CODEWARE®

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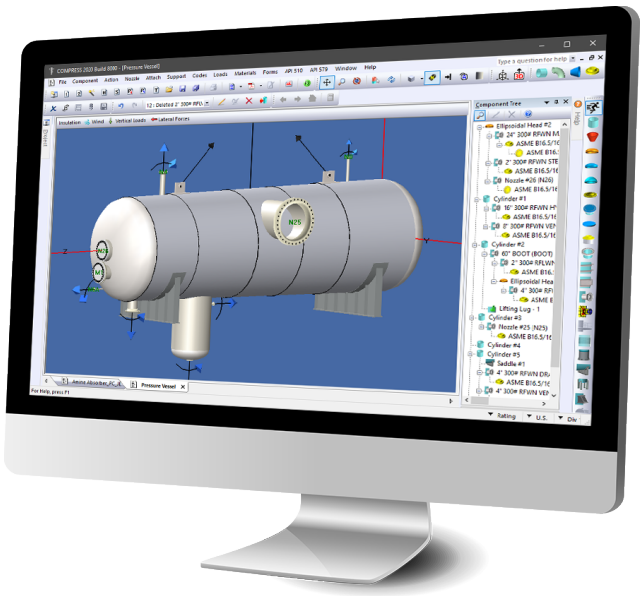
COMPRESS - ASME VIII Pressure Vessel Design Software

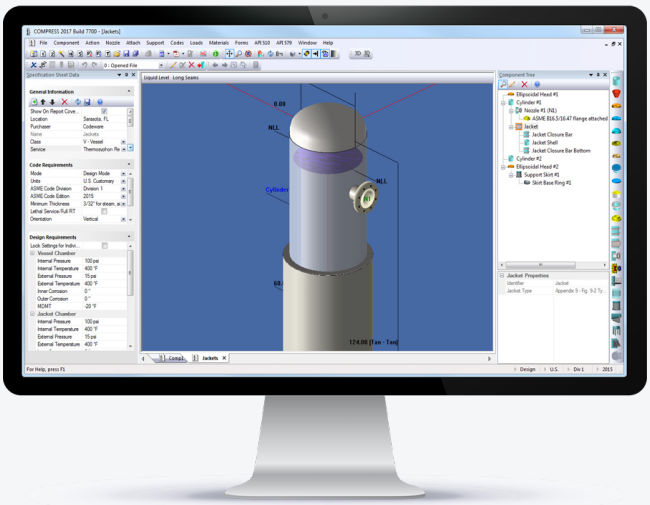
COMPRESS®

Smarter Pressure Vessel Designing

COMPRESS is an engineering productivity tool that models, calculates and creates reports for ASME® pressure vessels and heat exchangers. COMPRESS is the perfect solution for companies that want to bring their design work in-house.

- Saves engineering hours
- Finite Element Analysis
- Generate drawings
- Solid modeling





Increase Design Efficiency

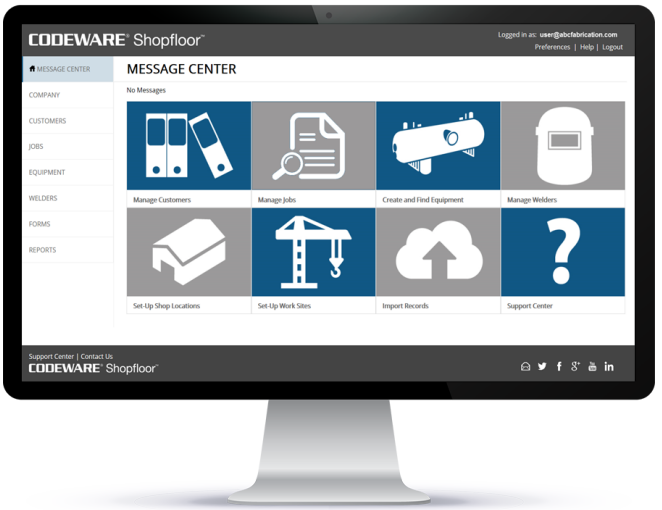
COMPRESS eliminates the time-consuming, manual iteration required by other software to design entire vessels or individual components. For new designs, COMPRESS selects sizes, thicknesses and ratings to meet code requirements. For rating or turnaround projects, COMPRESS calculates the MAWP and minimum thickness while allowing you to input your existing geometry.

