### GENERAL BROCHURE



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#### WWW.ISOLTECH.COM.ES

### **ABOUT US**

We started our activity in 2020 with a team of professionals with extensive experience acquired over more than 30 years working in the pharmaceutical, food, chemical and cosmetic industries.

We sell machines of recognized brands from European and North American market. We provide technological solutions and the necessary engineering to satisfy the needs of our clients.

Our objective is to consolidate and maintain business relationships with clients who entrust us with their projects.

### WE COLLABORATE WITH THE FOLLOWING COMPANIES

### ENGINEERING



MACHINES



### **ENGINEERING AND PROCESS PROJECT**





WILLIAM ALEXANDER CRAIG Oettingen, Bayern, Germany

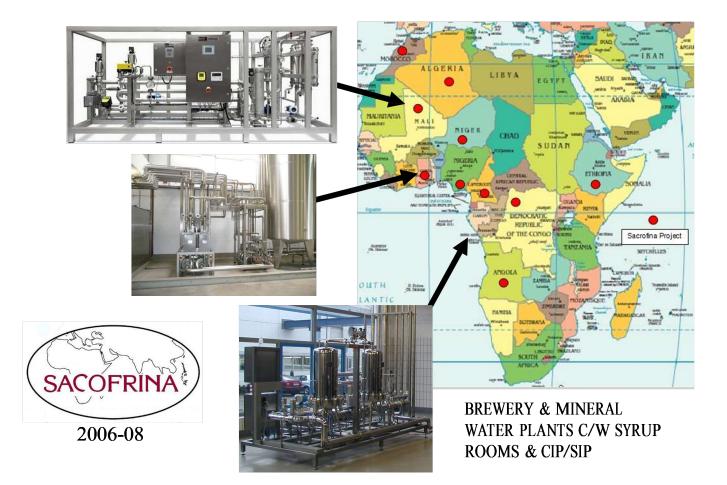
Process Design & Project Management Solutions

#### **PRO-DMS GENERAL PRESENTATION**

Detail of some projects carried out by PRO-DMS.



□ Allen Bradley PLC systems





Full modular utilities provision

2014-15



#### **INJECTABLE & INFUSION PILOT SYSTEM**

- Design, construction, installation and validation of a complete lipid emulsion pilot line for injectibles.
- □ Process system can produce pilot batches for various different product types incl. oils, solvents, lipids, powder and WFI based solutions.
- □ Fully automatic system complete with SCADA and batch data recording systems (EBR)
- Validated to full CFDA cGMP and GAMP 5 automation.



DNL

Rin-Tech







#### 2018-19

for

Design, construction, installation and validation of a scalable multi-purpose process system

STERILE INJECTABLE CMO SYSTEM

- injectibles. □ Industry 4.0 concept with complete traceability of
- process but with full mobile, modular versatility. Fully automatic system complete with SCADA and batch data recording systems (EBR) and MES
- Validated to full CFDA cGMP and GAMP 5 П automation with CFR 21 Part 11.



### **PROCESSING EQUIPMENT**

### **DILUTORS / REACTORS / FUSERS**

They are highly versatile equipments. They are prepared to carry out in the same unit, the process of dispersing, mixing and diluting products of different viscosities. To improve manufacturing times, they can incorporate a system vacuum and double jacket for heating and / or cooling. In all the models the manufacturing volume ranges from 25 to 40,000 liters. and the materials construction can range from stainless steels to coatings specials.





#### **EMULSION**

The emulsifier optimally solves the processes of heating, premixing, adding, emulsifying and dispersing, deaerating and cooling the product, without transferring or intermediate handling, which is always at odds with manufacturing costs, productivity and risks of cross contamination.





### **MIXING OF SOLID**

Biconical Blender, Vertical Conical Mixer, Ribbon Blender, V Blender, Intensive Horizontal Mixer, Drum Mixers and Bin Mixer are available.



### MIXING-GRANULATION AND DRYING GRANUTATIONS MACHINE

Mixer / granulator models and the TRICHOP model that mixes, granulates and dries are available. The MGR Trichop mixer granulators have been developed applying the most advanced design technology with the aim to optimise mixing, granulation and drying processes for powders in a clean medium. Consequently in one single operation, the Trichop mixes, humidifies dosed liquids, granulates and dries.



### **FLUID BED DRYER - GRANULATOR**

Includes removal of moisture from the product, top spray granulation using additives and the coating of solid particles with paraffins or similar via top spray and the Wurster process





### **PRE CLUSHER**



MÁXIMA DIMENSIÓN DE CARGA	PRODUCTO FIN	
MAXIMUM FEEDING SIZE	FINAL SIZE	PRODUCTION CAPACITY
30 cm	2/3 cm	2 ton/h

With simple, yet robust design, the pre-crushers are specially designed for reducing lumps or blocks of soft and medium-hard materials into pieces of a few centimeters that have to be ground or mechanically conveyed afterwards to reach higher finesses.

