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high speed constant motion pouch machine

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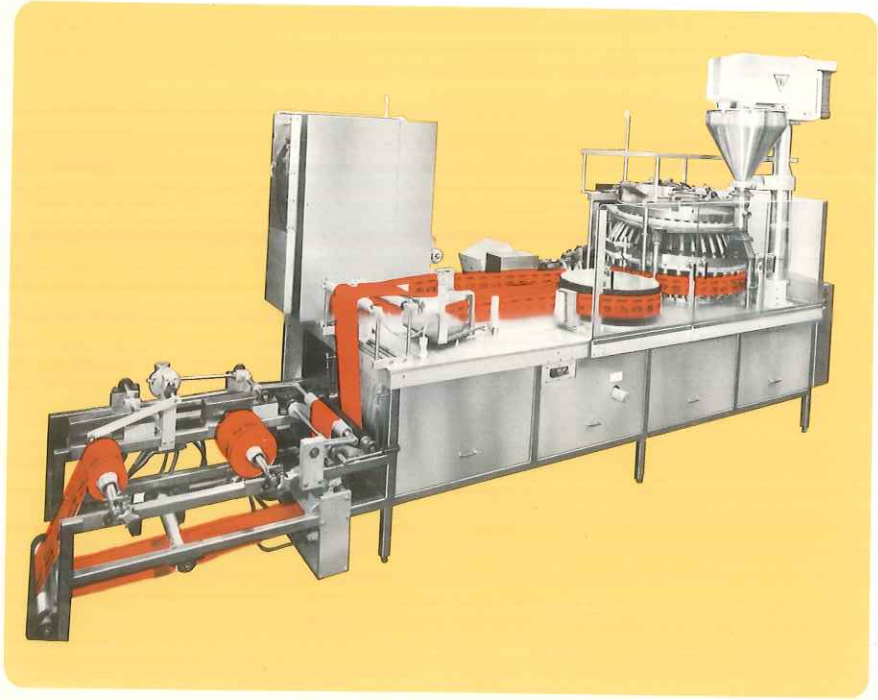
POUCH KING

Jones high speed Pouch King provides production proven features to reliably package condiments, foods and other products in pouches

Form/fill/seal 200 to 1300 pouches per minute



HIGH SPEEDS—Jones' continuous web concept keeps pouches under positive control during the Pouch King's high operating speeds. All rotary motion movements, including multiple station filling, sealing and cutting components, assure top performance and efficiency at highest speeds.

LOW MAINTENANCE—Improved machine design permits a substantial reduction in the number of mechanical moving parts for transporting, filling and sealing the pouches. All rotary motion components are easily maintained and are built for long term dependability.

HIGH RELIABILITY—The continuous strip of pouches, maintained during the entire form/fill/seal operation, eliminates complex support clamps and package transfer mechanisms.

ACCURATE POUCH FILLING—Unique filler features positive pouch opening and gradual loading of product, minimizing flashback and spout blockage while maximizing weight accuracy.

FULL CAPACITY POUCH (FCP)—Provides for a greater volume of product in a pouch through a tucked bottom technique which offers optimum fill capacity, assuring more product per square inch of web material. Greater pouch opening permits larger filling spouts making the Jones Pouch King adaptable to a wide range of product applications with improved product flow at high speeds.

QUALITY POUCHES/INTEGRITY OF SEALS—Adaptable to a wide range of flexible, heat sealable web materials including paper, glassine, cellophane, foil, polypropylene and other laminates. The side sealer is designed for maximum dwell time and low sealing temperatures to assure strong seals at high speeds.

VERSATILE COLLATING/CARTONING SYSTEMS—Jones transfers and collates pouches with continuous positive control and at the same high speeds. Options are available for pouch counting, bulk packaging and semi-automatic cartoning. Fully automatic pouch packaging systems are available with Jones' CMC, OSC and Criterion™ constant motion cartoners and IMC intermittent motion cartoners.

