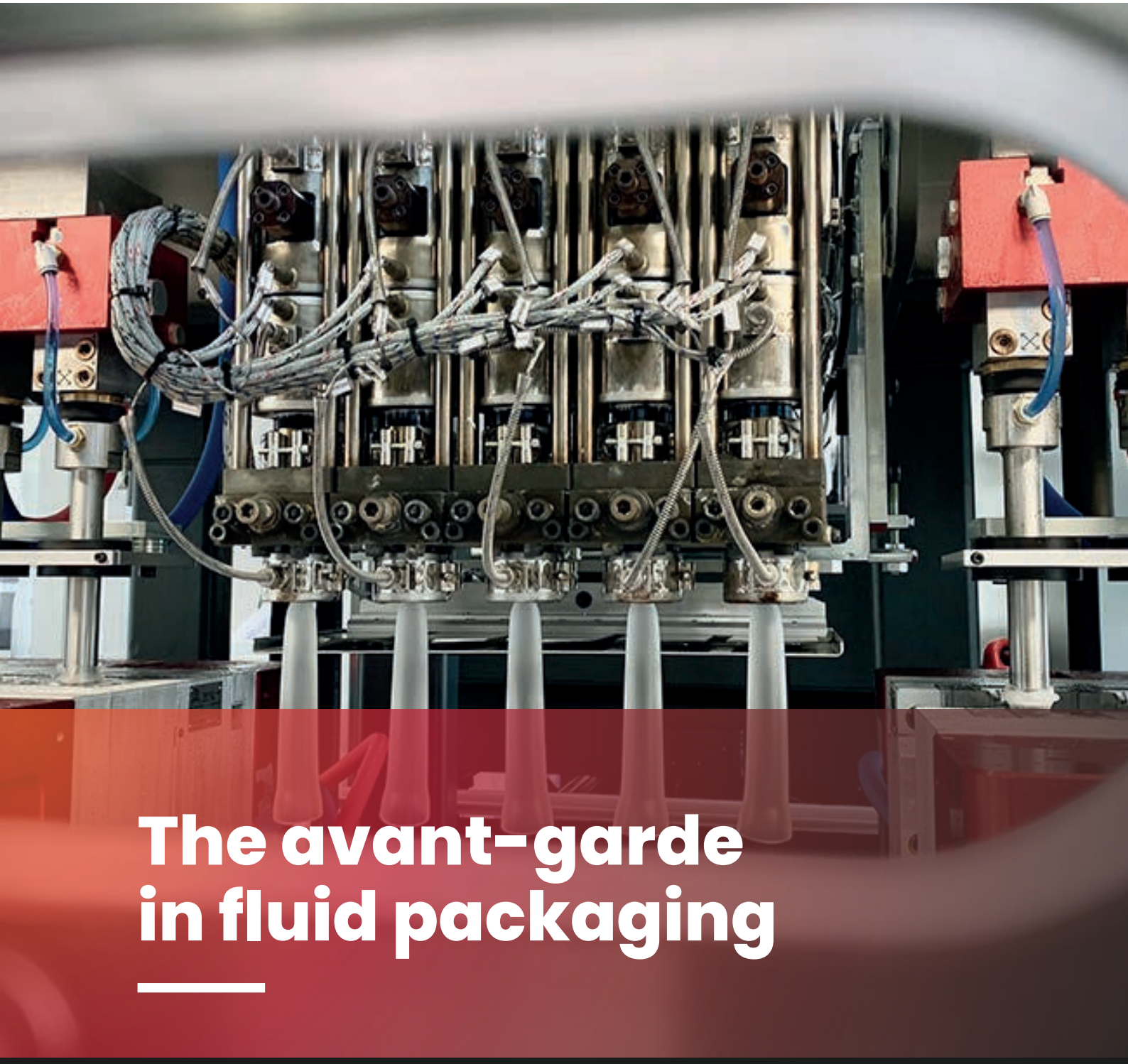
alphaMAC

an IMA Group Company



The avant-garde in fluid packaging

We take the lead in the evolution of extrusion blow moulding

AlphaMAC
an IMA Group Company

AlphaMAC is a solution provider for liquid product packaging with an innovative approach and a different vision in the design and construction of extrusion blow moulding machines.

