EURO 88

Flow Wrapping Solutions





- Innovation from experience since 1965
- Flexible wrapping machine suitable to handle different products with dedicated feeding systems
- Modular construction to meet the most demanding needs
- User-friendly machine fully servo driven with many different parameter settings through PC controller
- High-speed, up to 100 mt/m and high efficiency to get top performance



The Euro88 wrapping machine is a synthesis between the most advanced technology and the best Eurosicma's manufacturing tradition.

This flow wrapper is a **modular and flexible machine**, it is available in a wide range of configurations and can be connected with several different feeding systems. The Euro88 can handle different types of products and it is available in several configurations.

Thanks to the modular construction Eurosicma proposes a wide range of solutions, from simple stand-alone wrapping machine to completely integrated wrapping system in a fully automatic production line.

The Euro88 models are all **fully servo driven**, **using an independent brushless motor to drive and control every single machine axis**. The simplest configuration provides independent motors for the following devices:

- + Outfeed belt
- + Cross sealing rollers
- + Longitudinal sealing rollers
- + Wrapping material unwinding unit
- + Feeding chain

The Euro 88 wrapping machine can pack a wide range of products, such as candy bars, sponge cakes, dry and sandwich biscuits, wafers, marshmallows, noodles, bakery products, detergent tablets, soap and many more.



EURO 88 UNIVERSAL

MANUAL FEEDING FLOW WRAPPING MACHINE FOR FOOD AND NON FOOD PRODUCTS

The EURO 88 UNIVERSAL is the simplest version of the production range. The Euro88 Universal shares the same features and quality of the most sophisticated versions. It is a high-speed and performance machine fully servo driven and therefore extremely flexible, reliable and durable.



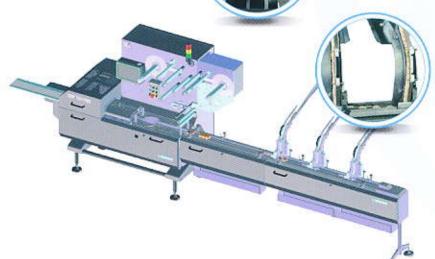


GRAVITY FEEDERS APPLICATIONS

Feeder models P.W.F. and V.M. are semi-automatic and designed for portioning products to wrap in stacks such as plain or sandwich biscuits, crackers and bakery products.



+ The P.W.F. device comes complete with vertical gravity feeders and a special double action pusher to handle multi-layer products smoothly. Once the stack is formed, products are transferred into the wrapper feeding chain.



 The V.M. feeders are directly positioned on the wrapper chain conveyor and they are suitable to handle and feed flat and dry products.

The number of gravity feeders depends on the project specifics.

Eurosicma also offers a counting version of the gravity feeder upon request and the necessary vibrating channels to be linked to all these kinds of feeders.



EURO 88/EDG

HIGH-PERFORMANCE WRAPPING MACHINE FOR PLAIN, SANDWICH BISCUITS OR CRACKERS ON EDGE IN FLOW PACK STYLE



Standard application: single flight bar conveyor

Special application: twin flight bar conveyor complete with moving belt

This model is designed to be connected with a flight bar in-feed conveyor. Automatic portioning units can be added upon request.

This model features includes:

+ Flight bar in-feed conveyor with independent servo motorized transfer unit. The flight bar in-feed conveyor can be positioned at 90° to reach the highest performance along with a gentle handling of the products. The feeding conveyor and the transfer unit are both driven by independent brushless motors.

The flight bar in-feed conveyor can be fully customized for special versions equipped with belt or additional flight bar chain to reduce or completely avoid friction between products and feeder during the transfer.

 Feeding chain with a set of special double pushers to ensure the biscuits always maintain a vertical position.

- Lateral chains units with pushers for controlling the products' position, during the product's transition from the folding box to the sealing and cutting jaws.
- In order to be able to manage different products' sizes, custom-designed spiral plastic chains are available, as alternative to the standard double pushers chain.
- Mechanical servo motorized gusseting device independently driven and works independently from the movement of the sealer.
- The Euro 88 EDG standard version includes all the devices present on the Euro 88 series.

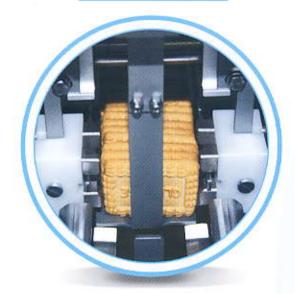
BISCUITS HANDLING AND FEEDING

In order to get the maximum output capacity and the most automation level Eurosicma developed integrated feeding systems that can be integrated with the Euro 88 machine.