The product, fed through the feeding hopper, is ground by the rotation of the lump-breaker blades that pass through the device of contrast, and then conveyed in the discharging hopper.

### **HAMMER MILLS**

MAXIMA DIMENSION DE CARGA MAXIMUM FEEDING SIZE	PRODUCTO FINAL FINAL SIZE	CAPACIDAD PRODUCTIVA PRODUCTION CAPACITY	
15 mm	100 micron	10 ton/h	

Hammer mills are more widely used in the chemical, pharmaceutical and food industries, as well as for fodder and minerals. Inside the mill, manufactured in two parts hinged together, the size reduction takes place by collision between particles and the grinding elements consisting in hammers assembled on a rotor, Once reached the required size controlled by the classifying screen, the product is discharged.



The RAPIDE series, is suitable to meet the requirements of medium and medium / fine particle reduction. It can be used to grind various materials: fibrous, tough, hard, crystalline, brittle, moist. The series TURBINE, purposely developed for fine chemical and pharmaceutical application, is characterized by the ease of assembly and cleaning operations. Both types, for specific process requirements, can be realized in cryogenic configuration.

### **CONE MILLS**



MÁXIMA DIMENSIÓN MAXIMUM FEEDING SIZE	PRODUCTO FINAL FINAL SIZE	CAPACIDAD PRODUCTION CAPACITY
15 mm	300 micron	300 kg/h

The cone mill is mainly suitable for de-lumping and sizing of products, in medium batch, having heterogeneous particle size.

The product, once reduced in size by impact and compression forces generated by a rotating impeller, are then discharged in the underlying container.

The versatility of the cone mill is increased by the possibility of changing the mounted screen, the speed of the rotor and the distance between the rotor and the screen.

### **MICRONIZERS**

MÁXIMA DIMENSION DE	PRODUCTO FINAL	CAPACIDAD PRODUCTIVA
MAXIMUM FEEDING SIZE	FINAL SIZE	PRODUCTION CAPACITY
< 1 MM	5 micron	UP TO 1000 KG/h

The jet mill is the most suitable system for the micronizing of chemical and pharmaceutical products.

Product particles are fed into the milling chamber through a Venturi injector.

High-velocity air, or nitrogen, is introduced into the mill through jet nozzles placed around the circular chamber. Particles, accelerated inside the milling chamber, are dragged in a vortical movement causing these to collide repeatedly and to be reduced to small dimensions. The exhausted flow carries micronized particles into a suitable cyclone-filter where it is dedusted through a set of filtering bags and discharged to the outside. Micronized product collection takes place into the bottom hopper of the cyclone-filter.



#### **CONTINUOUS LINER SYSTEM**



The continuous liner system is a reliable and simple solution for bag filling operations of toxic powders, ensuring a high containment degree to protect the operator, the environment and the product itself.

Easy to install, completely pneumatic, suitable for "LINER" of different size, material and thickness.

The continuous liner system can also be equipped with integrated weighing systems, roller conveyors and inerting with nitrogen

#### **VERTICAL DEDUSTING**



Dedusters are tablet cleaning systems. These automatic machines are designed to eliminate dust and burrs from tablets. They can reach a speed of 350,000 pcs/h.

Specifically, the dedusting machines are positioned directly at the exit of a compressing machine and, by means of a seismic vibration, along a journey of 4 to 7 meters, clean the tablets from the dust of which they are covered.

The resulting powder, following a different path from that of the tablets, can be recovered and reused. Easy to clean and disinfect.

#### **GLOVE BOX**

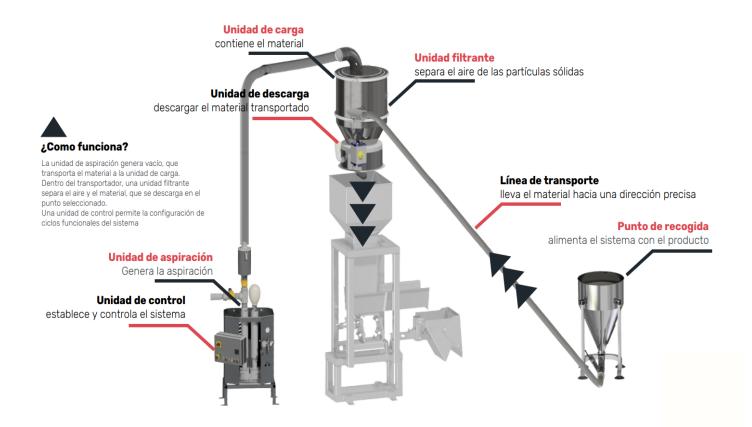


The different needs of the pharmaceutical market require a flexible approach that can solve specific problems. We design and build custom Isolators that allow the safe handling of API's and HPAPI's both in a safe area and in an explosive atmosphere.

Our Isolators are made of a monolithic structure of stainless steel AISI 316L and they are dedicated to the handling of API's and HPAPI's in solid form (up to OEB4 and OEB5).

