

Sal-Tech Easy Packaging Packaging Solutions Pallet Wrapping Machines

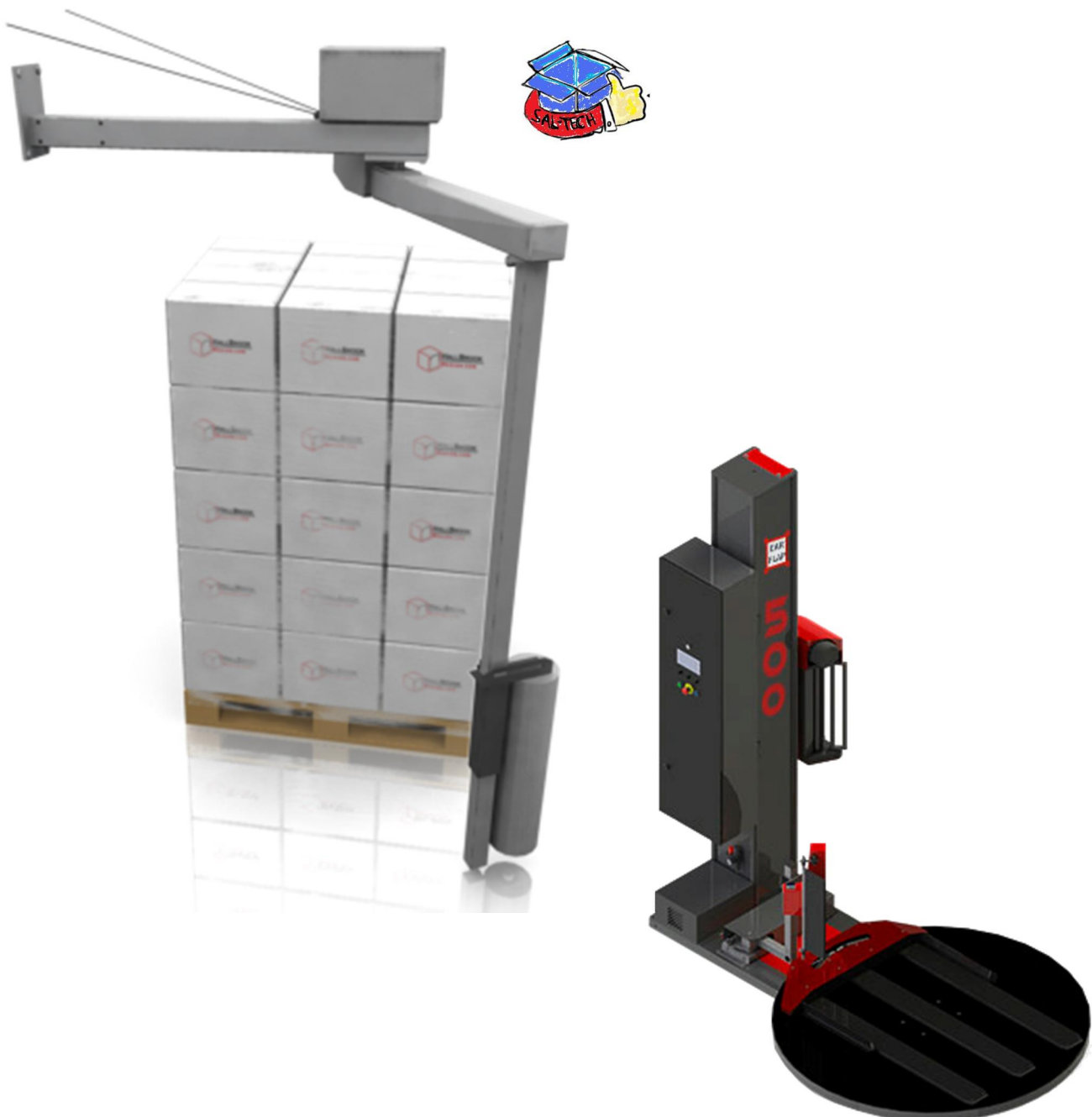


WE KEEP THINGS TOGETHER

**Machines,
Tools and
Materials**







Sal-Tech Easy Packaging Pallet Wrapping Machines



WRAPPING Basics

How do you get the best out of Pallet Wrapping

Typical Equipment for Pallet Wrapping:

			
<p align="center">Manual Handfilm Dispenser</p>	<p align="center">Semi Automatic E3 Wrap 2100</p>	<p align="center">Automatic STEP Model 500</p>	<p align="center">STEP Fully Automatic</p>

Process: The development provides a film around one or more products with the aim to stabilize protect and secure the cargo from tampering or theft. There are two main methods of the Pallet Wrapping process; the Vertical Development and the Horizontal Development. The highly stretchable film is wrapped around the item while adjusting the tension, the film provides secondary protection. Other products which can't resist the tension of the film can be, in principle be damaged. It is thus important that the product packaging are stabilized and maintained before and during the wrapping process.

Pre-Treatment of the Film by winding:

- Brake Pre-Stretching directly from the roll, the core is slowed down while the product / pallet pulling the film from the roll.
- Brake Pre-Stretching using the roller system, and then brake rollers while the product / pallet pulls the film through the rollers.
 - Mechanically adjustable brake pre-stretch
 - Magnetic / Electric adjustable brake pre-stretch
- Motorized Pre-Stretching through the roller system, rollers regulated product is filmed with minimal tension.
 - Fixed for pre stretch degree
 - Variable for pre stretch grad
- The pre-processed sheet which is used in connection with the above-mentioned processes.
 - Fort Solid Film
 - Perforated Film

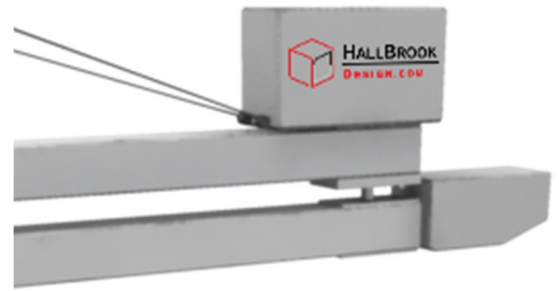
Concepts of Pallet Wrapping Vertical Development:

- Pallet Wrapping Basics: The pallet is wrapped to provide protection and stability of the product for day-to-day transportation.
 - Normal. Clear film for the general distribution
 - Pallet Wrapping and Storage: The pallet is wrapped for stability and protection of the product over time, including:
 - Dustproof pallet wrapping, top film used
 - Waterproof pallet wrapping, top film used
 - UV light protection for the product
 - Black film for theft/tamper proofing "expensive" products
 - Film with special properties such as anti-rust etc.
 - The sealing of the product
 - Other variables in the wrapping process:
 - Number of top and bottom turns. This is governed either by time or by number. Number is the best solution.
 - The Cycle:
 - Bottom – top – bottom
 - Bottom high speed to the top - bottom
 - Top – bottom
 - Bottom – mid position – top – bottom
 - Bottom – top – level down under top film- pause – top – bottom

Continued on page 32

Hallbrook E3 WRAP 2100 Pallet Wrapper – Our Concept

The proven concept, with more than 75 machines installed. The E3 Wrap 2100 is a simple yet effective design, engineered for efficiency. This innovative pallet wrapper is part of the Hallbrook E3Wrap Series of pallet wrapping machines. E3 or “E Cube” stands for Ergonomic, Economic, and Eco-friendly. It is very easy to assemble and install and maintenance friendly.



Equipped with a **24VDC Gear Motors** which you can depend on. Wraps up to 100 pallets per day or more.

750mm Wide Film

Hallbrook E³Wrap 2100 uses a 750mm wide film which enables the wrapper to wrap a standard pallet with minimum number of revolution faster and safer than most pallet wrapper.

Why by a E3 Wrap 2100 Pallet Wrapper?

10 simple reasons:

1. Wraps your pallets safe, fast and easy. Be Lazy, don't get dizzy, let your pallet wrapper do it.
2. No Hill - No ramp. Any pallet wagon, electrical truck or loader can place the pallet on the floor, and the pallet can weigh whatever the floor can carry.
3. Easy to clean the floor, no rusting parts placed or embedded on the floor. No ramp that blocks the floor area, no turntable that rusts in the food industry with wash down.
4. Small investment great value. Prices from less than 2000 USD/15.000DKK. And you can secure best price of film per pallet wrapped.
5. Fast, wraps a full height pallet 2200mm in less than 2 minutes. A normal 1200mm just one minute.
6. Ergonomic features “Easy Load” of film rolls less than 11kgs, anyone can handle these, no heavy lifting, and then again no hill to push a heavy pallet up on.
7. Rotation diameter 1910mm, allowing 1200x1200mm and 900x1350mm pallets.
8. Can sit in hallways and other tight areas without blocking the throughway.
9. It can be installed on most types of walls or we can supply a pole solution for floor mounting.
10. And not least “Greener”, optimal film economy as it presents higher usage degree of film, better cross pull, less use of electrical power per pallet wrapped, less waist per roll on core material, less air shipped per pallet of film.

THE WALL's of E3..... *Made in Denmark*



And more to follow.....

The proven concept, that makes it easy to solve difficult applications as well as the basic and simple daily pallet wrapper applications and demands.

Hallbrook E3 WRAP 2100 Pallet Wrapper

For hanging on the wall, with option POLE for floor mounting. Uses E3 wrap film with option to use standard hand wrap. Takes up very little space when parked and can sit in hallways. Easy to clean the floor no rusting parts or need for embedding. Easy to install – DIY. And remember No Ramp - No Hill and easy to use for everyone

Specifications standard basic configuration	
Wrap Speed	2200mm high pallet around 90 seconds 1000mm high pallet less than 60 seconds
Max Pallet Size	1200x1200xH2200mm – Takes the big pallets - all standard
Turning free diameter	Ø2000mm with fix-stop and 360 degree full access, no ramp
Pallet Weight	No weight limitations for the load/pallet, 50kgs to 10tons
Net Weight	60 kg - Easy to ship anywhere ### WRAPPER IN A BOX ###
Electrical Requirements	Single Phase according to Local Standard. Change over via switch

Options:

- Pallet height 2700mm/3000mm.
- LARGO, turning diameter 2500mm, pallet 2000x600mm.
- PLUS 25 aggregat, 25% pull through pre stretch
- Motor controller for overlap adjustment.
- Adaptor for handwrap Ø50 x 450/500mm
- POLE H3000mm, for floor mounting, or for higher as option.
- SCALE floor placed machine with pallet scale for 2000 kg.
- Special applications on demand



E3 Wrap LARGO with POLE, note no ramp no hill ☺



Hallbrook E3 Wrap Film Standard Range

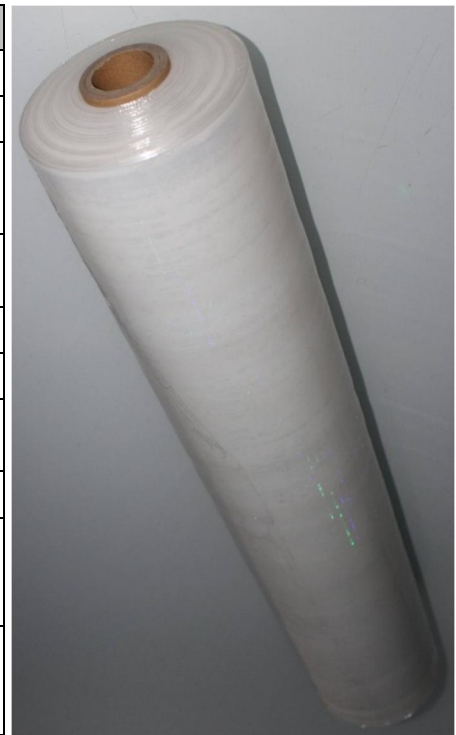
The Hallbrook E3Wrap Film is a high quality LLDPE stretch wrapping film. It is available in various colors and thickness and it is compatible with a wide variety of wrapping machines and hand tools.

