

DYNAMICA

CONTINUOUS MOTION CARTONER



DYNAMICA SERIES HORIZONTAL CONTINUOUS MOTION

1 PRODUCT FEEDING AREA

Cartoning is all about the type of product being packaged. The feeder units are the heart of any packaging line, and IMA has developed flexible solutions designed especially for customers who need to handle completely different product sizes and weights on the same lines.

2 PRODUCT TRANSPORT CONVEYOR SYSTEM

The product transport system is the most flexible and versatile and has been designed to accommodate all types of fixed or mobile bucket, maintaining excellent stability and orientation right up until the product enters the carton. The length of the system can be varied to accommodate one or more automatic feeders, manual loading stations or separators.

3 LEAFLET TRANSPORT SYSTEM

The leaflet transport system from the feeder to the introduction area into the carton is very innovative and very reliable.

As per recent regulations, more written content is required on the leaflets thereby making them thicker than before. The leaflet transport system is particularly suitable to handle any kind of thickness. The correct positioning of the leaflet prior to insertion into the carton is always ensured regardless of the width or length of the folded leaflet.

The leaflets are visible at all times, while the innovative conveyor system ensures that the paper dust they generate is continuously expelled.

4 CODE EMBOSSING

The coding stations are located in an area easily accessible to operators, and codes can be positioned on both sides of the carton. Coding can be done from both sides of the carton, by embossing, ink-jet or laser, and the code is always perfectly positioned, even at different speeds.

5 CARTON MAGAZINE

The carton magazine is the largest in its category. It has been designed to prevent dust falling on the mechanical parts, and can also be easily accessed by operators, as it moves towards the machine structure itself.

THE DYNAMICA IS THE ONLY CARTONING MACHINE IN THE WORLD THAT ALWAYS GUARANTEES PRODUCT VISIBILITY ON ENTRY, DUE TO THE POSITION OF THE PUSHERS.





6 ERGONOMICS AND MACHINE DESIGN

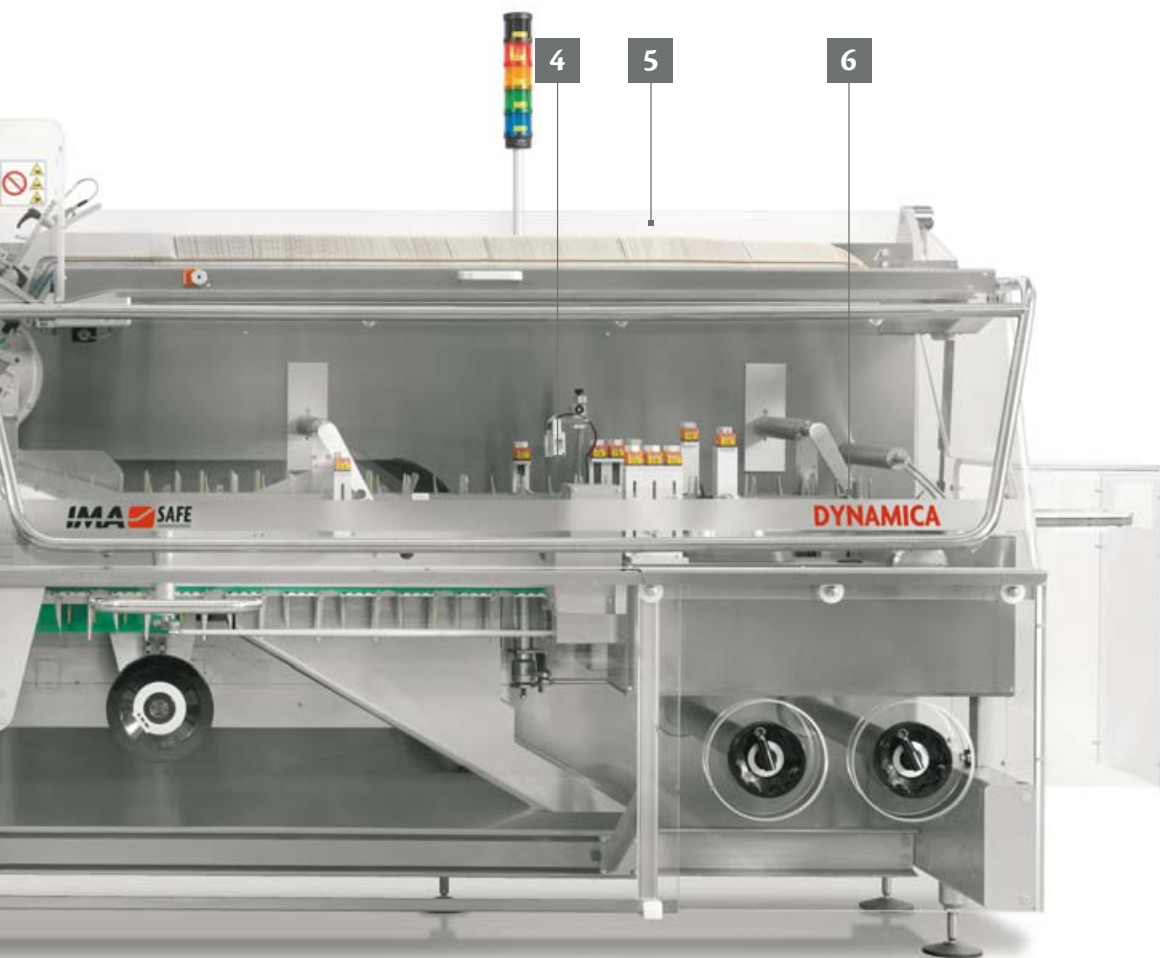
Compact balcony construction and clean design, ensuring greater accessibility, ease-of-use, complete visibility of all parts and enabling installation in a small production space.

