



FS360 wrapping machines information



Is the simple entry level stretch wrapper for the user who needs to wrap pallets quickly, strongly and at a competitive price.





Following Price List

BASE PLATE AND TURN TABLES

Base plate 75mm Ø1500mm/Ø1650mm/Ø1800mm/Ø2200mm/Transpallet base plate with Ø1500mm/Ø1650mm (1250Kg) Front side(changeable by client)

Base Plate and Turn table Options:

Increased load capacity up to 2200Kg (only base Ø1650mm)

Options on the turn table:

Guide for wrapping supermarket trolleys

RAMPS

Ramp Ø1500mm/ Ø1650mm/ Ø1800mm/ Ø2200mm (Blues Sablè RAL5010)

SCALE UNIT

Standard pallet scale unit. **Only for base Ø1500mm and Ø1650mm**Label Printer and cable connection
Module Datario Watch

FLOOR FRAMES FOR A FIXED SET-UP, LOWERED IN THE FLOOR

Floor flame for plate Ø1500mm/ Ø1650mm/ Ø1650mm for Scale Unit/ Ø1800mm/ Ø2200mm

MASTS AND THEIR RESPECTIVE MAX. WRAPPING HEIGHT

Mast for wrapping height < 2100mm/ < 2500mm/ < 3000mm

Top Press Option: Round disk or Square

FILM CARRIAGE OPTIONS

Film carriage type **CF1** (Mechanical core brake)

Film carriage type CF2 (Mechanical roll brake)

Film carriage type CF3 (Power Stretch 150%)

Film carriage type CF3 (Power Stretch 200%)

Film carriage type CF4 (Magnetic brake)

Options for film carriages:

Standard photocell;

Height sensing photocell for black light absorbing or reflecting products

NB! Bruger du sort strækfilm?

Venligst oplys dette ved bestilling for valg af pallehøjdesensor.

Standard roll holder for 76 mm inner Carton Core

Roll holder for 50 mm inner Carton Core (only carriages CF2, CF3 and CF4) Automatic film cutting device (only for CF3)

OP CONTROL PANEL

OP1 Control Panel

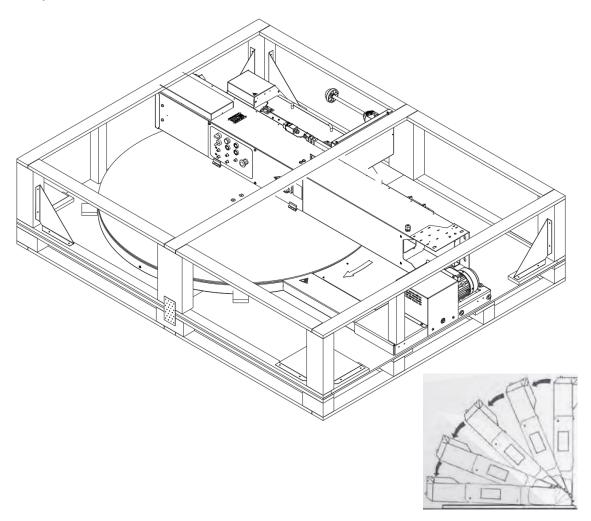
Option: Locking comand





Packaging

The machine is generally shipped wrapped in a polypropylene casing, fixed by strap in a wooden structure.



PACKAGING FOR MACHINES WITH TURN TABLES Ø 1.500 AND Ø 1.	650 AND HS 1.500 column 2,100
2.300 x 1.800 x 550 mm (Max. stacking of 4 machines)	
VCI Anti-Corrosion Plastic Cover	INLCUDED
PACKAGING FOR MACHINES WITH TURN TABLES Ø 1.500 AND Ø 1.	650 AND HS 1.500 column 2,500
2.700 x 1.800 x 550 mm (Max. stacking of 4 machines)	
VCI Anti-Corrosion Plastic Cover	INLCUDED
PACKAGING FOR MACHINES WITH TURN TABLES Ø 1.500 / Ø 1.650	AND HS 1.500 column 2,500
2.300 x 1.800 x 550 mm (Max. stacking of 4 machines) for cor	ntainer (detached column)
VCI Anti-Corrosion Plastic Cover	INLCUDED
PACKAGING FOR MACHINES WITH TURN TABLES Ø 1.800 / Ø 2.200	AND HS 1,650 all columns
3.140 x 3.000 x 550 mm (Max. stacking of 4 machines)	
VCI Anti-Corrosion Plastic Cover	INLCUDED
PACKAGING FOR MACHINES WITH TURN TABLES Ø 1.500 / Ø 1.650	AND HS 1.500 column 3,000
3130 x1.800 x 550 mm (Max. stacking of 4 machines)	
VCI Anti-Corrosion Plastic Cover	INLCUDED

