



**How can you achieve safety  
and profitability ?**

SAFETY  
NONSTOP



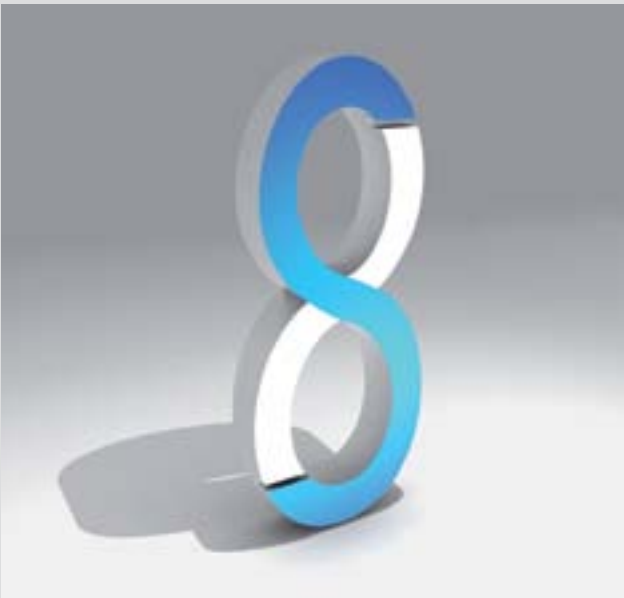
# Elevate your expectations

Expectations for the safety and profitability of process facilities are increasing. So is the complexity of meeting those expectations.

New safety standards, global competition and cost pressures are just some of the causes. Combined, these factors and others call for process safety solutions that offer nonstop safety and improve profitability by:

- Maximising plant uptime
- Generating more revenue
- Contributing to lower investment and life-cycle costs
- Open-platform integration with all leading DCSs
- Eliminating possibilities for human error

HIMA is the world's leading independent designer and manufacturer of process industry safety solutions. Everything we do, think and create is related to helping you achieve nonstop safety. More than 25,000 safety system installations demonstrate that commitment. Based on our experience, we suggest five steps and important questions to consider when selecting a safety solution vendor and system capable of meeting safety and profitability criteria.



## HIMA. Safety. Nonstop.

It's a philosophy 100 years in the making. It's built on HIMA's singular focus on safety and is proven by decades of technology breakthroughs. It represents our commitment to providing maximum safety and uninterrupted plant operations. Our goal isn't just to design the world's best safety systems. It's to help keep your business safe and running. No shutdowns. No failures. Maximum uptime. Maximum profitability.

$$\infty + S = 8$$

Infinity      Safety      Safety Nonstop



#### **Our Customers**

A partial list of our customers includes:

Aventis, AFC, Agip, Air Liquide, BASF, Bayer, Borealis, BP, Celanese, Clariant, Chevron, DOW, DSM, Evonik, ENI, E.ON, ExxonMobil, Hoffmann-La Roche, HOLBORN, Huntsman, INEOS, KOC, LANXESS, Mauell, MERCK, MiRO, PETRONAS, PDO, QP, OMV, Pemex, SABIC, SASOL, Shell, Statoil, Thai Petrochemical, Thyssen Krupp Uhde, TOTAL, UNOCAL, Vinnolit, Yara



**STEP 1**  
Start smart.

**STEP 2**  
Evaluate the technology.

**STEP 3**  
Assess the support.

**STEP 4**  
Evaluate the company.

**STEP 5**  
Consider the future.

3

2

1



5

4

## Five Steps to Safety and Profitability

Whether your business is oil and gas, power generation, petrochemicals, chemicals or pharmaceuticals, it's time to expect more from your safety system.

## STEP

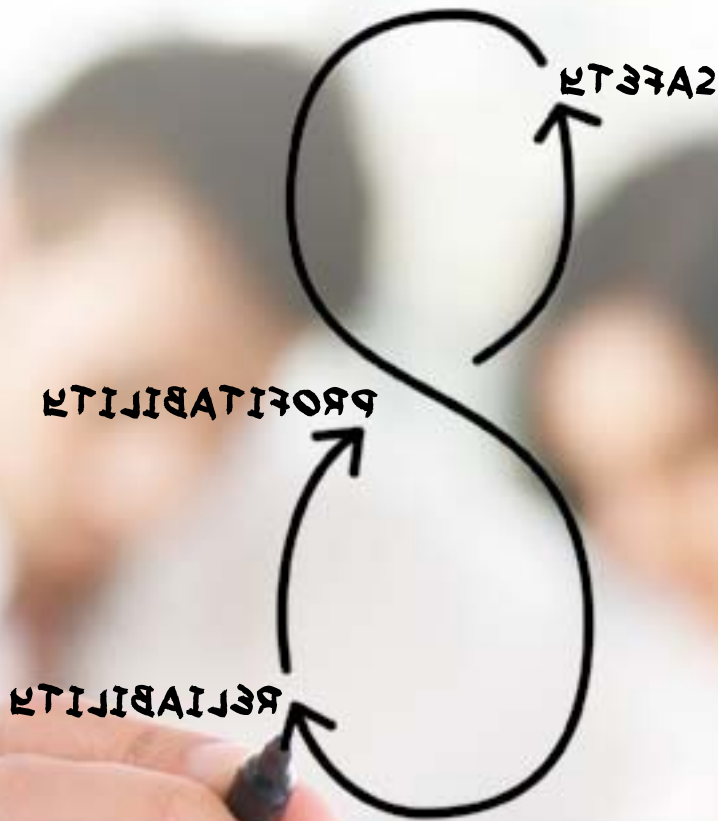
# 1

### START SMART.

You want an affordable solution that will protect your people and your facility while meeting applicable standards and keeping your process available.

