

# Controls and instrumentation

an introduction



**spirax**  
**/sarco**

**spirax**  
**/sarco**

# A controls solution provider

Spirax Sarco provides Knowledge, Service and Products for the efficient control of steam and other industrial fluids...

Based in Cheltenham, England, the origins of the company date back to 1910. We are a British public company and have been quoted on the stock exchange for over 48 years. Each year the company has reported a strong financial performance and continues to expand its business around the world.

Our aim is to provide a controls solution that helps our customers achieve operational improvement through their production capability, usually in the form of reduced energy usage, improved product quality, lower emissions and greater production throughput.

The solutions we provide can be from a replacement product, extending to a complete controls solution.

What makes us different is that we can take a holistic view of the system and, by working in partnership with our customer's technical engineering teams, deliver measurable and sustainable improvements.

Each customer situation is considered in terms of their process requirements, the engineering and production skills of the people involved in running and maintaining the plant and the budget available. Thus, a solution that best fits the customer profile is proposed.

## Spirax Sarco the facts:

- Founded in 1910.
- Represented in almost every country in the world.
- Quoted on the London Stock Exchange.
- Provides Knowledge Service and Products for the efficient control of steam and other industrial fluids.
- Controls solutions are product and system based.
- Takes a holistic view of the plant.
- Delivers measurable and sustainable improvements.
- Over 100,000 customers worldwide buying regularly.



# Our history of controls

## A progressive company with traditional values

With industry practices and customer expectations constantly evolving, success can only be maintained with a progressive attitude toward change.

Spirax Sarco controls and instrumentation have long been an essential part of the product offering. Naturally, many changes have occurred to the business, our products and people - a result of organic growth and growth from acquisition.

Importantly, these changes have been achieved without losing the essence of what has made the company a success. For example, our employment and customer service philosophies, inherited from a family run business dating back to 1910, remain evident even today.

### At a glance:

- 2005 – Mitech severe service and Emco metering businesses acquired.
- 2005 – Clean service control valves introduced.
- 2001 – M&M piston actuated and solenoid valve business acquired.
- 1993 – Jucker control valve and instrumentation business acquired.
- 1992 – Dedicated controls and Instrumentation unit formed.
- 1989 – Boiler house controls launched.
- 1986 – Range of metering launched.
- 1972 – Humidification controls introduced.
- 1963 – Drayton control valve and instrumentation business acquired.
- 1960 – Self-acting pressure controls range introduced.
- 1910 – Spirax Sarco company forms and sells self-acting temperature controls.



Our employment and customer service philosophies were inherited from a family run business dating back to 1910 and still remain evident today





The cross-pollination of successes from one industry to another is a key benefit to our customers



# Experience

Products and ideas can always be copied but hard won expertise accrued through years of experience is difficult to emulate...

The scope of Spirax Sarco's controls activity is worldwide and customers from a broad range of industry and commerce are serviced. Institutional and Government establishments such as Hospitals, Prisons and Universities and processors within the food, pharmaceutical, chemicals and plastics industries are all examples.

Whilst focused primarily on steam in its various grades (saturated plant, superheated, clean and pure), our fluid experience extends to oils, water, nitrogen, petroleum, natural gas, de-ionised water and many other chemicals and gases as demanded by the customer – for both general and special service.

Applications are equally as diverse and extend from simple tanks to pressure vessels, process vessels and reactors, heat exchangers and turbines.

This large industry and application knowledge means our direct sales engineers are constantly stimulated to provide solutions to many types of control problems. The resulting cross-pollination of successes from one industry to another is a key benefit to our customers.

## There is no substitute:

- Well-trained and highly experienced sales engineers.
- Global business.
- Serving a wide range of industries.
- Fluid focus is steam and its variants.
- Experienced in the control of oils, water and many chemicals and gases.
- Diverse range of applications.
- Customers benefit from cross-pollination of successes from one industry to another.

# Products

## Control solutions

The core business proposition of Spirax Sarco has not changed over the years but the products required to deliver the proposition have. These changes have occurred in line with the availability of new technologies and changing customer expectations.

Today Spirax Sarco has a comprehensive range of controls and instrumentation products available to its customers; general and special service control valves, positioners, electric and pneumatic actuators, controllers and transmitters, flowmeters and boiler controls.

## Our approach is to provide:

---

**Choice** - the right product for the job.

---

**Quick delivery** - through local stocks and configuration.

---

**Quality** of people, product design, manufacture and tested to international quality assured standards.

---

**Reliability** from attention to detail in design, manufacture and correct application of the product.

---

**Ease of maintenance** through design and parts interchangeability, and local stock of spares.

---

**Service** from a worldwide network of expert controls specialists and sales and service engineers.

---

**Value for money** by providing all of these things at a competitive price.

---

## Product offering:

- General service control valves.
- Special service control valves.
- Safety valves.
- Self-acting, pneumatic and electric actuation.
- Positioners and other control interface devices.
- Pneumatic and electric controllers and transmitters.
- Flowmeters.
- Boiler controls.
- Precisely matched steam control valves that form an integral part of our heat exchange package solutions.
- All capable of being networked for centralised control and monitoring.





