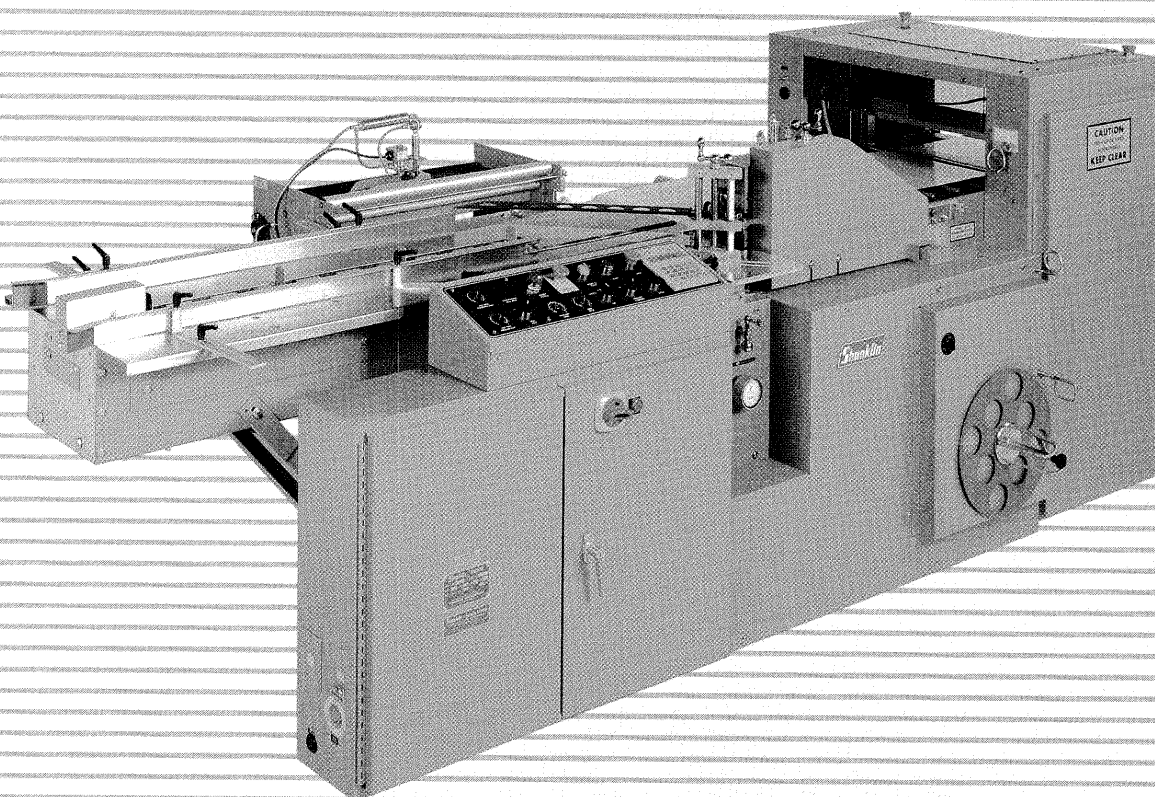




**Quality Shrink Packaging Machinery**



## **Models HS-1 and HS-3 High Speed Automatic Wrappers**

- Fully automatic continuous flow operation
- Makes neat trim seals
- Customized to Application
- Handles irregular shapes
- Easy size change over
- Runs well at both high and low speeds

# ***Shanklin*** Models HS-1 and HS-3 High Speed Automatic Wrappers

## **Introduction**

The SHANKLIN Model HS-1 High Speed Automatic Wrapper is designed to wrap products in plastic film, usually shrink film, fully automatically at speeds up to 100 packages per minute or up to 120 linear feet of film per minute.

The SHANKLIN Model HS-3, with its extended speed capability, can wrap packages at speeds up to 200 packages per minute or up to 200 linear feet of film per minute depending upon the package and the application.

