

Mechanical Press Technology



*PERFORMANCE,
DIE SET, AND
MULTI-ACTION
SERIES PRESSES*



PERFORMANCE SERIES

The affordable solution for single to multi-level parts

Floating Die Platen is utilized to achieve the lower action. A fixed die table stop permits the use of shelves in the die.

Die Control Rods assist with achieving uniform density within the compacted part.

Four Post Design Die Set is a fixed unit mounted in the press. The die plate and core rod plate float together.

Adjustable Lower and Upper Rams accommodate varying punch lengths.

Gear Driven Adjustments for precise control.

Ejection System is bottom punch push-up utilizing an ejection cam and push rod.

Shuttle-Type Filler Shoe System is fully adjustable by use of worm gear driven split cams.

Crosshead Style Upper Punch Guidance System provides very precise punch to die alignment. This precision alignment enhances tool life.

Lower Ram Guide Plate enables superior lower punch guidance. The adjustable lower ram does not protrude through the guide plate. This creates a solid barrier protecting the adjustments from powder contamination.



Die Control Adjustment is located in the upper ram, providing easy accessibility for adjusting and maintenance.

Core Rods can be mounted in a stationary position or floating to permit synchronous motion with the die plate. Mounting adapters are provided for both types of installation.

Core Rod Adapter Mounts are bolted in for ease of removal and installation.

Enhanced Guarding System includes solid fully enclosed hinged side guards, as well as hinged interlocked guarding on the front and rear of the press.

Powder Compacting Press Specifications

Tonnage		15		30		45		60		100		200 ³		300		400		550		750	
Fill/Stroke		fill	stroke	fill	stroke	fill	stroke	fill	stroke	fill	stroke	fill	stroke	fill	stroke	fill	stroke	fill	stroke	fill	stroke
PERFORMANCE SERIES¹	inch	2.50	4.50	3.25	5.25	4.50	7.00	6.25	9.00	6.25	9.00	6.25	9.00	6.25	9.00	6.25	10.00	6.25	10.00	6.25	10.00
	mm	64	114	83	133	114	178	159	229	159	229	159	229	159	229	159	254	159	254	159	254
DIE SET SERIES²	inch	2.75	4.50	3.25	5.50	4.50	7.00	6.25	9.00	6.25	9.00	6.25	9.00	6.25	9.00	6.25	10.00	6.25	10.00	6.25	10.00
	mm	70	114	83	140	114	178	159	229	159	229	159	229	159	229	159	254	159	254	159	254
MULTI-ACTION SERIES²	inch	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6.25	9.00	6.25	9.00	6.25	10.00	6.25	10.00	6.25	10.00
	mm	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	159	229	159	229	159	254	159	254	159	254
Range of Speed Adjustment Strokes Per Minute		10 - 50		8 - 40		7 - 30		7 - 25		7 - 25		7 - 22		7 - 19		7 - 17		7 - 17		7 - 13	



DIE SET SERIES

Ideal for multi-level parts and applications requiring removable die set

Removable Die Set available in up to three lower punch configurations.

Floating Die Platen is utilized to achieve the lower action. Adjustable die table molding stops enable process adjustments and tool redressing without modifying tool adapters.

Fill, Ejection and Molding Stops are worm gear-driven for easy accessibility and precise control.

Adjustable Lower Punch Rams provide individual independent adjustment of lower punches.

Crosshead Style Upper Punch System provides precise adjustment, as well as precision alignment.

Shuttle-Type Filler Shoe System is fully adjustable by use of worm gear-driven split cams.

Withdrawal Ejection System sequentially ejects tool levels using synchronized dual cams and push rods.

Modular Pneumatic Core Rod System has adjustable mold stops. Positions and motions are controlled independently of the die set. A fixed core rod, which is mounted directly in the die set, is also included.

Density Control Rods on the die and intermediate punch plates are independently adjustable—permitting precise density control.

OPTION	PERFORMANCE SERIES	DIE SET SERIES PRESS	MULTI-ACTION SERIES
Automatic Lubrication	optional	optional	standard
Cieco Controller (16 or 32 Output)	optional	optional	n/a
Core Rod Variants	optional	optional	optional
Digital Position Readouts	optional	optional	standard
Floor Mounted Drive	optional	optional	optional
Light Curtains	optional	optional	standard
Pneumatic Upper Punch	optional	optional	standard
Position Motorization	optional	optional	standard
Powder Level Monitor	optional	optional	standard
Presslog Control System	optional	optional	standard
Servo Filler Shoe	optional	optional	standard
Simulator System	n/a	optional	n/a
Tonnage Monitor	optional	optional	standard
Top Punch Hold Down	optional	optional	standard
Underfill	optional	standard > 200T	standard
Wear Package	optional	optional	optional

MULTI-ACTION SERIES

State-of-the-art technology for complex, multi-level parts

Selective Molding and Selective Ejection functions eliminates the need for expensive bridging of tools.

