

SOLID DOSE SOLUTIONS



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SOLID DOSE SOLUTIONS

YOUR PARTNER FOR EXCELLENCE IN SOLID DOSE PROCESSING

IMA ACTIVE IS THE IDEAL PARTNER FOR EACH SOLID DOSE PROCESSING PHASE: GRANULATION, TABLETING, CAPSULE FILLING AND BANDING, WEIGHT CHECKING, COATING, HANDLING AND WASHING.



HANDLING

Dispensing and transfer systems, bin docking stations, bins, drums, tumblers, lifting columns, containment valves.

GRANULATION

High shear mixer wet granulators, high shear granulator dryers and fluid bed processing equipment.

TABLETING

Centrifugal and force feed tablet press machines.

CAPSULE FILLING AND BANDING

Intermittent and continuous motion capsule filling machines, banding machines.

WEIGHT CHECKING

Machines for 100% weight check of capsules and tablets.

COATING

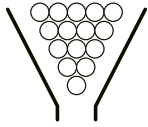
Sugar and film coating equipment with solid wall and perforated pans.

WASHING

C.I.P. groups, fast-rooms, manual or automatic bin washing stations, components washers.



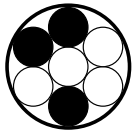
ICON LEGEND



POWDER DISPENSING



MIXING



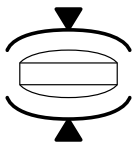
GRANULATION/PELLETIZATION



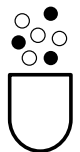
DRYING



PELLETS COATING



COMPRESSION



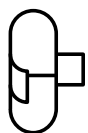
CAPSULE FILLING



WEIGHT CHECKING



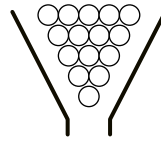
TABLETS/CAPSULES COATING



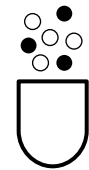
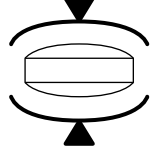
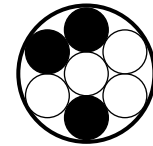
CAPSULE BANDING

PRODUCTION DIAGRAM

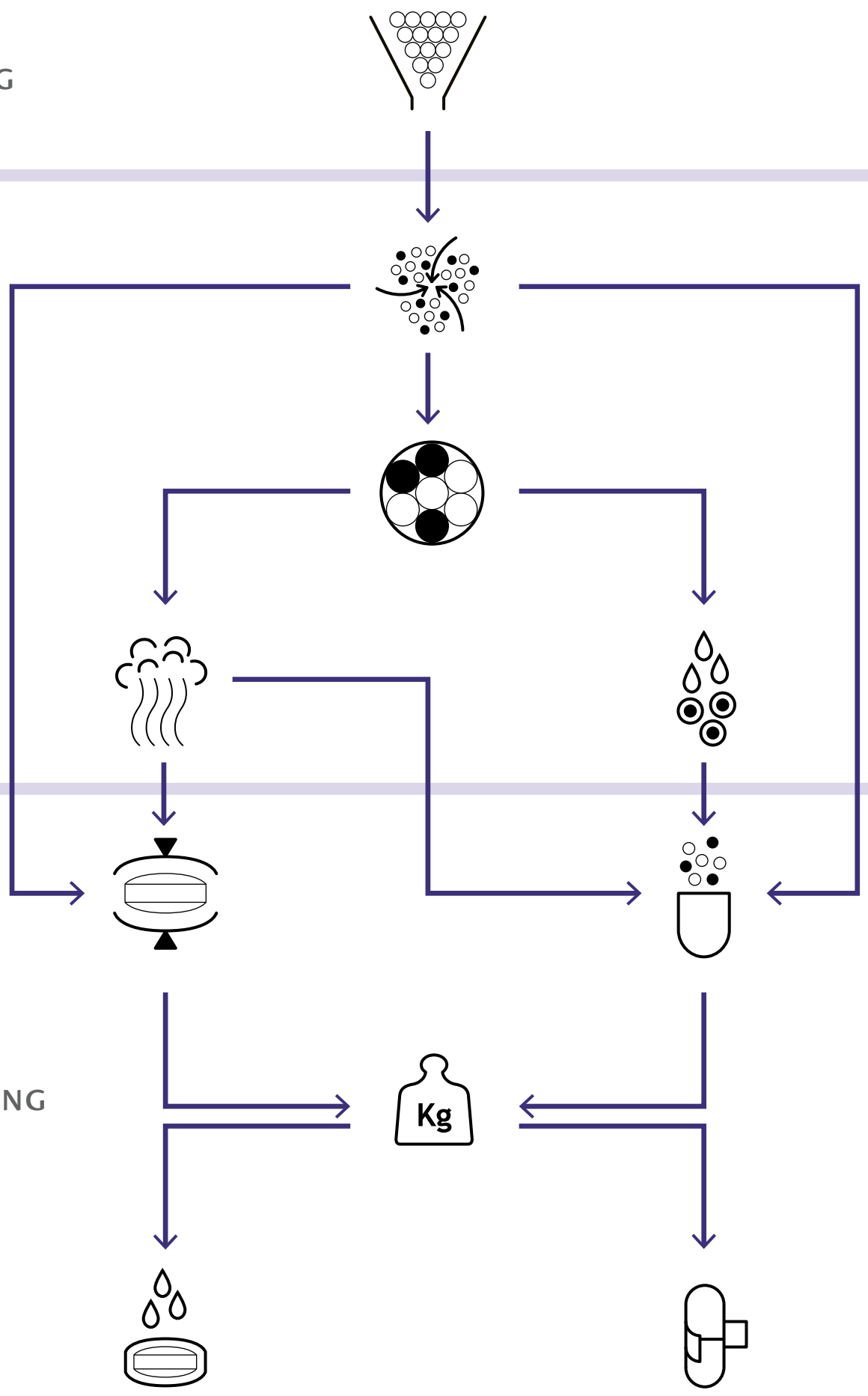
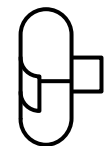
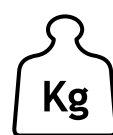
DISPENSING