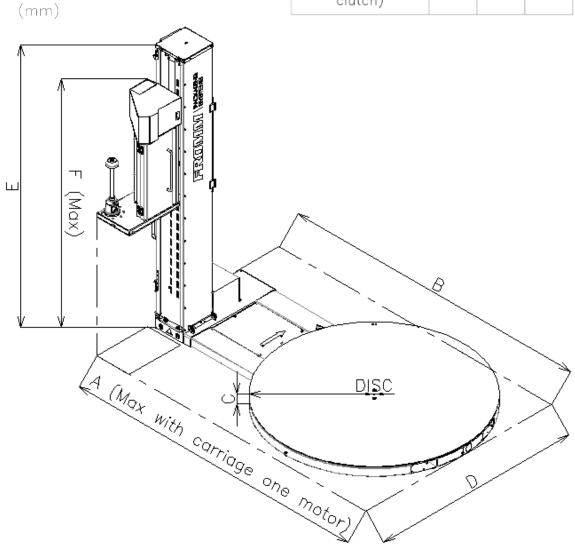




Layout (mm) with standard base

DISC	Ø1500	Ø1650	Ø1800	Ø2200
А	2265	2265	2635	3035
В	2280	2280	2650	3050
С	73	75	75	75
D	1565	1645	1790	2190

H Max Film	2100	2500	3000
Е	2060	2460	2950
F (carriage roll core brake)	2270	2670	3160
F (carriage one roll brake)	2350	2750	3240
F (carriage one motor)	2460	2860	3350
F (carriage with electromagnetic clutch)	2330	2730	3220



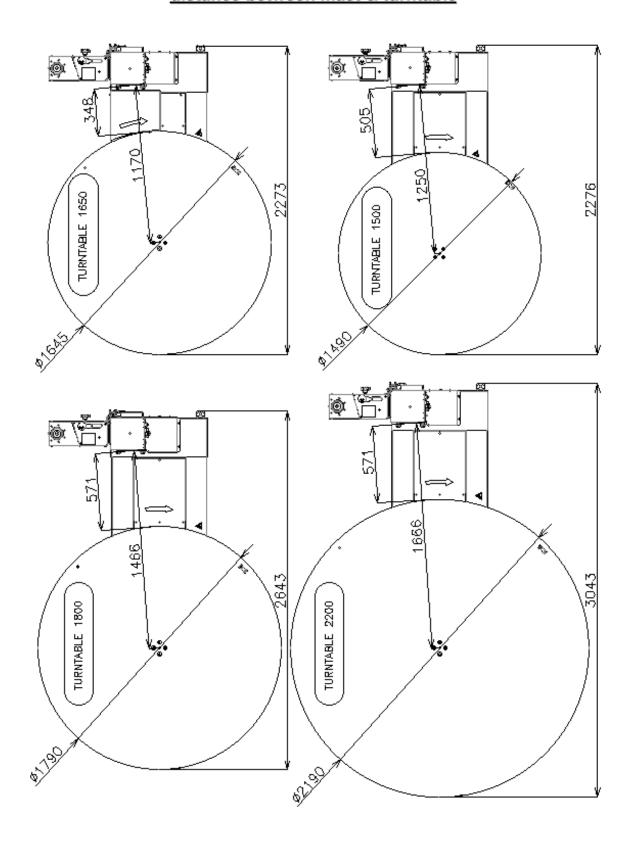
Power supply:

1 phase + N, 230V AC, 50/60 Hz





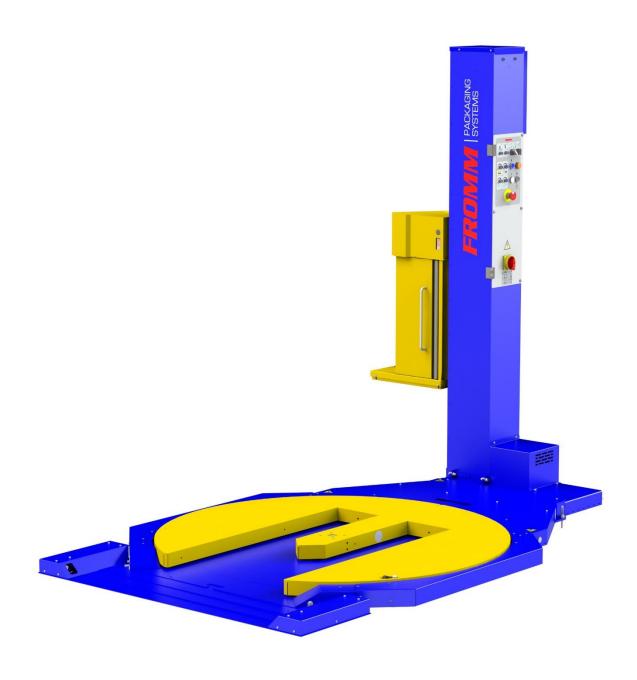
<u>Layout (mm) with standard base:</u> <u>distance between mast & turntable</u>







Horseshoe turntable

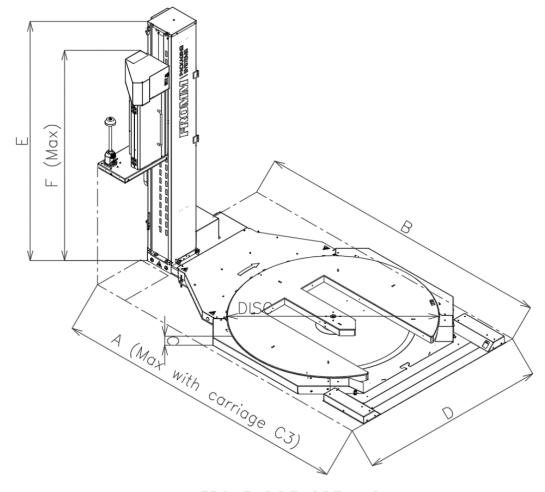






Н	Max Film		2100	2500	3000
E			2060	2460	2950
F	(carriage	C1)	2270	2670	3160
F	(carriage	C2)	2350	2750	3240
F	(carriage	C3)	2460	2860	3350
F	(carriage	C4)	2330	2730	3220