### **INDUSTRIAL VACUUM**

Maximum level of hygiene and no contamination of the working environment. Industrial vacuum cleaners for application in food and pharmaceutical industries must ensure absolute hygienic standards. HEPA filters, stainless steel construction, complete grounding, but also antistatic, stainless steel accessories suitable for food contact and for suctioning materials at high temperatures. The ATEX certification adds a further level of security thanks to certified components for use in ATEX areas.



Single-phase or three-phase conveyors for the long-distance transport of powders and granules. This unit can be extremely tailored to fit customer's needs, thanks to the modularity of the components: separated or integrated suction units that can be boosted at a later time, without having to replace the entire pneumatic conveyor. Multiple construction options for the total integration on customer's machinery and for constructive needs. Top quality conveying.

#### BIOCONTAINMENT

Biological containment is achieved by studying an optimized layout that includes an AIRLOCK pre-chamber inlet, accessories for the exit of infected material or for the interfacing of equipment and process systems on the wall, a containment structure with very low losses, a double barrier at the air inlet and outlet by means of HEPA filtration, a double HEPA filtering section at the expulsion for safety redundancy, a self-ventilating extraction module of industrial design for continuous use and high performance. A UVC stage sanitizes the dirt-side surface of the terminal HEPA filter.



Flexwalls Bioroom kit is composed of equal portions to be joined together on site until the size of the desired confined environment is obtained.

### **STAINLESS STEEL CONTAINERS**

Our products meet the needs of every department of the company, from the laboratory with containers for the sampling of products, to the production areas with containers and process plants, to the warehouse with palletizing or wheeled storage containers.

Starting from our customers' requirements, our technical office is able to meet all needs by designing customized containers, built to meet the manufacturing specifications required by the CGMP standards, and FDA guidelines.



Available with P.E.D. and ATEX certification, our containers are designed for a correct containment and discharge of any type of product; powders, liquids, gels and creams.

**GALENIC MACHINERY** 

### MANUAL FILLING MACHINE

#### MODEL MC 1/2 - MC 1/4



MC-2 manual filling machine to process 100 capsules from size 000 to 5. The machine allow the simultaneous opening, filling and closing procedure for 100 capsules. Combined with manual orientator MC-1, which is also available to process capsule sizes 000 to 5, and which is capable of orienting in two phases 50 capsules at a time on the MC-2 filling machine, it can considerably reduce working times. While the capsule opening system has been tried and tested for many years, the building materials have been recently updated:

The transformation kit for changing capsule sizes is built using a special patented resin (ERTACETAL), and stainless steel for the parts in contact with the product. The frame is made of a single casting of anodized hard aluminium, so as to facilitate cleaning.

It is possible to change sizes using the transformation kit.

Moreover, upon request, accessories to facilitate the preparation are available: fixed and adjustable powder hoppers, pressure pushers of various sizes, vibrating table to facilitate the smooth descent of the powders inside the capsules (a potentiometer helps the operator to find the right intensity for the vibration).

MC3-MC-4 are, respectively, the 60-capsules-at-a-time orientator (60 + 60), and the 120-capsule filling machine, with the same characteristics described for the previous models.



#### MODEL MC 100

Studied for the galenic laboratory of the Pharmacy, the MC 100 system is made up of an orientator and of a capsule filling machine mounted on the same conveniently sized base that can fit on any work table.

The capsule fitting machine is equipped with a vibrating plate and clamps to facilitate processing the powders and the full range of accessories allows to process of capsule sizes, both traditional and DB Caps.



The orientator does not require any maintenance operations and cleaning the parts of the filling machine that come in contact with the powders is extremely easy. The MC-50 is also available upon request, with the same structure and the same characteristics as the MC-100, but intended for the small productivity of 50 capsules.

#### MODEL MS 6



A Semi-automatic capsule filling machine for preparing 300 capsules simultaneously.

Normally combined with the MS 4/7 or MS 1 orientator, the machine is suitable for all sizes of hard gelatine (from 000 to 5) and, by using special accessories, also for DB Caps formats.

The machine is equipped with a vibrating plate with adjustable intensity and a unit for compressing the powders that facilitates their smooth descent inside the capsules.

The procedure for changing format is extremely simple and quick. Some accessories with which it is possible, for example, to reduce the number of holes or special hoppers to insert granules or pellets into capsules make the machine even more versatile.

The machine can be cleaned easily and quickly and the accessories coming in contact with the powders can be removed extremely easily, thus facilitating the operators' daily maintenance.

#### MODEL MS 6 AUTOMATIC

Pneumatically-driven semi-automatic capsule filling machine to make 300 capsules.

The opening and closing operations of the capsules and the compression of powders are carried out by pressing buttons located at the front of the machine and directly connected to the pneumatic unit. This ensures that the operations run perfectly and, most importantly, that the compression of powders inside the capsules is always consistent.