PROCESS



PROCESS & PACKAGING



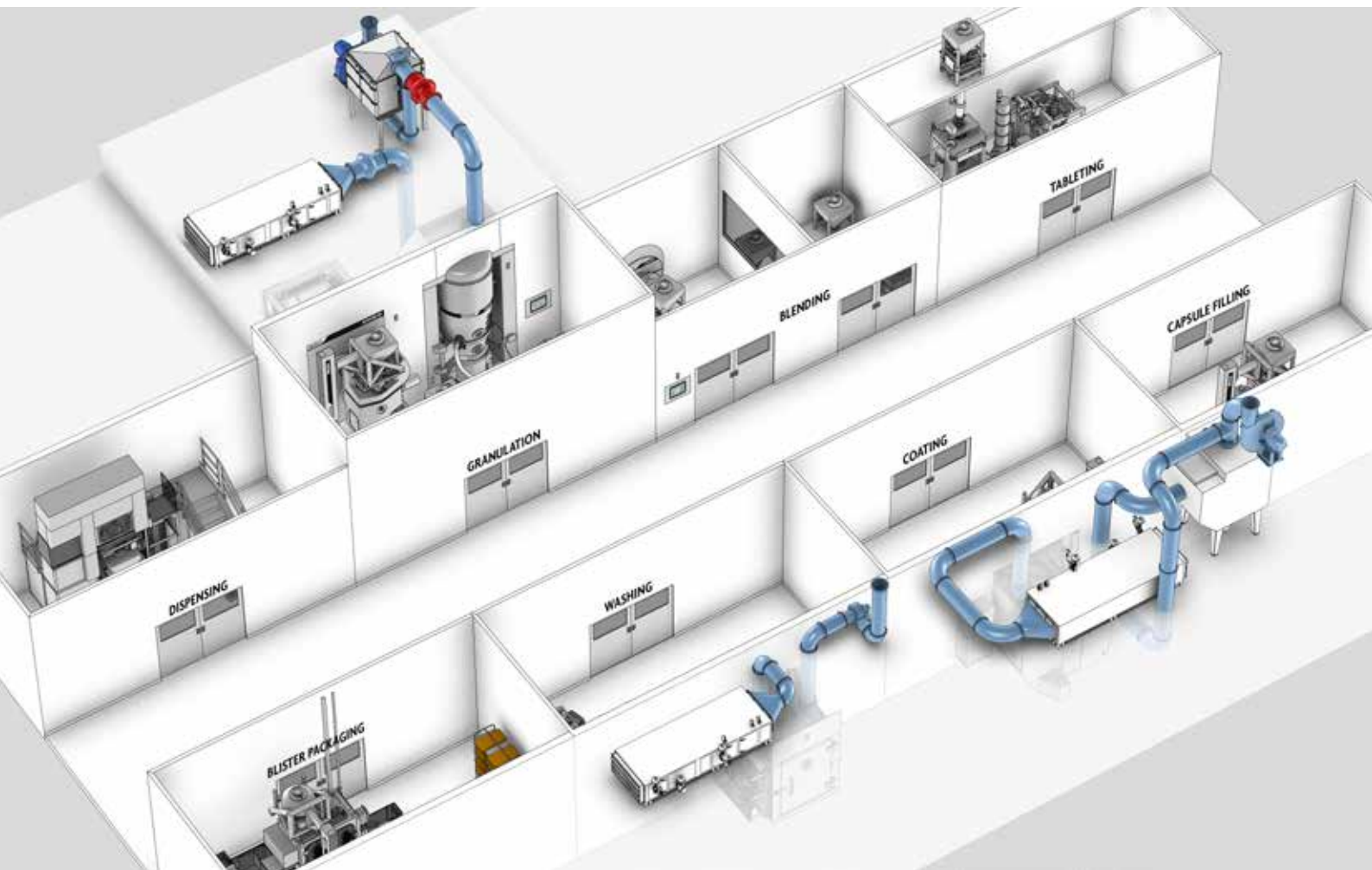
HANDLING



SMART DESIGN, COMPACT DIMENSIONS,
ACCURATE FINISHING.
IMA HANDLING SYSTEMS ENSURE
OPTIMAL PERFORMANCES
WITH MAXIMUM RESISTANCE.

IMA Active's handling systems include a wide range of equipment and technical solutions: dispensing and feeding systems, bins and drums, tumblers, lifters, columns and high containment valves. Thanks to its engineering know-how, IMA can integrate different equipment seamlessly into complete solid dose processing lines.

**FLEXIBILITY IS THE HALLMARK OF
IMA HANDLING EQUIPMENT:
THE SMART SOLUTIONS FOR
ENHANCING THE QUALITY OF
YOUR PRODUCTS.**



HANDLING



Pharma



Max Capacity
2,000 litres



Cleaning in
Washing
Cabin

PH-BIN AND PH-DRUM

PH-Bin and PH-Drum are product containers designed to handle powders and granules. Both are manufactured in stainless steel with pharma finish complying with the most restrictive GMP rules.

T-Bins are also available to handle tablets and capsules. They are cylindrical in shape and the loading lid is decentralised on the upper part to simplify product loading from a tablet press or a capsule filler.



Pharma



Max. Load
1,500 kg

CYCLOPS

Cyclops series of bin tumblers for blending and homogenising powders and granules features the innovative Trigon System, a universal bin docking system with a unique pharma GMP design simplifying loading and unloading operations.

Through-the-wall installation is possible to minimise space requirements in the production area.



Pharma



Max. Load
2,000 kg

CANGURO

Canguro is a bin tumbler designed for blending and homogenising powder and granules. The machine rotates containers by means of a standard blocking system.

Through-the-wall installation is possible to minimise space requirements in the production area.



Pharma



Max. Load
2,000 kg

HERCULES