DISK	Ø1500				Ø1650	
Opening side	FRONT	RIGHT	LEFT	FRONT	RIGHT	LEFT
Α	2520	2285	2285	2760	2525	2525
В	2530	2295	2295	2770	2535	2535
С		77			77	
D	1585	1820	1775	1740	1970	1970

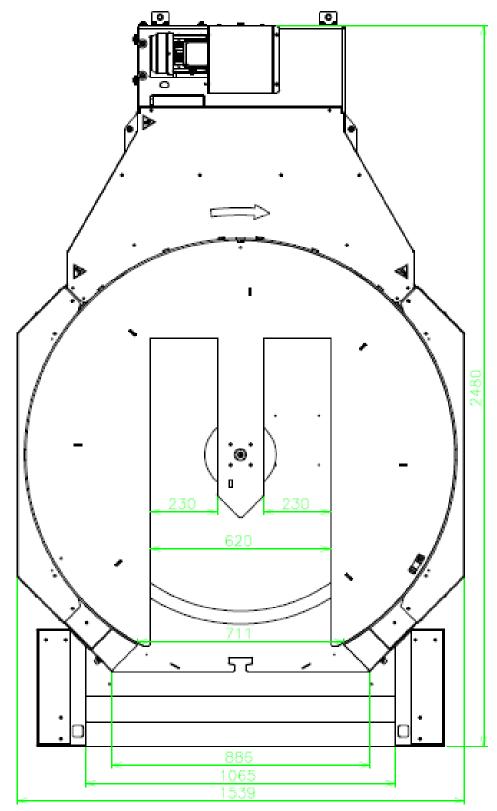


FRONT SIDE OPENING



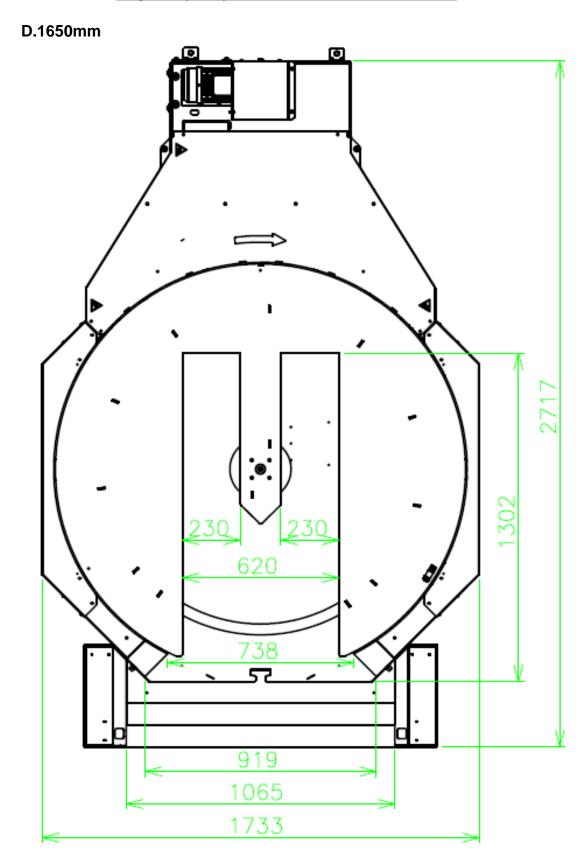


D.1500mm



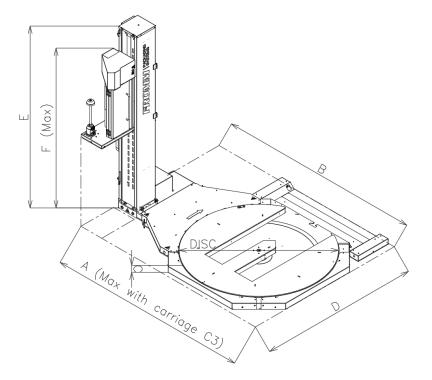




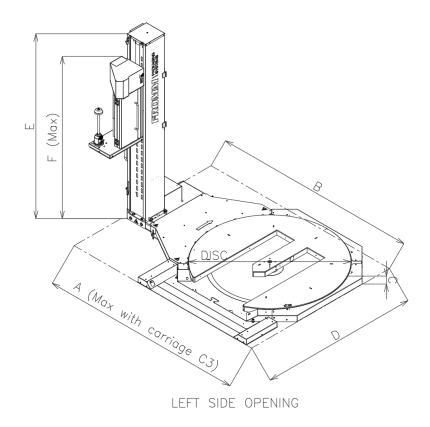








RIGHT SIDE OPENING



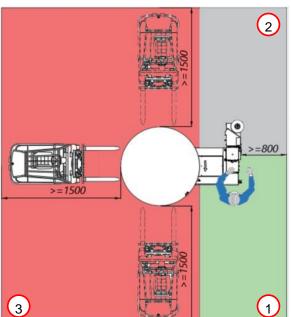
FROMM Wrapping Solutions



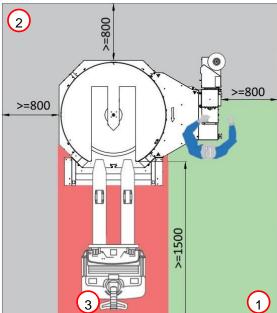


Overall dimensions (mm)

