



## SMC - Experts in the Snack Industry



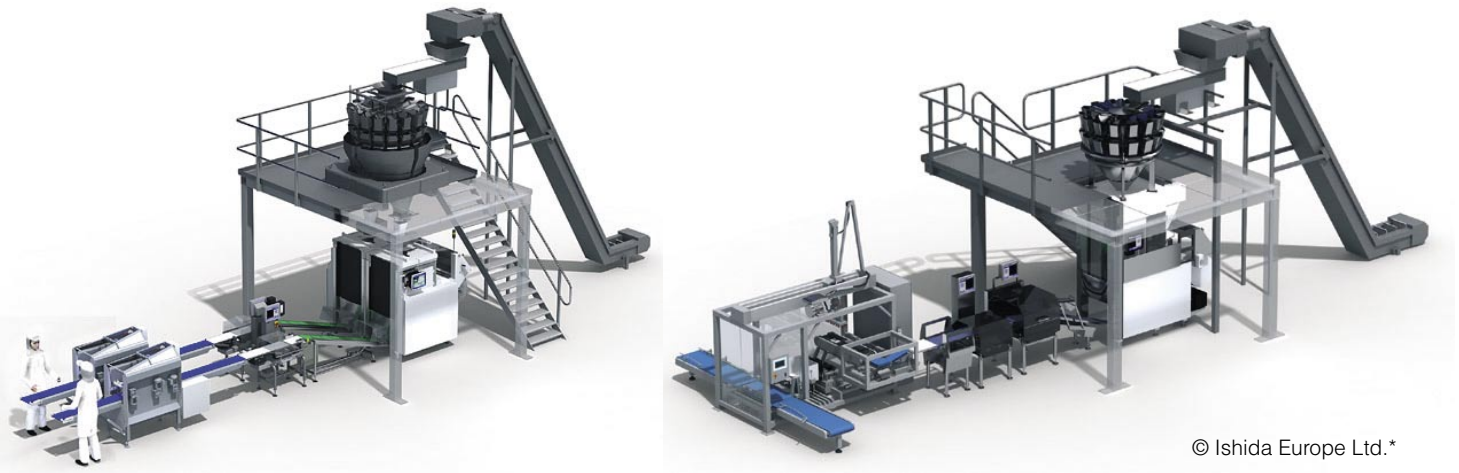
■ Gain competitive advantage – discover some simple and effective ways to ensure operational savings and improve productivity

We are all being urged to save energy. Headlines remind us almost daily of the need to reduce our carbon footprint and adopt a greener lifestyle. It's an important issue and one we ignore at our peril. Growing customer expectations and increasing legislation also mean that businesses can no longer afford to ignore green issues.

By adopting an energy saving strategy as a part of your business efficiency programme, not only will you save money but you'll help make a sustainable lifestyle for future generations.

As world leaders in pneumatics, our experts have developed some of the most innovative ranges of energy saving products and activities for compressed air systems which will help you save money as well as helping in the fight to protect our environment.

If this sounds too good to be true, we'll be happy to share our energy efficiency knowledge and technology with you!



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## SMC - Experts in the Snack Industry

**Expert (noun) - a person who is very knowledgeable about or skilful in a particular area (Oxford English Dictionary)**

At SMC we recognise that an ability to fully understand the requirements and issues of any manufacturing process is the key to our future success.

