VISUNET

HMI WORKSTATIONS & COMPONENTS

PEPPERL+FUCHS

PROTECTING YOUR PROCESS

Technologies that fit your application

Pepperl+Fuchs is a leading international developer and manufacturer of industrial HMI products for hazardous areas. Our HMIs fill a very unique niche in the process automation industry. Operator workstation and component development is focused on solving the environmental challenges and obstacles presented by taking HMIs into hazardous areas. Many technologies are supported from simple direct monitors, monitors with integrated KVM extenders, industrial PCs, and thin client-based remote monitors. Pepperl+Fuchs was the first to introduce hazardous location remote monitors for process control.

Challenges to installing remote clients and PC monitors in hazardous locations are manyfold. Partner with Pepperl+Fuchs, an industry-leading partner with over 60 years of experience and innovative high-quality products. We specialize in high-performance visualization systems and components that have been specifically designed to withstand the dirty, dusty, grimy conditions in hazardous and nonhazardous areas. It will save you time and money in the long run.

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VisuNet — insightful solutions

Every VisuNet HMI solution is built upon our commitment to innovation and process safety. From a network remote monitor, to a fully enclosed custom operator workstation, each unit has been designed to meet the rigorous demands of real-time process control: globally certified units for Zone 1 and 2 and Division 1 and 2, longevity, high performance, and trusted protection.

Depending on your facility and networking requirements, you can select a communication technology from our family of industrial solutions so that each workstation is a perfect fit for your HMI visualization infrastructure. At the core of VisuNet technology are four distinct communication and data transfer options.

Remote desktop protocols make efficient use of the client-server architecture. At the client level, minimal hardware is required to have access to applications running on the server. A touchscreen monitor and thin client are the only hardware required to interface with local and remote processes. The brains of the operation—the software application—can be installed on a server local to the facility or it can reside halfway around the world.

PC — MONITOR WITH INTEGRATED PC

- Network compatible or stand-alone
- Low power consumption and heat generation with the Intel® Atom™ or high performance with Intel® Core™ 2 Duo or Core™ i7

This is an industrial-grade PC and monitor with full PC computing capabilities operating as a stand-alone solution. The VisuNet panel PC uses standard Ethernet networking, USB, and serial connections. The high availability of the VisuNet IND is achieved by our rugged industrial designs and the high-performing Intel family of processors. Our fanless design increases system reliability and prevents premature failures from dust and corrosion. The Windows® 7 Professional operating system allows users to install software for plant control and operates without external processing power.

RM — NETWORK-BASED REMOTE MONITOR

- Power-efficient Intel Atom processor provides excellent performance
- Citrix® ICA or Microsoft® RDP or VNC protocols over Ethernet
- Compressed data transfer allows many RMs to connect to a single server

Remote monitor (RM) is a network monitor with a dedicated thin client, using standard Ethernet networking. RM workstations connect to a host system / server automatically and operate independently of other workstations in the network. The digital data transfer is full duplex for excellent picture quality. Long distances between the RM and server can be achieved with fiber-optic converters.

KM — MONITOR WITH KVM EXTENDER

- Fiber-optic or CAT5
- Up to 300 m / 1000 ft distance between monitor and host PC

KVM monitors use a set of KVM extenders that consist of a transmitter and receiver unit that give you the ability to send keyboard, video, and touchscreen or mouse signals over long distances while still maintaining high-quality VGA or DVI video resolution. KVM extenders provide hardware safety and protection by allowing you to place servers in a single centralized location, far away from any environmental hazards.

DM — MONITORS

- Connects directly to the PC
- 10" to 22" widescreen format

VisuNet DM industrial monitors are specifically designed to deliver reliable operation and long life in harsh application environments. Made with only industrial-grade components – no consumer-grade electronics – they are true industrialized monitors. Monitors are available for general-purpose or Class I/Div. 2, Zone 2/22 environments. Touchscreen and transflective options are available.

