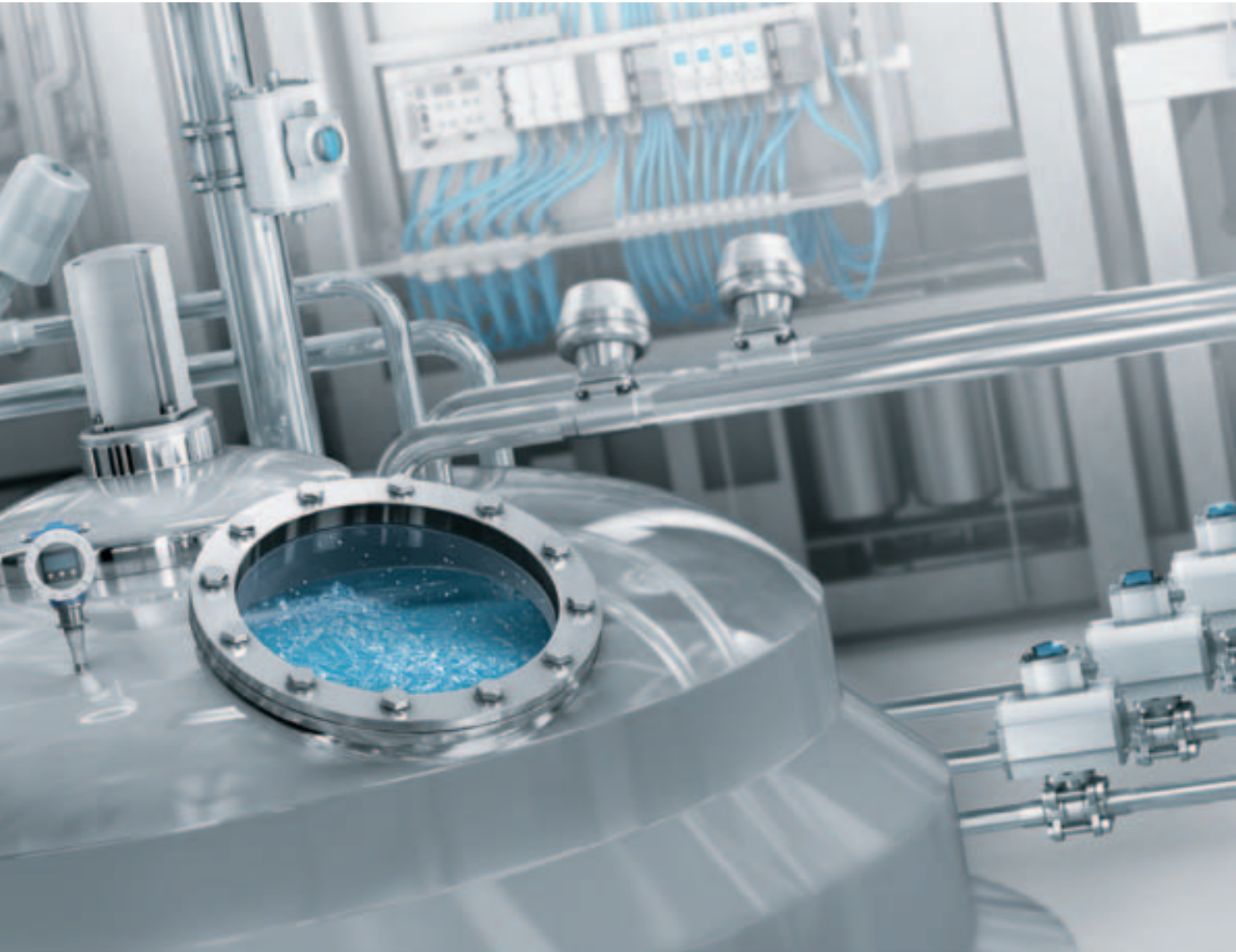


Biotechnology and pharmaceutical industry

FESTO





You are looking for a partner who understands your objectives.
You require more efficient production facilities.
We are your solution for automation.