Hercules lifting columns are designed to lift bins, drums, small containers or small machines such as pneumatic conveyors or mills. These machines feature a unique Self Brake System to maintain the load in case of emergency. Different models are available according to lift capacity; the bigger versions can be additionally fitted with the Mix feature for bin/drum blending (up to 1,000 kg).

HANDLING



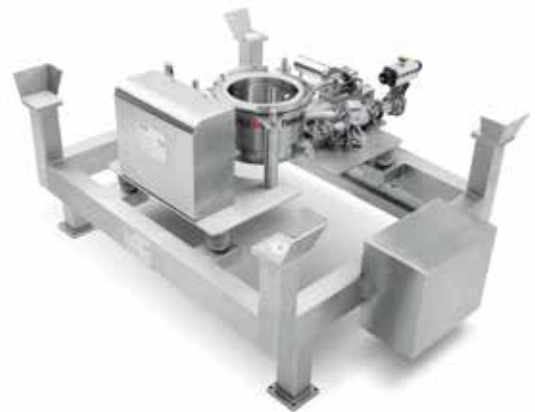
Pharma



Wash In Place

BDS BAG DUMPING STATION

BDS Bag Dumping Station is designed to handle powders and granules. This unit automates the handling of raw materials used in limited quantities during the production process. The product is introduced directly into pneumatic conveying lines, vacuum or pressure systems or other equipment ensuring a clean and dust-controlled environment while unloading bagged materials.



Pharma



Clean In Place



Wash In Place

TWINVALVE

The highly innovative TwinValve connection system is designed to ensure maximum efficiency for both standard and high potent products. As cleaning can be accomplished using compressed air and/or water/solvent as well as drying via the same connection, the installation is suitable for processing a wide range of active products. TwinValve can be easily retrofitted on existing installations.



Pharma



Wash In Place

VTS

VTS pneumatic pharma conveyor is designed for gentle transport of bulk pharmaceutical products and can be used directly from/into mixers, reactors, bins, containers, bulk-bags, tablet presses, capsule fillers, filling machines, etc. The bulk transportation is carried out by air stream aspiration under vacuum through hoses or pipes, with the use of compressed air only.



Pharma

TWISTER

Twister is a gravity transfer system designed to transfer powders, granules, tablets and capsules from an existing bin docking station to a processing or packaging machine in dust-tight conditions. The equipment ensures the product descends slowly in order to minimise potential powder/granule de-mixing or damage to tablets and capsules.

