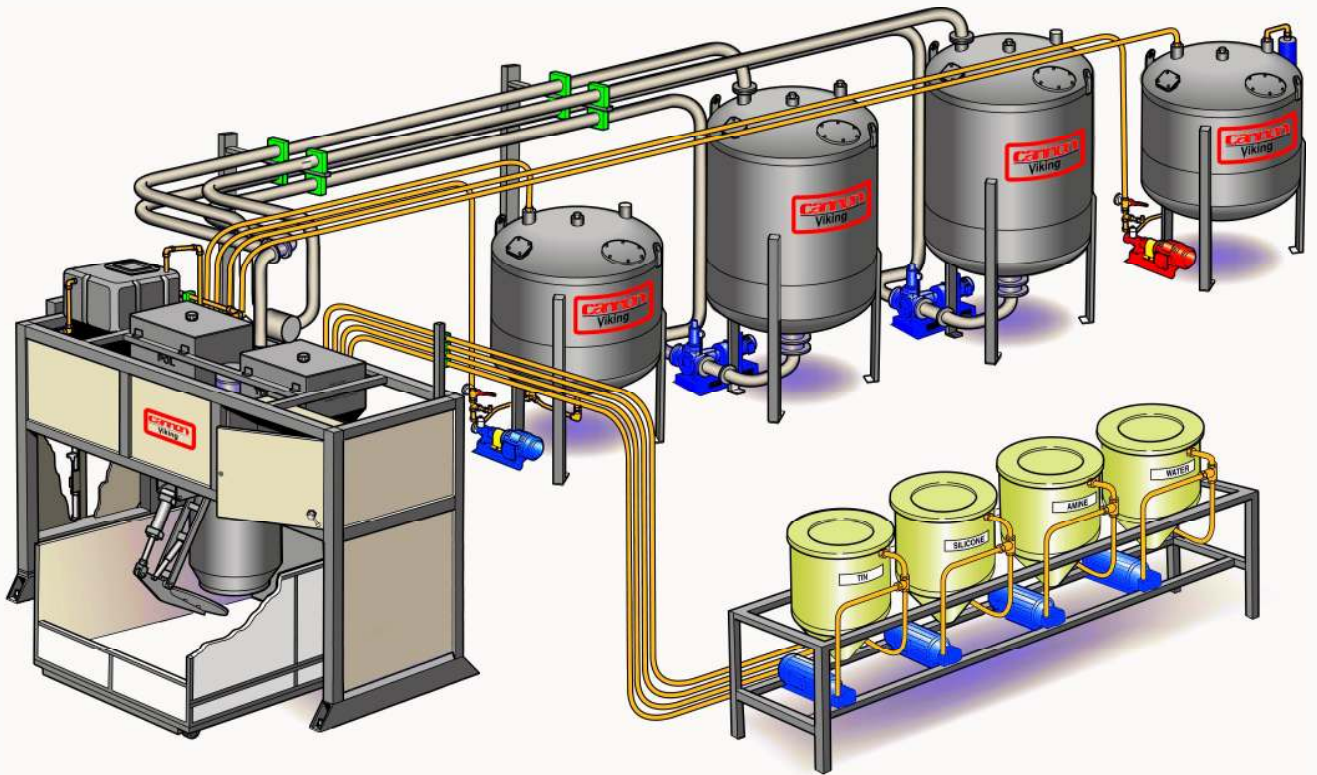
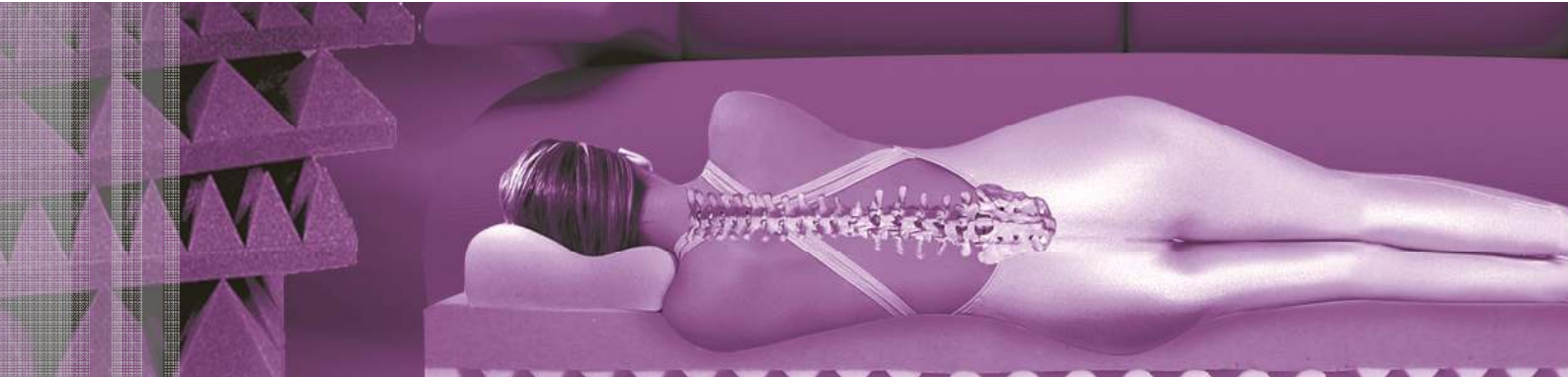