The guarding concept and the machine configuration make the machine totally accessible to the operator and allows a very quick change over.

The loading position of materials such as cartons, leaflets, booklets and products has been especially conceived to facilitate the working conditions of the operator.

A careful design together with a solid structure guarantee a minimal maintenance; moreover, all the parts are easily identifiable and there are no hidden corners where dust can lay.

Total conformity to GMP directives and stainless steel construction give the DYNAMICA a pharmaceutical finish.



DYNAMICA SERIES SPEED 400 CARTONS PER MINUTE

THE DYNAMICA IS THE ONLY CARTONING MACHINE DESIGNED TO MEET THE MOST STRINGENT GMP REGULATIONS IN THE PHARMACEUTICAL INDUSTRY.



PRODUCTS THAT CAN BE HANDLED ON DYNAMICA:

- BLISTERS
- WALLET STRIPS
- STRIPS
- TRAY PACKS OR THERMOFORMED TRAYS
- ALUMINIUM AND PLASTIC TUBES, SEMI RIGID TUBES, SQUEEZABLE TUBES ETC...
- AMPOULES, VIALS AND SYRINGES
- JET-PENS
- FLOW-PACKS
- STICK PACKS
- SACHET PACKS
- INHALERS
- SUPPOSITORIES
- BOTTLES (BOTH PLASTIC AND GLASS)
- COSMETICS (LIPSTICK, MASCARA, NAIL VARNISH ETC...)
- JARS
- ACCESSORIES ETC... (I.E.: SPOON, CANULA, SPRAY, GLOVES, SERVIETTES...)





BOX ERECTION SYSTEM

An extremely durable positive box erection system, designed for mechanical speeds higher than 500 cycles per minute. It will open any type of pack smoothly and efficiently, and place it into the conveyor system.

CARTON TRANSPORT

This patented positive system avoids friction and guarantees absolutely no cosmetic damage, even to shiny surfaces. The absence of mechanical chains means any carton dust left inside the machine can be removed easily.

PRODUCT INSERTION INTO THE CARTON

The efficiency of a cartoning machine depends on how well the feed capacity and transport introduction system can transfer the products into the pack continuously without causing any damage. The consistency and rigidity of products can vary enormously: blister packs, bottles, vials and flow packs, among others, always have to be properly oriented and aligned before they enter the pack. Products enter the cartons continuously, thanks to a series of pushers that gently transfer the product and accessories (spoon, dispenser, canula, booklets or leaflets) into the pack without causing any damage or defects.

CLOSING UNIT

Specific modules are available to close any type of carton, minimising the number of size parts needed while allowing the operator maximum visibility when performing adjustments, which can be carried out easily without the use of tools.

OPERATOR INTERFACE AND REJECT MANAGEMENT

The interface is placed at the centre of the machine on a high resolution colour touch screen, with user-friendly graphics to assist the operator. The electronics and software are extremely powerful and versatile, enabling the management of several external units while retaining full control of all the servo drives on the machine. A system to transfer production data to a host computer and modem connection are included in the machine. The management logic and rejection systems guarantee absolute certainty for any product type or working environment. It prevents the waste of boxes and products, thanks to the "NO CARTON NO LOAD / NO PRODUCT NO LOAD" function.

