

# *Dry Bag Cold Isostatic Presses*

For hard metals, ceramics, polymers, glass and more



HIGH SPEED.

PRECISE.

RELIABLE.

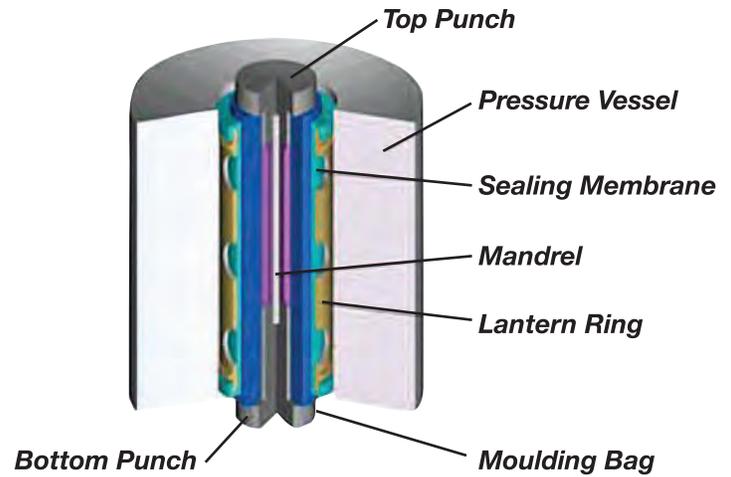


## SIMAC MONOSTATIC PRESSES

**SINGLE CAVITY  
SEMI OR FULLY AUTOMATIC  
ADJUSTABLE DWELL  
BUILT TO FIT APPLICATION**

### **Key Features Include**

- Removable inner (product) tools
- Manual or Semi-automatic operation
- Adjustable iso-pressure
- Certified pressure vessels
- Bottom part removal
- Part ejection elevator
- PLC control with Graphical User Interface (HMI)
- Iso-pressure monitoring via electronic transducer
- Adjustable iso-pressure dwell
- Fully enclosed service-ready pressure panel



### **Monostatic Press Pressure Vessel and Tooling Arrangement**

*SIMAC designs and manufactures Cold Dry Bag Iso-static Presses for powder compaction.*

*SIMAC has developed uniquely configured presses to allow for laboratory or production manufacture of uniform density components. The dry bag design is employed so that powder filling, compaction, and ejection are greatly simplified from wet bag types. The dry bag process is more efficient allowing for quick, ready to press parts.*

*SIMAC presses include a tool mounting system that allows for a wide range of parts to be produced in the same machine. Dual inner bag configuration allows simple tool changeover.*



# MONOSTATIC SPECIFICATIONS

Model	Type	Holding Capacity		Maximum Fill Diameter		Maximum Part Length		Maximum Isostatic Pressure	
		Tons		mm	Inches	mm	Inches	bar	psi
100 TON	45/300/2400	100		45	1.77	300	11.81	2400	34810
	60/300/2000	100		60	2.36	300	11.81	2000	29010
	75/300/1400	100		75	2.95	300	11.81	1400	20300
	45/425/2400	100		45	1.77	425	16.73	2400	34810
	60/425/2000	100		60	2.36	425	16.73	2000	29010
	75/425/1400	100		75	2.95	425	16.73	1400	20300
300 TON	80/425/2400	300		80	3.15	425	16.73	2400	34810
	80/450/2400	300		80	3.15	450	17.72	2400	34810
	105/425/2000	300		105	4.13	425	16.73	2000	29010
	105/450/2000	300		105	4.13	450	17.72	2000	29010
	135/425/1400	300		135	5.31	425	16.73	1400	20300
	135/450/1400	300		135	5.31	450	17.72	1400	20300
	155/425/1000	300		155	6.10	425	16.73	1000	14500
155/450/1000	300		155	6.10	450	17.72	1000	14500	
400 TON	80/425/3000	400		80	3.15	425	16.73	3000	43510
	80/450/3000	400		80	3.15	450	17.72	3000	43510
	105/425/2400	400		105	4.13	425	16.73	2400	34810
	105/450/2400	400		105	4.13	450	17.72	2400	34810
	135/425/2000	400		135	5.31	425	16.73	2000	29010
	135/450/2000	400		135	5.31	450	17.72	2000	29010
	155/425/1400	400		155	6.10	425	16.73	1400	20300
	155/450/1400	400		155	6.10	450	17.72	1400	20300
	180/425/800	400		180	7.09	425	16.73	800	11600
	180/450/800	400		180	7.09	450	17.72	800	11600



100 Ton  
Monostatic Press



300 Ton  
Monostatic Press\*

*\*optional features shown*



400 Ton  
Monostatic Press

## AVAILABLE OPTIONS

- Hydraulic Intensifier System
- Powder Transfer Unit
- Powder Metering Unit
- Bulk Powder Hopper
- Pick and Place System
- Output Conveyor System
- Rod Machining Equipment
- Program Storage
- Data Acquisition



