# **FLX HUB**

# FLEXIBLE PACKAGING SOLUTIONS





## Table of contents

| IMA FLX. THE ONE STOP SUPPLIER FOR FLEXIBLE PACKAGING | 4  |
|---|----|
| Industries  | 6  |
| PACK STYLES   | 7  |
| HORIZONTAL FORM FILL & SEAL SOLUTIONS                 | 8  |
| HORIZONTAL FORM FILL & SEAL SOLUTIONS DOY             | 11 |
| VERTICAL FORM FILL & SEAL SOLUTIONS                   | 12 |
| WEIGHING AND COUNTING SOLUTIONS                       | 14 |
| SECONDARY AND END OF LINE SOLUTIONS                   | 16 |
| OPEN LAB  | 18 |
| EDUCATION CENTER                                      | 19 |
| IMA ZERO  | 20 |
| SERVICE   | 21 |
| AROLIT IMA GROLIP                                     | 22 |



### THE ONE STOP SUPPLIER FOR FLEXIBLE PACKAGING

The new **IMA FLEXIBLE PACKAGING HUB** is where the production of all machines in the flexible packaging chain converge. Everything needed to process all types of flexible packaging for the **Food, Pharma, Wet Wipes and Pet markets** is right here.

The full array of leading technologies brought together in one facility, where a one-stop supplier drives the quest for excellence, sustainability, constantly researching innovative solutions and **new eco-compatible materials**.

# TURN-KEY HORIZONTAL AND VERTICAL SOLUTIONS

**IMA FLX HUB**, taking advantage of **synergies and integrations** with **IMA Group companies** and thanks to proven expertise gained in food & non-food industries' key applications, offers fully engineered solutions delivering highly efficient flexible packaging lines to maximise your line's OEE, with real time operator-specific production and diagnostics data.

From automatic loading systems to cartoning, from product feeding and handling to single and multiple flow wrapping. Weighing solutions coupled with vertical baggers and end of line equipment. IMA FLX HUB is your perfect partner for delivering **turn-key horizontal and vertical solutions**. Its high-speed flexible automation systems are capable of the highest production throughput requirements.

The **portfolio** includes systems for modified atmosphere applications (M.A.P.) and vacuum, as well as machines for 4 side seals, multi-lane and sticks, fold pack and sandwiching. The HUB also offers counting solutions, dosing devices and complete, fully automated Doy pouch lines.





## **INDUSTRIES**

IMA FLX, with its vast range of flexible packaging solutions, can satisfy every form, fill & seal, weighing & counting and secondary packaging requirement of Food, Pharma, Wet Wipes and Pet markets. FLX's team of specialists take great pride in their many years of hands-on experience in these industries. This field-tested know-how is expertly applied to the wide range of reliable, flexible and innovative packaging machinery and automatic lines designed and manufactured with your needs in mind.



Bakery



Pizza & Tortillas



Biscuits & Cookies



Snacks



Pasta & Noodles



Chocolate & Confectionery



Dairy



Meat & Poultry



Fish & Seafood



IQF



Ice Cream



Produce



Preserves & Condiments



Tea, Coffee & Beverages



Pet Food



Home & Personal Care



Wet Wipes



Pharma & Medical

## **PACK STYLES**

### **HFFS**



Pillow



Pillow with gusseting



Pillow Reclosable with stand-up feature





3 side seal



X Fold

### **VFFS**



Pillow



Block Bottom



3 side seal

Carry fresh



Easypack

DOY



Doy Shark



Doy with spout and handle



Doy with zipper

### STICK PACK AND FIN SEAL



Centered stick



Pour spout stick pack



Easy opening features stick pack



Quattro

Flexcan



Fin seal



Easy opening features fin seal



Pour spout fin seal

### **CARTONING AND END OF LINE**



Wrap-around tray with or without closing lid



Top loading tray and display box



Display box for flexible packs



Pre-glued carton for single product



Pre-glued carton for multiple products



Display boxes for flexible packs

### **END OF LINE**







### HORIZONTAL FORM FILL & SEAL SOLUTIONS

- BAKERY, BISCUITS & COOKIES
- Pizza & Tortillas
- SNACKS
- Pasta & Noodles
- CHOCOLATE & CONFECTIONERY
- DAIRY
- Meat & Poultry

- FISH & SEAFOOD
- IQF
- PRODUCE
- Pet Food
- Home & Personal Care
- WET WIPES
- PHARMA & MEDICAL

HFFS Flow wrapping machines tailored to match each customer's specific needs and deliver maximum production flexibility and efficiency at every performance level. Each model is available in different versions with a large range of options for the packaging of food and non-food products. Moreover, product feeding, distribution and conditioning to a flow wrapping system is one of the added values of the FLX HUB offer.