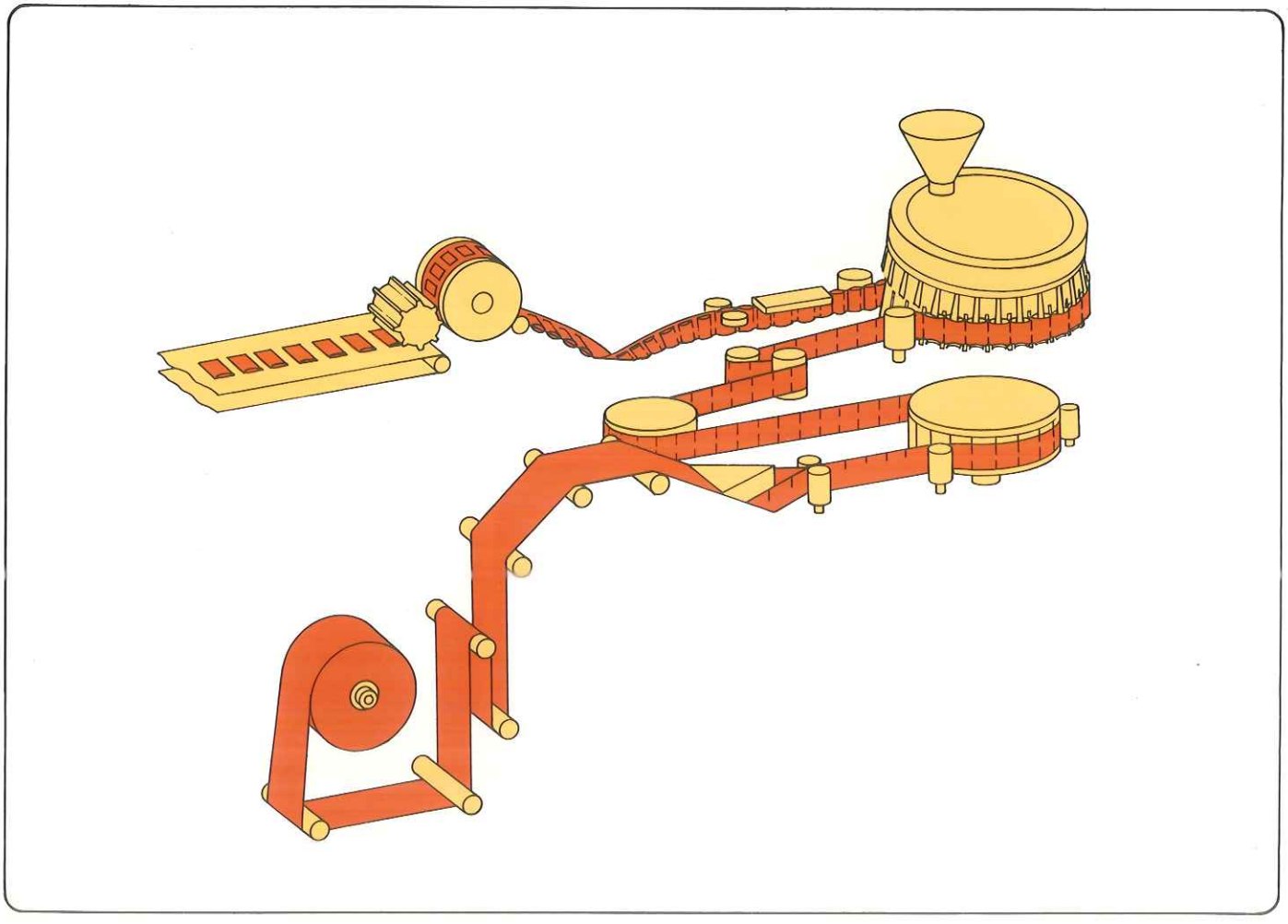
MULTIPLE PRODUCT FEEDS—Jones provides a wide range of feeds to meet a variety of product requirements including standard volumetric, auger and vibratory feeds, plus gas flush systems. Filler adapts to single or multiple feeders.