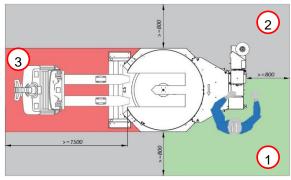
Standard base



Horseshoe, Right side opening

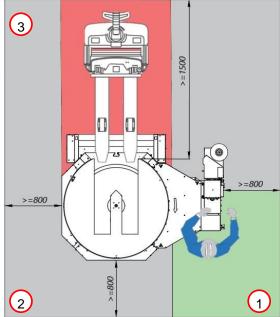


Horseshoe, Front side opening



- 1 Operator Area
- 2 Perimeter Area
- (3) Loading / Unloading Area

Horseshoe, Left side opening



Horseshoe machine will be delivered with the front side opening.

The opening side of the turntable be easily changed by the distributor directly in the customer's company.





Base Plate and Turn tables

Base Plate and Turn tables

Max. load capacity

Base plate 75mm Ø1500mm Max. load dimensions 800x1200mm, (1500Kg) Base plate 75mm Ø1650mm Max. load dimensions 1100x1200mm, (2000Kg) Base plate 75mm Ø1800mm Max. load dimensions 1200x1300mm, (2000Kg) Base plate 75mm Ø2200mm Max. load dimensions 1500x1500mm, (2000Kg) Transpallet base plate Ø1500mm Front side(changeable by client), (1250Kg) Transpallet base plate Ø1650mm Front side(changeable by client), (1250Kg)

Base Plate and Turn table Options:

Increased load capacity up to 2200Kg (only base Ø1650mm)

Options on the turn table:

Guide for wrapping supermarket trolleys



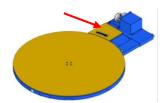
Main features:

Gearbox on the turntable with torque limiter.

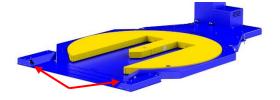
The torque limiter prevents the damage of the gears inside the gearbox during the fast deceleration of the turntable (especially with high weight) or when the operator pushes the pallet on the turntable.



Safety device in the base plate



Fixed guard: table oscillating mat, diameter 1650 mm, sheet metal, fixed to a side of the table structure by a pin and kept lifted by a spring on the opposite side, it prevents the operator from placing him/herself between the column and the table



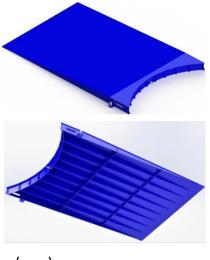
Light curtain: it prevents the machine from functioning should the access opening of the open table be used: more precisely, while the table is rotating, the table and any other movement are halted whenever a foreign body is detected between the photocell and the reflector.





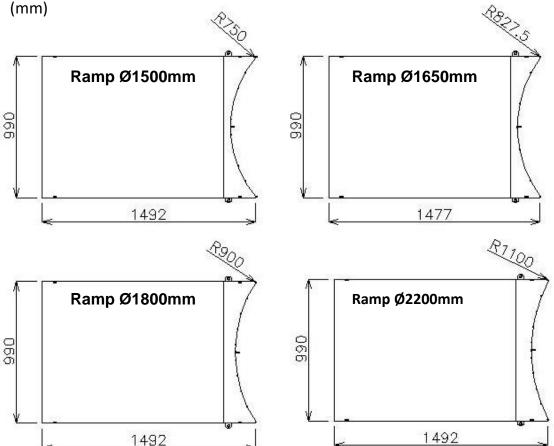
Ramps

Ramp Ø1500mm / Max. weight 1500Kg / L-1492mm / W-990mm Ramp Ø1650mm / Max. weight 1500Kg / L-1477mm / W-990mm Ramp Ø1800mm / Max. weight 1500Kg / L-1492mm / W-990mm Ramp Ø2200mm / Max. weight 1500Kg / L-1492mm / W-990mm Ramps painting: Blues Sablè RAL5010



Main features:

- Easy to assembly even on already sold machines;
- Designed for FS360 machines painted with the same color;
- Use it to easily load and unload heavy pallets onto stretch wraps machines using manual pallet jacks;
- Strong structure to avoid deformation;
- Integrated bolts to regulate the heigh of the ramp;
- Possibility to fix in 3 different side of the turntable.

