

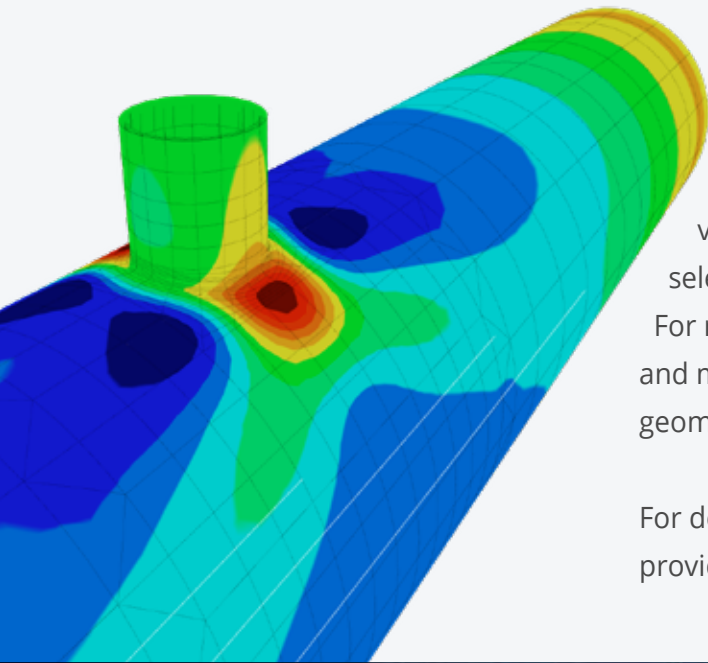
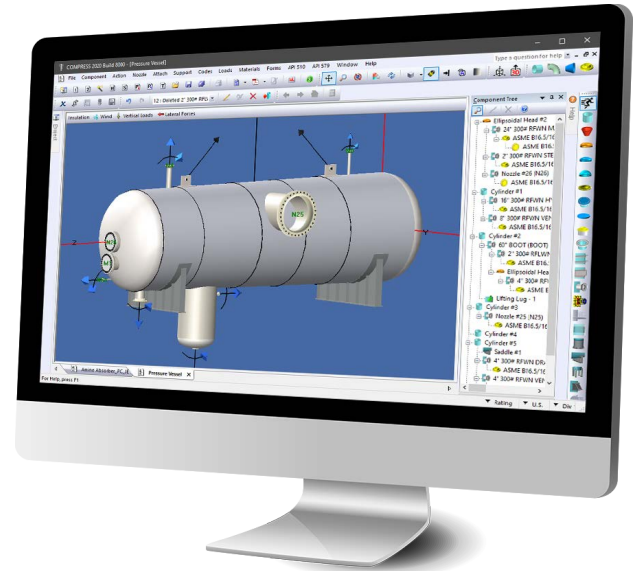
COMPRESS - ASME VIII Pressure Vessel Design Software

COMPRESS®

Smarter Pressure Vessel Designing

COMPRESS is an engineering productivity tool that models, calculates and creates reports for ASME pressure vessels, heat exchangers, and API-650 tanks. COMPRESS is the perfect solution for companies that want to bring their design work in-house.

- Save engineering hours
- Professional reports
- 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 turn-around projects, COMPRESS calculates the MAWP and minimum thickness while allowing you to input your existing geometry.

For designs that fall outside the scope of the code rules, COMPRESS provides built-in FEA capabilities.

Trusted by Clients Worldwide

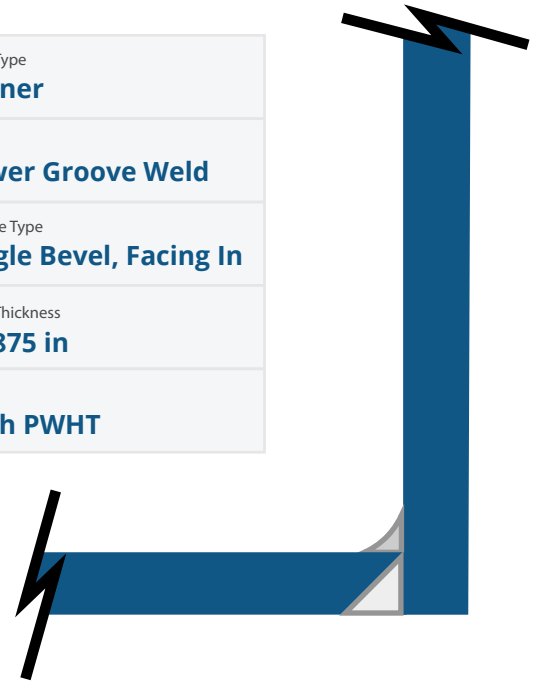
COMPRESS is used by 1,900+ companies in over 66 countries.