Three Independent Lower Punch Platens provide total independent adjustment of each level.

Adjustable Selective Molding Stops are provided on the die platen, as well as the #1/#2 punch platens.

Adjustable Selective Withdrawal Ejection on the die and #1/#2 punch platens, permitting the use of any lower punch platen as the stationary level. This simplifies tool design and adaptation for complex part geometries. #3 Punch Platen has 1-1/2" of float for transfer in conjunction with a fixed mold position.

Motorized Position Adjustments with digital displays for ease of accessibility and precise control.

Pneumatic Dual Upper Punch System gives upper hub and counter bore capability.

Top Punch Hold Down Function controls the part during ejection.

Automatic Central Press Lubrication System ensures that the correct amount of lubricant is applied at proper intervals.



Presslog Control System provides critical adjustment access and machine status via touchscreen operator interface.

Servo Filler Shoe System gives total precise control of all shoe functions programmed through the touchscreen monitor.

Tonnage Monitor digitally displays the tonnage on the monitor and provides high and low parameter settings.

Underfill/Overfill is used to reduce powder "splash out" from the die, as well as aid in difficult filling applications.

PRESSLOG HMI (Human Machine Interface & Control System)

The optional Windows®-based PressLog HMI uses a graphic touchscreen display. Operators know the machine's status at a glance. Users can check fault logs, store virtually limitless production process information and access online troubleshooting aids. **Password security** allows operator, supervisor and maintenance levels of access. **PressLog** retains a history of all setup recipes. Controls display metric or imperial units and is programmable for any language.



AUXILIARY EQUIPMENT

DIE WALL LUBE

Increase part density and green strength and reduce lubricant contamination in sintering

- Reduce or eliminate the need for lubricants in the powder mix
- Achieve higher part densities and greater green strengths
- Improve mechanical/electrical properties of sintered parts
- Reduce lubricant contaminants from sintering process
- Maintains current production throughput
- Readily adaptable to different makes/models of presses



FLUIDIZED FILLER SHOE

Increase productivity and improve process control

PRODUCTIVITY

- Enables flow of poor flowing powders
- Reduces die filling time for increased productivity

PROCESS CONTROL

- More consistent die filling
- Tighter weight and size control

Testing with iron powder shows a 50% increase in throughput with a 50% decrease in part dimensional variation*

**Results will vary based on application conditions*



ROTARY PARTS ACCUMULATOR

Increase efficiency by enabling a single user to tend multiple presses

- 2 Post designs in 22", 26", and 30"
- 4 Post designs in 36", 48", 60", and 72"
- Adjustable height and speed
- Reversible direction
- Removable parts tray
- Optional UHMW Material to avoid part nicking



EXPERTISE

Work with a company that understands your business. Gasbarre has been building presses for over 40 years, and we understand the needs of our customers— and the obstacles to their success. Expert advice comes standard with a Gasbarre press.

SELECTION

Mechanical, Hydraulic, Electric, Isostatic, High Speed; Gasbarre Press offers the widest selection of presses and accessory products available. Our presses are designed and built for maximum flexibility within your operation, allowing a wider range of use and faster ROI. Because your press should fit your needs, not the other way around.

SERVICE

Gasbarre customers require maximum up-time, and Gasbarre offers unmatched field service to deliver just that. In addition to emergency press service, Gasbarre offers machine operation and maintenance training as well as custom-designed maintenance programs performed by Gasbarre professionals. When our customers need help the most, we're only a phone call away.

WORLDWIDE SUPPORT

Gasbarre Products' qualified technicians, trainers, and sales staff offer prompt courteous assistance to help maintain your press at peak performance. Consultation is available via telephone or email, or on-site through our worldwide network of factory trained technicians.



*Mechanical
Hydraulic
Electric
Isostatic
High-Speed
Press Accessories*



*Sintering
Brazing
Quench
Annealing
Steam Treating
Tempering
Vacuum
Atmospheric*



*Tooling
Precision Machining
Design Services*



*Engineering & Design
Custom Fabrication
Electrical Assembly
Integration*



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