

HIGH PRESSURE
METERING MACHINES FOR
POLYURETHANE FOAMING



A-PRIMA

Cannon
DEDICATED INDUSTRIAL SOLUTIONS

A-PRIMA

High Pressure Metering Machines
for Polyurethane foaming





Machine Configuration

- 100 l carbon steel tanks with automatic refilling capability and level control
- Heat exchangers and heating elements
- Recycle stream distributors
- Filters for pump protection
- On-board rigid piping connections using the patented STAUFF tube forming system
- Low/High pressure contact manometers
- Flowmeters for real time control of pump output
- Frequency controlled motors for automatic output and ratio adjustment
- Cannon fixed displacement pumps
- Intuitive touch screen panel 9" mounted on frame by standard
- New "3-clicks" HMI software
- Pouring programs automatically selectable shot-by-shot
- "Week-End Cycle" for low and high pressure recycling of the components during long shutdown periods
- Calibration of each component directly through the mixing head
- Includes L14 straight-shaped mixing head, which is the lightest and easiest to handle self-cleaning and high performance equipment on the market

Technology, Quality and Reliability

Cannon "A-Prima" has been developed to give a smart response to a growing demand of the high-pressure metering machines market which requires operational simplicity, high quality standards, efficiency and reliability while keeping low initial investment costs.

Designed to meet specific customer's requirements and dedicated to comply with the standards for most of the polyurethane applications:

- Low-density rigid foams
- Flexible foam for automotive and furniture
- Integral skin

Main Benefits

- Plug & Play machine
- Solvent free
- High control of production processes
- Compact lay-out, space saving
- Excellent accessibility
- Easy maintenance and cleaning



Optional Devices

- Magnetic couplings
- Mechanical stirrers for tanks
- ON/OFF filling valves and/or refilling pumps
- Rotating boom or other mixing head holders
- Variable displacement pumps
- L14 can be provided with an extended nose, in order to guarantee a better laminar flow
- Any other suitable Cannon mixing head can be provided with the machine

Additional Control Devices

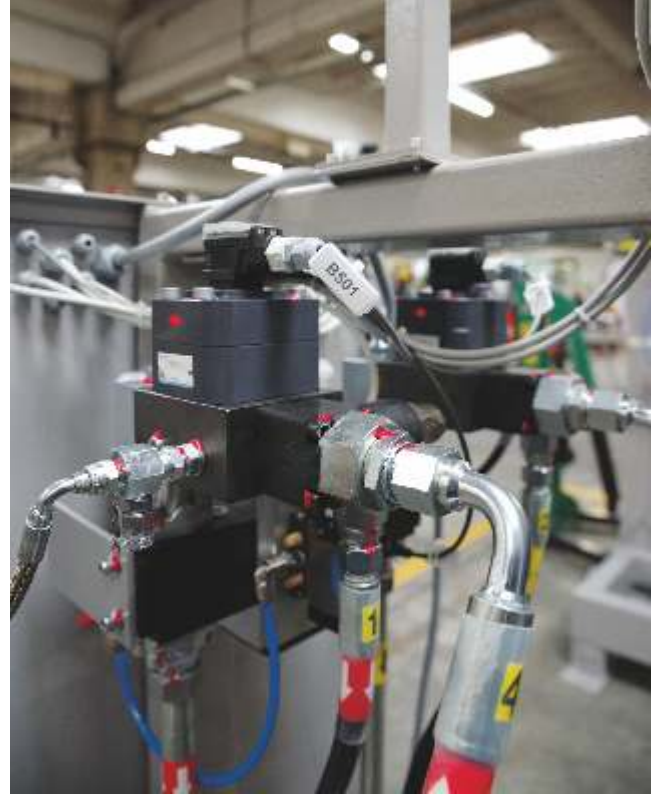
Together with A-Prima foaming machine, Cannon can provide the so-called "Opti-Control": an optional package of control systems that help to maximize efficiency of production process, to monitor the 'health' of machine and, at the same time, to reduce energy and raw materials