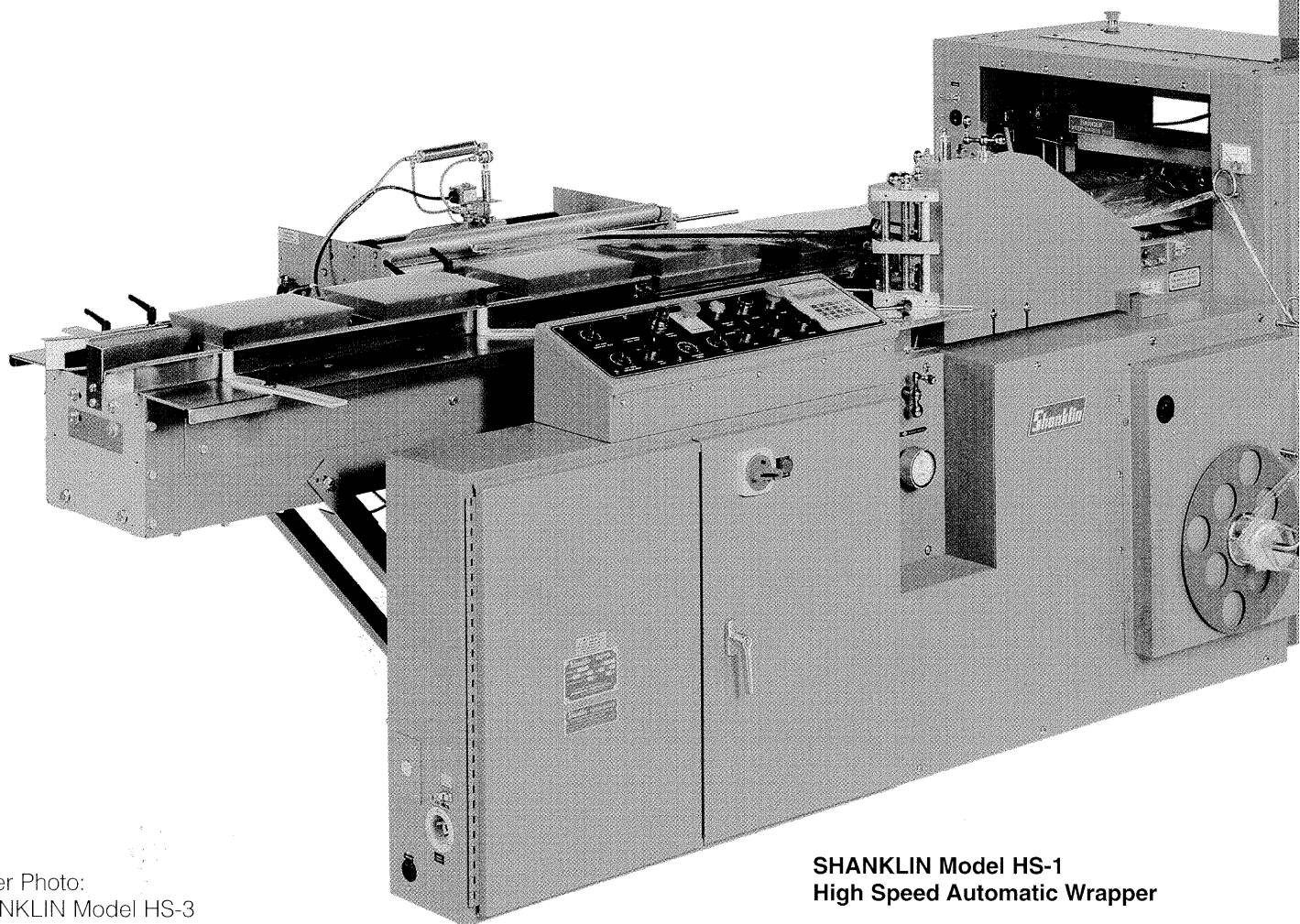
These highly versatile machines run equally well at both high and low speeds, which can be adjusted at the control console. The resulting package has neat trim seals on three sides of the package, with no overlap seams on the bottom or ends.