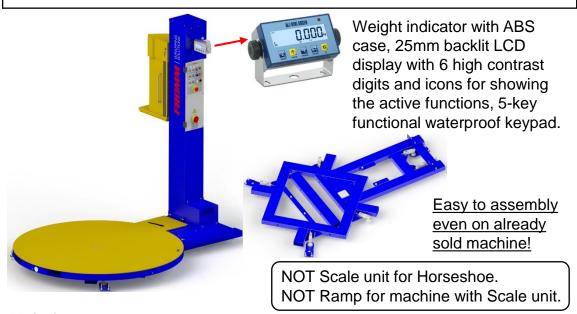






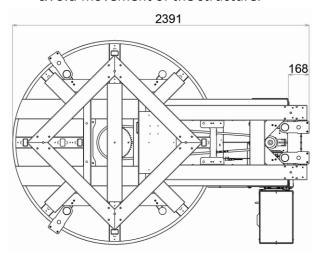
Scale unit

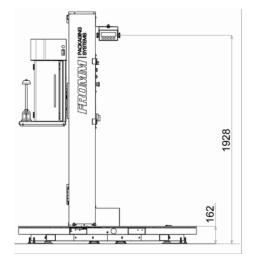
Standard pallet scale unit. **Only for base Ø1500mm and Ø1650mm** Label Printer and cable connection Module Datario Watch



Main features:

- The low-profile design, uses same footprint as standard FS360 machine, unique model fit bases Ø1500mm and Ø1650mm;
- The scale is fixed below the machine:
- The digital display is mounted on the side of the mast that accurately shows the pallet gross weight.
- Frame made with rectangular robust tubes, allows to weight up to 2000Kg;
- The scale is calibrated at our factory before shipment;
- System is based on 6 load cells with height adjustable feet for better stabilization;
- Supplied with the parts that allows the possibility to anchor the feet to avoid movement of the structure.









Scale unit

The system is certifiable because the cells and the instruments are certified. The calibration must be done on site, for example by DINI ARGEO dealer (instrument supplier). www.diniargeo.com www.ricelake.com



Test certificate

Number TC8012 revision 1 Project number 12200100 Page 1 of 4

		Page 1 of 4
	Issued by	NMi Certin B.V.
		Hugo de Grootplein 1
		3314 EG Dordrecht
	+ + + + + +	The Netherlands
-	In accordance	Paragraph 8.1 of the European Standard on Metrological aspects of non-automatic
۰	with	weighing instruments EN 45501:1992/AC:1993 and by application of the OIML
٠	+ + + +	International Recommendation R 60 (Edition 2000).
F		
r	Manufacturer	Zhonghang Electronic Measuring Instruments Co., Ltd.(ZEMIC)
F		XinYuan Rd. North Zone of EDZ, Hanzhong,
-		723000 Shaanxi
_	+ + + + + +	China
		the track of the track of the feet of the
	In respect of	A bending beam or shear beam load cell, with strain gauges, tested as a part of a weighing instrument.
		Manufacturer Zhonghang Electronic Measuring Instruments Co., Ltd.
		(ZEMIC)
Φ.		Type : H8C-xx-xx-xxx-xx Series
*		
*	Characteristics	E _{max} : 100 kg up to and including 250 kg for bending beam
+	+++++	500 kg up to and including 15 t for shear beam
+		Accuracy class + + :+ C
+	+ + + + + -	In the description number TC8012 revision 1 further characteristics are described.
÷	+ + + + + +	in the description number 1 costs (total of)
٠	Description and	The load cell is described in the description number TC8012 revision 1 and
+	documentation	documented in the documentation folder TC8012-2, appertaining to this
÷	+++++	test certificate. + + + + + + + + + + + + + + + + + + +
÷	4 4 5 7 7 4 4	***********
+	Remarks	Summary of the test involved: see Appendix number TC8012 revision 1.
4		This revision test certificate replaces the earlier version, including its documentation folder.
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*	issuing Authority	25 April 2012
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+	NMi Certin B.V. Hugo de Grootplein 1	This document is issued under the provision that no liability is accepted and that the against this decision, within all weeks
+	3314 EG Dordrecht	applicant shall indemnify third-porty liability. after the date of submission, to the general manager of Mild (see
÷	The Netherlands T +31 78 6332332	The designation of NMI Cereln IIV.as Notified "Regulation objection and appeal against decisions of NMI" www.nmi.nl)
+	certin@nml.nl	ec.europa.euventerpriseinewapproach/nando/ Reproduction of the complete INSPECTION
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Scale unit: Label Printer and cable connection



connect the Module datario

programmed in FROMM

watch (already

Italiana).

Printer for labels with customized logo, gross weight, bar code, time and data.

The Printer is TSC TE210 and it has to be programmed in FROMM Italiana.

The dimension of the label is 100mm x 60mm.

What the customer wants to print on the label?

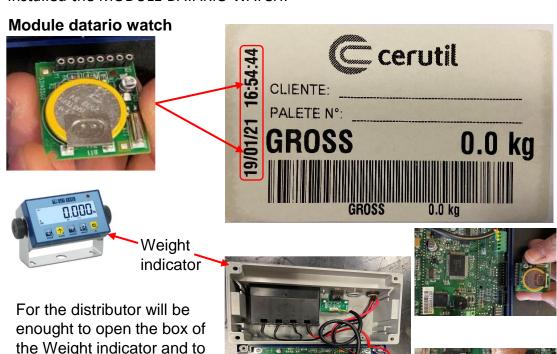
We can personalize the Layout with the most important information that the customer need shown on it.

We can also personalize the LOGO with the customer logo and we can change a little the graphics in according to the customer needs (example picture below).

Normally the customer needs to write only the gross weight plus the bar code is EAN128. From the barcode the provided information is only the GROSS Weight with an precision of 0.0KG.