Normally combined with the MS 4/7 or MS 1 orientator, the machine is available for all hard gelatine capsule sizes from 000 to 5 and, with special accessories, also for the DB Caps sizes.

The procedure for changing size is extremely practical and quick and requires, after the fitting has been changed, a simple adjustment.

The cleaning operations are also very simple: the accessories coming in contact with the powders can be dislodged extremely easily, facilitating the operators' daily maintenance duties.

As optional it is possible supply silenced compressor.



#### MODEL MS 1 AUTOMATIC



MS-1 is an automatic orientator capable of quickly orienting 150 or 300 capsule at a time in less than a minute.

This machine is ideal used in combination with one or more semi- automatic capsule filling machines such as models MS-3N, MS-6N and MS-6AUT and is used mainly in R&D labs and by pharmaceutical, phitotherapeutic and herbal companies with medium production.

The parts coming in contact with the product can be easily inspected and dislodged, and are made of FDA approved materials. The shift of production is extremely easy and quick.

#### **MIXING OF SOLIDS**

#### MODEL JUNIOR



Owing to its small size, it is able to fit in any laboratory.

Junior is equipped with a "V" shaped stainless steel container with a 0.5 or 0.25 liter capacity: the internal and external surface treatment can be of electro polisher or of RILSAN covering to facilitate the greater flow ability of the powder inside the container.

The container can be equipped, on request, with fixed or mobile vanes to break up lumps of powder and allow for a perfect mixing, even of small quantities of powder. The machine is equipped with a PLC that controls all functions: from rotation time to speed as well as inversion time of the rotations. The machine is equipped with a security system that stops movement in case of accidental opening of the protection guard.

It can be easily cleaned thanks to the double opening of the cylinders forming the "V" shaped jar.

#### MODEL MP 6

Powder blender equipped with an electro-polished steel "V" shaped cylinder with capacity of 1.5, 3, 5 and 12 liters capable of satisfying the diverse needs relating to the amounts of powder to be mixed.

Upon request, the container can be fitted with stainless steel caps and shafts with fixed vanes to break up lumps of powder and guarantee perfect mixing.

Thanks to the two openings at the two ends of the "V" it is easy to clean and wash the container, so that it is immediately ready for repeated mixing.



Thanks to the two openings at the two ends of the "V" it is easy to clean and wash the container, so that it is immediately ready for repeated mixing.

A touch screen panel is installed on the machine and it is connected to a PLC Siemens on which mixing functions such as time, rotation speed and inversion time of the rotations can be set.

### **SUCTING HOOD**

Table 6 IV supplement for the safety of operators in charge of powdered preparations. It also complies with the provisions of the permanent Commission for the revision and publication of the Farmacopia Ufficiale.

The SALP suction system can also be used for the suction of fumes and odors. It is in fact equipped with a double filter: an activated carbon filter and a synthetic filter to retain powder particles.

It does not require to carry out adjustments or changes to the work station: its height and inclination can be adjusted. Its ability to adapt to any filling machine (even the ones made by other companies) makes it an extremely versatile machine.

The SALP powder suction system can easily be placed in the area in which the preparation is carried out and, owing to its limited size and because it is very silent, it does not disrupt the operator's work.



### EMULSIFY



Turboemulsifier Mixer DS-3 can mix, homogenize, emulsify and disintegrate with considerable versatility.

It can work with a capacity of up to 10 liters. The motor, with a power of 600 watts, is capable of developing up to 12.500 nominal revolutions per minute.

All immersed parts, except the compass, are made of stainless steel.

The DS-3 turboemulsifier is equipped with a set of 5 steel heads for mixture, emulsion, breaking-up and homogenization.

The mixing system allows to considerably reduce the working times compared to a normal agitator.

#### **LIQUID DOSIFIER**



The Easycream device allows for rapid and secure dosing of liquids and slightly viscous products for filling and packaging.

The device is user-friendly and a PLC is used to set the time of the operation.

Once the correct dosage and number of revolutions of the peristaltic pump has been ascertained using, for example, the graduated cylinder, by turning on the start switch, the machine will execute the exact number of revolutions and automatically stop at the set value.

This solution allows for remarkable precision in the repeatability of the doses. Cleaning is extremely simple and quick since only the silicon tube comes into contact with the filling substances. By keeping several tubes on hand there will be no problems wasting time for maintenance.

The stainless steel 3 liter hopper is available upon request.

### **ELECTRONIC COUNTER OF CAPSULES AND TABLETS**



Electronic counting machine is suitable for counting the most diverse solid pharmaceutical forms such as capsules, round and oblong tablets, softgel and other tablet dimensions.

The diameter of the manageable solid forms must be between 5 and 25 mm and the maximum thickness 20 mm.

To remove powder and small fragments (especially when counting tablets) it is possible to equip the machine with optional accessories such as: tray with sieve and a suction system with two points. The disk distributing the solid forms is made of crystal so that the product to be treated may not be exposed to the risk of an electrostatic charge.