VisuNet EX1

VisuNet workstations are designed for use in harsh and hazardous industrial environments. The VisuNet Ex1 is certified for operation in Zone 1/21. The stainless steel enclosure surface is sanded to a smooth (RA ‹ 1.2 μm) finish and all welds are ground smooth and polished. An optional antimicrobial extended keyboard with various pointing options is available, including a glove-friendly resistive touchscreen.

PANEL PC ZONE 1/21

VisuNet industrial panel PCs provide an extremely versatile solution for the rigorous requirements in production control or connecting to plant automation systems. The robust VisuNet Ex1 panel PC is certified for operation in ATEX and IECEx.

REMOTE MONITOR ZONE 1/21

The VisuNet EX1 remote monitors provide operation and control of processes in Zone 1/21 environments via Ethernet network while the host system/server is situated in the safe area.

VisuNet GMP

VisuNet GMP operator workstations are constructed to meet the visualization needs of the Life Science Industry's process automation. Designed for applications under Good Manufacturing Practice (GMP) regulations, its slim-line stainless steel housing offers a suitable finish (RA≤ 0.8µm) with no gaps or horizontal areas for easy cleaning. All material is nonabrasive and tested to withstand a wide range of chemicals and cleaning agents. As the operator interface to the process automation DCS or MES systems inside the production area, the VisuNet GMP monitors are often also used in grade A to D clean rooms and other demanding production areas. They are also available for hazardous locations ATEX Zone 2 and 22. The outstanding functionalities make the network-based remote monitor version the favorite for the high-end demands of the regulated Life Science Industries.

NON EX AND ZONE 2/22

- 304 stainless steel housing
- RA ≤ 0.8 µm
- IP65
- 19" (48.3 cm) and 22" (55.8 cm) displays

APPLICATIONS

- Clean rooms
- Interstitial areas
- Fill and finish areas

VisuNet XT

The VisuNet XT PCs outperform the extreme conditions encountered while exploring for and extracting fossil fuels. The XT is used primarily in outdoor applications where harsh environments are the norm. It's suitable for the rig floor or anywhere an extremely rugged panel PC is required. The housing is constructed of lightweight marine-grade aluminum and has a polyester resin powder coat that withstands salt spray and a wide range of chemicals.

- Portable and field maintainable

- State-of-the-art design dissipates heat without the use of cooling fans

- Optically bonded, sunlight readable LCDs available in 15" (38.1 cm) or 19" (48.3 cm) screen sizes

- Globally certified – ATEX/IECEx Zone 2 and Class I, Div.2

- Extended temperature range -40 ° C ... +65 ° C

- Intel® Core™ i7 quad processor

VisuNet IND

VisuNet IND workstations combine one of our four core communication technologies with our sleek housing. This workstation is a sealed enclosure without vents or fans. The angled surfaces are designed to prevent standing liquids after washdown or other cleaning operations. Available in 316L stainless steel or painted mild steel, all connectivity is accomplished through a rear junction box.

- Globally certified for ATEX Zone 2 and Class I, Div. 2

- Slim, 3" (86 mm) deep enclosure

- Fanless design

- Angled surfaces to prevent standing liquid

- Available in stainless or painted steel

- Available in 15" (38.1 cm), 19" (48.3 cm), or 22" (55.8 cm) displays

- Extended temperature range supports a broad range of industrial applications

With a sleek, low-profile housing, VisuNet IND is our economical and versatile workhorse.

VisuNet Edge

The Edge workstation is our most adaptable solution. A universal indoor/outdoor, all-weather watershed housing makes this an ideal solution for a large variety of industrial operator workstation needs. It is especially well suited for washdown areas. An antimicrobial and chemically resistant keyboard with various mouse options completes the workstation.

