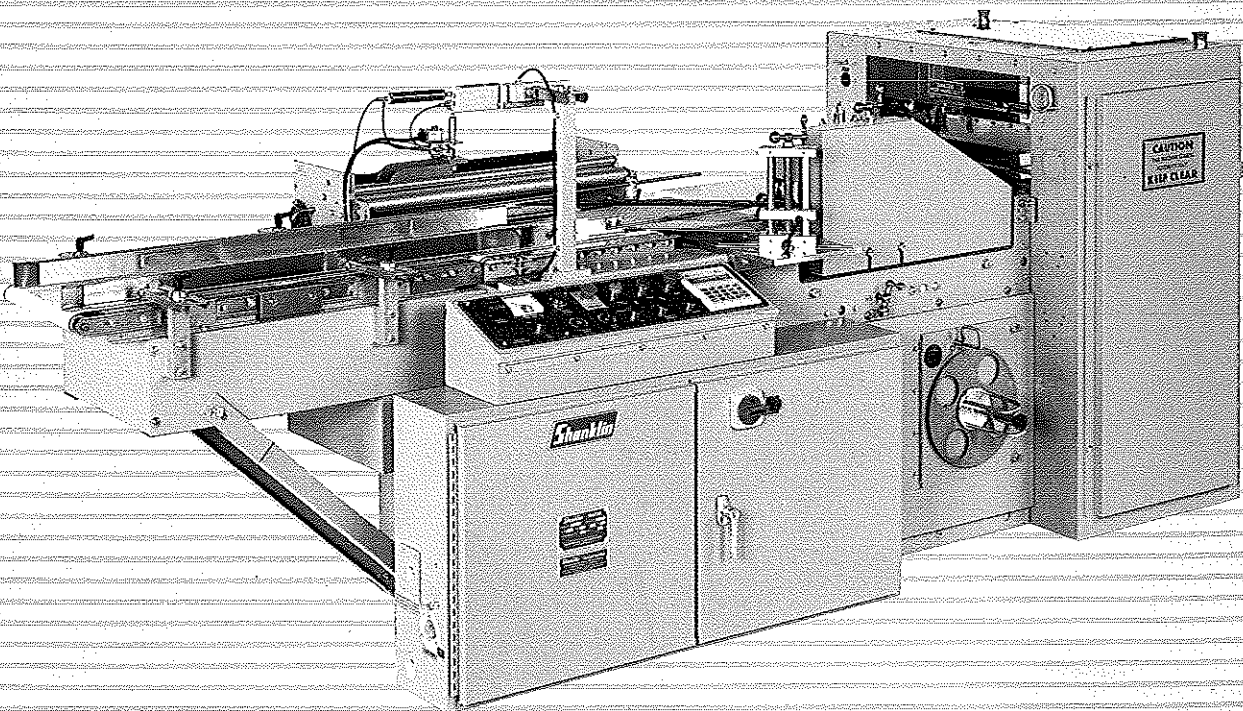




Quality Shrink Packaging Machinery



Models F-1 and F-5 FloWrap Machines

- Fully automatic operation
- Makes neat trim seals
- Customized to Application
- Handles irregular shapes
- Easy changeover
- Ample speed for most applications
- Available in stainless steel

