DRILL PRESSES PRODUCT CATALOG







DRILL PRESSES

Mechanical Variable Speeds 150 – 2000rpm Electronic Variable Speeds 50 – 2000rpm CNC Power Feed EVS Speeds 50 – 2000 rpm



20" FLOOR DRILL PRESSES



FLOOR DRILL PRESSES

All Floor Drills Features

- 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 double row to absorb both radial and thrust load.
- Precision Ground 22" x 19'5" thru coolant adjustable table and elevation mechanism
- 66" tall x 4" diameter 3/16" wall column for greater rigidity
- ½" cored T-slots on 9" centers for table and base
- 2-1/2" diameter quill 3 MT taper spindle, with 6-1/2" travel, and thread adjustable depth stop
- · Mesh top belt guard

INFINITELY VARIABLE SPEED WITH COUNTERSHAFT DRIVE

Clausing Two Speed or Single Speed Variable Speed Drill Press allows you to dial to the best rpm for the tool and material while the job is running.

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

Powerful Countershaft Drive

Clausing's heavy-duty drive (Three V-belts and a cog belt) delivers full power positive to the spindle at all speeds.



Infinitely Variable Speed Countershaft Drive Models

MODEL SELECTION CHART FLOOR DRILL MECHANICAL VARIABLE SPEED			
	Floor Drill Model		
	w/ 22" x 19" Table		
Two Speed Infinitely Variable Speeds: 150-2000 rpm 1-1/2 - 3/4 Hp			
2-speed, 3-phase, 220v*	2276		
2-speed, 3-phase, 440v*	2277		
Infinitely Variable Speeds: 200-1300 rpm 1-1/2 Hp			
11/2 Hp, 3-ph, 1140 rpm	2275		
Infinitely Variable Speeds: 300-2000 rpm 1-1/2 Hp			
11/2 Hp, 1-ph, 1725 rpm	2272		
11/2 Hp, 3-ph, 1725 rpm	2274		

*Motor, 11/2-3/4 hp 1800/900 rpm, 60hz. SPECIFY VOLTAGE—When voltage is not specified, motor will be wired on lower voltage. All Motors are ball bearing. 3-phase single speed motors are 208/220/440v, 60hz. Single-phase motors are capacitor-start, 115/220v, 60hz.



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

ELECTRONIC VARIABLE SPEED DRIVE FLOOR DRILL

Rotate Dial left or right to adjust the best rpm for the tool and material while the job is running. LED Readout for spindle speed. E-stop button for operator control.

- 50 to 2000 rpm—speeds to drill large holes, small holes to spot-face, counter-bore and ream
- A flip of the switch changes from forward to reverse spindle direction, perfect for production tapping applications
- Low voltage power protection with reset

CNC ELECTRONIC VARIABLE SPEED DRIVE

G-Code Program best rpm and feed rate for the tool and material. E-stop button for operator control.

- 3.5" color LCD display
- · Subset of standard G-Codes and M-Codes
- 50 to 2000 rpm— program speeds to drill large holes, small holes to spot-face, counter-bore and ream
- A flip of the switch changes from forward to reverse spindle direction, perfect for production tapping applications. Programmable tapping also available using a spring tap driver holder.
- Low voltage power protection with reset
- 32 bit CPU with 128Mb RAM
- 799 Maximum number of program lines
- 99 Maximum number of stored programs
- USB Port for importing NC programs
- Maximum feed speed 250 In/Min
- Built in MPG (manual pulse generator) wheel
- Analog spindle output 0-10vdc
- No battery backup required

Electronic Variable Speed and CNC Drive Models

MODEL SELECTION CHART FLOOR DRILL EVS and CNC			
Motor	EVS Floor Drill Model	CNC Floor Drill Model	
Furnished	w/ 22" x 19" Table	w/ 22" x 19" Table	
Speeds: 50-2000 rpm 1-1/2 - 3/4 Hp			
115/1-phase	2272EVS	2281CNC	
220/1-phase 230/3-phase	2274EVS	2279CNC	
460/3-ph, 1140 rpm	2274EVS4	2280CNC	

*Motor, 11/2-3/4 hp 1800/900 rpm, 60hz. SPECIFY VOLTAGE... When voltage is not specified, motor will be wired on lower voltage. All Motors are ball bearing 3-phase single speed 60hz motors. 115 volt and 460 volt use built in transformers.



