

PRECISION HIGH-SPEED POWDER COMPACTION PRESSES

GASBARRE PRESS DIVISION

Mechanical Compacting & Sizing Presses
DuBois, PA

BEST HYDRAULIC PRESS

Hydraulic Compacting & Sizing Presses
DuBois, PA

PTX-PENTRONIX

High Speed Compacting Presses
Plymouth, MI

SIMAC LTD.

Isostatic Presses
Rugby, England

SINTERITE PRODUCTS

Continuous Belt Sintering Furnaces
St. Marys, PA

C.I. HAYES

High Temperature Furnaces
Cranston, RI

J.L. BECKER

Heat Treating Equipment and Components
Plymouth, MI

McKEE CARBIDE TOOL

Precision Machined Components
Olanta, PA

MAJOR GAUGE & TOOL

Precision Machined Components
Livonia, MI

REMANUFACTURING AND REBUILD SERVICES

PTX-Pentronix, Inc. provides a complete range of services to support the PTX and Simac Presses that it manufactures for re-manufacturing or rebuilding. Also supported are PTX Multipak Loaders and Gasbarre Presses. Our rebuild team can disassemble and evaluate your press for necessary rebuild work, then return the press to as new condition. These processes are followed with tight quality control to ensure that the machine performs as a new machine should.

CUSTOMER SERVICE, WORLDWIDE TECHNICAL ASSISTANCE AND REPLACEMENT PARTS

The qualified technical staff of PTX and Gasbarre offer prompt, courteous assistance to return and maintain your press at its optimum operating efficiency.

Consultation is available by telephone, fax, or email. On-site services can be arranged through our worldwide network of factory trained technicians.

- Troubleshooting and repair services
- Tool design, tool capsule remanufacture, retrofit and assembly
- Operator, set up, and maintenance training
- Replacement parts
- Installation assistance
- Field retrofits



For Hard Metals, Ceramics, Plastics, Glass & More



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PTX-Pentronix, Inc. is a subsidiary company of Gasbarre Products, Inc. Gasbarre is an international supplier of hydraulic and mechanical powder compacting and sizing presses for simple to complex parts. Gasbarre designs are engineered for rugged, reliable operation, and backed by our reputation for quality.



Multipak® Anvil Press
with Powder Feeder

HIGH SPEED MULTIPAK® ANVIL PRESSES

Anvil pressing is the simplest, most economical high-speed method of compacting powder parts. Anvil pressing is a 'natural' for parts with one flat side. (The other side can be flat or multi-level. The parts can have holes, teeth, etc.) When thin parts fit this category, anvil pressing can benefit a wide range of applications. Our patented Unitized Anvil® design combines the powder feeder, anvil and vacuum pick up into one unit which is always in contact with the die plate. Since the die cavity is always covered until the part is pressed, powder spillage or blowout is virtually eliminated.

Press tooling is simple and less expensive. Parts are compacted against an anvil by the upward action of a lower punch (or punches). There are no upper punches and associated problems of misalignment, breakage and wear. Press setup is easy, and special skills are not required.

Available Press Tonnages: 4, 6, 16 and 35 ton



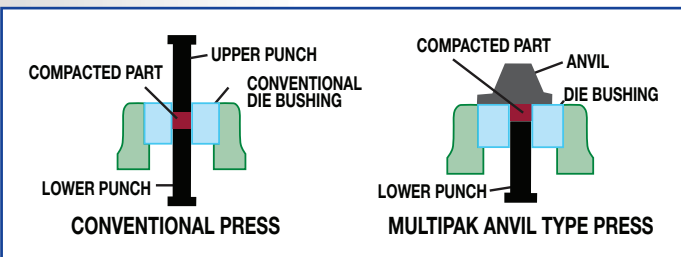
Multipak® Conventional Press
with Powder Feeder

HIGH SPEED MULTIPAK® CONVENTIONAL PRESSES

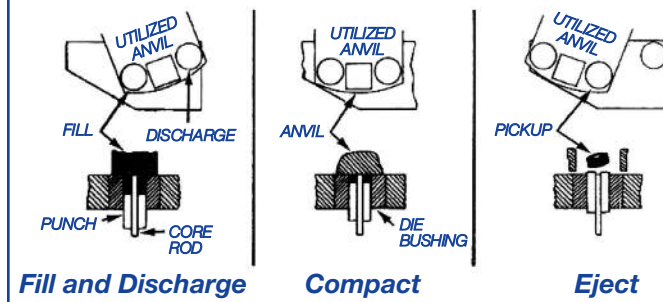
Specially designed for multiple cavities, high-speed, complex, and multi-level precision parts. The Multipak conventional presses offer powder transfer from top and bottom punches, a pre-press with the top punch, and a top punch hold-down system. With a standard removeable tool set, tool assembly is done off-line and can be replaced and adjusted within about 15 minutes. The same tool set may be used for a wide variety of parts.

The Multipak conventional press may also be used in the 'Anvil Press' mode.