SALES AND SERVICES

IMA UNDERSTANDS
THE NEED FOR
EXCELLENT SERVICE
AROUND THE WORLD



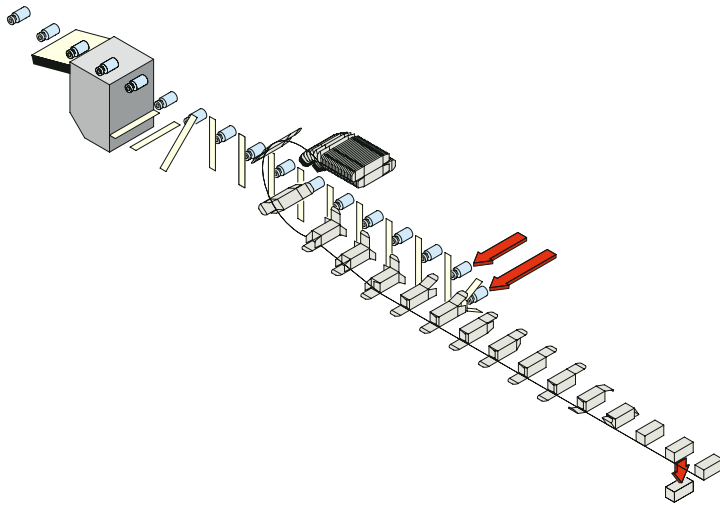
The use of original spare parts since they are essential to guaranteeing perfect machine working order over time, full production efficiency and life cycle duration.

Spare parts can be ordered from IMA directly or alternatively via the MyIMA e-commerce system and shipped to you within 24-36 hours.

- PRESENT IN OVER 70 COUNTRIES
- 10 BRANCHES PROVIDING SALES AND SERVICE
- MORE THAN 50 REPRESENTING AGENCIES
- 90 TECHNICIANS FROM ITALY SUPPLYING WORLDWIDE SERVICE
- 50 TECHNICIANS FROM LOCAL SUBSIDIARIES AND AGENCIES
- 11 AFTER SALES SUPERVISORS

IMA Safe provides prompt and effective technical assistance which covers the entire life cycle of its equipment. This assistance is provided by a dedicated team of experts able to meet our client's needs on a day to day basis. A customer oriented after sales service staff is what distinguishes IMA from the rest of the world.





THE DYNAMICA SERIES OFFERS THE WIDEST RANGE IN TERMS OF CARTON SIZE, WIDTH, LENGTH AND HEIGHT - NOT TO MENTION PACK VARIETY.

CONTINUOUS MOTION CARTONER	WIDTH (A)	HEIGHT (B)	LENGTH (H)	PRODUCTION SPEED
DYNAMICA S	25 – 90 mm	15 – 90 mm	65 – 200 mm	400 crt/min
DYNAMICA L	25 – 130 mm	15 – 90 mm	65 – 200 mm	300 crt/min
DYNAMICA SM	25 – 90 mm	15 – 90 mm	65 – 200 mm	250 crt/min
DYNAMICA SV	30 – 90 mm	15 – 90 mm	65 – 150 mm	400 crt/min
DYNAMICA S/MS	25 – 90 mm	15 – 90 mm	65 – 200 mm	250 crt/min
DYNAMICA L/MS	25 – 130 mm	15 – 90 mm	65 – 200 mm	250 crt/min
DYNAMICA SV/MS	30 – 90 mm	15 – 90 mm	65 – 150 mm	250 crt/min

The dimensions are indicative and can vary depending on the optional groups chosen and machine lay-out

OPTIONAL UNITS

- Computerised integration for quality control systems
- Leaflet insertion (all commercial systems available)
- Booklet insertion
- Blister production and recovery magazine
- Stacked blister outfeed
- Carton coding (embossing, ink-jet, laser etc.)
- Carton/leaflet/brochure barcode reader (all commercial systems available)
- Hot-melt glue system for various kinds of carton closure
- Various tamper-evident solutions - such as 4th flap
- Track & Trace solutions
- Labelling application
- 5th panel
- Mobile bucket chain
- CF600 automatic carton feeder
- Possible separation between product feeder and cartoner
- System to feed multiple products simultaneously in the same carton
- Computerised spare parts management
- Printer connected to the computer
- 21CFR Part 11 compliance
- Training for machine operators and multimedia CD for training at customer's site
- Computerised line machine statistical data collection or quality control system



Compressed Air Consumption

134 NI/min



Maximum Air Pressure

6 atm



Installed Power

5 kW



Power Supply

400 V

www.ima-pharma.com

IMA S.p.A.

IMA SAFE division

Via I Maggio 14/16 - 40064 Ozzano dell'Emilia (Bologna) - Italy

Tel. +39 051 6514111 - Fax +39 051 6514743

mktg.packaging@ima.it - www.ima.it



Certificate
N. IT00/0415