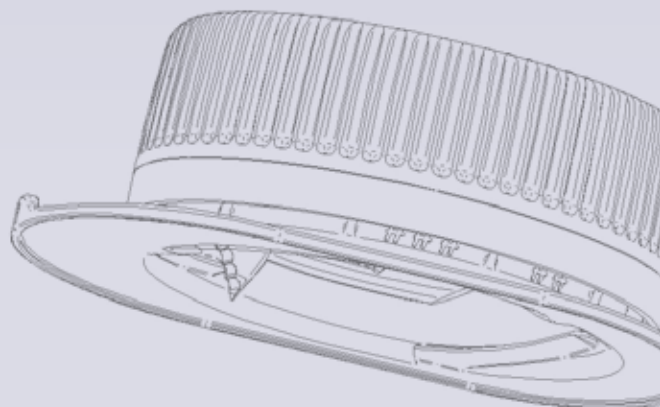
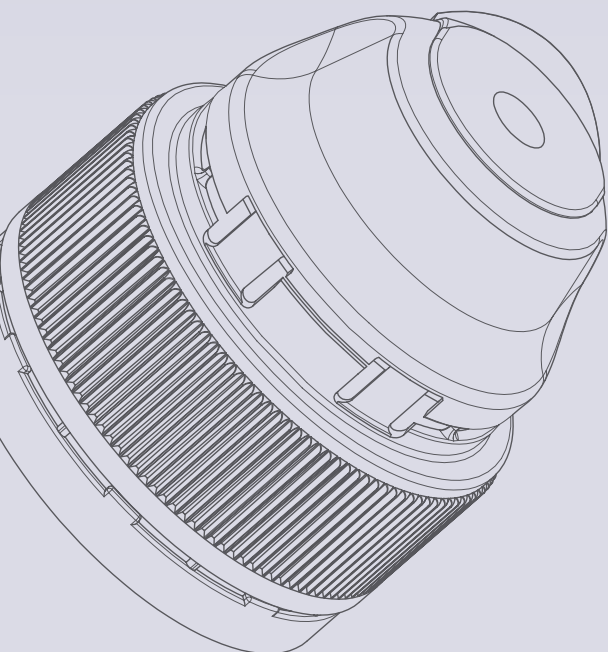


Assembly solutions

Design and manufacture of high-speed assembly machines for caps & closures, micro-pumps, medical equipment and connectors.



VELOMAT
ASSEMBLY AUTOMATION

a company of  **SAGMI**



Your strategic partner for assembling

TURNKEY AUTOMATIC SYSTEMS FOR
HIGH-SPEED AND HIGH-VOLUME ASSEMBLY

VELOMAT, founded in 1986 and located in Pescara, Italy, is part of the SACMI Group which has its headquarters in Imola Italy.

Velomat is an innovative designer and manufacturer of automatic turnkey systems for high-speed and high-volume assembly.

Design and production are the results of constant innovation that aims to meet – and exceed – customer specifications and expectations. The entire production process is customer-based and oriented. Each project seeks to satisfy each request and features both

standard and custom components to ensure a result that best matches the customer's needs.

An acknowledged leader in the industrial automation business, Velomat is continuously improving its market position. Over 650 machines have been sold all over the world in over 30 years of doing business.

The machines are designed to assemble micro, small and medium size products. Velomat supplies solutions to various markets, from Food & Beverage, Cosmetic and Detergents to Pharma and the Electrical and Electronic fields.

CAPS & CLOSURES

- CARTON FITMENTS
- SPORT CAPS
- LIQUOR CLOSURES
- EDIBLE OIL CLOSURES
- POUCH SCREW CAP

HOME & BEAUTY

- SPRAY ACTUATORS
- PUMP DISPENSERS
- TRIGGER SPRAYERS

PHARMA

- MEDICAL CLOSURES
- CHILD-PROOF CAPS
- NASAL SPRAYERS

ELECTRICS ELECTRONICS

- ELECTRICAL CONNECTORS
- CERAMIC FUSES
- OTHER ELECTRICAL DEVICES

Caps & Closures



After 30 years' experience, the typical demands of the Caps & Closures market have aligned with our standards; in parallel, we're constantly responding to the challenge of finding new solutions to meet changing customer requirements. The technology used depends on the

application requested by our customer: we produce continuous motion platforms for the assembly of multi-component closures.

Assembly speeds vary from 120 to 1500 parts per minute, depending on the type of closure and the customer's needs.

LIQUOR CLOSURES

Since we are a valued partner of the more prominent companies of the sector, we know that features such as slitting, folding, edging, gluing or lining must be provided and combined as necessary on the same standard pro-

prietary platform. Our platforms can easily be implemented with these features; a hybrid machine that combines our index and continuous platforms is also available when required by the specific application.

- Index or continuous motion platform
- From 120 to 1500 parts/min



SPORT CAPS

Requests for pulse light cleaning are becoming more and more frequent: Velomat can offer a

pulse light cleaning station completely integrated into its platform.

- Index or continuous motion platform
- From 120 to 800 parts/min



EDIBLE OIL CLOSURES

Oriented insertion at high speed and the ability to manipulate non-standard circular components

are crucial to guarantee flexibility of design and competitive advantages for our customers.