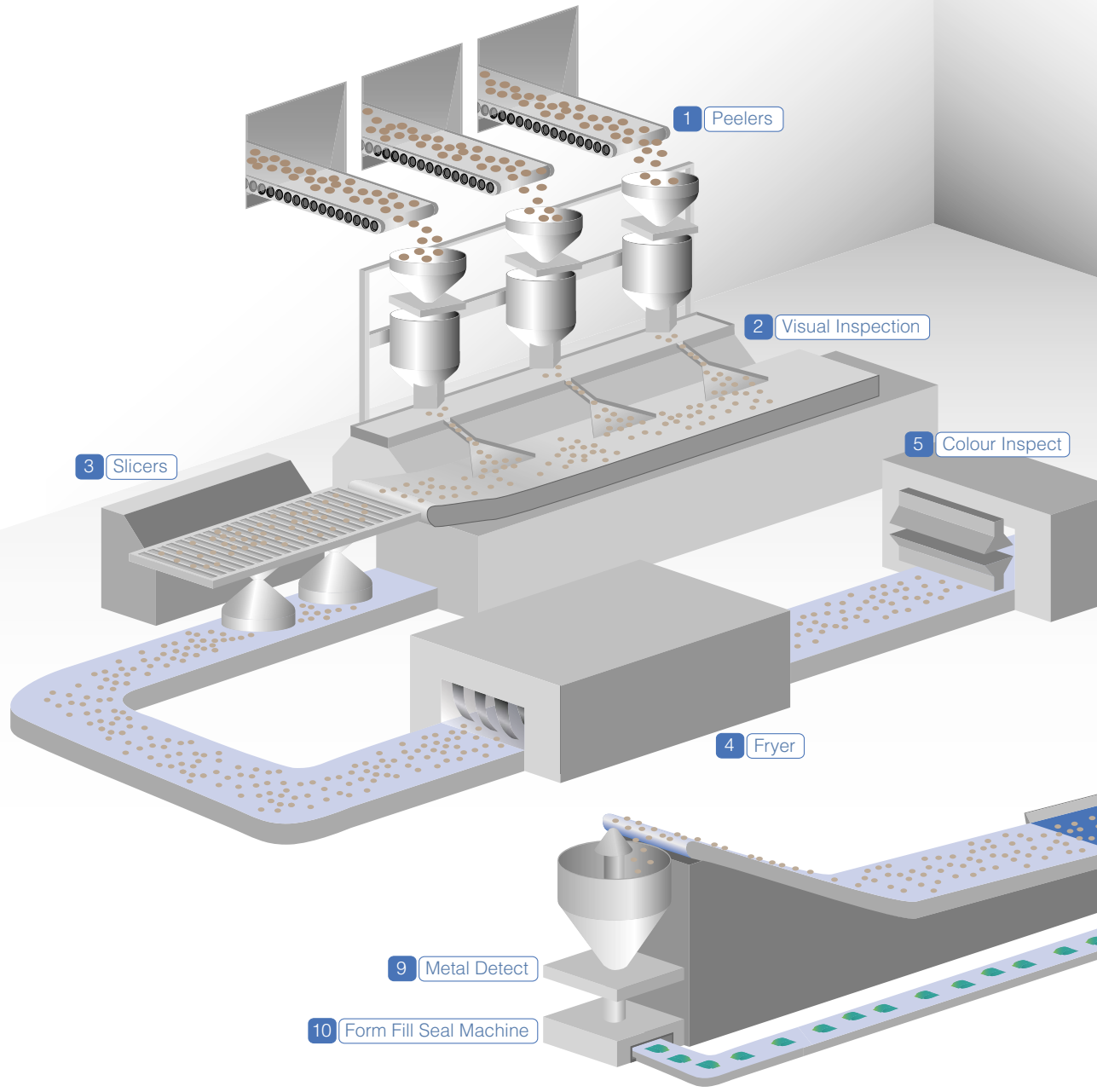
For this reason alone, we have developed specialist teams to work in all the major manufacturing industries throughout the world – our Industry Experts.

In the case of the Snacks Industry our experts know the stringent requirements that need to be met and all have extensive knowledge of both your production process and your business needs.