The Models HS-1 and HS-3 are simplified wrapping machines. They are easy to understand, easy to maintain, and easy to change over from one size to another. With the wide variety of options and accessories available, both models can be customized to application.

## **Description**

The SHANKLIN Models HS-1 and HS-3 High Speed Automatic Wrappers are unlike any other automatic wrappers on the market. They have the high speed and smooth product travel through the machine that is associated with high speed automatic wrappers. But they also have the versatility and ease of changeover that is associated with L-sealers. They will wrap low, medium, and high profile products, and can even wrap irregularly shaped products with relative ease. Although the machines perform a complex function, they are designed and built with customer service in mind, thereby facilitating distributor installation and customer maintenance.

The Models HS-1 and HS-3 High Speed Wrapping Machines produce trim seals on three sides of a package with clear film on the remaining side. Since there is no overlap seam, both top and bottom are covered by clear film. This is particularly desirable for products with graphics on top and bottom.



Cover Photo:  
SHANKLIN Model HS-3  
High Speed Automatic Wrapper

**SHANKLIN Model HS-1  
High Speed Automatic Wrapper**

## Operation

Products are fed continuously into the machine on a flighted infeed conveyor. Centerfolded film is fed from a power unwind located at the rear of the machine and is opened and re-directed by a Film Inverting Head providing an opening into which the products are inserted. If flat film is to be used, an optional film centerfolder is attached to the machine. As the web of film with the products inserted passes by the side sealer, a thermal sealing mechanism seals the free edges of the film, and the selvage trim is removed by a

vacuum system. The film with the product sealed into it is then conveyed to a traveling end sealer that seals the leading and trailing edges of the packages while simultaneously severing individual packages from the moving web of film. The flow of packages through the machine is continuous and the operation of the machine is both fast and reliable.

