

What's New in PV Elite version V26

The following changes have been made to PV Elite and CodeCalc.

PV Elite and CodeCalc Version 26.0

Code Updates

- For PV Elite and CodeCalc, added support for the 2023 edition of ASME BPVC, Section VIII, Division 1, where:
 - Mandatory Appendix UW-20 replaces Non-Mandatory Appendix A.
 - Division 1, Part UHX, refers to Division 2, Part 4.18 for tubesheets.
- (3805328, 3915476)
- Added support for the 2023 edition of ASME BPVC, Section VIII, Division 2. (3805328, 3915476)
- Added support for the 2023 edition of ASME BPVC, Section II, Part D. **Material Database Notes** are updated. (3591185)
- Added support for the 2023 edition of ASME BPVC for concentric conical channels attached to tubesheets. (3613619, 3667814 & 3651086)
- Added support for the 2022 edition of the ASCE-7 Seismic code. (3281709)
- Added support for the 2021 edition of IBC wind and seismic requirements. (3657169)

Configuration

- Added the [Use smaller of attached shell and small end hub thickness for g0](#) option to the [Job Specific Settings Tab \(Configuration Dialog\)](#). (4021293, 3979030)
- Added the [Percentage of nozzle loads applied to supports \(0 - 100%\)](#) option to the [Job Specific Settings Tab \(Configuration Dialog\)](#). (4049484, 3980617)

Input Processor and Analysis

- Added support for [clamp connections](#) on the [Elements Panel](#). (RI-TX-29318)
- Added support for metal-to-metal flanges with contact outside the bolt circle to [Sketch](#) on the [Flange Input Dialog](#) (for ASME Section VIII, Div. 1, Appendix Y, Class 1, 2, and 3; EN 13445, Section 11.10 PD 55000, Section 3.8.8). (3656597, 3876446, 3967202)
- Added support for design and analysis of PD 5500 Enquiry Case 133 [rectangular vessel flanges](#) on the [Elements Panel](#). (3816211)
- Added the ability to select EN 13445 and PD 5500 material by typing the material number or the database record number in [Material Name](#). The selected material code now displays in the dialog title. (3961606, 3853734, 3959691)
- Added the option [Edit the ASME User Material Database](#) to [Edit/Add Materials](#). Also added the [Material Group Number](#) and [Record Number](#) properties for EN 13445 and PD 5500 to the [Material Database Editor](#). (4049490)
- Added calculation of the bolt [Root Area](#) in the [Flange Input Dialog](#). (3876412)
- You can pin favorite materials using the pushpin control on the [Material Properties Dialog](#). Pinned materials then display on the pop-up window of [Material Name](#) or the material name properties in dialogs. You can then select a favorite material directly from the list. The list is dependent on the design code and component type. The length of the list can be customized from the configuration settings. (3984592, 3869808)

- Added a [Nozzle Input/Analysis](#) status field message displaying *Area passed/failed* and *UG-45 passed/failed*. (3795906)
- Added a tooltip next to [Existing Nozzle Description](#) in the [Nozzle Input/Analysis](#) dialog to clarify the use of the #SN option. (3795907)
- The [Flange Input Dialog](#) now displays a detailed diagram of the selected flange type. (4008779)
- Clamped connections are supported (ASME Section VIII, Div. 1, Appendix 24). (3654556)
- [Rectangular Vessel Input](#) allows determining the minimum allowable thicknesses. (3837089)
- [Lap joints](#) are now supported for EN 13445 and PD 5500. (3943075, 3816214)
- A detailed assessment of fatigue life is now available for EN 13445, Section 18. (3587676)

User Interface and Graphics

- Updated the [Nozzle List](#). The dialog is now modeless, allowing you to add, change, and delete nozzles on the dialog and the main PV Elite window. (4049489, 3900588)
- The bill of materials can be accessed from right-click > **Visibility** on the **3D View**. The BOM dynamically updates as the model is designed. (3797878)
- The software now defines default values for the [Lifting Lug/Trunnion Input](#) dialog and the [Base Plate Parameters](#) tab for the [Leg](#) dialog so that design is not interrupted by prompts for updated values. (3978645)
- A **Drawing View** tab is now available to show an updated 2D/3D flat, rotatable view of the model. (3800335)

Output Processor and Reports

- Updated the note for openings and made cosmetic changes to warning and error messages for the **Nozzle Calculations** report. (3714826)
- Added horizontal vessel bolt shear stress due to thermal friction growth in the **Saddle Calculations** report. (3852229)
- Added element numbers, from nodes, and to nodes to some output reports. (3959692)
- Component diagrams throughout the output reports now display user input values. (3613661)
- The MAWP of [a small ASME nozzle](#) is only the function of the UG-45 calculation and not UG-37 nozzle reinforcement calculation. (3735983)
- For a nozzle that is specified as a [Manway or Access Opening](#), the software prints the required thickness calculation in the **Nozzle Calculations** report according to ASME Sec VIII Div 1, UG-45. (3874626)

Documentation/Help

- Clarified the definition of [Friction Coefficient Mu](#) for saddles. (3952858)
- Added a note to API 579 Introduction indicating that CodeCalc does not support the latest edition of API 579. (3916714)
- Expanded the description of the [Full Face Gasket Option](#) in PV Elite to match the description in CodeCalc. (3781845)