The measurement of the cable between weigh indicator and printer will be 10m.

The time and data is possible to print on the label, only if on the display is installed the MODULE DATARIO WATCH.







Floor frames for a fixed set-up, lowered in the floor (Pit-option)

Floor flame for plate Ø1500mm

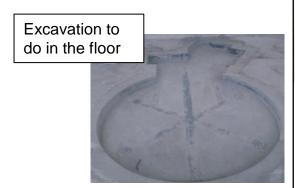
Floor flame for plate Ø1650mm

Floor flame for plate Ø1650mm for Scale Unit

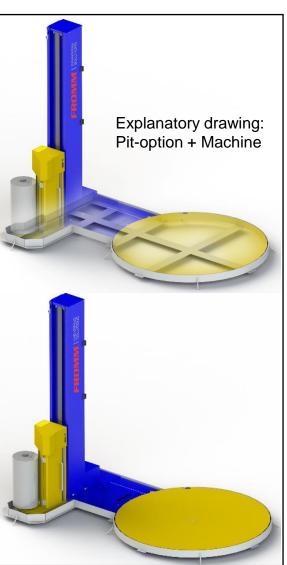
Floor flame for plate Ø1800mm

Floor flame for plate Ø2200mm





FROMM will provide the drawing with the dimension for the hole/cut in the floor.



Main features:

The frame (pit-option) was created to bury the machine. The disk of the turntable will be at the same level as the floor of the customer's company.

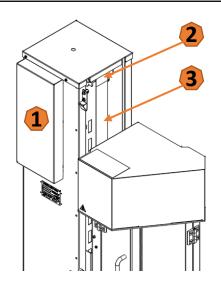




Masts and their respective Max. wrapping height

Mast for wrapping height < 2100mm Mast for wrapping height < 2500mm Mast for wrapping height < 3000mm

Top Press Option – Round disk **Top Press Option** - Square



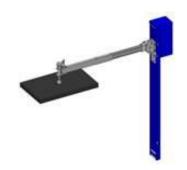
Safety device in the mast

- Fixed guard: carriage gearmotor casing, sheet metal, fixed to the column with screws. It segregates the dangerous internal mechanical devices;
- 2. Fall arrest device: it prevents the carriage from falling should the lifting belt break:
- 3. Belt tension detector: It detects the lack of tensioning of the carriage lifting belt, halting the machine.

<u>Top Press Option – Round disk</u> <u>Ø600mm</u>



<u>Top Press Option – Plate</u> 600x1000mm



Main features:

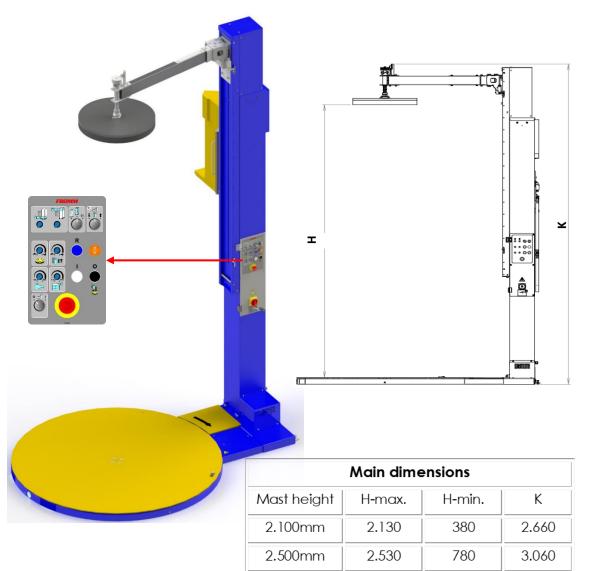
- · Electric powered, no air needed;
- Easy installation and connection to the machine management system;
- Automatic or manual operation via control panel;
- · Compensation for irregular loads;
- Adjustable arm, both in length and angle;
- Choice of Round (Ø600mm) or Rectangular plate (600x1.000mm);
- Automatic re-orientation to 0-position (rectangular plate).

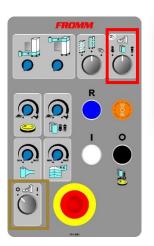




Top Press Option: Round disk or Square

Pressure Plates for unstable loads.







Selector to choose between an upward or downward carriage / **top-press movement**. As these are manual movements, they are only allowed if the machine is set to Manual mode.

3.020

1.270

3.550



Top-press activation

3.000mm





Film carriage type **CF1** (Mechanical core brake)

Film carriage type CF2 (Mechanical roll brake)

Film carriage type CF3 (Power Stretch 150%)

Film carriage type CF3 (Power Stretch 200%)

Film carriage type CF4 (Magnetic brake)

Options for film carriages:

Standard photocell

Height sensing photocell for black light absorbing or reflecting products Standard roll holder for 76 mm inner Carton Core

Roll holder for 50 mm inner Carton Core (only carriages CF2, CF3 and CF4)

Automatic film cutting device (only for CF3)

Film carriage type CF1 (Mechanical core brake)



Details:

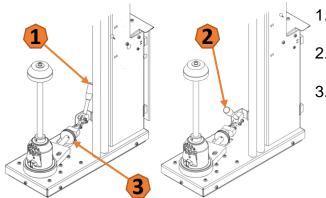




Manually adjusted brake tensioning system, placed at the base of the Carriage.

