



Expertise – Passion – Automation



Ensure reliable sterilisation

SMC solutions for steriliser

SMC – Your automation partner for the steriliser

Steriliser applications

SMC is a world leader in innovative design of automation components specifically suited to the MEDICAL DEVICE, LIFE SCIENCE, and STERILISER INDUSTRY.

Our global network of sales and services, covering over 80 countries, is supported by an expansive manufacturing capacity in order to meet our customers' needs.

We offer over 700,000 products that include technologies for pneumatic and robotic automation, microfluidics, thermo control, high purity liquid and gas, among many others.

Custom design, total solution and component quality are part of our DNA.

Our components...for the life of your device.

Interactive index

We understand your daily needs **2**

Desktop autoclave (steam) **4**



Large autoclave (steam) **5**



Ethylene oxide (low temp) **6**



H₂O₂, NO₂, and others **7**



Looking for a custom dental industry solution? Then look to SMC **8**

SMC Business Continuity Plan **9**

Industrial maintenance

It's no secret that maintenance is the key to the prevention of problems, cost savings and improvement in productivity and that is why it has become a fundamental aspect of the everyday reality of production lines. With the solutions that SMC can provide to achieve successful maintenance actions you will find the best way to improve the efficiency and productivity of your process.



Smart Flexibility

This is the main concern of the Industry 4.0, Factory of the Future, Smart Factory or Digitalisation, you name it. It is no longer a question of mass production, but to do so in a personalised, cost-effective, fast and sustainable way.



We understand your daily needs

Our local teams of highly trained experts are on hand to help you achieve your goals

Your safety in our focus

Creating confidence with confidence. SMC is an innovative, reliable and strong partner for pneumatic and electrical automation technology. We accompany our customers throughout the entire life cycle of their plant and, for all relevant safety issues, we have competent and professional solutions at your disposal.



Energise your efficiency

In our 24/7 economy and as governments, industries and consumers battle with in the quest for ever increasing supplies of energy, SMC has always been fully committed to assisting customers in reducing their bills and and, of course, in making its modest contribution to global sustainability.

Size & weight optimisation

Nowadays space and weight are at a premium. SMC is on the way to downsizing your machine components, continually re-designing our products so you can achieve more efficient, compact and light machinery.



Desktop autoclave (steam)

Steam sterilisers, also referred to as autoclaves, are an essential part of the decontamination and sterilisation process performed by sterile processing departments (SPD) in hospital, clinic and dental facilities.

- ▶ 2-way valve for water
- ▶ 2-way valve for steam
- ▶ Pressure confirmation sensor

- ▶ Quick coupler for water
- ▶ One-touch fitting.



⊕ JSX 2-port valve

- Fluid: Air, water, oil
- Body material: Stainless steel, brass and aluminium
- Port size: 1/8" to 3/8"
- UL and NSF compliant
- 360-degree coil rotation.



⊕ VX2 / VX3 2/3 port valve

- Fluid: Air, water, hot water
- Body material: Aluminium, resin, brass, stainless steel
- Port size: 1/8" to 1/2"
- UL compatible.



⊕ KQG2 one-touch Fitting

- Grease free
- Simple push-to-connect
- High temperature to 150 °C.



⊕ VXS2 zero differential pressure type pilot operated 2-port solenoid valve

- Fluid: Steam
- Body material: Brass, stainless steel
- Port size: 1/4" to 1"
- Long life: 3 million cycles
- Reduced temp and low coil temp rise.



⊕ VXK 2 way valve with Y-strainer

- Fluid: Air, water, or steam
- Body material: Brass
- Port size: 1/8" to 3/8"
- Space saving combination unit
- Built-in strainer.



⊕ KKA s-coupler for water

- Body material: Stainless steel 304
- Seal material: Fluoropolymer (Special FKM)
- Built-in check valve(s).



VCW-X51 2-port valve

- Fluid: Steam
- Port size: 1/8" to 3/4"
- Coil insulation type H type
- Reverse pressure (Max 0.1 MPa) countermeasure specifications.



