



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

# MAGNUM

P R E S S

*Building Fast Presses Fast since 1996*



**H&O Die Supply** 7200 Interstate 20 Kennedale, TX 76060 [www.hodie.com](http://www.hodie.com)  
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# MAGNUM P R E S S

PO Box 129 - Jerseyville, IL 62052 - [www.magnumpress.com](http://www.magnumpress.com) - 618-498-7077 618-498-7022 fax

## INTRODUCTION

Hello,

Thank you for considering Magnum Press Inc. for your press acquisition. My name is Phil Green and I am the Vice President of Sales at Magnum Press. We're located in Jerseyville, IL near the St. Louis metropolitan area and we manufacture high quality high production hydraulic presses fast. If you're using hydraulic or mechanical presses in any part of your operation or your equipment, we'd appreciate consideration to propose on your next project. Thanks. Phil Green [www.magnumpress.com](http://www.magnumpress.com).

## THE COMPANY

Magnum Press is a high quality manufacturer of high speed hydraulic press and automation equipment located in Jerseyville, IL near the St. Louis, MO metropolitan area. Magnum Press was founded in 1996 by second generation hydraulic press industry veteran, Pat DeStefano Jr, with just 3 employees. Pat has 35 years experience in the hydraulic press industry having worked since he was 12 with his dad at a press company co-founded by his dad in the late 1960's. He worked every imaginable position at that company from shop labor to draftsmen to design engineer and ultimately general manager. As general manager he had responsibility for over 20 employees with every department (manufacturing, engineering, drafting, purchasing and administration) reporting to him. Pat has a Bachelor of Science degree in engineering from the University of Rolla. He brings a unique blend of industry experience, design, mechanics, mechanical and electrical programming capabilities that culminates in simple, innovative, and efficient press design.

Magnum Press has continued to grow and offers a full range of standard and custom presses and continues to be in the business of making sure you get the right hydraulic press for the job. Magnum offers a full line of high speed standard gap frame press models in standard C-Frame configuration, 2-Post and 4-Post Guided Tool Plate, GIB Guided and Compact models. Custom 2-Post and 4-Post Column Presses are quickly designed and manufactured to your custom specifications. With a standard hydraulic press variety from 2 to 250 ton and broad reaching custom capabilities to 1500 ton and beyond, Magnum has the hydraulic press for you.





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## WHY A MAGNUM PRESS?

Magnum Press has the most complete line of standard gap frame (C-Frame) presses in the industry!

- BENCH MODEL GAP FRAME SERIES
  - MCB Series 4-35 ton. Standard non-rotational C-Frame press.
  - M2PB Two Post Guided Platen Series 4-35 Ton
  - M4PB Four Post Guided Platen Series 4-35 Ton
  - MGB GIB Guided Series 10-35 Ton for really heavy duty applications.
  - MCC Compact Series 2-35 Ton
- FLOOR MODEL GAP FRAME PRESSES
  - MCF C Frame 4-250 Ton
  - M2PF Two Post Guided Platen Series 4-250 Ton
  - M4PF Four Post Guided Platen Series 4-250 Ton
  - MGF Gib Guided Series 4-250 Ton

Magnum Press has extensive design and manufacture capabilities for column styles presses.

- COLUMN STYLE POST SERIES 2-1500
  - M4P Four Post Series
  - M2P Two Post Series
  - M4PS Four Post Series with Slide
  - M2PS Two Post Series with Slide
- CUSTOM AND LARGER PRESS DESIGN AND BUILD