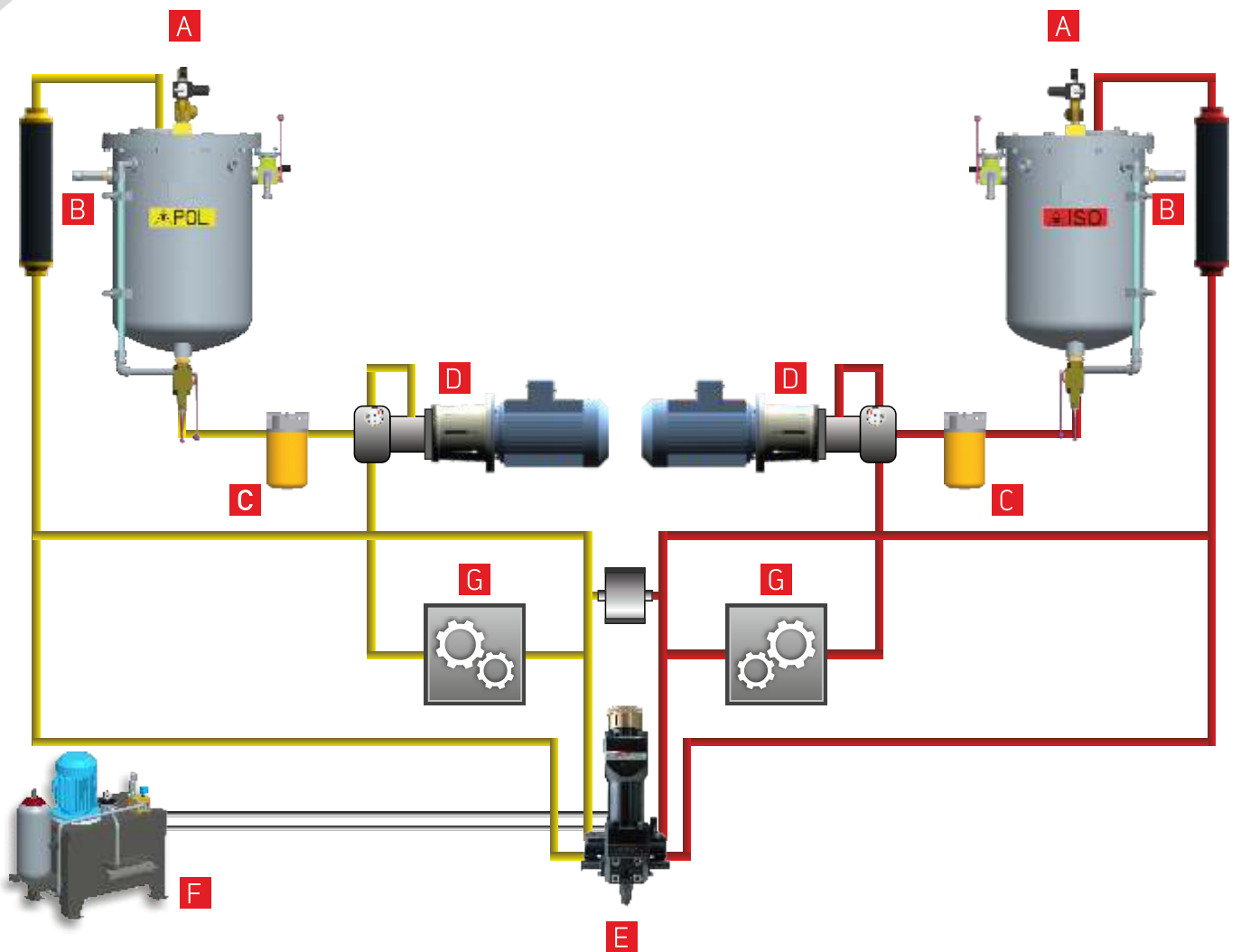


consumptions.

Opti-Control package includes different systems that can be even purchased individually by the customer:

- Opti-Ratio: enables the control and real-time adjustment of machine output
- Opti-Link: registers and stores main working parameters to keep trace of production history
- Opti-Service: it is able to detect software bugs and to upload software updating
- Opti-Energy: allows to program shut-down/work cycles for energy saving
- Opti-Connect: an advanced data logging system suitable for the 4.0 industry





- | | | | |
|-----------------------------------|---------------------|-------------------------|---------------------|
| A 100 l carbon steel tanks | C Filter | E Mixing Head | G Flow Meter |
| B Heat exchanger | D Pump group | F Hydraulic unit | |

Machine's Design Architecture

The design of Cannon machines is the result of 50 years of experience in this field as well as the overall know-how in machines and plants manufacturing.

