

Clausing Drill Presses

600Group

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



- Low/High Variable Speeds 150-2000rpm
- Variable Speeds 200-1300rpm
- Variable Speeds 300-2000rpm

Clausing 20"

Drill Presses

Infinitely Variable Speed Countershaft Drive...

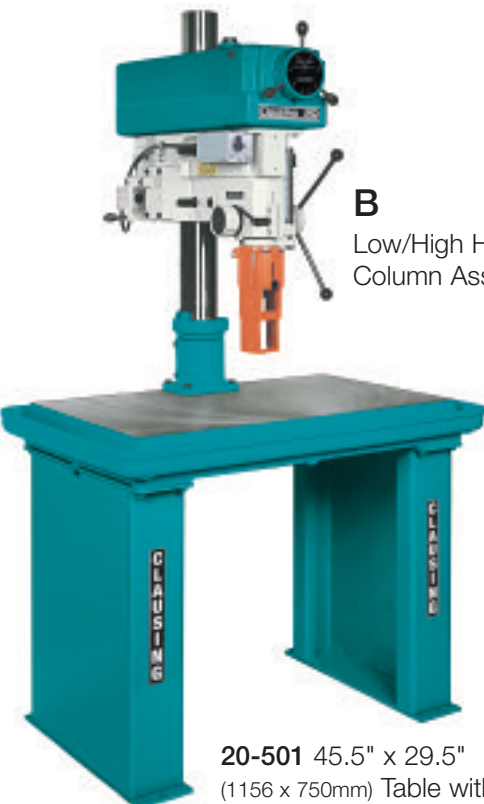
Dial to the best rpm for the tool and material while the job is running, with a Clausing LOW/HIGH Variable Speed Drill Press.

- ◆ 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 LOW/HIGH, production rated 1-1/8" in cast iron, 7/8" in steel with optional power feed.

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

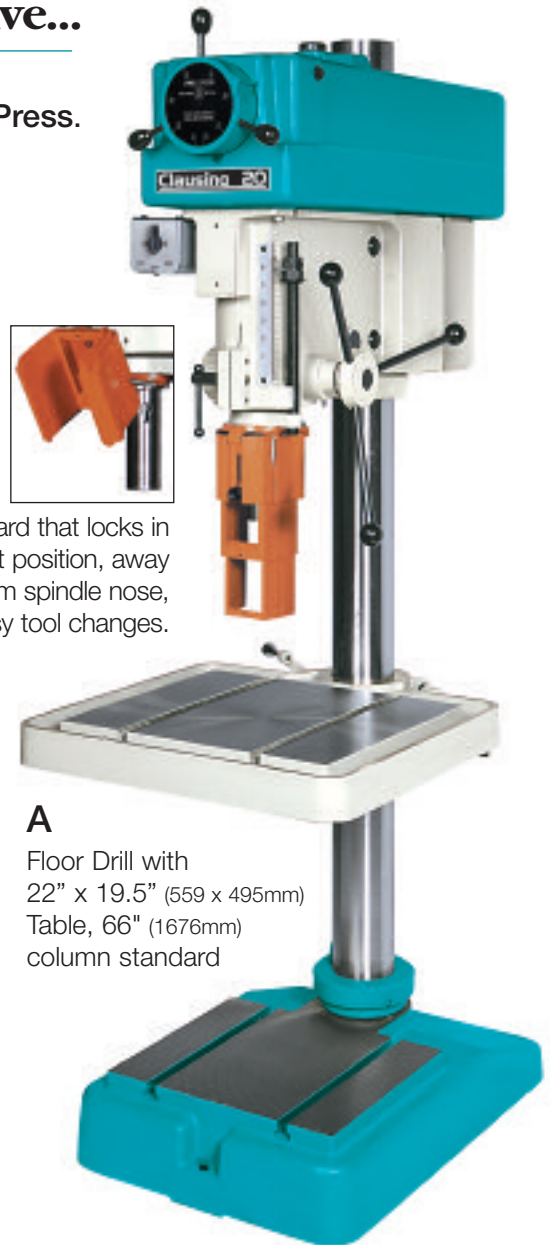
More features for superior performance...

