Biotechnology and pharmaceutical industry
Your challenge

Safe and reproducible solutions
Production technologies for pharmaceuticals are becoming more and more complex, and systems are being automated to an ever greater extent. Requirements stipulated by the regulatory authorities are getting stricter. Partners involved in health care systems are tightening their belts all over the world. Under these circumstances you need partners instead of just suppliers – partners who understand your requirements and your business, and who help you manufacture safe, high-quality products at optimized production costs.

Our solution

A head start with specific automation solutions
The engineering services, modules, assemblies and products from Festo provide you with answers for the implementation of modular, scalable automation concepts for your systems. Whether you produce active ingredients using biotechnological or chemical processes, prepare formulations as a contract manufacturer or fill parenterals in the clean room, consulting services, energy saving concepts, training and products from Festo offer security, increase your productivity and ensure highly reproducible product quality.

For more information:
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or scan the QR code and watch the video:

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Inertization of tanks and process equipment.

Standardization of control cabinets for media preparation and utilities.

Automation and complete delivery of process valves.

Machine automation and connection to control systems by means of valve terminal technology.

Compressed air preparation for process valves, actuators and processes which come into contact with the media.

Pneumatic and electrical automation of filling and packaging machines as well as state of the art handling solutions.

Automation potential in the individual process steps
Automation platform components

**Pilot valves CPE, V5Nv, VOFx**
Decentralized control of pneumatically actuated process valves, cylinders and other consuming devices.
**Applications:** pneumatic control of butterfly valves and ball valves in chemical systems, explosion protection zones 2/22 and 1/21, for safety-oriented EMR circuits up to SIL4.

**Valve terminals VTRG, CPN, MPA**
Central control of pneumatically actuated process valves, cylinders and other consuming devices.
**Applications:** pneumatic control of diaphragm valves in fermenters, water treatment systems and cylinders in packaging machines.

**Electrical automation platform CPX**
Automation all the way down to the field level, fieldbus nodes, remote I/Os (digital/analogue), compressed air and gas sensors, motor controllers and much more.
**Applications:** electrical connection of process sensors and position transmitters for process valves in fermenters, freeze dryers, chromatographs and other process equipment.

**Compressed air preparation, D and MS series**
On-site cleaning of compressed air and process air.
**Applications:** on-site compressed air preparation for pneumatic consumers, preparation of process air for direct contact with the product.

**Pneumatic components and compressed air preparation**

**Proportional pressure regulator VPPM**
Pressure and flow control of inert and neutral gases.
**Applications:** inverting, transferring materials from one container to another, pressure blanketing, contact pressure regulation for cylinders, controlling process valves.

**Linear drives CRHD, ADN**
Pneumatic automation in process equipment and machines.
**Applications:** moving spray balls in spray dryers, handling technology in filling and packaging machines.

**Linear actuators DFPI, DLP**
Pneumatic automation of linear and quarter-turn actuators (open/close and regulated).
**Applications:** actuated gate valves for dry goods, ventilation flaps.

**Electrical position transmitters DAPZ, SRBF**
Indication of the position of quarter turn actuators, digital and analogue.
**Applications:** position indication for pneumatically automated ball valves and butterfly valves.

**Positioner CMSX**
Positioner for double-acting quarter turn actuators, analogue and digital feedback signals.
**Applications:** position control for automated butterfly valves, ball valves, bulk goods deflectors, etc.

**Complete control cabinets**
Applications: pneumatic and electrical control cabinets for fermenters, chemical reactors and other process equipment.

**Ready-to-install solutions**

**Customized solutions**
Applications: ready-to-install pneumatic distributors and filter cascades, complete handling units, racks for media supply in machines.

**Ready-to-install process valves**

**Ball valves VZBC and VAP6 in pharmaceuticals variants**
Control of liquid or gaseous media and steam.
**Applications:** ball-type drain valves, steam supply, compressed air supply, CIP supply for chemical reactors.

**Hygienic butterfly valves**
Stainless steel hygienic butterfly valves for controlling liquid and gaseous media.
**Applications:** control of supply and discharge for mixers and homogenizers.

**Angle seat valve VZXF**
Control of liquid or gaseous media and steam.
**Applications:** steam supply in pharmaceutical systems, autoclaves and sterilizers.

**Butterfly valves**
Control of liquid or gaseous media and steam.
**Applications:** ultra-clean water and wastewater treatment, handling of powder and granulates, handling exhaust gas at chemical reactors.

**Valve terminals VTUG, CPV, MPA**
Central control of pneumatically actuated process valves, cylinders and other consuming devices.
**Applications:** pneumatic control of diaphragm valves in fermenters, water treatment systems and cylinders in packaging machines.

**Automation of process valves**

**Positioner CMSS**
Positioner for double-acting quarter turn actuators, analogue and digital feedback signals.
**Applications:** position control for automated butterfly valves, ball valves, bulk goods deflectors, etc.

**Linear actuators DFPI, DLP**
Pneumatic automation of linear and quarter-turn actuators (open/close and regulated).
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For years, Festo has been developing factory and process automation solutions for a broad range of industry sectors. By transferring experience and innovations from one industry to another, we take advantage of valuable synergies and create economies of scale. You too can profit from our worldwide network of know-how, because it enables us to develop and implement customized concepts for your plant quickly and economically.

We are the engineers of productivity
There are four outstanding characteristics with which we successfully implement your automation tasks and provide you with increased productivity: reliability, efficiency, simplicity and expertise. These make us what we are for you: engineers of productivity.

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