EVS 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

CNC Floor Drill (shown)

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



20" HEAD & COLUMN DRILL PRESSES

HEAD AND COLUMN DRILL PRESSES

This drill removes the base and table to allow the user to mount the head assembly on most any table or working surface.

All Head and Column Drills Features

- 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 double row to absorb both radial and thrust loads.
- 43" tall x 4" diameter 3/16" wall column for greater rigidity
- · Mounting flange for table mounting
- · Head elevation mechanism
- 2-1/2" diameter quill 3 MT taper spindle, with 6-1/2" travel, and thread adjustable depth stop
- · Mesh top belt guard



Infinitely Variable Speed Countershaft Drive Models

MODEL SELECTION CHART HEAD AND COLUMN		
	Head & Column	
	Assembly Model	
Two Speed Infinitely Variable Speeds: 150-2000 rpm 1-1/2 - 3/4 Hp		
2-speed, 3-phase, 220v*	2286-300	
2-speed, 3-phase, 440v*	2287-300	
Infinitely Variable Speeds: 200-1300 rpm 1-1/2 Hp		
11/2 Hp, 3-ph, 1140 rpm	2285-300	
Infinitely Variable Speeds: 300-2000 rpm 1-1/2 Hp		
11/2 Hp, 1-ph, 1725 rpm	2282-300	
11/2 Hp, 3-ph, 1725 rpm	2284-300	

*Motor, 11/2-3/4 hp 1800/900 rpm, 60hz. SPECIFY VOLTAGE—When voltage is not specified, motor will be wired on lower voltage. All Motors are ball bearing. 3-phase single speed motors are 208/220/440v, 60hz. Single-phase motors are capacitor-start, 115/220v, 60hz.

Electronic Variable Speed and CNC Drive Models

MODEL SELECTION CHART HEAD AND COLUMN EVS AND CNC			
EVS Head & Column CNC Head & Colu		CNC Head & Column	
	Assembly Model	Assembly Model	
Speeds: 50-2000 rpm 1-1/2 - 3/4 Hp			
115/1-phase	2282EVS-300	2281CNC-300	
220/1-phase 230/3-phase	2284EVS-300	2279CNC-300	
460/3-ph, 1140 rpm	2284EVS4-300	2280CNC-300	

*Motor, 11/2-3/4 hp 1800/900 rpm, 60hz. SPECIFY VOLTAGE... When voltage is not specified, motor will be wired on lower voltage. All Motors are ball bearing 3-phase single speed 60hz motors. 115 volt and 460 volt use built in transformers.



Head & Column Assembly with Base

(1) 2286-300 Head & Column Assembly and 20-200 22" x 25" (559 x 635mm) Production Base

FLOOR DRILLS

HEAD & COLUMN DRILLS

	VS	EVS	CNC	VS	EVS	CNC
Capacity Manual Hand Feed			1.25	" dia.		
Capacity Power Feed	-	-	1" in Cast Iron 3/4" Mild Steel	_ _	- -	1" in Cast Iron 3/4" Mild Steel
Drill to Center of Circle		20"			18-1/2"	
Spindle Nose			3 1	MT		
Spindle Travel			6.	5"		
Column			4" Diameter Ground S	Steel, 3/8" Thick Wall		
Quill (ground steel)			2.5" Di	ameter		
Quill Return Spring Cap.	40	lbs	-	40) lbs	-
Adj Table Working Surface		22" x 19.5"		_		
Adj Table T-Slots	Two - 1	5.5" long for 1/2" t-bolt 9"	Centers	-		
Table Travel (one setting)		20"		-		
Spindle to Adj Table Max.		33.125"			-	
Base Working Surface		15.5" x 13"			-	
Base T-Slots	Two - 1	13" long for 1/2" t-bolt 9"	Centers		-	
Spindle to Base Max.	43.375"		-			
Column Bracket to Spdl Ctr	-		9.25"			
Column to Center of Spdl	10"		10"			
Spindle to Stationary Table Max.	-		25.43"			
Column Length (standard)	66"		43"			
Motor Nema Frame Size			182 ar	nd 184		
Shipping Weight (approx)	630	650	675	390	410	435
Net Weight	600	620	645	360	380	405
Shipping Dimensions LxWxH	26"x40"x72"	32"x40"x72"	40"x40"x72"	24"x38"x55"	30"x38"x55"	38"x38"x55"
Drill Dimensions LxWxH	22"x36"x69"	28"x36"x69"	36"x36"x69"	20"x34"x52"	26"x34"x52"	34"x34"x52"

All specifications subject to change without notice or obligation.