Viking

Our mission... bringing comfort to your life





## The Cannon Group

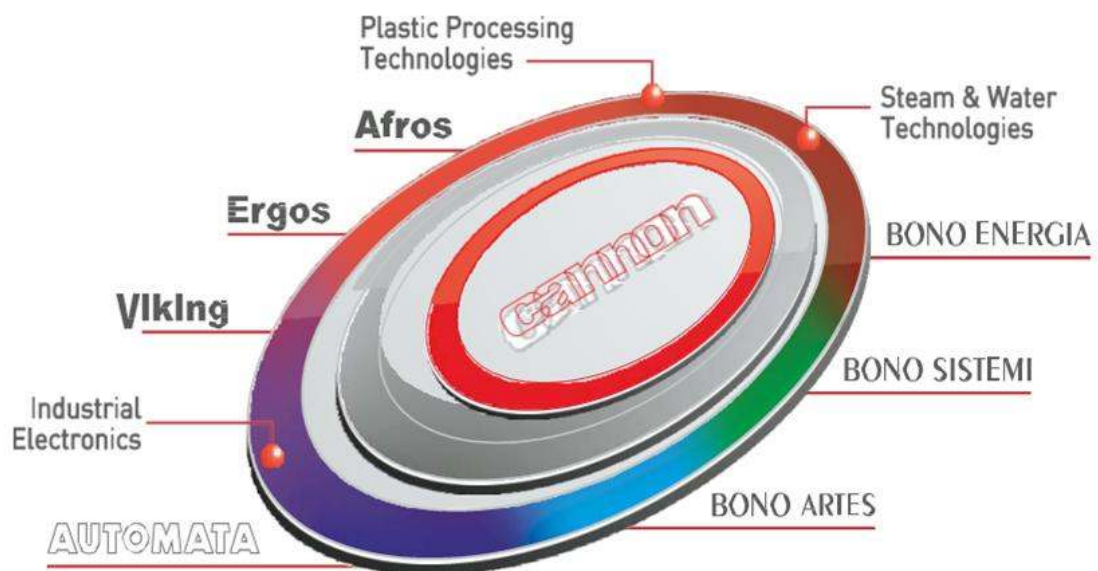
Cannon is an international group supplying a wide range of worldwide industries with dedicated engineering solutions.

Cannon offers a complete range of plants and machines for continuous and discontinuous processing of polyurethanes and other polymers obtained by chemical reaction (manufactured in the UK, Europe, USA, China and Japan).

The Cannon Group also specialises in the supply of equipment for thermoforming, composite materials,

industrial boilers, thermal fluid heaters, co-generation plants, water treatment plants, environmental protection solutions as well as bulk chemical storage, metering & blending systems.

Cannon designs and manufactures customised technical solutions for the improvement of its clients productivity, matching leadership, innovation and service of a global technological partner to energy saving, ecology and environmental sustainability.





## Welcome to Cannon Viking!

Cannon Viking is the world leader in the manufacture and supply of machinery and technology for the production of polyurethane foam blocks, with more than 700 machines operating in over 130 countries worldwide.

Cannon Viking offers a large variety of solutions to suit all foam block and furniture producers, from single block machinery through to the range of continuous foam block production plants with full computer control, high pressure chemical metering and foam liquid laydown technologies.

We can supply a complete turn key solution with the foaming plant, chemical tank farm and foam cutting machine with associated integrated electrical controls. The company has vast experience in the manufacture of all types of polyurethane foam, including standard Polyether foams, HR foams, Visco / Memory foams, Fire Retardant foams, Filled foams, CME and CMHR foams as well as Rigid and Semi Rigid block foams and Polyester foams.