The machine frame is manufactured using high resistance steel sections and bent sheets, which are welded together to form a rigid flat based frame.

As a result, no foundations or pits are required; Cannon strong design grants long life to its machine and can limit damages in case of external accidents.

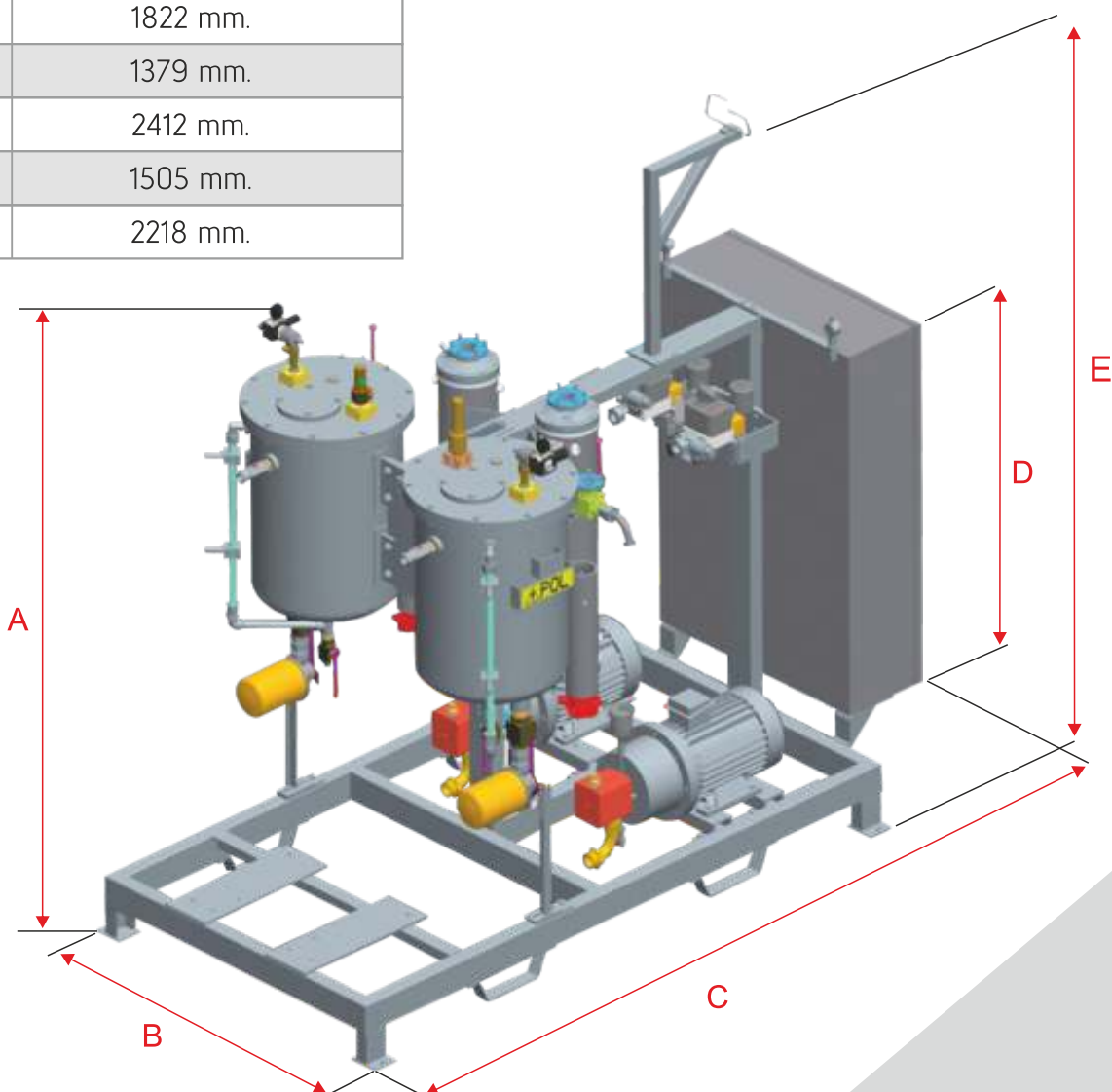
All the industrial components and sensors used in Cannon machines are sourced from leading European brands in order to deliver the high quality product to the customers. Every machine is provided together with safety guarding and CE certification as a standard.