#### Questions to Consider

- How much risk is acceptable for your facility?
- What are safety life-cycle standards, and what's required to follow them?
- How do you avoid oversizing your safety system?
- What is the best way to avoid litigation and fulfill your moral and economic responsibilities?
- How do you conduct risk assessments?
- How do you achieve Functional Safety Management?



# HIMA helps you do the right thing ... correctly

The process of selecting the right safety solution for your facility is complex and evolving. Accidents in the process industry – even among the largest and best-intentioned companies – provide confirmation.

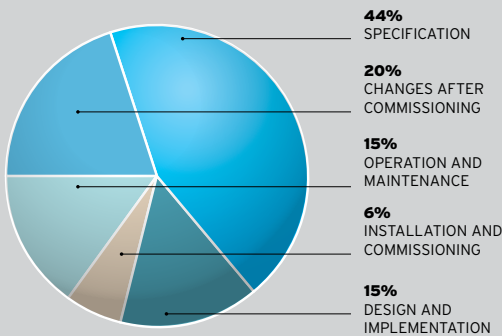
HIMA helps you confront and answer the difficult questions to protect your facilities appropriately, without overspending on that protection. TÜV-certified consultants work with you to help you understand what's required to implement a safety life-cycle approach in accordance with the IEC 61511 international standard.

Successfully implementing this life-cycle approach helps you achieve the appropriate level of risk reduction. It also provides the best legal protection because it incorporates acknowledged best engineering practices.

But following these standards requires far more than choosing hardware to match a specification. That's because every operation, plant and process is different, requiring an examination of all safety-critical functions and implementing the appropriate level of risk reduction.

HIMA has helped hundreds of companies in the process industry to choose, install and operate automated safety systems. We can help your company achieve the nonstop safety you require and the nonstop process availability essential to your profitability.

**Causes of accidents across different phases of the life cycle**



Source: Health & Safety Executive (2nd edition, Health & Safety Executive HSE – UK)

Studies show that accidents happen throughout a plant's life cycle. We can guide you through the safety life cycle to support the following activities and others:

- Risk assessment
- Development of risk mitigation strategies
- Installation of Functional Safety Management
- Qualification and training sessions for your personnel
- Selection, design, integration, installation and operation of the right equipment
- Review of operation, maintenance and repair procedures

STEP

# 2

## EVALUATE THE TECHNOLOGY.

Safety systems should provide maximum plant safety, be highly reliable and operate unnoticed. They should neither affect plant availability nor require a high degree of maintenance. Safety technology should allow flexible and efficient adaptation to special requirements as well as easy integration with additional systems and components.

### Questions to Consider

- How will the solution affect process availability?
- Can you select between different systems or does the vendor offer just one platform?
- How well can the solution be adapted to match your technical and budget requirements?
- Will the solution work with your current and future DCSs?
- Does the system and its components conform with the latest standards?
- Is the solution easy to operate and maintain?
- How much are the life-cycle costs, including efforts for mandatory proof tests?





# HIMA solutions provide maximum safety and process availability

High-availability solutions from HIMA guarantee safety and uninterrupted operation for every safety-critical process in your facility.

HIMA solutions support the following applications:

- Emergency shutdown systems (ESD)
- Burner management systems (BMS)
- Fire and gas systems (F&G)
- High-integrity pressure protection systems (HIPPS)
- Turbo machinery control (TMC)
- Pipeline automation and protection

Our solutions comply with the latest safety standards, including IEC 61508, IEC 61511 and ISA 84. All of our solutions are easily integrated into all automation environments and with all major distributed control systems.

## Why HIMA technology leads the industry

- Largest range of flexible and scalable safety systems based on the same proven safety technology
- Availability for any type and number of I/O points
- Works with both centralised and distributed applications
- Can be integrated into any process control system
- Absolutely safe, reliable and economical



### HIMatrix®

- SIL 3
- Fast, flexible, compact
- Extremely cost-effective
- Distributed applications
- Applications with just a few I/O points
- Subsea applications



### HIMax®

- SIL 3
- Nonstop operation
- Maximum performance
- Maximum configuration flexibility – for life
- Various mechanical concepts
- Mid-size and large applications



### HIQuad

- SIL 3
- For highest fault-tolerance requirements
- Scalable redundancy
- Central & distributed installations
- Broad range of I/O modules



### Planar4

- SIL 4
- Hard-wired system
- Programming: solder, Termipoint and Wire Wrap
- Extremely robust
- Scalable redundancy

HIMax



**HIMax is the first safety system developed to improve plant productivity and profits.**

**HIMax benefits for process facilities**

HIMax is a flexible platform for large, critical production processes. HIMax adapts to all I/O-count, response-time and fault-tolerance requirements as well as centralised and distributed applications.