→ **WE ARE THE ENGINEERS
OF PRODUCTIVITY.**

Added value from Festo in all phases
of the system's lifecycle

Our
know-how

Your
advantage

Engineering

Productivity and production costs are already determined during the engineering phase. Festo

- advises you so that you can achieve more efficient solutions and maximised standardisation,
- saves you time at the engineering stage,
- supports you in optimum planning and implementation
- and coordinates all the steps for you with all partners concerned.
- Worldwide, even for cross-border projects!

Procurement

Everything from a single source. Festo delivers

- products, special and complete solutions,
- ranging from standard pneumatics to ready-to-install, customer-specific solutions, control cabinets and process valves, and
- coordinates your international activities with the help of a closely-knit customer service network at 250 locations in 176 countries.

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 optimised 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:
www.festo.com/biotech

or scan the QR code and watch the video:



Installation

Save time and money. Benefit from Festo plug & work through

- quick and simple on-site installation,
- FAT certified, ready-to-install products,
- less time needed for training and validation thanks to standardisation.

Commissioning

Immediate, reliable commissioning. Festo supports you through

- reduced complexity without losing out on functionality thanks to more flexible and modular valve terminal technology,
- simple commissioning of ready-to-install modules, control cabinets and process valves,
- expert training for safe operation right from the start.

Operation, maintenance

High system availability and reliable processes. Festo ensures this with

- support for your systems throughout their entire service life,
- worldwide availability of spare parts
- assistance with modernisation and upgrades,
- consultation and services for the optimisation of processes and operating costs.



Automation platform components



Electrical automation platform CPX

Automation all the way down to the field level, fieldbus nodes, remote I/Os (digital/analog), 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.

Pilot valves CPE, VSNx, VOFx

Decentralised 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 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.

Pneumatic components and compressed air preparation



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.

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 tubing and fittings PFAN/PTFE and NPQP, FDA-compliant

Supply and distribution of neutral gases and process air.

Applications: distribution of compressed air to pneumatic drives (cylinders and process valves), nitrogen supply from bottles.

