

Stretch Wrapping Machines



FROMM FS210 Series **Budget Stretch Wrapping Machines**

Semi-automatic stretch wrapping machines equipped with a joystick.

FROMM stretch wrappers are extremely user-friendly and can be used in every situation. The FS210 and FS230, in particular, are highly suited to use by smaller-scale film users. Extra emphasis was placed during the design stage on safety and reliability. All the machines are designed to cope with a high workload. The use of carefully selected components keeps maintenance to a minimum.

Options FS210 & FS230

- pallet height 2.800 mm
- turntable 1.800 mm (FS230 only)
- pressure plate (FS230 only)
- open turntable "horse shoe" (FS230 only)
- access ramp
- access ramp for electric pallet truck
- frame for submerged floor mounting

DO NOT STACK

NON SOVRAPPORRE

• photoelectric cell for black film (FS230 only)



Standard technical specifications FS210 Turntable 1.650 mm Maximum pallet format 1.100 x 1.200 mm Maximum pallet weight 2.000 kg Maximum pallet height 2.500 mm Power supply 400V - 50/60 Hz

Standard version FS210

Fitted with mechanical film brake. Joystick operation.



Space saving open turntable

The optional open turntable makes loading with a hand pallet truck easy, specially where floorspace is limited. Equipped with an integrated walk-on safety device.

Moving the machine

Easy to move using a forklift truck.



FROMM FS230 Series **Basic Stretch Wrapping Machines**

Semi-automatic Stretch Wrapping Machines with multiple wrapping programs.

Standard technical specifications FS230

Turntable 1.650 mm

Maximum pallet format 1.100 x 1.200 mm

Maximum pallet weight 2.000 kg Maximum pallet height 2.500 mm **Power supply** 230V - 50/60 Hz

FS230, extremely complete standard version, including

- soft start, specially for wrapping unstable loads
- soft stop at 0 position
- fitted with a mechanical film brake
- audio signal at the start of a wrap cycle
- adjustable bottom wraps
- adjustable top wraps
- standard overlap of approx. 20%
- photoelectric cell for automatic height detection

FS230 with 2 automatic programs

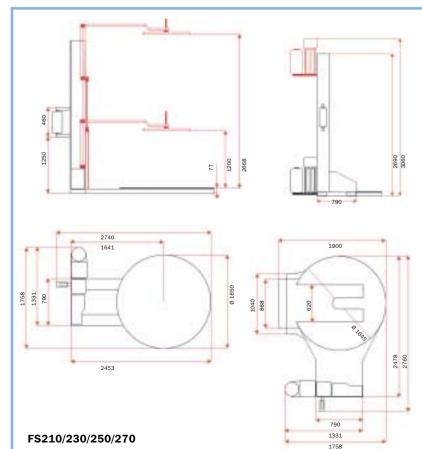
- 1. Upwards or Downwards wrap only.
- 2. Double wrap.

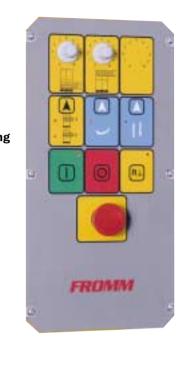
Mechanical film brake

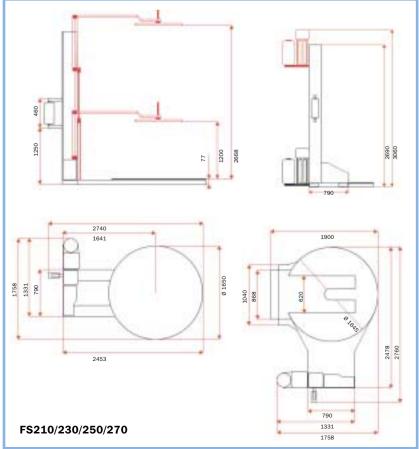
means of hand wheel.

Film brake adjustment by

Manual operation possible.