Item no. of standard film types:

Color Thickness	8 my	10my	12 my	15 my	17 my	20my	23my
Film length [m] per roll	1818	1350	1125	925	800	675	585
Stretch % minimum, elongation	200%	200%	200%	200%	200%	150%	150%
Clear - Transparent	54750800	54751000	54751200	54751500	54751700	54752000	54752300
Black , Non transparent					54751710	54752010	54752310
Blue, Transparent	54750820	54751020	54751220	54751520	54751720	54752020	54752320
Green, Transparent	54750850	54751050	54751250	54751550	54751750	54752050	54752350
White, semi Transparent					54751760	54752060	54752360

The E3 Wrap Film is the best film for the HALLBROOK E3 Wrap 2100 and E3 Wrap 2200. The E3 Wrap 2100 is an innovative pallet wrapper from Hallbrook Design, which eliminates the need for a ramp to load the pallet to the machine like the usual standard pallet wrappers.

Specifications	
Film Material	LLDPE, oktene LDPE
Elongation	150% to 200% min stretch
Dimension of Roll	Core Dimension $\varnothing 38/\varnothing 53 \times 770\text{mm}$ Film on core 750mm x $\varnothing 140$ maximum
Fill Thickness	8my, 10my, 12my, 15my, 17my, 20my and 23 my.
Film Width	750mm
Film Length per Roll	See above chart
Colors	Transparent, black, white, blue, red, green
Core Material	Paper wound core ($\varnothing 38/\varnothing 53 \times 770\text{mm}$)
Weight	Core weight approx: 620gram Film weight approx: 9,315kg Box of 1 roll approx: 10,2kg gross
Packaging of Film Material	1 roll per box, 150x150x780mm 35/70 boxes per layer/pallet 1050x750mm

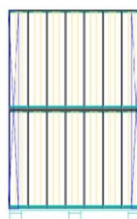


For more information, contact us.

Tel: +45-7027 2220

Skype: [easy.packaging](#)
support@sal-tech.com

Visit our website
sal-tech.com



Version: E-1 roll each box,
35boxes x 2 layers each
pallet 750x1050mm

35/70 Rolls per pallet - Greener

The Hallbrook E³Wrap film saves on air when being shipped. 15 pallets per 20 container rather than 8 normally. Less air on each pallet as the core is $\varnothing 38$ and even the core weight is reduced to 620gram, normally above 2kgs, making E3 Film a greener and **less carbon foot print product.**

Hallbrook E3 Wrap 2200

Wrapper has all the basic functions a stretch film wrapper should have, and still light on the investment demand. Designed for easy use. The Hallbrook E3 Wrap 2200 is ergonomically designed to lessen the workload of the user while maximizing the work output.

Features

- Easy to Operate
- Simple Wrap Solution
- Soft Start and Fix Stop
- Variable Turn-Table Speed
- Uses 750mm wide film
- Can Wrap Pallets up to 2000mm in height
- Light on Investment, High Quality.

750mm Wide Film

Hallbrook E3 Wrap 2200 also uses the high quality E3Wrap Film which is a 750mm wide film which enables the wrapper to wrap a standard pallet with minimum number of rotations.



2000mm Wrapping Height

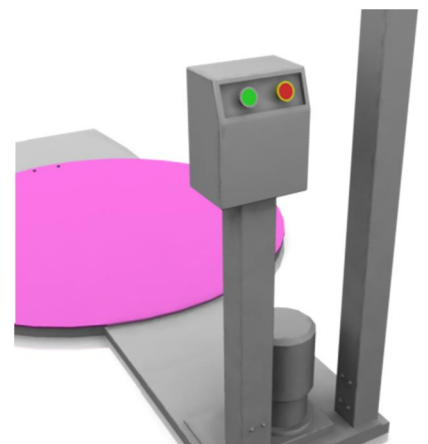
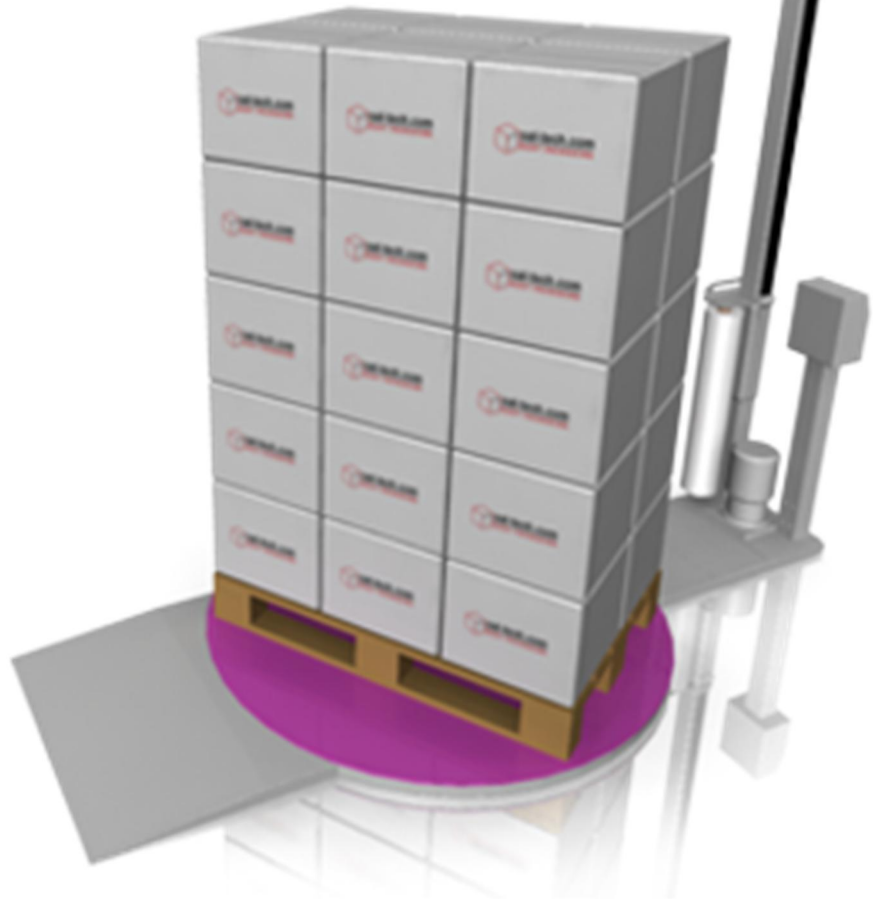
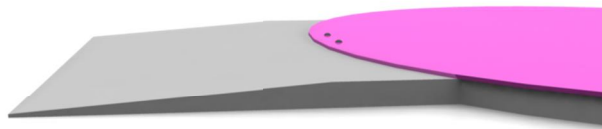
Together with the 750mm wide E3Wrap Film, The HBD E3 Wrap 2200 also enables you to wrap pallets up to 2000mm in height. **Option for 2500/3000mm**

Easy Start and Stop

PLC Control and the easily accessible Start/Stop Button lets you focus more on getting the job done. It also has a Fix Stop feature where the turntable stops at exactly where it starts so it will be easier to change pallets..

Low Turn Table Plate and Ramp

The machine features a 43mm High Capacity turn table lets you easily mount the pallets for faster wrapping interval. The turn table can wrap a maximum of 1200kg pallet.



Specifications

Maximum Wrapping Height	2000/2500/3000mm free choice on order.
Film Roll Width	750 mm
Wrapping Speed	Up to 100 pallets a day
Power Supply	110/220/230V-50/60Hz Single Phase

For more information, contact us.

Tel: +45-7027 2220
Skype: easy.packaging
support@sal-tech.com

Visit our website
sal-tech.com

Topfilm Dispenser Floor Placed

Topfilm dispenser for roll width 1500 or 1800 mm, for placing directly on the floor.

Standard version painted, but can be produced as galvanized as shown or in stainless steel version.

44201500 For 1500 mm wide film roll

44201800 For 1800 mm wide film roll

We also can produce special demands as to width of dispenser and stainless steel.



Topfilm Dispenser Wall Mounted

Topfilm dispenser for roll width 1500mm, for hanging directly on the wall

This way it is easy to pull the film directly across the pallet situated on the stretch film wrapper. The roll is carried using a alu tube through the core then placed in the bearing sets.



Standard version is galvanized steel and in aluminum, but can be produced as a stainless steel/aluminum version.

44211500 For 1500 mm wide film roll

44211800 For 1800 mm wide film roll

We also can produce special demands as to width of dispenser.

STEP ONE Pallet Wrapper Semi Auto.

State-of-the-art semiautomatic wrapping machine for wrapping palletized loads, equipped with motorized pre-stretch to guarantee the minimum film consumption. The only manual steps are the cutting of the film and its attachment to the pallet; the rest of operations are completely automatic and easily programmable through the touchscreen with a graphic and intuitive menu.

PERFORMANCE

Output	20/30 pallets/hour
Pallet Maximum Sizes	1200 x 1000 mm
Load Maximum Height	2400 mm
Load Maximum Weight	2000 kg

PLATFORM

Turning Device	Platform
Turning Speed	12 RPM
Diameter	1650 mm
Height	76 mm

MAIN FEATURES

Film Tension Control	Powered Pre-stretching
Film Cutting	Manual
Pre-stretching Relation	100 - 200 - 300%
Platform Turning Speed Control	✓
Reel Carriage	✓
Speed Control	
Film Maximum Width	500 mm
Film Maximum Thickness	260 mm

WEIGHT & SIZES

Weight		394 kg
Sizes	L	2465
	W	1650
	H	2546

UTILITIES

Electrics	230v
Consumption	1,2 kw

OPTIONS

Wrapper height	3000 mm
Platform diameter	1800 mm

Top film sheet dispenser	Manual
Horseshoe base	✓
Platform access ramp	✓
Pit frame for floor embedding	✓



Item no.: 43010010

STEP ROBOT PALLET WRAPPER- BRAKE or 300% Pre Stretch

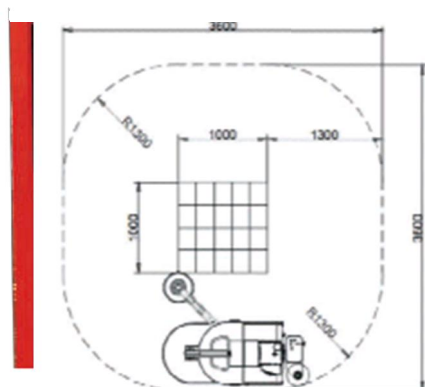
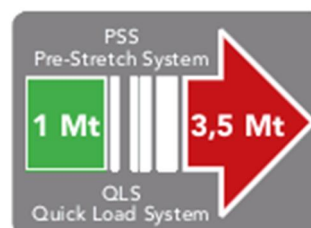
STEP Robot Pallet Wrapper brake or 300% pre stretch is a self-propelled stretch-film wrapping robot for palletized loads with different shapes, sizes and weight. It is equipped with a digital color display 7,2" that allows, in a very simple and functional way, to regulate the programs and the wrapping parameters easily.