The parts coming in contact with the product can be easily inspected and dislodged, and are made of stainless steel (AISI316L on request) or FDA approved materials. All operations and settings are operated by a touch screen and all functions have been planned in keeping with GMP regulations.

The production changeover is extremely easy and quick because few and simple adjustment operations are necessary.

The accessories that can be supplied include several exit cones suitable for vials with various opening diameters.

### AUTOMATIC MACHINE FOR MAKING SACHETS SEALED



Automatic intermittent machine for making sachets sealed on the four sides, the size of the sachet can be chosen from the following widths: 30, 40, 50, 60, 70 and 80 mm The length of the sachet can vary from 30 to 135 mm. It is possible to use all the types of flexible multi-layer supports (polylaminate) thermo-sealable (external layer in paper, plastic or aluminum), with or without printing. A printing unit makes it possible to print variable data such as batch numbers and expiration dates.

MP-100 is a machine with a very compact design, it can be operated also in small spaces and it is extremely flexible because it can be adapted quickly, simply by changing the dosage unit, to the packaging of liquids, creams, powders and solid bodies (capsules, tablets, soft gel, opalines, etc.) with a maximum measuring volume of 40 ml. This versatility enables the MP100 machine to be used in the pharmaceutical, cosmetics, herbal, chemistry and nutrition sectors.

The parts coming in contact with the product can be easily inspected and dislodged, and are made of stainless steel (AISI316 L on request) or FDA approved materials.

All operations and settings are operated by a touch screen and all functions have been planned in keeping with GMP regulations.

Machine can be equipped, by request, with remote connection and with nitrogen inserting system.

### **PACKAGING MACHINES**

#### LIINEAR AUTOMATIC MACHINE FOR FILLING AND CLOSING TUBES



Tube Fillers are automatic packaging machines used for filling and closing plastic and aluminum tubes. Our machines stem from over 40 years of experience in the field of automatic packaging tube fillers.

The tubes fillers for automatic packaging are available in both linear and the classic rotating versions. In particular, we are able to provide filling and closing lines of tubes in different diameters and in various materials such as: Polyethylene, Laminate, Polyfoil and Aluminum.

In addition, for large productions, high-capacity tube loading "Jumbo" stocks are available. Tube stocks are ideal for feeding plastic and aluminum tubes of linear tubes filling machines. However, they can also be used for applications other than those of an automatic packaging tube filler.

The automatic packaging tube fillers are designed according to the customer's needs, the characteristics of the tube and the required production. Multiple options and dedicated customizations are available.

Models available for filling and closing tubes up to 400 pieces / min.

#### **ROTATIVE AUTOMATIC MACHINE FOR FILLING AND CLOSING TUBES**





Each packaging machine can be equipped for filling and closing tubes from 10 to 50mm in diameter, with a production speed that reaches 4.500 pcs/h. The tubes' materials can be: Polyethylene, Laminate, Polyfoil, Coex and Aluminum.

### HORIZONTAL AUTOMATIC CARTONING MACHINE



The automatic packaging cases are available in horizontal version with alternating motion and continuous motion.

In particular, our automatic packaging blister machines are equipped with excellent flexibility in terms of machined case formats and production speeds, up to 15,000 pcs/h.

Our blisters machines are useful machinery for the automatic packaging of: tubes, bottles, blister, vases and any type of product in the pharmaceutical, cosmetic, food and chemical sectors.

#### **BLISTER MACHINE**



The TF3 is a high output blister machine with speeds exceeding 400 blisters per minute, making it the perfect machine for high volume production. The TF3 accommodates all types of feeding systems and printers. The TF3 Thermoformer has a unique laser feedback system to ensure continuous blister registration.

The TF2 is a versatile medium to high output blister machine. A format range of 170mm x 300mm makes the machine perfect for a wide range of applications including standard HUD blister packs and BINGO style blister packs. The TF2 also features a 40mm.



With speeds exceeding 80 indexes per minute and a format range of 90mm x 170mm, the TF1e delivers world-class standards in cGMP and standard features typically found on larger blister machines. Blisters up to 25mm in depth can be formed on the TF1e



The precision-engineered BlisterMate<sup>™</sup> executes multiple production processes without add-ons. It's a powerful blister packer with precise HMI controls so you can produce an endless variety of blister features.



With speeds up to 100 indexes per minute and a usable forming range of 120mm x 165mm, the TF1pro blister machine is a versatile platform. It is not only designed with the latest cGMP features, but it can also be configured to transfer blisters out the front, rear, or inline with the machine.



The TF1 is flexible to set up and run, as well as efficient and quiet. Built with cleaning and cGMP standards in mind, this machine also offers quick-change tooling. Although the footprint is small, it is capable of producing in excess of 80 large HUD blisters per minute.



