ASEPTIC PROCESSING & FREEZE DRYING SOLUTIONS





Aseptic Processing & Freeze Drying Solutions

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SETTING NEW STANDARDS IN ASEPTIC PROCESSING

PRODUCING MORE THAN 200 MACHINES PER YEAR IN THE FIELD OF LIQUIDS AND POWDER FILLING, MOST OF WHICH ARE INTEGRATED INTO COMPLETE PROCESSING LINES AND WITH OVER 1000 FREEZE DRYERS INSTALLED IN OVER 50 DIFFERENT COUNTRIES, IMA LIFE CAN MANAGE LARGE-SCALE **PROJECTS, DESIGNING** AND MANUFACTURING CUSTOMISED SOLUTIONS TO MEET SPECIAL END-USER **REQUIREMENTS.**

SIX PRODUCTION SITES FOR A BROAD SELECTION OF MACHINERY, EACH ONE SPECIALISED IN A SPECIFIC STEP OF THE PROCESS.



In addition to its role as a machinery supplier, IMA Life satisfies any requirements coming from the aseptic, biopharmaceutical and pharmaceutical markets. Each product represents consolidated technology, acquired not only through experience spanning over 60 years, but also thanks to its ongoing partnership with leading pharmaceutical companies worldwide.

PRODUCT RANGE

WASHING AND BLOWING

Internal and external washers for ampoules, vials and bottles and blowing machines for dry cleaning of containers.

DEPYROGENATING

Laminar flow sterilisation tunnels.

ASEPTIC PROCESSING

Sterile liquid and powder fillers for vials, ampoules, cartridges and RTU components. Isolator systems for the highest sterility assurance level.

FREEZE DRYING

Lyophilisation equipment for products in bulk, vials, ampoules, cartridges and syringes.

LOADING/UNLOADING

Automatic vial loaders and unloaders.

NON ASEPTIC PROCESSING

Non-sterile liquid and powder fillers.

LABELLING

Pharma and non-pharma labellers for ampoules, syringes, vials, bottles and cartons.

SERVICES



PROJECT MANAGEMENT

Customers are IMA Life's core business. Understanding customers' needs and offering service/ support create a real benefit throughout the entire supply chain. The relationship with customers is what guides the way we design and develop machinery and services.

Qualified project managers follow the customers from the very beginning of URS definition through the entire project lifespan. They plan, organise, secure and manage resources ensuring that end-user time-to-market deadlines are met.

R&D LABORATORY

IMA Life counts two R&D Laboratories staffed by highly skilled professionals, with extensive experience gained in the field of parenteral product and process development.

ISOTECH LABORATORY

Located in Bologna (Italy), at the IMA Life facility, it is specifically designed to perform internal research and to develop activities/training sessions in cooperation with customers.

LAB4LIFE LABORATORY

Located in Tonawanda (USA), at the IMA Life North America facility, it consists of a certified clean room, analytical support laboratory, product formulation, filling and full-size freeze drying equipment necessary for the development of pharmaceutical and biopharmaceutical products in batch sizes up to 20 litres. It includes a highly skilled team of professionals who provide assistance to our customers worldwide.

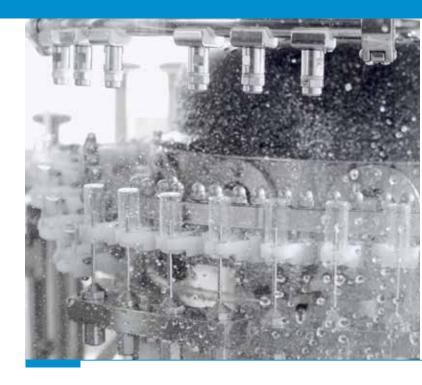
CUSTOMER SERVICE AND UPGRADES

- Global presence with local branches and offices to serve customers throughout the world.
- Engineering of complete integrated lines, validation and qualification support, controlled testing and process set-up assistance, machine refurbishments, training and spares.
- Dedicated SAMs (Service Account Managers) to maximise client satisfaction and loyalty, offering the right assistance starting from the initial requirement right through the entire machinery life cycle.