- Div. 2/Zone 2

- Non Ex

- Sloped enclosure for washdown and proper drainage

- Field maintainable

- Available in 19" (48.3 cm) and 22" (55.8 cm) displays

- Easy customization – supports user-specified PCs and thin client and other peripherals to simplify networking between processing and IT infrastructures

Our visualization products are used throughout the world in environments ranging from industrial to hazardous and corrosive. By engineering and manufacturing a complete solution in our facilities, we control the quality of the visualization products. Our Division 1/Zone 1 Edge units are built with a fully integrated Bebco EPS® purge and pressurization system (Ex p).

- Div. 1/Zone 1

- Bebco EPS®

- Watershed angled enclosure is constructed of 304 stainless steel and has chamfered edges and drip rails for washdown or outdoor moisture runoff

- Available as a standard solution for Div. 1 and Zone 1 areas or can be easily customized to meet your networking requirements

Solution engineering centers — customized solutions

Made to order...the design engineers at our Solutions Engineering Center (SEC) are ready to partner with you to design, manufacture, and test your next HMI solution.

Our modular concept approach provides customized solutions based on standard hardware components. We have a complete range of enclosures, industrial workstations, operator panels, purge units, and industrial components to meet your requirements. We can also incorporate your components and products from virtually any vendor to craft an ideal solution for your application. Take a look at some of our unique HMI problem solvers.

- Our design engineers work with you to develop tailored HMI solutions

- ATEX, UL508, and industrial countrols for hazardous location (NNNY & 698A) certified panel shop

- HMI systems and components for hazardous areas or nonclassified areas

We have years
of experience
solving unique
applications.

Visit our industrial
workstation
projects at:
www.visunet.com

Aseptic wall mount and inwall

This patented flush mount operator workstation is designed for use in MES, batch/process control, and HR functions located in sterile pharmaceutical environments. The unit installs in less than 30 minutes and features a flush 316L stainless steel faceplate, an ergonomically angled aseptic keyboard, and an industrial-grade monitor with an FDA-grade silicone gasket.

A dual-sealing silicone gasket eliminates the need for RTV after installation.

INWALL WORKSTATION

This cleanroom workstation is designed for easy installation in shallow- or modular-wall cleanroom designs. It is compatible with Grade A to Grade D spaces.

WALL MOUNT WORKSTATION

No room for an inwall workstation design in your cleanroom? Try our stand-alone wall mount workstation. This industrial workstation features a dual-seal FDA-grade silicone gasket that forms an air/ bacteria seal between the shell and the door of the workstation.

RM　PC　KM　DM

VisuNet panel mount components

VisuNet panel mount solutions are a versatile and modular portfolio of flat panel displays. Our rugged industrial displays are hazardous rated and well suited for process monitoring and control. Order a single display or create an operator panel with additional hardware to create a panel PC or a thin client or KVM-based network monitor.

- Globally certified for ATEX and IECEx Zone 2 and Class I, II, Division 2

- ATEX and IECEx Zone 1/21

- Sizes range from 10" (26.4 cm) to 22" (55.8 cm) widescreen

- ACP ThinManager® hardware partner

TOUCHSCREEN DISPLAYS

Industrial panel monitors are available with an intrinsically safe Class I, Division 1-rated touchscreen.

DUAL-RATED DIV. 2 / ZONE 2 PANEL MOUNT

Dual-rated Class I, Division 2 and Zone 2 panel products feature a broad temperature range using industrial-grade, LED backlit LCD monitors coupled to optional KVM extenders or PC or network connectivity.

GENERAL-PURPOSE PANEL MOUNT

Industrial panel products feature a broad temperature range using industrial-grade LCD displays that can easily be coupled with a KVM, dedicated thin client, or PC.

ZONE 1 PANEL MOUNT

Panel PC and RM network clients are designed for use in harsh and hazardous industrial environments. They are certified for operation in Zone 1/21, ATEX, and IECEx.

Mounting hardware

Numerous mounting solutions are available for each of our HMI workstations. Select from pedestal mount, wall mount, yoke mount, motion arm, or pole-mounted motion arm. Each solution provides several advantages, including hidden wire and airways for a clean and professional installation.