Shanklin Models F-1 and F-5 FloWrap Machines

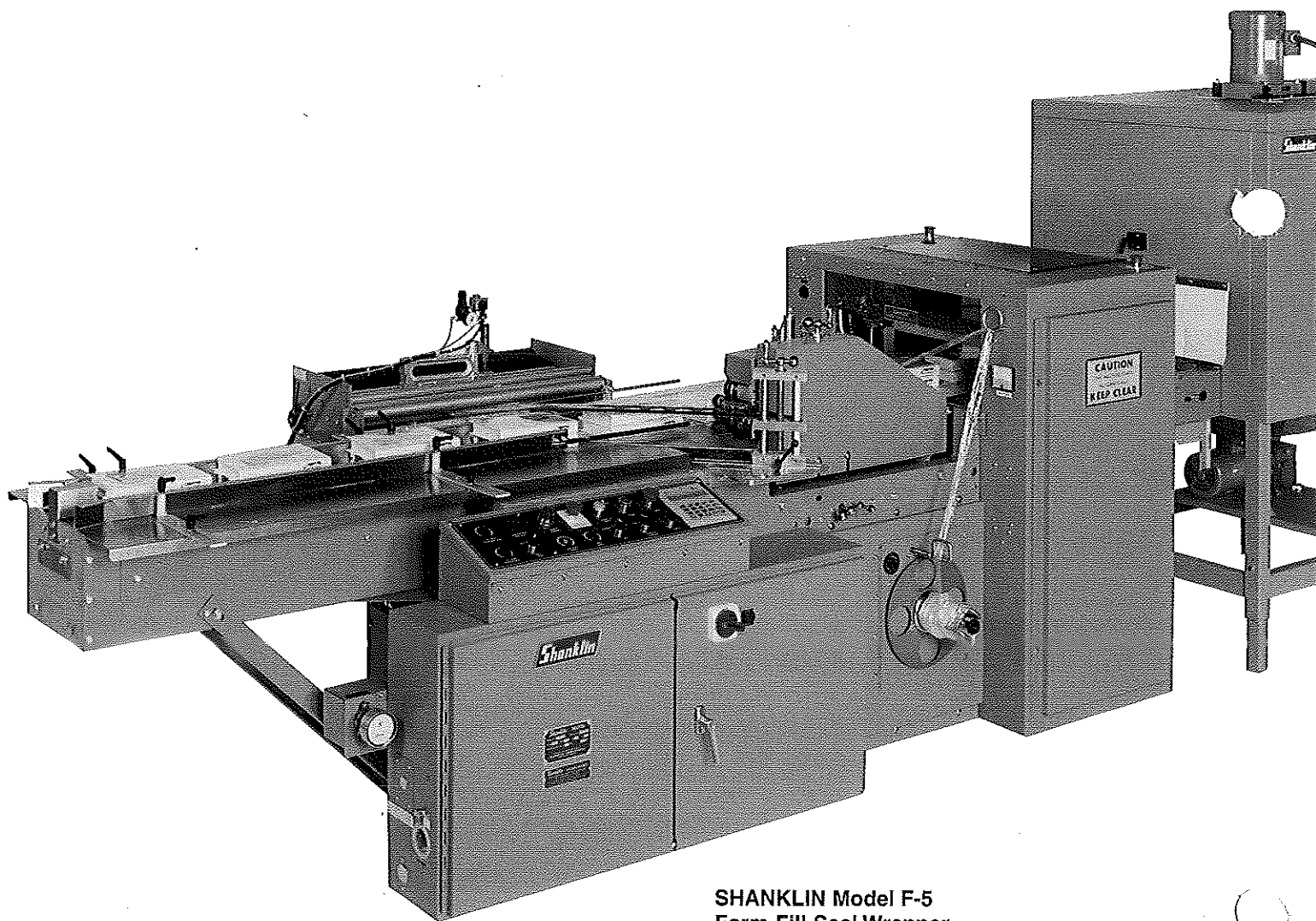
Introduction

The SHANKLIN F-1 and F-5 FloWrap machines are continuous motion horizontal "Form-Fill-Seal" machines designed to wrap packages in plastic film (usually shrink film). The Model F-1 has a belt infeed conveyor and is capable of wrapping packages at speeds up to 50 packages per minute. The model F-5 has a flighted infeed conveyor, and because of its product feeding systems can wrap products at speeds up to 75 packages per minute.

These highly versatile machines run equally well at both high and low speed, and their speed can be adjusted at the control console. The resulting packages have neat, welded bead trim seals on three sides of the package with no overlap seams on bottoms or ends of the packages.

The F-1 and F-5 both use centerfolded film which is usually readily available. Some customers prefer to use flat film folded by an optional SHANKLIN centerfolder. In either case, the inverting heads on the machines do not require a precise matching of film width, thus permitting many sizes of packages to be run with a moderate selection of film widths.

A further advantage of the side sealing system is that the film can be pulled toward the side seal jaws as it is being fed through the machine, thereby producing a tighter wrap than is possible for the bottom lap seal machines. In addition, the welded bead seal is a more positive seal than the overlap static seal.



**SHANKLIN Model F-5
Form-Fill-Seal Wrapper**

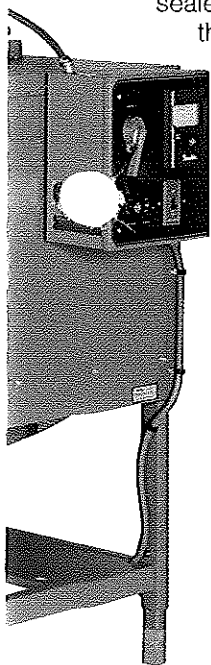
Cover Photo;
SHANKLIN Model F-1
Form-Fill-Seal-Wrapper

Description — Model F-1

The SHANKLIN Model F-1 accepts product arriving at the machine randomly spaced and establishes the correct product spacing by means of a series of precision timed and sequenced conveyors. The flow of product through the machine is a straight line and is relatively gentle.