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 add-on 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.

Joint Type	Corner
Weld	Lower Groove Weld
Groove Type	Single Bevel, Facing In
Shell Thickness	0.1875 in
PWHT	With PWHT



Easy to Read ASME VIII Reports

COMPRESS includes professional ASME calculation reports that are rigorous and complete. 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 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



Director of Operations
Mountaineer Fabricators

"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."

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, & 10th Editions

ASME VIII-2 pressure vessel calculations - Class 1 and 2 designs

API 650 Storage Tanks

Finite Element Analysis (FEA)

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

Appendix Y Flanges

Rotational lift and rigging analysis, lift lugs, 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

Conventional and half pipe jackets

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

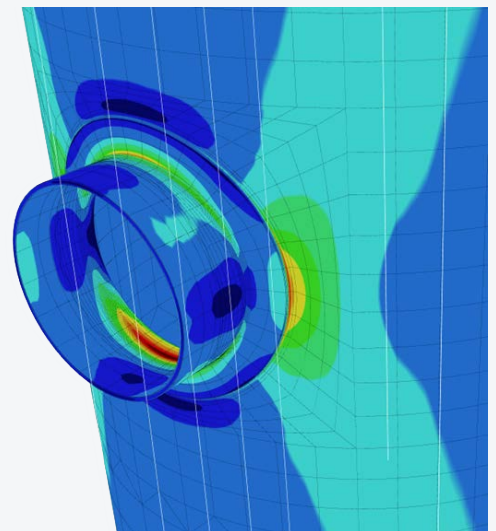
ASME B16.9 elbows, conical reducers and support skirt openings

ASME PCC-1 Appendix O assembly bolt stress determination

ASME Appendix 13 / API 661 rectangular header box calculations



COMPRESS models both horizontal and vertical heat exchangers.



Includes built-in FEA capabilities for nozzles and expansion joints.

Integration

Codeware XML data export supports 3rd party developers

Submit National Board® forms electronically

3D CAD Integration with Inventor® and SOLIDWORKS®

Automatic 2D drawings created 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 Shopfloor, Codeware's Section IX and AWS software

Technical (IT)

Networking and remote access enabled

Application server support

Remote (silent) installation availability

Multi-user license access

Support

Online training (privately with an engineer or online videos)

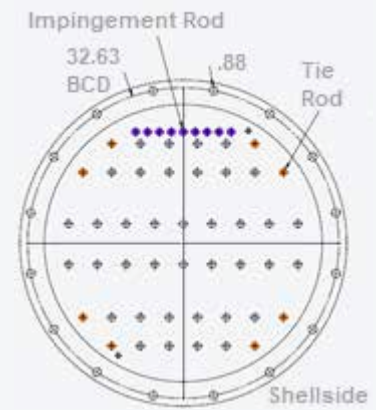
Engineering support (design and ASME code interpretation)

IT Technical support (installation, networking, and license configuration)

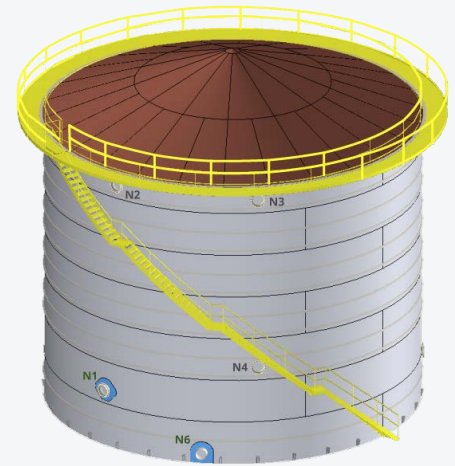
Support Center access (tutorials, articles, software downloads)

Software updates (includes mandatory ASME code updates)

Calculation verification and QA manuals



Create drawings automatically using the Codeware Interface add-in.



Design API 650 storage tanks.



Design both conventional and half pipe jacketed vessels as a standard feature.