

4-Post Hydraulic Presses

GREENERD



Rugged, Continuous Duty Presses Provide

Greenerd 4-Post Hydraulic Presses are heavy-duty production presses built for continuous use. Their proven design minimizes deflection and "lean back" common in many C-frame presses and ensures exceptional and consistent die alignment. It also enables loading of the press from any of four sides and permits easy integration into production lines or manufacturing cells. Presses offer fast, easy, and safe setup and operation as well as years of trouble-free service. Available in capacities up to 1000 tons, Greenerd 4-Post Presses are ideal for applications such as:

- Blanking
- Broaching
- Coining
- Die Tryout
- Deep Drawing
- Drawing
- Embossing
- Forming
- Hobbing
- Laminating
- Precision Assembly
- Riveting
- Staking
- Straightening
- Testing
- Trimming

Standard Operator Controls

Dual Palm Button Controls

These anti-tiedown, nonrepeat controls conform to current OSHA requirements.

Jog Control

Allows operator to move or position the platen at slow speed for setup purposes.

Return Stroke Limit Switch

Adjusts return stroke travel up to the maximum open distance, so you use only the stroke length required for each job.



Exceptional Die Alignment and Productivity

4-Post Guiding Minimizes Deflection, Maximizes Die Life

Four oversized guideposts ensure the exceptional alignment, flatness, and parallelism of all Greenerd 4-Post Presses. Located at the extreme corners of the press bed, these posts are larger in diameter and have bearings that are much longer in length than those on competitive presses.

Consequently, they minimize deflection of the platen and bed even in extreme and off-center loading conditions. As a result of their exceptional stiffness, Greenerd 4-Post Presses also provide better, more consistent tool alignment in progressive die applications. Better alignment improves product quality and dramatically extends die life.

Extra long, precision-machined guide bushings ensure that press flatness and parallelism are maintained through years of continuous service.

Designed for Continuous-Duty, High-Volume Production

Nobody builds hydraulic presses like Greenerd. As with all Greenerd presses, Greenerd 4-Post Presses are designed and manufactured to stand up to the rigors of continuous high-volume, three-shift manufacturing.

Heavy-duty components, meticulous construction, stringent quality standards, and extensive final testing ensure reliable operation, minimum maintenance, and long service life. Hydraulic manifolds, highly efficient vane or piston pumps, wet pin solenoid valves,

and continuous oil filtering guarantee years of trouble-free, round-the-clock operation. In addition, all hydraulic components and fittings used on Greenerd presses are rated for pressures 1.5 to 2 times greater than those at which the presses operate.

Advanced Hydraulics Provide Rapid Cycling, Precise Control

The advanced hydraulics of Greenerd 4-Post Presses provide high press speeds and rapid cycling needed for volume production as well as the exceptional control required for precision assembly. Press tonnage can be easily adjusted down to 20% of maximum.

Production Flexibility

Greenerd 4-Post Presses offer unmatched production flexibility. Their design allows work loading from any of the press' four sides and simplifies press integration into production lines with automatic feeders, loaders, unloaders, conveyors, and inspection equipment.

In addition to down-acting models, Greenerd offers 4-Post Presses in horizontal, up-acting, and double-acting versions. Available in hundreds of standard configurations with an extremely wide range of options and accessories, Greenerd 4-Post Presses can be custom tailored to your specific production requirements.

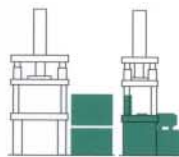


Custom Horizontal 4-Post Extrusion Press

Tank and Power Unit Locations

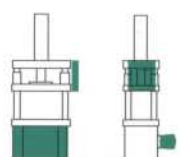
Beside Press

For most installations, this is the most convenient and economical location. Controls can be placed at operator's right or left. Hydraulic and electrical components are at floor level and are easily reached for service.