- Continuous motion platform
- Up to 600 parts/min



CARTON FITMENTS

We can meet our customer's every liquid carton closure need, from oriented insertion of components to slitting of the cap, torque control with

electric motors or magnetic clutches, in-line spark tests and vision inspections, plus automatic loading from the molding presses.

- Continuous motion platform
- Up to 1000 parts/min



POUCH SCREW CAP

Both torque control and position control are often requested and implemented for pouch

screw cap assembly tasks .

- Continuous motion platform
- Up to 600 parts/min



Home & Beauty



The Home & Beauty market has rapidly evolved towards demand for a high number of low-volume production batches.

To ensure outstanding productivity, Velomat equips its machines with sophisticated patented rapid changeover systems that allow various product families to be assembled on the same

machine. Thanks to smooth synergy within the SACMI Group, 100% of production can be controlled using methods that range from advanced pneumatic techniques to the more sophisticated SACMI Vision Inspection systems. Our proprietary assembly platforms can handle both pre-cut and coil dip tubes.

DISPENSER PUMPS

Whether module assembly machines, finishing machines or seal check machines, Velomat always provides state-of-the-art assembly technology and excellent output rates. Velomat engineers

provide customers with close support from the early stages of product validation, designing silicone dosing and the priming and pneumatic tests to meet and, in fact, exceed market expectations.

- Index or continuous motion platform
- From 120 to 800 parts/min



SPRAY ACTUATORS

Oriented pressing of the insert is achieved using vision or mechanical angular orientation; SACMI quality control vision systems are often required

and installed on our assembly machines, as are leak and flow test stations.

- Index or continuous motion platform
- From 120 to 800 parts/min



TRIGGER SPRAYERS

Vision quality controls are often required together with other functionality checks requested from time to time by the customer. Finished products can be stored in boxes using robots

and palletizers. Various product geometries can be handled without having to make any modifications to our standard assembly platform.

- Index platform
- Up to 150 parts/min



Pharma



The assembly of medical devices is one of the most demanding applications for custom-engineered equipment. Success depends on understanding both the device to be manufactured and the specific requirements of a medical production environment. Attention to detail and quality in every aspect of the production process is a key factor that allows Velomat to guarantee high efficiency and outstanding system availability in compliance with industry regulations.

MEDICAL CLOSURES

- SACMI in-line vision inspection is always embedded on our assembly platforms, as are end-of-line packaging systems.

- Index or continuous motion platform
- From 120 to 600 parts/min



CHILD-PROOF CAPS

Assembly platforms can be set up to be compliant with clean room environments. Contact materials, cleaning accessibility, minimal use of compressed air and lubricants ensure compliance with all required standards.

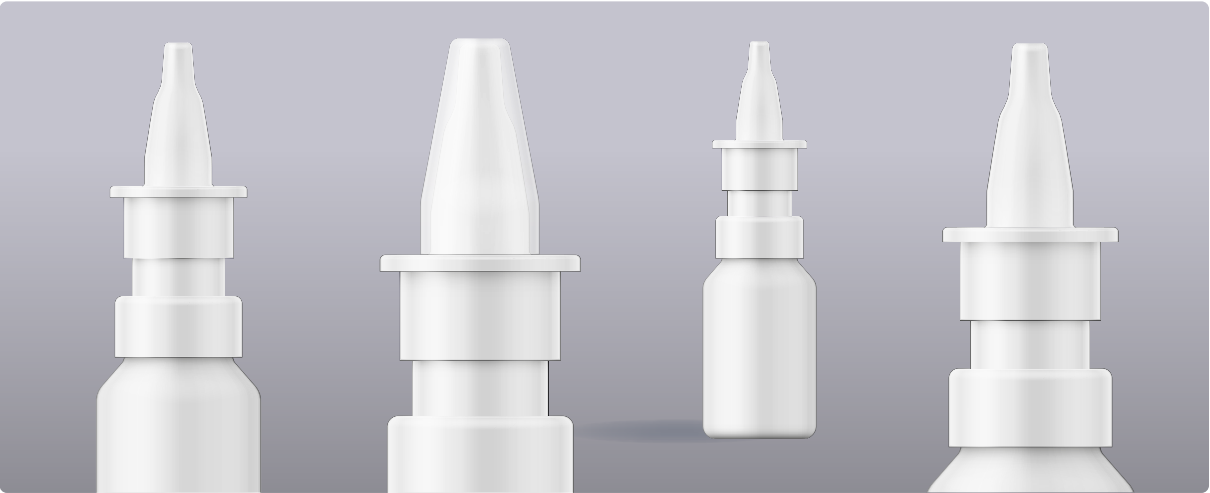
- Continuous motion platform
- Up to 1500 parts/min



NASAL SPRAYERS

Advanced pneumatic leak test techniques and, on request, pumping performance tests, can be implemented on the assembly platform.