GRANULATION

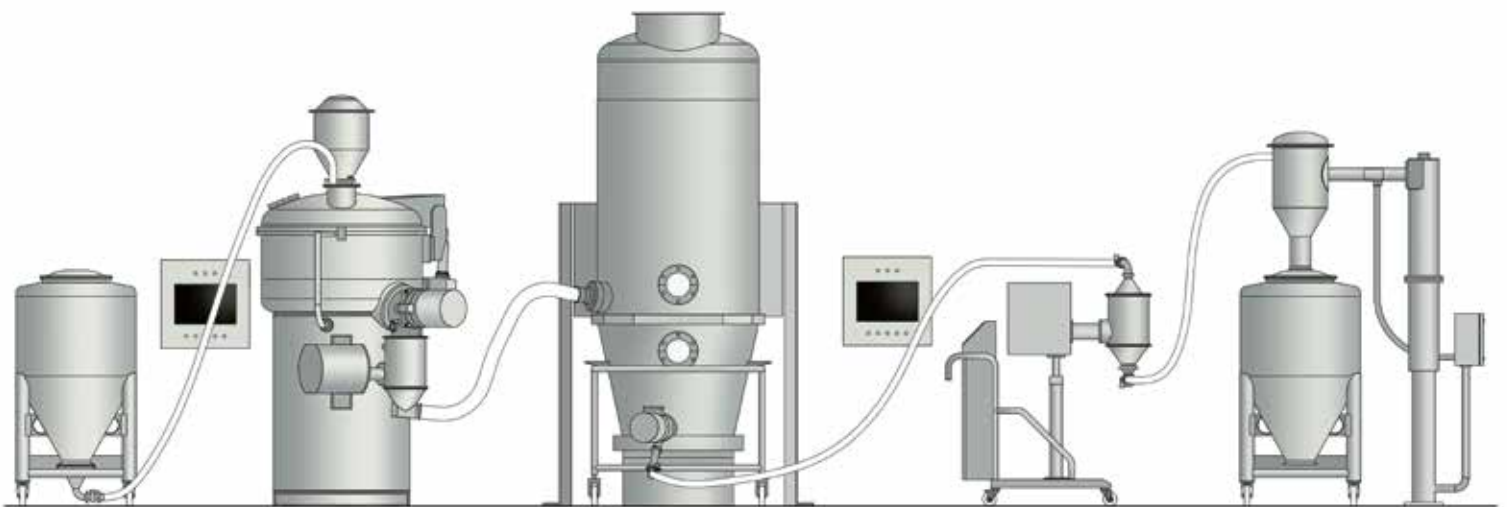




PRIME TECHNOLOGY, INTELLIGENT DESIGN, ENDURING RELIABILITY. IMA GRANULATION TECHNOLOGIES MAKE PROCESSING LEAN AND HIGHLY EFFICIENT. OUTSTANDING RESULTS WITH LITTLE MAINTENANCE.








IMA supplies a complete range of granulation equipment: from small laboratory scale equipment for R&D purposes to industrial equipment for the production of granules. IMA Active provides customized solutions to comply with current health, environmental and safety regulations to protect the operators, the plant and preserve the products.

IMA IS YOUR ONE STOP SUPPLIER FOR GRANULATION SOLUTIONS.



GRANULATION



- 
Pharma
- 
Capacity
3-3,000
litres
- 
Clean In
Place
- 
Gravity/
vacuum
loading
- 
Bottom
impeller
- 
Vertical/
telescopic
chopper
- 
Vacuum
drying

ROTO CUBE

Roto Cube is suitable for wet granulation and vacuum drying in one pot. Built to enable loading of raw materials and discharging in total containment, Roto Cube is recommended for HAPI. The product bowl can be lifted to different heights according to the task and tilted for gentle treatment of granules during the drying phase. Other features for drying such as the G.A.S.T. system, tilting bowl and microwaves reduce drying time.



- 
Pharma
- 
Capacity
60-1,500
litres
- 
Wash In
Place
- 
Gravity/
vacuum
loading
- 
Bottom
impeller
- 
Horizontal
chopper

ROTO MIX

Roto Mix high shear mixers are high-performance wet granulation solutions and ensure easy operation, cleaning and maintenance thanks to a very simple design.

Roto Mix can be supplied together with an in-line Imill calibrating mill and a Ghibli fluid bed dryer for a complete granulation line.



Pharma



Capacity
6-1,400
litres



Clean In
Place



Gravity/
vacuum
loading

GHIBLI

Ghibli fluid bed can be fitted with both fabric and metallic filters, easy to maintain and without the need for an operator access platform thanks to the tilting of the expansion and filter chamber. Ghibli fluid bed processor can be configured with different product bowls or air distributors to manufacture granules, small coated cores or pellets.