Spirax Sarco has a comprehensive range of controls and instrumentation products available to its customers





When you choose Spirax Sarco you have access to 800 direct sales engineers, controls specialists in 32 countries and a global service network, which means you are never alone; wherever you are in the world



## Before, during and after sales

By engaging with our well-trained and highly experienced sales engineers early in your improvement or expansion programme, you are sure to achieve the best price performance from your controls.

Correct selection of the product is key to achieving high performance and long service life. Depending on the circumstances this can be a complex decision.

Spirax Sarco has its own dedicated sizing and selection software, consequently; accurate selection decisions can be made quickly and reliably.

Installation, commissioning and maintenance services are readily available from our highly trained engineers whose knowledge is second to none in the industry.

When you choose Spirax Sarco you have access to 800 direct sales engineers, controls specialists in 32 countries and a global service network, which means you are never alone; wherever you are in the world.

### You are never alone:

- 800 well-trained and highly experienced direct sales engineers.
- Controls specialists in 32 countries.
- Consultative approach to solution delivery.
- Supported by dedicated sizing and selection software.
- Free of charge installation advice.
- Commissioning and after sales service engineers.
- Worldwide network of companies, agents and resellers.
- 32 training centres dedicated to spreading knowledge to our customers.
- Secure investment for the user.

# Research and development

An active research and development programme is frequently the lifeblood of any long-term successful organisation and Spirax Sarco is no different in this respect.

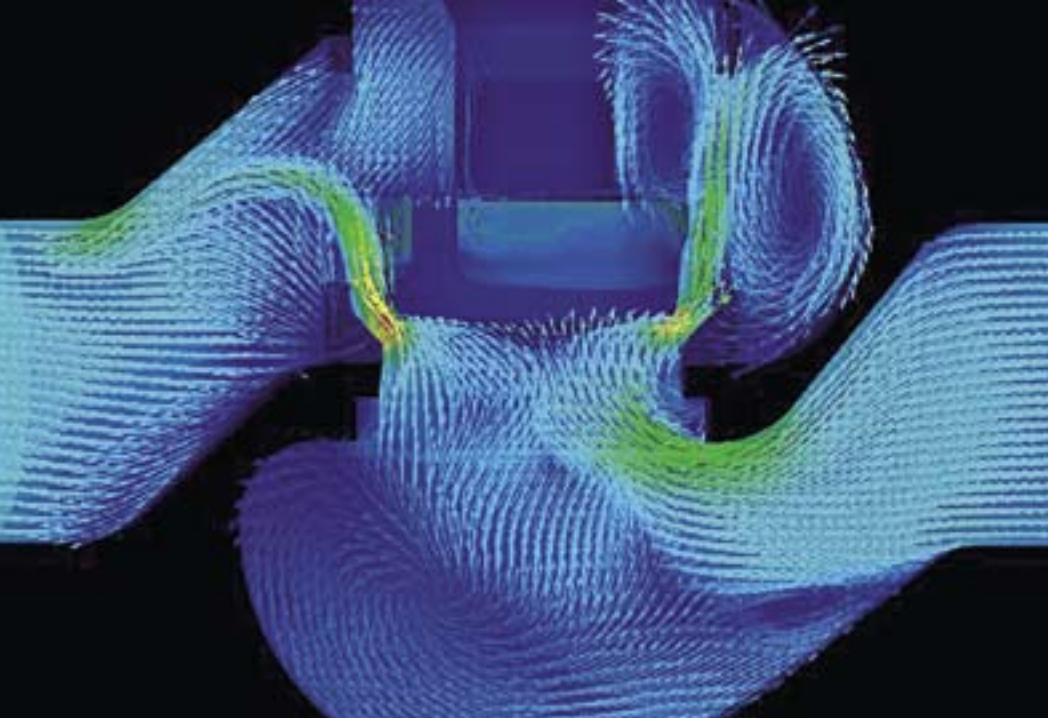
For many organisations, time and cost pressures limit the amount of product performance testing that can take place during the development phase, prior to product introduction. The result for the user is an increased risk of product failure when making an investment.

Spirax Sarco researches, designs and develops controls and instrumentation directly, often working in partnership with customers and specialist technology experts alike.