Depending on the product's nature and specifications, Eurosicmacan propose two models: the **Volumetric** and the **Counting** portion feeders.

Both are fully servo-driven to achieve best performance, flexibility, easy maintenance and cleaning. Feeding units and wrapping machines are connected in real time.

VOLUMETRIC VERSION



Volumetric portion maker



Volumetric portions transfer unit

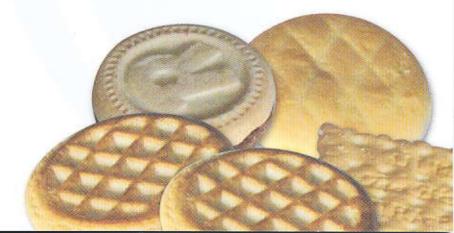
COUNTING VERSION



Single biscuit collection from gravity feeders



Counting portions maker





EURO 88 MULTI-BELTS FEEDING SYSTEM

EURO 88/CF3 FLOW PACK WRAPPING MACHINE COMPLETE WITH THREE 90°-110° BELTS FEEDER

The EURO 88/CF3 model is designed to receive longside leading products, placed in single line. This model has a 3-belts feeding system placed at 90° or 110°. The system maintains products at extremely low and carefully monitored pressure and it is suitable for semi-automatic and full automatic wrapping lines. Each belt is driven by independent brushless motor. This solution specially designed to handle regular-shape products such as enrobed chocolate bars, dry



biscuits, wafers and all the products that allow contact with each other during the feeding and timing process.

Products must enter the feeder crosswise.

The feeder working principle is based on the **recovery of empty spaces** on upstream flow, **automatic buffering** of products at controlled pressure and - after that - a **progressive separation** of the buffered products to make **soft and** therefore **gentle**, at high speed, the action of the wrapper infeed chain. The EURO 88/CF3 is mainly designed for single packs, but can also handle multipacks.

EURO 88/HSF4 MEDIUM SPEED FLOW PACK WRAPPING MACHINE WITH "IN LINE" LOW AND MONITORED PRESSURE FEEDING SYSTEM

The Euro 88/HSF4 model is designed to receive medium or large size, short-side leading products, placed in single line. The feeding system consists of 4 belts "in line". Each belt is driven by an independent brushless motor. The feeder buffers, spaces and times the products into the wrapper infeed chain.

This model is particularly suitable for wrapping snacks, bars, chocolate and soap.



EURO 88/HSF8 HIGH-PERFORMANCE FLOW PACK MACHINE WITH PRESSURELESS INTEGRATED FEEDING SYSTEM

The EURO 88/HSF8 model represents the successful combination of the EURO 88 wrapping machine with the unique and inimitable 8-belts HSF feeder.

Eurosicma developed a completely **pressureless high-performance feeding system**, specially designed to handle products



This feeding system is particularly suitable for **handling "difficult" products** such as nougats, healthy sticky bars, sponge cakes, jellies, gums, enrobed chocolate bars, biscuits, wafers, thin products and many more.



This feeding solution presents the following features:

- + It times the products using 8 belts independently driven by brushless motors and feeds the products into the chain conveyor of the wrapper avoiding any friction between products and belts thanks to the eight different speed corrections.
- The HSF feeder in its standard version is capable of speed up to 800 pcs per min. With the addition of a special kit, it can speeds up to 1000 pcs per min.



HSF8: pressureless high-performance feeding system. Extremely easy and fast tool-free cleaning for plates, belts and transmission rollers. Auto-tensioning and auto-centering belts' system.



SPECIAL APPLICATIONS ON MULTI-BELTS FEEDING SYSTEM: Side Transfer Feeder (STF) - Soft Side Transfer Feeder (SSTF)

Eurosicma has developed complementary devices to add to the traditional concept of multi-belts feeder. To accommodate Customer's specifications may be deeply customized,

The Side Transfer Feeder (STF) is a servo motorized device designed to transfer products from the multi-belts feeder into the chain of the EURO88 wrapping machine.

This technology is particularly employed to handle and feed wafers or bars to wrap in multipack.

Products can be naked or already wrapped,



Multipack overwrapping application



Side Transfer Feeder (STF)



The Soft Side Transfer Feeder (SSTF) having a double servo motorized system enhances the transfer of the products at high speed operating in the gentlest way.