IMA FLX can provide stand alone HFFS machines or complete turn-key solutions ensuring the highest efficiency is achieved and maintained.



### STAND-ALONE FLOW WRAPPERS

Stand-alone HFFS machines with manual feeding system and without M.A.P. devices. Ideal for dry and not perishable products at medium-low production speeds. Film control, NPNB (No Product No Bag) and servo-driven are just some of the features that can be provided and installed on this range of HFFS machines.



# FLOW WRAPPERS FOR M.A.P.

One of the most effective ways to extend the shelf life of fresh products is to pack them in a hermetically sealed pack with a modified atmosphere. IMA FLX robust flow wrappers are precisely engineered to ensure a reliable sealing process.. This range of machines are also ideally suited for non-food applications where a hermetically sealed pack is required, such as medical and personal care products like wet wipes.



## INTEGRATED LINES FOR DEDICATED APPLICATIONS

Thanks to proven expertise gained in food & non-food industries' key applications, IMA FLX offers integrated flow wrapping solutions for specific products or markets delivering high efficiency and maximising the OEE with real time production and remote diagnostics data. Fully automated solutions for applications such as pizza & tortillas and primal meat.







Pillow



Pillow with and without gusseting



Pillow Reclosable



Pillow Reclosable with stand-up feature



Pillow with clip



Quattro



Quattro Reclosable



3 Side Seal



Shrink



Shrink Barrier



## FLOW WRAPPERS FOR CANDIES AND GUMS

Flow wrapping solutions for small sugar confectionery items like candies, jellies, gums, lollipops, chewy candies, bubble gums and many more. Such modular and flexible machines are available in a wide range of configurations and can be equipped with several feeding systems: centrifugal disc feeder for candies, jellies, lollipops and pellets; cut & wrap feeding systems for products coming in rope; specific feeding systems for chewing gum slabs.



# TURN-KEY SOLUTIONS FOR BAKERY PRODUCTS

Complete packaging lines for a wide range of bakery products such as biscuits, crackers, cakes and rice cakes, rusks, swiss-rolls, crisp bread. wafers and noodles.

IMA FLX offers turn-key solutions including dedicated equipment for the handling, feeding, distribution, stacking and portioning; integrated primary and multipack flow wrappers; X-fold wrappers and a wide range of options and fully customized systems according to the market needs.



# SOLUTIONS WITH DISTRIBUTION AND HANDLING SYSTEMS

Product distribution and conditioning to a flow wrapping system forms part of IMA FLX's integrated solutions philosophy ensuring the highest efficiency is achieved and maintained. Integrated Distribution Systems include buffer storage and refeed modules, row removal, staging and feeding as well as gentle product handling and accurate timing. Cross belt feeding systems linked to flow wrappers and aligning systems for products coming randomly complete the range.

### HORIZONTAL FORM FILL & SEAL SOLUTIONS







# SOLUTIONS WITH INTEGRATED ROBOTIC SYSTEMS

In some instances, either the product, the delivery method or the space available results in a robotic solution being the best fit. These systems, such as pick & place or loading robots, may feed directly into the wrapper infeed or may pre-group the product to conveyors to allow subsequent delivery to the wrappers through smart belt systems that ensure constant delivery to the wrappers.



# SANDWICHING AND FLOW WRAPPING

Fully electronic sandwiching lines, wire-cut technology, for the production of sandwich biscuits and crackers, available with 2 or 4 lanes. Turn-key solution with sandwiching line directly combined with flow wrapper for pile pack configurations. Real time synchronization, compact solution and direct product transfer from the sandwiching towards the flow wrapper. Single and double cream colour and layering available.



