HEXAGON
PPM

VISUAL VESSEL DESIGN®

COMPREHENSIVE PRESSURE VESSEL, SHELL AND TUBE EXCHANGER

Capabilities:

- 2D Integrated Vessel
- Drafting Utility
- 3D Drawing Utility
- Flexible Printout
- Utilization Charts
- Integrated Databases
- Tube Layout
- External Loads Module
- VVD Code Assistant (Help on Technical Issues)
- Section-sensitive
- Online Help
- Report Generator

Visual Vessel Design® is a comprehensive pressure vessel, shell and tube exchanger, and boiler design and analysis solution. The software offers a strong emphasis on European codes and standards, including EN13480, AD 2000 Merkblatt, EN13445, PD5500, TBK2, and TKN. It also includes ASME Section VIII, Div. 1 for true international code flexibility.

Integrated Databases

Visual Vessel Design has a comprehensive collection of dimensional and physical properties that minimizes manual entry of values and helps streamline data entry.

Tube Layouts

Visual Vessel Design allows the designer to easily perform a highly optimized tube layout by offering true flexibility in accommodating tube patterns and passes of all kinds.

Utilization Charts

The utilization charts provide the user with instant feedvack on the utilization of each component. With Visual Vessel Design, users have immediate insight into the maximum utilization of each component in selected vessels.

Materials Library

Visual Vessel Design includes a material library with data for more than 3,500 different materials referenced to the ASME, BSI, EN, and NGS standards.

External Loads Module

This feature allows for the calculation of the loading on the support and the foundation loading for all load cases and for all types of support, includnding skirt, leg, bracket, and saddle support. External loads can include seismic loads, wind loads, dead loads, live loads on platforms, acceleration loads, nozzle loads, and blast/explosion loads.

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Report Generation

Visual Vessel Design generates reports that are data-rich and can include graphical elements and equations, with utilization charts, which additionally provide an instant overview of the calculation results.

General Arrangement (GA) Drawing Module

The GA Drawing module enables you to easily select drawings and tables that you want to include in your general arrangements. Drawings are saved in both an AutoCAD® DXF and PDF file format.

2D and 3D Drawing Utility

Visual Vessel Design can easily provide visualization of the design in both 3D and 2D with all components at their proper location relative to the global base coordinate system. The 2D drawing module allows single components, complete vessels, or any selected groups of components to be drawn on the screen or printed to scale. The included 3D modeler allows users to easily recognize dimensional input errors as they occur.

Advanced Flange Design

Visual Vessel Design includes the sophisticated flange design methods from EN1591 and EN13445 Annex. This enables users to easily design both standard and non-standard flanges that can take into account external loading and the effect of thermal expansion. This method also determines the flange rotation, measures deflection, and calculates the minimum required bolting torque.

Technical Specification

- Microsoft® Windows®-compatible

Application Areas

- Beverage
- Brewing
- Chemical
- Food
- Offshore
- Petrochemical
- Pharmaceutical
- Power
- Water Treatment