SIEMENS

Schneider
ElectricPEPPERL+FUCHS
PROTECTING YOUR PROCESS

Features:

- Mast hinged at the base for easy and quick installation
- Film carriage by transmission chain
- Mast height: 2400 mm (useful height 2300 mm)
- High frequency battery charger integrated
- 2 AGV battery 12 volt 120 Ah serial connected
- Operating temperature range: +0° C to + 40 ° C
- Mechanical brake or powered pre-stretch (230 - 300%)
- Emergency stop in compliance with CE regulations
- Safety bumper
- Full charge cycle time of 8 hours
- Max. speed rotation: 90 m / min
- Lateral contact wheel with adjustable height
- Lateral holes for forklifting of the machine
- Control panel with color 7,2" touch screen
- Machine controlled by PLC SIEMENS S7/1200
- Indication alarms
- Acoustic warning and lamp at the cycle start
- Up to 150 pallets (W 800 x L1200 x 1500 mm)
- Emergency wheel in case of low battery



Specifications:

	STEP ROBOT PALLET WRAPPER BRAKE	STEP ROBOT PALLET WRAPPER 300%
Carriage	Mechanical brake carriage	Powered pre-stretch film carriage
Pallet dimensions	Min: 600 x 600 mm Max: no limit	Min: 600 x 600 mm Max: no limit
Driving speed	35-90 mt/min	35-90 mt/min
Carriage up & down speed	1,4 – 5 m/min	1,4 – 5 rpm
Power supply charger	230 volts 1 ph – 50/60 Hz	230 volts 1 ph – 50/60 Hz
Forklifting	Side	Side
Product features		
Product dimensions	Min 600 X 600 mm	Min 600 X 600 mm
Max product height	2300mm	2300mm
Max loading capacity	No limit	No limit
Film roll features		
Film roll external diameters	280 mm	280 mm
Film roll height	500 mm	500 mm
Film roll thickness	12 – 35 my	12 – 35 my
Film roll internal diameter	76 mm	76 mm
Film roll max weight	20 Kg	20 Kg
STEP Item no.:	43011010	43011030



STEP Semi-Automatic Wrappers– Wrap Series

STEP Easy Wrap 2000A

Spring Break Stretch Wrapping Machine

Features

- Adjustable Spring Break
- Turntable Home Position – Fix stop
- Soft Start and Stop
- One Touch Automatic Program
- Safety Switch to prevent from foot pitch
- Height Detection by Photo Sensor
- Top and Bottom Wraps Selector
 - ~2 Bottom Wraps and 1 Top Wrap
 - ~3 Bottom Wraps and 2 Top Wraps

Options:

- Pit Frame, level with floor
- Horse Shoe Style Turntable
- Project Machines, your request Mechanical/Electrical
- Data Capture functions and STEP Software
 - Pallet: Height, Video, Image, Scanning, Weight, Communication
- Ramp



Specifications				
Maximum Wrapping Height	2400 mm	2700 mm	2400 mm	2700 mm
Maximum Turntable Speed	10 RPM			
Maximum Loading Weight	1500 kg			
Turntable Diameter	1500 mm		1650mm	
Power Supply	Single Phase According to Local Standard			
Turntable Motor Carriage Motor	220V AC, 3 Phase Variable using VLC			
Item Number	43461010	43461011	43461020	43461021

STEP Easy Wrap 2000B

Pallet Stretch Wrapper that almost has it all!

Features

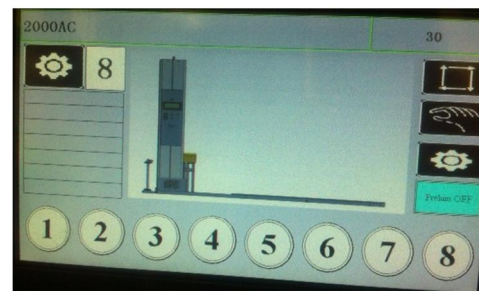
- 250% Power Pre-Stretch - Interchangeable for 150%, 200% or 300%.
- Turntable Home Position – Fix stop
- Soft Start and Stop
- Choices of Automatic and Manual Modes.
- Adjustable top and bottom wrap counts
- Adjustable Wrapping Tension, Turntable Speed and Carriage Speed
- Manual Reinforcing Wrapping
- Safety Switch to prevent from foot pitch
- Height Detection by Photo Sensor
- Advanced Soft Wrapping
- One-Way Idle Roller

Options:

- Top Pressure Plate Driven by Motor
- Pit Frame, level with floor
- Project Machines, your request Mechanical/Electrical
- Data Capture functions and STEP Software
 - Pallet: Height, Video, Image, Scanning, Weight, Communication
- Ramp

NEWS now with: Touch Screen Display Control Panel

Very easy to use control panel and is safely located at the side of the machine.



Specifications				
Maximum Wrapping Height	2400 mm	2800mm	2400mm	2800mm
Maximum Turntable Speed	12 RPM			
Maximum Loading Weight	2000 kg			
Turntable Diameter	1500 mm		1650mm	
Film Roll Width	500 mm (20")			
Film Roll Outer Diameter	280 mm (10")			
Film Roll Inner Diameter	76 mm (3")			
Power Supply	Single Phase According to Local Standard			
Turntable Motor Carriage Motor	220V AC, 3 Phase Variable using VLC			
Item Number	43461060	+ option	43461070	+ Option

Optional 3000 mm for Maximum Wrapping Height also available

Optional Ø1800/Ø2000/Ø2200/Ø2600mm Turntable Diameter also available

Data Capture (Weight)

Optional add-on to your Pallet Wrapper of choice for easier weighing of your palletized goods.

Contact us for more Information

The STEP Easy Wrap 2000B features an **Open Type Film Carriage** for easier film loading and replacement.

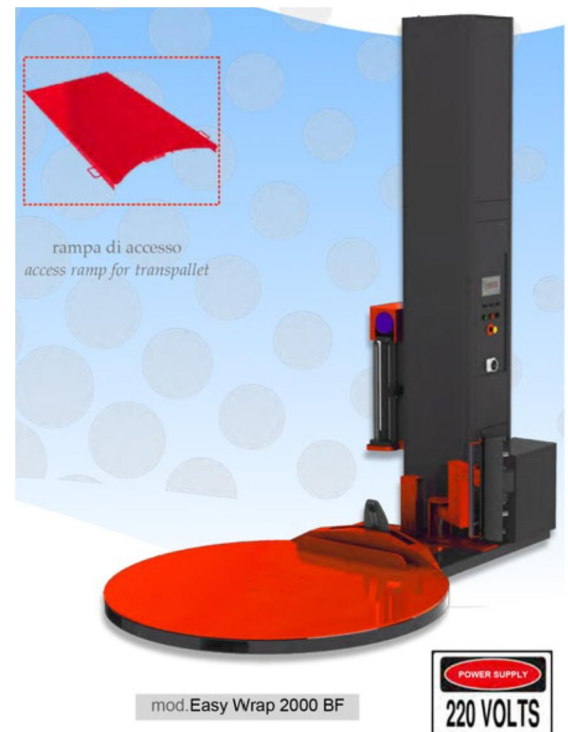


STEP Easy Wrap 501

Power Pre-Stretch Wrapping Machine

Features

- 250% Power Pre-Stretch - Interchangeable for 150%, 200% or 300%.
- Turntable Home Position
- Soft Start and Stop
- Choices of Automatic and Manual Modes
- Adjustable top and bottom wrap counts
- Adjustable Wrapping Tension, Turntable Speed and Carriage Speed
- Troubleshooting Shown on Screen
- Manual Reinforcing Wrapping
- Safety Switch to prevent from foot pitch
- Height Detection by Photo Sensor
- Advanced Soft Wrapping
- One-Way Idle Roller
- Touch Screen PLC Control



Options

- Top Pressure Plate Driven by Motor
- Pit Frame, level with floor
- Project Machines, your request Mechanical/Electrical
- Fully Automatic Top Film Dispenser STEP TFD-800
- Data Capture functions and STEP Software
 - Pallet: Height, Video, Image, Scanning, Weight, Communication
- Ramp (Item Number 43391800 Ramp Ø1800)

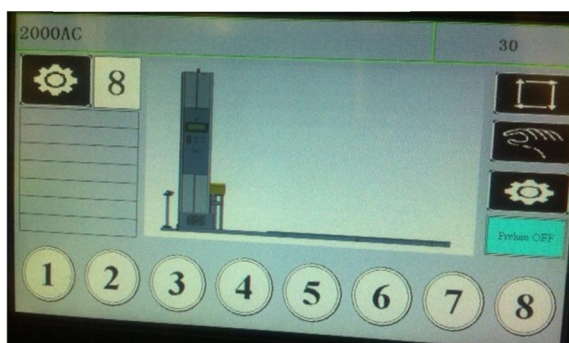
Specifications

Maximum Wrapping Height	2400 mm (<i>Optional 2700 mm and 3000 mm</i>)
Maximum Turntable Speed	12 RPM
Maximum Loading Weight	2000 kg
Film Roll Width	500 mm (20")
Film Roll Outer Diameter	250 mm (10")
Film Roll Inner Diameter	76 mm (3")
Turntable Diameter	1800 mm (Optional 1650mm)
Power Supply	Single Phase According to Local Standard
Turntable Motor	2/3 HP, 220V AC, 3 Phase Variable using VLC
Carriage Motor Power Pre-Stretch Motor	1/2 HP, 220V AC, 3 Phase Variable using VLC
Item Number	43461160

Main Features

Touch Screen Control Panel

Very easy to use control panel and is safely located at the side of the machine.



Pneumatic Clamp



Hot Wire Cutter and Secure Arm

Options for STEP EASY WRAP pallet wrappers:

Vare nr.	Beskrivelse
43468010	- turnatable 1650 mm
43468020	- turnatable 1800 mm
43468030	- turnatable 2000 mm
43468040	- turnatable 2200 mm
43468050	- mast height 2700 mm
43468060	- mast height 3000 mm
43468070	- access ramp 1500 mm
43468080	- access ramp 1650 mm
43468090	- access ramp 1800 mm
43468100	- access ramp 2000 mm
43468110	- access ramp 2200 mm
43468120	- pit frame 1500 mm
43468130	- pit frame 1650 mm
43468140	- pit frame 1800 mm
43468150	- pit frame 2000 mm
43468160	- pit frame 2200 mm
43468170	- Photo cell for black film
43508010	Frame for flower wagon Ø1500
43508030	Frame for quarter pallet
43508040	Frame for half pallet
44201500	Top film dispenser floor type 1500mm wide
44211500	Top film dispenser wall type 1500mm wide
44201800	Top film dispenser floor type 1800mm wide
44211800	Top film dispenser wall type 1800mm wide
OPTIONS FOR STEP WRAPPERS - DATA CAPTURE	
43508100	Scale for infloor mounting Ø1500
43508110	Scale for infloor mounting Ø1650
43508120	Scale for on floor placing Ø1500
43508130	Scale for on floor placing Ø1650
43509000	Barcode Scanner manual
43509010	Software for data capture/control BASIC
43509020	Height measurement module
43509030	Cam recorder 1 image still LOW resolution
43509040	Cam recorder 1 image still HIGH resolution
43509050	Cam recorder video with software
43509200	STEP Security BAND device



STEP Model 200 – Semi Automatic Pallet Stretch Wrapper

Item no.: 43050200

Semi-automatic stretch wrapper: detect pallet's height while making an optimized wrapping compared to a manual wrapping. At the end of the cycle they require the presence of an operator to cut the film and remove the pallet. The load is introduced and positioned on the turntable. Then, the turntable begins to turn at the speed selected depending on the wrapping cycle. Finally, the turntable turns the whole cycle until the final step when the film is cut manually.

Technical features.

- Production (as operator and load): **up to 20 pallets/hour**.
- PLC controlled, with display control panel.
- Hinged mast.
- Powered film carriage with variable speed, placed sidewise.
- Adjustable mechanical film brake with foot trapping detector.
- Automatic load height detection by photocell.
- 1.650 mm diameter turntable, 10 mm thick plate.
- Soft start/stop by frequency inverter with return to start position.
- 4 wrapping programs: Single, Cross wrap, Cross-plus, Full.
- Wrapping cycles counter.
- Independently adjustable top & bottom reinforcement wraps.
- Reinforcement wraps at any point in the cycle.
- Ergonomically designed control panel.
- Variable output, depending on load features and operator ability.
- Power: based on the country of destination.
- Installed power: 1 kw.

Standard pallet features (others on demand)

- Type of wrapping: Vertical.
- Maximum height: Up to 2.400 mm (consult about other heights).
- Maximum dimensions pallet and load: 1.200 x 1.100 mm
 - (consult about other dimensions).
- Maximum weight: 2.000 kg.