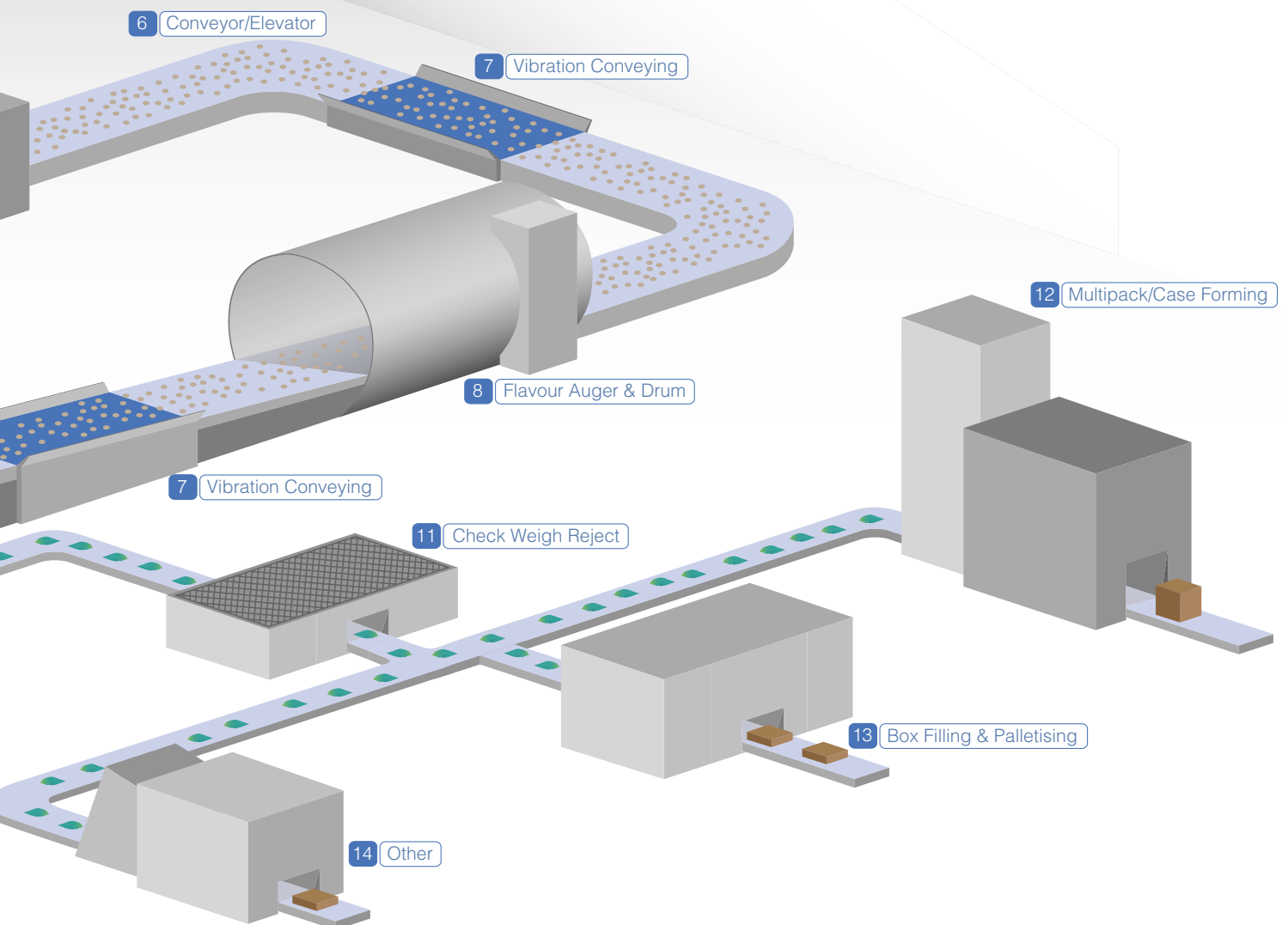
We understand the important issues such as continuous 24/7 operation, the latest up-to-the-minute hygiene regulations, the continual wash down and the extremes of heat and cold.

Our experts recognise that maximum operator health and safety is a MUST and with energy costs increasing at an alarming rate, even the smallest saving can have a real impact on a business's profits as well as the environment.