OPTIONAL FEATURES—In order to meet your requirements, many additional options are offered including a print registration unit, flexographic printer, coder/embosser, full capacity pouch, auger filler, multiple product feeds, gas flush system, 3 or 4 sided sealing, collating/transfer mechanisms, package counter, low roll detector, and automatic web splicers.

COMPUTERIZED REGISTRATION—An accurate computerized registration system, designed to eliminate manual control of web registration, is available as an option on all Jones Pouch King machines. The microprocessor-based system can accurately correct registration in both directions, eliminate problems due to misadjustment, and free the operator to attend to other functions.

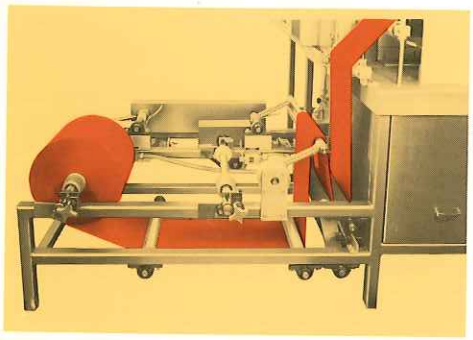
Operational flow diagram

This diagram illustrates the unique continuous web principle of operation of the Jones Pouch King. The machine will run with a variety of pre-printed heat sealable paper, glassine, cellophane, foil, polypropylene and other laminates.

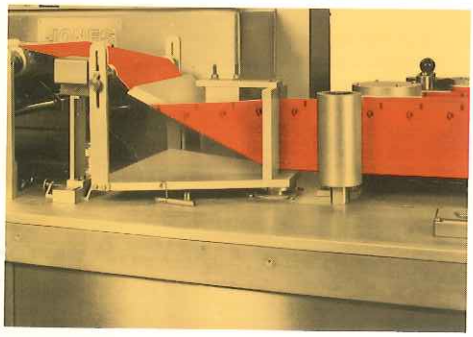


Jones Pouch King machine operation

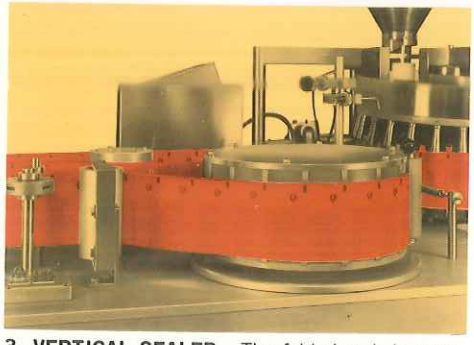
Step by step operation of industry's most dependable constant motion form/fill/seal machine



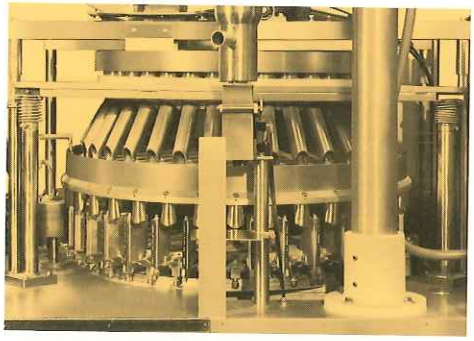
1. UNWIND—The unwind stand contains mandrels for mounting two pouch stock rolls, up to 24" (609 mm) diameter. The web travels over a dancer brake mechanism and variable speed rubber drive roll controlled by a signal from the photoelectric registration system. Automatic web splicers can be optionally provided.