## MAGNUM PRESS ADVANTAGES

- Our presses are precision designed and built to exacting standards, they are competitively priced with short lead times and they are FAST!
- We build both Gap Frame and Column Guided Presses with precision expertise
- Column style hydraulic presses are better at maintaining parallelism
- Gap frames flex but Magnum gap frames flex less because we use more steel...thicker, more bold in C frame....more steel means less flex
- Most Magnum Presses use an underhung RAM orientation to keep the bolts from bearing all the stress of the press force and reduce the overall height of the press. Some presses will break the bolts in their overhung designs
- Magnum Column Style Press Advantages
  - Magnum Column Style use self lubricating bearing with tight tolerances. All column presses with slides feature 1045 precision ground shaft material with honed bushings offering .002" - .003" clearance.
  - Fabricated beds are stress relieved prior to machining
  - Tooling surfaces of beds are ground to within .0015/ft flatness
  - Moving platens attached to RAM via floating 'safe' coupler
  - Die pins are rated 'stress proof' @ 100,000 psi
  - Shank stress on die pins, less than 20,000 psi
  - Contact area on bolsters to die pin shoulder stress, less than 10,000 psi



- Rod tensioners utilize 'Super Nuts'
- Tie rods on moving platen presses are induction hardened and chrome plated...minimum hardness is 55RC
- 3:1 minimum bearing length to pin diameter ratio
- For Off-Center loading: 4:1 bearing length to pin diameter ratio is used and the bushings are gusseted for added support and rigidity where needed
- Slides are counterbalanced to prevent free-fall
- Secondary locking circuit on main RAM provided for increased safety

- **\*\*STANDARD EQUIPMENT ON MOST MAGNUM PRESSES:**

- Allen Bradley MicroLogix PLC with Panel View HMI based controls\*
- 2-Hand No-Tie-Down Start
- CAT 4 Safety Start Relay
- Adjustable Tonnage
- Adjustable Stroke
- Pressure and Distance Reversal Mode
- Manual Setup Mode
- Energy Saver Shut Down
- Top Stop Over-Run
- True 2 Speed Ram
- Electro-Hydraulic Decompression
- Self-Contained Removable Hydraulic Power Unit
- Custom hydraulic block utilizing cartridge valves for fast response times, compact design, minimal leakage points and lower cost maintenance
- Flat-Face O-Ring seals on all hose and adapters for the most leak free hydraulic system design
- Visual Level/Temp Gauge
- Removable Bolster (Gap frame C-frame presses)
- Lockable Disconnect
- NEMA enclosures
- TEFC EISA Compliant Electric Motor
- Magnetic Starter/ Electronic Overload
- Single Point Power Connection
- Oversized RAM bushings for superior guidance and resistance to deflection on models with rigidly guided RAMS

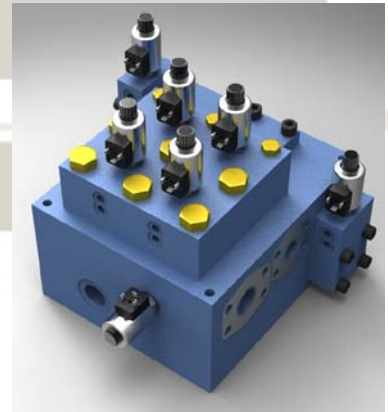


## Magnum Engineering:

Magnum Press Engineering has decades of experience and the in-house capabilities to design and build custom hydraulic presses for virtually any application. Our engineers have extensive knowledge with Finite Element Analysis, sophisticated hydraulic circuits, various feedback devices, and all of the major control/process/ and data acquisition packages.

## Magnum Hydraulic Systems

Magnum hydraulic systems are designed for presses. Our philosophy is to build simple, reliable and easily serviceable systems. **At the heart of our system are steel manifolds designed to consolidate valving, reduce plumbing, eliminate leaks and provide maximum service life. All pressure connection points have o-ring seals** – no metal to metal pressure connections – no pipe threads. We use flexible wire braided hose to isolate frame stresses from reservoir and power units yet, maintain crisp system response. Our systems are designed with minimal pressure drops to allow lower usable tonnage range. All systems incorporate decompression on the blind side of the cylinder to eliminate shock pressure waves and insure maximum service life for the system components. The entire system is designed to minimize response time to give you more parts per shift. Components are standard off the shelf so replacements are readily available. Our manifolds incorporate efficient cartridge valve design that have extremely low leakage, fast shift time and low pressure drops all adding to system efficiency. Larger systems use piloted DIN logic elements. These valves often called poppet valves, outperform large piloted spool valves in leakage, flow and response time. Reservoirs are generously sized to minimize the need for external system cooling. Gap frame power units are self contained and removable for service or remote location. Cylinders are premium quality NFPA compliant with easily serviceable rod bearings and seals.



