

Process Safety Pressure Protection Manager



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Comprehensive Design, Rating, and Data Management for Your Last Line of Defense

Process Safety Pressure Protection Manager is an enterprise-level process safety application used by oil and gas, refining, and chemical process industries for design, rating, and data management of pressure relief and disposal systems in accordance with industry standards and best-practice methodologies.

Company-specific guidelines, recommended and generally accepted good engineering practices (RAGAGEP), and regulatory requirements stress the importance for process plant operators to comply with process safety best practices and keep process safety information evergreen.

Process Safety Pressure Protection Manager utilizes a single data repository that provides process safety engineers and managers across the world a collaboration platform to ensure visibility into the adequacy of relief and disposal systems and manage the design basis for such critical process safety barriers throughout the plant lifecycle.

Process Safety Pressure Protection Manager is enhanced using Siemens Energy product development methodology which includes secure design practices and quality assurance processes.

Our Expertise

Siemens Energy pioneered the equipment-based Pressure Relief Analysis (PRA) methodology and is the world's leading provider of pressure relief technology.

Siemens Energy's expertise is unique because:

- **Developers of Best Practice approach** to Pressure Relief Analysis and corporate standards implemented by major international oil and gas, refining and chemical companies.
- **Global Process Safety Consulting Services** provider with nearly 5,000 projects completed.
- **Our people** are API and DIERS contributing members and subject matter experts in pressure relief design and analysis, and product development and software delivery experts.
- **Process Safety Pressure Protection Manager** offers users a robust process safety information management system with over 40 calculation methods for relief device sizing, flare header analysis, and maintaining evergreen data throughout the plant lifecycle.

Our Value, Our Customer

- **Process Safety Pressure Protection Manager Cloud:** Enables customers to quickly scale usage across their enterprise and provide faster access to software enhancements. Cloud delivery may increase the return on investment for Process Safety Pressure Protection Manager and associated process safety consulting services through productivity gains and optimized total cost of ownership.
- **Unprogrammed PSM Inspections:** If a regulatory officer knocked on your door today, how prepared would you be? Without Process Safety Pressure Protection Manager, you would need to spend significant resources to put together the documentation. An investment in Process Safety Pressure Protection Manager will have your process safety information and design basis available in a matter of minutes, saving your organization potential citations, time, and unforeseen costs.
- **Evergreening:** Trevor Kletz was fond of repeating: "There's an old saying that if you think safety is expensive, try an accident." Based on our extensive research over 25+ years executing projects, findings show only 60% of pressure relief devices meet design standards. With Process Safety Pressure Protection Manager, relief device information can be kept up-to-date, accurate, and accessible – helping ensure safe plant design and operation.
- **Interoperability:** According to a NIST report, lack of informational interoperability has a high impact on the cost of capital investment and projects. While designing new processes, associated equipment, and/or piping, Process Safety Pressure Protection Manager allows you to easily design pressure relief and disposal systems. Information needs to be entered only once in Process Safety Pressure Protection Manager and it is available to all stakeholders instantaneously which allows for fast, error-free information hand-over from engineering to operations.

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Siemens Energy
Electrification, Automation, Digitalization (EAD)
Process & Safety Consulting
USA Headquarters
1200 W Sam Houston Pkwy North
Houston, TX 77043, USA
Asia Pacific: Singapore
Canada
Europe: Belgium and Romania
Middle East: KSA and UAE
info.ogconsulting.energy@siemens-energy.com
Siemens Energy Customer Software Support Portal
cep.siemens-energy.com

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Core Capabilities

- **Equipment- and system-based pressure relief analysis** determines all overpressure scenarios and the adequacy of installed pressure safety valves, rupture disks, and piping vents.
- **Calculation methods** to determine required relief rates and stream properties, including two-phase relief scenarios based on API and DIERS methodologies.
- **Design verification** for pressure relief and disposal systems at various phases in the plant lifecycle.
- **Disposal system analysis** includes rating methods for knockout drum separation efficiency and hold-up capacity, and flare tip pressure drop and radiation.
- **Process Safety Pressure Protection Manager interfaces** with industry-leading relief header simulation software to determine disposal system pressure and temperature profile for back pressure calculations.
- **Single repository** for immediate access to PSM-related information and management of design basis for different plant modes of operation.
- **Advanced reporting** capabilities (standard or custom) for improved analysis and design deficiencies tracking and mitigation.
- **Role- and resource-based security** allows for the management of user access to data. Permissions can be granted as widely as an organization, as narrowly as a single operating unit, and any level in between.
- **Flexible licensing models** tailored to your requirements including software updates, technical support, different user types, installation options, and license terms.