	<b>A</b> Corrosion Resistant ▶ P.6	<b>B</b> Heat Resistant ▶ P.7	<b>C</b> Hygienic Design ▶ P.7	<b>D</b> Electrostatic removal ▶ P.7	<b>E</b> Handling ▶ P.8,9	<b>F</b> Control ▶ P.10	<b>G</b> Process Product ▶ P.11
1 Peellers	■		■		■	■	■
2 Visual Inspection						■	■
3 Slicers	■		■		■	■	■
4 Fryer		■	■			■	■
5 Colour Inspect		■	■		■	■	■
6 Conveyor/Elevator			■			■	
7 Vibration Conveying	■		■			■	
8 Flavour Auger & Drum	■		■			■	
9 Metal Detect	■		■	■	■	■	
10 Form Fill Seal Machine	■	■	■	■		■	
11 Check Weigh Reject			■		■	■	
12 Multipack/Case Forming			■	■	■	■	
13 Box Filling & Palletising			■	■	■	■	



## A Corrosion Resistant

### ■ Actuators

- Stainless Cylinders ..... **Series CJ• 5/CG• 5**
- Rodless Cylinders ..... **Series CY3**



Series CJ• 5/CG• 5



Series CY3

### ■ Clean Room Products

- Clean Regulator ..... **Series SRH**
- Clean Tubing ..... **Series TPH/TPS**



Series SRH

### ■ Fittings & Tubing (Stainless Products)

- SUS316 One-touch Fittings ..... **Series KQG**
- SUS316 Insert Fittings ..... **Series KFG**
- S-Couplers / Stainless Type ..... **Series KKA**
- Brass One-touch Fittings ..... **Series KQB**
- Polyurethane Tubing ..... **Series TU**
- Fluororesin Tubing ..... **Series TL**
- One-Touch Mini ..... **Series KJ**



Series KQG



Series KFG



Series KKA



Series KQB



Series TU



Series KJ

### ■ Flow Control Equipment

- Speed Controller / Stainless ..... **Series ASG**



Series ASG

### ■ Chemicals & Di Water

- Process Pumps ..... **Series PAF**



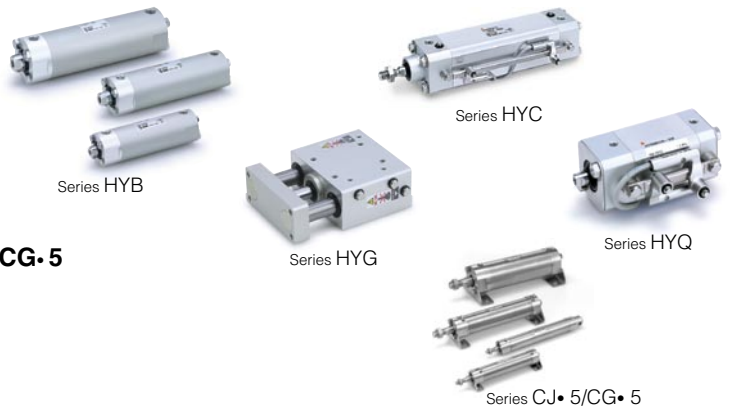
Series PAF

**B** Heat Resistant

Hygienic Design **C**

■ Actuators

- Round Tube Type..... **Series HYB**
- Guide Rod Type..... **Series HYG**
- ISO Type..... **Series HYC**
- Compact Type..... **Series HYQ**
- Piston Rod and Rod End Nut  
Made of Stainless Steel..... **Series -XC6**
- Stainless Cylinders..... **Series CJ• 5/CG• 5**



■ Fittings & Tubing (Stainless Products)

- Brass One-touch Fittings..... **Series KQB**



■ Standard Air Cylinder

- ISO Cylinder..... **Series C85**



**D** Static Control

■ Antistatic Equipment

To prevent an electrical charge due to conductance and to reduce problems caused by the build-up of static electricity.

Actuators

- Antistatic Cylinder..... **Series CM2-X1051**

Fittings & Tubing

- Antistatic One-touch Fittings..... **Series KA**
- Antistatic Tubing..... **Series TA**



Flow Control Equipment

- Antistatic Speed Controller..... **Series AS-X260**

Vacuum Products

- Vacuum Pads..... **Series ZP**

■ Ionizers

Corona effect used to neutralize ions and eliminate the build up of static electricity.