The big advantage of this solution is the delicate handling of the product at high speed thanks to the continuous movement of insertion and, at the same time, direct transfer into the chain of the flow wrapper.

Both devices can be supplied both single and twin versions, even complete with integrated self-cleaning cutting unit.



Soft Side Transfer Feeder (SSTF)



Self-cleaning cutting unit



EURO 88/HSF NOODLES

HIGH-SPEED AND PERFORMANCE PACKAGING SYSTEM FOR INSTANT NOODLES

Starting from the leading edge technology already developed in the pharmaceutical field, Eurosicma has created for the food industry a packaging system for instant noodles, both fried and riced. This high-performance wrapping line is provided complete with the HSF8 belts feeder and the automatic dispenser for cutting and placing seasoning bags into the noodles' packs.



Some of the added values are:

- + Seasoning Bag Feeder cuts bags coming from strips and places them on the noodles' cakes. The continuous feeding and rotary in phase cutting uses a special rotary cutting unit. This system is totally integrated in the control system of the wrapping line and it can be easily customized to feed multiple seasoning bags per pack. A configuration of up to three independent feeders per wrapper is currently available.
- + HSF8 High Speed Feeder and timing system with 8 belts individually servo driven prevents pressure, blocking, breaking and chipping of the noodle cakes and permits fine adjustment of the product flow.
- + High Performance no noodle no seasoning bag automatic function allows to minimizes waste by not placing the seasoning bag(s) in the unlikely event that a noodle cake is missing. The system is able to detect the missing noodle cake and wait for the successive one.

- + Cutless system. In case of a product out of phase, once passed through the box former, the system keeps the cross sealing jaws in open position, avoiding any jams.
- + Several selection devices such as empty bags, empty sachet, bags with sealed sachet are available upon request.



Seasoning Bag Feeder





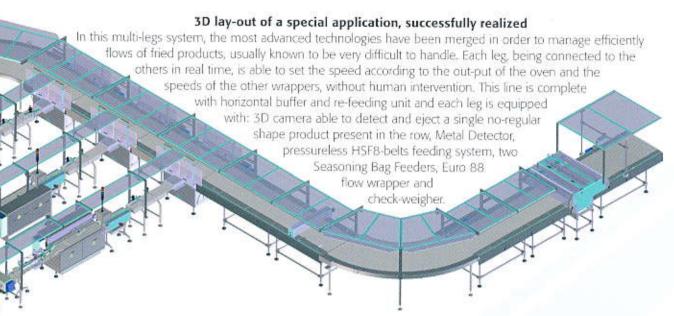
FULLY CUSTOMIZED FEEDING SOLUTIONS FOR PRODUCTS TO HANDLE WITH BELTS SYSTEMS

SOME EXAMPLES OF HIGH-PERFORMANCE
AUTOMATIC PACKAGING LINES FOR PRODUCTS
COMING IN ROWS TO WRAP IN FLOW PACK STYLE
ACCORDING TO PRODUCTS' SPECIFICATIONS,
EUROSICMA'S TECHNICAL DEPARTMENT IS ABLE TO
DESIGN AND DEVELOP TAILOR-MADE SOLUTIONS



Twin packaging lines complete with Carton Feeder from reel





DYNAMIC FEEDING AND GENTLE HANDLING

EUROSICMA'S KNOW HOW TO GET CONSTANT AND TOP PERFORMANCE OUTPUT TOGETHER WITH THE HIGHEST PRODUCTION EFFICIENCY

Multiple wrapping line - SMART distribution systems for enrobed cakes





Multiple wrapping line - SMART distribution systems complete with re-feeding unit for noodles



SMART

FEEDING SYSTEM FOR SINGLE AND MULTIPLE WRAPPING LINES SUITABLE FOR PRODUCTS COMING IN ROWS AND ALIGNED

The SMART Feeding System is the right solution to feed single and multi-legs wrapping lines.

Starting from the end of the production line, this feeding station is able to control and distribute orderly products coming in rows.