ARM OR POLE MOUNTS

Adjustable arm mounting solutions in powder-coated and stainless steel are available for our HMI workstations. These adjustable arms are designed for areas where maximum adjustability is preferred.

PEDESTAL MOUNT

Several pedestal mounting solutions are available for our HMI workstations. Select a pedestal mount with a fixed or swivel mount.

WALL MOUNT

Low-cost wall mount solutions are available for our HMI workstations. Wall mount solutions range from wall tabs to specific VESA pattern wall brackets at an attractive price.

Peripherals

We offer a comprehensive range of hazardous location handheld barcode readers and keyboards, as well as flexible networking equipment KVMs and fiber-optic converters. The peripherals are well suited for use with VisuNet operator workstations or custom stand-alone solutions.

- Division 2 CAT5 or fiber KVM extenders
- Hazardous location barcode readers and keyboards

HAZARDOUS LOCATION BARCODE READERS

Industrial-grade barcode scanners are suitable for use in ATEX Zone 1/21, and Division 2 environments.

DIVISION 2 KVMS

Pepperl+Fuchs is an exclusive manufacturer of Division 2-rated KVM extenders. Extenders are available in both fiber and CATx copper types. These KVMs transmit video (either VGA or DVI), keyboard, and mouse signals via USB or PS2, audio, and serial touchscreen information.

HAZARDOUS LOCATION KEYBOARDS

Rugged industrial keyboards with antibacterial / chemically resistant keyboard foils and various pointing options are certified for use in Class I, Division 2, and ATEX Zone 1/21.

Which system is right for me?
Configure a model number:
www.visunet.com

Looking for an HMI solution and not quite sure of your options?
Our quick-select tool will guide you to the right products!

Staying in touch.
The world over.