WASHING AND BLOWING

THE DECONTAMINATION OF CONTAINERS BEFORE AND AFTER THE FILLING PHASE IS A CRUCIAL PATH IN DRUG PROCESSING LINES. Over 50 years of experience in the production of equipment for blowing and washing of vials, ampoules and bottles, combined with constant commitment to innovation, make IMA Life a world leader in the field.





HYDRA

Hydra is a linear washing machine conceived to wash all vial sizes used in the pharmaceutical sector.

- Up to 46,800 pieces/hour
- 8 washing stations in the standard version, and up to 13 on request
- Automatic drainage system
- Water recycling and siliconising station
- Connection with upstream de-palletizer and depacking machines
- Complete segregation between process, circuit and mechanical areas to avoid cross contamination
- Can be connected to a depyrogenating tunnel by a special "first-in, first-out" off-set loading system



VEGA

Vega is a rotary washing machine designed for washing vials, bottles, ampoules and unstable cylinder-shaped containers.

- Up to 30,000 pieces/hour
- Up to 8 washing stations
- Ultrasonic pre-wash
- Connection with upstream de-palletizer and depacking machines through the use of turntables
- Water recycling and siliconising station
- Can be connected to a depyrogenating tunnel by a special "first-in, first-out" off-set loading system





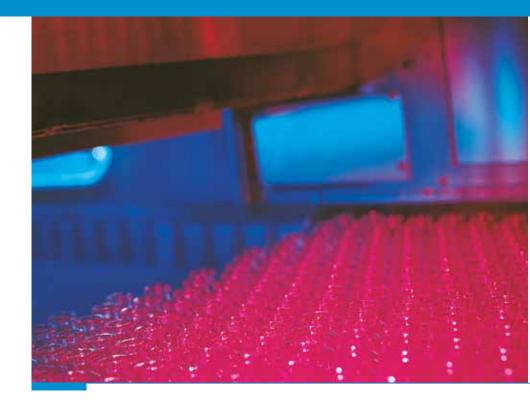
MISTRAL

Mistral is a rotary blowing machine for the dry cleaning of glass and plastic containers in general, which do not need washing with water or detergent, but only the removal of dusty solids with a sterile air jet.

- Up to 24,000 pieces/hour
- Blowing and simultaneous suction of impurities
- Can be connected to other packaging machines (unscramblers, fillers, cappers, etc.)

DEPYROGENATING

DEPYROGENATING TUNNELS RESPOND TO THE NEED FOR STERILISATION AND DEPYROGENATION IN CONTINUOUS DRUG PRODUCTION LINES. IMA Life expertise, combined with constant research, will satisfy any production need and kind of application with high technology equipment.





BLUE GALAXY

Blue Galaxy is a laminar flow tunnel for depyrogenation and sterilisation of glass containers like vials, ampoules, syringes and cartridges.

- Exclusive system of air balancing, pressurisation and heating/cooling for a perfect thermic treatment of glass containers
- Automatic adjustment of air speed
- Air flow measuring system inside the hot area
- Over-kill function during loading and unloading
- VHP (patent pending) or dry heat for sterilisation of the cooling zone

EXTERNAL WASHING





HYDRA 100/300/400

Hydra 100/300/400 are external rotary washers for the decontamination of filled and capped vials issuing from a processing line.

- Up to 600 pieces/minute
- No cross contamination between containers and machine
- Automatic drainage and drying system
- Quick and easy size changeover
- cRABS or isolator enclosure



VEGA 400

Vega 400 is a rotary washer for the decontamination of filled ampoules issuing from a processing line.

- Up to 400 ampoules/minute
- No cross contamination between containers and machine
- Automatic drainage and drying system
- Automatic water drainage

RIGOROUS DESIGN DOWN TO THE SMALLEST DETAIL IS ONE HALLMARK OF ALL IMA LIFE MACHINES FOR ASEPTIC FILLING.