Advantages of the SMART Feeding System:

- Dynamic buffer: the distributed row of products is loaded while the previous row is already downloaded and already gone towards the packaging line
- + No gap between the rows distributed by the SMART station
- + The alignment of products is assured
- Possibility of starting the products' rotation during the row distribution's phase, simply through parameters setting
- Possibility of adding a fully automatic re-feeding unit for the buffered products
- Real time communication between SMART stations and wrapping legs for the auto-speed adjustments of the whole packaging line
- SMART stand-by function available for multi-legs wrapping lines



ALIGNING SYSTEMS

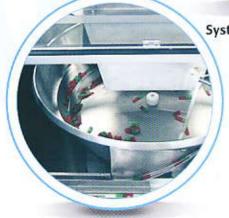
FEEDING SYSTEMS FOR SINGLE AND MULTIPLE WRAPPING LINES SUITABLE FOR PRODUCTS COMING RANDOMLY

Thanks to the great experience achieved in handling a wide and diversified range of products, Eurosicma developed specific feeding systems as alternatives to the SMART and MINISMART systems, able to handle also products coming randomly.

According to the nature and dimensions of the products, a wide range of aligning systems can be supplied, such as:

- Horizontal conveyors working at different speeds, complete of vertical belts and shaped product guides
- + Centrifugal and vibrating orientator
- + Centrifugal aligners





Vibrating orientator

MINISMART

FEEDING SYSTEM FOR SINGLE WRAPPING LINES
SUITABLE FOR PRODUCTS COMING IN ROWS AND ALIGNED

Starting from the end of the production line, this feeding station can handle a flow of products coming in rows and distribute it orderly into a wrapping line composed of one leg.

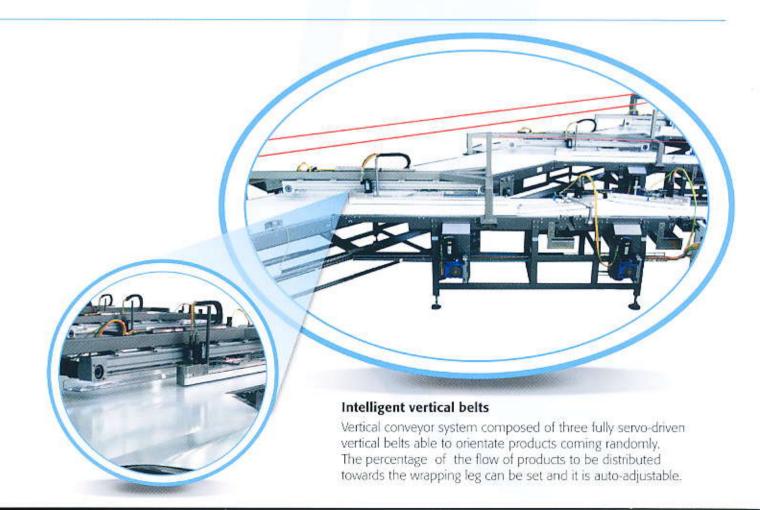
This feeding solution presents the following features:

- + Dynamic Transfer System for products' alignment
- 90° exit belt positioned at the end of the station, allowing products' transfer into the feeding system (either 90° or 110° or others)
- Telescopic System for the rejection of defective and oversized products, bad aligned rows, etc.. Such rows are discharged into a dedicated plate placed at an inferior level.

Advantages of the MINISMART Feeding System:

- + Over 70 rows/min
- + Products is monitored at every stage of the transfer
- + Easy cleaning and maintenance
- + Easy product change with no requirements of changing parts and manual adjustments







DETAILS



Removable jaws



Fixed jaws



Adjustable box former



System to remove air from packs



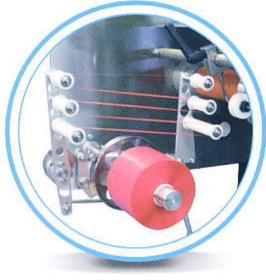
Pre-cut carton feeder





Carton feeder from reels

DETAILS



Longitudinal easy opening



Air conditioning system



Cooling system for belts roller



Gas flush



Stainless steel covering parts





PC BASED TECHNOLOGY

To grant a qualified and efficient long-term after-sales assistance for the mechanical, mechatronic and software parts, Eurosicma Group invested a lot in order to increase and stratify as much as possible its specific know-how also as far as control axis systems is concerned.

Since the nineties, due to the rapid electronic components' development and their very fast and intrinsic obsolescence, **Eurosicma**, instead of employing the many heterogeneous and low performance control systems available on the markets, **chose to develop a specific and optimized control axis system for its products which it would be able to preserve the value of the application and the know how developed in the years to come.**

To satisfy such corporate needs, in 1990 the Company O.A.SYS, owned by Eurosicma, was founded.

Preserving the value of the application is the intrinsic system's capacity of evolving together with the technological development that makes available even more complete and performance Hw and Sw.

The driving goals that lead to the development of the control axis system have been the **absolute separation** and **independence between the choice of the hardware parts and the software**, both as **standard** as possible, that is independent from the manufacturer, and **"open source"**.