Large autoclave (steam)

- ▶ Fluoropolymer for high temp and purity
- ▶ 2-way valve for steam
- ▶ 2-way valve for water
- ▶ Pressure confirmation sensor
- ▶ Solenoid directional valves
- ▶ Filter/Regulator for system air.



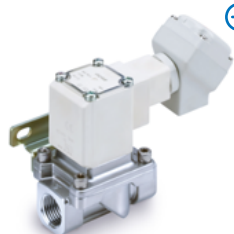
⊕ Fluoropolymer tubing and fittings

- Applicable tubing O.D.: Ø 4 to Ø 19 mm
- Max. fluid temp. 200 °C
- Translucent colours available.



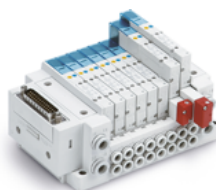
JSB air-operated angle seat valve

- Fluid: Steam
- Body material: Stainless steel 316L
- Port size: 1/8" to 2"
- Low pressure loss due to angle seat structure
- Long life 3 million cycles.



⊕ VX5 2-port valve

- Fluid: Steam
- Body material: Brass, stainless steel
- Solenoid valve for steam
- Port size: 1/4" to 1"
- Long life 3 million times.



⊕ SY directional control valve

- Space saving and improved operability
- Power consumption 0.1 W
- Supports dual 3-port valves.



⊕ WF water strainer

- Simple maintenance, replaceable mesh.



⊕ AC-D air combination units for air supply

- Clean looking, modular design
- Element and bowl are in one-piece.



AXT1274AX8 non-return valve

- Fluid: Steam
- Port size: 1/2.



⊕ JSXD pilot operated 2-port solenoid Valve, large flow

- Applicable fluid: Air, water, oil
- Body material: Aluminium, bronze, brass, stainless steel
- Port size: 1/4" to 2"
- Up to 2.200 l/min flow
- 1 to 60 °C water temp.



Ethylene oxide (EtO) cartridge or cylinder

Ethylene oxide sterilisers are used to sterilise heat and moisture sensitive devices that would be damaged by pure steam or liquid chemical sterilisation, including most plastic or rubber products (e.g., catheters, resuscitation bags, anesthesia masks, most fiberoptic instruments), as well as non-heat-sensitive devices.



⊕ Pressure regulator for gasses

- Up to 10,000 PSIG (690 bar) inlet
- Delivery pressure from absolute
- 1/8" through 1" connection.



⊕ Valves for gasses

- 1/4" through 1" line size
- Operating pressures from low vacuum to 4,500 PSIG (310 bar)
- Manual and pneumatic actuation.



⊕ Flow devices

- Check valves
- Vacuum generators
- Flow Switches.



⊕ KQ2 fitting and TU tubing

- Fluid: Air
- Applicable tubing O.D.: Ø 2 to Ø 16 mm
- Operating pressure range: -100 kPa to 1 MPa.



⊕ ISE7□G High-precision digital pressure switch

- Pressure ranges: 1, 2, 5 and 10 MPa
- 3-screen, 3-colour display
- UL standards.



⊕ PSE pressure sensor for pressure monitoring

- Remote high pressure sensor
- Enhanced durability
- Vacuum to 10 MPa (1,450 PSIG).



⊕ JSY compact solenoid valve

- Size reduction for flow
- Dual 3-port valve
- Low power consumption.



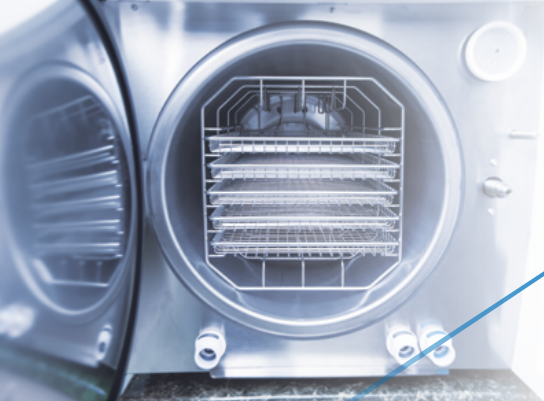
⊕ PF2M7(-L) digital flow switch

- 2 to 200 l/min range
- Dry air, N₂, Ar, CO₂
- Grease free.