- Index platform
- Up to 150 parts/min



Electrics & Electronics



Velomat has been actively present on this market for decades and has made many assembly machines for the world's leading companies, mainly for the automotive industry. Velomat is

able to meet the strict time constraints typical of the market by taking advantage of platform standardization, accurate project management and early identification of priorities

OTHER ELECTRICAL OR ELECTRO-MECHANICAL DEVICES

In its over 30 years of doing business, a multiplicity of devices have been assembled by Velomat.

Often, free pallet lines are used so that manual tasks can be combined with automatic ones.

- Free pallet lines

- Up to 20 parts/min



ELECTRICAL CONNECTORS

With connectors, the assembled product typically contains a housing, silicone seals, slides and secondary locks; in this field there is a strong focus on shortening changeover times.

Specific controls such as color or polarization, performed mechanically or with vision systems, can be implemented. The use of marking systems also ensures component traceability.

- Index platform

- Up to 80 parts/min



CERAMIC FUSES

Velomat assembly platforms provide all the features requested by this market segment; these range from unwinding, cutting and welding of the fuse elements to measuring and

compression of sand and electrical tests on the product. Moreover, several marking types are available: hot marking, laser or ink jet.

- Index platform

- Up to 60 parts/min



Manufacturers of high-speed assembly machines and providers of competitive advantages since 1986

In-depth knowledge in the assembly systems industry, consolidated over nearly 30 years of experience, has allowed us to build a solid, efficient organization that can supply customized

assembly solutions.

Depending on the products to be assembled, assembly systems are built on customized modules using the following technologies



Velomat systems can assemble, at high cadences, small and medium-sized products for many industries, from cosmetics, pharmaceu-

tical and medical to electrical, electronics and automotive.



Continuous motion platform

ONE OF VELOMAT'S MOST DISTINCTIVE SOLUTIONS

Continuous motion technology is one of Velomat's most distinctive elements. In fact, there are few companies worldwide that can boast the experience and expertise that Velomat has in this sector.

Velomat continuous motion machines reach speeds of 1,500 parts per minute and are made in compliance with pharmaceutical and medical standards where required.

Continuous kinematic machines can also use a proprietary free-pallet technology for assembly applications that require fast stages not easily approachable with traditional techniques. Velomat continuous motion machines are designed to be hard-wearing and low-maintenance. They can run for decades: the first Velomat continuous motion machine, manufactured in 1986 and delivered to Argentina, is still fully operational.



Electronic flexible platform

FLEXIBILITY AND MODULARITY

Our Electronic Flexible Platform is divided into two families: EFR Electronic Flexible Rotary and EFL Electronic Flexible Linear.

Flexibility and modularity are the hallmarks of this platform; on both the EFR and the EFL, Velomat can, depending on assembly requirements, apply electric rotary or linear tables or electronically driven pallets, synchronous with electronic manipulators. This architecture allows positions and paths – and product changeovers – to be performed on the HMI, saving customers

huge amounts of time. This architecture also gives us a major competitive advantage when we need to solve assembly problems involving numerous product families or perform tasks that need long cycle times.

The EFR and EFL platforms achieve output rates of 220 parts per minute; oriented insertion, dimensional checks, vision inspection systems, leak tests, as well as dosing, lining and dispensing systems, are all options that can, on request, be embedded our platform.



Index platform

MORE THAN THIRTY YEARS OF EXPERIENCE IN BUILDING ROTARY INDEX MACHINES

Velomat has more than thirty years' experience in building rotary index machines: over the years this has enabled the development of standard platforms which have now reached their third generation.

Velomat index modules are fully mechanical and are divided into two families:

- Index module 1150 – with independent shafts – each station performs a different kinematic action on the end effector even though the machine is operated by a single motor. The arms are moved by a pair of globoidal cams that can perform cycles of any

complexity and allow producers to perform assembly cycles that would be impossible with normal pick & place units. The Velomat 1150 modules reach speeds of 120 cycles per minute. At present there are over 250 such modules operating world wide.

- Index Module 500 – the operating arms are actuated simultaneously by two oscillating disks; again, the entire machine is run by a single motor. The Velomat 500 module allows manufacturers to approach assembly problems where the cost and overall dimensions of the machine are crucial design parameters.



Customer Care

EVERYTHING FROM ONE SOURCE

Velomat manufactures high-output, low-maintenance, high-efficiency, user-friendly machinery and equipment, ensuring customers enjoy the full potential of our assembly platforms. Throughout the entire lifecycle of its machines and equipment, Velomat guarantees an after-sales service managed by highly experienced technicians who provide all the support needed to maintain plants in perfect working order or complete fast, effective repairs. Services include:

- Direct assistance
- Tele-service assistance
- Spare parts with high-speed delivery

- Personnel training, also provided during installation of our machines
- Preventive maintenance kits can be requested following a visit by our technical staff.

*Velomat is proud to be part of the **SACMI Portal for Aftersales and Customer service Excellence (SPACE)**, via which advanced online services and tools help our customers manage and maintain long-term asset performance. Machine manuals, spare part selection/ordering and close support services are available to our customers at all times and can be accessed with a simple click.*



FULL SERVICE

Everything from one source
Turnkey solutions + contract manufacturing

velomat.service@sacmigroup.com

