

#### **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
- Cutting-edge Graphics
- Design Tools and Wizards
- Comprehensive Error Checking
- Saddle, Leg, and Skirt Design
- Analysis for Horizontal Shipping of Vertical Vessels
- User-definable Reports
- Wind Analysis
- Seismic Analysis
- International Vessel Codes
- Extensive Material Databases
- Steel Databases and Modeling
- Links to CADWorx® Plant Professional

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.

# 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.

# **Analysis Options**

PV Elite performs calculations in accordance with ASME Section VIII Divisions 1 & 2, PD 5500, and EN 13445. Rules from API 579 (Fitness for Service) are also included for evaluating the current state and remaining life of existing vessels.

# **Output and Reports**

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). It summarizes overall results where it identities the element or detail controlling the overall vessel MAWP.



#### 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.

#### **Interfaces**

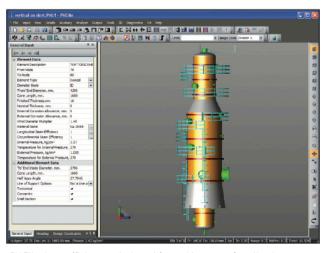
PV Elite interfaces with other popular software packages for finite element analysis, foundation design, and drafting. PV Elite also shares a bi-directional link to CADWorx® Plant Professional.

#### **Technical Specifications**

- AutoCAD®-compatible
- •Microsoft® Windows®-compatible

# **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 PPM

Hexagon PPM is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technology solutions that drive productivity and quality across geospatial and industrial landscapes.

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