### **BOTTLE CAPPER**



The screw type bottle capper CAS Series offers variety in speeds to meet all of your bottle capping needs. With speeds ranging from 10 to 1200 bottles per minute, no matter what your bottling capping needs may be, the CAS Series Screw Capping Machine is able to meet them. The screw type bottle capper comes with a settable top load and positive gripping, articulating cap chucks.

#### Standard Features (The Model CAE Series):

- Speeds range from 120 to 600 bottles per minute
- One machine for screw-on caps and oriented or non-oriented push down closures
- Standard frame sizes, 262, 320, 360, 480, 600, 640 and 720 for a variety of line speeds
- Cap pick up by "Pick n' Place" cap transfer assembly
- Quick release capping chucks are standard
- Maximum use of 304 Stainless Steel
- High speed change-over design to facilitate batch processing



• Stainless steel lubrication free head slides



Beltorque® In-Line cappers feature high quality and precise cap tightening. With the use of synchronized belts, this versatile and innovative machine applies cap torque without cap scuffing. The continuous-motion, unit has a single control for torque adjustment, and operates at speeds up to 150 units per minute.

The innovative Beltorque® capper features quick changeover with no tools and minimum dedicated cap change parts. It ensures compliance by applying consistent cap torquing.

### Standard Features (Beltorque High-Speed In-Line Cappers):

- Integrated cap elevator and cap chute
- Single control for torque adjustment
- Synchronized technology tightens cap with belts causing no damage to cap
- No tool, quick changeover, minimum change parts
- Stainless steel chassis
- Superior stability of the container during the cap tightening process
- PLC with HMI interface
- Quick and simple torque adjustments
- First station for applying the caps
- Second station for tightening & torquing of the caps
- All routine adjustments are scaled with no tools
- Validation of equipment is simplified
- Emergency stop button
- Polycarbonate front guard with interlock
- Adaptable on 36" high conveyor
- Runs on round, oval, square and rectangular containers
- Speeds up to 300 units per minute





#### Standard Features (Model RTQ 150 Retorquer):

- Heavy duty construction
- Stainless steel cabinet and support frame
- Variable-speed holding belts
- Manual height adjustment
- Timing belt driven
- 3 sets of tightening discs
- Variable speed tightening discs
- Spring loaded discs
- Air clutches for torque control
- No-tool adjustment
- Allen-Bradley PLC and HMI controls
- Speeds up to 300 cpm

### **CARTONING MACHINE**

**COTTONERS** 



The DELTA case packer machine line-up features the same balcony design with full walk-in access. In addition, all of our case and tray packers feature our Easy Case Clear-Out. This important feature easily releases problem cases, maximizing machine uptime.



Heavy-duty construction and robust design characterize Cottoners from NJM Packaging. Operation is simple yet precise, with a guillotine tearing device as standard equipment, and options such as missing cotton and wisp detection. A compact footprint makes them easy to incorporate into your particular packaging layout.

### **FLEXIBLE PACKAGING**

### MODEL FINAL CUT – HORIZONTAL



FINAL CUT series machines work both in automatic and intermittent mode, available either with simplex (1 production line) or duplex (2 production lines) version.

These are suitable for the packaging of products such as:

• Powder, granulated products, liquids as well as wipes and solid items.

Depending on the product, several dosers are available:

- Endless doser: Suitable for powder products
- · Volumetric doser: Great for granulated products
- Doser for Liquids and viscous products: With pump or piston

Final Cut Series		T-H13		T-H14	
Technical Data	Datos técnicos	Simplex	Duplex	Simplex	Duplex
Production (packs/minute)	Producción (Sobres/minuto)	100-110	200-220	90-100	190-200
Dimensions: (width x lenght) (mm)	Dimensiones (ancho x largo) (mm)				
Minimum	Mínimo	30 x 30	35 + 35 x 35	30 x 30	35 + 35 x 35
Maximum	Máximo	130 x 130	65 + 65 x 130	140 x130	70 + 70 x 130
Volume c.c. (in each sachet)	Volumen c.c. (en cada sobre)	1 to 60	1 to 20**	1 to 65	1 to 25*
Consumption	Consumo	2 Kw*	2 Kw*	3,2 Kw*	3,2Kw*
Voltage	Voltaje	380 V - th - p	h - n - 50 Hz		
Reel dimensions: (mm)	Diámetro Bobina (Reel size) (mm)				
Maximum diameter	Tamaño máximo	450		450	
Maximum width	Anchura máxima	260		260	
Core diameter	Diámetro interno	70-75		70-75	
Machine dimensions (mm)	Dimensiones máquina (mm)	2000 x 1250	x 850*	2300 x 1250	x 850*
Weight (kg)	Peso (kg)	750*		850*	
Operators	Nº operarios	1		1	