AlphaMAC is a company with an extensive experience in the field of extrusion blow moulding.

A company that was born from a team of professionals with multiple decades of experience in the field of extrusion blow moulding, with a common mission of bringing innovation to a consolidated technology, guaranteeing high reliability and efficiency of our machines by simplifying the use and thus becoming a reference point on the market.

Alphamac

AlphaMAC represents the avantgarde in extrusion blow moulding: machines, technologies, services and consultancy for the fluid packaging industry.

We create solutions for packaging of liquid products. Our main business is the design and manufacture of extrusion blow moulding machines, but we are also a service provider for EBM machines on a global scale and supply all types of engineering lines to the packaging industry.

We are an IMA Group Company, a world leader in the design and production of automatic machines for the processing and packaging of diverse products.
Being part of the IMA Group has strengthened us financially and has given us the opportunity to access a wide variety of technological services that will help further increase our innovative DNA.

Solid organization

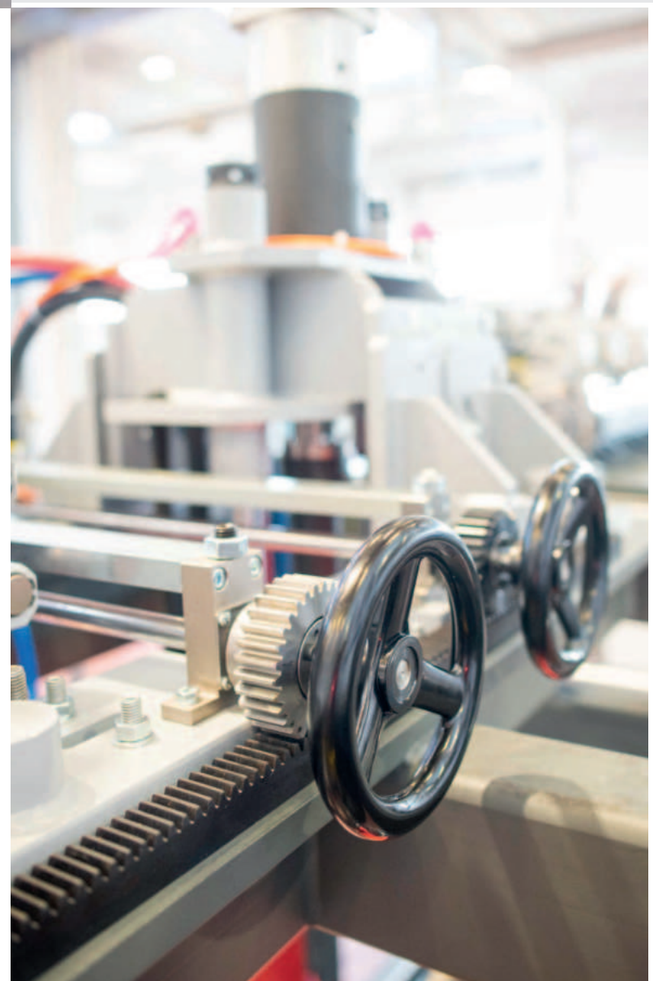
Maximum competence

Extreme Flexibility

OUR PRIORITY IS THE CREATION OF VALUE

We invent, design, plan, test and give technical assistance on machines for the production of plastic containers and complete lines for fluid packaging dedicated to the industrial, food and personal care sectors, ***creating value***

VALUE FOR THE CUSTOMER
VALUE FOR THE COMMUNITY
VALUE FOR THE FUTURE
VALUE FOR THE ENVIRONMENT



OUR VISION

To be the world leader the extrusion blow moulding sector, caring for our environment and known for advocating innovation, continuous improvement with a focus towards our clients.

OUR MISSION

To create products, machinery and lines that have a social and economic added value, satisfying our community as well as our stakeholders.