Coil specifications

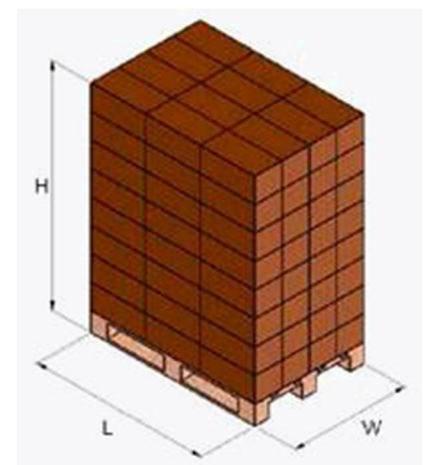
- PE sheet.
- Width: 500mm.
- Thickness: Up to 50 microns.

Versions

- Stainless steel 430, 304.
- Explosion proof.
- Subzero temperatures.

Options

- Special heights: 2.800 mm, 3.000 mm.
- Special turntables: Ø 2.000 mm, Ø 2.400 mm, Ø 3.000 mm.
- Special weights: 3.000 Kg.



Accessories

1. Turntable accessing ramp.
2. Embedding frame.
3. Scale with display.
4. Direct film brake.
5. Mechanical film brake (std.).
6. Electromagnetic film brake.
7. Powered film pre-stretch.
8. Twin film holder.
9. Powered top platen.
10. Special top holder for flat loads.
11. Load detection options: ultrasound.
12. Cycle start options: Remote control, pedal and button with stand.

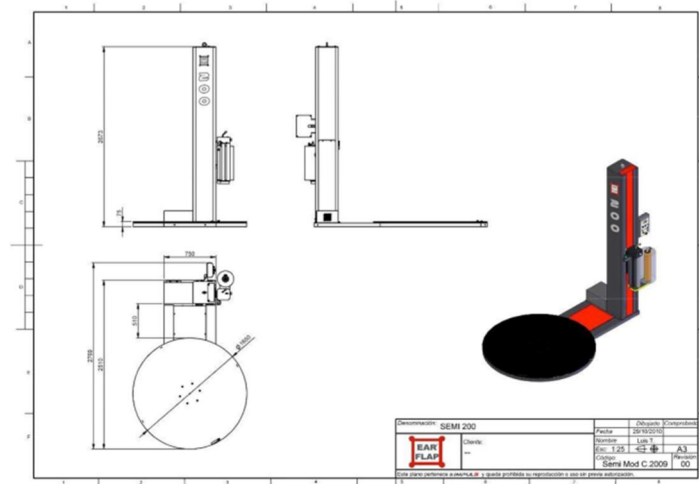


Photo: Available variants of Model 200



OPTIONS AND ACCESSORIES

Optional diameters:

Ø 2.000 mm

Ø 2.400 mm

Ø 3.000 mm

*Others consult



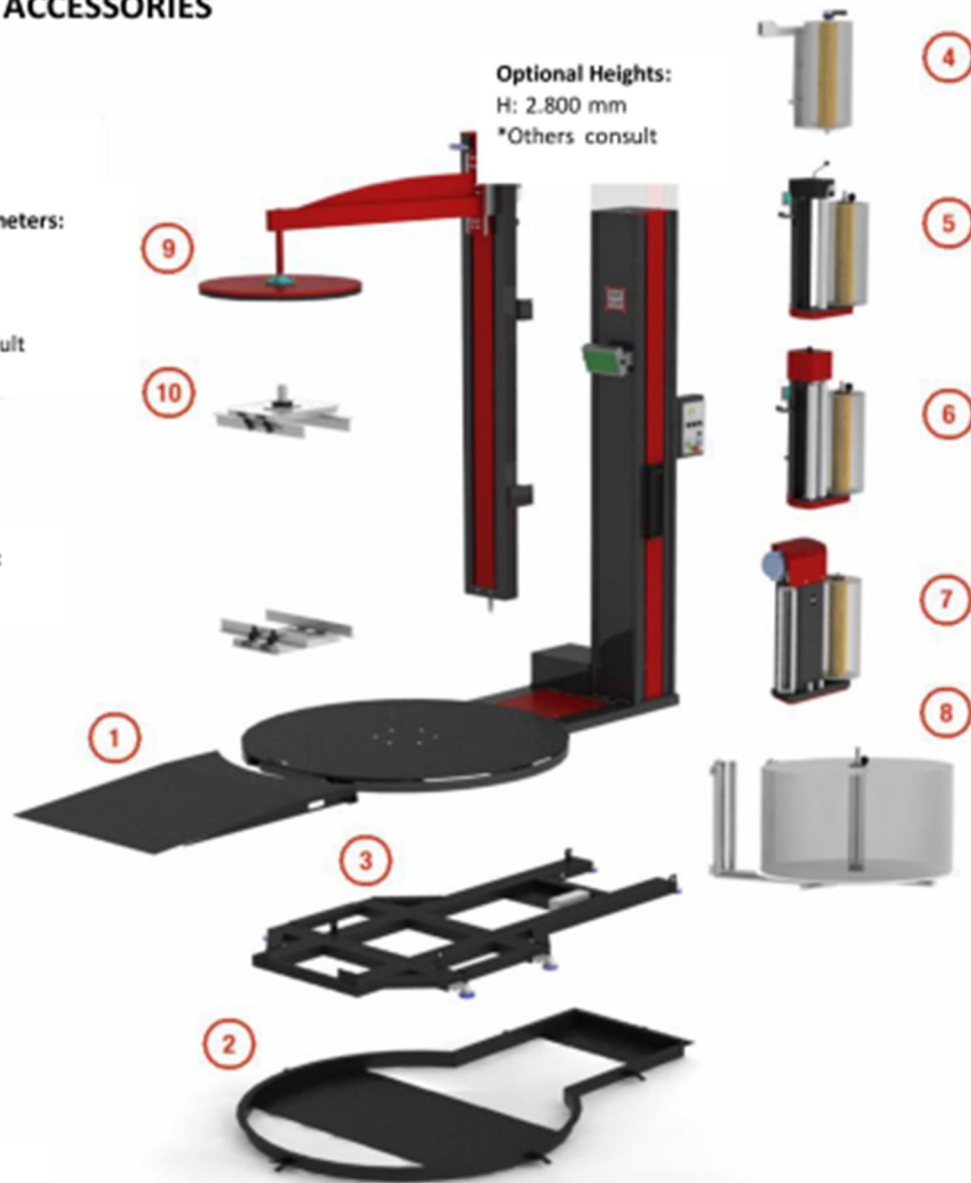
Optional:

3.000 Kg

Optional Heights:

H: 2.800 mm

*Others consult



Available in:

INOX

ATEX

- 30°

1. Turntable accessing ramp
2. Embedding frame
3. Scale with display
4. Direct film brake
5. Mechanical film brake (Standard)
6. Electromagnetic film brake
7. Powered film pre-stretch
8. Twin film holder
9. Powered top platen
10. Special top holder for flat loads
11. Photocell options
12. Start cycle options



*

*Requires security fencing

SPECIFICATIONS:	
Speed	Max 20 pallets per hour
Turntable	Yes
Display	PLC Control Touch Screen
Wrapping Programs	4 Programs
Power	1KW
Turntable Diameter	1650mm
Turntable Plate Thickness	10mm
Pallet Features	
Wrapping Process	Vertical
Height	Maximum of 2400mm
Pallet Dimension	1200mm x 1100mm
Weight	Maximum of 2000kg
Coil Features	
Type	PE Sheet
Width	500mm
Thickness	Maximum of 50 Microns
STEP Item No. (Standard Version)	43050200
Description of Option	Item No. Option
Pre-stretch brake	43050220
Access Ramp	43050200-100
Top pressing device	43050200-110
Platform 2000mm	43050200-120
Platform 2400mm	43050200-130
Platform 3000mm	43050200-140
ATEX Version	43050200-150
Sub Zero Temperature	43050200-160
Column max. height 2800m	43050200-170
Ultrasound detector for black loads	43050200-180
Pit frame platform 1650mm	43050200-190
Scale with Display	43050200-200
Powered Film Pre-Stretch	43050200-210
Twin Film Holder	43050200-230
Special Top Holder for Flat Loads	43050200-240
Stainless Steel Version	43050200-250

STEP Model 500

This STEP Model 500 is a more efficient option when it comes to choosing a pallet wrapping machine since it has an automatic processing. Built with a pallet height detector, this equipment also finishes procedures with its cutter system without the need for an operator to do so. Lastly, it clamps the film prepared for the next operation. The turntable speed may be adjustable as desired. Engineered to raise cost effectivity and productivity in the warehouse.



Features:

- Durable Design
- Display (LCD touch screen)
- Operation Control
- Electric Cabinet
- Inverters
- Rotary Collector
- CE Certification

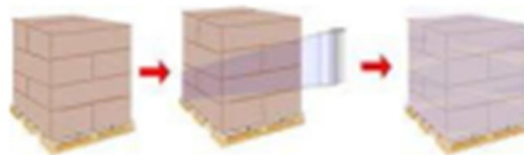
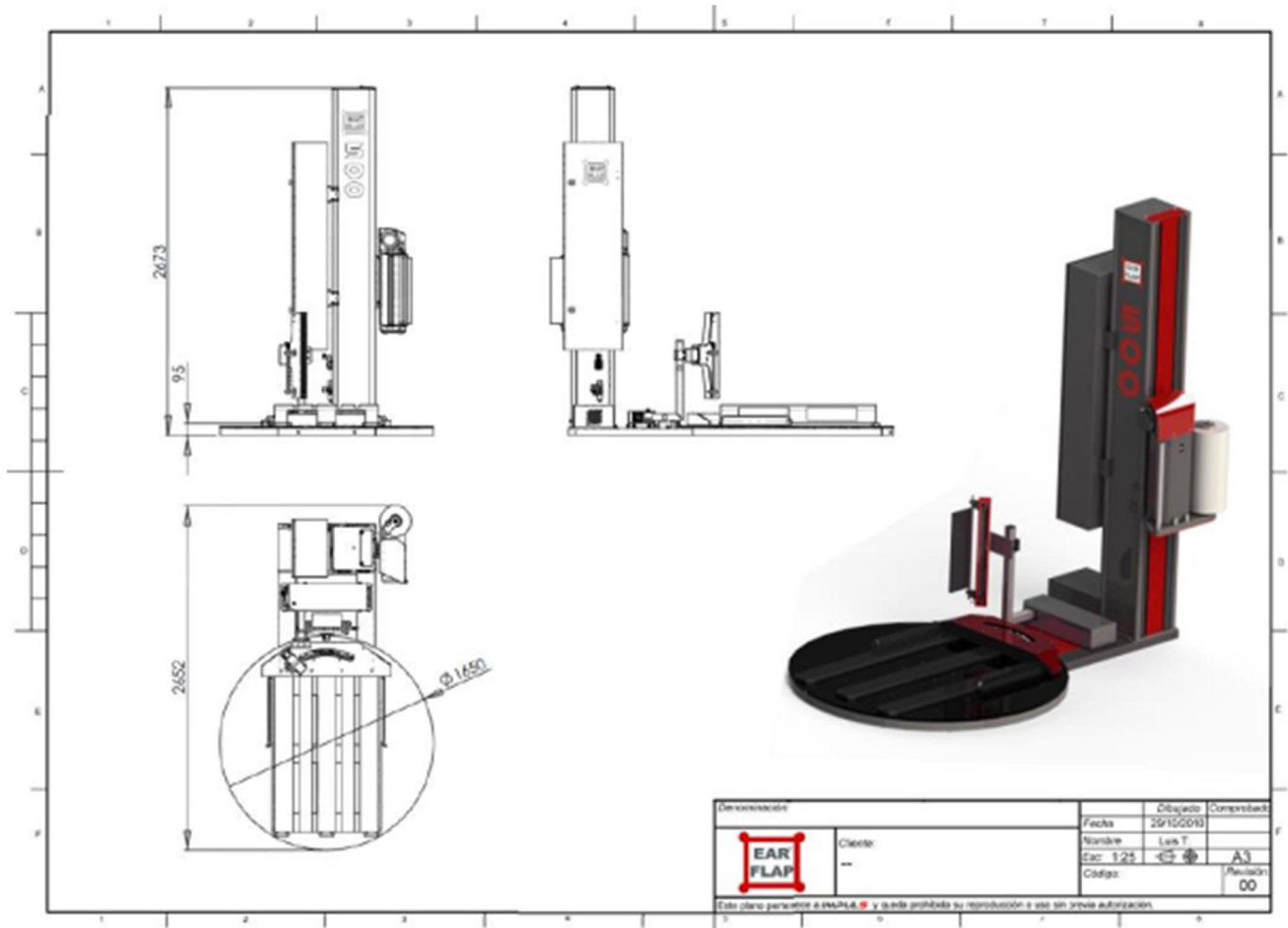
Versions:

- Stainless Steel 430, 304
- Explosion Proof
- Subzero Temperatures

Options:

- Powered top platen
- Powered film pre-stretch
- Height of 2800mm or 3000mm
- Turntable of 2000mm, 2400mm, or 3000mm in core
- Weight of 3000kg
- Top sheet dispenser
- Special working conditions
- Thermo sealing
- Scale with display
- Load detection options
- Direct film brake
- Mechanical film brake

SPECIFICATIONS:	
Wrapping Type	Vertical
Height (maximum)	Up until 2400mm
Weight (maximum)	2000kg
Dimension of pallet and load (maximum)	1200mm x 1200mm
Film Inner Core (diameter)	76mm
Film Outer Core (diameter)	240mm
Coil Height	500mm
Film Thickness	17μ - 50μ
Film Weight (maximum)	20kg
Electrical Requirements	220V – 240V, 50/60Hz, 1Kw, IP 54
H 2400 Standard version	43050500
Description of option	Item no. option
Special Height of 2800mm	43050500-090
Ramp for manual forklift	43050500-100
Ramp for electric forklift longer and reinforced	43050500-110
Embedding frame	43050500-120
Scale with display	43050500-130
Direct film brake	43050500-140
Mechanical film brake	43050500-150
Powered film pre-stretching with anti-entanglement (200%, 300%,400%)	43050500-160
Twin film reel holder	43050500-170
Powered top platen: square or round base	43050500-180
Special top holder for flat loads	43050500-190
Load detection options: ultrasound – Black film kit	43050500-200
Remote control device	43050500-210
Pedal with start, up and down	43050500-220
Stand with buttons (emergency stop, start and reset)	43050500-230
External control panel, instead of the one in the machine column	43050500-240
Security beacon	43050500-250
Security fencing (with external buttons: emergency stop, start and reset)	43050500-260
Security lighting barriers	43050500-270
Top sheet dispenser TDM1800	43050500-280
Stainless steel 304	43050500-290
Explosion proof	43050500-300
Explosion proof, if the electrical cabinet is outside of the ATEX zone	43050500-310
Subzero temperatures (down to -30°)	43050500-320
Height 3.000mm	43050500-330
Turntable Ø 2.000 mm	43050500-340
Turntable Ø 2.400 mm	43050500-350
Turntable Ø 2.800 mm	43050500-360
Turntable Ø 3.000 mm	43050500-370
Special weights: 3.000 Kg	43050500-380



STEP Model 800 Semi-automatic forklift rotary arm

A semi-automatic pallet wrapping machine that has a rotary arm and manual forklift for mobility.

STEP Model 800 optimizes pallet wrapping processes compared to manual wrapping. It does need an operator to manually cut the film upon end of each cycle and remove the pallet to bring in another pallet. The machine is equipped with a pallet height sensor for detection and speed for film carriage and rotary arm can be adjusted as necessary.

Features:

1. Pallet height sensor
2. Production (depends on operator and load): up to 20 pallets/hour
3. PLC controlled, with display control panel
4. Adjustable speed for film carriage and rotary arm
5. Pallet height sensor
6. Screen selectable Top/Bottom wraps and cycles
7. Illuminated cycle START/STOP beacon
8. Contact safety system: it stops the wrapping arm in case of contact with an obstacle
9. Automatic safety mode to start cycle
10. Battery charger: based on the country of destination

Specifications

Standard Pallet Dimension and Load	1200mm x 1000mm (other dimension on request)
Standard Pallet Height	Up to 1800mm (other heights on request)
Coil (PE Sheet) Width	500mm
Coil (PE Sheet) Thickness	Up to 50my
Battery Capacity	> 160 pallets
Voltage	24V/DC
Item No.	43050800

Accessories

- Direct film brake.
- Mechanical film brake (std.).
- Load detection options: ultrasound.
- Quick-change batteries kit.

Options

- Special heights: 2.800 mm.
- Special turntables: Ø 2.000 mm, Ø 2.400 mm.
- Special weights: 2.000 Kg.



STEP Model 900

Product Overview:

STEP Model 900 is a Semi-Automatic Robot Stretch Pallet Wrapping Machine suitable with using PE stretch films. An operator is required for the complete operation of this equipment, yet it keeps wrapping applications optimized with its automatic height detector and rotary arm, in turn lessening the effort of workers in the warehouse when it comes to stretch wrapping of pallets compared to manual procedures.

Description:

This semi-automatic pallet wrapping equipment caters to businesses with basic to heavy duty pallet wrapping requirements using PET and PP film measuring 500mm in film width. Enhancing the packaging processes as it provides efficient and reliable process, also optimizing procedures with its software designed which is user-friendly for maintenance and operations.

Taking you to the next level with its:



1. Height Detection Sensor: It automatically senses the pallet height utilizing the film for wrapping
2. Modifiable speed of film carriage and rotary arm: Speed is adjustable to desired quickness
3. Modifiable Wrap Cycle: Top and Bottom wraps and cycles may be programed and adjusted from the control panel
4. Display: Easy to use control panel for maintenance and operation
5. With START and STOP beacon
6. Security System
7. Ignition Key: This ignition key is an anti-theft feature
8. Battery: Analog type of battery is installed
9. Adjustable tracer wheel
10. Battery Saving: It has a Control Battery Life to optimize the battery charging cycle
11. Safety System: Halts its operation when there is a blockage

SPECIFICATIONS:

Speed	Up until 15 pallets per hour
Display Panel	PLC Control
Battery Capacity	More than 300 pallets
Wrapping Direction	Vertical
Pallet Height (Maximum)	2200mm
Film Type	PE
Film Width	500mm
Film Thickness	Up until 50 microns
STEP Item no.	43050900

Options:

- Height of 2800mm
- Mechanical film brake with anti-entanglement (std.)
- Powered pre-stretching with anti-entanglement (200%, 300%, 400%)
- Load detection options: ultrasounds
- Fast battery replacement kit
- Cycle start options: remote control

I

STEP Model TRM 500L

Automatic Pallet stretch Wrapper for inline applications

Item no.: 43050501

Go Automatic with the STEP TRM500L model. Designed for various business pallet wrapping requirements.

Features:

1. Variable Speed: 25 pallets per hour
2. PLC Touchscreen Control Panel Installed
3. Automatic Height Detector
4. Automatic Film Cutter
5. 300% Pre-Stretched Motor
6. 10 Wrapping Programs
7. Carriage Drive, ½" Chain
8. Turntable Drive, ⅝" Chain
9. Pneumatic Clamp, Film Holder
10. Soft Start Turn

Options

1. Electromagnetic Brake
2. Stainless Steel
3. Explosion Proof
4. Cold Temperatures



SPECIFICATIONS:	
Speed	Max 25 pallets per hour
Turntable	Yes
Display	PLC Control Touch Screen
Wrapping Programs	10 Programs
Power	2KW
Air Pressure	6 bar
<i>Pallet Features</i>	
Wrapping Process	Vertical
Height	Maximum of 2400mm
Pallet Dimension	1200mm x 1100mm
Weight	Maximum of 1200kg
<i>Coil Features</i>	
Type	PE Sheet
Width	500mm
Thickness	Maximum of 50 Microns
STEP Item no.	43050501

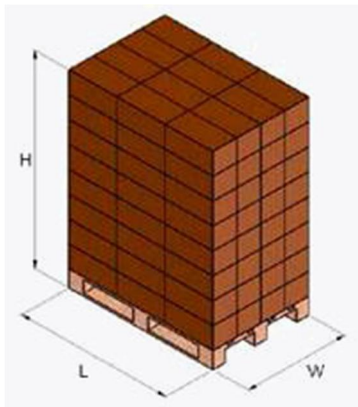
Automatic turntable stretch wrappers: automatic wrapping system based on turntable that rotates concentrically with the pallet. This model does not require the presence of operators at the end of cycle due to cutting system 3ALL. In this stretch wrapper the load input, positioning and output is automatic, with the necessary connections with conveyors and other machines of the system.

Technical features

- Production (according to load): **up to 25 pallets/hour**.
- Turntable with soft start, indexed stop and variable speed.
- Pneumatic clamp to hold film before the wrapping cycle.
- Automatic film cutting arm.
- Powered film carriage.
- Electromagnetic brake (option).
- Pre-stretch motor 300%.
- Load height detection by photocell.
- Controlled by PLC.
- LCD control touch screen.
- 10 different wrapping programs.
- $\frac{5}{8}$ " chain for turntable drive.
- $\frac{1}{2}$ " chain for carriage drive.
- Electric power: based on the country of destination.
- Installed power: 2 Kw.
- Air pressure: 6 bar.

Standard pallet features (others on demand)

- Type of wrapping: Vertical.
- Maximum height: Up to 2.400 mm (consult about other heights).
- Maximum dimensions pallet and load: 1.200 x 1.100 mm (consult about other dimensions).
- Maximum weight: 1.200 Kg.



Coil specifications

- PE sheet.
- Width: 500mm.
- Thickness: Up to 50 microns.

Versions

- Stainless steel 304, 430.
- Explosion proof.
- Subzero temperatures.



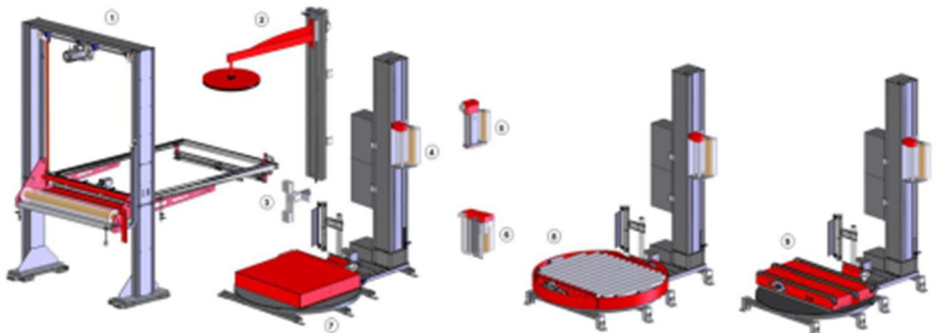
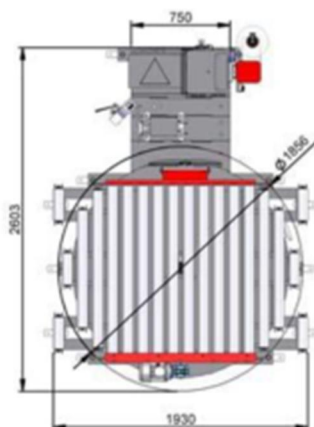
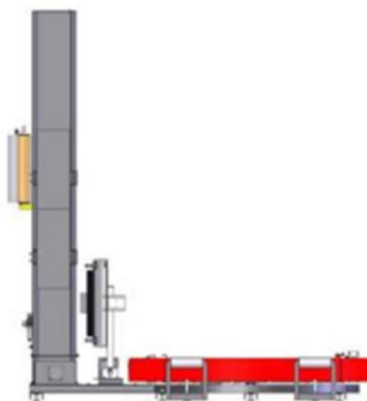
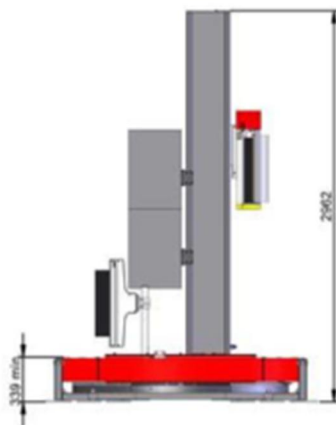
Accessories

1. Top sheet dispenser TDM1800.
2. Powered top platen.
3. Hot sealing.
4. Electromagnetic brake.
5. Powered "M" pre-stretch (std.).
6. Flat platform (std.).
7. Motorized rollers conveyor.
8. Motorized chain conveyor.



