Solution-Driven. Together.

Consultation, engineering, manufacturing and final certification from a single source.

Global Engineered Solutions for Hazardous Areas from Pepperl+Fuchs





Engineered Solutions

Solutions Designed to Meet Your Explosion Protection Needs

Pepperl+Fuchs has played a decisive role in the history of electrical explosion protection: from the beginnings of intrinsic safety to today's industry-changing technologies such as Ethernet-APL, our resourceful engineers have always been involved in shaping the industry over the past decades.

Therefore, you can be sure that with Pepperl+Fuchs you have exactly the right partner at your side if you are looking for a functionally mature and absolutely safe solution for measuring, controlling, switching, and distributing in hazardous areas. Our experts help you choose the best technologies from our portfolio to meet your requirements and comply with relevant standards and regulations. We develop the specifications together, and our global Solution Engineering Centers specialized in customized solutions implement them according to your requirements. You receive a fully certified, turnkey solution that ensures the highest level of safety in your plant's explosion-hazardous areas. Trust the experts.



Purge and Pressurization

- Complete pressurized enclosure solutions consisting of control units and predefined and certified enclosures
- Use of conventional electrical equipment in explosion-hazardous areas
- Various systems and types of protection for every requirement
- Fully automatic monitoring and control of enclosure pressure and temperature within the pressurized enclosure
- Menu-guided user interfaces provide maximum ease of use and flexibility for your application











Customized Terminal and Junction Boxes

- Broad portfolio for the safe conduction, connection and distribution of electrical energy in hazardous areas and harsh environments
- Small junction boxes or complex, freely configurable terminal boxes
- Large selection of enclosures made from highly durable materials
- Standardized variants available from stock
- Configured solutions available at short notice
- Extensive range of accessories



















Control Solutions

- Tailor-made control solutions for electrical explosion protection: from compact control units to control stations and complex control and distribution panels
- Numerous enclosure sizes and operating elements available
- Integration of electrical components and operating elements according to specification
- Selection of viewing windows for monitoring instruments











Interface

- Complex interface solutions from a single source: intrinsic safety barriers, signal conditioners, surge protection, and power supplies
- Control cabinets optimized for control-specific solutions
- Tailor-made down to the smallest detail
- Modules for mounting on DIN rails, power rails, or termination boards















Remote I/O

- For highly efficient connection of various devices and signals with 4 ... 20 mA, temperature measurement conversion, valve control, and various other functions
- Pre-assembled GRP or stainless-steel field junction boxes with backplanes and redundancy options
- Reduced wiring effort due to bus interface to the control system
- Effective digitalization with HART communication in retrofit projects and extensions to existing systems









HMI

- HMI solutions with flexible mounting options: pedestal, panel mounting, wall and ceiling mounting, mobile systems
- Various communication technologies: remote monitor (thin clients), PC, or direct monitor
- Suitable for continuous operation in harsh environmental conditions and explosion-hazardous areas
- Special features such as shock and vibration resistance, outdoor suitability for chemical plants, and GMP-compliant design for life sciences and pharmaceutical applications
- Large selection of peripheral devices: RFID readers, keyboards, or 1-D/2-D code handheld readers, and more















Ethernet-APL

- Ethernet-APL solutions for end-to-end digital communication from the field level to higher-level systems
- Ready-to-install and pre-wired plug-and-go solutions
- Fast transmission of large amounts of data
- Fully certified in GRP or stainless-steel enclosures
- Integrable into a single enclosure with remote I/O systems and other I/Os for intrinsically safe discrete and analog signals







Fieldbus

- Fieldbus solutions for reliable connection of instrumentation via FOUNDATION Fieldbus H1 or PROFIBUS PA
- For all common explosion protection methods (FISCO, Entity, High-Power Trunk) and every hazardous area
- Pre-assembled and pre-wired fieldbus junction box enclosure made of GRP or stainless steel
- Discrete inputs and outputs can be integrated via multi-input/output component
- Temperature multiplexer for eight signals at one address



















Wireless Access Points

- Wireless access point solutions for the use of industry-standard access points (e.g., Cisco or Aruba) in hazardous areas
- Rugged enclosures made of GRP, stainless steel, or aluminum
- Optional integration of Ex-certified antennas for optimum network coverage
- Installation of other radio-based components (RFID, UWB, BLE, LoRaWAN) and realization of IoT solutions possible





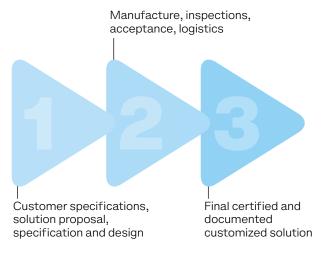
Engineered Solutions

Solution Engineering Centers (SECs) Around the World

We support you with individual solutions and accompany you in partnership from your request to the delivery of the final certified solution. For the demanding requirements of the process industry, Pepperl+Fuchs has therefore established special Solution Engineering Centers worldwide, where experienced experts plan, engineer, and manufacture customer-specific solutions on a daily basis. Here, customers receive ready-to-use complete solutions from a single source—in a wide variety of explosion protection types, including certification for hazardous areas.

- Safety is our top priority: Complete portfolio for hazardous areas from Pepperl+Fuchs—the world's leading provider and expert in explosion protection.
- Smooth and efficient project flow: PepperI+Fuchs has decades of experience in the field of engineered solutions for hazardous areas with thousands of solutions delivered
- Understanding and realizing customer needs:
 Intensive consulting from Pepperl+Fuchs and cooperative development with the customer throughout the entire process
- Fits any application: Ex-certified complete solutions tailored to specific customer needs ready for installation directly out of the Solution Engineering Centers
- Peace of mind: Our experienced solutions team will guide your solution through the application process, ensuring project finances and timelines stay on track
- Investment protection: Sustainable process automation solutions for both existing and new infrastructures

3 steps to your next solution







Your automation, our passion.

- Industrial Sensors
- Industrial Communication and Interfaces
- Enterprise Mobility
- Hazardous Area Products and Solutions

www.pepperl-fuchs.com

Subject to modifications • © Pepperl+Fuchs
Printed in Germany • Part. No. 70192263 03/25 • public



Pepperl+Fuchs Quality

Download our latest policy here:

www.pepperl-fuchs.com/quality