Optional Electrical Equipment for Manual Variable Speed Machines*

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.

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.

Clausing

20" MULTIPLE SPINDLE DRILL PRESSES

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

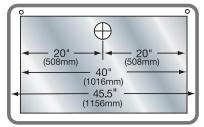


CLAUS-ZG CLAUS-NG **Head & Column Assembly with Table** (4) 2286-300 Head & Column Assembly and 20-504 85.5" x 29.5" (2172 x 750mm) Table with Legs

Head & Column Assembly with Table

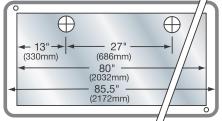
(1) 2286-300 Head & Column Assembly and 20-501 45.5" x 25.5" (1156mm x 648mm) Table Assembly

20-501 • 1-Spindle



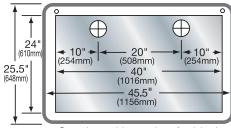
One piece table, two legs furnished

20-503 • 3-Spindle



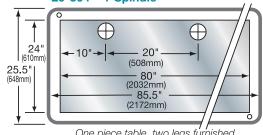
One piece table, two legs furnished

20-502 • 2-Spindle



One piece table, two legs furnished

20-504 • 4-Spindle



One piece table, two legs furnished

Note: EVS and CNC heads use more space check with the factory for spacing requirements. Example: 4 CNC heads will not fit on a 4 spindle table.

Standard Accessories

DRILL GUARD

Clausing Drills are equipped with a Spindle Guard that locks in an upright position, away from spindle nose



MESH GUARD

No. SK-208 Top Mesh

Belt Guard for moving belt protection



Optional Accessories

ELECTRIC FOOT CONTROL

For Manual Variable Speed Drills



Part No.	Description
302	Electric Foot Control
302R1	Electric Foot Control with reversing drum switch for single speed drill
302R2	Electric Foot Control with reversing drum switch for two speed drills start and stop drill from foot pedal

COOLANT SYSTEM



Part No.	Description
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.
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.
7044-3	Coolant System: For three (3) spindle drills. Like No. 7044-2 except arranged for 3 spindles.
7044-4	Coolant System: For four (4) spindle drills. Like No. 2044-3 except arranged for 4 spindles.

DRILL PRESS LAMP

Part No.	Description
7022	Cool burn-proof shade, aluminium reflector, switch, 19" (483mm) flexible arm, magnetic base, 6' (1.5m) cord and plug.



DRILL PRESS LED LIGHT

Part No. Description

20-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





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

ELECTRONIC DRO

(not required for CNC versions)

Part No. Description

20-900 Easy to read LCD display,
Data output port, 0"-6"
measuring range, 0.005"
(0.01mm) resolution, 59
in./sec. measuring speed



COLUMN OPTIONS

Part No.	Description
2294-AMT	66" (1676mm) Column in lieu of 43" (1092mm) Column 78 lbs. (35kg)
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 CNC Knee Mills
- Clausing Universal Mills

Clausing Precision Grinders

- Clausing Manual Grinders
- Clausing 2 Axes Hydraulic Grinders
- Clausing 3 Axes Hydraulic Grinders
- Clausing ASDIII Automatic Grinders
- Clausing OD/ID Grinders

Clausing Precision Cutting Machines

- Clausing/Kalamazoo Horizontal Bandsaws
- Clausing/Kalamazoo Vertical Bandsaws
- Clausing/Kalamazoo Tilt Frame Miter Bandsaws
- Clausing/Kalamazoo Cold Saws



For detailed catalogs of the full line of Clausing Machine Tools visit our Web Site:

www.clausing-industrial.com

Fax: 269-345-5945 we-mail us and request an electronic (pdf) catalog at:

info@clausing-industrial.com

Clausing Precision Lathes

- Clausing/Colchester Geared Head Lathes
- Clausing/Colchester Professional V.S. Lathes
- Clausing/Colchester MAGNUM V.S. Lathes
- Clausing C Series Lathes
- Clausing Large Swing Standard Lathes
- Clausing Large Swing CNC Lathes
- Clausing Precision Toolroom Lathes

Your Authorized Clausing Precision Machine Tools Distributor