Furthermore, they are the result of careful research into fluid dynamics and guarantee maximum product protection for all aseptic filling environments, such as traditional clean rooms, isolation technology or other containment solutions.

The implementation of emerging robotised technologies creates a new set of sterilisation, handling and filling challenges, improving product quality.



INJECTA

Injecta is the ultimate, innovative, fully robotic fill-finish machine for RTU components pre-arranged in nest and tub for injectable pharmaceuticals.

- Full integration with robotic or semi-automatic upstream primary package handling
- Protection of the process, based on advanced robotic-driven manipulations operating in a closed, ready-to-gloveless isolator
- High flexibility for multi-product and multi-format handling and modular design: from low to high production levels
- Different types of filling systems and 100% IPC, with single rejection of individual non-conformities
- All-in-one integrated fill-finish solution: in-line lyophilisation process and capping operations for vial handling
- CIP/SIP, vacuum filling system for viscous products and nitrogen
 purging system on request



STERIFILL RS AND STERI LIF3

Sterifill RS and Steri Lif3 are automatic filling and stoppering machines for handling RTU components pre-arranged in nest and tub for aseptic environments.

- Easy upgrade with fully robotic or semi-automatic upstream primary package handling
- Set for 2 or 5 filling groups for small to medium production batches
- Automatic extraction and re-insertion of the nest from/into the tub
- Fully automated 100% or statistical in-line process control
- Vacuum filling system to avoid air bubbling for specific/viscous products
- High flexibility to fill and close nested components with fast changeover times
- Integrated vial capping unit (only for Steri Lif3)
- CIP/SIP and nitrogen purging system on request

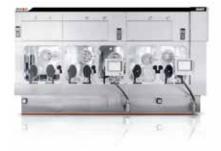




XTREMA

Xtrema is a high-speed vial filling and stoppering machine for aseptic environments.

- Output: up to 600 vials/minute
- Positive in-line transport system handling all vial sizes in the SVP and LVP range from 0.10 ml up to 1000 ml
- Continuous or intermittent motion filling with or without statistical or 100% IPC
- Anthropomorphic robotized nozzle carrier for gentle vial handling and high flexibility in filling operations
- Can fit powder and liquid filling systems in a combi version to be used alternatively or, when required, powder and liquid simultaneously
- Pre-arrangement for handling spray nozzle closures
- CIP/SIP units with programmable automatic cycles



SMART

Smart is a medium to high-speed filling, stoppering and capping machine for vials for aseptic environments.

- Output: up to 120 vials/minute
- Double comb positive in-line transport system handling all vial sizes in the SVP and LVP range with filling volume from 0.25 ml up to 500 ml
- Intermittent motion filling with 100% IPC
- Pre-arrangement for handling eye drops
- Integrated or separate capping station, according to the Annex 1 guidelines
- CIP/SIP units with programmable automatic cycles

ASEPTIC PROCESSING





STERIFILL

Sterifill is a series of high-speed linear filling and sealing machines for handling ampoules.

- Up to 400 pieces/minute
- Suitable for both open and closed ampoules
- Combi version to alternatively process both ampoules and vials with quick configuration changeover from ampoule to vial size
- Pre-heating and sealing stations with burning time adjustable according to ampoule glass thickness
- Nitrogen purging station and CIP/SIP systems with automatic programmable cycles available on request
- Can be connected to a depyrogenating tunnel
- Suitable for RABS or other isolation systems



XTREMA PWD

Xtrema PWD is a high-speed aseptic powder filling and stoppering machine for vials.

- Output up to 400 vials/minute
- Up to three different powders inside the same vial with filling volume from 0.50 mg
- 100% IPC with net/gross weight checking of each single powder dosed
- Dosing chamber self-adjusting system to reduce product waste
- Innovative "Smartplate" device for the assembly/disassembly of the dosing units to preserve class continuity
- Vacuum pressure technology with automatic simultaneous remote adjustment of dosing disc depth or auger dosing systems
- 90° dosing unit left-right rotation allowing for precise and trouble-free changeover





SMART PWD

Smart PWD is an aseptic powder filling, stoppering and capping machine for vials.