In addition to offering protection to SIL 3, HIMax systems can actually help you increase output while offering possibilities to reduce capital and operating expenditures. HIMax also offers virtually unlimited expansion potential. Hardware and software changes can be performed on demand, without interruption, for the full life cycle.

**Achieve maximum plant uptime**

HIMax delivers availability for life by enabling uninterrupted system operation throughout your plant’s life cycle. This maximises plant availability and improves productivity. With HIMax’s XMR® architecture, single points of failure are eliminated. Redundancy can be customised to ensure optimal protection.

All changes, additions and maintenance are possible without stopping the HIMax system. Even proof tests mandated by current industry standards can be conducted online, without any interruption of the safety system.

HIMax also eliminates common-cause effects via physical separation of redundant components. If fire or water in a control room causes critical safety system components to fail, redundant components in another location continue operating and keep the safety system fully functional.

**XMR® technology**

**Designed for safety, cost efficiency and availability**

HIMax solutions are built on revolutionary XMR architecture. XMR architecture offers nonstop SIL 3 protection and scalable redundancy for operation in quad, triple, dual and single modes. Among the XMR advantages:

- Available-for-life safety configurations deliver maximum plant uptime
- Spurious trips are virtually impossible
- You don’t pay for redundancy you don’t need
- Faulty modules can be replaced while your process continues safely and flawlessly. Even multiple failures will not produce a shutdown
- Unique common-cause failure protection

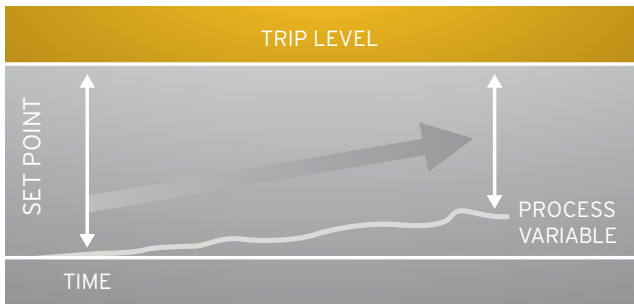


# Increase plant productivity with HIMax

## Increase plant output

HIMax supports increased plant productivity through improved process efficiency. The secret is engineering that incorporates advanced computational capabilities, providing powerful floating-point calculations in the CPUs and fast I/O processing algorithms. This enables predictive controls to be used to build dynamic models that safely reduce the band between the set-point/process variable and the defined trip level.

In an ethylene cracker, for example, this modeling could contribute significantly to product output, with no reduction in overall process safety.



## Make safety simpler

HIMax features make process safety simpler through helping to eliminate possibilities for human error and saving time in the engineering and start-up phase:

- Automatic module detection
- Fully integrated power distribution and fusing for modules, eliminating the need for external wiring
- Fast implementation via HIMA SILworX® software, included with every system
- Accelerated start-up, via building and testing the hardware configuration without the application program
- Comprehensive diagnostics, recording 2,500 events on each processor module and 500 events on each I/O module
- Built-in user management for hardware and software
- HART protocol support for simplified asset management solutions

## Maximum performance

HIMax is the world's most powerful safety platform, providing process facilities with unprecedented performance:

- Cycle time of 50 ms with 1,000 I/Os (split 50% analog/digital)
- Unlimited complex calculations
- Impact of calculation of 1,000 PIDs on cycle time: 5 ms
- Signal conditioning directly on I/O modules with no impact on CPU performance
- Up to 200 I/O modules in up to 16 racks per system and 250 systems per safety network
- Up to 1,472 I/Os per cabinet
- Multitasking: Set fixed cycle times for dedicated tasks
- Sequence of event (SOE), 1 ms resolution quality

**HIMax works with SILworX, HIMA's new, easy-to-use, fully integrated configuration, programming and diagnostic environment.**





## Reduce CAPEX and OPEX and gain lifetime flexibility

HIMax delivers the functionality you need today and accommodates changes in your business. You pay for exactly what you need, when you need it. Once deployed, HIMax stays on and never needs to be replaced. It adapts as your business grows. HiMax enables you to expand your plant without the need to allocate preconfigured spare slots.