Series and optional equipment

1. TDM 1800 top sheet dispenser
2. Powered top platen
3. Heat sealing
4. Electromagnetic film brake (standard)
5. S powered prestretch
6. M powered prestretch
7. Flat turntable (standard)
8. Roller conveyor
9. Chain conveyor



STEP Model TRM1500

A versatile Fully Automatic Turntable Wrapper has a Base with Turntable powered by a Roller Conveyor and a Mast where the Film Carriage Set and Electrical Cabinet is located. Equipped with in and out signals for connection to a chain or roller conveyor, can wrap any type of load regardless of its characteristics.

Features:

- Durable Design
- “M” Film Pre-Stretch
- 3 All System
- Belt Drives
- Gear Ring
- Touch Screen
- Electronic Control
- Electric Cabinet
- Frequency Inverters
- Slip Ring
- CE Norms Compliant

Options:

- Turntable with 3 – 5 Power Chains
- Specials Heights 2800mm – 3000mm
- Special Weights 3000 Kg



Specifications	
Wrapping Type	Vertical
Max. Wrapping Height	Up to 2400mm
Pallet and Load Dimensions	1200 X 1000mm
Max. Weight	1500 Kg
Stretch Film outer diameter	240 ± 250mm
Stretch Film inner diameter	76mm
Reel Height	500mm
Film Thickness	17 – 50 μ
Max. Weight of Film	20 Kg
Wrapping Programs	Single Cycle, Cross Cycle, Rain-Proof Cycle and 10 other Storable Program
Variable Output	Up to 35 Pallets/Hr
Electric Requirements	400V / 3 Phase / 50Hz / Can also be based depending on the country of destination
Installed Power	4 Kw
Electrical Protection	IP 54
Compressed Air Infeed	6 bar
Compressed Air Consumption	350 liter/Cycle
Noise Level	< 70 dB (A)
STEP Item no.	43051500

Accessories:

- Top Sheet Dispenser
- TDM1800
- Powered Top Platen
- Powered “M” Pre-Stretch
- Powered Rollers
- Conveyors
- Powered Chains Conveyor

Versions:

- Stainless Steel 430, 304
- Explosion Proof - ATEX
- Subzero Temperature

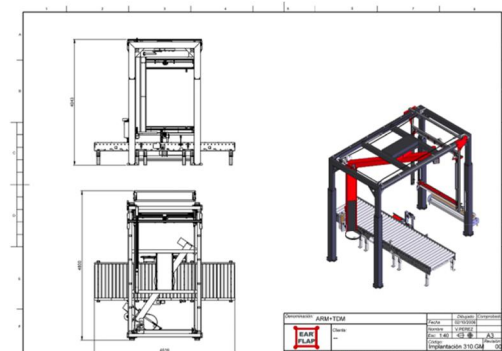
STEP Model ARM3500

An Automatic Rotary Arm Wrapper, equipped with a Fastening System, a Toothed Crown that enables the machine to Rotate at a higher speed reinforced by Pillars and a 3rd Larger that stabilizes and supports the upper structure. Rotating Arm turns around the unstable load, heavy & high output demands, ensures stability and efficiency.



Features:

- Durable Design for its flexibility, durability and efficiency
- "M" Film Pre-Stretch of the Wrapping inside the Film Carriage increases its wrapping strength therefore securing the product even more.
- 3 All System has integrated 3 external mechanical devices into 1 single unit. From Clamping, cutting and dolly heat sealing, no Minimum wrapping Height
- Powered film reel holder
- Rotary arm transmission, sprocket.
- Motorized Film Carriage
- Turning Arm with Soft Start/Stop and Variable Speed
- Acoustic & Luminous Warning System during operation and anomalies
- Control Panel is PLC and LCD Touch Screen for Control Panel
- Central Motorized Conveyor included
- Load and Height detection by Photocell
- 10 Storable Programs for wrapping speed and no. of wraps
- Compliance to CE Regulations



Specifications:

Wrapping Type	Vertical
Max. Wrapping Height	Up to 2,400mm (including conveyor & pallet)
Pallet and Load Dimensions	1,200mm X 1,000mm (direction of feed 1,200mm)
Max. Weight	As required
Stretch Film outer diameter	240 ±250mm
Stretch Film inner diameter	76mm
Coil Height	500mm
Film Thickness	17-50μ
Max. Weight of Film	20 Kg
Wrapping Programs	Single, Double or Complete Cycle plus 10 Storable Programs
Variable Output	±50 pallets/hr
Electric Requirements	400V 3Ph 50Hz or Based on the Country of Destination
Installed Power	4.5 Kw
Degree of Isolation	IP 54
Compressed Air Infeed	6 bar
Compressed Air Consumption	350 l/cycle
Noise Level	70 dB (A)
STEP Item no.	43053500

Options:

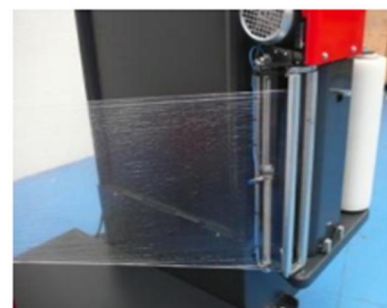
- Special heights: 2.800mm, 3.000mm.
- Special turntables: Ø2.400mm, Ø3.000mm.

Versions:

- Stainless steel 430, 304.
- Explosion proof, ATEX approval
- Subzero temperatures.

**Shown with Top film dispenser****ATEX****M-Stretch****Accessories:**

- Top sheet dispenser STEP TDM3500.
- Powered top platen.
- Powered "M" pre-stretch.
- Powered rollers conveyor.
- Powered chains conveyor.
- Pallets lift table.
- Security fencing 1,800 mm high with access door and anti-intrusion photocells input and output load included mutting.



Request the full 10 page STEP EAR-flap product description on demand. STEP JC 70936

STEP Model RRM4500 & STEP Model RRM6500

This Automatic Rotating Ring Pallet Wrappers wrap via a Rotating Ring that moves up and down, with 4 columns providing as support for the whole structure, Electric collector is used for the rotation system which powers the film Carriage and pre-stretch system that makes the Up and Down Motion possible. Speed of Wrapping is varied using the Digital Inverter.



Features:

- Turning ring with soft start, indexed stop and variable speed.
- 3ALL set system
- Powered film reel holder carriage
- Powered film pre-stretching 300%
- Load height detection by photocell
- Optical panel with LCD touch screen displaying user friendly graphics for operator
- Control System by PLC
- 10 Storable Programs (for Wrapping Cycle)



Options:

- Special heights: 2.800 mm, 3.000 mm.

Versions:

- Stainless steel 430, 304.
- Explosion proof.
- Subzero temperatures.

Accessories:

- Top sheet dispenser TDM4500/6500
- Powered top platen.
- Pallets lift table.
- Security fencing 1,800 mm high with access door and anti-intrusion photocells input and output load included mutting.

Specifications		
Model	STEP Model RRM4500	STEP Model RRM6500
Type of Wrapping	Vertical	Vertical
Wrapping Speed	Up to 90 Pallets/hour	Up to 120 Pallets/hour
Max. Height	Up to 2200mm (includes conveyor & pallet)	Up to 2200mm (includes conveyor & pallet)
Max. Dimensions of Pallet & Load	1200 x 1000 (direction of feed 1200mm)	1200 x 1000 (direction of feed 1200mm)
Exterior Film Wrap Diameter	240 ±250mm	240 ±250mm
Interior Film Wrap Diameter	76mm	76mm
Coil Height	500mm	500mm
Film Thickness	17-35 microns	17-35 microns
Max. Weight	20 Kg	20 Kg
Electrical Power	400V 3Ph 50Hz Based Upon Country of Destination	400V 3Ph 50Hz Based Upon Country of Destination
Installed Power	12Kw	12Kw
Pneumatic Installation	6 Bar	6 Bar
Air Consumption	70N/min.	70N/min.
Noise Level	70 dB (A)	70 dB (A)
STEP Item No. (Std. ver.)	43054500	43056500
Description of Option	Item no. option	Item no. option
Special heights: 2.800 mm	43054500-100	43056500-100
Special heights: 3.000 mm.	43054500-110	43056500-110
Stainless steel 304	43054500-120	43056500-120
Explosion proof	43054500-130	43056500-130
Subzero temperatures	43054500-140	43056500-140
Top sheet dispenser TDM4500	43054500-150	43056500-150
Powered top platen	43054500-160	43056500-160
Pallets lift table	43054500-170	43056500-170
Security fencing 1,800 mm high plus other features	43054500-180	43056500-180

STEP WRAP 4000 L3 Fully Automatic Pallet Wrapper



Features:

- Rotary speed, film carriage speed and the film tension can adjustable
- Automatic stretch film application & cutting is Pneumatically driven
- Equipped with Automatic height detection by photocell
- Machine is equipped with various durable top of the line components
- Equipped with Alarm and Emergency Button for Operators Safety
- PLC Controls the whole system with User Friendly Control Panel (HMI)
- Option for Powered IN/OUT feed Roller Conveyors. Rollers made of galvanized carbon steel to fit needed layout as per your demand.
- Option to include topfilm dispenser
- Options per project request.
- Option: Wrap heights 1800, 2400 or 2600mm, or per request.
- Option: Safety fence per layout onfiguration

SPECIFICATIONS

Packing Speed	40-50 pallets/hour		
Film Aggregate	Single carriage motorized 250% pre stretch adjustable tension control		
Rotation Speed	4-20 rpm (Adjustable)		
Carriage Speed	6m/min (Adjustable)		
Wrappign height default	500-2100mm with photocell for pallet height detection		
Cutting of film	Heater cutting system		
Conveyor height	500mm (can be customize)		
Machine film LLDPE film :	LLDPE film, thickness 17-35micron, width 500mm, core $\varnothing 76$, max diameter $\varnothing 250$ mm, weight 20kgs max		
Air pressure	0.4-0.7 Mpa		
Control system	PLC+HMI+ Frequency inverter		
Voltage	3 Phase 5-line AC 380V 50Hz		
STEP Item No.	43083010		
Description of Option	STEP Item No. of Option		
Roller conveyor Width	Width 900mm	Width 1150	Width 1350
1500mm powered Roller conveyor line	43083010-900-1500	43083010-1150-1500	43083010-1350-1500
1800mm powered roller conveyor line	43083010-900-1800	43083010-1150-1800	43083010-1350-1800
2500mm powered roller conveyor line	43083010-900-2500	43083010-1150-2500	43083010-1350-2500
3200mm powered Roller conveyor line	43083010-900-3200	43083010-1150-3200	43083010-1350-3200
3600mm powered Roller conveyor line	43083010-900-3600	43083010-1150-3600	43083010-1350-3600
Topsheet dispenser	43083010-120 STEP Wrap 4100 Top Sheet Dispenser, see following page		
Safety fence width 1000m*H2000mm	43083010-130 (price will be quoted per meter and configuration as per layout		
Safety light curtain	43083010-140		
Forklift stopper	43083010-150		
Safety door lock	43083010-160		
Control system with PLC, HMI & Frequency control of conveyor and safety system according to layout	43083010-170-JC N (Price will be quoted based on actual layout and configuration)		