\*without accessories \*\*for each unit

### MODEL TM-300 - VERTICAL

**\***/01/10/0



DETALLES TECNICOS:	
PRODUCTION ( BAGS/MINUT )	50-80 Sobres por minute (por línea)
DIMENSIONES AXL	Min. : 15mm x 60mm Max. : 60mm x 200mm
OLUMEN CC	1 hasta 60
OLTAGE	380V - th - ph - n - 50Hz
CONSUMOS	5,9 Kw
DIMENSIONES BOBINA	Diámetro: 300 Ancho: 300 Diámetro núcleo: 70 – 75
DIMENSIONES MÁQUINA	1300 × 950 × 1510*
PESO MÁQUINA	500*
DPERADORES	1

The T-M300 is a multilane vertical packaging machine for stickpacks with heat-sealable film.With a motorized and intermittent drive, it shapes the sachet, doses the product and seals it by temperature in a stickpack form with three side of seal, cuts it horizontally and unloads it for its later handling in an automatic way, either via transfer or by means of an exit belt.



### **BFS EQUIPMENT**

### MODEL TM-300 - VERTICAL



The handling and packaging difficulty has been taken care of in a simple and elegant way allowing a fully automatic packaging of cyanoacrylate adhesive at a speed up to 18.000 units per hour in a fully automatic equipment to make bottles starting from polymer granules, printing of product name and other information on these bottles, filling and sealing them all within one continuous automatic line with reliability of over 99,5%.

#### MODEL MECAS

MECAS is an acronym for "Machine for Eurohead Cap Assembling and Sealing". Multiple hot-runner injection units and multi-cavity mould allow sealing of caps, limiting line losses and optimizing production.

The MECAS unit enables:

- Assembling the Eurohead Cap from its basic components (basic components are Plastic Caps, and Rubber disk).
- Orientation of the assembly caps in such a way that the injection point of the rubber disk falls away from the parting line (optional). This is an important step because it is difficult to insert the spike in the area where the sealing is located.
- Placing a drop of water for injection on a both the sides of rubber disk (optional).
- Placing the assembled cap onto the plastic bottle.



Sealing the cap to the bottle by injection moulding. The injected ring of plastic gives a perfect seal and visual indication of sealing. The perfect seal would ensure that liquid from the bottle would not come out even if the spike is removed.

### MODEL ULTACLEAN (RABS)



Conventional Blow Fill and Seal technology has now been in use since the last 40 years, and it is widely accepted technology proven to confer high sterility assurance levels. The advantage of this technology has been even recognized by EU GMP. Actually, in a revised Annex on the manufacturing of sterile medicinal products, a separate paragraph is dedicated to the Blow/Fill/Seal technology.

It states: "Blow/Fill/Seal equipment used for sterile production which is fitted with an effective grade A air shower may be installed in at least a grade C environment, provided that grade A/B clothing is worn".



SYFPAC® LVP is specifically designed for containers which have a fill volume typically between 50 ml up to 2500 ml for aseptic primary packaging of: Intravenous solutions, solutions for irrigation, disinfectants, liquid soaps, solutions for continuous ambulatory peritoneal dialysis (CAPD), oral dosage, and antibiotics.

Temperature of the liquid while filling should be typically between 4°C to 30°C. Modified systems can be developed to handle liquids at higher temperature.

#### MODEL SECURJECT



Ageing population, global financial meltdown and increasing number of producers of generic drugs are all drivers to reduce the production cost.

• Several fold reduction in the cost can be achieved if these syringes can be made using Blow Fill Seal technology because:

it allows a reduction in the number of production steps.

- It allows production of pre-filled syringes in a space of 50 square meters, in few seconds starting from polymer granule at a cost of just few cents!
- It allows elimination of secondary packaging cost.
- Polymer syringe is an unbreakable primary packaging container during normal handling and transportation.
- Polymer syringes can have tighter tolerance, and reduce ovality of the inner diameter as compared to glass syringes. This reduces the force needed to move the plunger.
- Plastic syringe eliminate issues related to presence of tungsten traces. (Tungsten can cause catalytic breakdown and some biological compounds and proteins can create agglomerate with tungsten residues).



#### MODEL SVP

The SYFPAC® SVP machine was specifically designed for containers which have a filled volume between 0.25 ml up to 50 ml, for aseptic primary packaging of: Injectable solutions, ophthalmologic preparations, ear drops, preparations for aerosol therapy, respules, disinfectants, diluents, antibiotics and solutions for reconstitution.

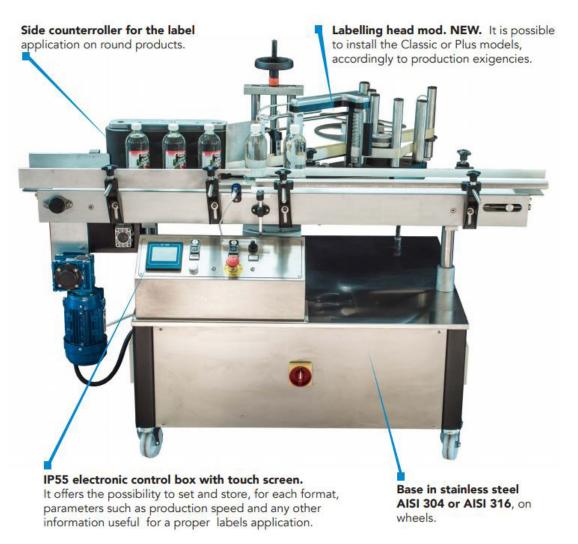
Special filling systems can be developed to package pastes, creams, thixotropic substances, suspensions, substances which set very quickly and substances which need protection from light and from atmospheric oxygen.