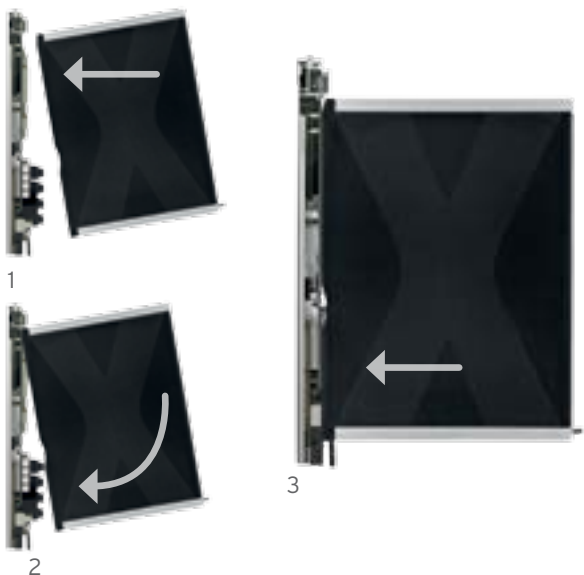
Other ways HIMax saves you money:

- Buy only what you need. HIMax adapts to meet virtually any application requirement
- HIMax can be your single platform for all I/O count, response time and fault-tolerance requirements, as well as centralised or distributed applications
- Save engineering time and costs using a flexible, intuitive and easily adaptable platform
- HIMax integrates with any DCS that you use today or in the future
- HIMax offers virtually unlimited expansion - hardware and software changes can be performed on demand, without interruption, for the full lifecycle. Cabinet size is minimised because there's no need to allocate slots for spares
- Benefit from HIMax's unprecedented performance and system flexibility by integrating more I/Os or greater application complexity per system
- HIMax is a cost-effective solution with different rack sizes to match your physical space requirements
- No hidden software costs. With a SILworX software license, you get a single intuitive software tool for all tasks.

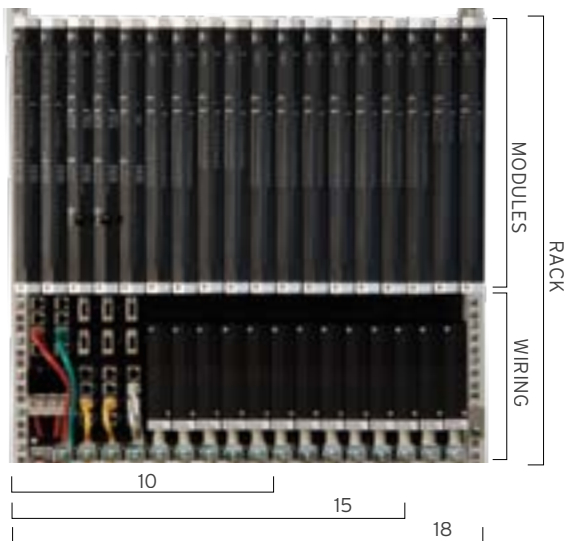
## Maximum flexibility

- Fully enclosed modules
- Module replacement without disturbing I/O or power wiring
- Three available rack sizes: 10, 15 and 18 slots
- Different field wiring configurations, including direct wiring and terminal blocks, as well as multicore cable with Field Terminal Assembly

The flexible HIMax rack is available in 10, 15 and 18 slots.



Module replacement without disturbing I/O or power wiring



All racks are panel mountable; the 15 slot is also available for 19-inch rack installation

# HIQuad



## THE RIGHT MATCH

HIQuad solutions are available in different configurations to match your technical and budget requirements.

### MS SYSTEM

- Universal mono-configuration safety up to SIL 3
- Maximum economy - minimum hardware

### HS SYSTEM

- Second CPU for maximum availability and fault tolerance on the CPU level

### HRS SYSTEM

- Total redundancy of CPUs, I/O bus and I/O modules
- Maximum availability and fault tolerance across the entire system

Designed to provide maximum guaranteed safety, HIQuad solutions are an ideal choice for small and mid-size safety-critical applications requiring high levels of process availability.

### H41q/H51q systems provide proven performance

#### Absolute reliability

HIQuad solutions are proven over decades of use in hundreds of process industry facilities. They are the industry standard for reliable and cost-effective solutions.

#### Scalable availability

HIQuad solutions are available with different combinations of scalable availability at the I/O and CPU level, allowing a precise match for your budget and technical needs while providing maximum safety. Even in a non-redundant, single-channel configuration, HIQuad can be used up to SIL 3 without any limits.

#### Flexibility

H41q/H51q systems are extremely flexible and can be easily adapted to your application requirements.

- For small and mid-size number of I/Os:  
Compact H41q systems for up to 208 I/Os, modular H51q systems for as many as several thousand I/Os
- For any type of I/O:  
Wide range of I/O cards, analog/digital I/O cards, relay cards, counter and thermo-element cards, cards with integrated Ex-separation
- For every availability requirement:  
Thanks to scalable redundancy, you invest only in what you need. All of the components can be employed singly, redundant or mixed – always SIL 3
- For centralised and distributed applications:  
Stand-alone or safe networking via safe**ethernet**
- For any DCS integration:  
Integrated solutions for all leading control systems

### H41q or H51q? One is right for your application

	H41q	H51q
Total I/O points per system	208	> 208
Total I/O modules per system	13	256
Total base plates per system	1	16
Communication module slots	2	10

### Highlights

- Maximum reliability
- SIL 3, even in single-channel configuration
- Flexible redundancy management
- Hot-swapping of modules
- Online program changes
- Comprehensive, tried-and-tested range of I/Os
- Easy to integrate into all DCSs
- Safety-related networking via safe**ethernet**
- Drag & drop engineering using the fully integrated configuration, programming and diagnostic software ELOP II
- Proven 19-inch technology
- For use in Ex-zone 2





# HIMatrix





Numerous safety applications don't require redundant systems, but special requirements can still apply. When you need powerful, safety-related distributed applications and/or very fast response times, think HIMatrix.