OUR MODEL OF INDUSTRY

The long experience of our team in the production of complete packaging lines for liquid products has allowed us to quickly establish ourselves in the market as a highly qualified and competitive player.

The industry model adopted has allowed us to grow rapidly and to provide customised solutions in a moment of global uncertainty, making it our key to success and allowing us to seize opportunities arisen from such uncertainty.

AlphaMAC an IMA Group Company

Starting from the business model, we differentiate ourselves from existing realities.
We have a lean structure, which includes our high value activities, allowing us to keep in house the company's know-how, competencies and coordinate a network of technical partners for all the outsourced activities. This industry model allows us to be extremely flexible and efficient, ensuring maximum competence in every phase of the process thanks to the partnerships with specialised companies for non-core activities.

The expertise of our partners clearly focuses on the world of automatic machines and their geographical proximity to AlphaMAC headquarters allowing constant cooperation and verified operations.

A SPACE DEDICATED TO EXTRUSION BLOW MOULDING

Our new machine testing facility, adjacent to the offices has a surface area of 4,000 square meters, which abundantly caters for the growing demand.

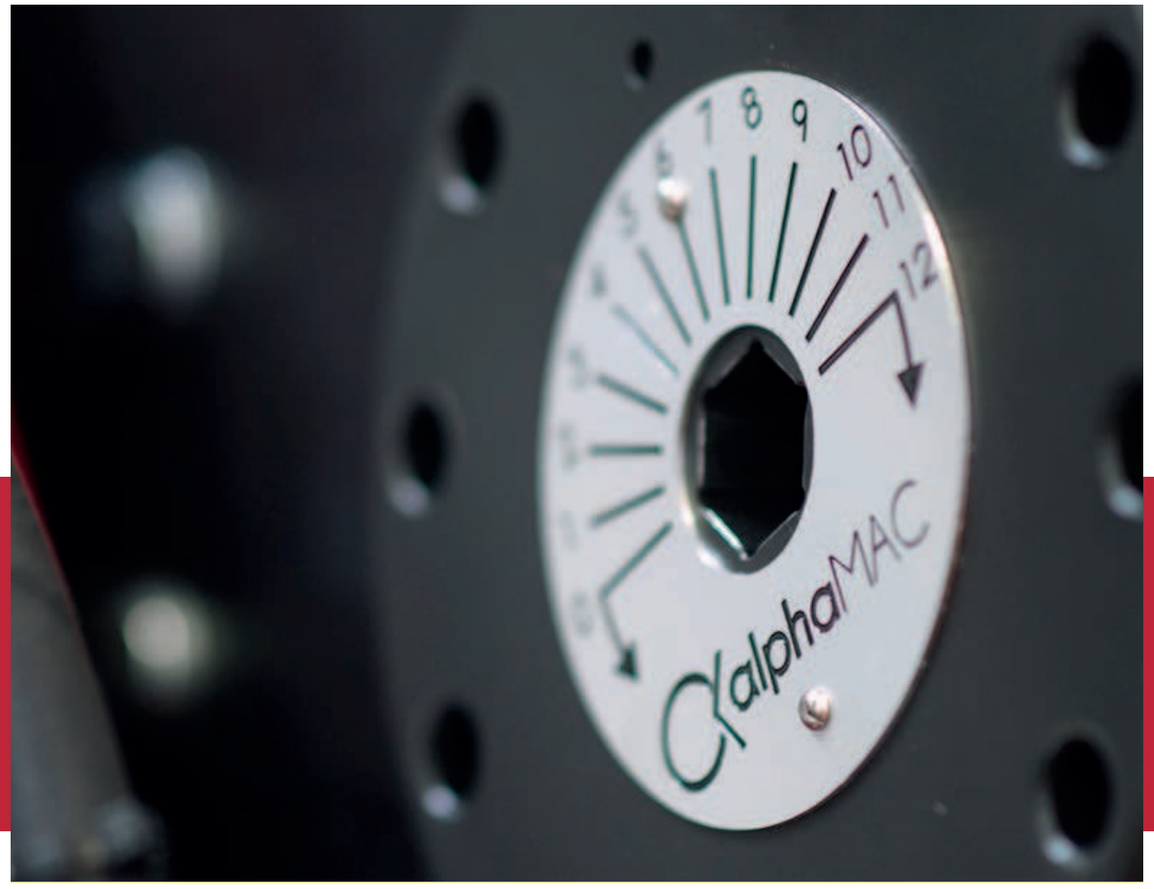
In our operating model the machines are rigorously checked before being delivered, with a minimum of 120 hours of dry cycle and 40 hours of production before validation.
This standard protocol guarantees a faster start-up at the end user's facility, reducing software and mechanical problems and making it easier to launch industrial production.