Technical Features

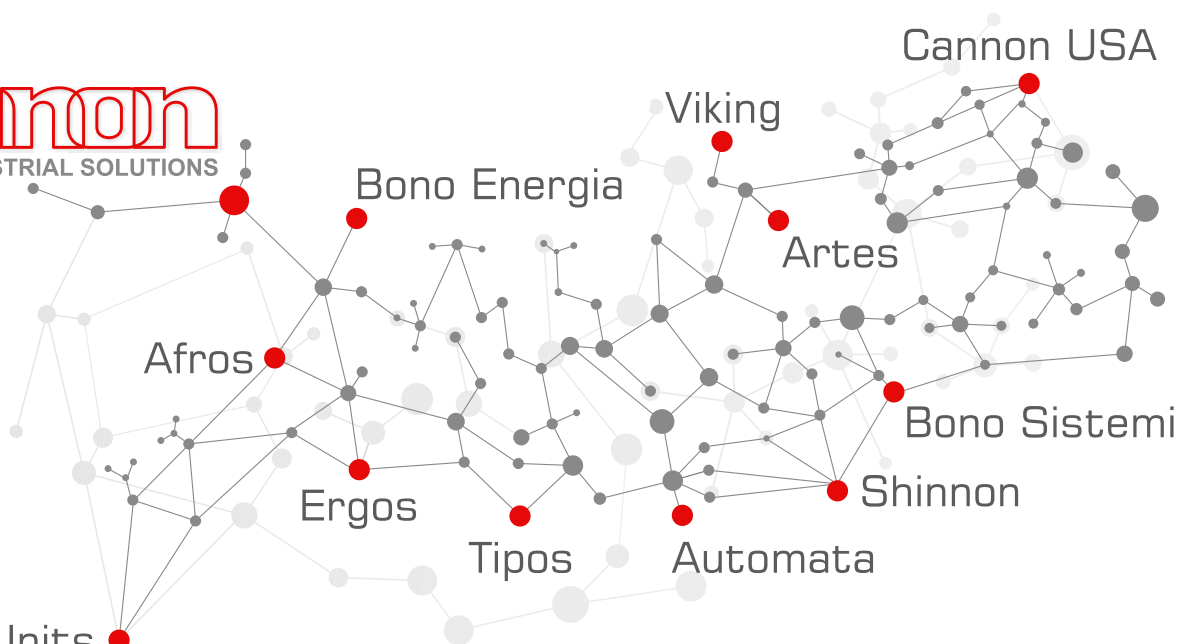
Model	Output Range - g/s				Absorbed Power	Air Consumption
	Ratio P/I 1:1		Ratio P/I 2:1			
	Min	Max	Min	Max	(kW)	(NI/shot)
A-PRIMA 10	35	160	50	120	14	80
A-PRIMA 20	65	330	100	250	17	80
A-PRIMA 40	130	660	200	500	23,4	80
A-PRIMA 60	-	-	250	1100	29,2	80
A-PRIMA 100	300	1600	480	1200	46	80

Dimensions

A	1822 mm.
B	1379 mm.
C	2412 mm.
D	1505 mm.
E	2218 mm.



The CANNON Group



Our Local Units

Cannon Deutschland
 Cannon Middle East
 Cannon do Brasil

Cannon Istanbul
 Cannon Eurasia
 Nippon Cannon

Cannon France
 HispaCannon
 MexiCannon

Cannon Far East

- Taiwan
- Thailand
- Vietnam
- Malaysia
- Indonesia
- Singapore
- South Korea
- China - Beijing
- China - Shanghai
- China - Guangzhou

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