

AOP 151 stretchLIFT type fully automatic packer



AUTOMATIC PALLET WRAPPING MACHINE AOP 151 Compact

TECHNICAL SPECIFICATIONS

- Pallet: 1200 x 800, 1200 x 1000 mm
- Wrapping height: max. 2000 mm
- Weight on pallet: max. 1500 kg
- Capacity : 25-45 pallet/h
- Film width: 500 mm
- Inner film roll diameter: 76 mm
- Conveyor height from the floor: 400mm

BUILD IN COMPONENTS

- PLC: **SIEMENS S7**
- Screen: **SIEMENS touch screen**
- Press-buttons: **SIEMENS / KLÖCKNER**
- Contactors: **SIEMENS / KLÖCKNER**
- Thermic overload: **SIEMENS / KLÖCKNER**
- Safety relays: **SIEMENS / KLÖCKNER**
- Border-line contact: **SICK**
- Sensors: **SICK**
- Photocells: **DATALOGIC / SICK**
- Frequency inverter: **MITSUBISHI / LENZE**
- Motors: **SEW / LENZE**
- Gears: **SEW / LENZE**
- Pneumatic: **FESTO**
- Electrical cabinet: **RITTAL**
- Display: **SIEMENS**

STANDARD EQUIPMENT OF MACHINE:

- Pre-programmed CPU SIEMENS S7 200
- Display SIEMENS OP7
- Electrical cabinet RITTAL
- Film overlapping adjustment
- Setting of top and bottom wraps
- Graded or continuous film carriage movement
- Normal or cross – spiral wrapping program
- Program for anti weather wrapping with top sheet dispenser – option
- Automatic pallet height sensing with photocell
- Rotation table stop in starting position
- Wrapping speed adjustable with frequency inverter
- System for film welding with teflonised bar
- System for film end blowing
- Quick load system for simple and quick film loading
- Film pre-stretch 140, 200, 320%
- Film tension between pallet and film carriage adjusted on control tableau
- Automatic control of film unwinding velocity with frequency inverter
- Rotating table speed adjusted with frequency regulator
- Rotating table soft start and stop
- Thermal protection of all motors
- Protection with fuses

SECURITY SYSTEM

- 2 m high safety fence
- doors protected with safety micro switch and lock
- emergency stop key mounted on control cabinet and at the doors
- automatic stop in case of film breaking or film
- safety photocells on exit and entry conveyor
- grade of protection by CE standard IP 54

CHARACTERISTICS AND BENEFITS OF AOP 151 Compact

- Energy saving
- Film capturing device enables firm and secure holding of film end
- Film welding against teflonised bar and not against the pallet
- Regulation of welding wire temperature
- High capacity top film dispensing (option ADF 110) without wrapping cycle interruption (with anti dust protection – top sheet dispenser stands in front of wrapping machine)
- Programm for anti weather protection (option ADF 120) - top sheet dispenser is placed on the side of the machine.
- System for top film blowing or mechanical holders secure the top film position during wrapping
- Automatic power pre-stretch system POWER 2000 for film pre-stretch
- Quick load system for simple and quick film loading enables film change in 30 seconds
- Control tableau with alfa-numerical display for machine condition review and easy adjustments
- Simple operating with the machine
- Possible adjustments for machine build in exsisting transport lines
- Essential packaging costs reduction

TECHNICAL DESCRIPTION

AOP 151 Compact

Pallet wrapping machine is equipped with automatic system for film capturing, cutting and welding. Safety fence is placed around the machine, doors are controlled with safety switch. System operation supervision on control cabinet with alpha numerical display with system for error indication.

Automatic Power pre-stretch system for optimal film consumption and maximum savings. Safety photocells on entry and exit in accordance with CE regulations.

CE mark.

Automatic Power pre-stretch system – POWER 2000

With this system all stages of film pre-stretching are improved. The system allows constant film pre-stretching at 140%, 200% or 300%, where considerable film savings are achieved. With this stretching method the film is evenly put onto the pallet and therefore wrapping quality is much better. With all manners of wrapping (also at uneven parts of pallet, different shapes of load) the film always stays evenly stretched thus making wrapping easier and more effective.

Outgoing film speed and rotating table speed are controlled by frequency inverter enabling even greater film savings. Film loading onto carriage and its insertion in pre-stretch system is very easy.

Control tableau

Control tableau with multifunctional alpha-numerical display enables communication between machine and the user.

Simple application system enables machine resetting, wrapping program choice and manual activating of all machine functions.

In case of error, auto-diagnostic system displays cause of error and helps user in error abolition. If the user has trouble in error abolition, the secondary help system suggests method for error abolition.

SEQUENCE OF OPERATION

Loaded pallet arrives on entry conveyers (not part of machine) onto roller conveyer on the machine. Pallet is positioned in the middle.

At this time rotating table is still, film capturing device holds the end of the film.

Wrapping cycle starts automatically. Film carriage is mounted on column. Soft start (and stop) of rotating table is standard equipment. Normal wrapping cycle begins on the lower pallet edge with low speed. After the first pallet corner acceleration of rotating table begins and achieves the top speed. At the stopping the speed reduces gradually until complete stop in starting position.

Pallet wrapping can begin and stop in any position depending on chosen program.

Top and bottom wraps, speed of film carriage movement depend on chosen program.

At the beginning of wrapping the film capture opens and enables complete pallet wrapping. Film end blowing system blows the film end at the moment of wrapping under the film wrap.

At the end of wrapping film capturing device captures and holds the film end. Film narrowing device narrows the film in welding place. Welding takes place against the teflonised bar and not against the pallet. Hot wire cuts the film, welding system moves back and wrapped pallet is transported out of the machine.

All machine functions are completely automatic.

OPTIONS

Top sheet dispenser ADF 110

Top sheet dispenser ADF 110 is placed in front of AOP 151 Compact machine

Top sheet dispenser ADF 120

Top sheet dispenser ADF 120 is placed at the side of AOP 151 Compact machine.

Pallet lifting on wrapping place

Pallet lifting system is integrated in the pallet transport on the wrapping place. Pallet is lifted during wrapping.

System enables complete wrapping of goods together with pallet.

Pressing unit for unstable loads

Pressing unit for stabilisation of unstable (light) goods on the pallet during wrapping cycle. Device is equipped with automatic height determination.