Testing is a fundamental phase of our process, helping us minimize unforeseen events during the start-up of the machines.

A NEW CONCEPT OF EBM MACHINE

We design and manufacture our EBM machines with the best available industrial technology, in order to ensure a state-of-the-art facility to our clients from a technological perspective.

We are a new player in the EBM machines panorama, and this has allowed us to think out of the box proposing a totally new logic in our machines.
We have not transformed and/or adapted previous technologies but have simply developed and implemented all from scratch allowing us to propose new methodologies of movements and advanced management through the PLC, with our full electric machine.



THE OBJECTIVE OF SIMPLICITY

Simple and robust mechanics, with solutions set to ease maintenance operations, consisting of a limited number of pieces, all subjected to FEM at the time of design. Total absence of electrical cables and pipes in the operator's working area, which usually hinders maintenance and format change operations.

EASY MAN-MACHINE INTERACTION

High-definition, intuitive interface with icon-based dialogue, essential information for immediate availability and personalized access levels based on the operator's skills. Collection of production data and product quality data integrated into the latest generation HMI of the machine with dedicated pages, allowing constant control and continuous improvement of the production process.

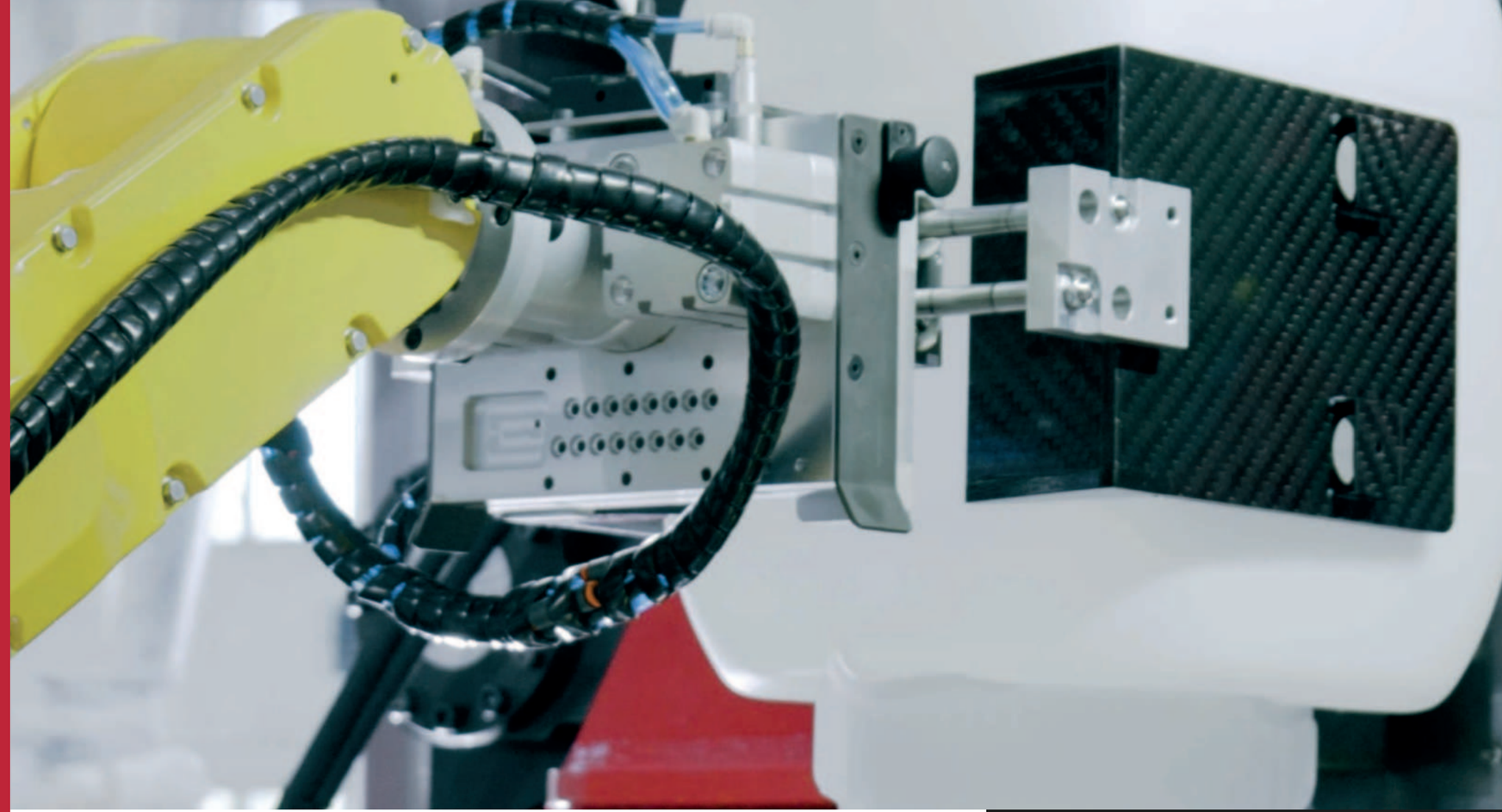
IN THE SMALLEST SPACE POSSIBLE

Reduced dimensions of the footprint, with simple, inspectable and safe connections between the parts of the machine. The compact footprint is always associated with ease of access for maintenance and mould change.

Innovation is our hallmark defining the drive behind the creation of our solutions, projected into the future of extrusion blow moulding.

THE AVANT-GARDE IN EXTRUSION

Our machines use cutting-edge technologies that allows us to be in line with new market trends regarding the extensive use of recycled materials (PCR) and the integrated quality control of the containers produced.