FROMM FS250 & FS270 Series **Standard Stretch Wrapping Machines**

Semi-automatic Stretch Wrapping Machines with multiple wrapping programs and various pre-stretch systems.

If you prefer easy to operate machines with the option of no less than 7 wrapping programs and multiple pre-stretch systems, then you should certainly choose the FROMM FS250 / 270 Stretch Wrapping Machines. Again, extra emphasis was placed during the design stage on quality, safety and reliability. All these machines are designed to cope with a high workload. The use of carefully selected components keeps maintenance to a minimum.

Standard technical specifications

Turntable 1.650 mm

Maximum pallet format 1.100 x 1.200 mm

Maximum pallet weight 2.000 kg Maximum pallet height 2.500 mm **Power supply** 230V - 50/60 Hz

Extremely complete standard version, including

- soft start, especially for wrapping unstable loads
- soft stop at 0 position
- audio signal at start of wrap cycle
- adjustable bottom wraps
- adjustable top wraps
- photoelectric cell for automatic height detection
- adjustable turntable speed (frequency-controlled)
- independent adjustable upward and downward speed of the film carriage
- easy to operate touch button control panel, based on a microprocessor with text display, for adjustment of parameters and previously set wrapping programs

7 Automatic programs

- 1. Upwards or Downwards wrap only.
- 2. Cross-wrapping, from bottom to top and back.
- 3. Waterproof program in combination with top sheet.
- 4. Program for extra wrapping layer at pre-set height.
- 5. Automatic start from a pre-set height.
- 6. Complete program with disengagement of photoelectric cell, pallet height adjustment through control panel.
- 7. Possibility of setting up an additional customer-specific program.

Manual functions possible.



Space saving open turntable

The optional open turntable makes loading with a hand pallet truck easy, specially where floorspace is limited. Equipped with an integrated walk-on safety device.

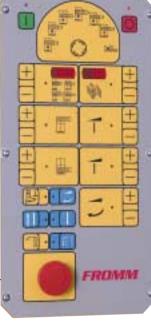
Moving the machine

Easy to move using a forklift truck.



Options

- pallet height 2.800 mm
- turntable 1.800 mm
- turntable 2.200 mm
- open turntable (horse shoe model)
- top pressure plate
- · access ramp
- access ramp for electric pallet trucks
- frame for submerged floor mounting
- voltage / frequency transformer
- photoelectric cell for black film
- conversion kit to model 270
- conversion kit to model 270+ for unstable pallets
- automatic film cutting device



Machine functions adjustable on the easy to operate control panel, with security blocking code feature

- film tension
- number of bottom wraps
- number of top wraps
- upward speed of the film carriage
- downward speed of the film carriage
- speed of the turntable
- delay of the photoelectric cell, for film overlap at pallet top
- · easy to read error code list



Low bottom wrap

It is possible to adjust the bottom wrap down to the turntable to stretch the complete pallet.

FS270+ 1-Motor Pre-stretch unit

As an additional option, 1-Motor prestretch with an extra swinger arm can be fitted to this version, enabling a controlled film feed. The film supply speed can be adjusted from the touch button control panel. (16.8242 Conversion kit)

FS250 Pre-stretch with electromagnetic film brake (up to approx. 100%)

The film is pre-stretched between the film carriage and the pallet. The pre-stretch is adjustable by means of touch buttons on the control panel.

The film is pre-stretched between

2 rolls with gear wheels, with a fixed stretch ratio of 150%. 200% gear wheels can be supplied as an option.

FS270 Pre-stretch with fixed

gear ratio (150%)



FROMM FR230 - FR250 - FR270 and FR290 Series **Robot Stretch Wrapping Machines**

Semi-automatic Robot Stretch Wrapping Machines, with multiple wrapping programs and various pre-stretch systems.

The FROMM robot is a mobile, semi-automatic stretch wrapping machine. It is particularly suitable for customers who need to wrap a wide range of large pallets or for situations where stretch wrapping takes place in various locations. With the battery fully charged, it can wrap up to 220 Euro pallets.