Good customer relationships need care and attention. They are an indication of genuine interest, trust, and a cooperative spirit: the foundation of Pepperl+Fuchs' strengths. No matter where you might be, we are always nearby. And we speak your language – in more than 140 countries the world over.
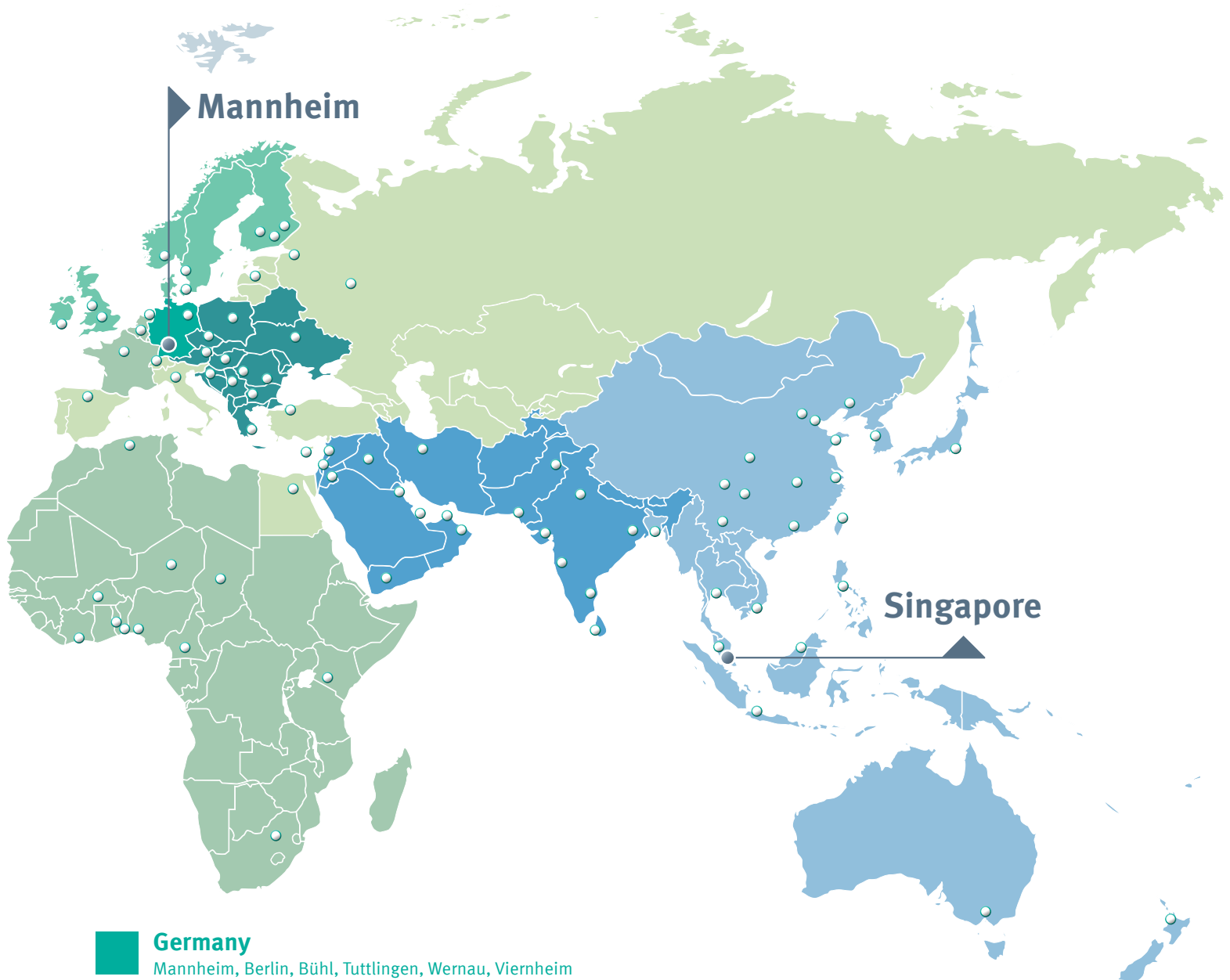
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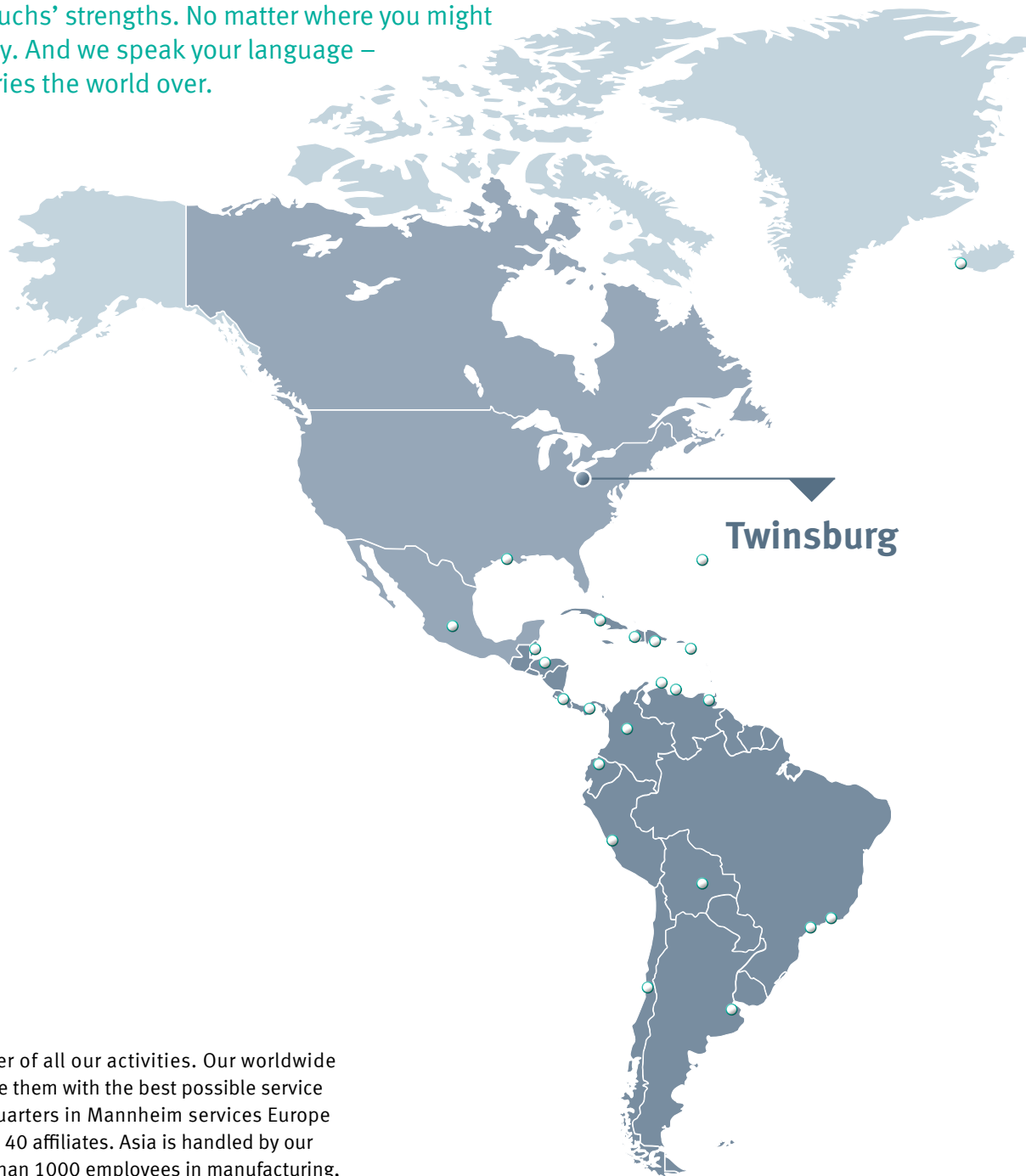
At home on all continents