Our full electric **machines reduce electrical consumption and drastically reduce maintenance interventions. The absence of hydraulic oil also eliminates an important aspect related to pollution of our environment and the cost related to its disposal.**

FULL ELECTRIC technology

COMPETENCE IN MATERIALS

We have in-depth knowledge and consolidated technology for the use of all types of materials, with extrusion screw profile designs dedicated to each application such as multi-layer, multi-cavity heads with rapid colour change solutions.
We carefully monitor market needs or trends and combine the high expertise on the extrusion of post-consumer materials (PCR) with extensive research and development for the extrusion of bio-materials.

MOTION SYSTEM

Our EBM machines use motors with cutting-edge solutions of very high quality, with the latest generation gearboxes to compensate for mechanical backlashes.
All motorized units include absolute encoders and are equipped with redundant position control. The introduction of “self-configurable” motors also facilitate replacement in the event of a breakdown and we use standard and commercially available B&R motors.

Our machines are designed and built with Industry 4.0 **logic and ensure an improvement in the OEE thanks to detailed production control and greater repeatability of electronically controlled movements.**
The communication between the inline machinery and production data in real time help to improve efficiency, reduce waste and avoid non-compliances.

OUR ADVANTAGES

The construction quality of our machines is very high, with excellent materials and components, latest generation technologies, innovative solutions for the highest process automation, ensuring stability and high-quality control.

Absolute encoders

Included with all moving parts, they provide instant reference of the position of any assembly and eliminate the need for a position zero each time the machine is turned on.

Sumitomo gearboxes

Latest generation gearboxes equipped with automatic compensation of mechanical backlashes to ensure perfect and reliable operations over the years.