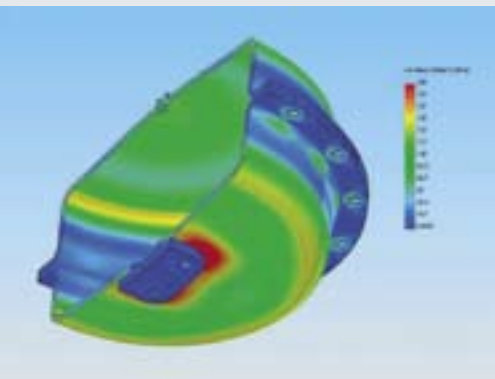
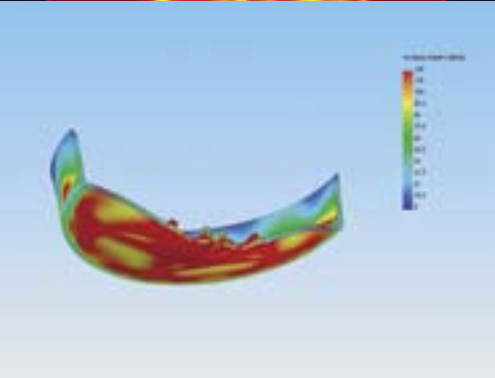
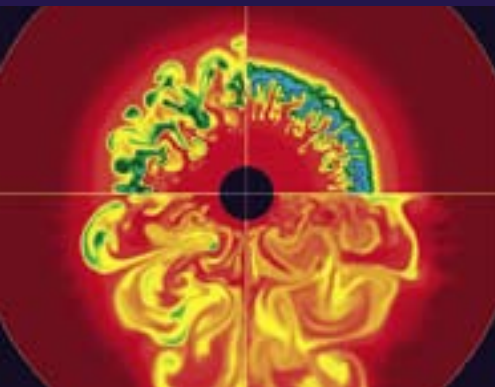
In-house 3D modelling, computational fluid dynamics, finite element analysis and rapid prototyping techniques allow for more rigorous testing, over a wider range of product combinations, than ever before. This permits much greater performance fine-tuning than previously achievable and results in a considerably lower investment risk for the user.

## Today's technology - Tomorrow's solutions:

- Active research and development programme.
- Works in partnership with customers and technologists.
- 3D modelling.
- Computational fluid dynamics (CFD).
- Finite element analysis (FEA).
- Rapid prototyping.
- Low investment risk for the user.



Spirax Sarco researches, designs and develops controls and instrumentation directly





a brand you can rely on  
**spirax**  
**/sarco**



# Manufacturing and quality

Our controls and instrumentation products are manufactured directly by Spirax Sarco in a number of strategically placed manufacturing plants around the World. These ISO 9001:2000 approved facilities employ production best practice, often achieving 'best-in-class'. This strategy of direct manufacture allows us control over the quality of product and service that we provide our customers.

Traceable materials are purchased from around the globe, to ensure that our customers always benefit from the advantage of the best technical and commercial sources.

Assembly is automated and testing is computerised. Every control device is factory set using skilled personnel to ensure a consistently high quality product.

## World class - worldwide:

- Strategically located manufacturing plants.
- ISO 9001:2000 accredited facilities.
- Global purchasing.
- Automated assembly.
- Computerised testing.
- Products configured centrally and locally by skilled personnel.
- Consistent high quality product.

## Group companies

### Africa

South Africa

### Americas

Argentina  
Brazil  
Canada  
Mexico  
USA

### Asia

China  
India  
Japan  
Korea  
Malaysia  
Singapore  
Taiwan  
Thailand

### Australasia

Australia  
New Zealand

### Europe

Austria  
Belgium  
Czech Republic  
Denmark  
Finland  
France  
Germany  
Italy  
Norway  
Poland  
Portugal  
Russia  
Slovak Republic  
Spain  
Sweden  
Switzerland  
UK

## Sales offices

### Africa

Egypt  
Kenya  
Nigeria

### Americas

Colombia  
Venezuela

### Asia

Hong Kong  
Indonesia  
Pakistan  
Philippines  
Vietnam

### Europe

Austria  
Hungary  
Ireland

### Middle East

UAE

## Distributors

### Africa

Algeria  
Cameroon  
Ethiopia  
Ghana  
Ivory Coast  
Libya  
Malawi  
Mauritius  
Morocco  
Namibia  
Senegal  
Sudan  
Tanzania  
Tunisia  
Uganda  
Zambia  
Zimbabwe

### Americas

Bolivia  
Chile  
Colombia  
Costa Rica  
Dominican Republic  
Ecuador  
El Salvador  
Guatemala  
Honduras  
Jamaica  
Nicaragua  
Panama  
Paraguay  
Peru  
Trinidad and Tobago  
Uruguay  
Venezuela

### Asia

Bangladesh

### Australasia

Fiji

### Europe

Bulgaria  
Croatia  
Cyprus  
Estonia  
Greece  
Iceland  
Latvia  
Lithuania  
Malta  
Netherlands  
Romania  
Slovenia  
Turkey

### Middle East

Bahrain  
Iran  
Jordan  
Kuwait  
Lebanon  
Oman  
Qatar  
Saudi Arabia  
Syria



Some products, services or solutions may not be available in certain markets