## ON EDGE X-FOLD WRAPPING

Fully electronic X-Fold wrapper for biscuits, crackers, rusks and rice cakes on edge available in manual, semi and fully automated configurations. Feeding, stacking systems and automatic portion feeders available

High performance solution able to reach up to 100 packs/min, with tight packs assured thanks to our advanced longitudinal sealing technology.

## HORIZONTAL FORM FILL & SEAL SOLUTIONS DOY



- CEREALS
- SNACKS
- CHOCOLATE & CONFECTIONERY
- Preserves and condiments
- PET FOOD
- Home & Personal Care

New range of innovative high speed Doy pouch machinery with a unique dual motion system composed of an intermittent station for pouch forming and sealing and a continuous station for filling solid and liquid products.

Given its versatility, this solution is suitable for a wide number of bag dimensions and filling volumes, as well as has the possibility to equip the Doy pouches with corner spout application, shaped round corners and handle punch. Pouch can be featured also with re-closable zipper, easy open tear notch and hole punch.



# HFFS DOY SOLUTIONS FOR LIQUID PRODUCTS

High speed doypack machine designed to form flat film roll into high quality Doypack bag, with fully integrated filling solutions for liquid products. This solution is dedicated to the spouted Doybag applications. The machine is equipped with a unique patented dual motion system consisting of an intermitted motion station that hermetically applies the spout to the bag, combined with a continuous motion carousel for bag filling with liquid products.



# HFFS DOY SOLUTIONS FOR SOLID PRODUCTS

High speed pouch machinery with unique dual motion system composed of an intermittent module for pouch forming and a continuous module for product filling. Suitable for a wide number of bag dimensions, this machine has the possibility to equip the Doy pouches with a re-closable zipper, rounded corners, easy open tear notch and hole punch.



Doy with tear notch



Doy with hang hole



Doy with round corners



Doy with spout



Doy with soft spout profile



Doy with tear notch and zipper



Shaped profile with spout



Shaped profile

### **VERTICAL FORM FILL & SEAL SOLUTIONS**



- BAKERY
- SNACKS
- CHOCOLATE & CONFECTIONERY
- Dairy
- MEAT & POULTRY
- IQF
- PRODUCE

VFFS Continuous & Intermittent film motion packaging machineries designed to produce the highest quality and most innovative range of pack styles, whilst delivering flexibility and exceptional performance. Ideal for loose particulates, fresh or frozen produce, powders, granulated products and liquids.

Multilane vertical machines for stick type packages ensure an increase in production and minimize wrapping material waste. Based on servo-motorized mechanism, the machines can pack different sizes of sticks and are suitable for liquids, powders and granulated products.



# VFFS MACHINES WITH INTERMITTENT FILM MOTION

Low-, mid- and high-end automatic intermittent VFFS machines featuring excellent sanitary design for dry and wet applications with the option of Modified Atmosphere Packaging (M.A.P.).

Ideal to run a wide variety of pack styles including Doy packs and transverse zipper bags for industries such as produce, dairy, IQF, bakery, confectionery with both heat and ultrasonic sealing.



# VFFS MACHINES WITH CONTINUOUS FILM MOTION

The IMA continuous film motion top performing baggers can pack both dry and wet products in a variety of bag styles, including pillow, block bottom, Quattro, EasyPack and Doy-style packs.

IMA's VFFS machines have been developed to meet the specific demands of food industry in terms of sanitary design, accessibility, fast changeover and OEE (overall equipment effectiveness).

Open frame design, IP66 rated electrical components and easily removable forming tube.



STICK PACKAGING MACHINES

Stick Packaging machines produce high quality stick type packages providing reliability, increasing production and optimizing the use of packaging material. The machines guarantee a high performance output in the packaging of liquids, powders and granulated products. The design of the machines is based on an Open Frame architecture that provides easy cleaning and accessibility for maintenance and operational adjustments.





# TURN-KEY VFFS SOLUTIONS

Thanks to its complete turn-key systems, IMA FLX can handle your product from the thermal processing system exit belt to dosage, primary and secondary packaging.

IMA offers a variety of dosing systems, including high-efficiency vision counters for gentle product handling, multi-head weighers for loose products and counters. The range of VFFS machines, from low-end to top-end, offers extreme sealing pressure for M.A.P. applications, many pack styles and changeover features.



