



### Safety First!

We offer a wide variety of safety guarding for your hydraulic press. We consider all aspects of safety and functionality in the design and build of our safety systems. Our safety systems are designed to work with safety and efficiency. Our systems may be constructed from stainless steel, aluminum, and/or carbon steel. We can also provide visual access areas using wire mesh, expanded and flattened steel, perforated steel, and Lexan.

# PHOENIX PRESSES CONSTRUCTION

Large or small... Phoenix builds them all.

**In this issue...**

- ☐ Innovative Compression Press
- ☐ Company opts for affordable customization
- ☐ 25 Ton OGF Recently Delivered
- ☐ Phoenix builds trio of low tonnage, long stroke presses.
- ☐ Keep em safe...



## Phoenix Delivers Innovative Compression Press

This custom 150 ton horizontal hydraulic press with tooling was designed for a large manufacturer of off road construction equipment. The purpose of the press is to bring welded tube assemblies back into rounded form before machining. This process is imperative because weld distortion causes tube to deform and subsequent operation must receive a round tube to control wall thickness.

The process consists of loading a part into the press using a crane. After the part is in place, an operator pushes a button with his left hand while simultaneously moving the control lever downward (two hand control) with the right hand. This enables the operator to control both the ram speed and pressure. The ram advances until it contacts the work and then idles at almost zero pressure.

The operator, who has full control of the pressure, utilizes a digital read out to extend the cylinder to a specified locale. Once the correct position is achieved, the operator ends the cycle and the cylinder returns to "home position". An LVDT is used to control the ram with a .002/inch resolution digital readout.



Press Conference is a periodic publication of Phoenix Hydraulic Presses. If you are interested in this information, please contact our staff in Hilliard. Product literature is available on request.

**PHOENIX HYDRAULIC PRESSES**  
4299 Reynolds Drive  
Hilliard, OH 43026



www.phoenixhydraulic.com | sales@phoenixhydraulic.com  
4299 Reynolds Dr. Hilliard, OH 43026 | Phone: (614) 850-8940 | Fax: (614) 850-9065



**PHOENIX HYDRAULIC PRESSES**

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**.

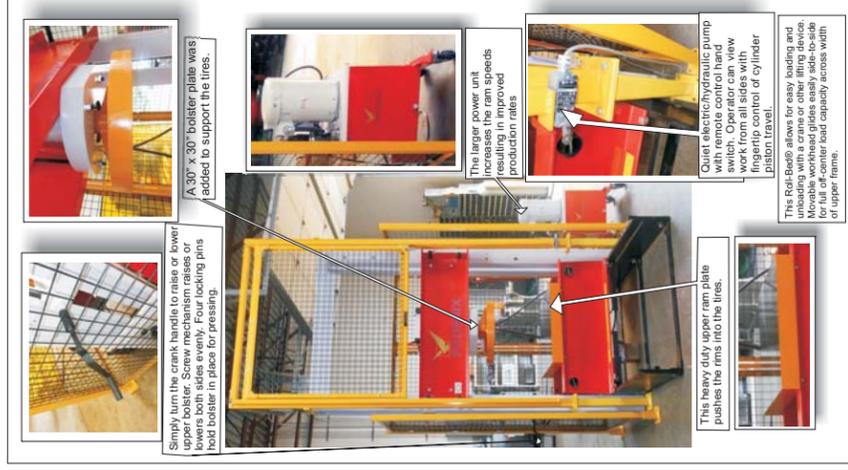


### Company opts for affordable customization

World's leading lift truck manufacturer contracted Phoenix to customize a standard H Frame Roll Bed Press. An upper ram plate, bolster, safety guards and larger power unit were all added to the standard press to satisfy the customer's production requirements for pressing rims into lift truck tires.

Because the weight and size of the truck tires, both a 30" x 30" bolster plate to support the tires and an upper ram plate to push the rims into the tires was added. Both plates were specially designed to be removable. Also, to increase ram speeds, the customer had Phoenix install larger power unit. The faster speeds will increase production rates.

The press also features extensive safety additions including an interlocked front lift guard with fixed guards on the sides and back of the press. The lift guard must be closed to operate the press.



Simply turn the crank handle to raise or lower upper bolster. Screw mechanism raises or lowers both sides evenly. Four locking pins hold bolster in place for pressing.



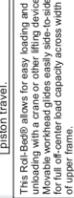
A 30" x 30" bolster plate was added to support the tires.



The larger power unit increases the ram speeds to meet production rates.



Quiet electric/hydraulic pump with remote control hand switch. Operator can view piston travel.



The Flat Beam allows for easy loading and unloading with a crane or other lifting device. Movable workhead glides easily side-to-side for increased load capacity across width of upper frame.



This heavy duty upper ram plate pushes the rims into the tires.

### C Frame and shuttle table combination results in a highly functional press

We built this 20-ton Open Gap Frame press for a leading producer of specialized products used to heat, cool, separate and transport products. The machine will be used for pressing rubber picks into heat exchanger tubes.

Many enhancements were added to the standard OGF press including a two post guided tool plate, a 3 position slide table, increase ram speed, press speed control system and hydraulic control system.

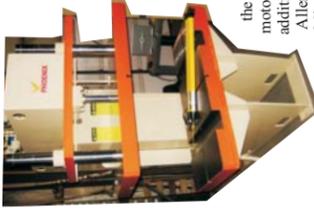
The slide table is capable of moving parts outside the press for easy loading and unloading. A two post guided tool plate was connected to the cylinder ram for increased alignment and anti-rotation of cylinder ram. An hydraulic control system was added to accommodate customer supplied upper fixture cylinder and a press speed control system and manual flow control valve were also built in to adjust slide table speed.



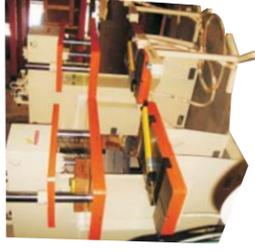
Phoenix offers a wide selection of hydraulic presses:

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

### Phoenix Ships Trio of 5-Ton OGF Presses



These recently delivered compression forming presses were designed for a supplier of aviation component services. Each of the floor mounted 5 ton presses feature a long 14" stroke and a 24" daylight. Each press was customized to have a two post guided tool plate with two 5/8" T-slots. Also, two cycle timers (pre-heat and clamp) and an adjust limit switch were added to



the presses' regular motor controls. Other additions included an Allen Bradley MicroLogix 1000 programmable controller and light curtains with mirrors to guard all four sides of the press.

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.



[www.phoenixhydraulic.com](http://www.phoenixhydraulic.com)

