



**American Isostatic Presses, Inc.**

## COLD ISOSTATIC PRESSES

**Wide array of systems available from American Isostatic Presses, Inc.**

### VESSELS:

ASME designed monolithic (one piece forging) vessels with:

- Full Thread
- Partial Thread (Breech)
- Pin type
- or...
- Yoke held closures

Safe, proven, durable, and cost effective. These vessels are easily inspected, maintained, and accepted for use in most locations. ASME stamping is also available.

### PRESSURES:

Any range from 1500 psi to 150,000 psi are available. Standards are: 1500, 3000, 6000, 10,000, 15,000, 30,000, 45,000, 60,000, and 100,000 psi.

### VESSEL SIZES:

Any size from 2 to 60 inches inside diameter and from 8 to 150 inches in length. Standards are (in inches) 2 x 8, 3 x 12, 4 x 16, 6 x 20, 8 x 24, 10 x 30, 12 x 36, and 16 x 48.

### CONTROLS:

We offer any style of controls or computer to operate the system, with fully automatic or manual operation. Various venting options are available for different applications.

### PUMPS:

Air powered or electric-hydraulic powered types are offered. Brands include Hydro-Pac, Haskel

### WARM PRESSES:

Most Cold Isostatic Presses can be ordered with heaters and controls to allow pressing up to temperatures of 100 C or more.

## BACKGROUND

Cold Isostatic Pressing has become a widely used process for consolidation of metal, ceramic, plastic, and composite powders. Wet bag CIP is performed in rubber molds which can be manufactured to intricate shapes and various sizes. This creates uniform density throughout the green body resulting in predictable shrinkage during subsequent sintering or HIPping. CIP can form parts too complex for uniaxial die presses. CIPed green bodies may also be machined quite easily prior to firing. Wet bag presses are capable of processing different size molds, multiple bags simultaneously, and very large parts. Most materials compact in the range between 10,000 to 40,000 psi. A research system with 60,000 psi capability allows testing to be done prior to scale up. AIP research systems are extremely simple and economical, allowing organizations the ability to own one or more systems in house. AIP Cold Isostatic Presses make an excellent addition to any facility and provide safety and reliability.



## AIP3-12-60C RESEARCH CIP

ADVANTAGES	Simple. Easy to operate. Easy to maintain. Safe, cost effective pressing.
WORKING PRESSURE	60,000 PSI
VESSEL TYPE	Single ended one piece 4340 forging
CLOSURE TYPE	Full thread type (pin optional)
WORKING SIZE	3" diameter x 12" long
PUMP	Haskel, 60,000 psi, air- driven liquid pump
CONTROLS	Astra gauge with contact for pump shut off, Manual valve for venting.
PIPING & VALVES	60,000 psi rated, replaceable Stellite tip and stem on valve
WARRANTY	1 year limited
DIMENSIONS	24" x 24" x 34"
WEIGHT	600 lbs
UTILITIES REQUIRED	120/220 VAC / 10 amps, 10 CFM compressed air.
AVAILABLE OPTIONS	<ul style="list-style-type: none"><li>* Breech and Pin Style Vessels</li><li>* Electro-Hydraulic Pumps</li><li>* Controlled Automatic De-pressurization</li><li>* Digital Readouts and Controls</li></ul>

### AMERICAN ISOSTATIC PRESSES, INC.

1205 S. Columbus Airport Rd.

Columbus, Ohio 43207

614-497-3148 \* 1-800-375-7108

Fax: 614-497-3407

Email [sales@aiphp.com](mailto:sales@aiphp.com) \* Web [www.aiphp.com](http://www.aiphp.com)