Standard technical specifications Maximum pallet height 2.000 mm **Rechargeable traction battery** 24V - 110Ah Automatic high-frequency battery charger Charging power supply 230V - 50/60 Hz

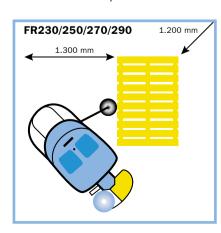
Extremely complete standard version, including

- audio signal at the start of the wrap cycle
- adjustable bottom wraps
- adjustable top wraps
- photoelectric cell for automatic height detection
- adjustable driving speed of robot by means of a frequency controller
- independent adjustable upward and downward speed of the film
- easy to operate touch button control panel, based on a microprocessor with display, for adjustment of parameters and previously set wrapping programs

7 Automatic programs

- 1. Upwards or downwards wraps only.
- 2. Cross-wrapping, from bottom to top and back.
- 3. Waterproof program in combination with top sheet.
- 4. Program for extra wrapping layer at pre-set height.
- 5. Automatic start from a pre-set height.
- 6. Complete program with disengagement of photoelectric cell, pallet height adjustment through control panel.
- 7. Possibility of setting up an additional customer-specific program.

Manual functions possible.



Options

- pallet height 2.500 mm
- pallet height 2.800 mm
- conversion kit to model 270
- photoelectric cell for black film



FR230 with Mechanical film brake

Film brake adjustment, by means of a hand wheel.

brake (up to approx. 100%)

the film carriage and the pallet. The pre-stretch is adjustable by means of touch buttons on the control panel.

Machine functions adjustable on the easy to operate control panel, with security blocking code feature

• film tension (not on FR230)

40

- adjustable delay of the photoelectric cell, for film overlap at pallet top
- driving speed of the robot
- upward speed of film carriage
- downward speed of film carriage
- number of bottom wraps
- number of top wraps
- · easy to read error code list

FR270 with Pre-stretch fixed gear ratio (150%)

The film is pre-stretched between 2 rolls with gear wheels, with a fixed stretch ratio of 150%. 200% gear wheels can be supplied as an option.

FR290 Pre-stretch with a 1-Motor driven pre-stretch unit (250%)

Pre-stretch by means of a 1-Motor driven pre-stretch unit, enabling a controlled film feed. The film supply speed can be adjusted from the touch button control panel.



FROMM FS500 Series **Rotating Arm Stretch Wrapping Machines**

Semi-automatic rotating Arm Stretch Wrapping Machines, with multiple wrapping programs.

FROMM has the ideal solution for highly unstable pallets. The pallet is placed under the machine or on a conveyorline, and the arm then rotates around the pallet and wraps it neatly in film. The 1-Motor Pre-Stretch unit, with a fixed ratio of 250% ensures the lowest possible cost price per wrapped pallet. Extra emphasis has been placed on quality, safety and reliability. This machine has been designed to cope with high workloads.

Standard technical specifications Maximum pallet format 1.200 x 1.200 mm Standard pallet height 2.400 mm **Power supply** 400V - 50/60 Hz

Extremely complete standard version, including

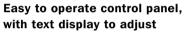
- audio signal at start of wrap cycle
- stop at 0 position
- flashing light during wrapping process
- adjustable bottom wraps
- adjustable top wraps
- standard overlap of approx. 20%
- photoelectric cell for automatic height detection
- fixed arm speed of 12 rpm
- fixed speed of film carriage
- control panel based on PLC with display, for adjustment of parameters and previously set wrapping programs
- obstacle safety bumper, with sender / receiver device