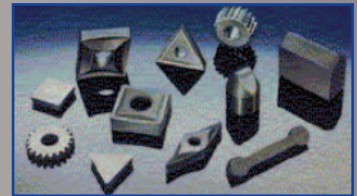
Available Press Tonnages: 2, 6, 16, and 35 ton



Utilized Anvil Operation



Multipak® Anvil Press
Anvil part examples



Multipak® Conventional Press
Conventional part examples

Specifications

	Model	Anvil Presses					Conventional Presses				
		1204	601	611	1601	3101	212	612	1612	3112	
Strokes per minute ¹	min-max	25-150	20-150	50-300	15-100	10-60	25-100	20-100	10-80	10-40	
Maximum Press Force	tons-kN	4 36	6 54	6 54	16 145	35 318	2 18	6 54	16 145	35 318	
Maximum Eject Force	tons-kN	2 18	3 27	3 27	8 73	17.5 159	1 9	3 27	8 73	17.5 159	
Upper Ram Stroke	in.-mm	anvil		anvil		anvil		anvil		anvil	
Maximum Fill	in.-mm	0.30 7.62	0.30 7.62	0.15 3.81	0.30 7.62	0.30 7.62	0.30 7.62	0.75 19.10	- -	- -	
Depth Cams ²	in.-mm	0.60 15.00	0.75 19.00	- -	0.75 19.00	0.75 19.00	0.60 15.00	1.10 27.90	0.75 19.00	0.75 19.00	
	in.-mm	1.10 27.90	1.10 28.00	- -	2.00 50.80	2.00 50.80	- -	1.5 38.10	2.00 50.80	2.00 50.80	
	in.-mm	- -	- -	- -	- -	3.00 76.20	- -	1.75 44.50	- -	3.00 76.20	
Max. Part Thickness	in.-mm	0.55 13.97	0.55 13.97	0.08 2.03	1.00 25.4	1.50 38.10	0.30 7.62	0.88 22.23	1.00 25.40	1.50 38.10	
Max. Part Diameter ³	in.-mm	0.85 21.6	1.25 31.8	0.75 19.05	1.75 44.4	2.00 50.80	0.50 12.7	1.25 31.80	1.75 44.40	2.00 50.80	
Cavities ⁴		1-22	1-30	1-22	1-50	1-50	1-22	1-30	1-50	1-50	
Motor	Hp.-kW	0.75 0.55	1.5 1.1	1.5 1.1	5 3.7	7.5 5.6	1.5 1.1	3 2.2	5 3.7	7.5 5.6	
Air Pressure Req'd.	psi-bar	80 5.5	80 5.5	80 5.5	80 5.5	80 5.5	80 5.5	80 5.5	80 5.5	80 5.5	
Free Air Req'd.	scfm-m ³ /min	10 0.283	10 0.283	10 0.283	20 0.566	20 0.566	20 0.566	20 0.566	20 0.566	20 0.566	
Overall Height ⁵	in.-mm	61 1549	66 1676	66 1676	85 2158	87 2209	70 1778	77 1955	96 2437	96 2437	
Overall Width	in.-mm	24 610	36 914	31 787	36 914	36 914	31 787	31 787	36 914	36 914	
Overall Depth	in.-mm	24 610	30 762	27 686	52 1321	58 1473	24 610	27 686	52 1321	57 1449	
Net Weight (approx.)	lbs.-kg	610 277	1650 748	1650 748	4400 2000	5600 2540	800 362	2200 998	6900 3130	8150 3697	
STANDARD FEATURES											
Adjustable fill height		•	•	•	•	•	•	•	•	•	
Adjustable mold height		•	•	•	•	•	•	•	•	•	
Deflection compensation	optional		•	•	•	•	optional	•	•	•	
Vacuum parts pickup		•	•	•	•	•	•	•	•	•	
Parts discharge conveyor	optional		•	•	•	•	•	•	•	•	
Automatic lubrication		•	•	•	•	•	•	•	•	•	
Variable speed drive		•	•	•	•	•	•	•	•	•	
OPTIONS											
Compaction Force Load Monitor							•	•	•	•	
Overfill/underfill or floating core rod		•	•	•	•	•	•	•	•	•	
Tool capsule (solid/cored/cup/flange)		•	•	•	•	•	•	•	•	•	
Remote control enclosure			•	•	•	•	•	•	•	•	
Wear resistance package		•	•	•	•	•	•	•	•	•	
Top punch hold down							•	•	•	•	
Multiple powder filling		•	•	•	•	•	•	•	•	•	

NOTES: (1) Maximum speed is with minimum fill cams (2) Contact PTX for consideration of deeper fill (3) Contact PTX for analysis of part height (4) Depending upon total force requirement (5) Height includes powder hopper

MULTI-LOADER® PART HANDLING SYSTEM

Automatic Multi-Loader high-speed part handling systems are microprocessor controlled to pick and place a variety of parts from the press die table, press conveyor, or other feeding machines, and place onto saggars, boats or trays. Designed to load parts one at a time, or a row at a time, the Multi-Loader consists of an indexing conveyor to advance the tray, a robot arm to pick and place the parts, a microprocessor based controller, and an operator control panel.