Centered stick pack



Pour spout stick pack



Easy opening features stick pack



Fin seal



Easy opening features fin seal



Pour spout fin seal



Pillow ultrasonic



Pillow vertical



Block bottom



Block bottom with window and handle



3 side seal vertical



Quattro vertical



Carry Fresh



Doy Shark



Flexcan



Easypack

## WEIGHING AND COUNTING SOLUTIONS



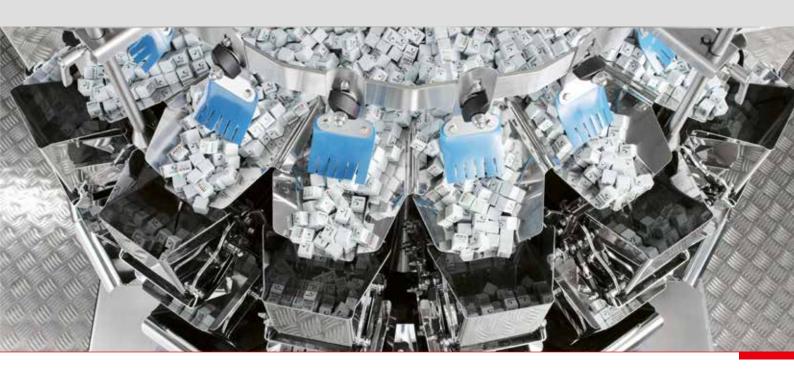
- BAKERY
- BISCUITS & COOKIES
- SNACKS
- CHOCOLATE & CONFECTIONERY
- DAIRY
- Meat & Poultry
- IQF
- PRODUCE
- PET FOOD

Compact-design multi-head weighers suitable for a wide range of products: dry, fresh and frozen. Sanitary and wash-down execution available with small, medium and large hopper volume to best meet the application target. Easy detachable product contact parts available in plain execution, embossed or with special coatings. They can run in weighing or counting mode in standard configuration.



### **MULTIHEAD WEIGHERS**

High quality multi-head weighers tailored to each customer's products, to weigh consistently and precisely across a very wide range of pack weights and speeds. The product range includes weighers from 10 to 24 heads, with construction standards for either "dry" or "wet" environments. Sanitary design, accessibility, fast changeover and OEE.





### LINEAR MULTIHEAD WEIGHERS

High quality linear weighing machines tailored for different products and weights.

The product range includes weighers from 8 to 15 heads, with construction standards for either "dry" or "wet" environments. Sanitary open design, accessibility, fast changeover and tool-less removable components.



### **COUNTING MACHINES**

Counts controlled by a vision system into boxes or vertical form fill and seal machines at a high speed with over 99% accuracy.

The Vision range offers complete flexibility in terms of product type, shape and size. Key to the flexibility of the belt-based system is a powerful line scan camera combined with single pneumatic driven fingers (Batchmaker) to separate the products.

### SECONDARY AND END OF LINE SOLUTIONS



Discover our full array of secondary and end of line packaging solutions to add the final touch that your product deserves. Thanks to our deep knowledge in advanced automation, we develop and manufacture a wide range of side loading, top loading and case packer machines capable of responding to the constant diversification in product shapes and sizes, but with the primary aim to preserve the integrity of the contents.



Wrap-around tray with or without closing lid



Top loading tray and display box



Display box for flexible packs



Pre-glued carton for single product



Pre-glued carton for multiple products



Display boxes for flexible packs



# CONTINUOUS CARTONING MACHINES

Continuous cartoning machine, mod. AC200, with continuous motion, adjustable changeover size, has been designed for a lateral automatic filling operation, hot melt closing. The machine is completed with device for the positive opening of the box by means of double suction cups.



#### **FORMING MACHINES**

The Forming Machines (with single, double or triple forming head) are suitable for erecting, starting from a flat blank, E-flute and corrugated carton boxes by means of hot-melt, turn-over end walls or locks.



#### LOADING SYSTEMS

The Loading System, mod. CR, is able to collate products individually and place them either flat or on edge in a vertical race track prior to be picked as a group and top loaded (Delta Robot) into cartoners (hinged lid boxes or RSC cases), side load cartoners or flow wrappers. The CR can be provided, if necessary, with a variety of infeed systems, multiple collecting units and robots. The CR is a stand-alone unit but can be integrated, as a module, with a Forming and/or Closing unit to be part of a MonoBlock (MB) machine.