## Magnum Electrical Systems

At the forefront of the electrical system design is safety. The primary power flow for press functions is handled by a CAT 4 two-hand anti-tie down safety relay. This specialty relay checks complementary inputs from each cycle initiator to insure the operators hands are out of the work area. The secondary control functions are handled by a PLC. This system allows a flexible control system while maintaining system integrity. A clean panel design makes trouble shooting a breeze. All wiring is terminated to spring cage style terminals. These terminals provide reliable vibration resistant connections. Wiring on the panel is routed through wire troughs with removable covers. All PLC I/O points are also terminated to the terminals. Systems include multiple guard terminals already installed. Inputs and outputs have all necessary connections (power for proximity switches and grounds and neutrals for coils) on a single terminal, no searching for support wiring for devices. All valve coils use DIN 43650 connections with power indicator lighting and electrical EMF surge suppression. The hydraulic cartridge valves require less current to operate than conventional spool valve for minimal electrical usage.



**Magnum has a LONG list of options to customize your hydraulic**



TOP STOP OVER-RUN  
ZERO FORCE PALM BUTTONS  
COMPLETE CYCLE  
TIMED DWELL at FORCE  
CYCLE COUNTER – BATCH  
CYCLE COUNTER - NON-RESETTABLE  
CYCLE COUNTER – RESETTABLE  
FEED INTERFACE CIRCUIT  
SINGLE STROKE AUTOMATIC CIRCUIT  
CONTINUOUS AUTOMATIC CIRCUIT  
ADJUSTABLE CYCLE RATE CONTROL  
AUTO SHUT DOWN  
SINGLE POINT ACTUATION  
DPI DIGITAL PRESSURE INDICATOR  
DPI DIGITAL PRESSURE INDICATOR  
with PEAK HOLD  
GOOD PART BAD PART DETECTION  
PROGRAMMABLE RAM POSITION  
CONTROL  
PROGRAMMABLE PRESSURE  
CONTROL  
REMOTE START  
AB MicroLogix 1000 (32) I/O  
AB MicroLogix 1200 (40) I/O  
AB MicroLogix 1500 (48) I/O  
MANUAL or PROGRAMMABLE SPEED  
CONTROL  
POSITIVE RAM STOP  
SERVO DRIVEN POSITIVE STOP  
HYDRAULIC RAM SPEED CONTROL  
HEAT EXCHANGER  
AIR TO OIL COOLER  
WATER TO OIL COOLER

HEATED PLATEN  
FOOT SWITCH  
SPECIAL VOLTAGES  
MACHINE GUARDING  
LIGHT CURTAIN GUARDING- ONE  
SIDED  
LIGHT CURTAIN GUARDING- THREE  
SIDED MIRRORED  
MACHINE GUARDING- FOUR SIDED  
T-SLOTS  
SPLIT RING DIE COUPLER  
QUICK CHANGE DIE COUPLER  
TOOL MOUNTING PLATE  
CUSTOM BOLSTER  
OPEN BACK TOOL AREA  
SPECIAL FRAME  
EXTENDED STROKE CYLINDER  
ONBOARD MOUNTED POWER UNIT  
REMOTE MOUNTED POWER UNIT  
OVERHEAD POWER UNIT  
AUXILIARY HYDRAULIC CIRCUIT  
SPECIAL CYCLE SEQUENCE  
COLOR TOUCH SCREEN  
SPECIAL BRAND COMPONENTS  
AUTOMATIC OILER for GIB AND  
COLUMN  
ROLLER CAM INDEX UNIT  
SERVO CONTROLLED INDEX UNIT  
LAPTOP DUPLEX OUTLET  
E-SAVER  
VARIABLE FREQUENCY DRIVE  
INDEX UNIT DIAL PLATE  
BENCH MODEL FLOOR STAND