- Output up to 120 vials/minute
- Double comb positive in-line transport system handling all vial sizes in the SVP and LVP range with filling volume from 0.50 mg
- Up to two different powders inside the same vial
- 100% IPC with net/gross weight checking of each single powder dosed
- Dosing chamber self-adjusting system to reduce product waste
- Vacuum pressure technology with automatic simultaneous remote adjustment of dosing disc depth or auger dosing systems
- 90° dosing unit left-right rotation allowing for precise and trouble-free changeover



ALU AND STERICAP

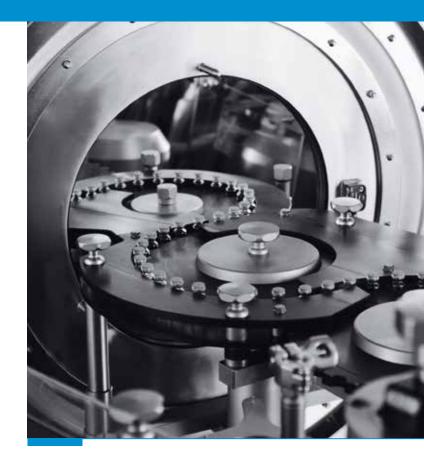
Alu and Stericap are capping machines featuring a broad range of application capabilities: from traditional aluminium caps, with or without flip-off, to the most sophisticated caps such as addvantage, bio-set and monovial closures.

- Alu series for medium to high-speed requirements (up to 600 vials/minute)
- Stericap for low to medium-speed requirements (up to 300 vials/minute)
- Very low particle generation system to avoid product contamination
- Pneumatic circuit to keep constant applied vertical force
- 100% measurement and control of vertical compression force
- Low size changeover and set-up time
- Little maintenance required

ASEPTIC PROCESSING

The increasing amount of toxic products treated by the pharmaceutical industry calls for more and more sophisticated containment technologies to reduce operator exposure. Consequently, isolator systems are replacing standard cleanrooms for aseptic filling and processing.

A STATE-OF-THE-ART TECHNOLOGY, A FULLY CLOSED ENCLOSURE, EQUIPPED WITH A DEDICATED AIR CIRCUIT WHERE MACHINES CAN BE SEGREGATED. IMA LIFE SIX-SIDED ISOLATORS ENSURE THE HIGHEST PRODUCT PROTECTION AND FULL OPERATOR PROTECTION.



ISOLATION TECHNOLOGY

IMA Life isolator systems feature a fully closed enclosure equipped with a dedicated air circuit where the machines can be segregated. They ensure full integration with the machine with cost effectiveness and ease of use, and provide the highest and most reliable configuration to grant:

- the highest sterility assurance level
- the highest operator protection
- the highest number of automated operations

Production area can be downgraded to class C: the ideal solution to handle highly toxic products.

MATERIAL TRANSFER ISOLATOR (MTI)

The Material Transfer Isolator is recommended to decontaminate components, tools or other units, which must be introduced inside the isolated filling line without breaking the aseptic environment. It is a section of the main isolator, but it can be decontaminated independently while other isolator sections are in a different status.

Its closed environment allows fast and secure decontamination procedures using H_2O_2 and it shares the same Heating Ventilation Air Conditioning (HVAC) and H_2O_2 generator system of the main isolator.





FREEZE DRYING

WITH OVER 1000 FREEZE DRYERS INSTALLED IN OVER 50 DIFFERENT COUNTRIES, IMA LIFE HAS A TRULY GLOBAL PRESENCE WITH FACILITIES WELL POSITIONED TO SERVE CUSTOMERS THROUGHOUT THE WORLD.

This wide range of custom-built freeze dryers also includes solutions for pilot work or clinical trial production or even R&D laboratory freeze dryers. These last freeze dryers are available for the USA and Canadian markets only.