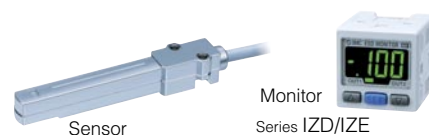
- Ionizer (Bar)..... **Series IZS**
- Ionizer (Nozzle)..... **Series IZN**



■ Measuring Instruments

Measures the electrical charge potential of the workpiece.

- Electrostatic Sensor/Monitor..... **Series IZD/IZE**
- Handheld Electrostatic Meter..... **Series IZH**

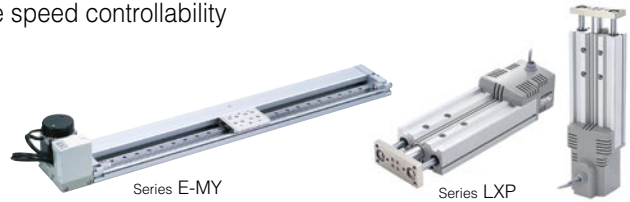


## E Handling

### Electric Actuators

Having both the operational ability of an air cylinder and the speed controllability of an electric actuator. Integrated controller type.

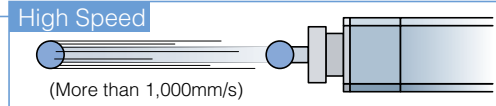
- e-Rodless Electric Actuator ..... **Series E-MY**
- Electric Actuator (Guide Rod Type) ..... **Series LXP**



### High Speed

High Speed Actuators (more than 1,000mm/s) with improved cycle time.

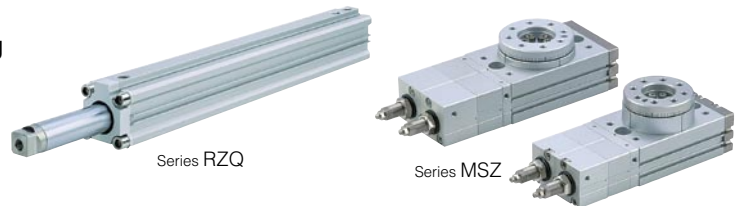
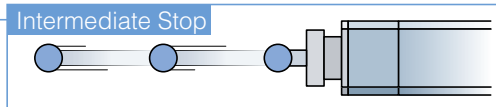
- High Power Cylinder ..... **Series RHC**
- High Speed Rodless Cylinder ..... **Series CY**



### Intermediate Stop

Actuators with an intermediate stop mechanism.

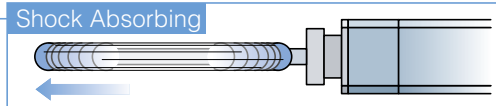
- 3 Position Cylinder ..... **Series RZQ**
- 3 Position Rotary Table ..... **Series MSZ**
- 4 Position Cylinder ..... **Series CXSJ**
- Cylinder ..... **Series CJ**



### Shock Absorbing

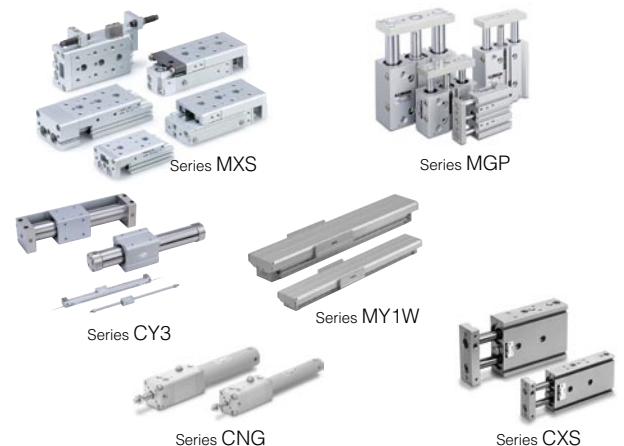
In response to delicate workpieces transferred at high speed. Shock absorbing stroke end.

