# **Powder Compaction Presses**For hard metals, ceramics, polymers, glass and more



HIGH SPEED.
PRECISE.
RELIABLE.





Pentronix, Inc.







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# HIGH SPEED MULTIPAK ANVIL PRESSES

Available in 4, 6, 16 and 35 ton

- Economical
- High speed
- Single or multi-cavity
- Ideal for parts with one flat side
- Fast tooling changeover





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. 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., virtually elimination powder spillage. Parts are compacted against an anvil by the upward action of a lower punch. There are no upper punches and associated problems of misalignment, breakage and wear.



# HIGH SPEED MULTIPAK CONVENTIONAL PRESSES

#### Available in 2, 6, 16 and 35 ton

- High speed
- Fast setup
- Single or multi-cavities
- For complex, multi-level, precision parts
- Fast tool changeover



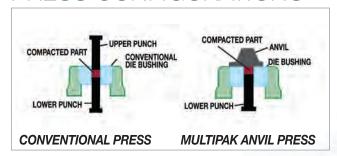
Specially designed for multiple cavities, high-speed, complex, and multi-level precision parts. Multipak conventional presses offer powder transfer from top and bottom punches, a pre-press with the top punch, and a top punch hold-down system. With a standard removeable tool set, tool assembly is done 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 'Anvil Press' mode.

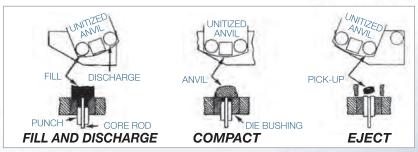
## **SPECIFICATIONS**

		Anvil Presses									Conventional Presses								
Mode	1 12	1204		601		611		1601		3101		212		612		1612		3112	
Strokes per minute <sup>1</sup> min-ma	25-	25-150		20-150		50-300		15-100		10-60		25-100		25-100		10-80		10-40	
Maximum Press Force tons-kl	1 4	35	6	54	6	54	16	145	35	318	2	18	6	54	16	145	35	318	
Maximum Eject Force tons-kl	1 2	18	3	27	3	27	8	73	17.5	159	1	9	3	27	8	73	17.5	159	
Upper Ram Stroke inmn	ı ar	anvil		anvil		anvil		anvil		anvil		29.72	1.75	44.00	2.38	60.00	3.63	92.00	
Maximum Fill inmn	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 <sup>2</sup> inmn	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	
inmn	1.10	27.90	1.10	28.00	-	-	2.00	50.80	2.00	50.80	-	-	1.50	38.10	2.00	50.80	2.00	50.80	
inmn		-	-	-	-	-	-	-	3.00	76.20	-	-	1.75	44.50	-	-		76.20	
Max. Part Thickness inmn	1 .55	13.97	.55	13.97	0.08	1.91	1.00	25.40	1.50	38.10	0.30	7.62	0.88	22.23	1.00	25.40	1.50	38.10	
Max. Part Diameter <sup>3</sup> inmn	0.85	21.60	1.25	31.80	0.75	19.05	1.75	44.40	2.00	50.80	0.50	12.70	1.25	31.80	1.75	44.40	2.00	50.80	
Cavities <sup>4</sup>	1-	1-22		1-30		1-22		1-50		1-50		1-22		1-30		1-50		1-50	
Air Pressure Req'd. psi-ba		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-m³/mi	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 <sup>5</sup> inmr	61	1549	66	1676	66	1676	85	2158	87	2209	70	1778	77	1955	96	2437	96	2437	
Overall Width inmr	1 24	610	36	914	31	787	36	914	36	914	31	787	31	787	36	914	36	914	
Overall Depth inmr	1 24	610	30	762	27	686	52	1321	58	1437	24	610	27	686	52	1321	57	1449	
Net Weight (approx.) lbskg	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								_	1	•				•			1		

#### PRESS CONFIGURATIONS



#### UNITIZED ANVIL OPERATION



## 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 saggers, 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.



## PRESS REBUILD SERVICE

PTX-Pentronix, Inc. provides a complete range of services, from simple parts and service to complete rebuilds. 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.

## **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



Brazing Quench

Sintering

Annealing

Steam Treating

Tempering

Vacuum

Atmospheric



Tooling
Precision Machining
Design Services



Engineering & Design Custom Fabrication Electrical Assembly Integration





DuBois, Pennsylvania USA press-sales@gasbarre.com • 814.371.3015

www.gasbarre.com



