



SOFTWARE EXPERTISE

E²G's proprietary software is built by industry experts and used by our consulting engineers on FFS, damage mechanism reviews, risk-based inspection (RBI) assessments and other asset life-cycle management projects. E²G software is updated frequently to meet the latest API and ASME codes and standards.

Pioneered development of

FFS & RBI

Primary authors on

WRC 528 & 562

Lead investigators on

API 579 & 571

INDUSTRIES



Ammonia/Fertilizer



Biofuels & Renewables



Chemical & Specialty Chemicals



Oil & Gas



Petrochemicals

THE ENGINEER'S DIGITAL TOOLBOX

Achieve safer facilities and plants by evaluating equipment design and in-service conditions to make informed engineering decisions on the remaining life of fixed equipment, piping, and structures.

SagePlus™ software is a comprehensive collection of analysis tools designed for engineers to evaluate the design and in-service conditions of fixed equipment at oil and gas, petrochemical, chemical, and other industrial processing facilities. Gain actionable intelligence with SagePlus software.



Extend life of aging equipment



Determine design criteria



Accurate calculations



Make informed decisions

SagePlus ANALYSIS MODULES

Use the power of SagePlus on your desktop or via the Cloud. The comprehensive analysis modules include:

Advanced Analysis

Modules for nozzle stress analysis, burst pressure calculations, pipe elbow flexibility, and piping stress analysis

Advanced Fracture Analysis

Conduct brittle fracture screening, evaluate crack-like flaws, monitor crack growth, and analyze ductile tearing

Fitness-for-Service (FFS)

Basic analysis of shells, pipes, tanks, nozzles, and flanges for both basic design considerations and evaluation of damage mechanisms using API 579-1/ ASME FFS-1 Level 1 and Level 2 approaches

Fixed Equipment

Analysis tools for the direct determination of supplemental loads caused by seismic and/or wind loadings in towers and horizontal vessels

Heat Transfer & Fluid Transport

Fluid property modeler, stored energy of pressurized system, steady state heat transfer, and steam tracing

HotTap

Analyze hot taps and welding simulation

DATA VISUALIZATION

SagePlus software allows you to easily visualize models during data entry with real-time graphics display added to every module. Using the graphics, you can quickly and easily navigate or study any section of the analysis model.

VISUALIZATION CAPABILITIES

Easily toggle between the full object and cut section views to study detailed connections

- 2D & 3D orthographic
- 3D perspective
- Cut-section

MULTI-COMPONENT VESSELS

Graphic view includes a clickable parts list to easily isolate a specific section of the vessel

GEOMETRY

View geometry at different states, including nominal thickness and corroded future thickness views.

- Export to 3rd party applications (Abacus, MAT, or Design CAD)

TOP FEATURES

MATERIALS DATABASE

Accurately calculate maximum allowable stress for the construction of pressure vessels, piping, and tanks using the industry's most comprehensive list of materials and properties. Improve external logistic workflows and easily integrate with other 3rd party software products with access to 250 combined years across 12 codes and standards.

Quickly and easily find the information you need with E²G's material database, including:

- Physical properties (WRC 503)
- Strength properties
- Impact test exemptions
- Material notes & properties modifiers
- Universal material identification

CALCULATION & REPORTING

Accuracy of calculations distinguishes SagePlus from competing mechanical engineering software tools. Achieve less conservative results with SagePlus' extensive calculation reports, design code modules, and customized data import and export functionality.

CALCULATION REPORTS

Easily toggle between the full object and cut section views to study detailed connections

- 2D & 3D orthographic
- 3D perspective
- Cut-section

CUSTOM IMPORT/EXPORT REPORTS

Use customized reports of imported and exported information for inspections

Specify which data to include in the report:

- All input information
- Detailed calculation results
- Supplemental load cases
- Trend graphs
- Symbols & keywords

To learn more about the benefits of SagePlus,

HERE'S HOW TO GET STARTED

CLICK HERE

SCHEDULE A DEMO

with an E²G SagePlus expert