Film tension between 10%-30%. Advisable for 15 pallets per day.

Carriage braking system

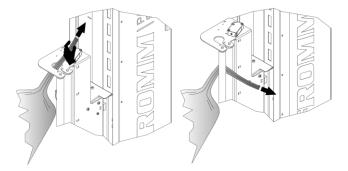


- Deactivated brake, roller holder free:
- Activated brake, roller holder blocked;
- 3. Rotate the wheel (3) to increase/decrease the insertion of the clutch and therefore the tensioning of the film between the carriage and pallet.





Way film into the carriage



Film loading (for all Carriages)

LLDPE polyethylene material: Max 35 µm / 0.00138" Reel core inner diameter:

76mm / 3"

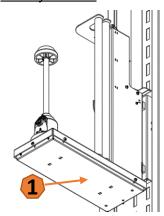
Reel outer diameter:

Max 250 mm / 9.84"

Filler width:

Max 500 mm / 19.68"

Safety device



Fixed guard : carriage 1. CF1 toe board, sheet metal, free to move on guides detect the to presence of obstacles.

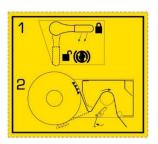
Film carriage type CF2 (Mechanical roll brake)



Details:



Way film into the carriage



Manually adjusted brake tensioning system. Constant stretch of the film. The tension is adjusted on the carriage using a black knob (it acts on black roller), placed at the top of the Carriage.

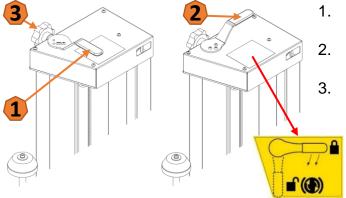
Stretch between 20%-70%.

Advisable for 20 pallets per day.



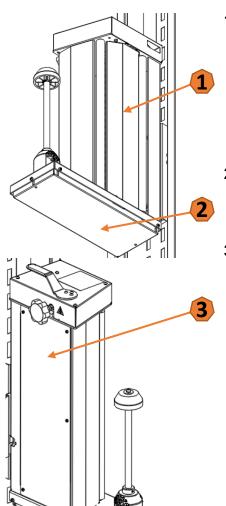


Carriage braking system



- Deactivated brake, roller holder free;
- Activated brake, roller holder blocked;
 - Rotate the wheel (3) to increase/decrease the insertion of the clutch and therefore the tensioning of the film between the carriage and pallet.

Safety device C2/C4



- Mobile guard: carriage CF2/CF4 front door, sheet metal, fixed to a side of the carriage structure by a pin and kept closed by magnets on the other side, it segregates the dangerous internal mechanical devices. Performance level according to EN ISO 13849-1: Safety PL "C" category.
- **2. Fixed guard:** carriage CF2/CF4 toe board, sheet metal, free to move on guides to detect the presence of obstacles.
- 3. Fixed guard: carriage CF2/CF4 rear panel, sheet metal, fixed to the machine structure by screws, it segregates the dangerous internal mechanical devices.





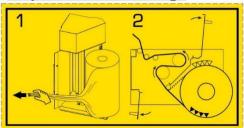
Film carriage type CF3 (Power Stretch 150%/ 200%)



Details:



Way film into the carriage

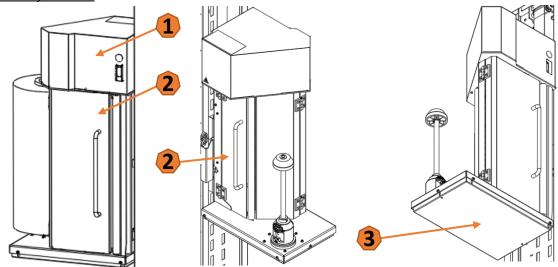


The film force/feed to load (tension) is controlled by a potentiometer, adjusted on the control panel.

Example 150% pre-stretch:

1 meter film becomes 2,5 meters. Pre-Stretch fixed 150% or 200%. Advisable for 20 pallets per day.

Safety device



- 1. Fixed guard: carriage CF3 upper casing, sheet metal, fixed to the machine column by screws, it segregates the dangerous internal mechanical devices.
- 2. Mobile guard: carriage CF3 front door, sheet metal, fixed to a side of the carriage structure by hinges and kept closed by magnets on the other side, it segregates the dangerous internal mechanical devices. Performance level according to EN ISO 13849-1: Safety PL "C" category 1.
- **3. Fixed guard:** carriage CF3 toe board, sheet metal, free to move on guides to detect the presence of obstacles.

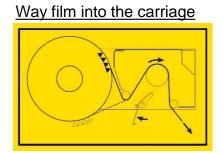




Film carriage type CF4 (Magnetic brake)



Details:



Safety device CF4 = CF2

The tension of the film is controlled by a potentiometer, adjusted on the control panel. The electromagnetic brake giving a better tension control compared to mechanical brake.

Stretch between 40%-90%.

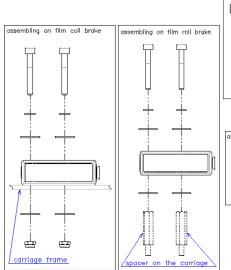
Advisable for 20 pallets per day.

