









**SHAMAL** is a horizontal flow pack type packaging machine that produces sealed packs, in air-tight form as well with three seals originating from a wrapping material sealer reel. Shamal has also been designed for M.A.P. (Modified Atmosphere Packaging). The main characteristics that make Shamal the focal point worldwide in the field of packaging can be summed up in the following:

**Speed**: up to 60 air-tight packs/min. Thanks to the E.R.S. "Extended Rotary Seal" M.A.P crossways sealing unit (PFM patented), high flexibility can be obtained in the formats of the packageable products.

**Aesthetically perfect packs**: Shamal produces perfect wrinkle-free packs which are properly tensioned and even, thanks to the wrapping material conveyance controlled by an electronic unwinder with a height and width adjustable forming box.



**Easy cleaning**: the construction concept is that of the "cantilevered" type, where the mechanical and electrical components are housed at the rear of the machine in separate and protected areas, while the sealing units and conveyor surfaces are housed at the front. The machine face is therefore free from obstacles and can easily be cleaned thus preventing production waste from coming into contact with mechanical and electrical parts.

**High quality components and machining**: the highest performance levels, maintenance reduced to a minimum, and the utmost quality of the material used in production mean a guarantee without limit of time.



### Servo Model

• A new PFM User Friendly and intuitive programming system, which uses a touch screen panel for easily setting the machine functions with up to 20 different programmes.



• The format change is effected automatically, in particular with regards to:

Pack length setting

Slow-down setting

Product phasing



## **Main standard accessories:**

The machine is equipped with the following devices:

- 2 m long infeed conveyor covered with anti-sliding belt and with a metallic joint. Fast assembly/disassembly and cleaning.
- Cantilevered structure in oxidation proof powder painted carpentry.
- Longitudinal sealing unit with adjustable height by means of the motor.
- 3 individual wheel units, protected and inclinable lengthwise in order to absorb a higher or lower quantity of material and therefore regulate the product wrapping. The first unit draws the material, the second unit carries out the sealing and the third unit the rim folding.
- Long Dwell crossways sealing unit with adjustable height.
- Automatic centring reel holding unit shafts with an electronically controlled multiple belt unwinder.

Adjustable forming box.

#### Individual sealing crimper and sealing wheel temperature control

# **Main Optionals:**

• Pre-heating shoe.

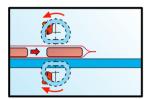
### **Available models:**

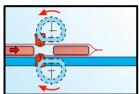
- Mechanical fixed-pitch version .
- Two-axled Electronic version.
- Three-axled Servo version.
- Three-axled LVA Servo version.
- Shrink version.

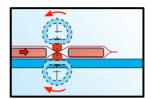
# Long Dwell sealing system: Long Dwell E.R.S.

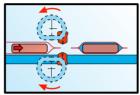
Temperature, Pressure and Time are the three principle factors that when optimized, using appropriate wrapping material, enables high Integrity / Hermetic sealing to be achieved.

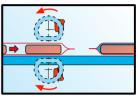
The PFM E.R.S. sealing systems with temperatures equal to those of traditional rotary systems maximize pressure and lengthen sealing times. They have a rotating, mechanical, and constant motion which is particularly fluid in rectilinear sections and an automatically ejecting cutting knife. The longitudinal and crossways sealing units guarantee completely hermetic sealing, while a close study of the distances between the sealing units, the operational kinematics and the speed at which the products are moved, assure an excellent replacement of the modified atmosphere of sealed film inside the box, as well as an accurate control of residue oxygen. Also designed for products of considerable size.











PFM patented Long Dwell sealing system: 1 jaw per shaft, high operation flexibility with a maximum speed of 140 cycles/min.

PFM	Shamal
Product length mm:	min 50, max 600 (mechanical version)
	min 150, max unlimited (LVA version)
Product width mm:	min 5, max 320
Product height mm:	min 5, max 200
Reel strip mm:	max 700
Reel diameter mm:	max 350
<b>Speed of</b> <i>mechanical cycles/min:</i>	max 70
Sealing method:	Long Dwell Compressor.
<b>Power consumption</b> <i>kW</i> :	7 approx.
Weight <i>Kg</i> :	1.000
Standard power supply:	380 Volt three-phase + N + E.

PFM reserves the right to modify technical data without prior notice.



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