Uniquely fast, uniquely flexible

HIMatrix solutions combine one of the world's fastest safety controllers with the fastest safety bus, safe**ethernet**.

Developed for applications requiring a few I/O points to several hundred I/O points, HIMatrix features cost-effectiveness and big-system performance. Ideal for networked and time-critical applications, the HIMatrix series of safety-related controllers and remote I/O modules delivers excellent system performance, compactness and easy assembly.

The integrated switch makes it possible to use HIMatrix solutions in various network topologies, including line, tree and star structures. Ring structures are also possible. The extensive hardware range and safety-related networking of the systems via safe**ethernet** guarantee high levels of flexibility and optimum adaptation to the application requirements. Features such as remote diagnostics via modem or Ethernet/Intranet/Internet contribute to cost-effective solutions.

Highlights

- Certified up to SIL 3
- Broad range of compact controllers and remote I/O modules
- Response time less than 20 ms
- Cycle time for a 1K program: approx. 0.02 ms
- Safety-related networking via safe**ethernet**
- Comprehensive integration and communication options
- For use in Ex-Zone 2
- Drag & drop engineering, using ELOP II Factory or SILworX
- Certified function blocks

HIMatrix solutions offer greater performance and flexibility than solutions using conventional safety controllers and relays.



# Planar4



For automated processes with extremely high potential risk to people, equipment and the environment, HIMA offers Planar4 systems.

Where ultimate safety counts

Planar4 systems integrate inputs, logic processing and outputs on every module. The application-specific programming of the Planar4 system is accomplished without software, but instead with various wiring techniques such as solder, Termipoint or Wire Wrap on the backplane bus board.

Planar4 systems are the first hard-wired systems with integral diagnostics and communication capability. The diagnostics ensure rapid error signaling and easy troubleshooting. An efficient remote diagnostic system can be created when combined with the communication options. Input and output statuses, limit and time values as well as events - including HIMA signals with a time stamp - can be integrated into any DCS or visualisation system.

All Planar4 modules can be used in a redundant structure in order to increase availability.

Highlights

- For use up to SIL 4
- MTBF >200 years
- Switching time 2-10 ms
- Scalable redundancy
- Comprehensive integration and communication options
- Monitoring for open and short circuits
- Space-saving 19" technology

Planar4 is the world's only fully IEC 61508-compliant system that can be used for SIL 4 applications.



# Distributed safety solutions

## safeethernet for reliable safety networks

Around the world, decentralised and distributed automation concepts have gained acceptance, including in the field of safety-related automation.

HIMA developed the safeethernet protocol in 1997 to network HIMA systems safely. Applied today in nearly every conceivable application and field of industry, safeethernet solutions are based on standard Ethernet technology (IEEE 802.3) and offer the following features:

- TÜV-certified up to SIL 3
- Data transmission at 100/1,000 Mbit/s
- Fast response times, even for networked applications
- No limitations on physical separation
- Utilises standard Ethernet components and functions for safety-critical applications
- Networking of up to 255 systems on each Ethernet segment
- Intelligent, diverse redundancy concepts
- Fully compatible with industrial use

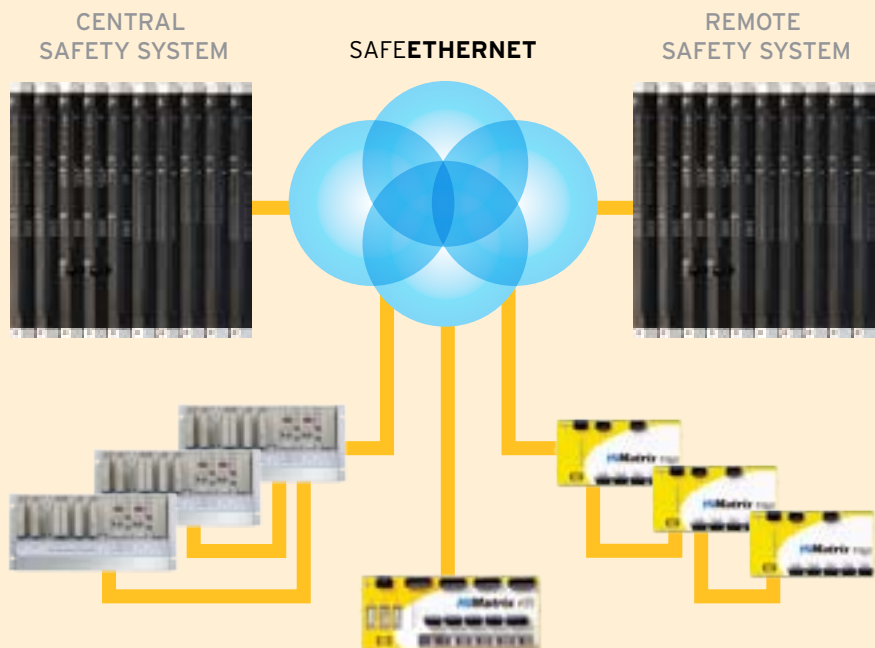
With safeethernet, networking HIMA safety systems in process facilities with decentralised, distributed applications is easy and efficient. In addition to offering the highest level of safety and reliability, safeethernet solutions offer the following benefits:

### High levels of flexibility and transparency

- Ethernet network technology guarantees flexibility when it comes to adapting to the requirements of your application - in planning, commissioning, maintenance and expansion.
- Utilises diverse transmission media: copper, ISDN/DSL, FO, satellite, wireless applications
- Enables a range of different network topologies: line, tree, star and ring structures
- Vertical integration and transparency across all levels
- Network participants can access each other, enabling centralised programming, diagnosis and other visualisation

### Highly economical

- Integrates safety-related and non-safety-related data in one standard Ethernet network – without compromising safety
- Can be integrated into existing Ethernet networks
- Utilises cost-efficient standard Ethernet components made by any manufacturer
- Redundancy concepts assure uninterrupted system operation, even if one communications route fails
- Quick, step-by-step commissioning
- Economical remote diagnostic and maintenance concepts





# Integrated safety solutions

## Full integration in the DCS operating and monitoring environment

The productivity advantages of a HIMA system, including nonstop operation, can be achieved with all leading process control systems. In fact, HIMA guarantees the achievement of the required functionality and assumes the initiative when coordinating and creating solutions with DCS suppliers.

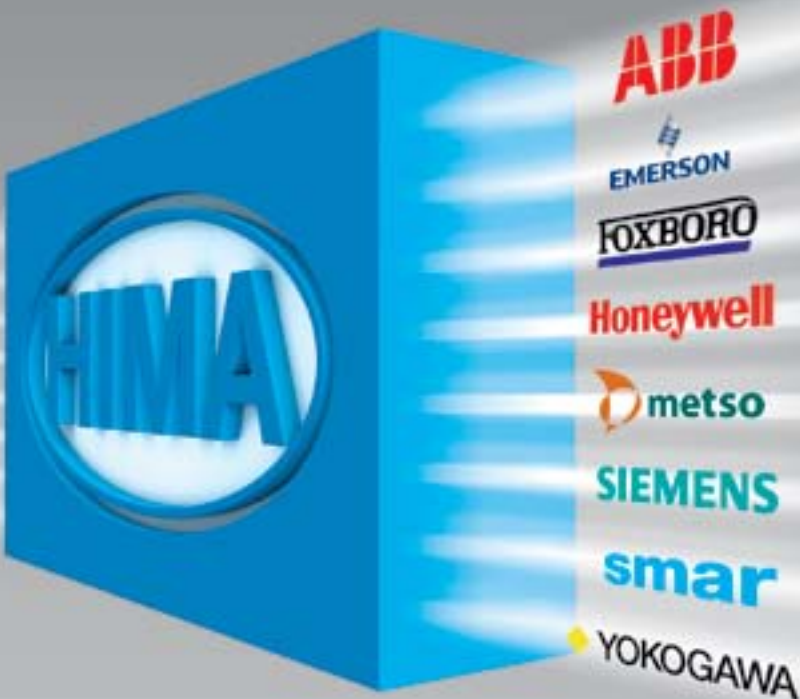
Sample functionalities:

- Integration of alarms and events into the alarm management of the DCS
- Integration of faceplates for operating and monitoring
- Transfer and visualisation of diagnostic data from HIMA systems
- Transfer and visualisation of process data and safety-related locking states
- Transfer of time-stamped data
- Maintenance overwrite switch (MOS)
- Partial stroke test (PST)
- Start-up bypass (SUB)

Customers working with a MIV/MAC can also benefit from HIMA solutions. As an independent system supplier, HIMA has successfully implemented projects with all DCS manufacturers for years and on a worldwide basis. So your MIV/MAC can offer you one-stop shopping that includes HIMA solutions.

## The HIMA DCS Competence Team

A specialised HIMA team tests all integration options with all leading DCSs and develops efficient integration tools and software components. All control systems have been installed at HIMA and are continuously analysed. This enables HIMA to guarantee full functionality and assume responsibility for the entire integration process.