- ◆ **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.
- ◆ **3 MT spindle...** with 6-1/2" travel, 2-1/2" diameter quill and micrometer depth stop.
- ◆ 4" column with 1/2" thick wall for great rigidity, accuracy.
- ◆ Precision ground 22" x 19" oil trough table, handles large parts and fixtures.



20-501 45.5" x 29.5"
(1156 x 750mm) Table with Legs

B
Low/High Head &
Column Assembly



A
Floor Drill with
22" x 19.5" (559 x 495mm)
Table, 66" (1676mm)
column standard

Clausing Drills are equipped with a Spindle Guard that locks in an upright position, away from spindle nose, for easy tool changes.



Powerful Countershaft Drive



- ◆ Three V-belts and a cog belt transmit positive power to the spindle.
- ◆ Variable and spindle pulleys are cast iron, fully machined and balanced.

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	1.125" (28.6mm) in cast iron .875" (22.2mm) 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., .5" (12.7mm) thick wall
Quill (ground steel)	2.5" (63.5mm) dia.
Quill return spring, capacity	40 lbs (18kg)
TABLE, DRILL PRESS A	
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)
BASE, DRILL PRESS 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 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 A	630 lbs. (286kg)
Drill press B	390 lbs. (177kg)

FURNISHED: No. 3 MT spindle; elevating mechanism; switch; belt guard; spindle guard. Motors and switches are installed and wired, ready to connect to power. Single phase motors have 8' three-wire cord and plug.

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 lb.

No. 2371-14 MAGNETIC STARTER for 3-phase. Includes disconnect switch and 110 volt push buttons. Meets NMTBA standards.

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

No. 2377 REVERSING DRUM SWITCH for 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 lb.

For 2-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 lb.

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 lb.

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

Motors

Catalog Number	H.P.	Speed	Phase	Voltage
2868	1½	1140 rpm	3	208/220/440
2871	1½	1725 rpm	3	208/220/440
2872	1½	1725 rpm	1	115/230
2878	¾-1½	900/1800 rpm	3	220
2879	¾-1½	900/1800 rpm	3	460

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

Infinitely Variable Speed Countershaft Drive

Motor Furnished	A Floor Drill 22" x 19" Table	B Low/High Head & Column Assembly
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Low/High Infinitely Variable Speeds: 150-2000 rpm

2-speed, 3-phase, 220v*	2276	2286-300
2-speed, 3-phase, 440v*	2277	2287-300

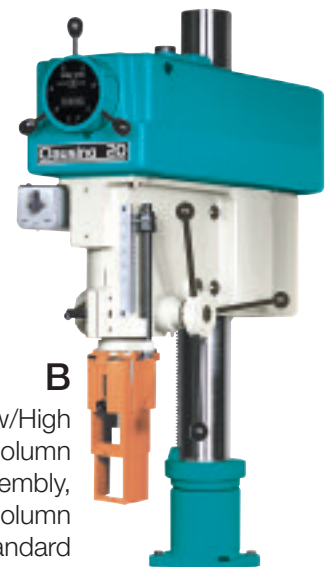
Infinitely Variable Speeds: 200-1300 rpm

1½ Hp, 3-ph, 1140 rpm	2275	2285-300
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Infinitely Variable Speeds: 300-2000 rpm

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.



B
Low/High
Head & Column
Assembly,
43" (1092mm) Column
Standard

Clausing

Clausing Drills can be built for your specific needs.

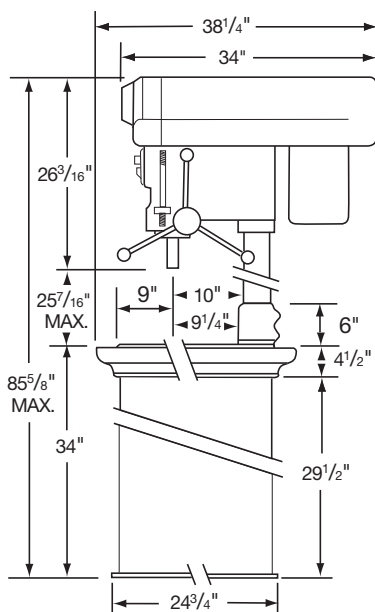
Clausing multiple spindle drills can be custom built with any number of 20" heads, with choice of high or slow speed drives, hand or power feeds, can be combined in a multiple spindle drill to meet your specific requirements.