Pharma



Capacity
90-1,500
litres



Wash In
Place



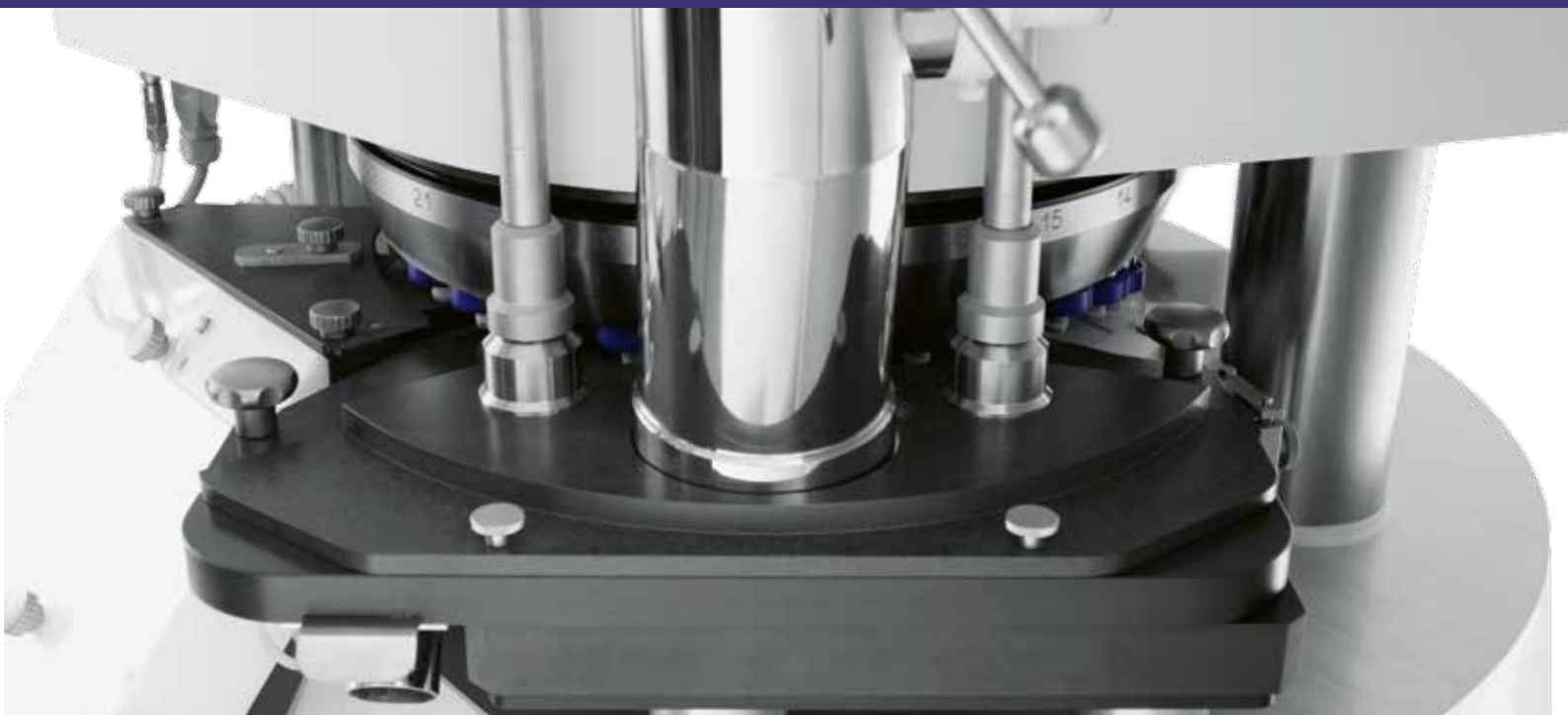
Gravity/
vacuum
loading

ARIA

Aria is an extremely flexible fluid bed processor allowing drying, granulation and coating. Flexibility in terms of batch size processing is a hallmark of this machine, designed for through-the-wall installation, simplifying integration with other processing equipment such as wet calibrators, calibration mills, product conveyors, thus reducing space requirements in the production area.

TABLETING





POWDER DOSING SYSTEMS

Force feed die feeding: the powder is fed from an upper loading hopper to a force feed die feeder containing two paddle wheels, distributing the powder on the die plate, so that die feeding occurs by gravity.

Centrifugal die feeding: the powder is fed from an upper loading hopper into the central rotor area. The centrifugal force generated by the turret rotation allows accurate feeding of the dies through specially shaped radial channels.

SIZE CHANGEOVER

On Prexima THC the die table can be easily removed to change the tooling type.

On Comprima compression tools are made up of two parts and a semiautomatic size change is achieved in a very short space of time.

On Prexima the extraction of the turret is quick and easy thanks to a rotating arm positioned in the upper mechanical compartment. The HMI guides the operator step by step during each phase.