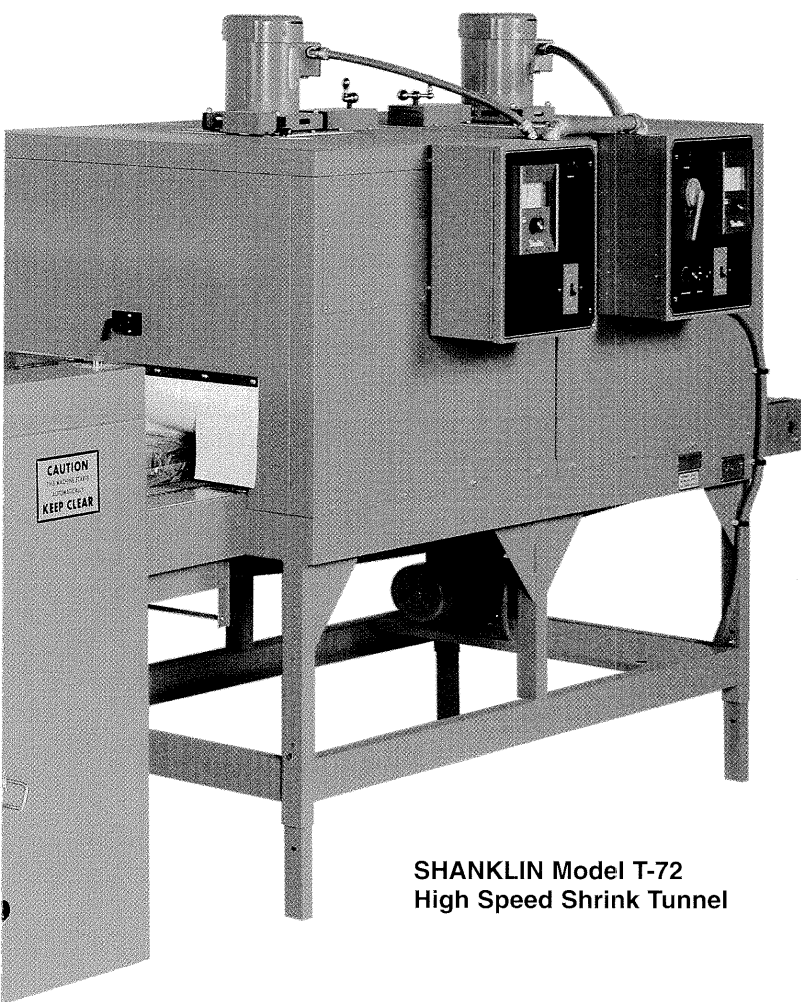
## Shrinking

A SHANKLIN High Speed Shrink Tunnel, located at the discharge end of the wrapping machine, shrinks the film tightly around the product to give the completed package an attractive appearance. A comprehensive line of SHANKLIN Shrink Tunnels meets the need of virtually all applications.

## Changeover

Size changeover is relatively simple. With the Model HS-1, the infeed conveyor speed and lug spacing are easily adjusted for package length and to achieve the desired package spacing. End seal placement is adjustable from the control console. With the HS-3, the infeed conveyor lug spacing is set, and then the main conveyor speed is adjusted to determine cut-off length. Once the cut-off length is set on the drive crank, and the infeed lugs are moved into synchronization with the cross seal.

Changes in package width are made by adjustments provided on the machine. A change in film width may also be required, although one film width will accommodate a range of package sizes. Package height adjustment can frequently be made without need for new parts since one Inverting Head will handle a range of product heights. In the event that the height change is too great to accommodate the one Inverting Head, extra Inverting Heads are available at moderate cost.

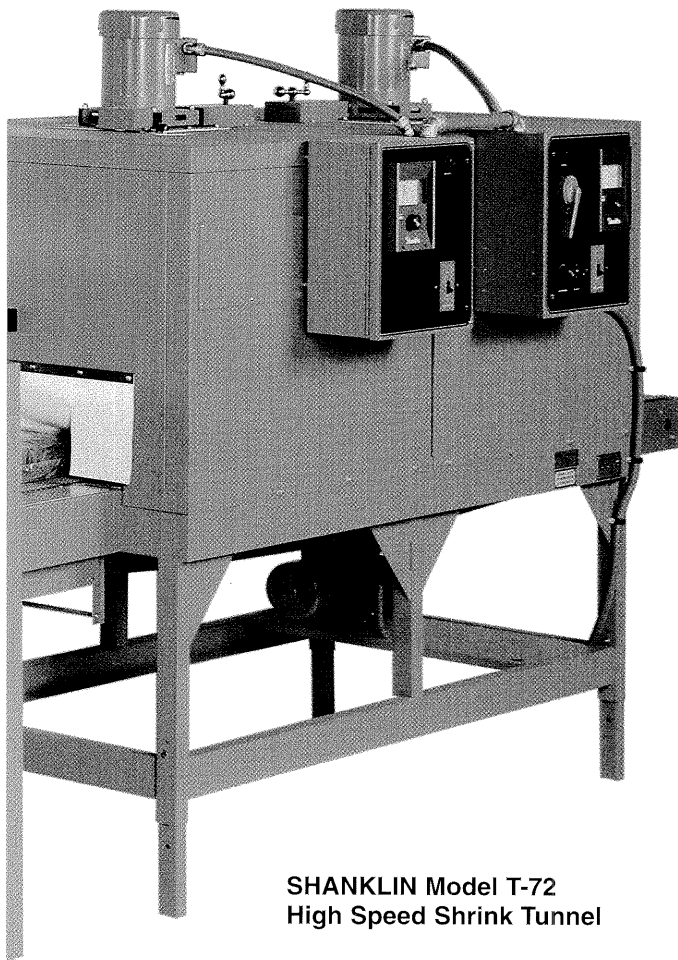


**SHANKLIN Model T-72  
High Speed Shrink Tunnel**

**USDA APPROVED MODELS AVAILABLE  
STAINLESS STEEL MODELS AVAILABLE**

## Product Infeeds

Depending on product type and production line operation, the following options are some of those available for feeding products into the infeed conveyor of the HS-1 and HS-3. Consult factory for additional systems.