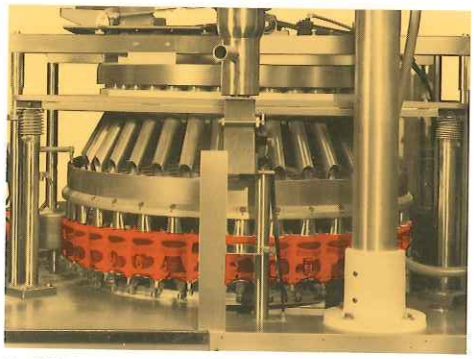
2. FORMER—After the roll stock passes through a scanner which detects registration marks on the web, it is then folded in half on a pivotal plow. This mechanism is designed to adjust for variations in winding and to help maintain the fold in proper alignment. In addition, a code dater or printer can be mounted on the machine at this station.



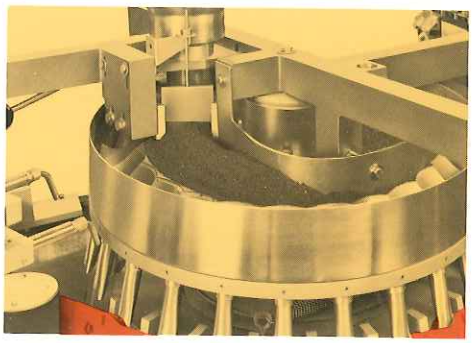
3. VERTICAL SEALER—The folded web is wrapped more than 180° around the vertical sealer to allow maximum dwell time for sealing into a continuous strip of individual pouches. The driven drum is equipped with cartridge heaters mounted vertically behind the seal bars. Packages with three- or four-sided seals can be made on the Pouch King.



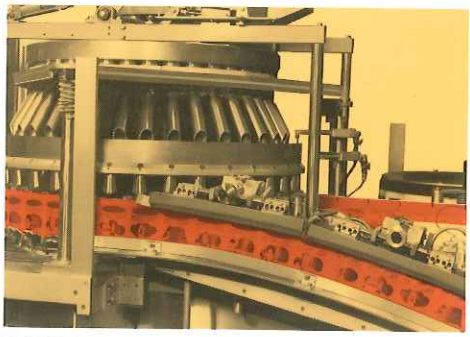
4. VACUUM TRANSFER WHEEL—The sealed pouches pass through driven rolls to the vacuum transfer wheel where the seals are positioned against "lands" which alternate with recessed areas. Vacuum, air and mechanics are used to open the pouch for insertion of the filling spouts.



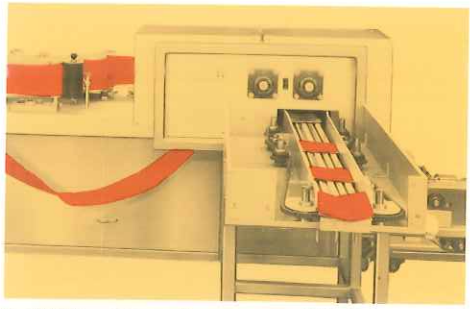
5. FULL CAPACITY POUCH—After leaving the tucking roller the web, running at a constant speed, is overfed into the vacuum transfer wheel causing a natural separation between the front and back panels of the pouch for easier air stream penetration. Once the opening is started a tucking mechanism, actuated by a cam ramp and follower, begins to press up against the bottom of the pouch adding to the spreading forces on the sides. The pouch is completely opened from top to bottom allowing increased volume while minimizing the amount of web material needed.



6. FILLER—The product is metered through an adjustable gate onto a rotating filler plate and is continuously proportioned into the spouts. This technique of gradual pouch loading avoids spout blockage and product flashback. The canted filler plate allows the spouts to enter the pouches and retract without reciprocating motions.



7. TOP SEALER—After leaving the filler, the strip of filled pouches is pulled through top sealer bars by power rolls to assure flat, wrinkle-free seals. High integrity seals, free of contamination, are provided by the natural arc of the closed web of filled pouches as it passes thru the top sealer. Excess air is expelled from the pouch before sealing.



