

Electric and pneumatic controls



spirax
/sarco



provides knowledge, service and products worldwide for the control and efficient use of steam and other industrial fluids.

For over 80 years the Spirax Sarco organisation has been committed to providing steam users with knowledge, service and products to improve and maintain steam heating and process plants of all types. Spirax Sarco is a world leader in the control and efficient use of steam and other fluids.

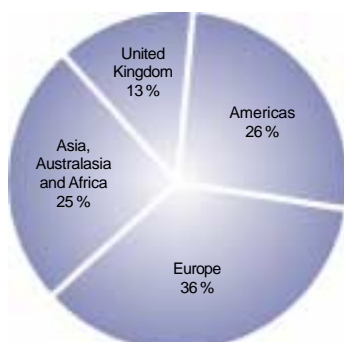


Spirax Sarco - the company at a glance

Total turnover £m



Business spread



From origins in 1910, the company has been based in Cheltenham, England since 1937. It is a British public company and has been quoted on the London Stock Exchange for over 30 years. Each year the company has reported a strong financial performance and continues to expand its business around the world.





Part of the comprehensive product range



Controls unit, Cheltenham

3 900 people employed around the world including 650 sales engineers.

39 companies in 32 countries dedicated to the efficient use of steam.

100 sales offices providing readily available local support and service.

12 manufacturing plants committed to customer satisfaction.

1 000 000 students have completed our correspondence courses.

31 training centres dedicated to spreading knowledge to our customers.

100 000 customers buying regularly.

Comprehensive product range to provide system solutions for steam and fluid handling.

World leader in steam control technology and sales.



Three port electrically actuated valve



Pneumatic controller

Commissioning a pneumatic controls system



Two port pneumatically actuated valve with positioner

A wide range of equipment . . .

Pneumatically actuated control valves

Two and three port control valves manufactured in SG iron, cast steel and stainless steel, ranging from DN15 to DN200.

The valves can be used on pressures up to 40 bar and are available with screwed or flanged connections. Pneumatic actuators are to NAMUR standard, spring to open, or spring to close, and incorporate a rolling nitrile rubber diaphragm.



Positioners

To complement the range of pneumatically actuated control valves, the pneumatic and electropneumatic positioners will allow small actuators to close against higher differential pressures, eliminate hysteresis and speed up actuator positioning time.



Smart Positioner

The SP1 electronic smart positioner harnesses the latest design and manufacturing techniques to:-

- Reduce the total cost of valve ownership.
- Improve valve performance.
- Ease commissioning.



Electrically actuated control valves

Using the same valve range as the pneumatic actuators, electric actuators provide the solution to applications that require an electric power supply. A comprehensive range of accessories is available.





Programmable electronic controllers

Panel mounted single loop controllers suitable for single or multi set point control. They incorporate PID, auto TUNE and ADAPTIVE algorithms.

Pneumatic transmitter controllers

The controllers are available with a simple proportional control action, or with the addition of integral and derivative action. Temperature sensing is via a nitrogen filled direct expansion system, and pressure sensing by interconnecting pipework to an internal bourdon tube.



Sensors and transmitters

A full range of pressure and temperature sensors and transmitters are available.

Pneumatically actuated ball valves

A range of screwed and flanged ball valves is available in sizes DN15 to DN100 and suitable for pressures up to 62 bar.



Butterfly valves

When tight shut-off is required for isolation of plant the Spirax Sarco range of butterfly valves provides the perfect answer. Range: DN40 to DN250; SG iron body; pressures up to 40 bar; EPDM or metal to metal seat.

... giving a wide range of options...

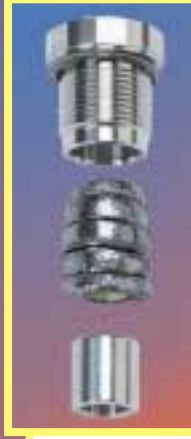
Chevron seal
Standard self-regulating chevron rings for constant stem friction and minimum maintenance.



Bellows seal
Bellows seal with back-up chevron seal for high temperature applications and zero emissions. Cost effective low pressure bellows seal option available.



High temperature graphite
Graphite braided rings for high temperatures.



Soft seal trim
Soft seal trims for bubble tight shut-off to ANSI class VI.



Hard facing
Hard faced seat and plug for high erosion resistance during cavitation, flashing and two phase flow applications.



Characterised plugs
Equal percentage, linear and fast opening trim options for process characteristic matching.



