



# Industrial Automation

## PET Bottling

Solutions for linear and rotary bottling  
equipment

Breakthrough  
engineering for  
a better world



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# Breakthrough engineering for a better world

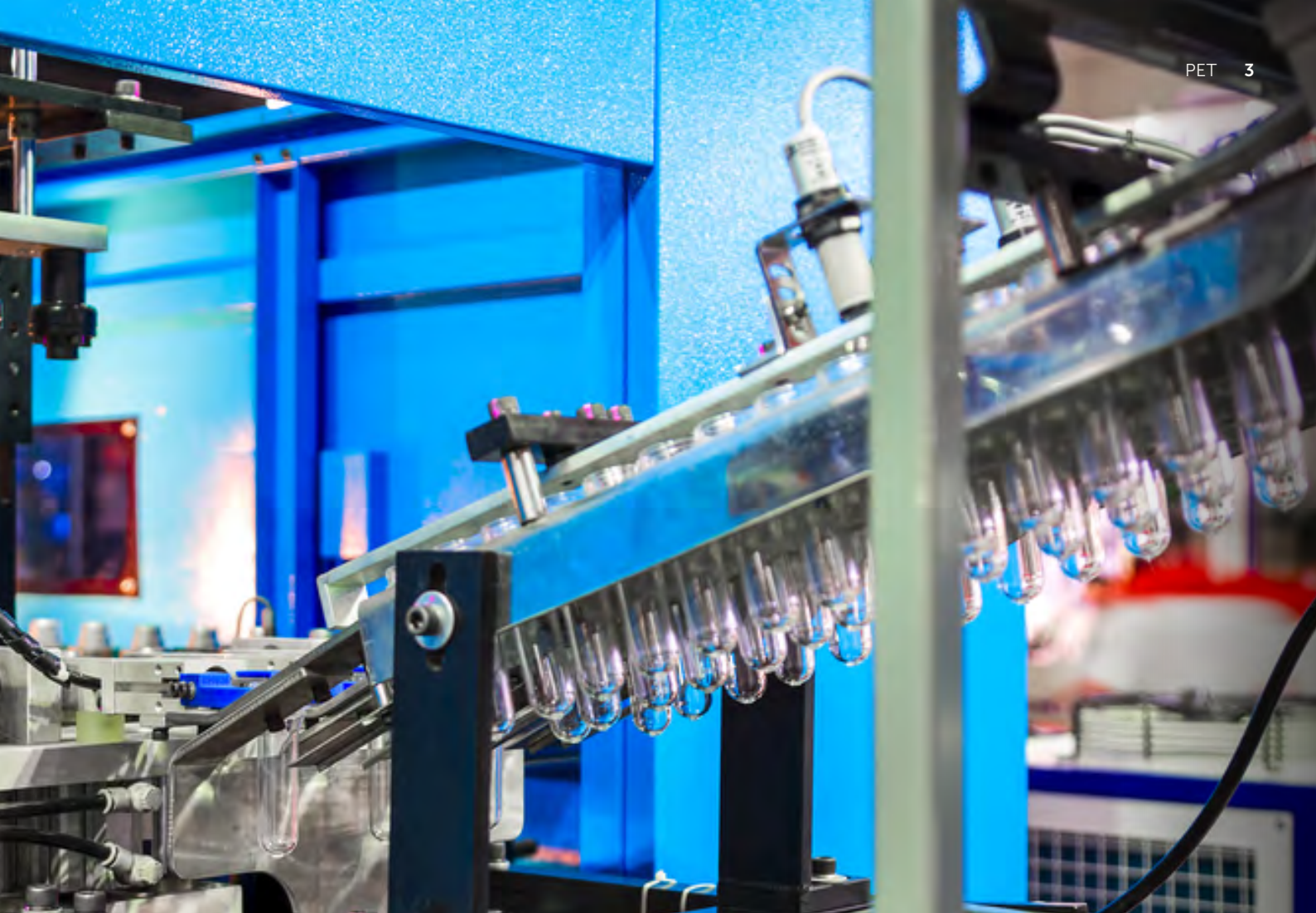
We create solutions for our customers which enable smarter, safer, more productive and sustainable factories, production lines and warehouse operations. Our pneumatic, electric motion and fluid control systems help machine builders and end users around the world automate and optimise manufacturing and warehousing processes.