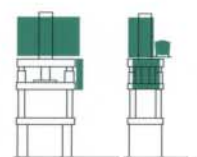
Below Press

When press motor and pumping unit are relatively small and will fit below the press, this configuration reduces floor space requirements.



On Top Of Press

Where floor space is severely limited, the power unit can be mounted on top of the press. In such cases, the size of the press bed and power unit will determine the shape of the power unit. Consult factory for details.



Typical Specifications

The specifications shown here are typical for Greenerd 4-Post Presses.

Approximately 70% of the presses we build fall within these dimensions and performance ranges.

However, they in no way represent the extent of our capabilities.

Since almost 30% of our press production is nontypical, Greenerd can easily accommodate almost any need or request.

So, if your requirements go beyond the typical specifications shown here, please consult us.

As part of its ongoing program of product improvement, Greenerd reserves the right to change specifications without notice.

Dimensions

Die space between posts (left to right)	30 – 60"
(front to back)	13 – 32"
Press bed (front to back)	24 – 48"
Daylight	24 – 30"
Stroke length	18"
Cylinder bore diameter	5 – 18"
Ram diameter	3.5 – 12.75"
Table to floor height	36 – 40"
Overall height	110 – 166"

Performance

Maximum Tonnage	1000
Ram Speeds (ipm):	
Close	162 – 577
Press	16 – 84
Open	169 – 602

Modifications and Options

Greenerd 4-Post Presses can be easily modified and equipped with a wide range of performance-, productivity-, and safety-enhancing options. Our experienced applications engineers will review your requirements and recommend the right options and modifications for your needs.

Modifications

Standard Greenerd 4-Post Presses are readily modified as follows:

- Extra daylight
- Extra stroke
- Oversized beds
- Special bed apertures
- Custom table heights
- T-slots and mounting holes
- Other custom frame features

For other modifications, please consult the factory.

Options

The right options can help you maximize the performance, productivity, ease of operation, and safety of your press. Standard options include:

- **Touch Screen Microprocessor Control.** Dramatically simplifies and speeds press setup, fine-tuning, operation, and changeovers. Increases press productivity and flexibility. Large-capacity program library stores user-developed job settings for lightning fast press setups.



Touch Screen Control

- **Precision Servo System.** Controls platen position to $\pm .001$ " and tonnage to $\pm 1\%$ of setting.
- **Joy Stick Control.** Allows manual control of press tonnage and speed on each stroke.
- **Automatic Cycle.** Allows continuous automatic cycling of platen.
- **Rapid Cycle.** Advanced hydraulic/electrical circuit for more rapid stroking.
- **Precontact Slowdown.** Slows platen speed from rapid advance to pressing speed before contacting the work.
- **Speed Control.** Allows adjustment of pressing speed.
- **Distance Reversal Switch.** Automatically reverses platen direction at desired depth of stroke.

- **Tonnage Reversal Switch.** Automatically reverses the press at desired tonnage.
- **Adjustable Dwell Timer.** Maintains platen in work position for a desired time period.
- **Anti-Shock Circuit.** Reduces hydraulic shock at breakthrough on heavy blanking, piercing, and trimming jobs.
- **Die Cushions.** Air and hydraulic.
- **Impact Dampers.** Cushion platen after breakthrough, dramatically reducing the reverse load on the press frame, shock in the hydraulic system, noise, and vibration.
- **Knockouts.** Mechanical and hydraulic knockouts with stroke and other features to suit your application.
- **Heated Platens.** Heated by electric cartridge heaters or steam, complete with temperature controls and timers. Available with air- or water-cooling.
- **TEFC Motors and NEMA 12 Starters.**
- **Heat Exchanger.** Cools hydraulic fluid. 2-pass, water- or air-cooled.
- **Light curtains/PSDI.** Greenerd engineers can assist you in selecting safety accessories such as light curtains, presence sensing devices, gates, and barriers. Press controls will be modified to accommodate these safety features. When used in conjunction with other options, these features can help increase press productivity in addition to ensuring operator safety.