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PV Elite: Performs *complete* mechanical analysis and design for pressure vessels, including vertical and horizontal vessels, heat exchangers and stacks. Complete vessel are built and analyze as 1 entity, the program can automate the interaction between various vessel components, and this is very helpful especially for tall towers. **PV Elite will continue to include CodeCalc (as the component analysis part of PV Elite).** This complete package provides flexibility of performing either a simple component calculation or a comprehensive vessel calculation.

CodeCalc: Performs mechanical design and analysis of major *components* for pressure vessel and heat exchangers. It follows industry standard codes and includes modules for heat exchanger tubesheets, horizontal vessels etc. **This program is being discontinued December 31, 2009. Existing users current on UMS will automatically be upgraded to PV Elite.**

Capabilities	CodeCalc	PV Elite
Standards and Codes:		
ASME Section VIII Div.1, TEMA, and WRC107/297		
Div. 2, British (PD-5500), European (En-13445)		
National and International wind and seismic standards.		
Component Analysis of:		
Flanges		
Nozzles		
Shell		
Heads		
Expansion joints (bellows type, and flanged and flue type)		
Heat exchanger tubesheets		
Rectangular Vessels		
Advanced Capabilities:		
Rigging analysis (check of vessel stresses when lifted)		
Pressure fatigue analysis		
Multiple vessel skirt opening		
Bi-directional interface with CADWorx Equipment software — Allowing vessels to be used in an AutoCAD 3D modeling environment.		
Bi-directional link to PV Fabricator software - Allowing generation of 2D fabrication drawings		
Basic 2D Cad drawings of the vessel.		
Data links to MS Access database and foundation design software.		
Export to National board U1, U1A and U4 forms.		
Many international structural steel and bolt std. tables.		
Dynamic modeling of earthquake Modal method for computing the natural frequency of vessel		
Dynamic wind effects due to vortex shedding.	