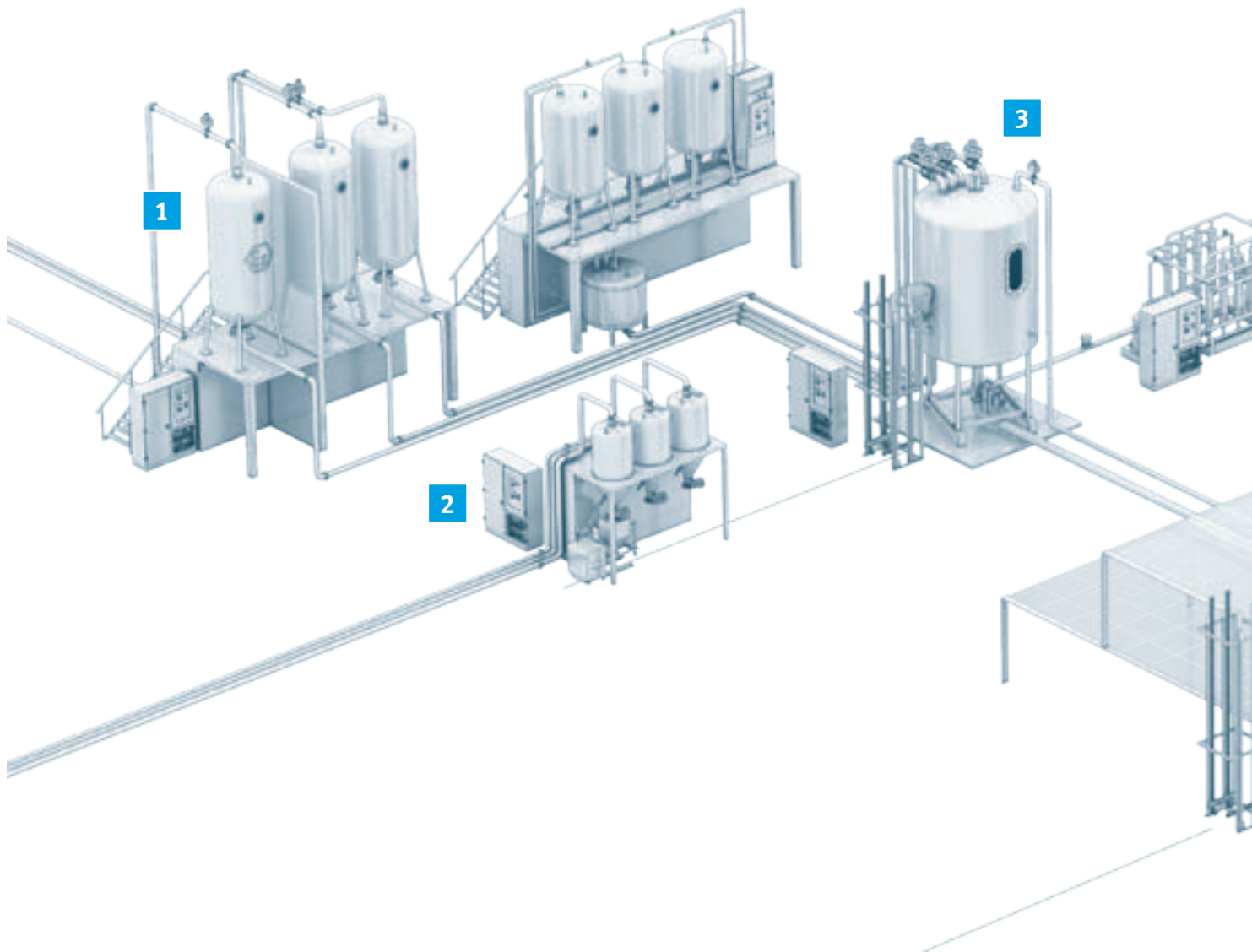
Proportional pressure regulator VPPM

Pressure and flow control of inert and neutral gases.

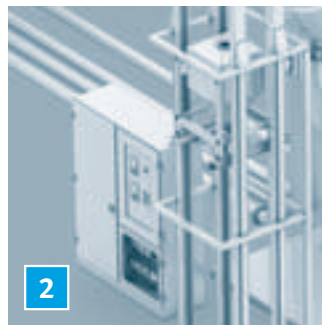
Applications: inerting, transferring materials from one container to another, pressure blanketing, contact pressure regulation for cylinders, controlling process valves.