B





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P R E S S

The Most Complete Gap Frame Line in the Industry!  
55 BENCH MODELS *and growing! 2-35 Ton*

MCB SERIES



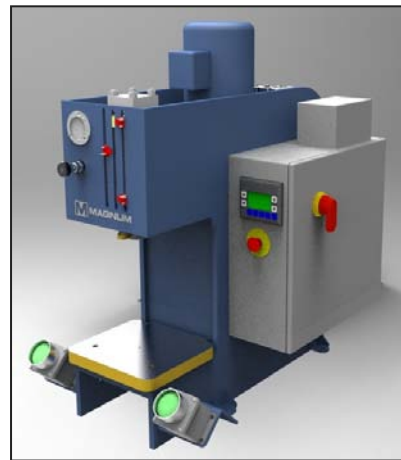
M2PB SERIES



M4PB SERIES



MGB SERIES



MCC SERIES



# MAGNUM

P R E S S

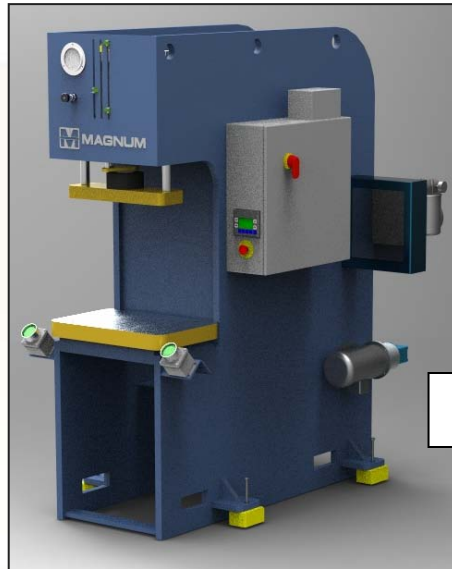
The Most Complete Gap Frame Line in the Industry!