7 Automatic programs

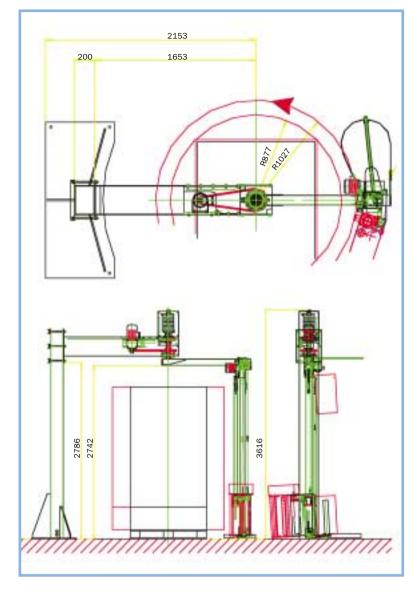
- 1. Upwards wraps only.
- 2. Cross-wrapping, from bottom to top and back.
- 3. Waterproof program in combination with top sheet, single wrap.
- 4. Waterproof program in combination with top sheet, double wrap.
- 5. Top wrap only.
- 6. Upwards wrap only with pallet foot program.
- 7. Cross-wrapping from bottom to top and back, using pallet foot program.

Manual functions possible.





- film tension
- number of bottom wraps
- number of top wraps
- delay of the photoelectric cell, for film overlap at pallet top
- · error code list reading



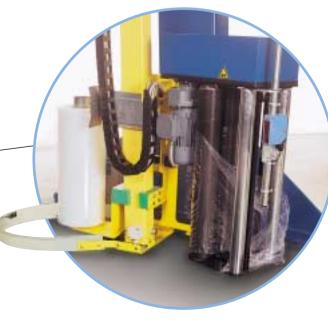


- pallet height 3.000 mm
- pallet format 1.400 x 1.400 mm
- voltage / frequency transformer
- gear wheels 200%



Pre-stretch by means of a 1-Motor driven pre-stretch unit with a fixed pre-stretch ratio of 250%, especially for highly unstable pallets.

Equipped with an obstacle safety bumper, with sender / receiver device.



FROMM Holding AG

FROMM Holding AG designs, develops and manufactures a complete line of packaging machines and equipment for unitizing and palletizing industrial loads, such as: strapping tools and machines, pallet stretch wrapping machines and the unique patented Airpad™ product protection and voidfilling system.

Established in 1947, the family-owned business employs more than 450 people throughout the world. Fourteen subsidiaries in Europe, South Africa and the USA, together with more than fifty specialized partners and distributors worldwide, guarantee efficient customer service and product support. Traditional values like continuity, independency and reliable quality products guide the company's corporate policy and represent the success over decades. production, consulting, sales and service - worldwide and all under one roof!

FROMM stands for: Development,

Our experience is your benefit!



Research- and development centre in Achern (D)



Tool- and manufacturing plant in Caprino (It)



Airpad™ film and STARstrap™ Polyester strap production facilities in Kölleda (D)

Research and development

At the research centre in Achern, Germany a team of experienced engineers continuously develops new techniques and products using state-of-the-art 3D-CAD computer systems. Constantly updated testing procedures and equipment guarantee and secure the recognized high FROMM quality standards.

Tool- and machine production

FROMM production runs around the clock. Highly qualified teams of specialists using computer controlled machines, manufacture FROMM products designed, to meet or exceed the ever demanding quality standards professionals ask for. All FROMM tools and machines are developed and manufactured under ISO 9001 and tested prior to being despatched from the factory.

Airpad™ film and STARstrap™ Polyester strap production

In its production facilities in Kölleda, Germany, FROMM Airpad film and STARstrap Polyester strap are developed and produced, using state-of-the-art test equipment, extrusion lines and film blow units. Airpad films guarantee the high quality standard and impact capacity of the Airpad air cushions, where STARstrap Polyester strap again and again proofs its quality in the ever growing market for polyester strap. This plastic products operation of FROMM is ISO 9001 and ISO 14000 certified.



FROMM Companies





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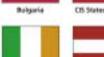


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FROMM Stretch Wrapping Division is part of the Swiss FROMM group, with research and production facilities in Germany and Italy.