Automation potential in the individual process steps



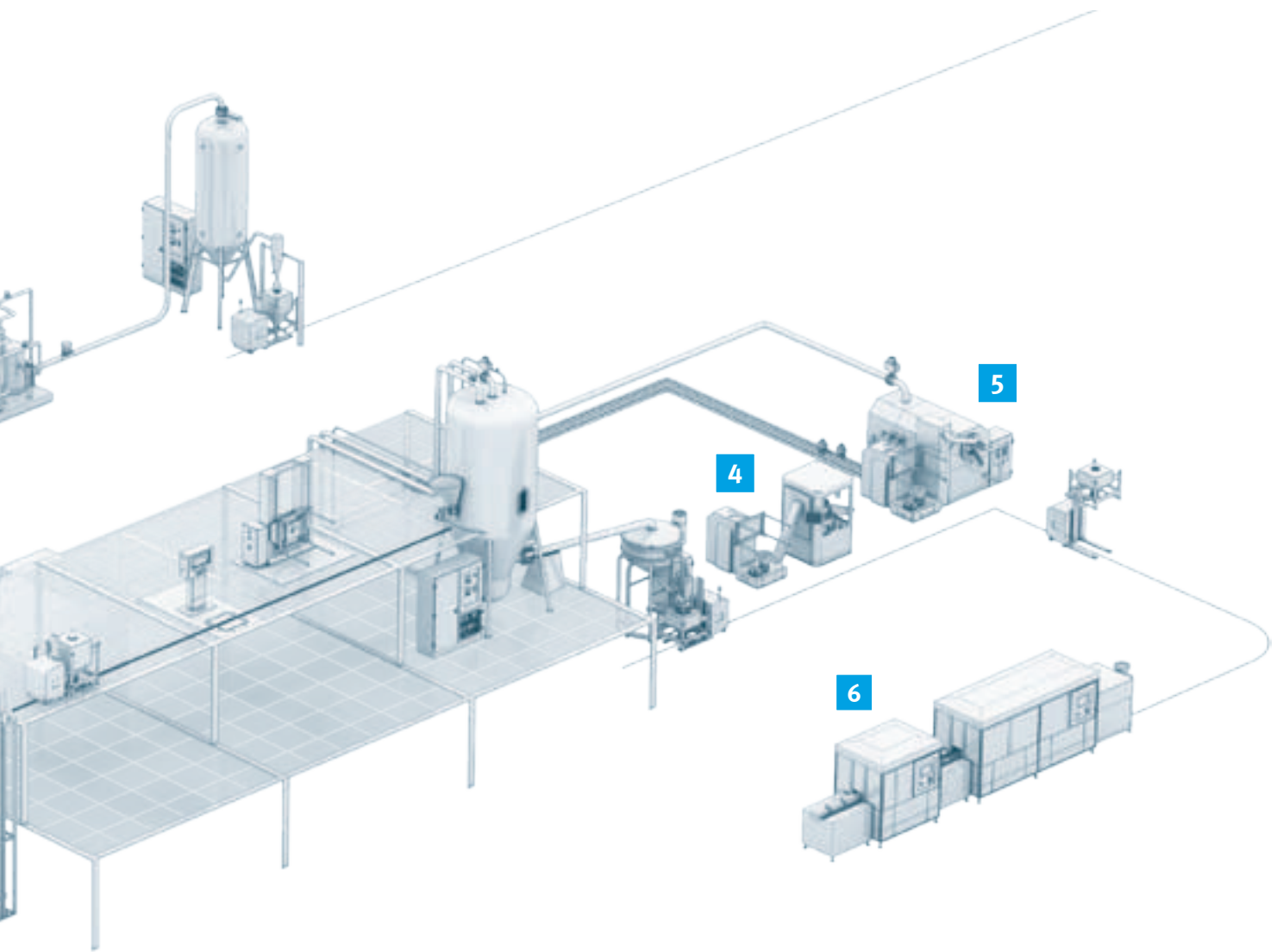
Inertisation of tanks and process equipment.



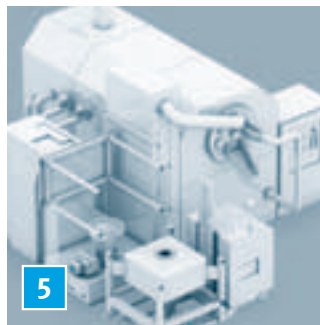
Standardisation of control cabinets for media preparation and utilities.



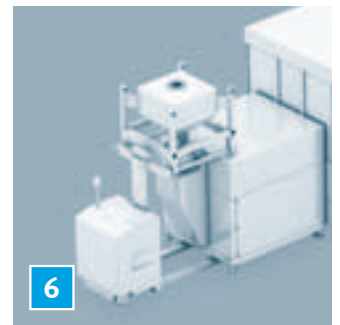
Automation and complete delivery of process valves.



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.

Ready-to-install process valves



Ball valves VZBC and VAPB 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.



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.

Hygienic butterfly valves

Stainless steel hygienic butterfly valves for controlling liquid and gaseous media.

Applications: control of supply and discharge for mixers and homogenisers.



Angle seat valve VZXF

Control of liquid or gaseous media and steam.

Applications: steam supply in pharmaceutical systems, autoclaves and sterilisers.



Automation of process valves



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.



Quarter turn actuators DFPB/DAPS

Pneumatic automation of quarter-turn actuators (open/close and regulated).

Applications: butterfly valves, ball valves, plug valves, bulk goods deflectors.

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.



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.