Maintenance

We designed a machine that has sufficient internal space to facilitate maintenance operations without obstacles or dangers for operators allowing the right spaces for intervention.

Mould closing system

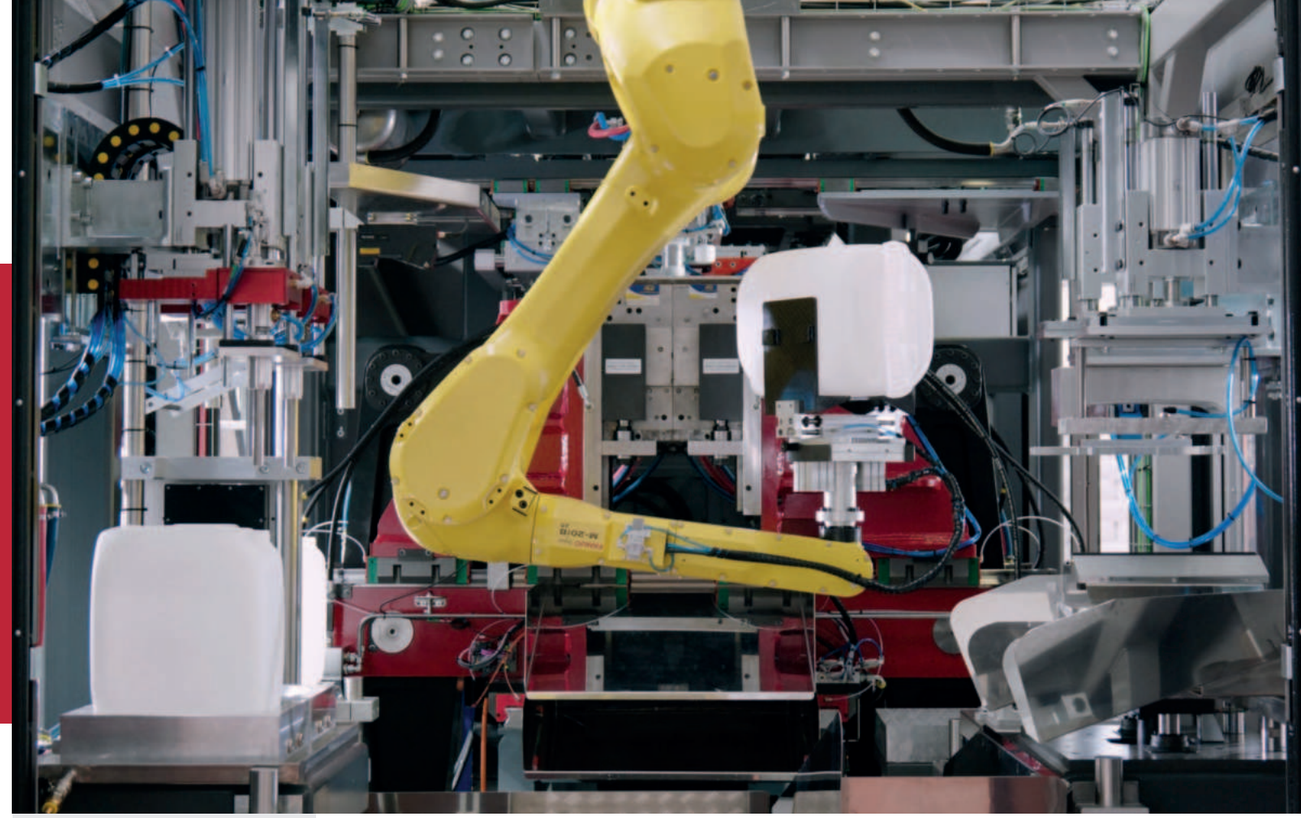
Born from two generations of electric machines, it is highly reliable and durable thanks to the knee pad operating principle, the steel levers machined from solid without any welding and the aluminium mould holder plates, also machined from solid, which guarantee: a reduction of weight, a lower dispersion of cold between the mould and the machine and an optimal elastic range of deformation in order not to stress the material over time.

