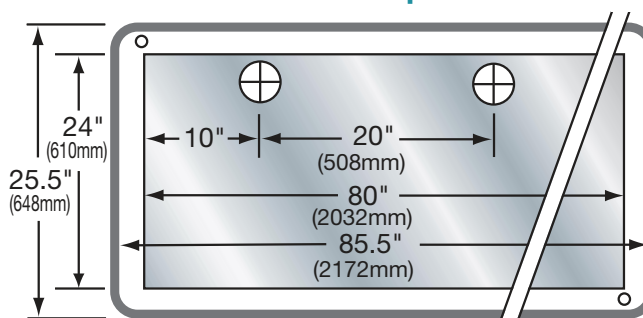


## 20-503 • 3-Spindle



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

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 withdrawing 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 - 60 ipm (0.25 - 1500mm/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. (568 kg)
LED Numerals:	5/8" (15.9mm) high
Control Power:	220/230 volt, 50/60 Hz Single or Three Phase
Max. Drilling Capacity:	1" (25.4mm) in cast iron 3/4" (19mm) in mild steel

## Electric Foot Control

### No. 302 Electric Foot Control

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

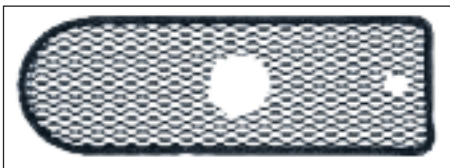
**No. 302R2 Electric Foot Control with reversing drum switch for two speed drills** Start and stop drill from foot pedal



## Mesh Guard

### No. SK-208

Top Mesh  
Belt Guard



## Coolant System

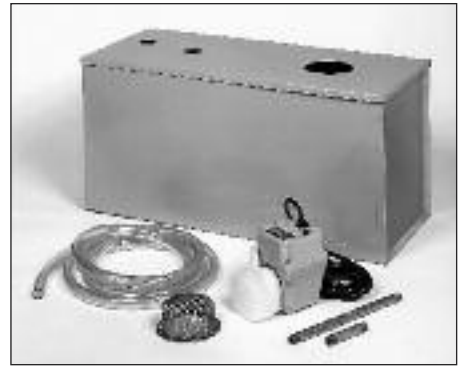
**No. 7044 Coolant System.** 5 gallon capacity, 110 volt, 60 cycle single-phase motor, for single spindle drills. Flexible nozzle with regulator valve, plastic hose, clamps, fittings, cord and plug. 18 lbs.

### 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 Chuck and Arbor



**No. 1897 Key-Type Chuck.** Takes 3/16" (4.8mm) to 3/4" (19mm) drills. Adapts to 3JT spindle with No. 1898 arbor. 4 lbs. (1.8kg)

**No. 1898 Arbor.** Adapts No. 1897 to 3JT spindle. 1 lb. (.5kg)

## 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)



Your Single Source for Machine Tools

### Clausing Precision Drills

- Clausing Belt-drive Drills
- Clausing Geared-head Drills
- Clausing Radial Drills

### Clausing Precision Mills

- Clausing Bed Mills
- Clausing CNC Bed Mills
- Clausing Knee Mills
- Clausing EVS Knee Mills
- Clausing Universal Mills

### Clausing Precision Lathes

- Clausing/Colchester Geared Head Lathes
- Clausing/Colchester Professional V.S. Lathes
- Clausing/Metosa Geared Head & V.S. Lathes
- Clausing/Metosa CNC Lathes
- Clausing Large Swing Standard and CNC Lathes

### Clausing Precision Grinders

- Clausing Manual Grinders
- Clausing 2 Axes Hydraulic Grinders
- Clausing 3 Axes Hydraulic Grinders
- Clausing ASDIII Automatic Grinders

### Clausing Precision Cutting Machines

- Clausing/Kalamazoo Horizontal Bandsaws
- Clausing/Kalamazoo Vertical Bandsaws
- Clausing/Kalamazoo Cold Saws

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# 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 **MCC-KT**  
13.8" x 10.8 cross  
slide table



Controls mounted on the front  
of the headstock for operator  
convenience for fast and easy  
speed selection

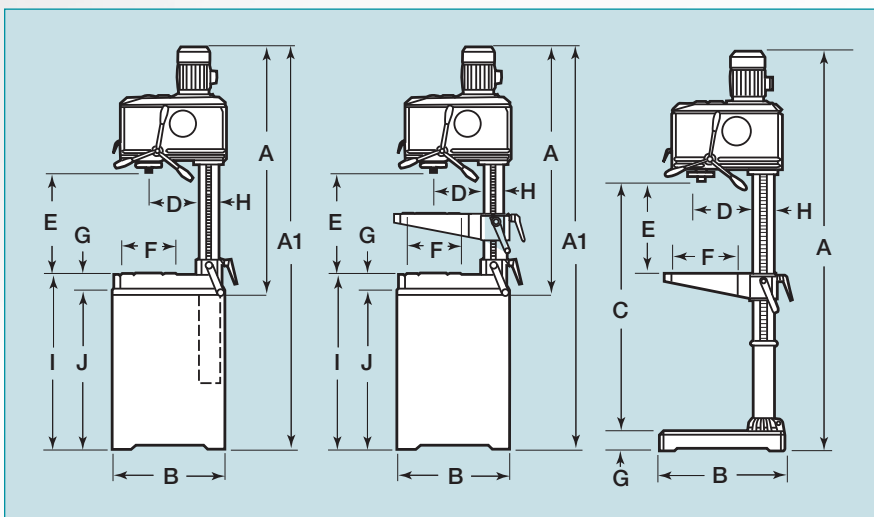
# Capacities, Specifications and Dimensions

