

Technical Bulletin



Models US40, US75 & US120

Hot Stamp and Heat Transfer Machines

United Silicone's large-area hot stamp and heat transfer decorating machines provide advanced capabilities for reduced setup time, high reliability, efficiency, smooth and quiet operation, and simplified troubleshooting. These versatile machines may also be used for graphic foil stamping, die cutting, and embossing. All machines feature stable, consistent head travel and smooth foil advance for optimum stamping quality from job to job.

Advanced Control System

- Job storage capabilities
- Advanced diagnostic capabilities
- Digital control of temperature and time parameters
- Graphics screen on operator control interface

Powerful Stamping Force and Control

- Stamping force generated by the action of a cam-amplified horizontal cylinder offering consistent, repeatable stamping pressure
- Safe, quiet, smooth cycling
- Front-panel fine adjustment offers precise control over head stroke length and stamping force
- Numerous head sizes to accommodate a wide range of part sizes

Precision Foil Advance

- Constant torque for smooth advance
- Optional, adjustable head-up delay regulates cooling time for optimum foil release
- Accurate, repeatable cycling for minimal transfer waste

Precision Heat Transfer Web Advance

- Stepper Motor with constant torque
- Electronic web offset adjustment
- Accurate, repeatable cycling for minimal foil waste

Model US 40 (not shown) Hot Stamping Machine

(Shown with optional slide table & opti-touch)

- 4-ton maximum stamping force
- Standard head sizes: 10" x 10"
12" x 16"
12" x 24"

Model US 120 Hot Stamping & Heat Transfer Machine

- 12-ton maximum stamping force
- Standard head sizes: 12" x 16"
14" x 24"



Model US 75

Hot Stamping & Heat Transfer Machine

(US 75 shown with optional slide table, XY table, and heat transfer indexer)

- 7.5-ton maximum stamping force
- Standard head sizes: 10" x 10"
12" x 16"
12" x 24"



(US 120 4-Post configuration shown with optional slide table, XY table, and heat transfer indexer)

ITW United Silicone

DESIGNERS AND MANUFACTURERS OF HOT STAMP AND HEAT TRANSFER DECORATING SYSTEMS AND SUPPLIES

Vertical, Roll-on and Peripheral Machines

Automated Systems • Close Tolerance Machines • In-Mold Feed Systems
Metal Dies • Custom Tooling • Silicone Rubber Sheets, Dies and Rollers
Contract Manufacturing • R & D • Custom Engineering & Design

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OPERATING FEATURES

An advanced control system is specifically designed and optimized for hot stamp and heat transfer applications. The control unit provides reliability over all functions and it has machine setting memory for all temperatures and time parameters. It also has the flexibility for expansion and customization. Side-mounted operator controls with membrane switch panel and graphics screen display, offers operator convenience by displaying machine settings, machine status and diagnostic messages. Featured is digital control of stamping temperature with overheat set-point protection, dwell time, foil pull time and resistance to electro-magnetic interference. Also provided is a before/after foil pull selector, digital parts counter with reset, a set-up selector and optional head-up delay selector.

Consistent stamping pressure and stable head action resulting from the cam-amplified force of a horizontal cylinder and cam-follower travel guides.

Head height fine adjustment allows precise control of stroke length and stamping force.

Head angle adjustment permits proper front-to-rear angular relationship to be set between die and work table.

Front panel head speed flow controls permit convenient adjustment of up and down head travel speeds, cycle time, stamping and foil stripping conditions.

Pre-drilled and tapped 16" x 24" steel work table provides a stable setup platform and convenient fixture mounting.

Adjustable work table outriggers provide independent work height adjustment and support at all four corners.

Dual palm buttons combine reliable cycle starting with operator safety.

Quick-change die holder with adjustable stops ensures positive, repeatable die positioning.

Precision foil and web advance system, driven by a stepper motor, produces constant torque for smooth advance, reliable control, efficient foil utilization, and minimal waste. The system features:

- Adjustable foil guides and guide rings maintain accurate foil positioning in relation to decorating surface.
- Quick-release foil takeup shaft facilitates rapid roll changeover.

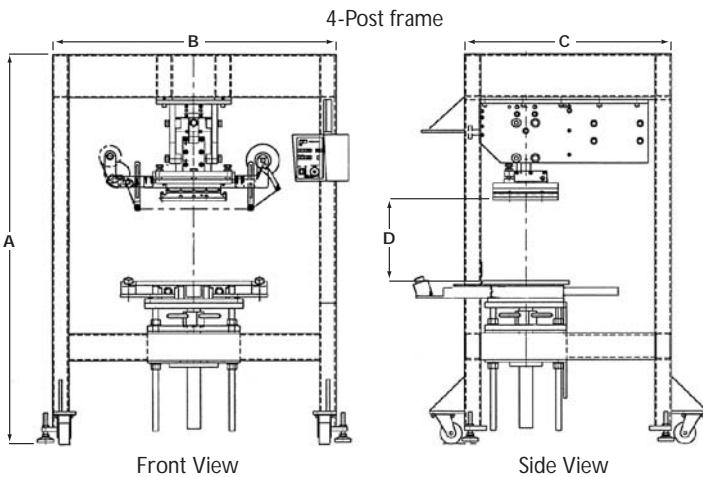
CONSTRUCTION FEATURES

- Rugged steel machine frame for reliability and repeatability
- Machine components, available painted, chrome plated, black oxide coated, and anodized which provides long-term corrosion protection.
- Machine base with solid top and leveling feet offers a sturdy base and independent leveling adjustment on all four corners.

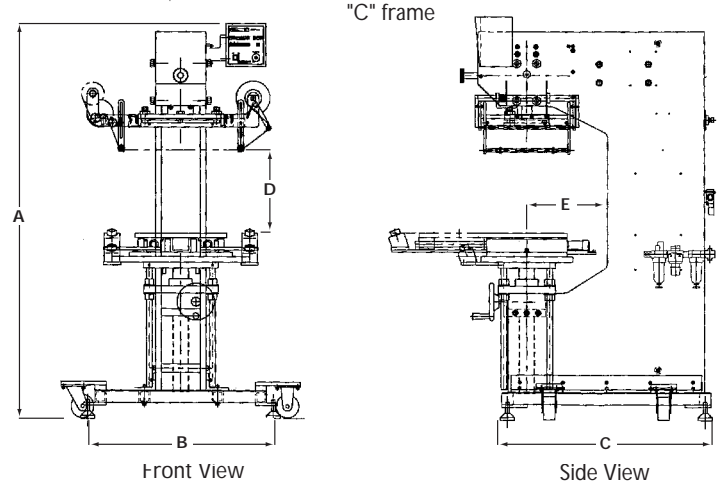
OPTIONAL AUXILIARIES

- Electronic Eye Heat Transfer Indexer
- Rotary Index Table
- Slide Table
- X-Y or X-Y-R Positioning Tables & Special Safety Guarding

SPECIFICATIONS



	A	B	C	D
US 40	71	52	34	1-12
US 75	73	52	38	1-12
US 120	73	52	38	1-12



	A	B	C	D	E
US 40	68.5	24	29	0-13.5	10
US 75	70.25	33	41	3.5-18	12
US 120	70.5	34	45	3.5-18	14