

cannon



Gasketing Technology
Foam in Place



Precise. Flexible.
Tailored to your needs.



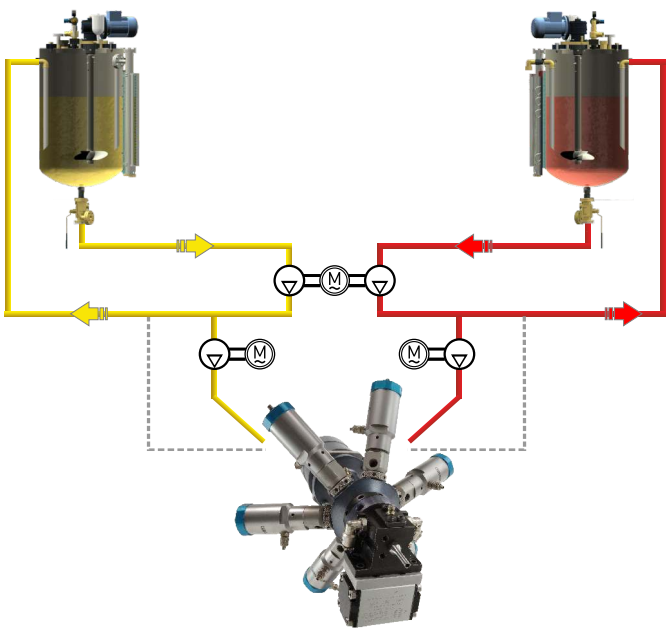
From single dosing units to tailor-made plants

With more than 50 years of experience in applications for polyurethane and silicone mixing and dosing we meet specific customer requirements, providing single units and turnkey plants for a full range of foam in-situ gasketing requests.

High-performance dosing

Designed explicitly for Foam in Place (FiP) technology, the Cannon BI dosing machine is configurable for processing polyurethane and silicone-based formulations at low, medium or high viscosity.

The dosing unit frame can host up to 4 tanks and the mixing head can work with 4 different ports.



Dosing Unit details

Mixing ratio	From 10:1 to 1:1
Output range	Multiple configurations available from 0,4 to 20 (g/s)
Viscosity range	100 - 150,000 mPas (Thixotropic)
Tanks	40 lt Pressurizable and jacket

*The output has been calculated at ratio P/I 100:25; at specific gravity 1.2 kg/l / 1.05 kg/l
Different outputs and viscosity are available on request.*

Highest accuracy dosing system

We achieve the highest accuracy due to a double functional system:

- Thermostatization of the tanks and accurate chemical temperature control by means of long recycle circuit fitted with dedicated recirculation pumps.
- Dosing pumps mounted very close to the mixing head allow for precise metering and mixing process optimization.

Chemical conditioning system

Temperature control is a crucial factor during production. Independent temperature control of the chemicals inside the jacketed tanks and in the mixing chamber is possible thanks to a sophisticated thermoregulation system.

The recycling circuits keep constant process parameters during entire production cycle, homogenizing chemical systems through dedicated stirrer fitted on the tanks.

One head, multiple components

High flexible Cannon B1-Multi is a new generation dynamic mixing head designed for micro-shot applications to cover an output range from 0.4 up to 20 g/s. This versatile multi-component head has the flexibility to properly mix and pour up to 4 different chemical components, keeping them separate until they enter the mixing chamber. Its modular design and the Leak-Free injector's body improve maintenance and cleaning operations, while the stainless steel body guarantees an extended lifetime.

The possibility to upgrade the injectors with additional recycling lines enables them to face the most demanding process conditions such as very low outputs.

EcoCleaner

The advanced cleaning system

Cannon EcoCleaner is a closed loop washing system for mixing heads to clean the mixing chamber by using a combination of air flush and environmentally friendly cleaners.

The EcoCleaner performs an effective separation of solid waste and cleaner, which through a recycling system, can be used several times.

This translates into cost and management advantages by reducing to minimum the disposal needs of standards cleaners.

Your benefits

- **Up to 90% disposal cost reduction**
- **Highly efficient cleaning with all formulations**
- **Increased working time between washing cycles**





Integration is our business

The FiP must be robotically assisted to achieve an accurate gasket lay-down, allowing high repeatability, precision, and consistency.

Flexibility: 6-axis robot

This robot is the optimal solution for a 3D or complex gasket path patterns, providing a versatile and precise handling system. Specifically designed for this application, the robot dressing hosted directly on the arm, guarantees complete and easy mobility of the mixing head.

Productivity: 3-axis cartesian robot

This innovative 3-axis Cannon cartesian robot combines compactness, fast cycle times, and high productivity. This production cell integrates the EcoCleaner, control panel, safeties and parts handling, forming an integrated stand-alone system with a small footprint.

A new vision

The robot can be equipped with an advanced vision system for parts identification. A set of dedicated precision cameras, installed inside the foaming cell, recognize the position and orientation of the parts in the working area.

The gaskets will be automatically foamed without centering masks or mechanical references.

Load-Create-Unload

Repeat

Part handling system

A variety of different solutions is available depending on product size, required productivity, space availability, and possible integration into existing production lines, including:

- Overlapped or side-by-side automatic shuttle tables
- Single or multi-position turntables
- Single or double conveyor belt
- Automated loading/unloading system

Cannon can include specific automated surface plasma treatment to improve gasket adhesion.

Why choosing our FiP

- Tailor-made approach with proprietary solutions related to dosing units mixing heads, robotics, and parts handling systems
- R&D center, including lab plant dedicated exclusively to gasketing technology for development, testing, and prototyping
- Local presence in more than 40 countries benefiting from Cannon sales and services network
- Advanced solutions for temperature conditioning and chemical homogeneity to achieve the highest quality gasket sealing
- Cannon dosing and mixing system is suitable for a wide range of low and high viscosity chemicals from multiple raw material supplier
- Environmentally friendly mixing head washing system with Cannon EcoCleaner



4.0 Connectivity for complete monitoring



With an intuitive touchscreen control panel, this system monitors and controls all dosing machine functions in real-time.

All the individual pages and setting parameters are accessible with a maximum of 3-touches.

Can 4 Pro

This proprietary remote or local supervision platform for Industry 4.0 is designed to manage, monitor, and control processes performed by Cannon equipment. A free demo of Can4Pro is available at can4pro.com



The Cannon maintenance and spare parts platform lets you easily identify and request what you need online.



Our experts remotely interact in real-time with the machine working in your facility to solve any software problems.

We are part of the Cannon Group, an international machinery manufacturing holding, which comprises more than 30 companies and branches worldwide.

Dedication to continuous innovation and a strong commitment to reducing the ecological footprint are the drivers of all the Group's technology developments, with a clear focus on energy efficiency, resource consumption reduction, and emissions reduction.

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