



FREQUENTLY ASKED QUESTIONS

Aspect Pressure Vessel



Contents

3	General Information
5	Installation
6	Licensing
7	Purchasing
7	Training
8	Maintenance and Support
8	Q.A./Certification
9	Key Functionality
9	Modeling
10	Analysis
11	Integration and Interoperability
11	Deliverables
12	Software Upgrades
12	Online Resources



General Information

What is Aspect Pressure Vessel?

Aspect Pressure Vessel (formerly PV Elite) is software for designing and analyzing pressure vessels and heat exchangers and assessing fitness for service.

Who uses Aspect Pressure Vessel?

Aspect Pressure Vessel is used across many industries by EPC contractors, fabrication shops, and vessel/exchanger owner-operators. It is also widely used by Notified Bodies for approving and verifying calculations to provide the necessary certification so the vessel can be put into operation.

Why is Aspect Pressure Vessel used?

Content: Pressure vessels are complex equipment, often under significant pressure or potentially containing hazardous fluids. Safety is paramount as the failure of such as a piece of equipment can be disastrous. Failure of a pressure vessel can cause significant damage and lead to loss of life. Aspect Pressure Vessel is used to ensure correct calculations are performed, according to recognized standards, to ensure that the design of the pressure vessel is safe.

Which industries are supported by the use of the software?

Aspect Pressure Vessel is used in many industries. Aspect Pressure Vessel can help ensure the containment is fit for purpose in any industry where a fluid is stored in a vessel.

What are the major features of the software?

Aspect Pressure Vessel features include:

- A graphical user interface allowing you to add model data while seeing the vessel elements as they are added
- Horizontal and vertical vessels consisting of cylinders, conical sections and body flanges, as well as elliptical, torispherical, hemispherical, conical and flat heads
- Saddle supports for horizontal vessels
- Leg and skirt support at any location for vertical vessels
- Extensive online help
- Deadweight calculation from vessel details such as nozzles, lugs, rings, trays, insulation, packing and lining
- Wall thickness calculations for internal and external pressure according to the rules of ASME Section VIII Divisions 1 and 2, PD 5500, EN-13445 and AD 2000.
- Stiffener ring evaluation for external pressure
- Wind and seismic data using the American Society of Civil Engineers (ASCE) standard, the Uniform Building Code (UBC), the National (Canadian) Building Code, India standards, as well as British, Mexican, Australian, Japanese and European standards
- A user-defined unit system
- A complete examination of vessel structural loads, combining the effects of pressure, dead weight and live loads in the empty, operating and hydrotest conditions
- Logic automatically increases wall thickness to satisfy pressure and structural loads requirements and introduces stiffener rings to address external pressure rules
- Structural load evaluation in terms of both tensile and compressive stress ratios to the allowable limits
- Detailed analysis of nozzles, flanges and base rings
- Material libraries for all four design standards. ASME material libraries include customary and metric tables, as Section II, Part D provides. Japanese material libraries are also included.
- Component libraries containing pipe diameter and wall thickness, ANSI B16.5 flange pressure vs. temperature charts, and section properties for AISC, British, Indian, Japanese, Korean, Australian and South African structural shapes
- Thorough and complete printed analysis reports, with definable headings on each page. Comments and additions may be inserted at any point in the output

Installation

What are the hardware and software requirements?

Refer to the link [Aspect Pressure Vessel software recommendations](#)

Does Aspect Pressure Vessel require a specific version of the Windows operating system?

Refer to the link [Compatibility Matrix](#)

Select product **Aspect Pressure Vessel** and select the version from the dropdown to view its requirements.

In what languages is the software available?

The program interface is available in English, French, Portuguese, Italian and Spanish. The Input echo report is available in these same languages, plus German.

Does Aspect Pressure Vessel work on Linux or Mac OS?

No.

Does Does Aspect Pressure Vessel work on 32 and 64-bit platforms?

64-bit Windows platforms only are supported.

Is it possible to install Aspect Pressure Vessel silently?

Yes, see the Aspect Pressure Vessel product installation instructions available online. <https://docs.hexagonppm.com>

Can Aspect Pressure Vessel be installed on several computers?