IPC UNITS

All tablet presses can be connected to an IPC unit to check weight, hardness and thickness: the unit can be fitted with a Wash In Place system. NIR systems can also be applied.

TABLETING



Pharma



Clean In Place



300,000 tablets/hour






Centrifugal feed

COMPRIMA

Comprima guarantees yields of up to 99.5%, allowing maximum production speeds even with shaped tablets or awkward products. The long compression time improves tablet quality even at high speeds, while the complete separation between processing and mechanical areas reduces size-change times and enables fitting the machine with an automatic cleaning system.







- 
 R&D
- 
 Clean in place
- 
 Inter-changeable turret
- 
 79,800 tablets/hour
- 
 Force feed

PREXIMA THC

Prexima THC tablet press is for R&D applications and small scale production and can be equipped with B and D type tooling on the same turret. Its compression rollers are designed to work with a force similar to production machines and the latest software for R&D is available as an option. Good accessibility facilitates cleaning and maintenance. Prexima THC has been designed to also allow the testing of HAPI.



- 
 Pharma
- 
 Inter-changeable turret
- 
 1,044,000 tablets/hour
- 
 Force feed

PREXIMA

Prexima is the best solution to handle all production volumes. Based on the Comprima concept, Prexima ensures complete separation between processing and mechanical areas thanks to the use of specially designed seals and protections. Maximum reliability with pre-compression and main compression forces up to 100 kN is possible thanks to the exceptionally sturdy structure. Clever design also enables excellent accessibility.

CAPSULE FILLING



Our expertise in this sector goes back to the first automatic capsule filling machine in the world produced in the 1950's. Combined with our constant commitment to innovation, today IMA is world leader and boasts over 5,000 installations worldwide.

A wide range of filling systems giving excellent results with all kinds of products, in and off-line production control technology and high automation are our key strengths, together with an unrivalled experience in high containment.

PRODUCT DOSING

- POWDER AND PELLETS
- MICROTABLETS
- TABLETS
- LIQUIDS

CLEANING

- MANUAL CLEANING
- WASH IN PLACE
- COMPLETELY AUTOMATIC AND VALIDATABLE CLEAN IN PLACE SYSTEM

CONTROLS

- STATISTICAL WEIGHING UNIT FOR STATISTIC GROSS WEIGHT CHECK
- STRAIN GAUGES FOR 100% IN-LINE CONTROL OF POWDER DOSAGE
- CAMERA FOR 100% CONTROL OF MICROTABLET QUANTITY
- WEIGHING UNIT AT OUTLET FOR 100% GROSS WEIGHT CONTROL OF ALL PRODUCTS
- WEIGHING UNIT AT INLET AND OUTLET FOR 100% NET WEIGHT CONTROL OF ALL PRODUCTS



CAPSULE FILLING



- 70,000 capsules/hour
- Manual cleaning
- Wash In Place
- Multi product dosing

ZANASI AND ZANASI PLUS

Zanasi machines are designed to satisfy low and medium-speed production requirements. Able to run with a minimum quantity of product, they are suitable for multi-product dosing: powder, pellets, liquids, tablets, microtablets. Easy to operate and maintain, also featuring different controls, size changeover and cleaning times are minimal. For high containment configurations, we supply Zanasi THC.



- Pharma
- 100,000 capsules/hour
- Manual cleaning
- Single product dosing

PRACTICA

Practica capsule filling machine covers low, medium and high-speed production requirements and performs single product dosing (powder/granule or pellet) with very high accuracy. Highly reliable thanks to its engineered simplicity, Practica is user-friendly and ensures extremely easy operations and low maintenance.







- 
Pharma
- 
200,000 capsules/hour
- 
Manual cleaning
- 
Multi product dosing

ADAPTA

Adapta capsule filling machine covers low, medium and high-speed requirements and features exceptional design flexibility: two of its dosing units are interchangeable allowing plug and play shift between different machine configurations and filling combinations. With the appropriate options, total production control and efficiency are achieved with any product dose. The machine is suitable for multi-product dosing: powder, pellets, liquids, tablets, microtablets.



- 
Pharma
- 
150,000 capsules/hour
- 
Clean In Place
- 
Single product dosing

IMATIC

Imatic capsule filling machines cover medium and high-speed requirements and dose powder or pellets into the capsules. The single turret operating system ensures maximum dosing precision and reliability even at very high speeds and allows the machine to be fully automated. All size parts have been paired, reducing the number of parts to be changed, thus minimising downtime.

CAPSULE BANDING



Pharma



100,000
capsules/
hour



Manual
cleaning

HERMETICA

Hermetica is a highly automated capsule banding machine for tamper-evident sealing of capsules filled with liquids, powder or other products. Easy to operate, the machine features automatic handling of gelatine working parameters.



