

Fluid Cell Sheet Hydroforming



Features & Benefits

- High-performance sheet metal and composite forming capability
- Increased forming capacity via a universal bladder can form multiple parts in a single cycle
- Dramatically lower tooling costs through elimination of mated dies
- Minimized reliance on skilled labor through an intuitive, programmable control system with built-in recipe handling
- Compact, flush-floor designs eliminate the need for pits or special foundations
- Even application of pressure outperforms traditional rubber pad forming
- Fast, inexpensive bladder changes for increased up-time
- Reduced unplanned downtime with simple preventive maintenance

Hydroforming Technology, Re-Invented

Triform's fluid cell sheet hydroforming presses use the force of a pressurized diaphragm to shape sheet material over a male form block or into a female cavity.

Since the diaphragm acts as a universal female die, matched tooling is not required. This can reduce tooling costs by 50% -90% compared with conventional press tooling! Additionally, tooling can be made from a variety of materials including steel, aluminum, 3D printed substrates, poured epoxies, and even wood.



The process offers high-performance forming capability through the even application of pressure on every square inch of the part's surface. This equal pressure, programmable

via Triform's intuitive control platform, offers net shape part production while minimizing wrinkles, improving part definition, and reducing hand finishing.

A Diverse Family for Maximum Flexibility

From the ultra-compact 16-5BD boasting an 8-second cycle time to the tray-style 36x120-6BD with a shuttle system for increased productivity, we're confident we have a fluid cell press to meet your budget, size, and production needs.

Service & Support After the Sale

Every Triform press features our proprietary PressLink Connect Module which remotely joins technicians with the press in the field. In addition to fast, complimentary support, PressLink facilitates program updates and distance learning without the need for an on-site visit.

On-board diagnostic systems, preventive maintenance packages, and built-in equipment redundancies further our commitment to minimizing unplanned downtime.



See how fluid cell sheet hydroforming works

Learn more about sheet hydroforming

TRIFORM
Manufactured by Beckwood

636.680.2356
info@triformpress.com
triformpress.com

Machinery Specifications



Model	16-5BD	24-5BD	2448-10BD	3648-6BD	3678-6BD	3696-6BD	36120-6BD
Forming Area:	16" Diameter (406mm)	24" Diameter (609 mm)	24" x 48" tray (609mm x 1219mm)	36" x 48" tray (914mm x 1219mm)	36" x 78" tray (914mm x 1981mm)	36" x 96" tray (914mm x 2438mm)	36" x 120" tray (914mm x 3048mm)
Max Chamber Pressure:	5,000 PSI (345 bar)	5,000 PSI (345 bar)	10,000 PSI (689 bar)	6,000 PSI (413 bar)	6,000 PSI (413 bar)	6,000 PSI (413 bar)	6,000 PSI (413 bar)
Max Tool Height:	5" (127mm)	5" (127mm)	6" (152mm)	6" (152mm)	6" (152mm)	6" (152mm)	6" (152mm)
Cycle Time:	<20 seconds	<20 seconds	<60 seconds	<60 seconds	<60 seconds	<75 seconds	<90 seconds
Dimensions							
Length:	122" (309 cm)	142" (360 cm)	262" (665 cm)	262" (665 cm)	321" (815 cm)	360" (914cm)	408" (1036cm)
Width:	42" (106 cm)	35" (89 cm)	189" (480 cm)	198" (502 cm)	198" (502 cm)	198" (502 cm)	198" (502 cm)
Height:	90" (228 cm)	88" (223 cm)	101" (256 cm)	102" (259 cm)	110" (279 cm)	110" (279 cm)	110" (279 cm)
Total System Weight:	18,000 lbs (8164 kg)	25,000 lbs (11,339 kg)	135,000 lbs (61,234 kg)	90,000 lbs (40,823 kg)	130,000 lbs (330,200 kg)	150,000 lbs (381,000 kg)	180,000 lbs (81,646 kg)
Power System							
Total System Horsepower:	20 HP	20 HP	100 HP	195 HP	195 HP	195 HP	195 HP
Working Fluid:	AW 46	AW 46	AW 46	AW 46	AW 46	AW 46	AW 46
Reservoir Capacity:	40 gallons (151 liters)	50 gallons (189 liters)	200 gallons (757 liters)	300 gallons (1135 liters)	500 gallons (1892 liters)	500 gallons (1892 liters)	500 gallons (1892 liters)
Control System							
Electrical / PLC:	Allen Bradley CompactLogix	Allen Bradley CompactLogix	Allen Bradley CompactLogix	Allen Bradley CompactLogix	Allen Bradley CompactLogix	Allen Bradley CompactLogix	Allen Bradley CompactLogix
Touchscreen Interface:	8" Color Touchscreen	8" Color Touchscreen	10" Color Touchscreen	10" Color Touchscreen	10" Color Touchscreen	10" Color Touchscreen	10" Color Touchscreen

* All cycle times are estimated with filler plate at 5,000 PSI and 50% volume.

* All models include the option to increase to 10,000 PSI. Consult a Triform rep for detailed specifications.