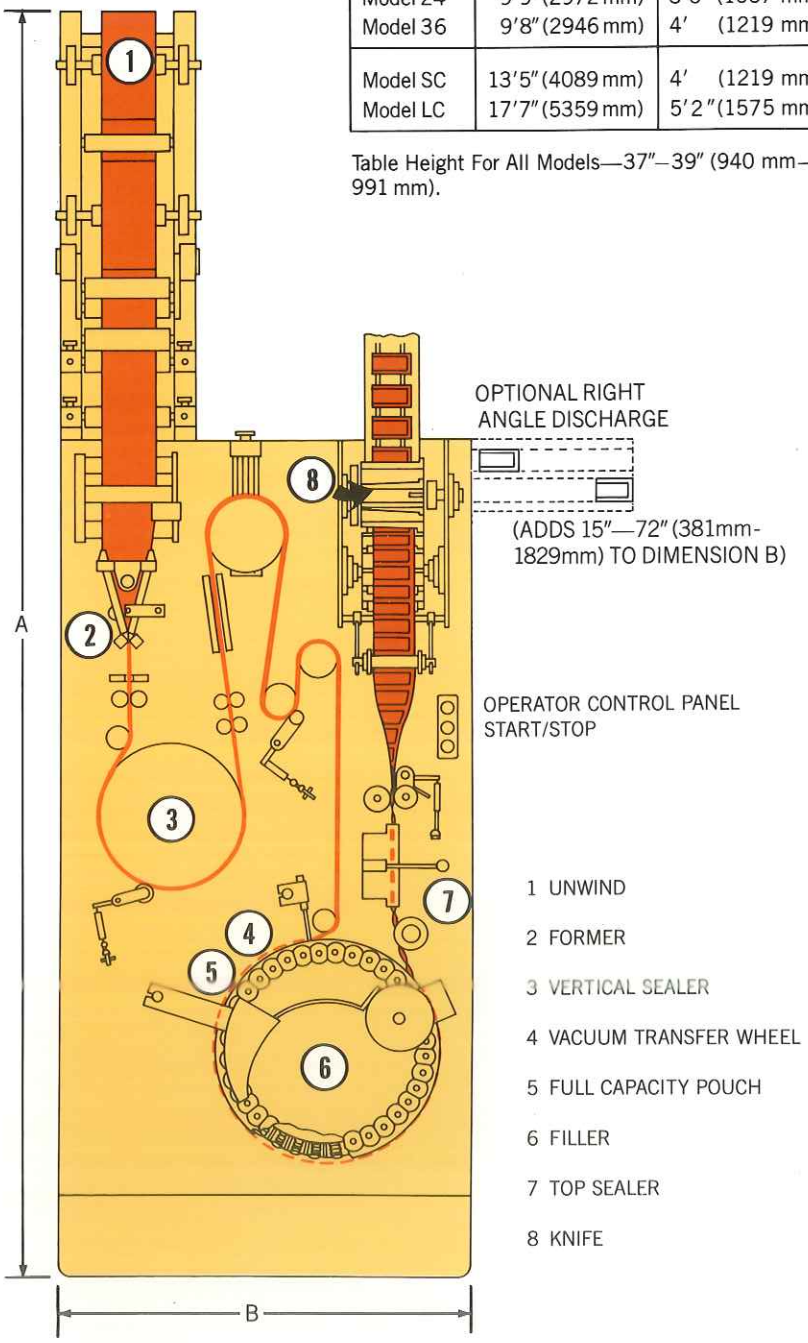
8. KNIFE—The continuous web of filled and sealed pouches is turned 90° and threaded into the rotary knife mechanism. The blades are mounted at an angle to provide shearing action for clean cutting. Single pouches or strips of perforated pouches can be placed onto a right angle or in-line discharge for further processing or transfer to Jones cartoning equipment.