### HIMA solutions support the following protocols:

- OPC DA and OPC A&E
- MODBUS TCP Master & Slave
- MODBUS Master & Slave RS485
- PROFIBUS-DP Master & Slave
- PROFINET
- FOUNDATION fieldbus H1 (together with FF-SIS protocol)\*
- Send & Receive TCP
- HART protocol
- ComUserTask, programmable protocols

\*Details are subject to change

STEP

# 3

## ASSESS THE SERVICES.

To achieve safe and profitable plant operations and be fully compliant with the latest standards, you need expert services.

### Questions to Consider

- Does the manufacturer offer extensive consulting to help you achieve compliance with the latest safety standards?
- Are your contact persons certified safety experts or general staff technicians?
- Does the project management comply with current safety standards?
- Is 24-hour support available on a global basis?
- Are the service engineers also qualified safety experts?
- What training options are offered?



# Expert advice supports safety life-cycle compliance

Wherever you work, the HIMA network of subsidiaries, service & sales centres and representatives in more than 50 countries is ready to support your success. And when you call HIMA – whether it's for consulting, engineering or service – you always talk to a safety expert. Services are available to end-users, EPCs and system integrators.

## Safety consulting

HIMA has one of the world's largest resources of TÜV consultants. These experts can guide you through all phases of the Functional Safety Life Cycle and help devise feasible solutions for compliance with your legal, financial and moral responsibilities.

The result is:

- Best possible protection for your plant, the people working there and the environment around them
- Solutions that conform perfectly to all standards and are legally sound
- Solutions that support the long-term profitability of your company by protecting against production stops while reducing investment and life cycle costs

Consulting services include:

- Hazards and risks analysis - Use of technologies such as HAZOP, checklists, what-if, FTA and ETA to ensure that your analyses are documented completely and correctly, and that they fulfill your safety requirements
- Safety Integrity Level (SIL) Analyses - Support for determining which SIL level applies to your application, using a risk matrix, risk graphs and Layers of Protection Analyses
- Specification and tender documentation - Support for preparing accurate and appropriate Safety Requirement Specifications (SRSs) or tender documentation
- System design and integration - Support for designing your safety architecture, integrating complete systems and choosing components
- SIL verification - Helps you meet your SIL requirements and the demands of Functional Safety
- Functional Safety Management (FSM) - Support for ensuring that the right processes are used to establish Functional Safety

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**HIMA is one of just a few companies certified by TÜV for Functional Safety Management.**

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# Project management

## Project management and engineering

Our IEC 61508-compliant project management system includes international project coordination and implementation by qualified local contacts, from the tendering phase right through to commissioning. Using project-specific databases, systematically created hardware and software typicals and engineering with high-level process understanding, we help ensure that your projects are completed correctly, cost-effectively and on time.

### HIMA project management services include:

- Concept design  
Profitability and planning reliability are based on a thorough analysis and exactly defined concepts, interfaces and responsibilities in the early project phase.
- Basic engineering  
Manufacturer-neutral project documentation such as function charts, I/O lists and cause-and-effect matrices are the result of close cooperation with the customer's specialists.
- Detailed engineering  
Every application is unique. The intelligent adaptation of standardised modules such as hardware templates

or preconfigured software modules and the use of common engineering tools ensure both individual solutions and economic efficiency.

- Testing/approval  
By simulating sensors, actuators and bus signals, complete loop checks can be performed during the factory acceptance tests (FATs).
- Documentation  
Transparent documentation complying with IEC-61508/11 facilitates understanding of hardware and software applications.
- System integration  
A special competence team and a wide range of tested technical solutions are available to ensure the integration of safety and control systems as well as other automation components.
- Commissioning  
Experienced safety experts eliminate economic risks to customers by providing support during commissioning, loop checks, functional tests and start-up to ensure smooth progress during one of the most critical phases.





# Service and training

## Service

HIMA is close to its customers around the world. With a global network of companies and professional representatives, HIMA is able to provide optimal on-site service. Our comprehensive portfolio of services includes:

- 24-hour hotline - Consulting, analysis and online diagnosis via telephone
- 24-hour on-call service - Fast on-site support: analysis, diagnosis, troubleshooting
- 24-hour spare parts services - Guaranteed spare parts availability

The creation, operation and maintenance of critical safety solutions require a high level of the latest specialist expertise. In particular, with respect to the new safety standards.

## Training

The creation, operation and maintenance of high-availability, standards-compliant, economical safety solutions requires a high level of the latest specialist expertise. The HIMA training program offers you everything you need for your individual knowledge update.

Project-specific training courses can be arranged, in addition to courses on basic principles. HIMA is authorised to teach Functional Safety engineering courses that award TÜV certification. All courses can be held at a HIMA training centre or at your location.

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**HIMA training classes familiarise your employees with standards and guidelines such as IEC 61508 and 61511. See our website for a list of classes.**

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STEP

# 4

## EVALUATE THE COMPANY.

There's no substitute for vendor longevity, reliability and expertise in the process industry.

