

TURN INPUTS INTO INSIGHTS

State-of-the-art software that keeps you and your asset management projects moving forward. Use software that is designed to simplify your day-to-day tasks while helping you develop expert-level analysis skills.

Equity Engineering develops software that supports informed decision-making and strategic planning for the safe and efficient operation of industrial assets. The fully integrated software supports all aspects of equipment lifecycle management by integrating the latest API and ASME codes and standards with the depth of Equity's engineering experience.

PlantManager® 6.0

PlantManager 6.0 is a flexible and scalable cloud-native platform that leverages the power of Equity's suite of analytical tools to deliver insight into all aspects of an asset's lifecycle. PlantManager 6.0 offers both inspection planning and management tools and advanced engineering analysis calculators to give you the ability to conduct comprehensive analyses of an asset's integrity and performance.

- Asset register and document management
- Reporting and management dashboards
- Data import and export

PlantManager ASSET™

PlantManager ASSET is an asset integrity management system (AIMS) that provides end-to-end asset lifecycle management capabilities.

- Corrosion rate calculations
- Minimum thickness calculations
- Damage mechanisms assignment
- API RP 581 with streamlined input and output
- Inspection activity scheduling
- Inspection finding management
- Damage management locations
- Thickness management

PlantManager SAGE®

PlantManager SAGE is a collection of mechanical engineering modules for conducting comprehensive evaluation and analysis into the design, condition, and compliance of new and in-service equipment.

- All commercially available SagePlus™ modules
- Levels 1 and 2 fitness-for-service (FFS) API 579-1/ASME FFS-1 integration
- Support de-rate and re-rate records
- Fluid templates and re-rating using materials database
- Configurable fluid builder

eec

Leverage the convenience of the Equity Engineering Cloud (eec®) platform to quickly and easily perform complex engineering calculations that are aligned with the latest industry codes and standards. With more than 50 tools, the cloud-native platform helps you make effective and informed decisions to keep your facilities operating safely and reliably.

DamageWeb™

DamageWeb is a quick reference guide that specifically helps inspection and maintenance personnel streamline the process of pinpointing damage mechanisms and potential risk areas.

- Identify the best maintenance and inspection method to address specific damage mechanisms
- Cross-reference API 571 and WRC 589 for accurate damage mechanism identification and classification
- Visualize the variety and location of typical damage mechanisms in refining units with built-in process flow diagrams (PFDs)

eecHotTap

eecHotTap assesses the risk of burn-through or cold cracking during a hot tap welding procedure. Solve a complex set of welding challenges with this simple tool.

- Predict peak wall temperature, maximum cooling rate, and the shortest cooling time around the weld region and within the heat-affected zone (HAZ)
- Evaluate variety of hot tap geometries, materials, and thermal boundary conditions
- Estimate material hardness after a microstructural change

TBREAK

TBREAK is a user-friendly analysis tool that combines an intuitive piping language with state-of-the-art 3D visualization to help you understand and mitigate tube rupture damage in heat exchanger processes.

IntelliJoint®

IntelliJoint is a one-stop solution for the evaluation and optimization of bolted joint assemblies. The extensive analysis capabilities help improve the safety and reliability of existing flanged joints and streamline designs for new equipment.

- Compare performance of gasket styles or manufacturers
- Identify and optimize gasket for specific applications and dimensions
- Troubleshoot existing gasket configurations and determine effectiveness of proposed leak fixes

SIMFLEX-IV

SIMFLEX-IV is a piping stress analysis software that will help prevent potential failures by improving the structural integrity of piping systems and supporting structures.

- Mitigate piping integrity issues and failures
- Design for operational or process changes
- Visualize impact of static and dynamic pipe stresses
- Integrate latest codes and standards (ASME B31.1, B31.3, B31.4, B31.8, B31.J, and ASME Section III Class 2 & 3 piping codes)

Other Calculators

The eec includes several flexible module-based packages to support analysis of:

- API 579/ASME FFS-1
- Boilers and vessels
- Design
- Fatigue
- Fluids
- In-service equipment
- Materials
- Pipelines
- Piping
- Tanks

SagePlus™

Achieve safer operations by evaluating equipment design and in-service conditions to make informed engineering decisions on the life of fixed equipment, piping, and structures. SagePlus is an extensive collection of mechanical engineering modules for conducting comprehensive evaluation and analysis into the design, condition, and compliance of new and in-service equipment. SagePlus is only available as a desktop-based software tool through the PlantManager (versions 2.0 - 5.0) application.

- Check design or perform re-rating analysis of vessels, piping, and tankage constructed to ASME and API codes and standards
- Identify fixed equipment integrity issues and make informed decisions on whether to run, replace, or repair
- Solve industry-specific challenges with software developed using facility and owner/user knowledge and experience
- Accurately assess fixed equipment remaining life with new and alternative analysis techniques

API RBI

Optimize your inspection plans by systematically factoring risk into your decision-making by identifying areas of vulnerability and reducing equipment performance uncertainties. API RBI is the industry's only fully compliant API 581 calculator that will help you plan maintenance strategies efficiently and accurately. API RBI is only available as a desktop-based software tool through the PlantManager (versions 2.0 - 5.0) application.

- Remove uncertainty by evaluating your equipment and refocusing inspection efforts to the highest-risk items
- Identify high- and low-risk equipment to optimize inspection schedules and reduce cost
- Identify performance trends and operational problem areas with dynamic data visualization
- Implement quantitative RBI programs using guidance that accounts for applicable damage mechanisms and risk-based inspection plans
- Inventory groups and pressure relief device (PRD) protected equipment may be specified and evaluated

Use PlantManager (versions 2.0-5.0) desktop application to access the SagePlus or API RBI software products.

The Equity Difference

BENEFITS



Develop inspection and maintenance plans using accurate data analysis



Scale software tools to meet organizational needs and budget



Improve facility-wide communication with fully integrated software



SUPERIOR TECHNICAL RESPONSE, THOROUGH ANALYSIS, AND TIMELY WITH GREAT COMMUNICATION. EQUITY'S SOFTWARE SUPPORT TEAM IS RESPONSIVE AND HELPFUL EVERY TIME THAT I CONTACT THEM. **THANKS FOR THE SUPPORT!**

API RBI Software User, January 2022