- Sine Cylinder ..... **Series RHC**
- Sine Rodless Cylinder ..... **Series REA/REB**
- Shock Absorber ..... **Series RB/RJ**



### Combination Cylinder

- Slide Table ..... **Series MXS**
- Guide Cylinders ..... **Series MGP**
- Mechanically Jointed Rodless Cylinder with Protective Cover ..... **Series MY1W**
- Magnetically Coupled Rodless Cylinder ..... **Series CY3**
- Dual-Rod Cylinders ..... **Series CXS**
- Cylinder with Lock ..... **Series CNG**



■ Specialty Cylinder

- Non-rotating Double Power Cylinder..... **Series MGZ**
- Stopper Cylinder..... **Series RSQ**



Series MGZ



Series RSQ

■ Rotary Actuator

- Vane Type Rotary Actuator..... **Series CRB**



■ Vacuum Equipment

- Drain Separator for Vacuum..... **Series AMJ**



■ Fittings & Tubing (Stainless Products)

- SUS316 One-touch Fittings ..... **Series KQG**
- SUS316 Insert Fittings ..... **Series KFG**
- One-touch Fittings ..... **Series K□**
- S-Couplers / Stainless Type..... **Series KKA**
- Antistatic One-touch Fittings..... **Series KA**
- Antistatic Tubing..... **Series TA**
- Miniature Fittings / Stainless Type ..... **Series M/MS**



Series KQG



Series KFG



Series KKA

■ Process Valves

- 2 Port Solenoid Valves ..... **Series VQ20/30**
- 2 Port Solenoid Valves ..... **Series VCA**



Series VQ



Series VCA

# F Control

## Sensors

For monitoring the flow of fluids, such as air, water oil, Di water chemicals, etc. Can detect vacuum pressure of lift and transfer lines.

- Digital Pressure Switch (Integrated Sensor) ..... **Series ZSE/ISE**
- Digital Pressure Switch (Separate Sensor) ..... **Series PSE**□
- Digital Flow Switch ..... **Series PF**
- General Purpose Fluid Pressure Sensor ..... **Series PSE560**
- Digital Flow Sensor Air ..... **Series PF2A**
- Digital Flow Sensor Water ..... **Series PF2W**
- Digital Flow Sensor ..... **Series PFMV**



## Flow Control Equipment

- Speed Controller ..... **Series AS**
- Speed Controller / Stainless ..... **Series ASG**



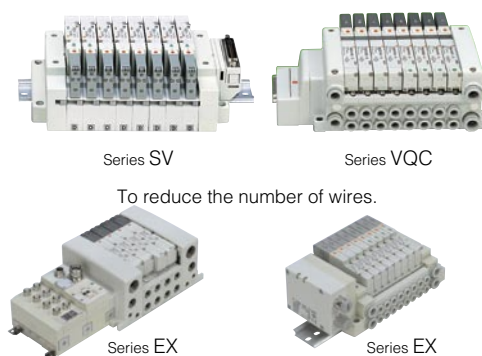
## Pressure Control Equipment

- Regulator ..... **Series AR**
- Regulator Manifold ..... **Series ARM**
- Electro-Pneumatic Regulator ..... **Series ITV**



## Directional Control Valves (IP65/67 Enclosures)

- 5 Port Solenoid Valve ..... **Series SV**
- 5 Port Solenoid Valve ..... **Series VQC**
- 5 Port Solenoid Valve ..... **Series SV/SYJ**
- 5 Port Solenoid Valve ..... **Series SQ**
- 5 Port Solenoid Valve ..... **Series VQZ**
- 5 Port Solenoid Valve ..... **Series VQ**
- 5 Port Solenoid Valve ..... **Series SY**
- 5 Port Solenoid Valve ..... **Series VV100**
- Serial Transmission System ..... **Series EX**