⊕ ZH Vacuum ejector

- Compact and lightweight
- Nozzle diameter: 0.5 to 2.0.



H₂O₂, NO₂, and others

Hydrogen peroxide sterilisation, is a low temperature sterilisation process commonly used to sterilise heat sensitive devices. The process involves H₂O₂ vapour filling the steriliser chamber, contacting and sterilising exposed device surfaces.



⊕ LVM compact 2/3-port valve

- Fluid: Chemical liquids
- Low particle generation
- Isolated structure (diaphragm)
- Poppet or rocker type
- Available with power saving circuit.



⊕ AK diaphragm valve

- Compact and lightweight
- Cleaned for oxygen service
- Manual or pneumatic actuation.



⊕ LPV pinch valve

- Fluid: Gas and liquid applicable to the tube
- Highly resistant to contamination
- Power consumption: 2.0 W or 2.9 W
- Easy tubing replacement.



⊕ PVQ proportional valve

- Fluid: Air or inert gasses
- Body material: Brass, stainless steel
- Flow control proportional to current or voltage signal
- Repeatability 3 % or less.



⊕ LVC/LVA/LVH high purity valve

- Fluid: Chemical liquids
- Low particle generation
- High chemical resistance
- Air and manual operation
- Fluid temperature 0 to 100 °C.



JSXP proportional valve

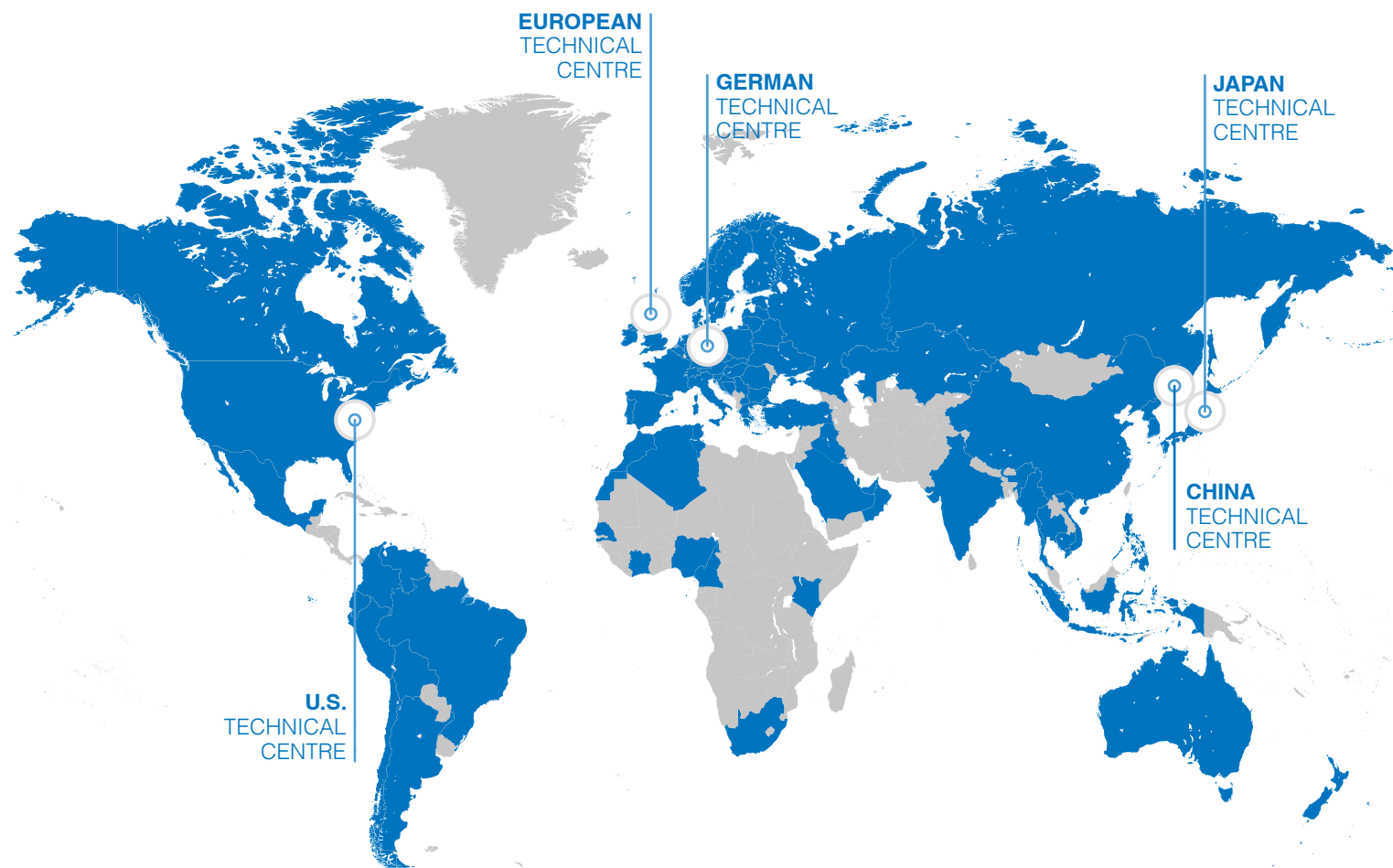
- Fluid: Air, water
- Body material: Brass, stainless steel
- 1.6 mm or 2.4 mm orifice
- Flow proportional to input signal.