We have partnered with customers in industrial automation for over a century, applying our experience and innovation to create lasting value for their businesses. Our solutions support critical industries such as automotive, food and beverage, pharmaceuticals and even the space industry. We support the automation of precision manufacturing, product assembly, testing and packaging.

We use the latest digital technologies in our automation products and constantly innovate in close partnership with our customers. By applying our deep expertise, we can solve their toughest automation challenges, today and tomorrow. Through increased productivity, efficiency and safety, our customers can serve their own customers better, creating sustainable competitive advantage and delivering growth.

Our world-class product portfolio includes IMI Norgren, IMI Bimba, IMI Bahr and IMI Buschjost.

Breakthrough engineering you can count on.



# PET bottling

Building on three decades of PET engineering excellence, we remain a pioneering force in this sector, constantly driving performance and reliability improvements. Our patented plastic piston technology and experience in valve positioning allows us to reduce dead space volume and increase productivity.

We deliver PET expertise through our global design centres, demonstrating our commitment to research, design innovation and high quality manufacturing. We are continuously engaged in the development of new products – demonstrated by our unique patented piston technology and forthcoming developments in blowing solutions.

We also have a global manufacturing footprint, meaning we're able to deliver on even the most demanding of international projects (and we have the global customers to prove it).

We have the products, the experience and the expertise. And it's all available to you.

Find out more  
[www.imiplc.com/industrial-automation](http://www.imiplc.com/industrial-automation)

# Blowing blocks: improving efficiency and flow performance

Our patented plastic piston technology and experience in valve positioning allows us to reduce dead space volume and increase productivity (we are currently pushing the production boundaries beyond 2,200 bottles per hour per cavity on some machines).

Our innovation and design excellence gives us the edge, and also gives our customers the edge too.

## Giving you competitive advantage

- Productivity – our pioneering technologies help maximise flow performance and bottle output
- Cost savings – we're setting the standard for air recycling and minimising dead space volume, and that means maximising efficiencies for you
- Control – integrated functions – including P1, P2, Exh, air recovery, compensation valves, capping cylinder and valves – all provide greater operational versatility



# Air supply units & air recovery systems: large flows, precision accuracy and machine reliability

We offer the whole 'air' package, from 7 bar standard pneumatics and 20 bar pre-blowing lines (P1), through to a comprehensive suite of 40 bar lines (P2). It is in P1 and P2 that we have particular expertise, ensuring proven reliability – whatever your requirements in terms of size, capacity or flow. Our unique modular approach means many of these technologies are available as 'plug & play', resulting in fast and cost-effective modifications.

Our aim is to meet and exceed your high standards and expectations.

## Giving you competitive advantage

- Cost savings – full air recovery to your 7 and 20 bar lines helps generate efficiencies
- Full compliance – our technology delivers exceptional regulation accuracy
- Flexibility – compact and highly versatile 'plug & play' systems for every need
- Increased output – we are able to deliver a high flow to increase your maximum bottle output
- Electronic proportional options – this technology allows you to change pressures quickly and remotely



# Precision equipment components for every need

Our product inventory gives you access to a world-class range of high-quality, precision engineered blowing blocks and air preparation products. Covering everything from standard pneumatics and components to 40 bar check valves and silencers, these are all available with a quick turnaround, and come with exceptional technical back-up and support. All products are delivered ready assembled.

●● We'll help keep your production line moving, and improving. ●●

## Our portfolio of products includes:



### TRI-Blow Block AVSP-L-3V\*\*

- **Medium:** Compressed air (purity class 3.4.3 acc. to ISO 8573-1:2010)
- **Medium temperature:** +5 ... +35°C
- **Ambient temperature:** +10 ... +50°C
- **Operating pressure:** 2 ... 40 bar
- **Pilot air pressure:** 6 ... 7 bar
- **Operating voltage:** 24 V d.c.
- **Power consumption:** 2W
- **Electric connection:**  
AMP 2P 9.4 mm (C-industrial)



### Four Block Valves AVSP-L-4V\*\*

- **Medium:** Compressed air (purity class 3.4.3 acc. to ISO 8573-1:2010)
- **Medium temperature:** +5°C ... +35°C
- **Ambient temperature:** +10°C ... +50°C
- **Operating pressure:** 2 ... 40 bar
- **Pilot air pressure:** 6 ... 7 bar
- **Operating voltage:** 24 V d.c.
- **Power consumption:** 2W
- **Electrical connection:**  
AMP 2P 9.4 mm (C-industrial)