Our customers are at the center of all our activities. Our worldwide network ensures that we provide them with the best possible service and support. Our world headquarters in Mannheim services Europe through a network of more than 40 affiliates. Asia is handled by our office in Singapore, with more than 1000 employees in manufacturing, service, and sales. And our North American headquarters in Twinsburg, Ohio, is responsible for a comprehensive network of offices and sales partners in the USA, Canada, and Mexico.

No matter where in the world you may be, Pepperl+Fuchs is right nearby – and always there for you.

North America
USA, Canada, Mexico
South America
Brazil, Argentina

Mannheim

Singapore

Germany
Mannheim, Berlin, Bühl, Tuttlingen, Wernau, Viernheim

Northern Europe
Great Britain, Norway, Ireland, Denmark, Sweden

Eastern Europe
Austria, Poland, Hungary, Czech Republic

Western Europe & Africa
Netherlands, Belgium, Luxembourg, France, Africa

Southern Europe & Russia
Italy, Switzerland, Spain, Turkey, Egypt, Russia

South-western Asia & India
India, UAE, Dubai

Asia-Pacific
Singapore, Japan, Australia, China, Korea

YOUR DEMAND. OUR CHALLENGE.

PROCESS INTERFACES

- Intrinsic Safety Barriers
- Signal Conditioners
- FieldConnex Fieldbus Infrastructure
- Remote I/O Systems
- HART Interface Solutions
- Level Measurement
- Purge+Pressurization Systems
- Industrial Monitors+HMI Solutions
- Explosion Protection Equipment
- Wireless Solutions
- Process Interface Solutions

INDUSTRIAL SENSORS

- Proximity Sensors
- Photoelectric Sensors
- Industrial Vision
- Ultrasonic Sensors
- Rotary Encoders
- Positioning Systems
- Inclination and Acceleration Sensors
- AS-Interface
- Identification Systems
- Logic Control Units

www.pepperl-fuchs.com

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