NO₂ sterilisation is a truly room temperature process, which provides designers and developers a good choice for the sterilisation of temperature-sensitive materials such as bioresorbable polymers.

Technical development locations

Looking for a customised solution?

Our 5 technical centres are at your disposal and 1,700 R&D Sales Engineers who will be pleased to devise, develop and design a tailor-made solution with you for your application.



We develop specific solutions by understanding our clients' needs

Our dedicated teams can provide you with ad-hoc solutions and R&D activities to help tackle your challenges

Sustainable growth also means ensuring uninterrupted operations

We are committed to ensuring that SMC is prepared for any emergency and that our business activities will not stop in the event of such circumstances. SMC aims to fulfil our product supply responsibilities and maintain our customers' trust by contributing to both sustainable growth and the expansion of technological innovations.

SMC, as a comprehensive manufacturer of automatic control equipment that supports automation, is able to promptly provide products that meet our customers' needs anywhere in the world.

Finance BCP

Safe & Solid financial base

In the event of an emergency, SMC can provide a safe and solid financial base (with cash, deposits, and equity capital) that will sufficiently cover the working capital and funds needed to rebuild buildings and the equipment required for business continuity. This is done to provide peace of mind to our customers and workers alike.

Information security BCP

Vital data kept safe

Strengthen information security for protection against computer viruses and cyberattacks, plus the installation of data centres to establish a disaster recovery system. Your information is safe with us.

Sales BCP

Consistent sales support

8,300 sales engineers worldwide ready to recommend the best solution for you.
Over 80 global locations to make sure that wherever you are, we are there too.

Production BCP

Ensure customer order fulfilment

Reliable delivery for you thanks to our 8 global logistic centres and 30 production sites, 10 of which are located in Europe. Moreover, flexibility to rapidly respond to any sudden change in the manufacturing environment.

**Aiming to gain your trust
Sustainability through
reliability**

Engineering BCP

Consistent technical support

1,700 engineers at our 5 technical centres around the globe (2 in Europe - Germany and UK).



Expertise – Passion – Automation

www.smc.eu

EMC-P-E22-19-UK