### Questions to Consider

- How deep is the company's safety experience?
- How much experience does it have with your applications?
- Does the company have the range of equipment and services you need?
- What do customers say about the company?
- How innovative and thus future-proof are the products from the manufacturer?
- Is the manufacturer's customer orientation thorough and well-thought-out?



# Gain the benefit of a century of experience

Founded in Germany in 1908, HIMA has a record of safety system innovation that began in 1970 when the company introduced the world's first TÜV-certified safety system.

Today, HIMA is a global organisation with subsidiaries, its own service and sales centres and experienced representatives in all of the key industrialised regions of the world. We offer the experience of 25,000 installations in 80 countries, proven system integration with all DCSs and more TÜV-certified safety specialists than any other supplier.

From HIMatrix controllers to HIMax, the world's most advanced safety solution, HIMA has the industry's broadest range of TÜV-certified systems delivering SIL 3 compliance. We guarantee the utmost expertise in engineering, consulting and service in more than 50 countries.

HIMA systems are at work in

- Steamcrackers
- Polyethylene, polypropylene and PVC production
- Fertiliser plants
- Onshore and offshore facilities and platforms
- Pipelines
- Tank farms and gas storage facilities
- Loading stations
- Refineries
- Burner and combustion plants
- Turbines and compressors
- Batch processes

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**HIMA protects more of the world's major oil, gas and processing companies than any other safety system supplier.**

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## A HISTORY OF INNOVATION

### 1908 >>

Founded by Johannes Hildebrandt, HIMA stands for Hildebrandt Mannheim.

### 1970 >>

The world's first TÜV-certified safety system: Planar

### 1986 >>

The world's first TÜV-certified programmable safety system: H50

### 1991 >>

The world's first TÜV-certified reverse compiler

### 1997 >>

The world's first TÜV-certified redundant Zoo4D/QMR system: H41q/H51q

The world's first TÜV-certified safety-related communication (SIL 3) over Ethernet: **safeethernet**

### 2002 >>

The world's fastest TÜV/BG-certified safety systems for factory automation: HIMatrix

As the first manufacturer of safety-related systems in the world, HIMA was awarded IEC 61508 safety certification "Functional Safety Management" by TÜV.

### 2003 >>

The world's first TÜV-confirmed SIL calculation and verification software: SILence

### 2004 >>

The world's first TÜV-certified SIL 3 intrinsically safe (ATEX) analog isolater and HART data extraction combined with world's first SIL 3/ATEX HART multiplexer

### 2005 >>

The world's first intrinsically safe Ethernet communication in Ex-Zone 1

### 2007 >>

The world's first TÜV-certified safety system in accordance with EN ISO 13849-1 and EN IEC 62061

### 2008 >>

The world's first TÜV-certified nonstop safety system: HIMax



STEP

# 5

## CONSIDER THE FUTURE.

Because of the long run times in the process industry, only a long-term partnership can ensure safety and profitability throughout the entire plant's life cycle.

### Questions to Consider

- Are the solutions offered flexible enough to allow potential changes, extensions or upgrades of your processes?
- Is plant safety the company's primary focus?
- If the manufacturer of the safety solution is part of a conglomerate, are long-term support and ongoing development of the installed systems guaranteed?
- How committed is the company to research and development?



# One company focused on your safety and financial success

While HIMA has the automated safety industry's longest track record, we also have the commitment and structure to serve your business far into the future.

Our first and only priority remains protecting the safety and availability of your assets. We believe this focus leads to unparalleled expertise, innovation and better solutions. One example of that focus is nonstop, available-for-life systems that support optimised processes at your facility. Another is partnerships with world-leading companies that add to our capabilities.

Customers have rewarded this focus with long-term contracts and relationships that further encourage our independence. And, in an era when conglomerates acquire and divest companies for reasons that have little to do with customer satisfaction and success, we believe HIMA's independence, size and focus offer advantages to your processes and your business.

**The facts:**

- HIMA is the world's largest independent safety systems supplier
- We have been owned by the same German family since 1908
- Our exclusive focus is safety systems
- 100 percent of design, manufacturing and R&D take place at our headquarters in Brühl, Germany
- Approximately 25 percent of our 600 employees are dedicated to research and development
- We are financially successful and expanding our geographic reach
- Our independence frees us from decisions based on external valuations and stock performance

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**Your next step?**

Contact your local HIMA representative to learn how HIMA solutions can help improve your facility's safety and business performance.

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## Why HIMA?

HIMA is the world's leading designer and manufacturer of automated safety solutions. Everything we do, think and create is designed to help you achieve nonstop safety. The result of this philosophy: solutions that provide maximum safety and uninterrupted plant operations.

During the past 40 years, our systems have been protecting the assets of the world's major oil, gas and processing companies. Founded in Germany in 1908, HIMA has a record of safety system innovation that began in 1970.

Our first and only priority remains protecting the safety and availability of our customers' assets. Our independence and German family ownership contribute to a safety focus, a high level of quality, expert knowledge of our staff and customer responsiveness that competitors have not matched.

Our reward is a century of customer trust.

SAFETY  
NONSTOP





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