



All of us at Phoenix Hydraulic Presses wish to thank you for 25 years of business success. We have truly enjoyed working with you and hope to continue serving you in the future.

PHOENIX
HYDRAULIC PRESSES
4299 Reynolds Drive
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Press Conference is a periodic publication of Phoenix Hydraulic Presses. Our sales staff in Hilliard welcomes your inquiries. Product literature is available on request.

PHOENIX PRESS CONFERENCE



Large or small...
Phoenix builds
them all.

In this issue...

- Press punches out auto parts
- Phoenix partners with Power Team.
- Rebuild...repeat.
- Bonding press on steroids.
- Here is to the next 25 years!

Down Acting Press Punches Auto Parts

We recently built and delivered this 100 ton, down acting, four column hydraulic press to an automotive parts manufacturer located in central Ohio. The press operates a cam type die for punching holes in automotive parts.

The press has a 23" daylight, 20" stroke and features an extra long guide bushings to reduce platen tilt. The platen bushings are precision in-lined bored and fitted to the columns to assure smooth platen movement. T-slots were machined into the 40" x 28" bed for hydraulic die lifters.

The hydraulic system is designed for a 5 second cycle time and features fire resistant water glycol fluid. The press has a 200 gallon floor mounted power unit. The system uses a constant delivery vane pump, a piston pump, drip pan under reservoir; and water to oil heat exchanger

The electrical system uses a 24-V DC control; compact Logix programmable controller; panel view 1000 Plus HMI; Grace Port for Ethernet hub and a LVDT for ram position control. The ram cycle begins with the ram advancing at a fast speed until a set point is reached which then shifts the ram from advance to pressing speed. The ram automatically returns when a set point is reached (distance reversal) or when the ram contacts the automotive part and builds up to a pre-set pressure (pressure reversal) the ram reverses automatically.

The press includes over temp and low oil alarms. Safety features include a light curtain across the front and back of the press. Also for safety bolt on expanded metal guards were installed on the side of the press



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Phoenix Hydraulic Presses (and its predecessor PH Hydraulics) has been designing and building standard and customized presses since 1987. Our Quality Start-Up team performs rigorous mechanical, hydraulic and electrical inspections on each completed press to ensure conformance to internal and customer specifications

Why Buy Phoenix?

Our Presses:

- Are engineered with a **Stress Safety Factor of 5:1.**
- Use **hard tubing wherever possible.**
- Use **standard industrial components making it easy to get spare parts.**
- Go through an **extreme testing and inspection process.**

A VERY SPECIAL PARTNERSHIP.....

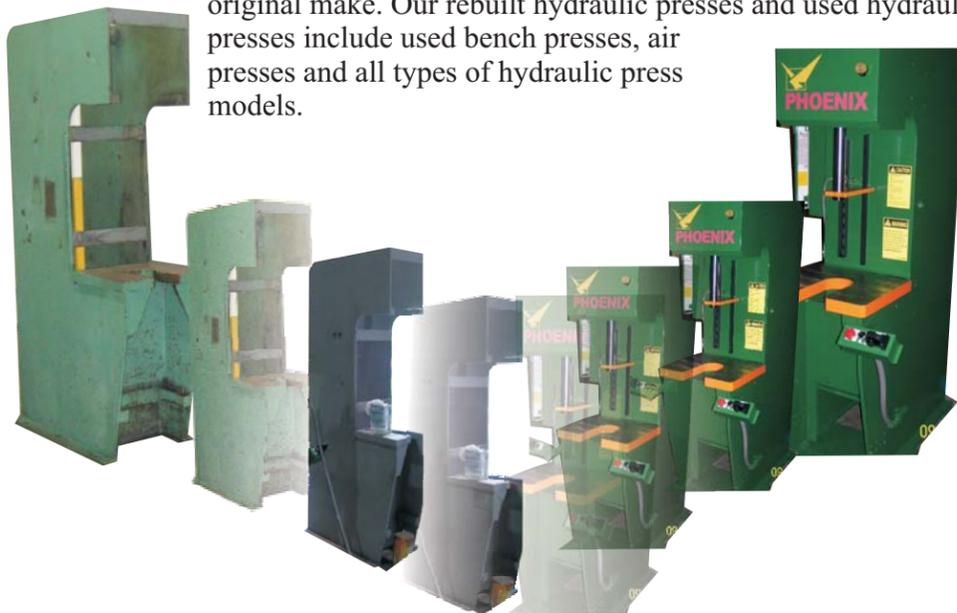
Phoenix Hydraulic Presses, in partnership with its sister company, are the only Power Team distributor who also customizes and maintains Power Team presses.



REBUILDING A BETTER FUTURE

We recently rebuilt these two presses for a large manufacturer. The press was first stripped down and then rebuilt from the ground up.

We will completely rebuild or upgrade your hydraulic press- no matter the original make. Our rebuilt hydraulic presses and used hydraulic presses include used bench presses, air presses and all types of hydraulic press models.



FRICITION PLATE BONDING PRESS ON STEROIDS

Phoenix Hydraulic Presses recently designed and built a 100 Ton, 2-Column four cell multiple press unit. This friction plate bonding press was created for a 1st tier automotive supplier to bind metal disks to friction paper creating transmission parts.

The four cells each have an 18" x 18" heated platen capable of reaching working temperatures up to 750 degrees. Insulation on the bottom and side of the platens protects the press from heat damage.



Each cell moves individually but is driven by one power unit. The press can be run in either manual or automatic mode. The cells are designed to build pressure on one press while allowing movement of the next press platen.

The pressure for the massive press is achieved utilizing over 300 feet of piping which make up the hydraulic lines. The pipe runs overhead to help accommodate the high pressure flow that each press requires.

Extra-long guide bushings reduce platen tilt and insure long-term accuracy. The linear transducer determines and monitors position of press.

The advance speed of the press is down 480 per minute; Pressing speed is 60 per minute; and the return speed is 522 per minute

The huge 250 gallon hydraulic reservoir is floor mounted. A pilot operated check valve is used to lock the press under pressure while the next press is activated.

An air to oil heat exchanger keeps fluid operating at the most efficient temperature.

The light curtains stop the press from moving if anything breaks its plain. Also a die safety block must be placed on the plate to prevent the press from moving when performing maintenance or changing dies.

The presses are controlled by an Allen Bradley 505 programmable controller with an Allen Bradley PanelView 1000 operator interface to control machine functions.

Opto Touch switches.-Operator must actuate both together to operator prep. This ensures no injuries to hands.

Phoenix offers a wide selection of hydraulic presses:

- Four column
- Two column
- Gib or straight sided
- Floor mounted C-frame
- Bench
- H-frame
- Custom engineered

Is it time to insure your competitiveness when demand picks up for your products?

We offer the total package—high quality, USA manufactured presses combined with competitive pricing and on time delivery.