## 96 FLOOR MODELS *4-250 Ton*

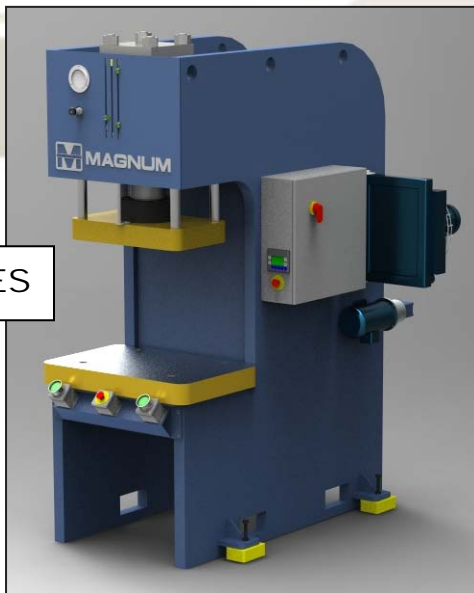
MCF SERIES



M2PF SERIES



M4PF SERIES



MGF SERIES





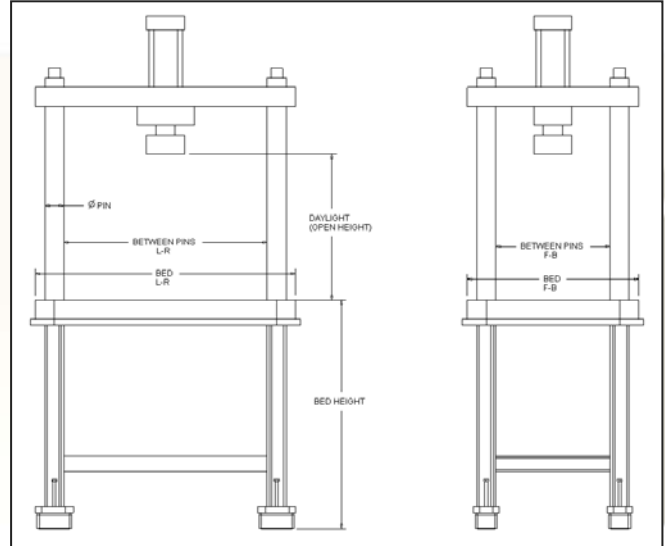
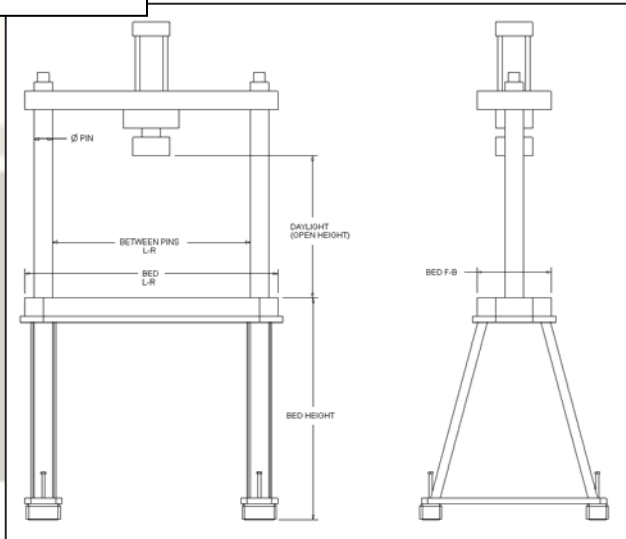


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## COLUMN MODELS

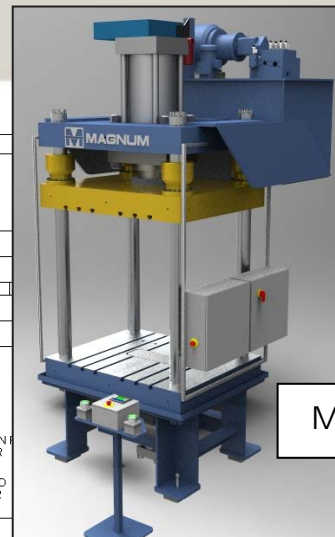
M2P SERIES



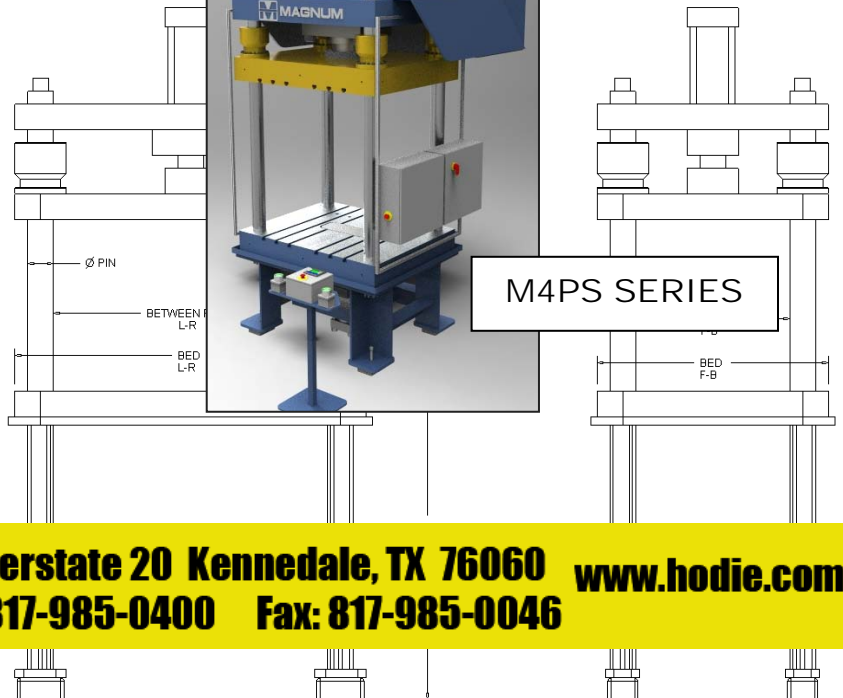
M4P SERIES



M2PS SERIES



M4PS SERIES



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