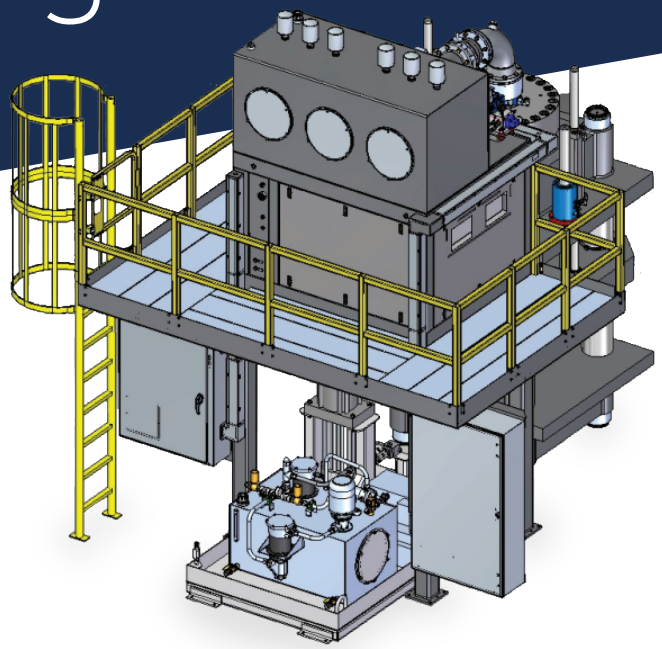
THERMO MECHANICAL PROCESSING

Hydroforming Press

lift®
LIGHTWEIGHT INNOVATIONS FOR TOMORROW



VENDOR

Interlaken Technology (ITC)

MATERIALS

Aluminum and steel alloys

A **Hydroforming Press** shapes ductile metals such as aluminum, brass, steel, and stainless steel into lightweight, structurally stiff and strong pieces.

Hydroforming is a specialized type of die forming that uses a high-pressure hydraulic fluid to press room temperature working material into a die.

It is popular in the auto industry to produce stronger, lighter, and more rigid unibody structures for vehicles, particularly high-end sports cars and shaping of aluminum tubes for bicycle frames.

Hydroformed parts have a higher stiffness-to-weight ratio and at a lower cost than traditional stamped parts.

APPLICATIONS

Virtually all metals capable of cold forming can be hydroformed, including aluminium, brass, carbon and stainless steel, copper, and high strength alloys.

SPECIFICATIONS

- 1,000 ton clamping actuator
- 64"x 76.5"x 36"
- 20,000 psi pressure intensifier
- 20" Shut Height

Deflection Reaction Frame	Near-zero
Open and Close Rate	3 inches/second
Column Spacing	32" column side to side
Column Spacing	32" column front to back
Two feed actuators	115 tons each, 8" stroke
Reaction plate/die shoe for tooling	
Hydraulic power supply	
Forming-fluid handling system	Closed-loop

Complete control system with multiple open channels for user inputs and outputs.

Preloaded with software for tube hydroforming

High rate data acquisition

All interconnecting hoses, tubes, piping, wiring and cables

Position control to within 0.001", force control to within 5% of full scale

MEDC
MICHIGAN ECONOMIC DEVELOPMENT CORPORATION