

## CUSTOM DEVELOPMENT

Phoenix Hydraulic Presses specializes in custom engineered presses for a wide variety of applications such as Straightening, Compression Molding, Assembly, and more. If you have something unique in mind and need assistance in designing and implementing your plans, give us a call at (614) 850-8940 to get started.

## PRESS MAINTENANCE

Phoenix also offers maintenance on many types of presses. This includes replacement parts and accessories. If you are in need of a particular part or service, give us a call!



# PHOENIX HYDRAULIC PRESS CONFERENCE

2015  
WINTER

## IN THIS ISSUE

PHOENIX EXPANDS ITS BENCH PRESSES FROM 2 TO 40 TONS

01

TWO 80 TON OGF PRESSES WITH TOOL PLATE READY FOR SHIPMENT

02

HORIZONTAL PRESS WITH TOOLING

03

## PHOENIX EXPANDS ITS BENCH PRESSES FROM TWO TO FORTY TONS

Phoenix expanded its standard bench presses which range from 2 to 35 tons to design and build a custom 40 ton bench press. The press has daylight of 18", stroke of 12", and reach of 10". The bed size is 20" x 15 1/2". A 40 gallon reservoir is integral to the press structure. A custom mounting bench was also designed for the press.

Press controls included our quality control circuit that allows the press to return automatically after the ram contacts the limit switch positioned 3" above the contact point. This allows hands free operation from the contact point. Electric controls are an Allen Bradley MicroLogix 1000 programmable control with 16 I/O.

Please refer to the website's custom press section for further details and additional custom press examples. [www.phoenixhydraulic.com](http://www.phoenixhydraulic.com)



4299 Reynolds Drive  
Hilliard, OH 43026

**PHOENIX**  
**HYDRAULIC**  
**PRESSES, Inc.**





## TWO 80 TON OGF PRESSES WITH TOOL PLATE READY FOR SHIPMENT



Two massive 80 ton OGF (open gap frame) presses are going to be used by a Tier One automotive supplier. Phoenix has standard OGF Presses ranging from 5 to 200 tons. The application of the presses is for metal stamping and will be joining eight other Phoenix presses at this location.

The press frames include a four post upper guided tool plate (LR 30" x FB 20"), four heavy duty press mounts and a bed (LR 30" x FB 25"). Additional frame specifications call for an 18" daylight, cylinder stroke of 10", and reach of 14".

The hydraulic specifications include 52 and 21 GPM vane pumps at 1800 RPM, manifold mounted valves, return line filters, thermostatic water regulating valve. The press is driven by a 40 HP high efficiency motor. Electronically we installed an Allen Bradley MicroLogix 1500 (two communication ports) PLC with outputs for starter solenoid valves on an added output card.

Please visit our website and go to the presses section. Then go to the OGF (floor mounted C frame presses) section. [www.phoenixhydraulic.com](http://www.phoenixhydraulic.com)

Phone: (614) 850-8940 • Fax: (614) 850-9065  
4299 Reynolds Drive • Hilliard, OH 43026  
[www.PhoenixHydraulic.com](http://www.PhoenixHydraulic.com)  
[sales@phoenixhydraulic.com](mailto:sales@phoenixhydraulic.com)

## HORIZONTAL PRESS WITH TOOLING

Phoenix Hydraulic Presses [www.phoenixhydraulic.com](http://www.phoenixhydraulic.com) has developed a turnkey system that combines a designed horizontal press with four ton cylinders on each end and special work holder tooling that will clamp and locate automotive components known as knuckles. There are a total of eleven variants that the tooling needs to accommodate. Each variant gets two components pressed into it: a tapered roller bearing and a plain bushing.

The work holding tooling utilizes a hydraulic actuator to clamp and locate the knuckles within the press structure. Additional stand offs and initial locating features will be included for knuckle placement prior to clamp cylinder actuation. Also the tooling has custom rod end adapters to receive the tapered roller bearings and plain bushing bores.

The press operates by initiation of the ergonomic switches and the ram advances until the work is contacted and pressure builds up. The ram instantaneously builds up pressure until the applied force reaches the preset pressure and causes the ram to reverse automatically (pressure reversal) or contacts the positive stop on the cylinder and reverses automatically (positive stop reversal). The ergonomic switches must be released to start a new cycle.