B&R interface

New and intuitive with a few pages and a 21-inch vertical touch-screen monitor, with the possibility of integrating commands from peripheral systems, quality systems (vision) and data exchange modules from an Industry 4.0 perspective.

ALPHA SERIES THE MACHINES FOR EXTRUSION BLOW-MOULDING

A range of machines capable of responding to different production needs, both in the size of the bottles and in the production volumes.



AlphaZERO

600S | 700S | 800S

Single station monoblock machine, ideal for small-medium size converters and end users with flexible production of limited quantities, guarantees fast format changeover operations and compact space.

It does not require expert technicians for installation and start-up, it is almost maintenance-free as it does not have movement of the extruder platform or pick & place systems for products

600S Stroke: 600 mm	Clamping force: 18 tons	Dry cycle: 3,0 sec
700S Stroke: 700 mm	Clamping force: 24 tons	Dry cycle: 3,2 sec
800S Stroke: 800 mm	Clamping force: 25 tons	Dry cycle: 3,3 sec

Alpha

20S | 20D | 30S

Designed for users operating in the industrial product segment, including aggressive chemicals with high safety objectives (UN certification).

The VENTI is available with single or double station, for containers up to 20L while the TRENTA is single station and for containers up to 30L. The latter comes with an integrated Quality Control module with management via an anthropomorphic arm and is the first machine available on the market to guarantee a high degree of efficiency for zero defect products with a very compact layout.

**20S	20D** Stroke: 830 mm	Clamping force: 32 tons	Dry cycle: 3,8 sec
30S Stroke: 750 mm	Clamping force: 32 tons	Dry cycle: 3,8 sec