## Cannon Viking History

Cannon Viking was initially formed as Viking Engineering in 1956. Since this date the company has been heavily involved and integral part of the development and the evolution of the polyurethane foam industry worldwide.

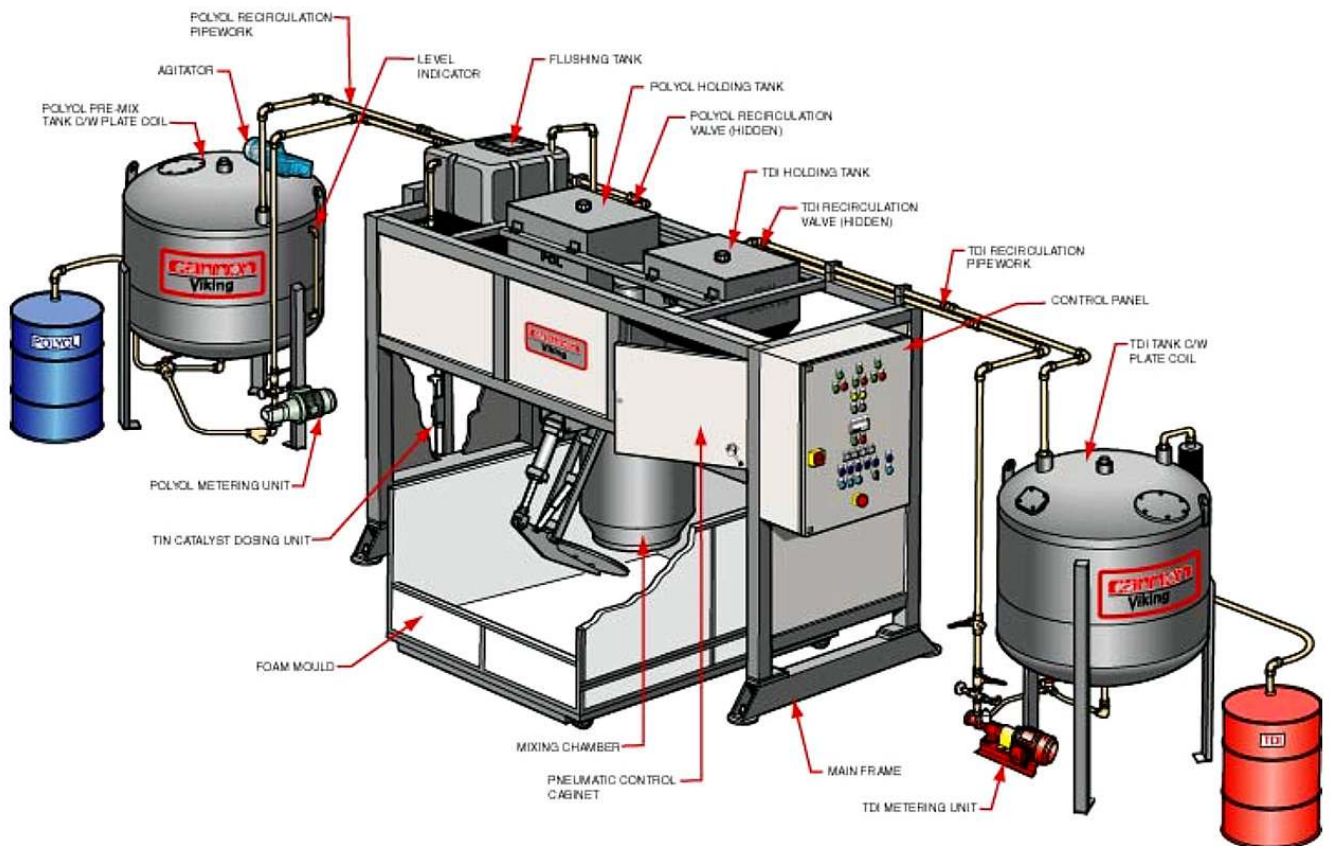
Our name is synonymous with high quality, efficient, and modern machinery and we continue to produce machinery of the highest standard today at our factory in Manchester, UK.

In 1989 Viking became part of the Cannon group, the worlds leaders in polyurethane processing technologies. As pioneers in the industry with the very latest development such as: CarDio™ Carbon Dioxide Technology for low density foams, Omega computerised control and monitoring equipment and High Pressure Liquid Laydown and Maxfoam technology, all of which have been developed and supported in house.