Top view illustrates unique constant motion design of the Jones Pouch King

APPROXIMATE MACHINE DIMENSIONS

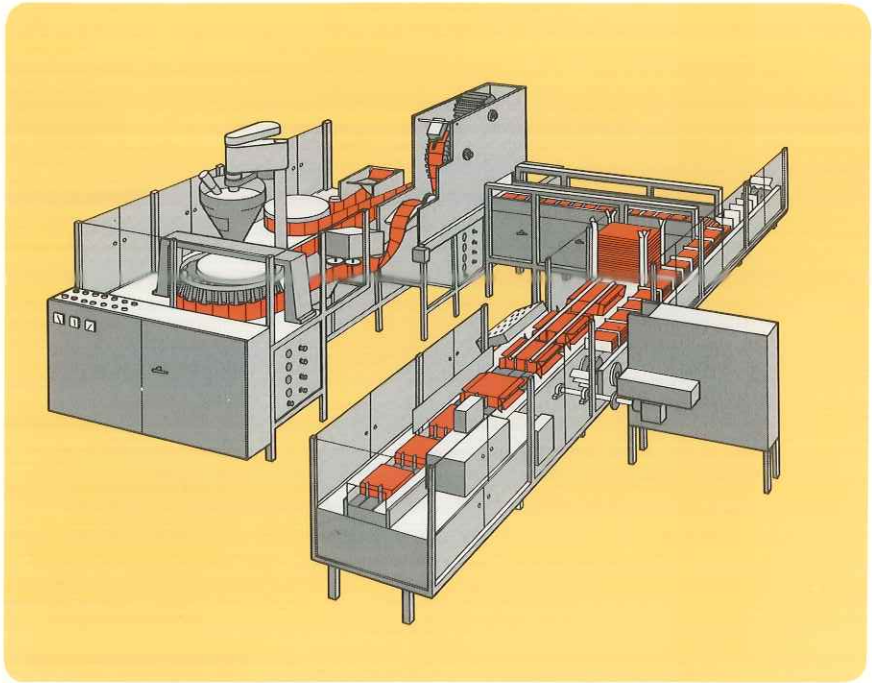
Condiment	Length (A)	Width (B)
Model 24	9'9" (2972 mm)	3'6" (1067 mm)
Model 36	9'8" (2946 mm)	4' (1219 mm)
Model SC	13'5" (4089 mm)	4' (1219 mm)
Model LC	17'7" (5359 mm)	5'2" (1575 mm)

Table Height For All Models—37"–39" (940 mm–991 mm).



Jones high speed pouch packaging systems

Offer complete integration of equipment custom-made to your specific application



The form/fill/sealing of pouches on Jones' Pouch King machines is only part of the total story. Jones' expertise in package collating and cartoning is equally important for the integration of a reliable high speed packaging system.

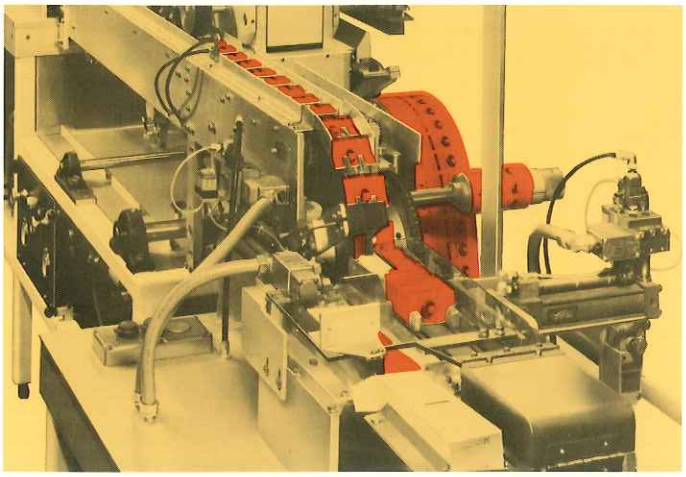
Backed by years of experience in all phases of package handling, Jones offers bulk packing and cartoning systems which can be tailored to your specific application. Jones will evaluate and recommend the best and most economical system, whether the operation be automatic or semi-automatic, intermittent or continuous motion.

One of the prime advantages offered by the Jones Pouch King is higher speeds compatible with constant motion cartoner output. This permits a one-on-one situation—only one Pouch King needed per cartoner—providing a reduction in line complexity and obvious savings in initial costs, floor space and labor.