Ready-to-install solutions



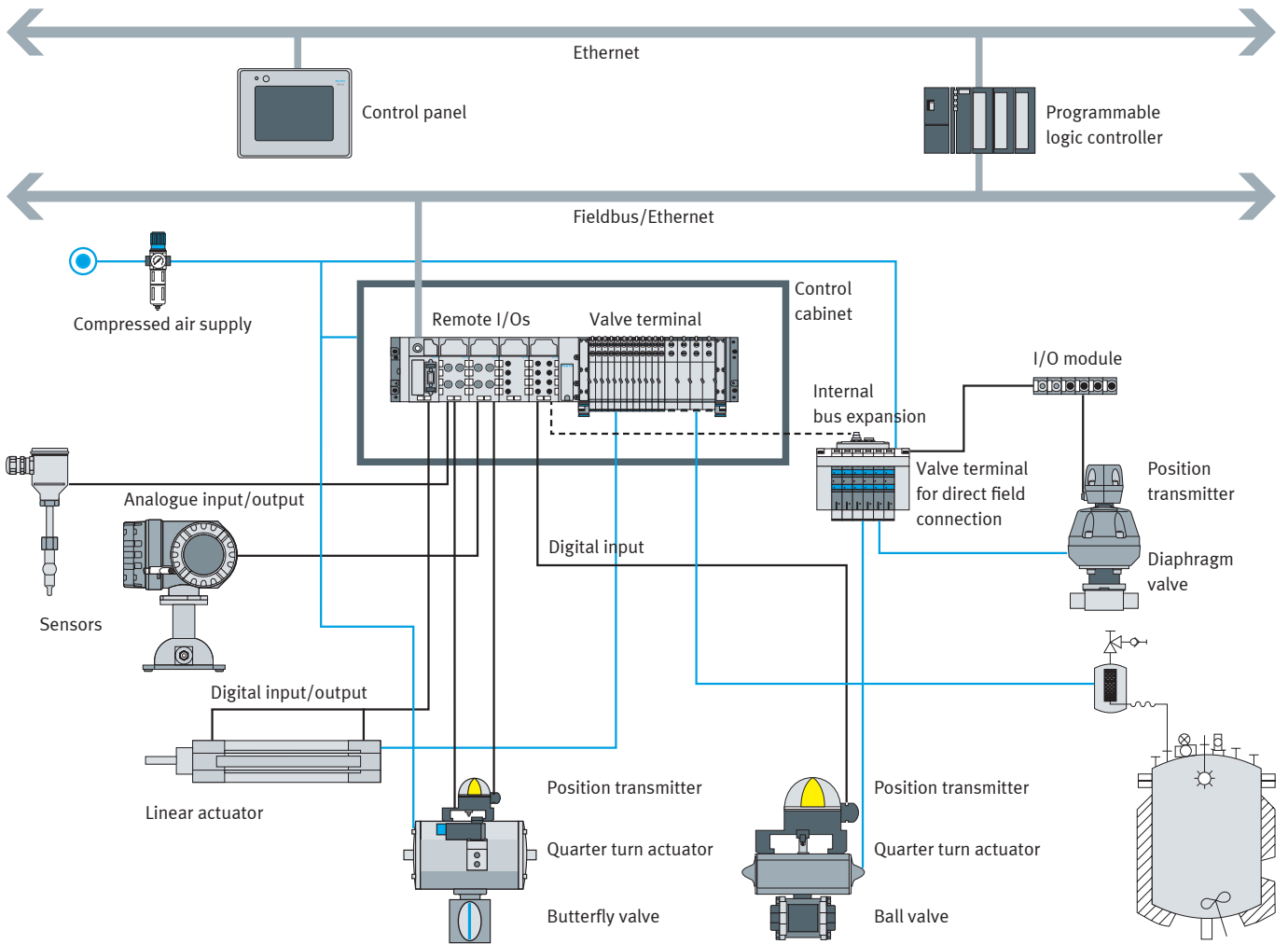
Complete control cabinets

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

Customised solutions

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

Head start for you: complete automation systems from a single source ...



... and innovation through synergies



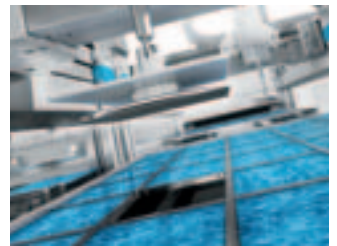
Water technology



Food/packaging industry



Laboratory processes



Solar and flat-panel industry

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 customised 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.