### Five Block Valves SPCH/170096

- **Medium:** Compressed air (purity class 3.4.3 acc. to ISO 8573-1:2010)
- **Medium temperature:** +5°C ... +35°C
- **Ambient temperature:** +10°C ... +50°C
- **Operating pressure:** 1 ... 40 bar
- **Pilot air pressure:** 5 ... 7 bar
- **Operating voltage:** 24 V d.c.
- **Power consumption:** 2W
- **Electrical connection:**  
AMP 2P 9.4 mm (C-industrial)



**Six Block Valves  
AVSP-R-6V\*\***

- **Medium:** Compressed air (purity class 3.4.3 acc. to ISO 8573-1:2010)
- **Medium temperature:** +5°C ... +35°C
- **Ambient temperature:** +10°C ... +50°C
- **Operating pressure:** 2 ... 40 bar
- **Pilot air pressure:** 6 ... 7 bar
- **Operating voltage:** 24 V d.c.
- **Power consumption:** 2W
- **Electrical connection:** AMP 2P 9.4 mm (C-Industrial)



**Six Block Valves  
SPCH/160107**

- **Medium:** Compressed air (purity class 3.4.3 acc. to ISO 8573-1:2010)
- **Medium temperature:** +5°C ... +35°C
- **Ambient temperature:** +10°C ... +50°C
- **Operating pressure:** 1 ... 40 bar
- **Pilot air pressure:** 5 ... 7 bar
- **Operating voltage:** 24 V d.c.
- **Power consumption:** 2W
- **Electrical connection:** AMP 2P 9.4 mm (C-Industrial)



**Six Block Valves  
SPCH/200001**

- **Medium:** Compressed air (purity class 3.4.3 acc. to ISO 8573-1:2010)
- **Medium temperature:** +5°C ... +35°C
- **Ambient temperature:** 0°C ... +50°C
- **Operating pressure:** 3 ... 40 bar
- **Pilot air pressure:** 5 ... 8 bar
- **Operating voltage:** 24 V d.c.
- **Power consumption:** 2W
- **Electrical connection:** AMP 2P 9.4 mm (C-industrial)



**Starbloc  
SPCH/140001**

- **Medium:** Compressed air (purity class 3.4.3 acc. to ISO 8573-1:2010)
- **Medium temperature:** +5°C ... +35°C
- **Ambient temperature:** +10°C ... +50°C
- **Operating pressure:** 1 ... 40 bar
- **Pilot air pressure:** Maximum 7 bar
- **Operating voltage:** 24 V d.c.
- **Power consumption:** 2W
- **Electrical connection:** AMP 2P 9.4 mm (C-industrial)



**Linbloc  
SPCH/140031**

- **Medium:** Compressed air (purity class 3.4.3 acc. to ISO 8573-1:2010)
- **Medium temperature:** +5°C ... +35°C
- **Ambient temperature:** +10°C ... +50°C
- **Operating pressure:** 1 ... 40 bar
- **Pilot air pressure:** 6 ... 10 bar
- **Operating voltage:** 24 V d.c.
- **Power consumption:** 2W
- **Electrical connection:** AMP 2P 9.4 mm (C-industrial)



**Big Bottle Block Valves  
AVSP-B-6V\*\***

- **Medium:** Compressed air (purity class 3.4.3 acc. to ISO 8573-1:2010)
- **Medium temperature:** +5°C ... +35°C
- **Ambient temperature:** +10°C ... +50°C
- **Operating pressure:** 3 ... 40 bar
- **Pilot air pressure:** 6 ... 8.5 bar
- **Operating voltage:** 24 V d.c.
- **Power consumption:** 2W
- **Electrical connection:** AMP 2P 9.4 mm (C-Industrial)



**Big Bottle Block Valves  
SPCH/120048**

- **Medium:** Compressed air (purity class 3.4.3 acc. to ISO 8573-1:2010)
- **Medium temperature:** +3°C ... +30°C
- **Ambient temperature:** 0°C ... +50°C
- **Operating pressure:** 2 ... 40 bar
- **Pilot air pressure:** 6 ... 10 bar
- **Operating voltage:** 24 V d.c.
- **Power consumption:** 2W
- **Electrical connection:** AMP 2P 9.4 mm (C-industrial)