### **METAL DETECTOR**



- Digital electronics with alphanumeric graphic display
- 3 levels password access protection
- Principle of operation: digital with bidimensional image
- Working multifrequency
- 100 storable product programs
- One RS232 C serial port
- Phase adjustment function
- Function and process alarm output
- High immunity to environmental interferences
- Fail-safe mode
- Wheels
- Very high sensibility to all magnetic and not magnetic metals, stainless included
- High productive flow
- Accurate ejection of the contaminated product
- Total printouts
- Automatic balancing
- Self-check function
- Report archive
- Date/Time function
- Automatic product compensation (Tracking)
- In conformity with ISO FDA HACCP GMP
- In conformity with Pharmaceutical Metal Detection Systems regulations
- Production data management in conformity with the standards in force

#### LABELLING MACHINES

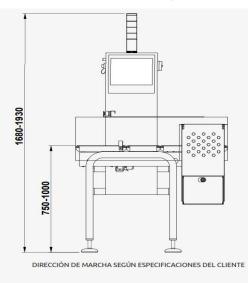


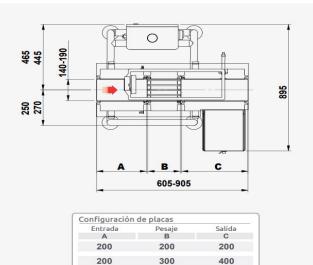
Automatic labelling machine for application of labels on round products. The machine consists of: conveyor belt and a head like this: Classic New 1,2,3 and Plus. The M3005 is for wraparound label application, the machine is equipped with side controller available with units of overprinting dry, or a hot-transfer. The products loading/unloading can be done manually, through loading Ø 800 or 1000 mm or directly from an production line.

### **CHECKWEIGHERS**



- Electromagnetic load cell
- Digital electronics with PC Mainboard mini-ITX
- 10,4" TFT color display with touch screen panel
- Windows Embedded Operative System
- Electronic self-calibration device
- Mobile average function
- 3 levels password access protection
- 200 storable product programs
- 2 RS232 serial ports
- Ethernet interface
- Conformity with standards ISO FDA HACCP GMP
- · Production data management in conformity with the standards in force





200

400

300

#### MONOBLOCKS



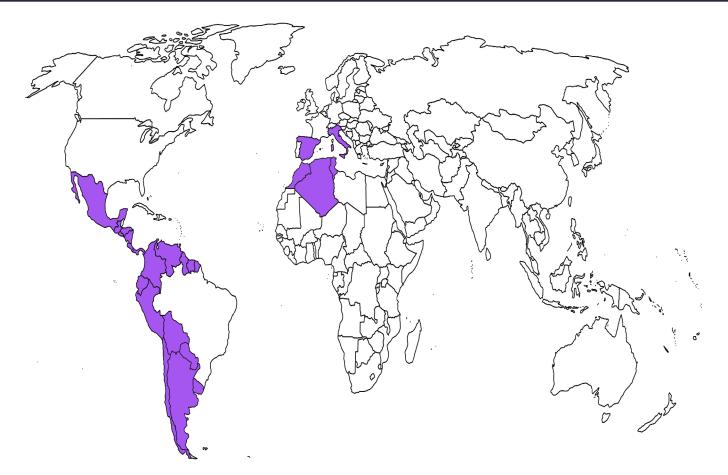
Automatic filling and capping machine suitable for filling and capping plastic and glass bottles, designed for the pharmaceutical and cosmetic industry.

- Allows filling in one cycle by means of tracking nozzles;
- Intermittent motion;
- Central starwheel, equipped with safety clutch, for bottle transport to the different operating stations
- · Vibrating bowls placed on the operator side, for an easy closures loading
- One through tabletop conveyor, for the bottle inlet and outlet, with adjustable guides.
- All the parts in contact with the product are made of 316 L Stainless Steel;
- Wide range of options available;
- Maximum accessibility to all working areas;
- Easy and perfect cleaning of all parts;
- Manufactured in AISI316 polished stainless steel;
- Complete separation between mechanical parts and working area;
- Increased time for the filling operations therefore higher performance.

Minimum quantity of change parts, in order to achieve:

- Very fast changeover time with reduction of dead times and consequent longer time for the production
- Easy changeover, tool free
- Low costs of additional sets of change parts with cost reduction

### **OUR PRESENCE IN THE WORLD**





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