STEP WRAP 4100 SD2 Top Sheet Dispenser Inline Fully Automatic

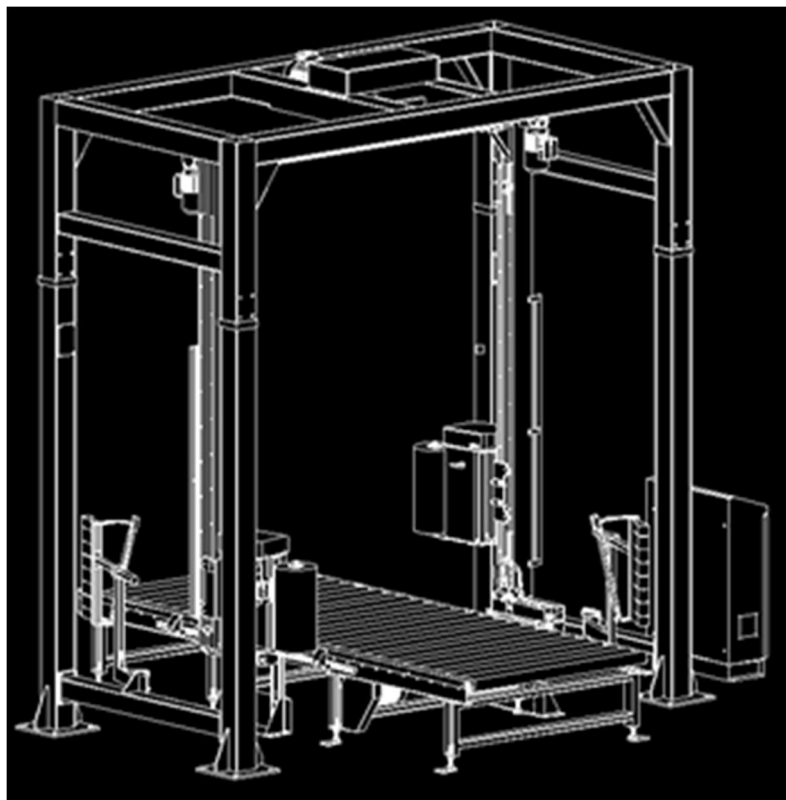


Features:

- Equipped with Automatic height detection by photocell
- Machine is equipped with various durable top of the line components
- Equipped with Alarm and Emergency Button for Operators Safety
- PLC Controls the whole system with User Friendly Control Panel (HMI)
- Powered Roller Conveyor Line is made of galvanized carbon steel

SPECIFICATIONS	
Packing Speed	50 pallets/hour
Top sheet cut method	Knife cutting
Top sheet pulling speed	12m/min
Top sheet size	W 1700mm, Length is adjustable
Conveyor height	600mm (can be customize)
PE film :	PE film, thickness 50-75microns, width1600-1700mm, net weight 120kgs max
Air pressure	0.4-0.7 Mpa
Control system	PLC+HMI+ Frequency inverter as per project
Voltage	3 Phase 5-line AC 380V 50Hz
STEP Item No. for Top Sheet Dispenser	43083010-110

STEP WRAP 4200 L3D Fully Automatic Pallet Wrapper HIGH SPEED



Features:

- Rotary speed, film carriage speed and the film tension can adjustable
- Automatic stretch film application & cutting is Pneumatically driven
- Equipped with Automatic height detection by photocell
- Machine is equipped with various durable top of the line components
- Equipped with Alarm and Emergency Button for Operators Safety
- PLC Controls the whole system with User Friendly Control Panel (HMI)
- Option for Powered IN/OUT feed Roller Conveyors. Rollers made of galvanized carbon steel to fit needed layout as per your demand.
- Option to include topfilm dispenser
- Options per project request.
- Option: Wrap heights 1800, 2400 or 2600mm, or per request.
- Option: Safety fence per layout onfiguration

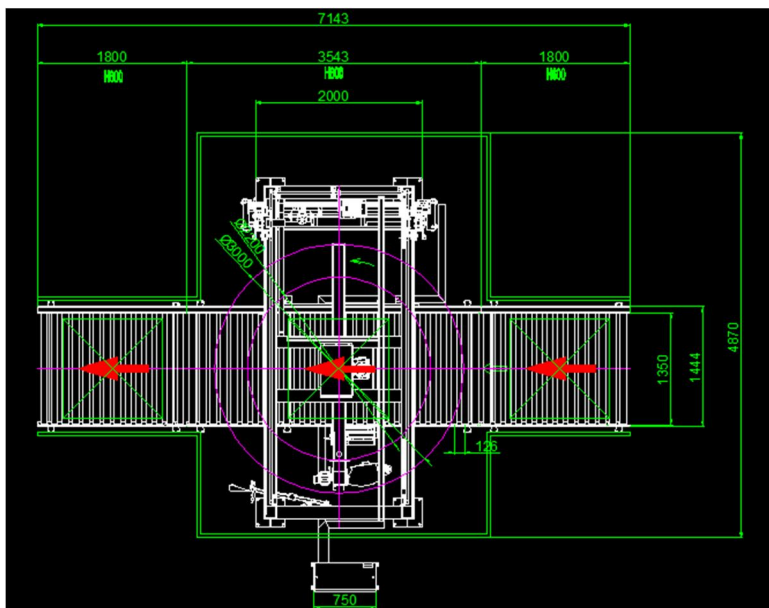
SPECIFICATIONS			
Packing Speed	50-60 pallets/hour		
Film Aggregate	Double carriage motorized 250% pre stretch adjustable tension control		
Rotation Speed	4-20 rpm (Adjustable)		
Carriage Speed	6m/min (Adjustable)		
Wrappign height default	500-2100mm with photocell for pallet height detection		
Cutting of film	Heater cutting system		
Conveyor height	500mm (can be customize)		
Machine film LLDPE film :	LLDPE film, thickness 17-35micron, width 500mm, core Ø76, max diameter Ø250mm, weight 20kgs max		
Air pressure	0.4-0.7 Mpa		
Control system	PLC+HMI+ Frequency inverter		
Voltage	3 Phase 5-line AC 380V 50Hz		
STEP Item No.	43083020		
Description of Option	STEP Item No. of Option		
Roller conveyor Width	Width 900mm	Width 1150	Width 1350
1500mm powered Roller conveyor line	43083010-900-1500	43083010-1150-1500	43083010-1350-1500
1800mm powered roller conveyor line	43083010-900-1800	43083010-1150-1800	43083010-1350-1800
2500mm powered roller conveyor line	43083010-900-2500	43083010-1150-2500	43083010-1350-2500
3200mm powered Roller conveyor line	43083010-900-3200	43083010-1150-3200	43083010-1350-3200
3600mm powered Roller conveyor line	43083010-900-3600	43083010-1150-3600	43083010-1350-3600
Topsheet dispenser	43083010-110 STEP Wrap 4100 Top Sheet Dispenser, see following page		
Safety fence width 1000m*H2000mm	43083010-130 (price will be quoted per meter and configuration as per layout		
Safety light curtain	43083010-140		
Forklift stopper	43083010-150		
Safety door lock	43083010-160		
Control system with PLC, HMI & Frequency control of conveyor and safety system according to layout	43083010-170-JC N (Price will be quoted based on actual layout and configuration)		

STEP WRAP 5000 L5 Fully Automatic Double Rotary Arm Stretch Wrapper with Top Sheet Dispenser

STEP WRAP 5000 L5 Fully Automatic Double Rotary Arm Stretch Wrapper with Top Sheet Dispenser – is designed and equipped with Double Film Carriage, one for each side to properly secure the wrapping. Equipped with a Top Sheet Dispenser installed on top of the conveyor line, suitable for products that need watertight wrapping.

Features:

- Rotary speed, film carriage speed and the film tension can adjustable
- Automatic stretch film application & cutting is Pneumatically driven
- Equipped with Automatic height detection by photocell
- Machine is equipped with various durable top of the line components
- Equipped with Alarm and Emergency Button for Operators Safety
- PLC Controls the whole system with User Friendly Control Panel (HMI)
- Powered Roller Conveyor Line is made of galvanized carbon steel



STEP Luggage Wrapper

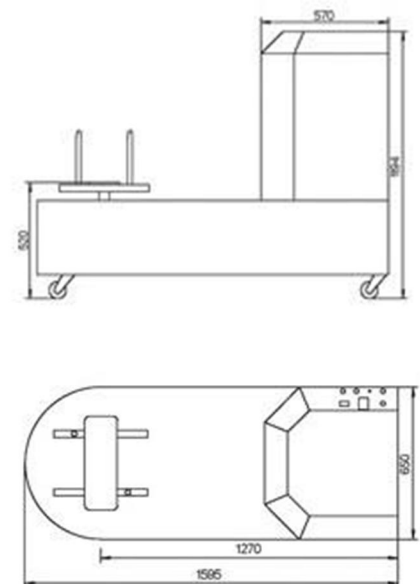
Luggage wrapper is designed to wrap luggage and related items for security purpose in airport. Film provide extra support while the luggage is being transport to protect from being damaged. The operator places the luggage on the platform and adjusts vertical rods to secure bag according the luggage's size.

Features:

- PLC control screen
- Powered pre-stretch film carriage up to 200% to reduce film consumption
- Operator adjusts vertical rods to secure bag
- Film tension control adjustment on the panel
- Wrap layer adjuster
- Platform speed 20RPM
- Machine easy to be moved by one person



SPECIFICATIONS	
Max. Packing size (mm)	400-1200(W)x180-400(L)x300-600(H)
Rotating speed	0-20 RPM
Power supply	220V/50Hz/1 Phase: 0.5kw
Weight capacity	100kg
Packing materials stretch film width	500mm
Dimension (mm)	650(W)x1570(L)x1200(H)
Machine weight	200kg
Item number:	43700010



STRETCH FILM FOR WRAPPERS – MACHINE FILM

ALWAYS ASK FOR UPDATED PRICE!