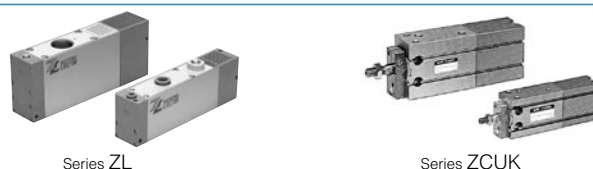
## Air Line Equipment

- Modular F.R.L. Unit ..... **Series AC**



## Vacuum Equipment

- Multistage Ejector ..... **Series ZL**
- Free Mount Cylinder for Vacuum ..... **Series ZCUK**



**G** Process Product

■ Process Valve

- Process Valve ..... **Series VC**
- Process Valve ..... **Series VX**
- Electro-Pneumatic Positioner ..... **Series IP**



Series VC



Series VX



Series IP

■ Solenoid Valve

- Namur Interface 2 and 5 Port Solenoid Valve ..... **Series VFN**





### SMC CORPORATION (Europe)

<b>Austria</b>	☎ +43 2262622800	www.smc.at	office@smc.at			
<b>Belgium</b>	☎ +32 (0)33551464	www.smc-pneumatics.be	info@smc-pneumatics.be			
<b>Bulgaria</b>	☎ +359 29744492	www.smc.bg	office@smc.bg			
<b>Croatia</b>	☎ +385 13776674	www.smc.hr	office@smc.hr			
<b>Czech Republic</b>	☎ +420 541424611	www.smc.cz	office@smc.cz			
<b>Denmark</b>	☎ +45 70252900	www.smc.dk	smc@smcdk.com			
<b>Estonia</b>	☎ +372 6510370	www.smc-pneumatics.ee	smc@smc-pneumatics.ee			
<b>Finland</b>	☎ +358 207513513	www.smc.fi	smc.fi@smc.fi			
<b>France</b>	☎ +33 (0)164761000	www.smc-france.fr	contact@smc-france.fr			
<b>Germany</b>	☎ +49 (0)61034020	www.smc-pneumatik.de	info@smc-pneumatik.de			
<b>Greece</b>	☎ +30 210 2717265	www.smc-hellas.gr	sales@smc-hellas.gr			
<b>Hungary</b>	☎ +36 23511390	www.smc.hu	office@smc.hu			
<b>Ireland</b>	☎ +353 (0)14039000	www.smc-pneumatics.ie	sales@smc-pneumatics.ie			
<b>Italy</b>	☎ +39 (0)292711	www.smc-italia.it	mailbox@smc-italia.it			
<b>Latvia</b>	☎ +371 67817700	www.smc.lv	info@smc.lv			
<b>Lithuania</b>	☎ +370 5 2308118					
<b>Netherlands</b>	☎ +31 (0)205318888	www.smc-pneumatics.nl	info@smc-pneumatics.nl			
<b>Norway</b>	☎ +47 67129020	www.smc-norge.no	post@smc-norge.no			
<b>Poland</b>	☎ +48 222119600	www.smc.pl	office@smc.pl			
<b>Portugal</b>	☎ +351 226166570	www.smc.eu	postpt@smc-smces.es			
<b>Romania</b>	☎ +40 213205111	www.smc-romania.ro	smcromania@smcromania.ro			
<b>Russia</b>	☎ +7 8121185445	www.smc-pneumatik.ru	info@smc-pneumatik.ru			
<b>Slovakia</b>	☎ +421 413213212	www.smc.sk	office@smc.sk			
<b>Slovenia</b>	☎ +386 73885412	www.smc.si	office@smc.si			
<b>Spain</b>	☎ +34 945184100	www.smc.es	post@smc-smces.es			
<b>Sweden</b>	☎ +46 (0)86031200	www.smc.nu	post@smc-pneumatics.se			
<b>Switzerland</b>	☎ +41 (0)523963131	www.smc.ch	info@smc.ch			
<b>Turkey</b>	☎ +90 (0)2124440762	www.entek.com.tr	smc@entek.com.tr			
<b>UK</b>	☎ +44 (0)8001382930	www.smc-pneumatics.co.uk	sales@smc-pneumatics.co.uk			

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