**Big Bottle Recover Valves  
SPCH/120049**

- **Medium:** Compressed air (purity class 3.4.3 acc. to ISO 8573-1:2010)
- **Medium temperature:** +3°C ... +30°C
- **Ambient temperature:** 0°C ... +50°C
- **Operating pressure:** 2 ... 40 bar
- **Pilot air pressure:** 6 ... 10 bar
- **Operating voltage:** 24 V d.c.
- **Power consumption:** 2W
- **Electrical connection:** AMP 2P (9.4 mm industrial)

## Our portfolio of products includes:



### Dome Loaded Reducing Valve D166

- Flow rate dependent on working conditions (Contact IMI to specify)
- Ø 1" BSPP connections
- Internal Ø 9 mm, 12 mm or 15 mm through the valve
- **Max. inlet pressure:** 50 bar
- **Outlet range:** 0.5 ... 100 bar



### Dome Loaded Reducing Valve D291

- Flow rate dependent on working conditions (Contact IMI to specify)
- Ø 2" BSPP connections
- Internal Ø 20 mm or 25 mm through the valve
- **Max. inlet pressure:** 50 bar
- **Outlet range:** 0.5 ... 100 bar



### Proportional Reducing Valve D366

- Ø 1/4" BSPP connections
- Internal Ø 4 mm through the valve
- **Max. inlet pressure:** 100 bar
- **Outlet range:** 0 ... 100 bar
- 3-way regulator
- **Power supply:** 24 V d.c.
- **Input and output signals:** 4-20 mA or 0-10 V  
CMS e-card – Integrated outlet pressure sensor



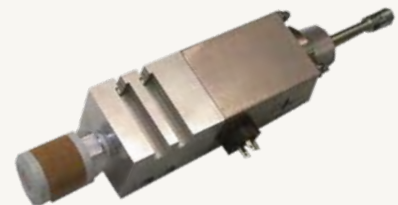
### Proportional Reducing Valve D366

- Ø 1/4" directly flanged version
- Internal Ø 4 mm through the valve
- **Max. inlet pressure:** 100 bar
- **Outlet range:** 0 ... 100 bar
- 3-way regulator
- **Power supply:** 24 V d.c.
- **Input and output signals:** 4-20 mA or 0-10V  
CMS e-card – Integrated outlet pressure sensor



### Spring Loaded Reducing Valve D396

- Ø 2 mm flanged connections
- Internal Ø 2 mm through the valve
- **Max. inlet pressure:** 50 bar
- **Outlet range:** 5 ... 11 bar
- Calibrated permanent leakage



### Solenoid Valve E237

- Ø 8 mm flanged connections
- Internal Ø 8 mm through the valve
- **Max. inlet pressure:** 50 bar
- **Function:** 2/2 NO
- **Power supply:** 24 V d.c. – Hirschmann connector
- Position switch

## Our portfolio of products includes:



### Cooling/Air Recovery Valve

- VSP15203x Series
- 2/2-way valve, normally closed – with integrated check valve
- 24 V d.c./2W, without manual override
- **Operating pressure (min ... max.):** 3 ... 40 bar



### Compensation Valve

- VSP15204x Series
- 3/2-way valve, normally closed
- 24 V d.c./2W, without manual override
- **Operating pressure (min ... max.):** 3 ... 40 bar



### 85360 Series

- Piston valve design
- Indirectly solenoid actuated
- For neutral gases and liquids
- **Fluid temperature:** –20 ... +90 °C
- **Operating pressure:** 0.5 ... 40 bar
- Body in brass (CW617N)



### Check Valve VSP15203x Series

- Check valve (no spring)
- G1/2" ... G1 1/4"
- **Operating pressure (min...max.):** 3 ... 40 bar



### Starbloc with Capping Cylinder A1406-A02

- **Medium:** Compressed air (purity class 3.4.3 acc. to ISO 8573-1:2010)
- **Operating pressure:** 1 ... 40 bar
- **Pilot air pressure:** 5 ... 7 bar
- **Cylinder stroke:** 35±1 mm
- **Cylinder bore:** Ø 63 mm
- **Operating voltage:** 24 V d.c.
- **Power consumption:**  
Pilot valve (4X) 2W,  
Cylinder control valve 5.4W
- **Ambient temperature:** +10° ... +50°C
- **Medium temperature:** +5° ... +35°C



### High Speed Stretch Cylinder HSSC50 Series

- Double acting with adjustable air cushion
- **Bore size:** 50 mm
- **Operating pressure (min ... max.):** 4 ... 8 bar
- **Standard stroke:** 300 mm, 400 mm, 420 mm
- Speed up to 2.4 m/s
- Long cushion option for better reduction of shock and vibration