Wrap around machines are suitable to pack your products into carton trays. Products, organized in lines in the desired configuration, on arrival to the loading zone. Blanks are picked up from the magazine and inserted, with "U" shape, into the transport chain, in front of the product. Once the product has been inserted into the box, the box goes to the closure zone. Flaps are closed and lateral walls are glued.



#### **CLOSING MACHINES**

The Electronic linear closing machines are suitable to close the boxes along the three lateral flaps by hot melt closure. Hot melt glue is applied by a gun system (one gun sets the glue along the longest side of the box, the other two guns to the two smallest sides). Changeovers are quick and easy via the handswheel regulation system.

The machines are provided with independent motor and a synchronising device placed at the infeed of the machine.



#### **PALLETIZERS AND DEPALLETIZERS**

Available in several versions ranging from basic applications, such as manual pallet loading, up to more sophisticated solutions, such as automatic feeding of empty pallets and unloading of full pallets, palletizers have a solid structure and use precise, rapid multi-axis robotized systems for accurate positioning of products on pallets or inside "big boxes".

### **OPEN LAB**

OpenLab is the IMA Group's network of technological laboratories and testing area, dedicated to the research of sustainable materials, technologies and production optimization processes.

#### LABORATORIES:

- Lugano CH
- · Foiano Della Chiana (AR) IT
- Bologna IT
- · Lowell, Ak USA



### MAKE INFORMED MATERIAL DECISION

OpenLab has carried out in-depth analysis of the composition and performance of most flexible films available on the market. Drawing from this extensive library and on its own practical experience, IMA FLX HUB can help you to enhance efficiency by selecting the best film for your application.

# TECHNICAL TROUBLES? OPENLAB'LL GET SHOT OF THEM

OpenLab experts will work through any technical glitches that are preventing your film and your packaging machine from interfacing seamlessly. Whether it's a different film composition or a mechanical machine fault that is causing an issue, IMA FLX HUB will analyse both material and machine to diagnose the problem and restore reliable performance.

### **TEST TOMORROW'S FILMS. TODAY**

OpenLab evaluates most emerging sustainable and breakthrough materials before they are even commercially available in order to know how to run them on the IMA FLX HUB machines. If you are thinking about introducing a new biodegradable, performance-enhanced or ultra-thin film, be sure to take advantage of OpenLab testing capabilities. IMA FLX HUB can design a turn-key machine to accommodate the sealing and running characteristics of your chosen film. In addition, the offer includes thorough testing of new materials, from laboratory analysis right through to trials on production lines that simulate real-life conditions – avoiding actual downtime and costly mistakes.







## **EDUCATION CENTER**



To help our customers obtain top performance and maximum safety from our machines, IMA recommends technical training courses for personnel from Production (Operators, Technicians and Supervisors), R&D, Process Transfer Department and the Maintenance Department.

Training courses can be organised at IMA's site or at the customer's plant and are held by qualified IMA technicians. They provide instructions for the customer's staff on how to operate the machine and maintain it in perfect working conditions and how to carry out troubleshooting procedures in the easiest, fastest possible way.

Our Training Courses are tailor-made and modular, in order to fulfill all customer needs; special attention is given to the customised units fitted to the machine and to the best and most effective way of dealing with any situation which may arise during machine operation.

During the training sessions our experts explain the correct use of the documentation supplied with the machine.

An Attendance Certificate is issued for all participants who successfully complete their assessment tests.

### **IMA ZERO**

# IMA ZERO. OUR PLEDGE TOWARDS SUSTAINABILITY.

**IMA ZERO** is the foundation of our sustainable development programme. It includes all current practices, plus those we are currently implementing, and has the ultimate goal of minimizing environmental impact in industrial manufacturing, and of promoting and creating a working and living habitat that always puts people at the centre.

Economic results and social benefits are complementary objectives through which we have always generated value for our company, customers, employees, suppliers and for the entire community.

