

New Version 10.0

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Version 10.0 includes a number of improvements and additions, and is in compliance with ASME VIII:2007 edition, Addenda 2008, EN13445 Issue 32, PD5500:2006 Amendment 3

Version 10.0 – Updates to latest code amendment

Version 10.0 includes a number of improvements and additions. This version is also in compliance with:

- ASME VIII:2007 edition, Addenda 2008
- EN13445 up to and including Issue 32
- PD5500:2006 Amendment 3

The material libraries have been updated to ASME II Part 2:2007 A08 and all EN materials have been updated to latest revisions.

EN1092-1 for Standard Flanges

Added a new module for EN1092-1 for standard flanges. Dimensional data for the flanges and facings, as well as all pressure/temperature rating curves and applicable materials have been included.

Tubesheet Design to EN13445 Annex J

Added a new module for the alternative method for design of tubesheet to EN13445 Annex J. Significant reduction in tubesheet thickness may be achieved compared to the standard method in EN13445 section 13.

Wind Loads to EN1991-1-4

Wind loading can now be calculated to EN1991-1-4 in addition to ASCE-97 and UBC-97. The gust factor to EN1991-1-4 is also calculated based on the natural frequency of the vessel.

Blocking and sealing rings

Added a new modules for design of blocking and sealing rings for jacketed vessels according to:

- ASME VIII D1; APPENDIX 9, JACKETED VESSELS
- PD5500; Section 3.11.3.3 - BLOCKING AND SEALING RINGS

General

Some general enhancements and additions of the new version includes:

- EN1591/EN13445 Annex G, improved input sections. The thermal load can now be calculated as an option instead of giving DeltaU as an input.
- To ease the design of tall vessels, a new option has been included to calculate to minimum shell thickness due to internal pressure at different elevations.
- Lifting lugs can now be attached to the vessel skirt
- A detailed analysis can now be performed for a horizontal to vertical rotational lift. All stresses in lugs/trunions and local stresses in shells are calculated at lifting incremental angle of two degrees from horizontal to vertical orientation.
- New option included that allows the user to select design temperature and safety factor when designing anchor bolts.
- A new option is included to allow the user to include external loads on nozzles simultaneously with the nozzle design.
- A new option has been included so the design model can include location of all circumferential and longitudinal weld seams. Inter-distance between seams and nozzles/attachments are calculated, a note/warning message is displayed if distance is below recommended limits.
- Included calculation of thermal expansion and requirements for slotted holes for sliding saddle.
- Included new options for design of bolted domed heads/dished covers to ASME VIII D1, Annex 1-6.
- A new report option for Nozzle List has been included, this table now includes nozzle service, size, rotation, orientation, standout, and location (x, y and z values).
- A new report option for foundation loading has been included.
- Added new options for user specified components. Insulation, lining and liquid trays are new options available, these options will also be visualized in the 3D drawing.
- A new option has been added for 2D and 3D drawing modules, the user can now select between a left handed coordinate system and a right handed coordinate system.
- Pressure testing to EN13445-5 is now in compliance with amendment A10:2008, resulting in a relaxation of level of test pressure.
- A new file retrieval system has been included that can index and store information about all design files. A search and sort options has been included to help the user in retrieving old files.
- New sample files have been included.
- A new option for bracket support has been included, to allow more than 2 web plates to be included on the bracket.
- EN13480 added new module for design of expansion bellows and many enhancements to existing modules.
- The EN13480 module has been translated to different languages.
- The EN13480 module now includes calculation of test pressure and MAWP