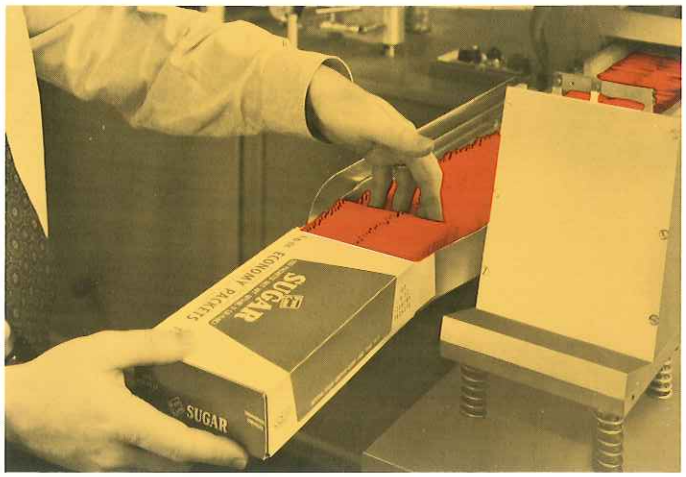
To assure a successful system, proper synchronization between the pouch machine and cartoner is a must. The two units can be electrically and mechanically joined to assure trouble-free starts, stops and operation at highest speeds. Pouch King equipment can be interlocked with Jones CMC, OSC and Criterion™ constant motion cartoners, or Jones IMC intermittent motion cartoners, for a wide range of collating/cartoning options.

The Pouch King counts, divides, stacks and transfers pouches for bulk case packing or cartoning

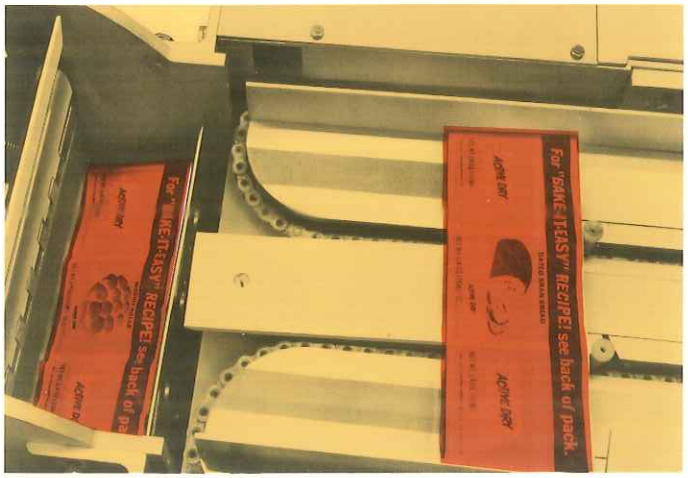
Permits semi-automatic or automatic operation



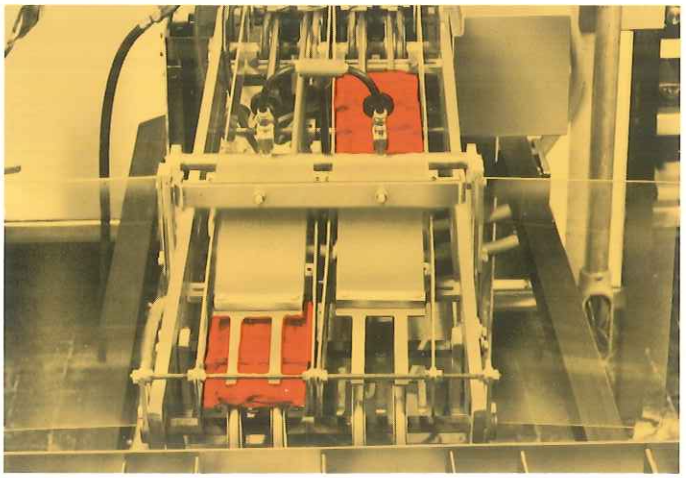
WHEEL STACKER—A continuous strip of filled pouches is cut on a rotary knife and transferred by vacuum cups onto a lug conveyor. The pouches pass through a conditioner to evenly distribute product for efficient collating. Pouches are collated by a stacker/counter and transferred into an indexing lug conveyor. Collected pouches are transferred to a loading station for automatic insertion into an end loaded carton.