The machine consists of a rugged main frame on which are mounted a series of conveyors to carry product through the machine. The electrical control system sequences the conveyors to space product properly.

Folded film or film being delivered by a centerfolder feeds to a film inverting head which opens the film, turns it inside out, and wraps the film around the product. A conveyor carries the overwrapped product past a side sealing area, where a weld bead is made on the film and the excess film is trimmed off. From there the package is conveyed to a moving jaw end sealer, which forms the weld bead seals on the end of the product and severs the package from succeeding products.



**SHANKLIN Model T-7XL
Shrink Tunnel**

Description — Model F-5

The SHANKLIN Model F-5 is similar to the Model F-1 with one major difference. The infeed conveyor of the F-5 is a flighted lug conveyor, and although it cannot accept random spacing of product, it will permit the machine to operate at somewhat higher speeds than the Model F-1. An additional consideration is that some product is better handled on a flighted infeed conveyor, and for this type of product, the Model F-5 is ideal.

The side sealer and transverse sealer of the F-5 are identical to those on the F-1, and they produce the same neat appearing package, with trim seals on three sides and no overlap bottom seal.

Operation — Model F-1

As product arrives at the machine, it is carried to a "ready" position by the infeed conveyor. At precisely the right moment, the infeed conveyor feeds the product into the main conveyor system so that it is spaced the proper distance from the preceding product. The conveyors carry the product through a film inverting head where it is surrounded by film. As the products pass by the side sealer, a thermal sealing mechanism seals the free edges of the film with a neat welded bead seal, and the selvege trim is removed by a vacuum system. The film with product sealed within 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. Upon completion of end sealing, the package is conveyed out of the machine, usually to a SHANKLIN Shrink Tunnel.

Operation — Model F-5

Operation of the Model F-5 is the same as the Model F-1 except that products are carried continuously into the machine on a flighted infeed conveyor, thereby permitting higher speeds.

Shrinking

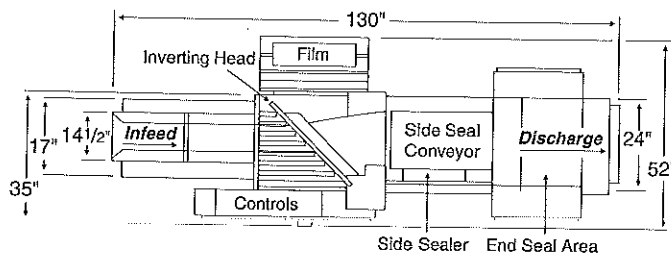
A SHANKLIN Shrink Tunnel, located at the discharge end of the wrapping machine, shrinks the film tightly around product to give the completed package an attractive appearance. A comprehensive line of SHANKLIN Shrink Tunnels meets the needs of virtually all applications.

Specifications

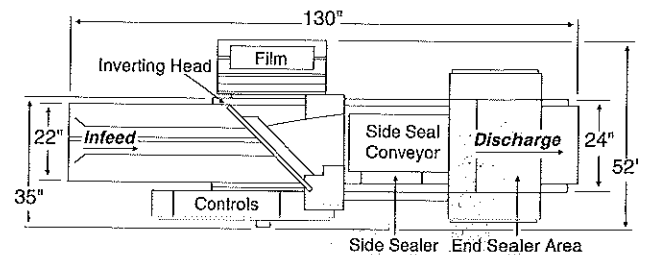
	Model F-1	Model F-5
PACKAGE SIZE	Minimum: 1/2" Wide x 1/8" High x 4" Long Maximum: 16" Wide x 6" High x 48" Long Optional 8" Height Width + Height combination cannot exceed Maximum film width	Minimum: 1/2" Wide x 1/8" High x 3" Long Maximum: 16" Wide x 6" High x 48" Long Optional 8" Height Width + Height combination cannot exceed Maximum film width
MAX. FILM WIDTH	22" folded or 44" flat Centerfolder required for flat film	22" folded or 44" flat Centerfolder required for flat film
CONVEYOR HEIGHT	Adjustable 35 1/2"- 41 1/2" without casters 41 1/2"- 47 1/2" with casters	Adjustable 35 1/2"- 41 1/2" without casters 41 1/2"- 47 1/2" with casters
PACKAGE SPEEDS	50 Packages/Min. Maximum Dependent on product and application	75 Packages/Min. Maximum Dependent on product and application
FILM SPEEDS	60 linear Ft/Min. Maximum	90 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	1/2 H.P. D.C. motor with SCR variable speed control	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"> • Emergency Stop Button Instantly Stops All Machine Functions Until Manually Reset • Multiple Safety Interlocks • Emergency Reverse • Air Cylinder Safety Opens End Seal Jaws • Low Voltage Sensors • Tamper Resistant Controls 	
ACCESSORIES	<ul style="list-style-type: none"> • Film Centerfolder • Extra-length Infeed Conveyor • Adjustable Inverting Head • Automatic Start and Stop Control 	<ul style="list-style-type: none"> • Dual Speed Machine Operation • Print Registration • Special Product Guides • Large Capacity Selvage Scrap Systems