Options for film carriages

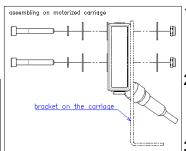
Standard photocell:-



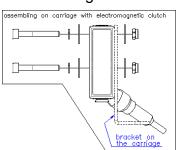
Height sensing photocell for black light absorbing or reflecting products:



Carriage CF1 Carriage CF2



Carriage CF3



Carriage CF4

- Reliable background suppression and color independent detection;
- 2.Display and buttons for precisely setting the switching point;
- 3.Laser protection class 1 for requirements in the automotive industry;
- 4. Reliable detection of reflective surfaces.







Standard roll holder for 76 mm inner Carton Core

Spool holder for Carriage CF1



Spool holder for Carriage CF2/ CF3/ CF4



Spool holder central for all carriages



Roll holder for 50 mm inner Carton Core (only carriages CF2, CF3 and CF4)

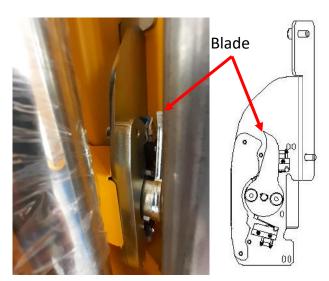




Automatic film cutting device (only for CF3)

Switch on Cutting device by pressing the button on the top of the Carriage CF3





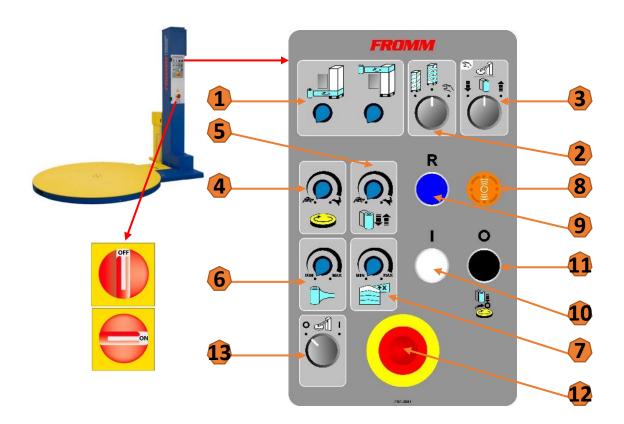




OP Control Panel

OP1 Control Panel

Option: Locking comand

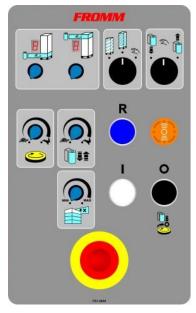


- 1. Inferior/Superior wrapping number
- 2. Double/Single/Manual wrapping mode
- 3. Up/Down carriage/top-press manual handling
- 4. Table speed
- 5. Carriage Speed
- 6. Tensioning
- 7. Overlap
- 8. Light/Acoustic Signal (it will an acoustic signal upon switching on the machine)
- 9. Reset
- 10. Start
- 11. Stop
- 12. Emergency Stop
- 13. Top-press (option)





OP Control Panel



OP Carriages CF1 & CF2

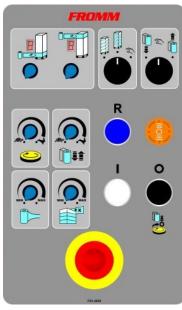
Operating Panels:

- for Mechanical Carriages (CF1 & CF2);
- for fixed Pre-stretch Carriage (CF3) and for Magnetic brake Carriage (CF4).

The buttons and selectors are diam. 22 mm, knobs for selecting speed and wraps.
Very easy in use and robust construction.

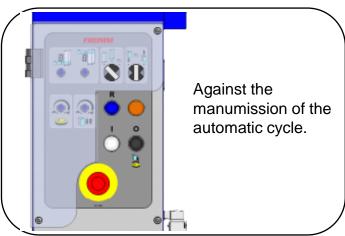
Limited functions but enough for most of the users:

- Cycle up/ down, or only up with automatic carriage return when the table is in zero position, or manual cycle;
- Selection of the top and bottom wraps (0 to 9);
- Carriage speed from 2 to 4 m/min;
- Turntable speed from 6 to 12 wraps/min;
- Overlap (Strip of film placed over the top of the product), it depends on the carriage / turntable speed;
- Knob for the tension (for Carriage CF3 and for Carriage CF4).



OP Carriages CF3 & CF4

Option: Locking comand



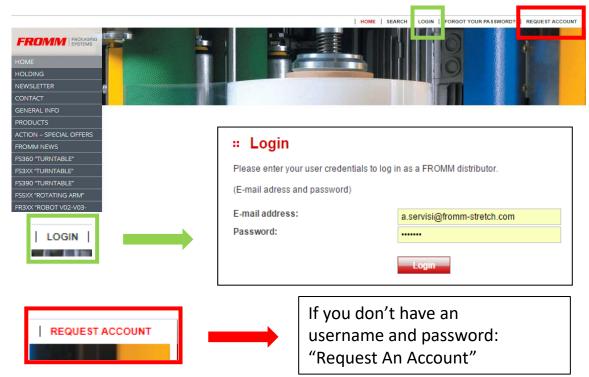




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