PV Elite®

Vessel and Heat Exchanger Design, Analysis and Evaluation

Capabilities:

- Vessel Design and Analysis
- Exchanger Design and Analysis
- Tubesheet Design and Analysis
- Rectangular and Non-Circular Vessel Analysis
- Individual Component Analysis
- Comprehensive Error Checking
- Saddle, Leg, Lug, Trunnion and Skirt Design
- Analysis for Horizontal Shipping of Vertical Vessels
- User-definable Reports
- International Wind Analysis
- International Seismic Analysis
- International Vessel Codes
- Links to CADWorx® Plant Professional
- Transportation Analysis
- 3D PDF Generation

PV Elite® is your complete solution for vessel and heat exchanger design, analysis and evaluation. Users of PV Elite users have confidently designed equipment for the most extreme uses and have done so quickly, accurately and profitably.

Data Collection

PV Elite makes defining pressure boundary conditions for vessels and exchangers easy, even for load sets that require significant data input. PV Elite streamlines data entry by breaking the input down into sensible subsets; help on any input item is only a keystroke away.

Cutting-Edge Graphics

PV Elite's graphical representation of analysis models helps ensure confidence in the input and results. With PV Elite, you can view and manipulate analysis models with complete ease.

Advanced Analysis and Reporting

To simplify inspection requirements, PV Elite lists the most important equations such as required thickness and maximum allowable working pressure (MAWP) and also groups results by type (e.g. internal pressure, external pressure, bending stress, nozzles and flanges). Overall results are summarized where the element or detail controlling the overall vessel MAWP is identified. Quickly send analysis results to output reports or export the file format of your choice (Excel, Word, PDF).

Materials and Codes

PV Elite is a global package with international code rules plus extensive region-specific content. Vessel material definitions, piping and steel component data, local wind loads, and local seismic loads of many regional markets are all included.

Powerful Integration Capabilities

PV Elite interfaces with other popular software packages for finite element analysis, foundation design and drafting. PV Elite also shares a link to CADWorx® Equipment module and other Intergraph SmartPlant suites.

Technical Specifications

- SOLIDWORKS® Compatible
- Inventor® Compatible

Codes

- ASME Section VIII Division 1 & 2
- API 579 FFS
- WRC 107, 297, 537, 538
- EN 13445
- PD 5500
- STS-1 ASME Steel Stack Standard
- PCC-1 Appendix O Bolted Flange Joint Assembly

Component Design & Evaluation

PV Elite includes CodeCalc for quick and efficient component design and evaluation.

User Interface

The interactive user interface in PV Elite presents only what is needed at each point of information gathering. Therefore, the user is not burdened with "out of sequence" requirements of information needed for the analysis.

.

Equations and Substitutions

The software provides equations and substitutions, making it effortless for the user to verify the accuracy in the calculations presented in the reports.

Application Areas

Beverage, Brewing, Chemical, Equipment , Food, Offshore, Petrochemical, Pharmaceutical, Piping, Power, Process and Plant Design, Shipbuilding, Water Treatment
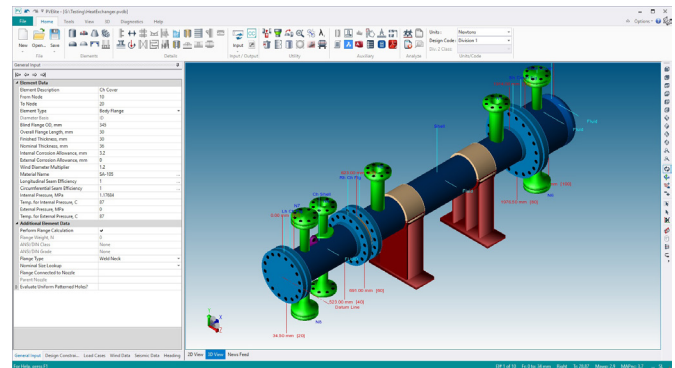
PV Elite is an efficient analysis tool for a wide range of applications.

About Hexagon

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Hexagon's PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 21,000 employees in 50 countries and net sales of approximately 3.9bn EUR. Learn more at hexagon.com and follow us @HexagonAB.