# SIMAC DENSOMATIC PRESSES

**HIGH VOLUME  
UP TO 6 CAVITIES  
RANGES FROM 5-150T  
TOP OR BOTTOM EJECTION**

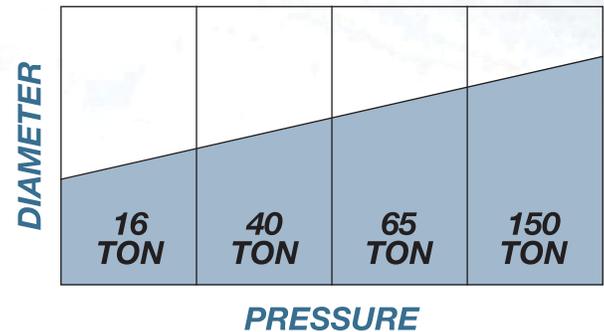
## Applications

- Spark Plug Insulators
- Rods
- Balls
- Sensor Bodies
- Lamp Tubes
- Spray Nozzles
- Drill Blanks

## Available Options

- Automatic powder feed metering system
- Different sized pressure vessel blocks
- Automatic pressed component handling and transfer
- Pressed component profile grinding
- Component inspection

## Part Size vs. Clamping Pressure



# DENSOMATIC SPECIFICATIONS

	Capacity	Type	Cavities	PPM	Maximum Fill Diameter		Maximum Part Length		Maximum Isostatic Pressure	
					mm	Inches	mm	Inches	bar	psi
DENSOMATIC PRESS	5 Ton	1/5/570	1	2	23	0.91	120	4.72	570	8265
	15 Ton	1/15/2100	1	2	23	0.91	114	4.50	2100	20450
	16 Ton	6/16/830	6	30	30	1.18	120	4.72	830	12035
		4/16/2100	4	5	20	0.79	120	4.72	2100	30450
	20 Ton	2/20/520C	2	10	23	0.91	140	5.51	520	7540
		6/20/520C	6	10	23	0.91	90	3.54	520	7540
	30 Ton	6/30/800	6	12	23	0.91	105	4.13	800	11600
		3/30/00	3	2.5	23	0.91	105	4.13	2100	30450
	40 Ton	4/40/2000	4	16	80	3.15	120	4.72	2100	29000
		65 Ton	4/65/600	4	12	80	3.15	170	6.69	600
	4/65/2100		4	12	105	4.13	125	4.92	2100	30450
125 Ton	6/125/2100	6	4.5	28	1.13	114	4.50	2100	30450	
	150 Ton	3/150/800	3	7.5	80	3.15	230	9.06	800	11600
180 Ton	1/180/1000	1	1	80	3.15	230	7.87	1000	14500	
PRESSURE GRINDER	16 Ton	6/16/830-G18	6	30	30	1.18	120	4.72	830	12035
	20 Ton	6/20/520-G18	6	10	23	0.91	105	4.13	520	7540
	30 Ton	6/30/800-G18	6	12	23	0.91	105	4.13	800	11600
		3/30/2100-G18	3	2.5	24	0.94	150	5.19	2100	30450
	125 Ton	6/125/2100-G18	6	4	28	1.13	114	4.50	2100	30450

# SIMAC PRESS SPECIAL FEATURES



## TOUCHSCREEN HMI

- Full process monitoring
- Quick function access
- Process recording
- Recipe storage/recall
- Cycle optimization



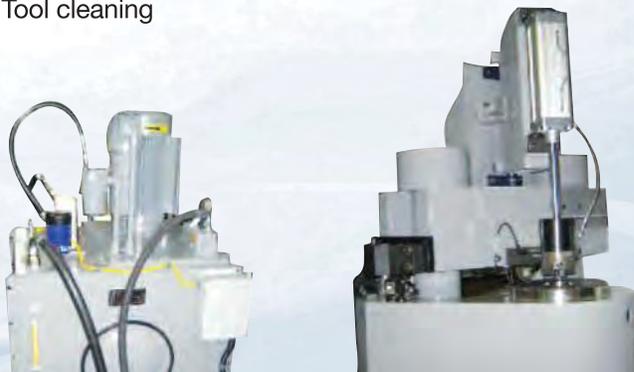
## HYDRAULIC/PNEUMATIC ENCLOSURE

- Quick maintenance
- Quiet operation
- Clean environment



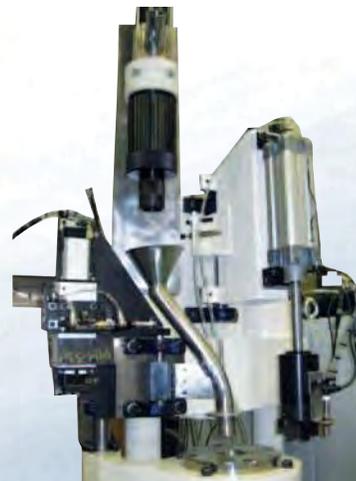
## AUTOMATED MATERIAL HANDLING

- Sensitive tactile parts grippers
- Tool rotation:
  - Threaded parts
  - Tool cleaning



## ISOPRESSURE INTENSIFIER

- Hydraulic pressure amplifier system
- Large area/volume– to small area/volume
- Hydraulic power unit
- Allows for additional pressure



## POWDER FEED SYSTEMS

- Volumetric type
- Fluidized type
- Mass type

# PRESS REBUILD SERVICE

Simac offers a complete range of after sale service and support. Our rebuild team can clean, 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.



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**GASBARRE PRODUCTS, INC. CORPORATE HEADQUARTERS**

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

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

