

Machine Type: "SAD 16"



SAD 16

General Specification

- Fully-automatic pallet stretch wrapping machine – turntable type.
- With 10 wrapping programs with operator setting for:
 - a) Film overlap (independent for upward and downward travel).
 - b) Number of top wraps.
 - c) Number of bottom wraps.
 - d) Lay-on force of film (during bottom wraps).
 - e) Lay-on force of film (during product wraps).
 - f) Pre stretch rate (during bottom wraps).
 - g) Pre stretch rate (during product wraps).
- With operator selection for:
 - a) Wrapping without top sheet.
 - b) Wrapping with top sheet (if existing).
 - b) Pass through the machine without wrapping.
- Automatic film application to pallet.
- Automatic cutting of film on completion of wrapping cycle.
- Soft start/stop of turntable with fully adjustable speed control via inverter drive.
- Film slide driven by braked worm gear motor, independent control of film slide travel to give required film overlap for upward and downward travel.
- Photocell sensing of pallet height.
- Paint finish to RAL specification depending on customers preference.
- Machine is controlled by PLC, brand Siemens, series S7-300 with an Operator Panel, brand Siemens, Type TP 177 Blue Mode in separate control cabinet.
- interface logic for integration into an fully automatic conveyor system

Conveyor, mounted on to the turntable of the wrapping machine

- powered Pallet roller conveyor,
 - Track width : 1100 mm
 - Speed : open
 - Carrying rollers : galvanised steel rollers
 - Roller spacing : 167 mm
 - Roller diameter : 80 mm
 - Drive : 3 phase gear motor with brake
 - Chain drive from roll to roll
 - Conveyor with protection ring

Film System:

- **two roll pre-stretch system**
each Pre-Stretch rollers separately driven by AC motor gearboxes via electronic variable speed drive.
Lay-on force is fully adjustable by an operator setting and deflection of the dancer bar.
The Film pre-stretch rate is fully adjustable within 50 - 300 %

Film specification:

- Stretch film
 - Film width : 500 mm
 - Film thickness : 12 - 35 micron
 - Film rolls diameter : max. 250 mm
 - Core diameter : 76 mm
 - Tacky side of film : outside or inside of film roll

- Top sheet
 - Film width : depending on palette size
 - Film thickness : 40 - 100 micron
 - Film rolls diameter : max. 320 mm
 - core diameter : 76 mm

Dimensions:

- Height of machine tower			3000 mm
- Turntable diameter		1600 mm	
- For pallets with the dimension	up to	L x B 1200 x 800 mm	
- Pallet load size	max.	L x B 1300 x 900 mm	
- Turntable diameter		1830 mm	
- For pallets with the dimension	up to	L x B 1200 x 1000 mm	
- Pallet load size	max.	L x B 1400 x 1100 mm	

For larger pallets, a "heavy duty turntable" option is available.

- Pallet height range (Std) (based on conveyor height 500 mm)		500 - 2000 mm
- Pallet weight	max. min.	1000 kg 70 kg
- Conveyor height	min.	450 mm
- Capacity: (depending on pallet height and required film overlap)		
• Without top sheet		40 - 45 Pal/h
• With top sheet dust proof		35 - 40 Pal/h
• With top sheet weather proof		30 - 35 Pal/h
- Electrical main connection :	3 x 400 V, N, Pe, 50 Hz, 16A	
- Control voltage	: 24 VDC	
- Pneumatic connection	: 6,0 bar	
- Air consumption	: 30 l/Pal.	

Mechanical Options available:

- Twin heads for increased capacity
- Top sheet applicators – internal & external
- Top platten for load stability during wrapping
- Larger Diameter Turntables

Component Manufacturers

Motors:	SEW
PLC:	Siemens
Drives:	Lenze
PSU:	Weidmuller
Terminals;	Weidmuller
Sensors	IFM
Limit Switches;	Bernstein & Siemens
Photo Cells:	Leuze
Control Gear:	Siemens
Interface Relays:	Finder
Switchgear:	Schneider
Safety Photocells:	Leuze or Sick

Optional Equipment

Larger Diameter Turntables	
Heavy Duty Turntables	
Extended Towers	(for pallets upto 3M)
Electrically driven Top Plattens	(to stabilise the load by pressing on the top of the pallet)
Film cutter mounted on film slide – “16S” type,	(to enable film to be cut at the top of the pallet)
Film cutter mounted on Top Platten – “16B” type,	(to enable film to be cut at the top of the pallet)
Film Cutting by Knife	(instead of hot wire)
Film Sealing Counterplate	(so film is not sealed against product)
Special photocell	(for dark coloured products)
Supply of additional Conveyors	
Control of additional Conveyors	
Top Sheet Applicators	(Internal for waterproof, external for dust proof)
Top Sheet Cutting by Knife	(instead of hot wire)
Top Sheet Loading Hoist	(for 1 person operation)
Galvanised machine	