NEAT STACKER—Two rows of shingled pouches are discharged from a knife vacuum drop off onto a right angle belt conveyor. The operator inserts a set up box over a loading shoe at the end of the conveyor and identifies the count by a preprinted "alert mark". The packets are manually end loaded and the carton is placed on an adjacent vibrator to settle the load in the carton.



PIN CONVEYOR—Either double or triple serrated pouches are discharged from a knife vacuum drop off onto a right angle conveyor. Chain driven pin conveyors feed a predetermined count of pouches stacked either two, three or four high to a rotating transfer collection bucket.



MARK III TRANSFER—Pouches are released sequentially from vacuum cups located on the rotary knife to form two lanes on a right angle transfer conveyor. Each group of pouches is shingled and accumulated on differential speed belts. Gates accumulate the stacks and discharge them into infeed buckets of an intermittent motion cartoner. For a constant motion Jones cartoner the transfer conveyor pivots in the direction of bucket travel during loading.

SPECIFICATIONS

Machine: R. A. Jones High Speed Horizontal Constant Motion Pouch King Models.

Package Size Range/ Speed	Pouch Sizes		Approx. Speed
	Width	Height	
Salt/Pepper	1¼" (31.75 mm)	1¼" (31.75 mm)	1300
Sugar—Model 24	2½" (63.5 mm)	1⅜" to 3" (34.93 mm to 76.2 mm)	900
Sugar—Model 36	2½" (63.5 mm)	1⅜" to 3" (34.93 mm to 76.2 mm)	1300
Model SC	2" to 2¾" (50.8 mm to 69.85 mm)	2" to 3¾" (50.8 mm to 95.25 mm)	50-1000
Model LC	2¾" to 5¾" (69.85 mm to 146.05 mm)	3½" to 8½" (88.9 mm to 215.9 mm)	50-1000

Pouch Material: Wide range of flexible heat sealable structures including paper, glassine, cellophane, foil, polypropylene and other laminates.

Product Feed Systems: Standard volumetric, vibratory, auger feeds, and gas flush systems.

Construction: Welded tubular steel frame, anodized aluminum top/bottom plates, stainless steel shafts and guards, pre-stretched chain, anti-friction sealed bearings. Stainless steel frame, panel and filler optional.

Drive Motor: Variable speed TEFC motor, 1 to 3 H.P., depending upon model.

Vacuum/Air: 3 H.P. or 5 H.P. vacuum pump included, depending upon model. Compressed air required—60 to 80 psi (3-40 cfm).

Electrics: 230 or 460 volts, 3 phase, 60 Hertz with transformer for 110 volt controls (other voltages available upon request). All wiring meets or exceeds N.F.P.A. National Electrical Code.

Lubrication: Total number of grease fittings will vary from 5 to 10. All pillow blocks, flange bearings and ball bearings are sealed and do not require lubrication.

Standard Features: ☐ Vacuum pump ☐ Pivotal plow ☐ Clear polycarbonate, vertical, electrically interlocked, safety barrier guarding ☐ Dual roll unwind stand (Model SC and LC only).

Optional Features: ☐ Print registration unit ☐ Flexographic printer ☐ Coder/embosser ☐ Low roll detector ☐ Auger filler ☐ Full capacity pouch ☐ Vibratory feeds ☐ Package counter ☐ Bottom sealer ☐ Gas flush system ☐ Collating/transfer mechanisms ☐ Automatic web splicers ☐ Volumetric cups ☐ Computerized registration system.

Jones

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