**SHANKLIN Model T-72  
High Speed Shrink Tunnel**

## Product Infeeds for HS-1 and HS-3:

- A SHANKLIN Synchronic Feed for continuous product flow feeding
- A SHANKLIN Right Angle Feed with “no product” detectors (Product can be fed from either side.)
- Timing Screws for continuous flow feeding of round product
- Hand-feeding of product where suitable using the extended infeed conveyor

## Additional Product Infeeds for HS-1:

- A SHANKLIN Harmonic Feed for continuous product flow feeding
- A SHANKLIN Automatic Product Placement Conveyor
- Wide Flight Bar Infeed for multipacking

The flow of accumulated product upstream from the infeed conveyor of the machine is essentially smooth and continuous with the SHANKLIN Harmonic Infeed, The SHANKLIN Synchronic Infeed, and the Timing Screw Infeed.

Synchronic Infeeds and Timing Screw Infeeds are designed for all SHANKLIN High Speed Wrapping Machines. They are used to place product between the flights of the infeed conveyor smoothly and continuously at high speeds.

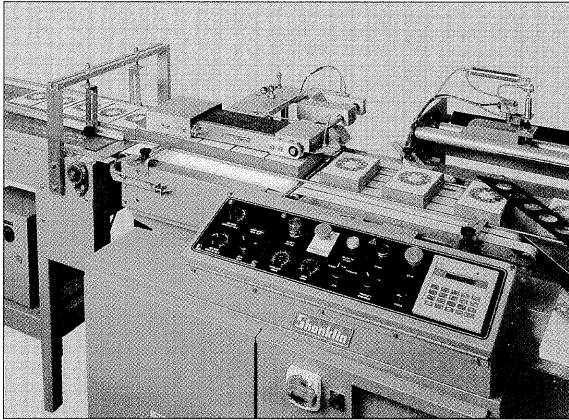
Harmonic Infeeds are installed on modified HS-1 Wrapping Machines which are equipped with belt infeed conveyor systems instead of the flighted infeed conveyors. The Harmonic Infeed is a simple, versatile way to achieve smooth, continuous product feeding at HS-1 speeds.

## Controls and Adjustments

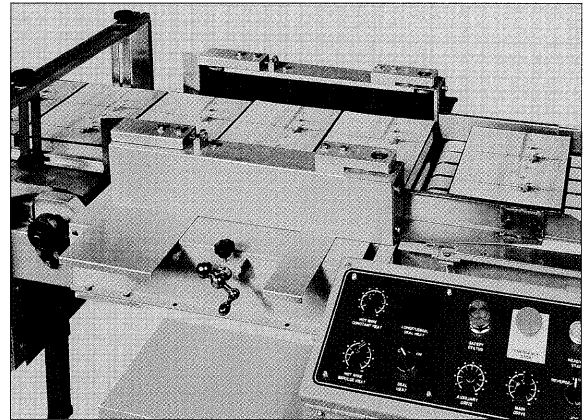
The SHANKLIN HS-1 and HS-3 High Speed machines are equipped with programmable controllers with user-friendly touch screen control panels, which allow easy machine set up and adjustment, assist in operator set-up, perform diagnostic checks, and control machine sequencing.

Diagnostic routines and status display are standard, helping the operator to quickly find a stoppage or a malfunction and to monitor the condition of the machine. The programmable controller has an optional data network capability.

