



Process Safety Solutions

Manage risk, safety and compliance with a customized process safety dashboard

You are about to embark on a new capital project. Are you confident in the quality of your engineering information?

Many refining and petrochemical plants struggle with a mountain of process safety and engineering information. This critical information is often scattered in file rooms, drawers or legacy applications. Compounding the problem are multiple versions of the same information housed in maintenance, engineering, safety, operations and other functional areas. What's more, the information is often recreated and re-validated over and over again by different disciplines with different needs.

Get control today

Inaccurate, inaccessible or out of date information can drive up costs and impact safety and performance. In a time of increased demand and heightened regulatory scrutiny, it's important to have the information you need at your fingertips.

Customized process safety dashboard

Siemens consultants will create a master repository of critical process safety and engineering information that is current, accessible, accurate and sustainable.

The Siemens Process Safety Information Manager software enables us to deliver a system that's easy to use and maintain, and provides instant access to important information including, but not limited to:

- Piping and instrumentation diagrams
- Equipment datasheets
- Relief systems design basis
- Management of change forms and action items.

Siemens, through its acquisition of Berwanger Engineering Services, offers a suite of process safety programs designed to ensure current, accessible and accurate information.

While most of Siemens' process safety services address the most critical aspects of OSHA 1910.119, all are designed to improve operational efficiency.

Siemens approach

Siemens' best practice for process safety is the result of over a decade of experience, hundreds of implementations and a suite of powerful software products.

Our approach includes:

- Plant-wide audits to locate all process safety information
- Information management tools to scan, extract and index data
- Exception checking for identifying and resolving inconsistencies
- Integrating and consolidating workflows
- Software solutions that ensure the consistency of core engineering information

Audits, assessments and training

Unsure of where to begin? Siemens offers a wide range of baseline audits and assessments designed to identify gaps in your process safety programs. Among them:

- Process safety management (PSM) assessments
- National emphasis program (NEP) assessments
- Compliance audits
- PSM elements training

Once a baseline has been established, Siemens can apply its process safety expertise in five key areas:

1. Process safety information management

- CAD support
- P&ID development
- Field walkdowns
- I&E drawings update
- Equipment file consolidation

2. Pressure relief design and analysis

- Equipment-based pressure relief analysis
- Flare (vapor/liquid disposal systems) analysis
- Quantitative risk analysis (QRA) of flare systems
- Blowdown drum analysis
- Mitigation of findings/concerns
- Evergreening of design basis
- Best-practice training
- Pressure Protection Manager™ (PPM) software implementation

3. Programs


- Workflow design
- Implementation
- Maintenance and support
- Training
- Product life cycle changes
- PS Change Manager software implementation

4. Mechanical integrity (MI) programs

- MI program audits and gap analyses
- MI program development and implementation
- Inspection data management (IDMS) implementation
- Fitness-for-service evaluations
- Risk-based implementation program development and implementation
- Piping and equipment inspection plans
- Standards and procedures generation
- Circuitization of P&IDs
- UltraPIPE® software implementation

5. Process hazards analyses

- Facilitation and scribing
- Re-validation
- Package generation
- Analysis of PHA/LOPA and SIL reviews
- Flare QRA
- HAZID, what-if analysis, FEED HAZOP, EPC HAZOP
- Cause and effects
- PHA manager software implementation
- PHA software implementations



For more information about this and other professional consulting services, contact us at 1 (800) 658-8809 or +1 (713) 570-2900 or info.ogm@siemens.com.