U.S. Patent Nos. R30,010; 4,219,988, 4,419,855, 4,537,016, 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.



F-1



F-5



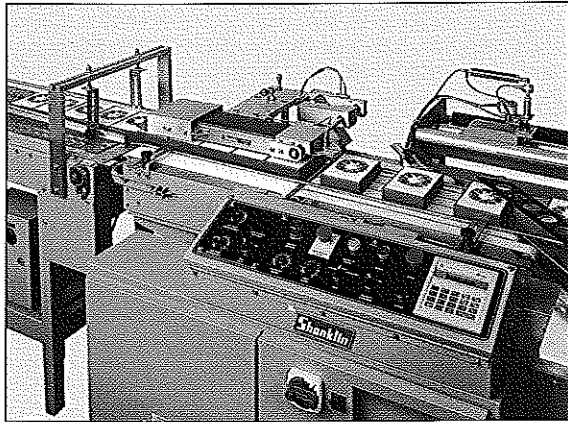
SHANKLIN CORPORATION

100 Westford Rd., Ayer, Mass. 01432 Tel.: (508) 772-3200

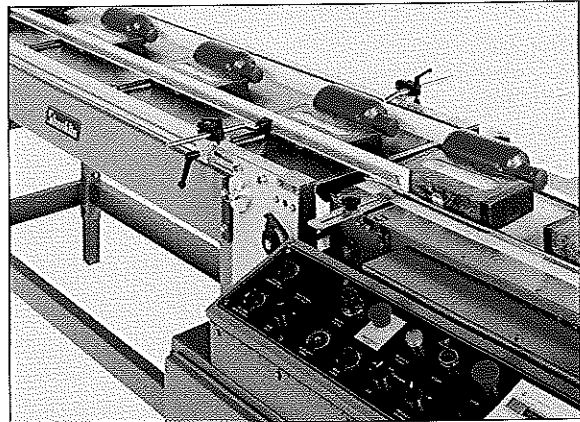
©Shanklin Corporation, 1995



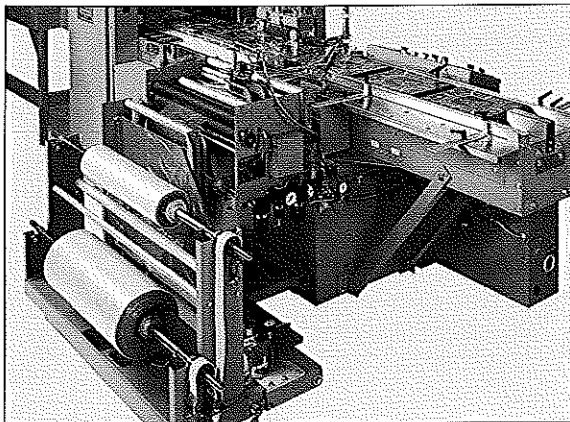
Printed in U.S.A.



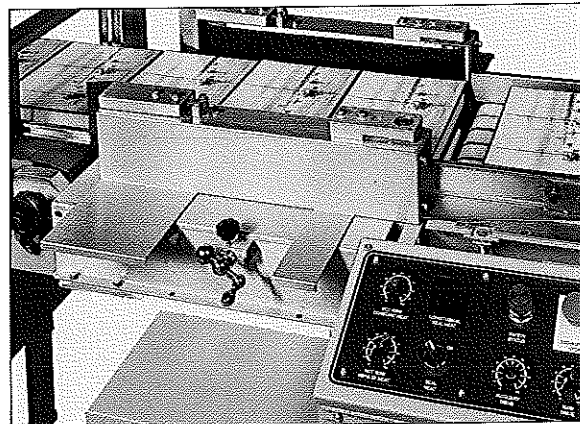
A SHANKLIN Overhead Harmonic Infeed continuously feeds product smoothly into an F-5 to produce the required spacing between products.