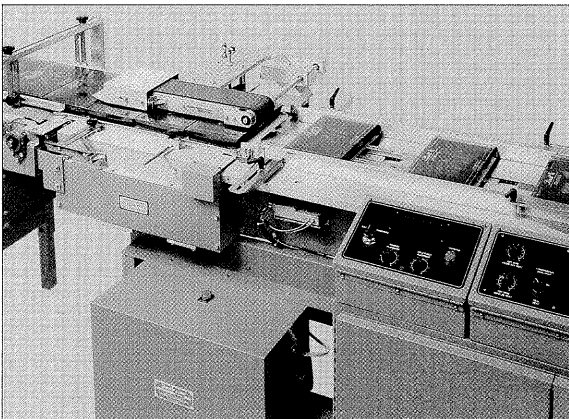




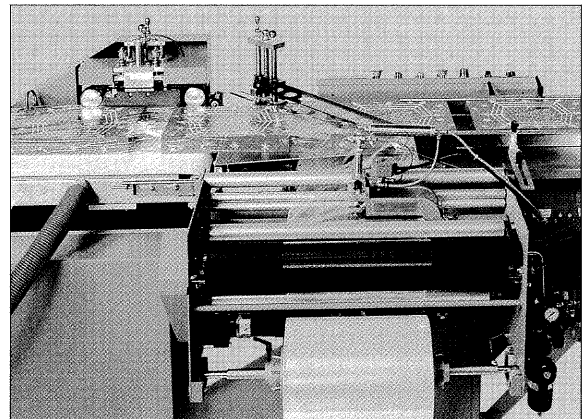
*A SHANKLIN Overhead Harmonic Infeed continuously feeds product smoothly into an HS-1 to produce the required spacing between products.*



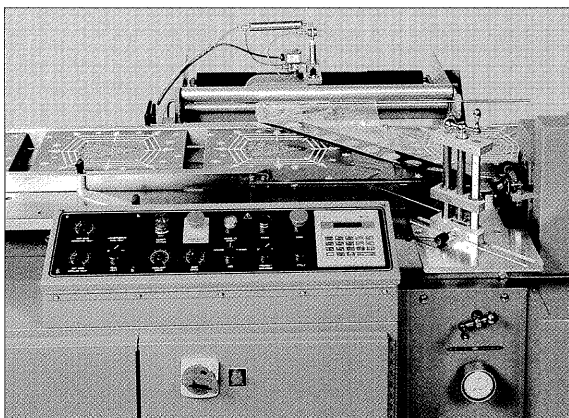
*A SHANKLIN Side Belt Harmonic Infeed continuously feeds product smoothly into an HS-1 to produce the required spacing between products.*



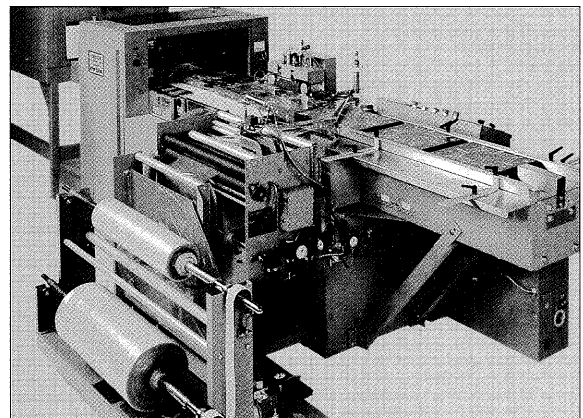
*A SHANKLIN Synchronic Overhead Belt Infeed places the product smoothly and with precision into the flights of the infeed conveyor on the HS-1 and HS-3.*



*A SHANKLIN Standard Film Unwind feeds folded film to the adjustable inverting head.*



*Product enters film at the inverting head. The head can be easily adjusted to suit product size change. Note the conveniently located control panel.*



