

About Our Shuttle Press

Hull's shuttle presses are high production rate presses for parts requiring the operator to load intricate inserts into the mold. The mold consists of two lower halves with a common top half. Inserts can be loaded in one bottom half as the other is curing. A PLC is used for easy cycle and temperature set up, through an operator touch screen interface. Presses are available in either electric or hydraulic configurations.

Small parts with delicate inserts such as microcircuits, integrated circuits, transistors, or large parts such as coils, transformers, and relays can be encapsulated. Parts requiring core pins, threaded inserts, and coring prior to ejection can be routinely produced. An adjustable low pressure system for the pressing phase for both the clamp and transfer rams enables this press to cover a broader molding scope not normally associated with large machines.

Hull's standard sizes are 75 Ton, 100 Ton, 150 Ton, 200 Ton, 250 Ton, 300 Ton, 450 Ton & 500 Ton - but with all of Hull's products, sizes & features can be customized to suit your needs. The machine and accessories you buy have the latest and best performance and design features.



PERFORMANCE FEATURES

- **Versatile Transfer Speed Control System** - allows fast approach to adjustable point in transfer ram stroke, then a pressure and temperature-compensated metering valve permits precise control of transfer pressing speed, essential for precision encapsulation of delicate parts.
- **Separate Hydraulic Ejection System** - for each work station bottom mold half. Five ton force requires only 1.5 seconds for full maximum 2" adjustable ejection stroke above shuttle platen.
- **Adjustable, Smooth, Slow-close of Platen** - allows maximum closing speed "in the clear", with controlled speed "in the close", assuring maximum safety to the mold and positive positioning of parts in the mold.
- **Complete PLC Control** - for transfer and compression (including breathe dwell) molding and encapsulation. Each is easily reached, adjusted and seen.
- **Independent Adjustments** - of each variable of the cycle without affecting other variables. Allows a wide selection of molding compounds and assures quality of the finished product.
- **Manual Operation** - permits mold checkout and set-up of the overall cycle for development work or prior to a production run.
- **Semi-automatic Operation** - permits operator to unload and load the other bottom mold half. Mold automatically opens when cycle is complete. One Operator - can easily load and unload molds at two work stations. Press operation controls at each work station permit actuation of cycle without moving from work station.
- **Electric Heating** - indicating controllers insure close regulation of all three mold halves temperatures for a wide range of molding conditions.
- **Quick, Easy, Mold Mounting** - small or large molds are quickly, easily and accurately mounted in top and bottom platens using rows of drilled and tapped holes appropriately spaced. Oversize platens are designed for the maximum number of cavities with low pressure materials and optimum loading space.
- **Designed for Compounds Having a Wide Range of Flow Viscosities** - low pressure materials to efficiently encapsulate delicate inserts without deflection or damage.

PRODUCTION FEATURES

- **Rugged Machine** - heavy duty construction gives support/protection to all components.
- **Hydraulic Lines** - long life seals on all hydraulic lines.
- **Dustproof Panels** - house plug-in electrical components.
- **Transfer Pot and Materials Protected** - from oil by external gland drain on the transfer and clamp cylinder.
- **Work Station Operation** - for increased production. Both hands are required to shuttle the mold to insure maximum operator safety. A control is available to actuate the transfer ram down automatically upon closing of mold or it can be operated independently.
- **Safe Operating Temperature** - of the hydraulic system is assured by having an external heat exchanger.
- **Over-temperature Safety Switch** - cuts off power and displays a red warning light when optimum oil temperature has been exceeded.

SPECIFICATIONS 75 TONS*

Dimensions

Die Space, L-R, F-B 20" x 22"
 Overall Height 105"
 Height to Shuttle Plate Surface 40"
 Floor Space, L-R, F-B 85" x 102"

Tonnage - Pressure

Clamp Tonnage, Maximum 75 tons
 Transfer Tonnage, Maximum 11 tons
 Clamp Working Pressure psi Max. 2654
 Transfer Working Pressure psi Max. 2654

Length of Strokes - Spacing, etc.

Clamp Ram Stroke 8.5"
 Transfer Ram Stroke 8.5"
 Maximum Daylight Platen Open 24"

Ejector System

Stroke, Max., Adjustable Above Shuffle Plate .. 2"
 Ejector Rod Spacing, F-B 19.5"
 Hydraulic Ejection Max. Tonnage 5 tons
 Elapsed Time/Full-Stripping 1.5 sec.

Oil Reservoir Capacity

(oil not supplied) U.S. Gallons 120

Water Connections

Cooling Water Connections 1/2" N.P.T.
 Water Discharge 1/2" N.P.T.

****Electrical Requirements**

Pump Motor 230/3/60, 22 amps
 Controls 115/1/60, 10 amps
 Electric Heaters Per Mold Half 220/1/60
 3500 watts

Pump Motor Size 15 hp
Shipping Weight (Approx.) 12,500 lb.

** NOTE: Other sizes (15-300 tons) are available and can be quoted upon request.*

*** NOTE: Electrical specifications can be modified to meet local requirements.*

Action	Clamp	Transfer
Fast Close	303"/minute	700"/minute
Pressing Adjustable	0-30"/minute	0-55"/minute
Return	243"/minute	820"/minute

For more information regarding Hull products & service, please contact Werner Lamberger at:

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