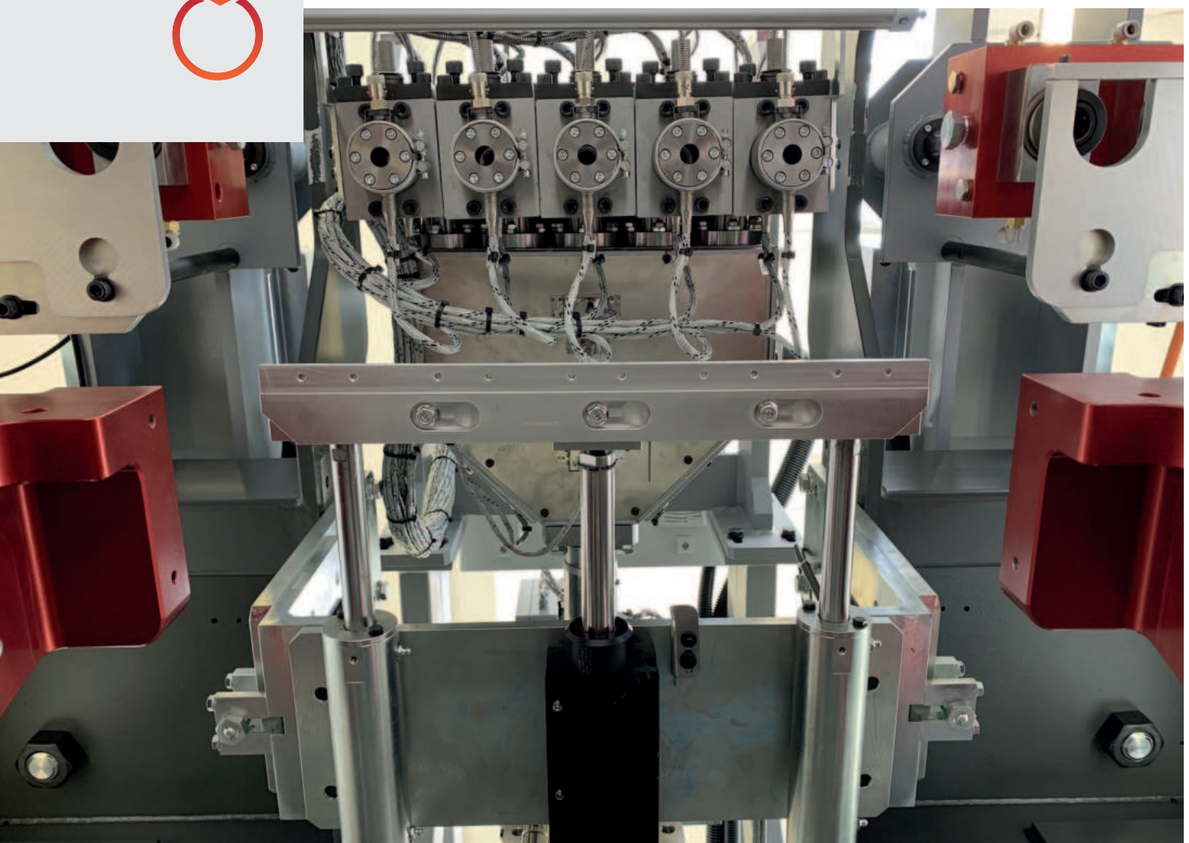
5CENTO alphaMAC

6CENTO alphaMAC

Alpha
500D | 600D

Mainly intended for converters with different production needs from 100 ml to 5 lt., Machine with T layout, available in the double station model, is characterized by its wide versatility and an excellent quality / performance / price ratio and guarantees a high overall efficiency value.

500D Stroke: 500 mm	Clamping force: 12 tons	Dry cycle: 2,6 sec
600D Stroke: 600 mm	Clamping force: 18 tons	Dry cycle: 3,0 sec



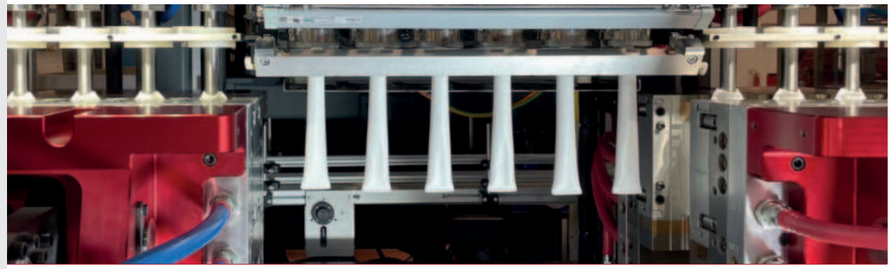
7CENTO alphaMAC

8CENTO alphaMAC

Alpha
700D | 800D

Two models designed for medium-high production, intended to produce containers from 100 ml to 5 litres with a high extrusion capacity, are able to produce in multi-cavity and multi-layers (up to 6 layers) ensuring the right return of the investment thanks to a high hourly production. They are also suitable for users with dairy production with requirements in the ESL (Ultra-clean version) and UHT (aseptic version) segments.

700D Stroke: 700 mm	Clamping force: 24 tons	Dry cycle: 3,2 sec
800D Stroke: 800 mm	Clamping force: 32 tons	Dry cycle: 3,5 sec



MILLE alphaMAC

Alpha
1000D

Machine suitable for productions with high volumes and few format changes, for containers from 100 ml to 5 litres, just as the 700D and 800D it is possible to use it with a multi-layer head and in the Ultra-clean or aseptic version.

1000D Stroke: 1.000 mm	Clamping force: 32 tons	Dry cycle: 4,0 sec

A GREEN AND SUSTAINABLE VISION

Two very important topics are related to sustainability and the global problem of plastic waste.

We are sensitive and proactive in these directions with a range of 100% electric machines and with some automation solutions that guarantee absolute low consumptions: 0.27 kWh per kg of extruded plastic for single-layer machines in comparison to 0.45 kWh per kg of the obsolete hydraulic machines.

We have adopted a different length / diameter ratio on our extruder screws compared to other manufacturers, with a 26 L / D that allows users to better stabilize the process when using a high percentage of regrind material and post-consumer resin. We are defining some synergies with bio-organic material producers to do field tests and research to develop screws that will allow us to use this type of material on our machines in the future.

In our factory we also have a laboratory machine available for our customers to test their materials.

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