Thickness	Description	ITEM NO.
Basic - Pre - stretch degree up to 150 %		
12 MY	LLPDE stretch film in machine rolls. Inside core diameter ø76mm Roll weight including core 16-17,5kg. 30 or 45 rolls per pallet – ASK. Pre - stretch degree up to 150 % Film width 500mm Price always based on daily update.	54115012
15 MY		54115015
17 MY		54115017
20 MY		54115020
23 MY		54115023
30 MY		54115030
35 MY		54155035


Advance – Pre – stretch degree up to 250 %		
12 MY	LLPDE stretch film in machine rolls. Inside core diameter ø76mm Roll weight including core 16-17,5kg. 30 or 45 rolls per pallet – ASK. Pre – stretch degree up to 280 % Film width 500mm Price always based on daily update.	54125012
15 MY		54125015
17 MY		54125017
20 MY		54125020
23 MY		54125023


Advance Plus – Pre – stretch degree up to 280 %		
12 MY	LLPDE stretch film in machine rolls. Inside core diameter ø76mm Roll weight including core 16-17,5kg. 30 or 45 rolls per pallet – ASK. Pre – stretch degree up to 280 %Film width 500mm Price always based on daily update.	54135012
15 MY		54135015
17 MY		54135017
20 MY		54135020
23 MY		54135023

Extreme – Pre – stretch degree up to 300 % Cast film		
12 MY	LLPDE stretch film in machine rolls. Inside core diameter ø76mm Roll weight including core 16-17,5kg. 30 or 45 rolls per pallet – ASK. Pre - stretch degree up to 300 % Film width 500mm Price always based on daily update.	54145012
15 MY		54145015
17 MY		54145017
20 MY		54145020
23 MY		54145023

HAND ROLLS Ø50 core x 300meter Transparent & Black

Thickness	Description	Stock	Item no.
Width 450mm x Ø50 core x 300meter			
12 MY	LLDPE stretch film in hand rolls transparent or black if stated. Inside core diameter ø 50 mm 6 rolls er box		54164512
15 MY			54164515
17 MY			On Stock 54164517
20 MY			On Stock 54164520
23 MY			54164523
30 MY			54164530
35 MY			54164535
20 MY Black			54164620
23 MY Black			54164623

Width 500mm x Ø50 core x 300meter			
12 MY	LLDPE stretch film in hand rolls transparent or black if stated. Inside core diameter ø 50 mm 6 rolls er box		54165012
15 MY			54165015
17 MY			54165017
20 MY			On Stock 54165020
23 MY			54165023
30 MY			54165030
35 MY			54165035
20 MY Black			54165120
23 MY Black			54165123

Width 500mm x Ø50 core x 500meter			
9my	LLDPE stretch film in hand rolls transparent Inside core diameter ø 50 mm 6 rolls er box		On Stock 54165009

TOPFILM

Tickness x Width x Meter	Description	Item no.
50my x 1500mm x 500m	LDPE top film in rolls for machine use 500 m/roll.	54701500

Other width of film on request: 1200, 1800, 2000mm, Just ASK!

TOP sheets– Preformed sheets on rolls

Tickness x Width x Meter	Description	Item no.
35my x 1300 x 1700mm Clear	LDPE top film in rolls, tear lines for sheets 200 sheets/roll	54713173
50my x 1400 x 1700mm Black	LDPE top film in rolls, tear lines for sheets 130 sheets/roll	54713175

HAND Rolls width 100 MM For hand wrapping

17 my x 100 mm x 150 m Clear	LLDPE stretch film in MINI hand rolls – 24 rolls /carton	54808017
HAND DISPENSER W 600	With adjustable brake.	65005000

Continued from page 3

Applicable equipment in relation to different processes:

- **Manual:**

General: The physical dimension such as height and weight, the handling limitations of manual hand wrapping.

- Hand Films dispenser for hand film 450 or 500mm width.
- Hand Films handles for mini rollers 100 to 125mm width.
- Hand preferred films for direct winding without secondary tool.

- **Semi-Automatic:**

General: The physical dimension such. height, diameter and weight puts restrictions on what the machines can perform. Each machine series will typically have a number of options that enable greater dimension, weight and diameter, this applies to all machines semi-automatic, automatic and fully automatic.

- **Basic Machine Concepts:**

- Tower type with the turntable, the pallet is rotating while being wrapped.
- Satellite type of unit where the film is wrapped around the stationary pallet.
- Tower type turntable with horizontal rolls where product is rolled and rotated.
- Combining turntable, satellite aggregates leads to extreme process speeds.

- Semi Automatic Pallet Wrapping E3 Wrap 4000, where you manually attach the film to the pallet before the process starts and automatically cuts the film when the process is completed. Basic Solution.
- Semi Automatic Pallet Wrapping E3 Wrap 6000, where you manually attach the film to the pallet before the process started, but the machine itself, cut the film when the process is completed. Advanced Solution.
- Best film with manual process where the wrapper has pause function.

- **Automatic:**

- Automatic Pallet Wrapper E3 Wrap 7000 which can start the process automatically and holds the film after cutting, ready for the next pallet to wrap. The only manual work is loading/unloading of the pallet which in turn is handled manually by truck or pallet truck.
- The Best film with manual process or automated integrated solution is the STEP HB 800.

- **Fully Automatic:**

- Fully Automatic Pallet Wrapping E3 Wrap 8000 is a process where the machines develops and manage the pallet without human intervention. The pallet is transported onto the taxiways, wrapped and carried out subsequently. It is important that the pallet has the necessary stability for the internal transport.
- Top films such as Fully Automatic Integrated Solution.

- **Other equipment which may advantageously be integrated around the wrapping process:**

- Weighing of the pallet with integrated weight system.
- Data collection around the packed pallet. The data are collected and stored up against the ERP system using the STEP Data Exchange System.
 - Scanning the pallet registration number.
 - Weighing Function.
 - Pallet dimension measurements.
 - Image capture of the pallet
 - 360 degree video capture of the pallet
- Top film dispenser.
- Top plate for stabilization of the pallet during wrapping.
- Taxiways on the turntable and / outlets for manual or automatic pallet change.
- Label marking of the pallet.

Typical process rates in the choice of machine type / process, depending on the sum function, pallet dimensions, product, movie selection, etc.

Fully Automatic Pallet Wrapping, projected full-optimal solutions, up to 70-100 pallets per hour.

Advanced wrapping and packaging lines with the incorporation of many types of processes in the project specified solution concepts and lines. In many cases, several technologies are implemented to ensure optimal use of each element, whereby

material and energy consumption is minimized. Data are collected and processed to ensure the right quality and information.

Manual	5-10 pallets day. A person will presumably be able to wrap more pallets per day but it is definitely not recommended as a permanent solution for regular pallet wrapping due to the negative impact working environment-wise.
Semi-Automatic	5-100 pallets a day
Automatic	5-30 Pallets per hour
Fully Automatic	5-120 Pallets per hour

Other types of machines and equipment for Wrapping:

			
Horizontal Wrapping	Roll wrapping	Data capture pakke STEP Data Exchange System	Top films Dispenser STEP TF 1500

Film Types:

General consideration and reality: *It is expensive to use an inexpensive film*

It is extremely important that the correct film used for the right purpose, so make sure you get a price optimal development of its product. This choice, start by selecting the machine, aggregate type, process point in relation to your production flow, material selection and secondary processes that affect the entire packaging process, mixed stability by moving internally from the process point to the moth.

- **Hand Film:**
 - LDPE cast or blown, clear, white, black, other colors Additional Features: UV, rust protection
 - Thickness: 9 to 35my
 - Width: 450-500mm for hand film on core $\varnothing 50$ - $\varnothing 76$ and core movable type. Hand Scrolls 75 to 150mm on core $\varnothing 76$.
 - Pre stretch: regular, Pre stretched.
- **Machine Film:**
 - LDPE cast or blown, clear, white, black, other colors Additional Features: UV resistant, UV, rust protection, perforated holes, added glue, etc.
 - Butene / Hektene types of short chains. LDPE Low Density with limited characteristics about the strength and elongation. STEP Basic Stretch
 - Oktene types of long and branched chains. Octene LLDPE Linear Low Density with good general properties such as strength and elongation. STEP Advanced Stretch
 - Metallocene types with numerous and widely branched Chain Metallocene catalyst is not a monomer such as ethylene, but the film producer of the donor represent. Especially good strength, tear and elongation properties. STEP ultimate stretch.
 - Thickness: 9my to 35my
 - Width: 500mm $\varnothing 76$ mm on the core and the outer diameter up to 250mm, common European hemming. Jumbo rolls of width 750mm with outer diameter up to $\varnothing 450$ mm.
 - Pre stretch degree: 100% to 400%, Pre stretched. The typical commercial products are 150%, 280% and 300% Pre stretch degree.
 - Interior or exterior glue.
 - Invoicing of film gross to net DKK / kg or gross to net DKK / roll with a number of meters in thickness given

- Hemming: Machine Film wrap on pallets typically 2 or 3 layer upright. Film Rolls should not lie down for the sake of balance, excitation and crib conditions during storage. Each layer is typically packed with either 15 (within a EURO pallet without an overhang) or 22 in which the film roll is packaged with an overhang on the pallet. Other variants exist.

Environmental Conditions:

PE material composition is of particular interest as this is often hot welded:

Polyethylene ca. 98 %

Color pigments are not toxic ca. 1-2 %

Toxic and Reaction Properties: Polyethylene is chemically and biologically inert. Polyethylene can be used directly for food.

Physical Contact:

There is no risk, beyond the mechanical.

Welding, Gluing and Printing of PE Materials:

It is recommended to have the workplace have an outside ventilation to avoid exposure to welding fumes from plastic welding. If welding at a room temperature below 150 degrees, smoke and steam generation is considered to be insignificant. It is recommended that you always provide adequate ventilation for the sake of the general welfare of the workers.

PE can be used in friction welding and ultrasonic welding without the need of suction, as all welding fumes goes into cables in the weld zone.

PE has a low surface tension and therefore can only be glued and applied to the text for the treatment of the surface.

Flammability:

When the polyethylene is heated, the material will melt at approx. 109-125 degrees.

Burning:

Controlled burning is recommended. When ignited, the material will continue to burn, even after the ignition source is removed. The decomposition produces H₂O, and CO₂. If burned with a low presence of oxygen, the combustion will also produce mono oxide, which is toxic.

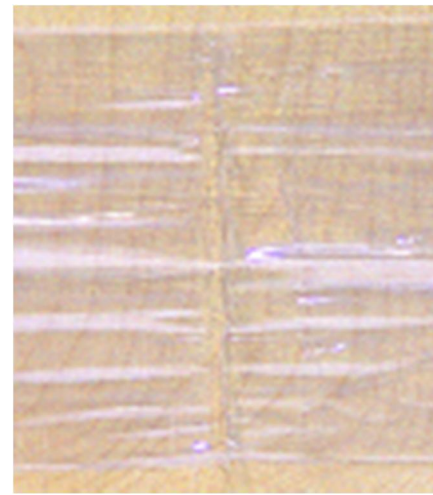
Recycling:

PE materials are suitable for recycling.

Horizontal Wrapping

Key Benefits

- Positive heat seal - eliminates loose tails and bundle failure
- Heavy duty construction - designed for industrial applications
- Low Maintenance - hardlube coated wear parts for years of reliable service
- Economical - uses low cost stretch film
- Product Friendly - allows tight banding without product damage



While the force to load adjustable film tensioning feature allows you to control your wrapping tension, the inherent properties of stretch film will never damage your product.

Flow through design makes the Flex Strap stretch film banding machines the ideal solution for bundling long length products, such as, millwork & extrusions. The Flex Strap's unique *heat seal* assures bundles stay bundled by preventing the film from unravelling.



Sal-Tech Easy Packaging

Horizontal Wrapping Machines



Horizontal Wrapping Machines – STEP H-Wrap Series

Horizontal wrapper is specially designed for long products such as, plastic material, pipes, timber etc. Its principle is rotating the ring holding the film around the product, as it is conveyed forward. These types of wrapping machines are used to wrap a package horizontally to further stabilize where conventional vertical wrapping machines cannot. The STEP H-Wrap Series of machines are engineered to wrap small to medium sized packages and products.

STEP H-wrap 400



Features:

- | | |
|-----------------------------|----------------------------------|
| • Packing Material: | Stretch Film or Anti-rust Paper |
| • Material Width: | 125mm-200mm |
| • Product dimension max: | 200x200mm |
| • Rotating Inner Diameter: | 400mm |
| • Conveyor Speed: | 5-8m/min |
| • Machine Weight: | 600KG |
| • Power Supply: | 2kw/AC380V/50HZ |
| • Machinery Shape Size: | (2100 X 1000 X 1400)mm |
| • Infeed and outfeed belts: | As per demand to order as option |
| • Item no.: | 43801400 |

STEP H-wrap 1800

Features:

- Rotating ring inner diameter 1800 mm
- Package dimension 100 mm*1200 mm(W*H)
- Packing length >1200 mm
- Rotating ring speed 20-30 rpm
- Conveying speed 5-8 m/min
- Power 2.2 Kw
- Machine Weight 1500 kg
- Machine shape size 2600 mm * 1650 mm * 2600 mm
- Packing material width 200 mm- 500 mm
- Item no.: 43801800