IMA ZERO definitely represents and embodies the Group's

desire and dedication to change and give a positive and ecofriendly impact, identifying four pillars to follow: **NOP** (No-Plastic Program), **LOW** (Low Impact Program), **E-MOB** (Sustainable Mobility Program) and **YOU** (Human-Centric Program). All these pillars put at the forefront the environment and the people living in it

Starting from innovation, **IMA ZERO** is our very latest promise to create products, production processes and services, benefitting from a renewed logic of sustainability and from the awareness that **our commitment today will help to shape the world of tomorrow.** 



IMPACTING PRESENT, AFFECTING FUTURE.



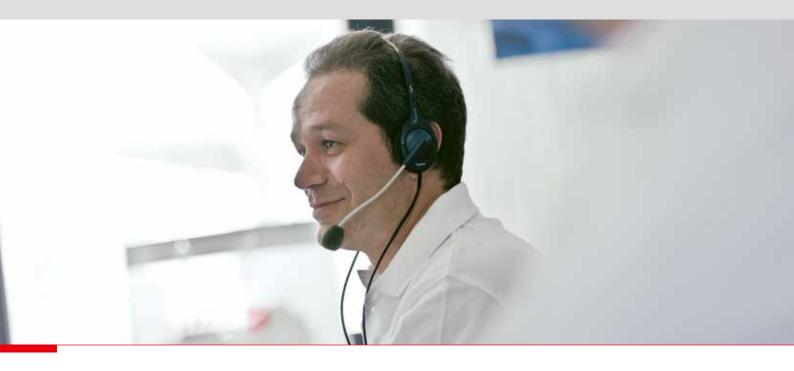
### NOP: NO PLASTIC PROGRAM

Through the research and testing of alternative processes and materials, together with specialised partners, IMA fosters **plastic-free and sustainable, compostable or biodegradable packaging solutions.** 

IMA has established the **Open Lab** where Material Technologists study, develop and test compostable and recyclable materials to be used on its packaging equipment.



### **SERVICE**



# UNRIVALLED EXPERIENCE, ANYWHERE IN THE WORLD

Unrivalled experience in the market, highly skilled technicians able to intervene anywhere in the world, plus personalised maintenance programmes to ensure ongoing support and maximise performance are the key elements provided by IMA FLX HUB to sustain your competitive advantage in a demanding market place.

Throughout the entire equipment lifecycle, IMA FLX HUB guarantees on-site technical assistance to ensure minimal downtime, thereby safeguarding your productivity.

From the design phase onwards, for both turn-key solutions and single machines, we believe that working together with each customer leads to the very best solutions, always tailored to real, closely evaluated situations.

Even during testing and validation, the customer is our main point of contact for a reciprocal exchange of know-how. This dialogue does not end at the time of delivery, it continues through the complete lifecycle of the machine.

# THE NEED FOR EXCELLENT SERVICE AROUND THE WORLD

- PRESENT IN OVER 50 COUNTRIES
- 8 BRANCHES PROVIDING SALES AND SERVICE
- More than 40 representing agencies
- LOCAL TECHNICIANS AND SUPERVISORS FOR PROMPT SUPPORT

### **DOCUMENTATION**

All machines are delivered with full detailed technical documentation including:

- Spare parts catalogue for rapid part identification and easy ordering
- Instruction manuals for machine groups and commercial units, each manual contains separate sessions for operators and technicians
- Electrical documentation including functional drawings, I/O tables, PLC and microprocessor cards lists

### **ABOUT IMA GROUP**

IMA Group is world leader in the design and manufacture of automatic machines for the processing and packaging of pharmaceutical, personal care, food, tea and coffee products.

The Group is present in around 80 countries, supported by a sales network made up of 29 branches (Italy, France, Switzerland, the United Kingdom, Germany, Austria, Spain, Poland, Israel, Russia, the United States, India, China, Malaysia, Thailand and Brazil), representative offices in central-eastern Europe and more than 50 agencies.

IMA Group has more than 40 production plants in Italy, Germany, France, Switzerland, Spain, UK, USA, India, Malaysia, China and Argentina.

In planning its strategies, IMA Group takes account of the economic, social and environmental impact of its operations, adhering to the principles of sustainable growth and Corporate Social Responsibility.

Explore on ima.it/en/flexible-packaging-hub

#### IMA BRANDS FOR THE FLX HUB:













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