- A wide range of solutions for lyophilisation:
- Lyophilisation process developments
- Pilot and scale-up freeze dryers
- Laboratory R&D freeze dryers
- Industrial freeze dryers
- Continuous spray freeze dryers
- Automatic vial loading and unloading systems





PROCESSES AND TECHNOLOGIES

IMA Life's steady investments in R&D initiatives have resulted in innovative solutions in lyophilisation process and technologies such as:

- Veriseq[™] Nucleation (using Ice Fog Nucleation)
- Fusion[™] shelves produced in-house using an automated manufacturing process to ensure lower operating costs, enhanced process control and reduced risk
- **Fusion Plus™**, further improvement of the Fusion technology to avoid sticking stoppers. This proven solution consists in a low adhesion coating applied to the lower shelf surface and it is patented worldwide
- WiSe, multi-point, battery-free wireless temperature sensors, developed for monitoring product temperature
- **Quantum** mass spectrometry, a multipurpose device performing quantitative real-time process-relevant measurements
- Lynfinity technology which brings to the market a robust yet gentle continuous aseptic process for spray freeze drying, also for laboratory process modelling/development



We share our knowledge. Join the Lab4Life Community to get full access to contents and explore the collection of our scientific publications on the freeze drying process. <u>https://ima.it/pharma/lab4Life/</u>



LYNFINITY

Lynfinity is a continuous spray freeze dryer performing a lyophilisation process starting with bulk liquid product and ending with the discharge of dried particles, featuring total containment from formulation to powder filling.

- Designed for continuous process from fermentation to final packaging, it allows for reduced running OPEX cost
- Controlled spray of liquid product into a cryogenically cooled freezing chamber
- Storing of frozen particles in a cooled canister for product transfer in a traditional lab freeze dryer for the drying process
- Useful tool for introduction to spray freeze drying, technology evaluation and process development, with a low barrier to entry
- High sterility assurance levels



LYNFINITY LAB

Designed for laboratory environments, Lynfinity Lab features the freezing process identical to that of the production Lynfinity.

- Small footprint for setup in laboratories
- Model building
- Process development with limited formulation (down to 200 ml)
- Generation of uniform frozen droplets of mean volumetric diameter 600 microns
- Dried product characterisation
- Stability testing

FREEZE DRYING





LYOMAX

Lyomax is a freeze dryer able to condition products in bulk, vials, ampoules or other types of containers such as cartridges or syringes.

- Different configurations including integral condenser, external condenser, two-storey and pass-through designs, Lyomax sizes start from 1 m² up to 100 m²
- Shelves designed and manufactured according to IMA Life's Fusion™ technology, enhancing performance, reducing operating costs and business risk
- Configurable options and custom designs provide the optimal solution for each application
- Compliant with the highest technical requirements, the strictest standards of the global licensing authorities and with all the current guidelines such as GAMP, cGMP, FDA, etc.
- Pre-arranged to support the processing of non-aqueous solvents and high potent products



LYOFAST

Lyofast is a freeze dryer able to condition products in bulk, vials, ampoules or other types of containers such as cartridges or syringes.

- Freeze-drying areas from 4 m^2 to 50 $m^2\!.$ Two-stage reciprocating, semi-hermetic, water-cooled refrigeration system
- Suitable for vaccines, antibiotics, cytostatics, biologicals, hormones, active ingredients, and reactives
- Variable shelf inter-distance and integrated design with the loading system
- Lead time reduced by up to 50% compared to custom-built lyophiliser: competitive edge by reducing the time to market
- Shelves designed and manufactured according to IMA Life's Fusion[™] technology, enhancing performance, reducing operating costs and business risk
- Wide range of standard options ensuring sufficient flexibility over a broad range of configurations
- Pre-arranged to support the processing of non-aqueous solvents and high potent products





LYOFAST MINI AND MINIMAX

Lyofast Mini and Minimax are small batch freeze dryers able to condition products in bulk, vials, ampoules or other types of containers such as cartridges or syringes.