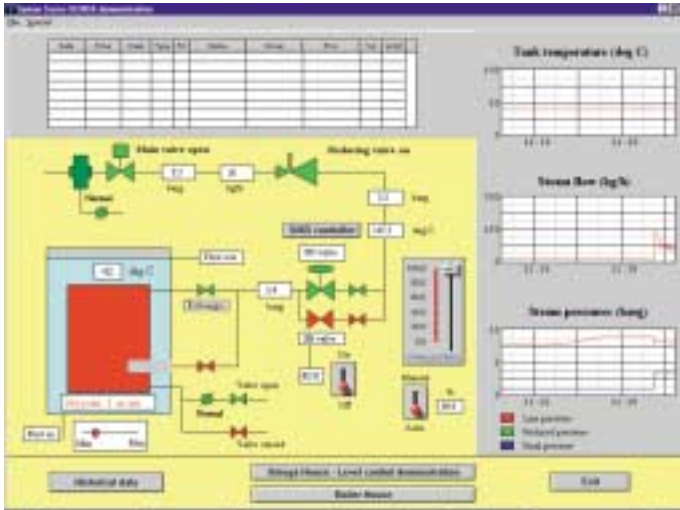
Noise reducing trim
Flow divider reduces noise and erosion from high velocity conditions.



Reduced capacity trims
Optional trim sizes to optimise control valve performance.



...all of which can be used in networked control systems...



Spirax Sarco offer a comprehensive range of products which include electric actuators with positioner, electropneumatic positioners for pneumatic controls, sensors, transmitters and electronic process controllers; which can all be interfaced with computer based control and/or monitoring systems. Communications for centralised control and on-line diagnostics is available via a HART® protocol on the SP1 positioner. This allows re-ranging and fault diagnosis to be carried out on-line as well as other functions such as self-stroking and modifying valve characteristics.

...for a wide range of industry and commerce

including - Food and drinks: Laundries: Pharmaceuticals:
Textiles: Oil refining: Metal processing: Chemicals:
Electronics: Plastics: Rubber and tyres:
Pulp and paper: Horticulture: Sugar refining:
Shipbuilding: Heating and ventilating:
Air conditioning, and many more.



A partnership with Spirax Sarco provides knowledge, service and products worldwide for the control and efficient use of steam and other industrial fluids.

- **Worldwide support from a team of 3 900 dedicated employees.**
- **Local access to Spirax Sarco's expertise and products through 39 group companies in 32 countries.**
- **Valuable information, advice and interchange of ideas from customer training courses held in any of our 31 training centres worldwide.**
- **A comprehensive range of the highest quality products.**

Spirax Sarco worldwide service

Europe

Austria *Vienna*
 Belgium *Zwijnaarde*
 Czech Republic *Prague*
 Denmark *Copenhagen*
 Finland *Helsinki*
 France *Trappes*
 Germany *Konstanz*
 Hungary *Budapest*
 Ireland *Dublin*
 Italy *Milan*
 Netherlands *Maarn*
 Norway *Oslo*
 Poland *Warsaw*
 Portugal *Lisbon*
 Russia *St. Petersburg*
 Spain *Barcelona*
 Sweden *Stockholm*
 Switzerland *Zürich - Zollikon*
 United Kingdom *Cheltenham*

Africa

Kenya *Nairobi*
 Nigeria *Lagos*
 South Africa *Johannesburg*

Americas

Argentina *Buenos Aires*
 Brazil *São Paulo*
 Canada *Toronto*
 Mexico *Monterrey*
 USA *Columbia, S.C.*

Asia & Middle East

China *Shanghai*
 Hong Kong
 India *Poona*
 Indonesia *Jakarta*
 Japan *Tokyo*
 Korea *Seoul*
 U.A.E. *Dubai*
 Malaysia *Kuala Lumpur*
 Pakistan *Karachi*
 Philippines *Manila*
 Singapore
 Taiwan *Taipei*
 Thailand *Bangkok*

Australasia

Australia *Sydney*
 New Zealand *Auckland*

Our comprehensive product range includes:

- **Boiler controls**
- **Flowmeters**
- **Pneumatically and electronically actuated control valves**
- **Pressure reducing valves**
- **Self-acting temperature control valves**
- **Programmable electronic controllers**
- **Pneumatic transmitter controllers**
- **Safety valves**
- **Steam traps**
- **Steam trap monitoring systems**
- **Condensate pumps**
- **Flash vessels**
- **Separators**
- **Strainers**
- **Stop valves**
- **Check valves**
- **Humidifiers**

A further 46 agencies operate throughout the world.

If you have difficulty finding a local contact please contact us at the number shown below.
 Some of the products shown may not be available in certain markets.

OVERVIEW

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