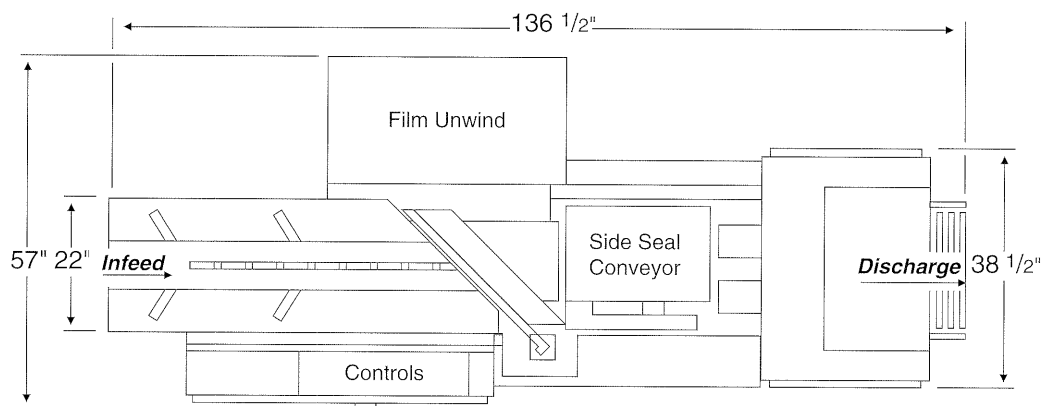
*A SHANKLIN Compact Centerfolder is required when flat film is being used. An optional dual roll easy load centerfolder is available, as shown above.*

## Specifications

	Model HS-1	Model HS-3
PACKAGE SIZE	Minimum: 1/2" Wide x 1/8" High x 3" Long Maximum: 16" Wide x 6" High x 60" Long Optional 8" Height Width + Height combination cannot exceed Maximum film width	Minimum: 1/2" Wide x 1/8" High x 2" Long Maximum: 16" Wide x 3" High x 15" Long  Width + Height combination cannot exceed Maximum film width
MAXIMUM FILM WIDTH	24" folded or 44" flat Centerfolder required for flat film	24" folded or 44" flat Centerfolder required for flat film
CONVEYOR HEIGHT	35 1/2" without casters 41 1/2" with casters	35 1/2" without casters 41 1/2" with casters
PACKAGE SPEEDS	100 Packages/Min. Maximum Dependent on product and application	200 Packages/Min. Maximum Dependent on product and application
FILM SPEEDS	120 linear Ft/Min. Maximum	200 linear Ft/Min. Maximum
LONGITUDINAL SEAL	Weld bead at side of packages	Weld bead at side of packages
TRANSVERSE SEAL	Impulse Hot Wire or Hot Knife jaws standard. Jaws for polyethylene available	Impulse Hot Wire or Hot Knife jaws standard. Jaws for polyethylene available
MAIN DRIVE	1 H.P. D.C. motor with SCR variable speed control	1 1/2 H.P. D.C. motor with SCR variable speed control
POWER	230 Volts, 15 Amps, 60 Hz, 1 Phase	230 Volts, 15 Amps, 60 Hz, 1 Phase
COMPRESSED AIR	1/2 C.F.M. Free Air at 60 P.S.I.	1/2 C.F.M. Free Air at 60 P.S.I.
SAFETY DEVICES	<ul style="list-style-type: none"> <li>• Emergency Stop Button Instantly Stops All Machine Functions Until Manually Reset</li> <li>• Multiple Safety Interlocks</li> <li>• Emergency Reverse</li> <li>• Air Cylinder Safety Opens End Seal Jaws</li> <li>• Torque Limiters on Main Drive and Infeed Conveyor</li> <li>• Low Voltage Sensors and Actuators</li> <li>• Tamper Resistant Controls</li> </ul>	
ACCESSORIES	<ul style="list-style-type: none"> <li>• Film Centerfolder</li> <li>• Extra-length Infeed Conveyor</li> <li>• Additional Inverting Heads</li> <li>• Automatic Start and Stop Controls</li> </ul>	<ul style="list-style-type: none"> <li>• Dual Speed Machine Operation</li> <li>• Adjustable Inverting Head</li> <li>• Print Registration</li> <li>• Large Capacity Salvage Scrap Systems</li> </ul>

U.S. Patent Nos. R30,010; 4,219,988; 4,339,093; 4,419,855; 5,097,939; 5,131,213; 5,321,230; and pending.

Specifications on all machines subject to change without notice. Some photos may show accessories not part of the basic machine.



HS-1 & HS-3



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