- Link between laboratory development, pilot and industrialised production
- Shelf areas from 1 $m^{\rm 2}$ to 4.2 $m^{\rm 2}$
- Suitable for product development and process cycle optimisation, up-scaling of the process for later use in production plants and small-scale production, especially for biotech customers
- Easy integration with UAF, RABS, isolators, automatic and semiautomatic loading and unloading systems
- Shelves designed and manufactured according to IMA Life's FusionTM technology, enhancing performance, reducing operating costs and business risk
- Pre-arranged for the installation of PAT tools: Veriseq[™] controlled nucleation, Quantum mass spectrometer and WiSe, wireless temperature sensors
- Pre-arranged to support the processing of non-aqueous solvents and high potent products



MINIFAST

Minifast is a pilot freeze dryer to condition products in bulk, vials, ampoules or other types of containers such as cartridges or syringes.

- Connection between a typical bench-top freeze-dryer used in laboratories and the industrial Lyofast and Lyomax range of freeze-dryers
- Minifast 04 and Minifast 10 configurations, with shelf areas of 0.4 m^2 and 1.1 m^2 respectively
- Suitable for product scale-up, product development and process cycle optimisation
- Ice condenser capacities range from 8 kg to 20 kg with minimum condenser temperatures of -85°C as standard
- Shelves designed and manufactured according to IMA Life's Fusion[™] technology, enhancing performance, reducing operating costs and business risk
- Standard shelf inter-distance is 80 mm with larger spacing offered as an option (120 mm on Minifast 04 and 160 mm on Minifast 10)

AUTOMATIC VIAL LOADING/UNLOADING SYSTEMS

THE FREEZE DRYER IS LOADED OR UNLOADED ONE SHELF, ONE ROW OR SEVERAL ROWS AT A TIME WITH VIALS AT A CONSTANT LEVEL. ALL SYSTEMS ARE FRAMELESS AND CAN BE FLEXIBLE, MIXED OR FIXED.





DA VINCI SYSTEM

Da Vinci is a fixed vial loading/unloading system with an innovative Wi-Fi technology for enhanced performance and lower operating costs.

- High throughput with performance up to 600 vials/minute
- One-sided or pass-through loading and unloading of freeze dryer
- Self-driven module installed on the transfer bar
- Wireless communication between battery and PLC control
- Positioning control based on laser technology
- Quality sanitary design: VHP-compliant
- Pre-arranged for fully isolated working environment
- Extremely compact footprint, thus increasing the level of flexibility with regard to possible line configurations and cleanroom layout

HIGH SPEED SINGLE LINER

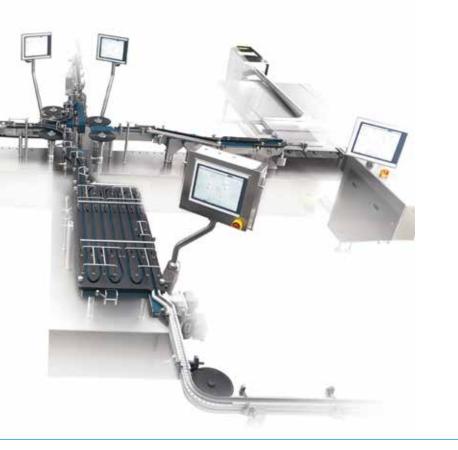
The high-speed single liner is an unloading system suitable for integration with both fixed and flexible loaders.

- Speed up to 450 vials/minute
- Compact footprint
- Optimum design for isolator application
- Low friction Poly-Acetal conveyor belts, plus vial guiding belt
- Free to set speed difference between belts
- No change parts
- No friction between vials during single lining process
- Possible combination or integration with the UAT

FIXED SYSTEMS

The fixed vial loading/unloading systems consist of a conveyor integrated with the outfeed of the filling line, which transports vials to a loading/unloading station installed opposite the freeze dryer during the loading phase. They can load each shelf one row at a time or in packages of several rows at a time. At unloading, the conveyor transfers a single line of vials to the downstream capping machine.