WEIGHT CHECKING



Pharma



230,000
units/hour



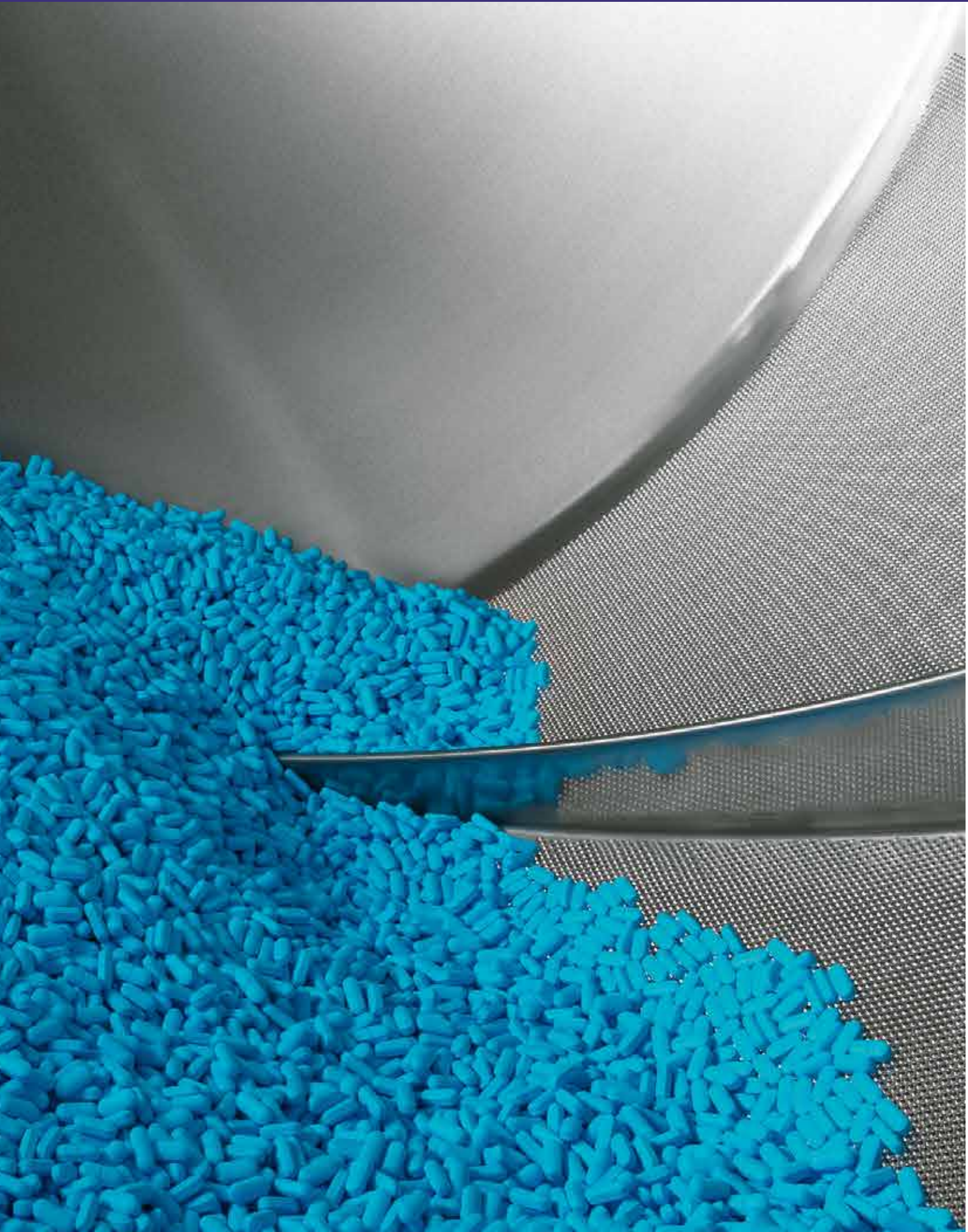
Manual
cleaning

PRECISA

Precisa series of weight checking machines is designed for 100% weight control of tablets or filled capsules and can be installed in line with all tablet presses and capsule fillers currently on the market. Easy to access, Precisa features the continuous motion system used for placing the product on the weighing cells, which eliminates vibration and ensures maximum accuracy even at high speeds.



COATING





OVER 30 YEARS OF EXPERIENCE
AND OVER 1,500 SUCCESSFUL
INSTALLATIONS WORLDWIDE ARE
PROOF OF THE PROCESS
TECHNOLOGY AND QUALITY OF
IMA COATING EQUIPMENT.

Our know-how, together with constant research, close collaboration with raw material suppliers and universities, is a foundation to develop high quality equipment for an optimal production process.

PAN TYPE AND MIXING BAFFLES

IMA's unique mixing baffles positioning for both solid wall and perforated pans ensures perfect mixing, uniform coating material distribution and the highest flexibility. Just one drum for a wide range of batches.