The most suitable technology to achieve these aims was the **PC Based Technology** and today is still the most performance one.

Thanks to this courageous choice, Eurosicma is able to give its Customers the right support, supplying autonomously the electric and electronic spare parts primarily installed or, in case of components out of production, Eurosicma is able to supply the currently ones, granting the full compatibility. Our machines have the possibility of updating with minimal costs. Past, present and future become one thing.

Since 1997 the Pc based architecture has drastically simplified the realization of any project. All the projects are equal and what changes is only the number of the linked elements. The configuration is essential: industrial PC, an open operative system and a fieldbus that interconnects the I/O cards, and the control drivers of the brushless motors. The current generation is characterized by the appreciated fieldbus Ethercat, the only one able to grant the three main requirements: high technical characteristics of speed and reliability; open source; the only standard universally and concretely employed on the market. Their use and interchangeability are granted since they correspond to the rules of the Ethercat Technology Group (ETG) and so widely provable on the market.

Hardware and software elements are two separate entities, therefore it is possible the updating of only one part to improve the performance of the machine.

Since the 1997 up to now, over than 1500 controls have been employed and over than 15.000 drivers have been linked to the digital bus.

The software configuration options are registered in a **dynamic-link software library** by the Automation Department. The methodology requires the principle of the **compatibility of the releases**, **therefore the latest versions of the software can be installed also on machines previously supplied.**

Practical examples of the advantages coming from the employment of the PC Based Technology are that applications realized 15 years ago can be easily adapted to the current technologies and that, for all the machines supplied, for the oldest ones too, any kind of spare parts is always available.



PRODUCT SIZE RANGE

Machine model	LENGTH		WIDTH		HEIGHT OR THICKNESS	
	Min.mm	Maxmm	Min.mm	Max.mm	Min.mm	Max.mm
Euro 88 Universal	30	400	15	120	5	80
Euro 88 P.W.F.	35	120	35	65	5	60 (*)
Euro 88 V.M.	35	95	35	65	5	60 (*)
Euro 88 EDG	55	250	38	80	38	80
Euro 88 CF3	30	160	25	100	5	60
Euro 88 HSF4	30	400	15	100	5	60
Euro 88 HSF8	30	160	15	100	5	60
Euro 88 Noodles (noodles)	50	160	50	120	15	60
Euro 88 Noodles (seasoning bag)	50	200	30	80	1	7
Euro 88 STF	50	400	30	160	10	50
Euro 88 SSTF	50	250	30	100	10	30
Smart	35	160	15	100	7	45
Minismart	35	160	15	100	7	45

(*) Max. thickness of single product= 20 mm

IN ITS STANDARD BASIC VERSION, THE EURO 88 UNIVERSAL IS COMPOSED BY:

- + Single reel holder with film yield compensator
- + Bidirectional photocell for print registration
- + One pair of cold longitudinal sealing rollers
- + Two pairs of hot longitudinal sealing rollers
- + Cross sealing fixed or removable jaws
- + Out feed belt
- + 10" display (Touch Screen)

FILM REEL DIMENSIONS

Eurosicma has a dedicated Team of experts specialized in testing all kinds of wrapping materials.

Min. Inner diameter (mm)	70	
Max. Inner diameter (mm)	79	
Max. External diameter (mm)	380	
Reel width (mm)	350 (500 opt)	
Max weight (Kg)	25	

Wrapping materials: all heat or cold sealable materials: polypropylene, cellophane, coated paper, aluminium, laminates, etc...

DISTRIBUTION SYSTEMS

	Smart	Minismart	
Standard width	(*) 1000 mm	(*) 1000 mm	
n° of raws/min	up to 55 (single strain) up to 120 (multiple strain)	up to 70	
Power consumption	7,5 Kw	7,5 Kw	
Air consumption	50 NL	50 NL	

(*) Other widths available upon request

AVAILABLE OPTIONS

- + Proportional valves
- Customized cross sealing roller group, according to Customers' needs (various crimps type)
- Special execution of the cross sealing jaws (e.g. eurohole)
- Additional pair of removable jaws (standard rollers with 2 jaws)
- Double reel holder, unwinding film unit, auto-splicer
- + Adjustable box former
- + Water cooling
- + Gusseting (mechanical or pneumatic)
- + Several selecting devices for defective packs available upon request
- + Counting unit
- + Coders
- + Ethernet connection
- + And several others