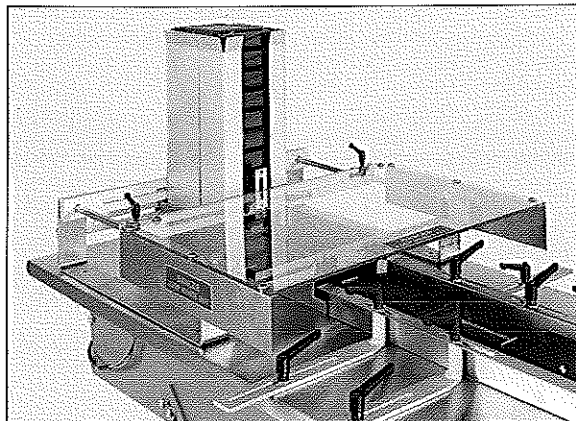
A SHANKLIN Flight Bar Infeed simplifies hand loading product. Particularly useful for multipacks or packs with dissimilar products.



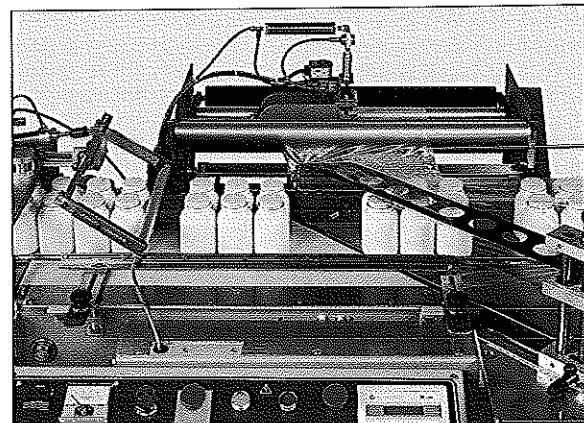
A SHANKLIN Dual Roll Centerfolder uses flat film.



A SHANKLIN Side Belt Harmonic Infeed continuously feeds product smoothly into an F-5 to produce the required spacing between products.



A SHANKLIN Hopper feeds low profile products into an F-5.



A SHANKLIN Multipacking Infeed accumulates multiple products. Using a cross bar, as shown, or alternative side bars, the multipacks are released into the F-1.

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 SHANKLIN F-1 and F-5 Flowrappers. Consult factory for additional systems.

Product Infeeds for F-5:

- A SHANKLIN Harmonic Infeed for continuous product flow feeding
- Adjustable Flight Bar Infeed permits multipacking of similar or dissimilar product
- A SHANKLIN Automatic Product Placement Conveyor
- A SHANKLIN Right Angle Feed with "no product" detectors (Product can be fed from either side.)
- A SHANKLIN Hopper Feed for low profile product
- Hand-feeding of product where suitable using the extended infeed conveyor

Harmonic Infeeds are installed on modified F-5 Wrapping Machines which are equipped with belt infeed conveyors. The Harmonic Infeed is a simple, versatile way to achieve smooth, continuous product infeed at F-5 speeds.

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

Product Infeeds for F-1:

The F-1 Flowrapper, with its smooth belt infeed, accepts product automatically and does not require a product feeding device.

For packaging multiple products, a multi-packing infeed option is available for the F-1 machines.

Changeover

Size changeover on the F-1 is simple. The product spacing and end seal placement are easily adjusted on the control console to accommodate product length and spacing changes.

For product height and width changes, reset the infeed conveyor guides and change or reset the film inverting head. If necessary, replace the roll of film with one of appropriate width. Adjust the side sealer position laterally to suit the product width and vertically for the product height. Reset the end seal jaw opening to clear the package height. The machine is now ready to use.

The procedure for the F-5 machine is similar to the F-1, except that product length changes are accomplished by changing the conveyor lug spacing and conveyor variator servo settings.

Controls and Adjustments

The SHANKLIN F-1 and F-5 FloWrap machines are equipped with a programmable logic controller (PLC), which allows easy machine set up and adjustment, assists in operator set-up, performs diagnostic checks and controls machine sequences.

Diagnostic routines are standard, helping the operator to quickly find a stoppage or malfunction and identify the cause. The PLC has a network capability via a Data Highway system.

USDA APPROVED MODELS AVAILABLE
STAINLESS STEEL MODELS AVAILABLE