DOSING UNIT






The spray system includes two spray units (air for sugar coating and airless for film coating) complete with the relevant surge chambers to guarantee constant flow rate.

SPRAY GUNS

All IMA coating pans are fitted with spray guns featuring an Anti-Bearding-Cap (ABC) system avoiding gun clogging while the machine is working. The spray guns are fitted on a sliding support arm and are positioned and adjusted during the process from the outside, by using the relevant device.

COATING



-  Pharma
-  Non Pharma
-  Solid wall pan
-  Max. Capacity 1,200 litres
-  Clean In Place

GS HT-HE-HP

GS Coating Equipment is designed in different sizes and fitted with a patented core drying system. Different models are available upon request: GS HT is equipped with exhausting paddles for tablet film and sugar coating and is also available in the economic version GS HE.

GS HP can be equipped alternatively with exhausting or blowing paddles to perform tablet film and sugar coating as well as to process pellets and microgranules.



-  Pharma
-  Solid wall pan
-  Max. Capacity 850 litres
-  Clean In Place

GS EVOLUTION

GS Evolution is a highly automated installation designed for film and sugar coating and the production of pellets and microgranules. The machine features complete isolation of the processing area to satisfy containment requirements.

Available in two different versions: standard or spiralled pan for automatic product and water discharge.



- 
Pharma
- 
Perforated pan
- 
Max. Capacity
900 litres
- 
Clean In Place

PERFIMA

Perfima is a coating pan for tablet film and sugar coating. The pan maintains the same shape and position of mixing baffles as the IMA GS pans: this shape has proven over the years to guarantee the best mixing results. The unidirectional air flow ensures perfect drying of the cores avoiding turbulence inside the pan. The machine is also available with a spiralled pan for automatic product discharge. Additionally the front door can be prearranged for automatic product loading and discharge ports.



- 
Pharma
- 
Perforated pan
- 
Max. Capacity
550 litres

EFFECTA

Effecta is the effective answer for everyday coating processes. The functionally shaped perforated drum and the specially conceived baffles positioned in the central sector of the drum guarantee effective mixing of the cores and uniform distribution of the sprayed coating dispersion.

The machine can be supplied with switchable spray guns for tablet film and sugar coating and is complete with a peristaltic pump and a volumetric dosing system depending on the process performed.

WASHING



Pharma



Max. flow rate
400 l/min

VENUS

Venus is a component washer designed to wash small tools, glass, hoppers, small containers, cams, trays and small bins. The machine can be fitted with a hot air drying system and different platforms, baskets and racks to wash specific components. A two-door version is available for through-the-wall installation and/or to separate dirty and clean working areas. Its washing principle is based on water recirculation. An ultrasound system is also available.



Pharma



Max. flow rate
50 l/min (single pump)
50 or 100 l/min (double pump)

ATLANTIS

Atlantis is a washing and drying cabin designed for washing containers (bins, tanks), drums, pallets, tooling or components of all shapes and sizes. The basic configuration has a square-section, stainless steel cabin and includes a single door with an inflatable seal. The machine can be installed through the wall and, as an option, supplied with two doors for pass-through installations. The high-efficiency version enables increased output: up to 3 bins/hour.



Pharma Max. flow rate
40 l/min HP
70 or 120 l/min LP

HYDROWASH

HydroWash is a self-regulating C.I.P. pressurisation group used as a feeding group for a W.I.P. system or to obtain the internal and external cleaning of a container or coupled with a washing/drying cabin to create a washing system (C.I.P.). The machine is available in both LP (Low Pressure) and HP (High Pressure) versions.



PROCESS AND DEVELOPMENT LABORATORY

IMA Laboratory includes 10 test rooms with a controlled environment, staffed by qualified pharmacists assisted by specialist engineers. Dedicated rooms for customer trials are also available in USA.

MAIN ACTIVITIES:

- Tests at the IMA Laboratory or at the customer's plant to set-up working parameters and optimise machine performance.
- Formulation development/definition on a wide range of machine to test the complete production process.
- Assistance for process start-up or scale-up.
- Implementation of PAT systems.
- Experimentation and development of new technology in collaboration with universities, raw material suppliers and IMA R&D Department.
- Training courses.

The appropriate instrumentation is available to carry out different technological tests: moisture content (Loss On Drying), hardness, disintegration, friability, stereomicroscope, flowability and particle size control.

PREMIUM SERVICES TO SUPPORT CUSTOMERS THROUGHOUT THE ENTIRE MACHINE LIFE CYCLE.

- INTEGRATED MAINTENANCE
- ENGINEERING
- AFTER SALES AND SPARE PARTS
- DOCUMENTATION AND VALIDATION

IMA ACTIVE IN THE WORLD



IMA S.p.A.

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Certificate
N. IT00/0415