Trusted by Clients Worldwide

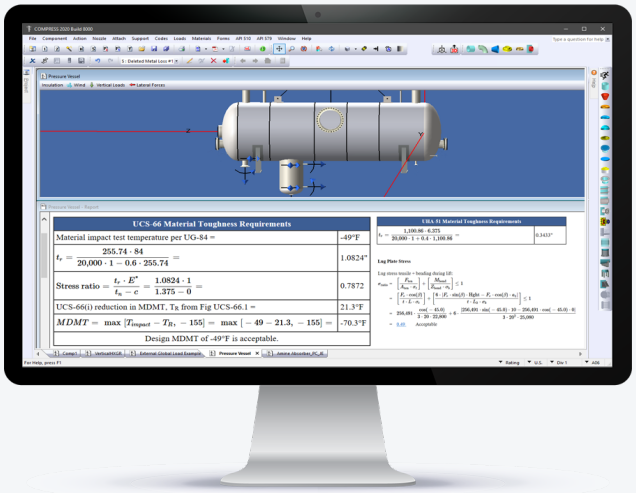
COMPRESS is used by 1,800+ companies in over 65 countries

Integrated ASME Fabrication with Shopfloor

Shopfloor is a native cloud-based ASME IX welding and project management system. It works with COMPRESS and helps to quickly determine if you'll need to qualify additional weld procedures and/or welders.



- Expensive custom programming is no longer required to get your engineering, estimating, drafting and quality control departments working together.
- Shopfloor integrates with the Codeware Interface's Drafter 3D feature so your standard weld details and assigned WPS numbers can be automatically placed on fabrication drawings.
- Organize jobs by customer and location, create all required ASME Section IX weld procedures and forms as well as track welder continuity.



Easy to Read ASME VIII Reports

COMPRESS includes professional ASME calculation reports that are rigorous and complete. Quickly produce customizable ASME design reports complete with page numbers and a table of contents with a click of a button. Below is an example of an advance formula taken from a COMPRESS calculation report.

Maximum allowable working pressure, (at 600 °F) UG-27(c)(1)

$$P = \frac{S \cdot E \cdot t}{R + 0.60 \cdot t} - P_s = \frac{19{,}400 \cdot 1.00 \cdot 1.375}{84 + 0.60 \cdot 1.375} - 0 = \underline{314.47}\ \text{psi}$$

Maximum allowable pressure, (at 70 °F) UG-27(c)(1)

$$P = \frac{S \cdot E \cdot t}{R + 0.60 \cdot t} = \frac{20{,}000 \cdot 1.00 \cdot 1.375}{84 + 0.60 \cdot 1.375} = \underline{324.2}\ \text{psi}$$

"We have been using COMPRESS since its inception. Les Bildy has developed a first rate product. We have found it very user friendly, and can't imagine our company succeeding without it."

General Manager
Hooper Welding Enterprises

"In our 20 plus years of using COMPRESS including the design, quotation and fabrication of in excess of 10,000 pressure vessels, we have come to rely on the accuracy and dependability we get each and every time."

Director of Operations
Mountaineer Fabricators

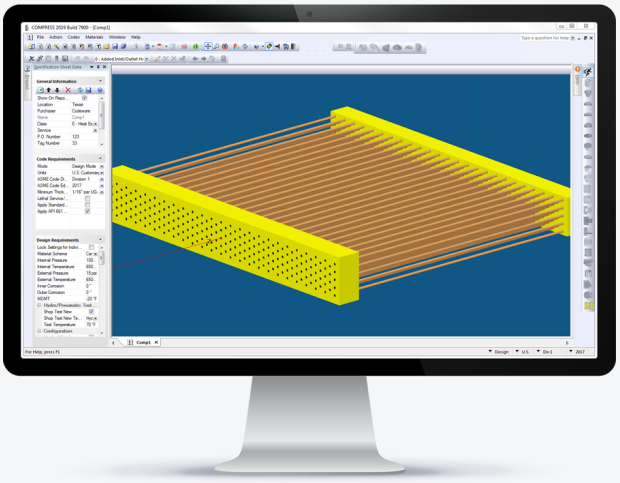
COMPRESS Features & Benefits

Engineering and Design

- ASME VIII-1 calculations for internal and external pressure
- ASME UHX and TEMA heat exchanger mechanical design
- TEMA 7th, 8th & 9th Ed., built-in F&F expansion joint FEA
- ASME VIII-2 pressure vessel calculations - Class 1 and 2 designs
- Simple component and complete vessel design in one program
- Multiple ASME VIII Code Editions in one program
- User defined materials (for old or non-ASME materials)
- US Customary, SI and MKS units
- Mandatory Appendix 46 (Div 2 rules using Div 1 allowable stresses)
- Selection of Building Codes for UG-22 loads determination
- Built-in finite element analysis (FEA)
- Rotational lift and rigging analysis, lift lugs, ears, trunnions and skirt struts
- Customizable PDF reports with page numbers and table of contents
- Flange Wizard to design minimum weight Appendix 2 flanges
- Radial, custom forged, elliptical, hillside, tangential and tilted nozzles
- Appendix 9 jacketed vessels with nozzle penetrations and closure bars
- Multi-chamber and multi-diameter (stacked) vessel design
- UG-99 with hydrotest stress calculations (new and corroded)
- Long Seam Wizard for fast longitudinal shell seam placement
- Static head on components automatically calculated from liquid levels
- Complete UCS-66 and UHA-51 MDMT ratings
- Shipping (transportation) saddle design
- Hillside nozzle opening chord lengths determined automatically
- External pressure design lengths determined automatically
- ASME B16.9 elbows, conical reducers and support skirt openings
- ASME PCC-1 Appendix O assembly bolt stress determination
- ASME Appendix 13 / API 661 rectangular header box calculations



