



Save money – continuously

- Significant cost reduction by use of flat roll stock film
- Continuous production – film rolls up to 3,000 m
- For product diameters up to 160 mm

Why seal with TSA 160?

The automatic sealing machine TSA forms a ready-to-be-filled tube from flat roll stock film which is then directly gathered on the stuffing horn. A variety of sandwich films, mono or coated, may be employed. By means of heat sealing sandwich film is sealed with minimum overlap, band-sealing is also possible. Film rolls hold up to 3,000.



Advantages

- Reliably tight film sealing
- Highest productivity through automatic, self-monitoring processes
- Simple machine operation with SAFETY TOUCH – shockproof, 10" large and easy to clean
- Highest productivity; product parameters can be recalled from the SAFETY TOUCH recipe management
- Increased productivity due to recognition of film supply end
- Compact, space-saving design with steerable wheels and feet
- Training, handling, maintenance and service simple and user-friendly
- Longer product shelf-life
- Significant cost reduction through moderately priced flat roll stock film vs. shirred casings
- Continuous production (reloading of film vs. up to 100 times reloading of casings)
- Optimum use of material due to minimum overlap of film at the seam
- Considerably less waste compared to cartridges and other packaging



- Less storage area required for input stocks
- Shorter fitting times for a wide variety of pack sizes, thanks to quick-change format set
- Film and product-specific set-

tings of temperature and sealing speed in the SAFETY TOUCH, progressively adjustable during continuous production

Quality and hygiene

- Increased hygiene due to use of flat films vs. watered casings
- Stainless steel provides resistance to aggressive cleaning solutions
- Easy to clean, closed system, only one part product-carrying (stuffing horn)

Optional equipment

- Simple and safe marking of batches during production by continuous printing on flat film using an integral printer, e.g. ink jet, hot stamping, thermal transfer
- Vacuum system for air-free filling of large calibres
- Strip sealing for processing 2-layer film
- Filling system hybrid

Combinability

ICA, ICA XL

The TSA 160 can be coupled with automatic double-clippers ICA and ICA XL in combination with a mono pump, a stuffer or a drum press.

Function and operation

The TSA becomes a continuous working production line when it is coupled with a stuffer and an automatic clipper. The film roll is placed on a self-tensioning roll carrier. Uniform inlet tension of the film is achieved by the roller guide system. The forming shoulder forms the flat film around the stuffing horn into an open tube. The tube is then sealed lengthways with minimal overlap by heat sealing. An integrated control circuit provides for a steady amount of shirred film for the downstream clipper to allow continuous production. The production process is operator-friendly and can be easily programmed via the central

touch panel SAFETY TOUCH. The unit is operated via three membrane keys on the control panel.

Technical data

Width	1,295 mm
Depth	1,320–3,215 mm
Height	1,480–1,680 mm
Weight	895 kg
Three-phase current connection	200–240 VAC, 380–460 VAC, 50/60 Hz
Power input	4.5 kW
Fuse connection	16 A
Compressed air	5–7 bar / 0,5–0,7 MPa
Air consumption	2.5 NL/cycle

Dimensions, weight and consumption values vary depending on the equipment and/or machine configuration.