Cannon Viking continue to evolve and develop to stay ahead in the support of all our customers. We have been at the forefront of all major industry developments over the past 50 years and we are determined to offer our many customers around the world the best product range currently available.



## The Cannon Viking Blockmatic



The Blockmatic produces polyurethane foam blocks in an economical discontinuous operation. The chemical components, a pre-mixed polyol blend, TDI and a catalyst, are fed in ratio from separate metering units in sequence to a mixing chamber where blending takes place. After mixing, a bottom plate opens and the liquid mixture is poured into the rectangular block mould.

This rectangular mould incorporates a flat top system to ensure the optimum block shape is achieved. In continuous cycle mode, the machine pumps the chemicals from the storage vessels ready to produce the next foam block. Additional rectangular block mould are available to enable the production of high quality square foam blocks, as well as cylindrical moulds for production of round blocks for peeling applications.



*The Cannon Viking Blockmatic complete with HMI PLC Controls undergoing final testing in Manchester before delivery to another customer*

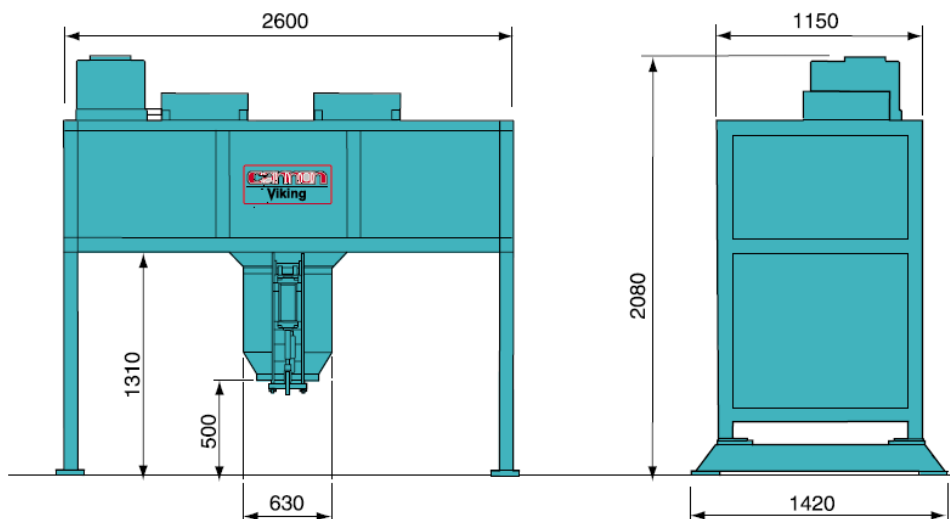


## Features and Benefits of the Blockmatic

- Simple and logical machine control unit with standard electrical controls or HMI
- Machine supplied as a complete unit for immediate installation & operation
- Low capital investment and installation cost
- Economic utilisation of raw material with accurate pumping systems
- Capability to produce various grades & types of foam; such as filled foams, rigid, semi-rigid, HR & Visco-elastic
- Compact machine design requiring minimum space
- Robust, modular construction for simple assembly on site in customer's factory
- Simple operation system requiring a minimum of training & technical knowledge
- Low level maintenance equipment
- Use of high quality components for reliable, trouble-free operation
- Chemical re-circulation to ensure accurate blending & chemical conditioning
- Three versions of the machine available: 120, 150 or 180kg maximum shot weight



*The Cannon Viking Blockmatic is able to produce round blocks for peeling (as above) or standard rectangular blocks for the production of standard, HR and visco foams (as below)*

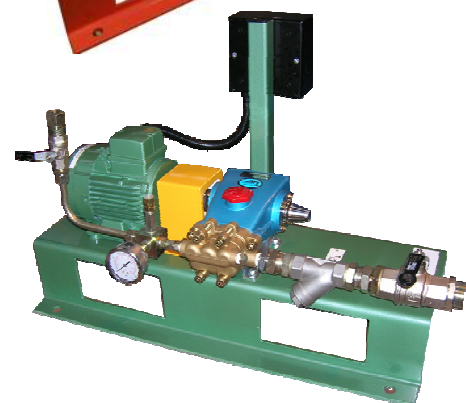


**\*NOTE:** Due to the variable specification agreed by the customer only the Blockmatic machine itself is shown above. Dimensions related to the tanks and other equipment can be obtained on request to Cannon Viking.