- Operating speed up to 500 vials/minute
- Fixed loading configurations for one, two, four freeze dryers or more, depending on cycle times and process environment
- Different types of loading pusher
- Mainly loading and unloading from the same side
- Pre-arranged for isolation system



IMA LIFE IS ONE OF THE FEW SUPPLIERS IN THE WORLD THAT DESIGNS, MANUFACTURES AND TESTS A FULL RANGE OF PROVEN SYSTEMS FOR FULLY AUTOMATIC LOADING AND UNLOADING OF VIALS INTO INDUSTRIAL FREEZE DRYERS.

IMA LIFE CAN MANAGE ALL INTERFACING WITH UPSTREAM AND DOWNSTREAM FILLING AND CAPPING EQUIPMENT.

FLEXIBLE SYSTEMS

The flexible vial loading/unloading systems use "transporters" or "robots" to serve multiple freeze dryers one shelf at a time. They are composed of:

- LAT (Loading Accumulation Table) which assembles a pack of vials to the shelf dimensions
- T-CAR (Transfer and Loading Cart) which carries one pack of vials to and from the freeze dryers (one or two transporters in each system)
- UAT (Unloading Accumulation Table) disassembling pack of vials

Once a pack is created on the LAT, the T-CAR collects the vial pack and transfers it onto the designated freeze dryer shelf. At the end of the lyophilisation process, the T-CAR collects the vial packs from the freeze dryer shelf and transfers them to the unloading accumulation table (UAT), where the vials are de-scrambled for single lining to the alu capper. It can be used for multiple freeze dryers.

- Speed up to 600 vials/minute (LAT and UAT) and 900 vials/minute (T-CAR)
- Loading and unloading from the same side or from different sides i.e. loading by CLU system (front side) and unloading by T-CAR (rear side)
- Suitable for pass-through system configuration
- Fit for integration with containment solutions
- High-speed single liner system integrated with unloading table

MIXED SYSTEMS

The mixed vial loading/unloading systems offer a combination using fixed and flexible solutions.

- Only pass-through configurations, operating up to 450 vials/minute and unloading up to 900 vials/minute
- Fixed loading and flexible unloading
- Flexible loading and fixed unloading



NON ASEPTIC PROCESSING

EITHER INTERMITTENT OR CONTINUOUS MOTION, THE IMA LIFE FILLERS FOR PHARMACEUTICALS CAN DOSE DIFFERENT TYPES OF PRODUCTS LIKE INFUSIONS, OPHTHALMICS, PREPARATIONS, SUSPENSIONS, INTRANASAL PRODUCTS, ORAL DROPS, DRINKABLE SUGARY SYRUPS, DETERGENT/DISINFECTANT SOLUTIONS, ETC. AND CAN APPLY DIFFERENT TYPES OF CLOSURES.





FLEXIFILL

Flexifill is an in-line filling machine handling both plastic and glass containers.

- Low-medium output with filling volume up to 1000 ml
- Ideal for all types of pharmaceutical products ranging from eye drops, contact lens solutions to detergents, infusions, oral and topical solutions
- Positive in-line filling system for alternate or continuous-motion transport system
- Reduced overall design suitable for monobloc solutions with integrated capping or for connection with separate closing machines
- Ideal to handle unusually shaped containers in pucks
- Suitable for sterile applications and for integration with CIP/SIP system



MULTIFILL F57/F97

Multifill F57/F97 are multipurpose intermittent motion machines for liquid filling and closing of vials and bottles.

- Output up to 220 pieces/minute
- Suitable for dosing various types of pharmaceutical products (water-based, viscous, foamy, sugar-based solutions, etc.) using different kinds of dosing units
- Wide range of sorting/feeding units for all kinds of containers/closures such as push on caps, droppers, flip off, Ropp caps, screw caps, etc.
- Assembly of different types of multidose intranasal devices and diagnostic tubes
- Suitable for CIP/SIP system up to 350 ml dosage



MULTIFILL

Multifill series are rotary liquid filling and closing machines. Robust, efficient and safe, these machines are capable of working under extreme load conditions.