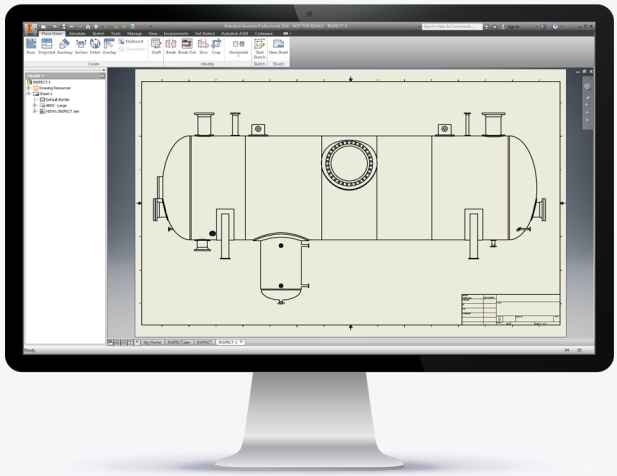
COMPRESS handles both horizontal and vertical heat exchangers.



ASME Appendix 13 for air cooled heat exchangers is included in COMPRESS.

Integration

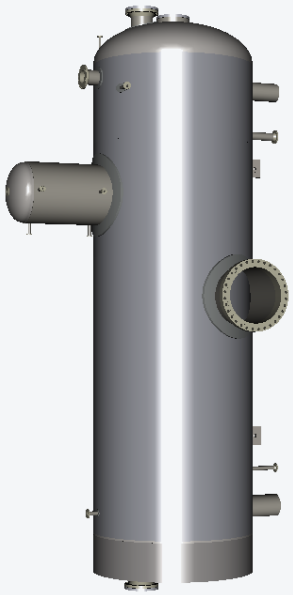
- Codeware XML data export supports 3rd party developers
- Submit National Board® forms electronically
- 3D CAD Integration with Inventor® and SOLIDWORKS®
- Drafter 3D automatic 2D drawings creation from COMPRESS solid models
- Export neutral solid model file formats IGES, ACIS and STEP
- HTRI Xchanger Suite Xist® native file bi-directional interface
- Integrates with Codeware's Section IX weld program, Shopfloor



Create drawings automatically using the Codeware Interface add-on.

Technical (IT)

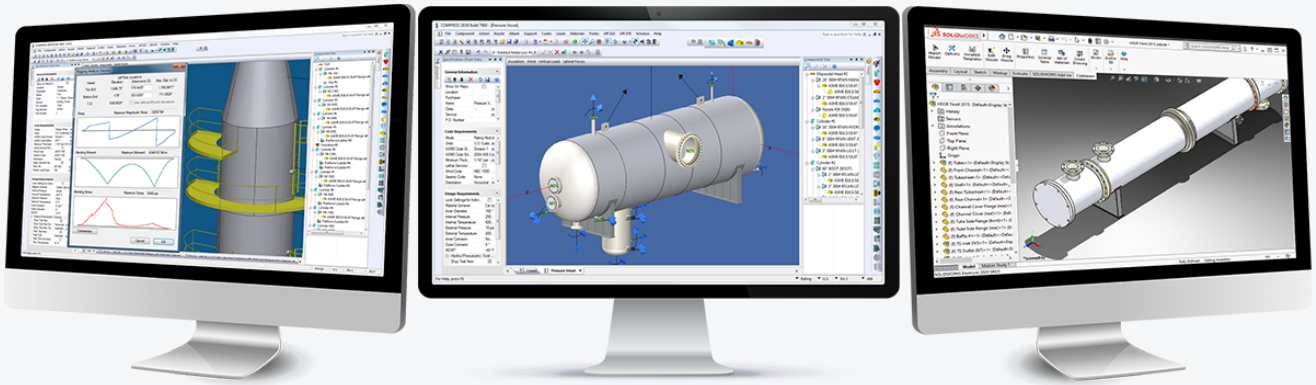
- Networking and remote access enabled
- Application server support
- Remote (silent) installation availability
- Multi-user license access



Solid modeling allows designers to "walk through" vessels to verify nozzle positions and projections.

Support

- Online training
- Technical support (online, email and phone)
- Support Center access
- Software updates
- Calculation verification and QA manuals



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