Models Auto feed reversing "RS" Models	TS18	TM18	TL18	TS25 TS25RS	TM25 TM25RS	TL25 TL25RS
<b>Capacities:</b>						
Maximum drilling capacity in steel	.71" (18mm)	.71" (18mm)	.71" (18mm)	1" (25mm)	1" (25mm)	1" (25mm)
Maximum drilling capacity in cast iron	1" (25mm)	1" (25mm)	1" (25mm)	1.18" (30mm)	1.18" (30mm)	1.18" (30mm)
Maximum tapping capacity in steel	.55" (14mm)	.55" (14mm)	.55" (14mm)	.71" (18mm)	.71" (18mm)	.71" (18mm)
Maximum tapping capacity in cast iron	.71" (18mm)	.71" (18mm)	.71" (18mm)	.87" (22mm)	.87" (22mm)	.87" (22mm)
<b>Specifications:</b>						
Spindle taper	3MT	3MT	3MT	3MT	3MT	3MT
Quill diameter	2.44" (62mm)	2.44" (62mm)	2.44" (62mm)	2.44" (62mm)	2.44" (62mm)	2.44" (62mm)
Spindle travel (drilling depth)	4.72" (120mm)	4.72" (120mm)	4.72" (120mm)	4.72" (120mm)	4.72" (120mm)	4.72" (120mm)
Main motor power	.75/1.1 Hp (.55/.80 Kw)			1/1.5 Hp (.73/1.1 Kw)		
No. of speeds (see speed charts)	8	8	8	8	8	8
<b>Dimensions and Weights</b>						
Height (A)	47.6" (1210mm)	48.4" (1230mm)	75.8" (1925mm)	47.6" (1210mm)	48.4" (1230mm)	75.8" (1925mm)
Height (A1)	79.1" (2010mm)	79.9" (2030mm)	-	79.1" (2010mm)	79.9" (2030mm)	-
Base: length x width (B)	22" x 15" (560x380mm)	22" x 15" (560x380mm)	24" x 15" (600x380mm)	22" x 15" (560x380mm)	22" x 15" (560x380mm)	24" x 15" (600x380mm)
Base to spindle (C)	See (E)	20.9" (530mm)	47.6" (1210mm)	See (E)	20.9" (530mm)	47.6" (1210mm)
Spindle center to column (D)	9.84" (250mm)	9.84" (250mm)	9.84" (250mm)	9.84" (250mm)	9.84" (250mm)	9.84" (250mm)
Spindle to Table (E)						
Minimum	4.33" (110mm)	1.18" (30mm)	4.13" (105mm)	4.33" (110mm)	1.18" (30mm)	4.13" (105mm)
Maximum	19.7" (500mm)	12.6" (320mm)	25.2" (640mm)	19.7" (500mm)	12.6" (320mm)	25.2" (640mm)
Worktable: length x width (F)	-	10.6" x 11.8" (270 x 300mm)	-	-	10.6" x 11.8" (270 x 300mm)	-
Base height (G)	3.1" (80mm)	3.1" (80mm)	3.7" (95mm)	3.1" (80mm)	3.1" (80mm)	3.7" (95mm)
Column diameter (H)	3.94" (100mm)	3.94" (100mm)	3.94" (100mm)	3.94" (100mm)	3.94" (100mm)	3.94" (100mm)
Floor to top of base (I)	34.6" (880mm)	34.6" (880mm)	-	34.6" (880mm)	34.6" (880mm)	-
Cabinet height (J)	31.5" (800mm)	31.5" (800mm)	-	31.5" (800mm)	31.5" (800mm)	-
Net weight	298 lbs (135kg)	364 lbs (165kg)	408 lbs (185kg)	298 lbs (135kg)	364 lbs (165kg)	408 lbs (185kg)
Shipping weight	353 lbs (160kg)	419 lbs (190kg)	496 lbs (225kg)	353 lbs (160kg)	419 lbs (190kg)	496 lbs (225kg)
Shipping dimension (length x width x height)	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)	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  
**PKB**  
cabinets





## Clausing Radial Drills Models: CL920A

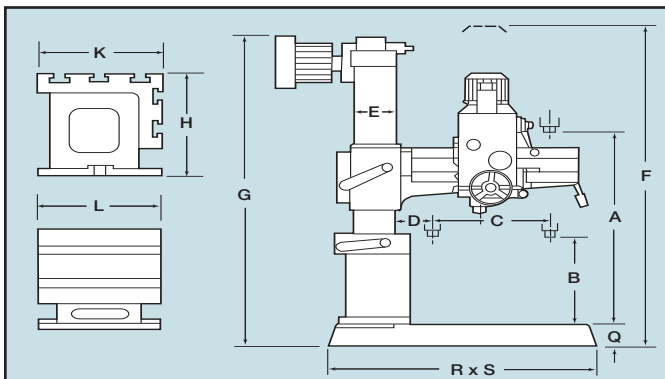
### Features and Standard Equipment:

- 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
- CSA Electrics Standard ● Tool kit and manuals

### Specifications:

Model	CL920A
<b>Working Area:</b>	
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)	25.2" (640mm)
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" (380mm)
Base Dimensions Floor Area (R x S)	49.6" x 25.2" (1260x640mm)
Height (Q)	6.5" (160mm)
<b>Drill Head:</b>	
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)
<b>Dimensions and Weights:</b>	
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
<b>Capacity:</b>	
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)