- Output up to 500 bottles/minute with filling volume up to 1000 ml
- Ideal for pharmaceutical applications like drops, syrups, solutions, etc.
- Different models and configurations available: filling and closing in monobloc (1 or 2 closing operations), stand-alone or combined with separate closing machines
- Different types of filling systems available
- Suitable for CIP/SIP system





MACRO PWD

Macro PWD is an automatic intermittent motion machine designed to dose powder, granules and milled products in glass or plastic bottles and jars.

- Accurate and clean filling
- Minimum and maximum bottle inlet/outlet loading sensors
- No bottle no fill control device
- Dedicated belt for automatic rejection of incorrectly filled bottles or missing closures
- Open RABS for powder containment
- Easy access to the working area
- Great visibility of the working area during production



SL

The SL series is a unit dose filling and sealing machine for medium to high-speed requirements.

- Suitable for ophthalmic products, oral vaccines, oral and nasal drops, disinfectants, aerosol solutions and diagnostic reagents
- Easy integration with high-speed production lines, handling up to 375 unit doses/minute
- Filling volumes from 1 to 10 ml
- Wide range of accessories (i.e. automatic tray loading/unloading, visual inspections, seal tester, different dosing systems, inkjet printing units)

LABELLING

THE IMA LIFE PRODUCTION RANGE INCLUDES A VAST ARRAY OF LABELLING MACHINES, WHICH CAN BE SUPPLIED IN STAND-ALONE VERSION OR AS AN INTEGRAL PART OF COMPLETE PACKAGING LINES.

These machines feature different solutions to align the packaging of pharmaceutical products to emerging requirements in terms of Track & Trace of the final products.





SENSITIVE FOR CARTONS

A complete series of automatic linear labellers designed to apply self-adhesive labels to cartons at high speed.

- Up to 500 cartons/minute
- Handling of a wide range of cartons both aeroplane style, and reverse-tuck and five-panel cartons
- Up to 3 labelling heads: two side heads for tamper labels and one top head for vignette labels
- Overprinting devices, inkjet, laser, etc. and camera vision systems for T&T and serialisation assurance
- Machine version with fully integrated check-weigher



SENSITIVE FOR BOTTLES AND VIALS

A complete series of automatic linear and rotary labellers designed to apply selfadhesive labels to standard/irregular shaped plastic/glass containers.

- Up to 600 pieces/minute
- High performance and versatility levels
- Handling of a wide range of containers: round, elliptical, square, rectangular, unusual shapes
- 4 labelling heads with automatic switch



SENSITIVE AV

A completely automatic labelling machine to apply self-adhesive labels on small, unstable containers like ampoules, cartridges and vials.

- Up to 500 pieces/minute
- Special infeed system to keep the containers in vertical position up to their delivery to the scroll
- Label quality control system for automatic detection of printing errors
- Easy access and cleaning operations

ANCILLARY EQUIPMENT





STARPACK

A series of automatic and semi-automatic depackers of cylindrical glass containers from polyethylene shrink wrapping.

- Up to 4 bundles/minute
- Quick and easy size changeover
- Can be connected to complete processing lines
- Integration with de-palletisers



V-VL

A series of automatic tray loaders for loading vials onto plastic, metal or paperboard trays, facilitating transfer operations.

- Up to 800 pieces/minute
- Minimum operator intervention
- Brushless version suitable for sterile area: it avoids any contact with the vial mouths or caps
- Simple changeover by means of calibrated mechanical adjustments

TO COMPLETE THE PANORAMA OF THE PACKAGING LINES, IMA LIFE MANUFACTURES A RANGE OF EQUIPMENT FOR THE AUTOMATION OF TRADITIONAL MANUAL OPERATIONS FOR THE LOADING OF CONTAINERS.

IMA LIFE IN THE WORLD













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