20" heads see pages 3.

Special orders priced on application



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



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

Multiple Spindle Drill Presses

Build Your Custom Multiple Spindle Clausing Drills.

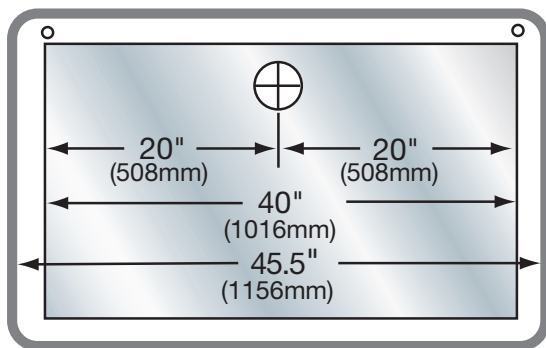
When ordering a multiple spindle drill press use the table model number below for both 20" machines, plus the appropriate head and column assemblies for the corresponding number of heads. Mix and match any number of drill heads as your requirements demand. **Example:** If your wish to have a 3 spindle 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 quotation.

NOTE: Drills with 1 to 4 spindles, unless equipped with air feed, are shipped completely assembled with table mounted on legs. All other models are shipped assembled except that legs must be mounted at destination.

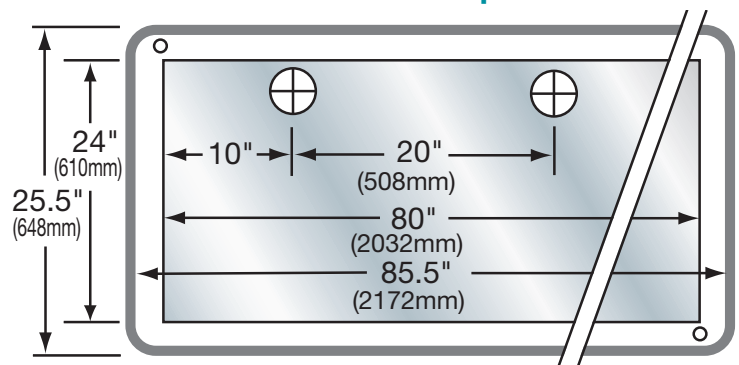
**Special orders priced on application*

20-501 • 1-Spindle



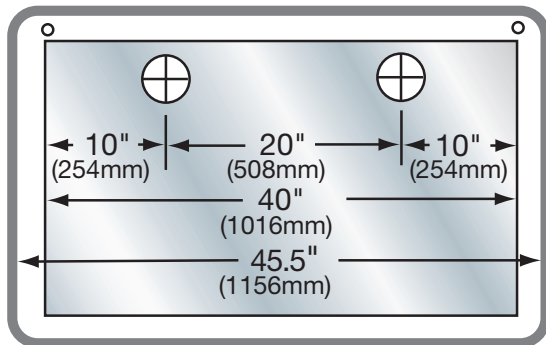
One piece table, two legs furnished

20-504 • 4-Spindle



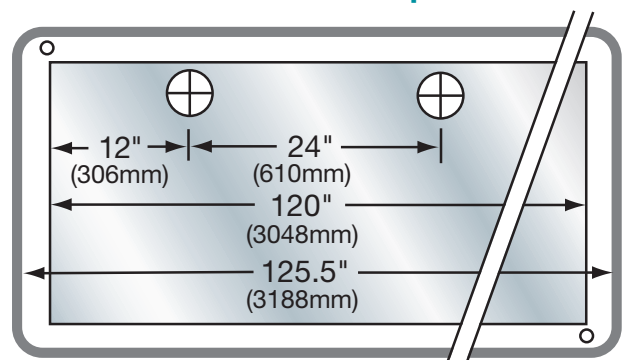
One piece table, two legs furnished

20-502 • 2-Spindle



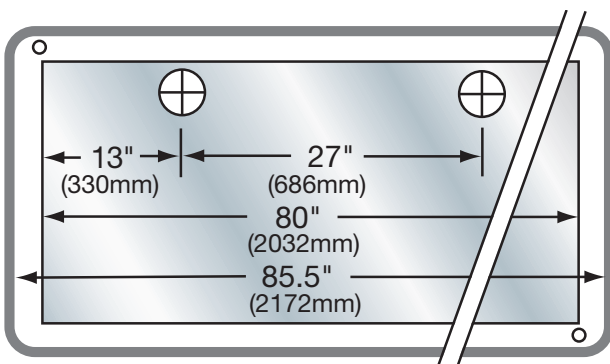
One piece table, two legs furnished

20-505 • 5-Spindle*



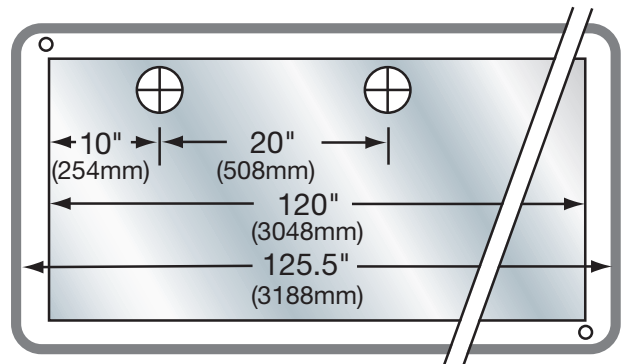
Two piece table, three legs furnished

20-503 • 3-Spindle



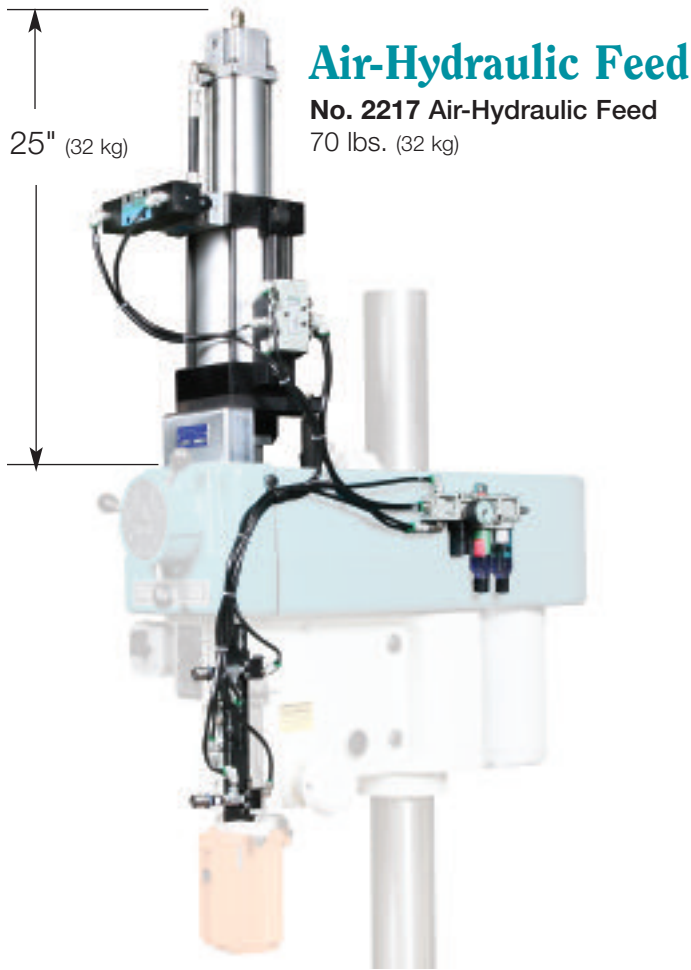
One piece table, two legs furnished

20-506 • 6-Spindle*



Two piece table, three legs furnished

Power Feed Option for 20" Drills



Air-Hydraulic Feed

No. 2217 Air-Hydraulic Feed
70 lbs. (32 kg)

For automatic or semi-automatic production.

