

Deep Draw Sheet Hydroforming



Features & Benefits

- High-performance drawing capability for a variety of materials including the strongest alloys
- Easily configured to operate in fluid cell mode for increased forming flexibility
- 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
- Simplified part development with the "In-Sight" feature
- Fast, inexpensive bladder changes for increased up-time
- Reduced unplanned downtime with simple preventive maintenance

Hydroforming Technology, Reinvented

Triform's deep draw sheet hydroforming presses use a state-of-the-art computer system to precisely control the downward-acting diaphragm and upward-acting tool to form complex geometries in a single press cycle.

As pressure is applied, the tool is extended atop a hydraulic cylinder, drawing the material into the pressurized diaphragm. Parts such as cans, boxes, or those with curved flanges, benefit greatly from Triform's controlled flow of the material.

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 materials, poured epoxies, and even wood.

Removing the Guesswork from New Part Development

Triform deep draw technology leverages a proven, decades-old forming process with several integrated enhancements that increase users' forming capability.

Triform's 'In-Sight' feature allows you to pause the cycle at any point in the forming process and open the press for a visual inspection of the forming results. Depending on those results, you can either continue the cycle or abort it in order to modify the recipe. This ability to look inside the chamber greatly expedites new part development, saving valuable time & materials.

Service & Support After the Sale

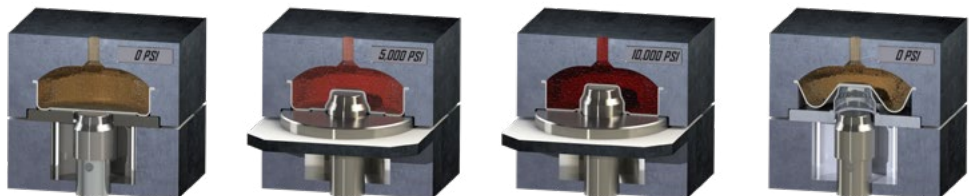
Our dedicated service and support team is exhaustively trained in Triform technologies, and our commitment to rapid response results in increased uptime for your organization.

Our proprietary PressLink connect module remotely joins Triform technicians with your press in the field. In addition to fast, complimentary support and troubleshooting, the PressLink device facilitates certain program updates without the need for an on-site service visit.

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

TRIFORM
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See the deep draw process from inside the press:
triformpress.com/deep-draw



Machinery Specifications



Model	610-20-3SC	12-15-7BD	16-10-7BD	20-10-10BD	25-10-12BD	32-10-12BD	42-10-12BD
Max Blank Diameter:	6" x 10" oval (152 x 254 mm)	12" (304 mm)	16" (406 mm)	20" (508 mm)	25" (635 mm)	32" (813 mm)	42" (1066 mm)
Max Chamber Pressure:	20,000 PSI (1379 bar)	15,000 PSI (1034 bar)	10,000 PSI (689 bar)	10,000 PSI (689 bar)	10,000 PSI (689 bar)	10,000 PSI (689 bar)	10,000 PSI (689 bar)
Draw Depth Capacity:	3" (76 mm)	7" (178 mm)	7" (177 mm)	10" (254 mm)	12" (304 mm)	12" (304 mm)	12" (304 mm)
Max Punch Diameter:	4" (101 mm)	8" (203 mm)	12" (305 mm)	15" (381 mm)	19" (483 mm)	27" (685 mm)	36" (914 mm)
Lower Punch Force:	125 tons	381 tons	280 tons	471 tons	1130 tons	1850 tons	2,240 tons
Cycle Time:	<30 seconds	<30 seconds	<45 seconds	<45 seconds	<60 seconds	<60 seconds	<75 seconds
System Dimensions							
Length:	170" (431 cm)	165" (419 cm)	165" (419 cm)	200" (508 cm)	155" (394 cm)	177" (449 cm)	192" (487 cm)
Width:	55" (139 cm)	70" (177 cm)	70" (177 cm)	70" (177 cm)	70" (177 cm)	75" (190 cm)	87" (221 cm)
Height:	105" (266 cm)	135" (343 cm)	135" (343 cm)	157" (398 cm)	260" (660 cm)	304" (772 cm)	340" (863 cm)
Weight:	17,000 lbs (4,535 kg)	44,000 lbs (19,958 kg)	44,000 lbs (19,958 kg)	62,000 lbs (28,122 kg)	130,000 lbs (58,967 kg)	230,000 lbs (104,326 kg)	350,000 lbs (158,757 kg)
Pit Depth:	n/a	n/a	n/a	3' (91 cm) or platform	5' (152 cm)	7' (213 cm)	10' (305 cm)
Power System							
Total System Horsepower:	50 HP	170 HP	170 HP	170 HP	170 HP	250 HP	400 HP
Working Fluid:	AW 46	AW 46	AW 46	AW 46	AW 46	AW 46	AW 46
Reservoir Capacity:	80 gallons (302 liters)	300 gallons (1,135 liters)	300 gallons (1,135 liters)	400 gallons (1,514 liters)	500 gallons (1,892 liters)	800 gallons (3028 liters)	1,000 gallons (3785 liters)
Control System							
Programmable PLC:	Allen Bradley CompactLogix	Allen Bradley CompactLogix	Allen Bradley CompactLogix	Allen Bradley CompactLogix	Allen Bradley CompactLogix	Allen Bradley CompactLogix	Allen Bradley CompactLogix
Touchscreen Interface:	17" Color	17" Color	17" Color	17" Color	17" Color	17" Color	17" Color

* Consult Triform rep for higher pressure or increased lower punch force.

* Cycle times calculated at 50% pressure & draw capacity.

* Standard dimensions provided. Consult Triform rep for alternate configurations.