### High Pressure Silencer T32 Series

- **Port size:** R1" ... R1 1/4"
- Noise reduction up to 35 dBA
- High corrosion resistance
- Compact design
- Easy to maintain

# Standard product range



## Air preparation set Excelon® Plus

- **Fluid:** Compressed air
- **Port sizes:** 1/4", 3/8", 1/2" or 3/4"
- **Thread type:** ISO G or NPT
- **Maximum inlet pressure:**
  - > Guarded polycarbonate bowl 10 bar
  - > Metal bowl 20 bar (17 bar for 1/4" range)
- **Maximum temperature:**
  - > Polycarbonate bowl 60°C
  - > Metal bowl 65°C



## Air preparation set Olympian Series

- **Fluid:** Compressed air
- **Port size:**
  - > BL64G: G1/2"
  - > BL68G: G1"
- **Max. inlet pressure:** 17 bar
- **Pressure range:**
  - > B64G: 0.3 ... 17 bar
  - > B68G: 0.4 ... 17 bar
- **Ambient temperature:** -20°C ... +80°C



## Cleanline cylinder with IP67 Integrated Valve & Actuator (IVAC) Series PRA/842000

- **Fluid:** Compressed air, filtered, lubricated or non-lubricated
- **Port size:** G1/8, G1/4, G3/8
- **Operating pressure:** 1 ... 10 bar
- **Operating temperature:** -20°C ... +80°C
- Double acting, magnetic or non-magnetic piston, adjustable cushioning



## Valve Island VR Series

- **Two sizes:** 10 mm and 15 mm widths
- **Flow:** 220 to 270 l/min (VR10), 460 to 590 l/min (VR15)
- **Operating pressure:** Maximum pressure 7 bar (101 psi)
- **Operating temperature:** -5°C ... +50°C (+23°F ... 122°F)
- Up to 24 solenoids
- 24 V d.c. Multipole



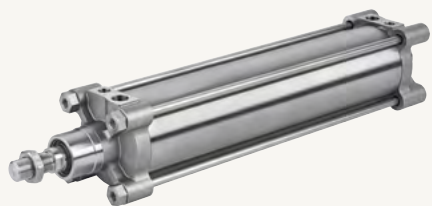
## Heavy duty non-return valves S/520, S/521, S/522, S/523, S/524, S/525

- Permits free flow of air in one direction only
- Line mounted
- **Port sizes:** G1/8", G1/4", G3/8", G1/2", G3/4", G1"
- **Operating pressure:** 0.3 ... 16 bar
- **Ambient temperature:** -20°C ... 80°C (standard), -20°C ... 150°C (high temperature)



## In-line valve VR61

- **Fluid:** Compressed air
- **Port size:** G1/4, 1/4" NPT
- **Flow:** 950 ... 1300 l/min
- **Operating pressure:** -0.9 ... 10 bar
- **Operating temperature:** -40°C ... +65°C



**Stainless steel ISO standard 1552  
cylinder, double acting  
ISOLine™ KA/802000/M**

- **Port sizes:** G1/8, G1/4, G3/8, G1/2, G3/4
- **Bore sizes:** 32, 40, 50, 63, 80, 100, 125, 160, 200 mm
- **Standard stroke:** 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500 mm
- **Operating temperature:**  
-10°C ... 80°C (standard version);  
0 ... 150°C (high temperature version)
- Double acting with adaptive cushioning system



**Cleanline Roundline Cylinder in  
Stainless Steel or Aluminium  
KM/55001/M Series**

- **Fluid:** Compressed air, filtered, lubricated or non-lubricated
- **Cylinder diameters:**  
32, 40, 50, 63, 80, 100, 125 mm
- **Operating pressure:** 1 ... 10 bar
- **Operating temperature:**  
-20°C ... +80°C
- Double acting, magnetic piston, adjustable cushioning



**Push in fittings  
Pneufit S Stainless Steel**

- **Operating pressure:** Vacuum ... 15 bar
- **Vacuum:** -750 mm of Hg ie. 99%
- **Operating temperature:**  
-15°C ... +225°C
- **Tube sizes:** 4, 6, 8, 10, 12 mm O/D

Our Industrial Automation sector operates four global centres of technical excellence and a sales and service network in 50 countries, as well as manufacturing capability in Europe, Americas and Asia Pacific.

Supported by distributors worldwide.

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