Easy to set up. Rapid approach and rapid return are cam actuated... to skip feed, merely change shape of cam. Feeds are infinitely variable, 6" to 60" (13 to 1524mm) per minute... hydraulically controlled for uniformity. Depth stop is micrometer graduated.

In-line thrust assures maximum efficiency ... full power direct to drill point. Ball bearing transfers thrust to spindle ... piston doesn't turn. Cycling controls are air-actuated for trouble-free performance.

Shipped installed when ordered with drill from factory... easily installed on drills in field.

Important Stack Adapters

Factory mounted air feed units for use with multiple drill heads or tapping heads must incorporate adapters to advance the spindle a sufficient distance for mounting the drill or tapping head. Please specify the number of adapters required to coincide with the length of quill needed to mount head.

001-025 Adapter for 20" drills $\frac{3}{8}$ " thick.

Specifications:

Maximum stroke	5.5" (140mm)
Maximum thrust*	1,919 lbs. (870 kg)
Feed, infinitely variable*	.5" to 60" (13 to 1524mm) per min.
Maximum rapid approach*	280 (7112mm) per min.
Depth accuracy	.002" (.05mm)
Air cylinder diameter	5" (127mm)

* At 100 psi. air line pressure



Foot Control Valves

For Air-Hydraulic Feed 20" models

Complete with accumulator, hose, connector.

No. 1618 for one air-hydraulic feed. 3 lbs. (1.4 kg)

No. 1619 for simultaneous operation of 2, 3, or 4 air-hydraulic feeds. 6 lbs. (2.8 kg)



Dual Palm Button

No. 1618A-Dual Palm Button Actuator.

Both palm buttons must be pushed simultaneously in order for drill to feed down to the work piece.

Includes separate, emergency palm button to retract drill. Available for field installation.

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 lb.



No. 2350 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.

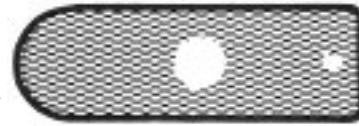
No. 2351 Coolant System. For three (3) spindle drills. Like No. 2350 except arranged for 3 spindles.

No. 2352 Coolant System. For four (4) spindle drills. Like No. 2350 except arranged for 4 spindles.

No. 2353 Coolant System. For five (5) spindle drills. 2-5 gal. tanks, 10 gallon capacity, 110 volt, 60 cycle, single-phase motor. Complete with all valves, hose, fittings, cord and plugs.

No. 2354 Coolant System. For six (6) spindle drills. Like No. 2353 except arranged for 6 spindles.

Mesh Guard



No. SK-208 Top Mesh Belt Guard

Columns

20" Drill Presses

No. 2294-AMT 66" (1676mm) Column in lieu of 43" (1092mm) Column 121 lb., (55kg)

No. 2349-AMT 90" (2286mm) Column in lieu of 66" (1676mm) Column 160 lb., (73kg)

Drill Chuck and Arbor



No. 1897 Key-Type Chuck. Takes $\frac{3}{16}$ " (4.76mm) to $\frac{3}{4}$ " (19mm) drills. Adapts to 3 MT spindle with No. 1898 arbor. 4 lbs. (1.8 kg)

No. 1898 Arbor. Adapts No. 1897 to 3 MT spindle. 1 lb. (.45 kg)



Drill Press Lamp

No. 7022 Lamp. Cool burn-proof shade, aluminum reflector, switch, 19" (482mm) flexible arm, magnetic base, 6' (1828mm) cord and plug.

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 replacement reversing drum switch for two speed drills

Start and stop drill from foot pedal, reverse spindle from reversing drum switch





Your Single Source for Machine Tools

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- Clausing Radial Drills

Clausing Precision Mills

- Clausing Bed Mills
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- Clausing EVS Knee Mills

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