## Blockmatic Optional Extras and Additional Items

The Blockmatic machine can be tailor made to meet your individual requirements with a wide range of optional extras and additional items such as:

- **Technical Service, Training and Know-How** - Should it be necessary we can offer the services of an experienced Cannon Viking Commissioning Engineer to supervise the equipment installation and provide full training and support. In many markets, we also have additional service and support provided by our local Cannon office or sales representative.
- **PLC Control System** - A PLC Control Unit can be supplied for even easier and more accurate operation and formulation storage.
- **Separate Metering Streams** - For even greater accuracy and production flexibility, separate metering units can be supplied with the Blockmatic machine for Catalysts, Colour Pigment as well as additional Polyols, Isocyanates and Additives for speciality foam types such as HR and Visco-elastic as well as filled foams.
- **Additional Tank Units** - Additional tanks can be supplied for Polyol and special Polyols, as well as TDI and MDI where necessary to enable production capacity to be increased. Typically with one additional Polyol Tank and one additional Isocyanate Tank the production capacity can be increased to more than 100 foam blocks per shift.
- **Moulds** - In addition to the rectangular mould which can be supplied with the Blockmatic machine, we are happy to supply designs for the manufacture of further moulds including cylindrical moulds locally.
- **Spare Parts** - A full spare parts inventory for the Blockmatic machine is maintained at Cannon Viking and most items are available for despatch within 24 hours at competitive prices.
- **Ancillary Equipment** - A full range of ancillary equipment is available from Cannon Viking, this includes: foam testing equipment, mattress production equipment, weighing machines etc.





## Blockmatic Summary

Blockmatic Machine Output	120, 150 or 180 kg per shot.
Foam Block Dimensions	220 x 200 x 110 cm Standard Mould
Foam Density Range (Typical)	15-80 kg/m <sup>3</sup>
Foam Types	Flexible Polyether foam grades, Visco, HR, Rigid and Semi-Rigid foams.
Production Capacity	60-80 blocks per shift, dependent upon block size and number of moulds, etc.
Machine Production Cycle Time	3-4 minutes per block.

## Service and Support

Cannon Viking has a team of eight fully trained technical service engineers with a combined technical experience of more than 200 years in polyurethane machine operation and foam manufacture. Here are just some of the following services we provide:

- Technical Service for installation and commissioning of machine
- Onsite Training
- Trouble-shooting on production and formulation issues.
- New formulation support to produce different grades of foam.
- Spare Parts
- Design plans for factory and machine layout.

All Cannon Viking machines carry a full Guarantee of satisfactory operation. Testing at Cannon Viking is thorough and the Customer, or their Representatives, are always welcome to inspect the final machine whilst testing is being carried out in Manchester.

Customers are welcome to undergo pre-delivery training which will greatly facilitate the installation and operation of their machine when running in their factory.

Cannon also provides full support and technical design to help customers plan their factory and machine layout with special emphasis on raw materials storage and temperature conditioning, foam block handling and conversion as well as related fire safety.

## Worldwide Network

With a global network of sales and service operations, Cannon offer a useful and appreciated local service with spare parts availability, laboratory usage for trials, technical advice and consultancy, remote service connection, direct helpline assistance and training courses.

### Far East

China  
Hong Kong  
Indonesia  
Japan  
Korea  
Malaysia  
Philippines  
Singapore  
Taiwan  
Thailand  
Vietnam

### Eastern Europe

Belarus  
Bosnia-Herzegovina  
Lithuania  
Poland  
Romania  
Russia  
Serbia  
Ukraine

### Africa

Algeria  
Angola  
Cameroon  
C. Afr. Rep.  
Congo  
Egypt  
Ethiopia  
Ivory Coast  
Kenya  
Libya  
Mali  
Morocco  
Niger  
Nigeria  
Senegal  
South Africa  
Sudan  
Tanzania  
Tunisia  
Zambia

### Middle East

Bahrain  
India  
Iran  
Iraq  
Israel  
Jordan  
Kuwait  
Oman  
Pakistan  
U.A.E

### Europe

Belgium  
Denmark  
Finland  
France  
Germany  
Greece  
Iceland  
Ireland  
Italy  
Netherlands  
Norway  
Portugal  
Slovakia  
Spain  
Sweden  
U.K

### Americas

Argentina  
Brazil  
Canada  
Caribbean  
Chile  
Colombia  
Mexico  
Peru  
U.S.A  
Venezuela





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