Aspect Pressure Vessel can be installed on as many computers/workstations as needed. Concurrent access and use of the software is controlled by Octave Licensing.

If only a single license of a Aspect Pressure Vessel product is bought, can this be used on more than one computer?

Yes, but only one license can be used at any one time.

Are Aspect Pressure Vessel licenses named user?

No, Aspect Pressure Vessel licenses can be used by any user, maximizing license use.

Can new and old versions of Aspect Pressure Vessel be run in parallel on the same computer?

Yes, and many customers do this. To switch between versions seamlessly, run the program as an administrator. It will help Windows point to the correct registry keys.

Is Aspect Pressure Vessel backward compatible?

No, analysis models can be opened only in the version of Aspect Pressure Vessel originally used to create them and later versions of the software.

Is Aspect Pressure Vessel forwards compatible?

Yes. Older files can be brought into the newest version of Aspect Pressure Vessel.

Can Aspect Pressure Vessel be installed on a virtualized system?

Yes, providing the system offers the required resources and meets the minimum software and hardware requirements Aspect Pressure Vessel needs to work efficiently.

Note: Octave does not officially support use of Aspect Pressure Vessel on virtualized systems.

Licensing

How is Aspect Pressure Vessel licensed?

All Octave products, Aspect Pressure Vessel, included, are licensed by Octave's cloud-based licensing solution – Octave Licensing

Octave Licensing Client and a Configuration Connection Information (.CCI) file are installed on each workstation that needs to access licenses in the cloud. The Configuration Connection Information (.CCI) file provides a handshake between the software product, Octave Licensing Client, and the cloud licensing server, enabling licenses to be requested and returned by software users when they start or exit the software product(s) they are using.

The first .CCI file issued to a new customer is usually named 'Site ID.CCI', e.g., 00123456.CCI. This file is generated for a site-based Keystore, i.e., a Keystore containing all licenses of all products purchased. If product licenses need to be deployed differently, for example, some of the total licenses for various products held by the customer need to be allocated for use on a specific project; then a project-based configuration must be created in the Licensing Portal.

Doing so results in additional keystores being created and two or more CCI files being used to access licenses in the cloud.

Consult online help for further information about Octave Licensing.

Refer to the link <https://docs.hexagonppm.com>

What license options exist for Aspect Pressure Vessel?

Aspect Pressure Vessel licenses are 'CX' type, meaning they can be used 24 hours per day / 7 days per week / 365 days per year. For further information about this and other license types supplied by Octave, refer to the End User License Agreement (EULA) included with the software installation media.

How are Aspect Pressure Vessel licenses administered?

Octave Licensing works in parallel with the Licensing Portal. This is an online self-service system that IT personnel/license administrators can use to manage the configuration and deployment of their Octave product licenses. Customers are encouraged to use Octave Licensing Portal to self-manage their licenses. Online help covering license administration is provided inside the portal

Is an Internet connection required to use Aspect Pressure Vessel?

Octave Licensing is cloud-based, so, an Internet connection is always needed to access licenses in the cloud when using a computer in the office connected to the company's network. The exception is when licenses are to be used remotely, away from the office. Licenses temporarily checked-out to a mobile computer will work without an Internet connection.

Can Aspect Pressure Vessel be used outside the office on a mobile computer?

Yes, providing Offline Availability has been set on the licenses in Licensing Portal. Offline Availability is what controls license check-out via the Octave Licensing Client. This Octave Licensing feature is configured inside the Licensing Portal.

When the Octave Licensing Client is installed, if Offline Availability has been configured, it's possible to use the Check-out option to check out one or more product licenses so that they can be used on a mobile computer. The licenses (product tags) available to check out are displayed on the 'Check-out' tab.

Note: Offline Availability is not set by default on site-based configurations; your IT administrator/license administrator must enable this before licenses can be checked out and used on mobile computers.

Check-in is used to return licenses to the cloud license server when the mobile computer is returned to the office and connected to the network when it has Internet access.

While checking out, licenses active on a roaming computer are unavailable for office-based users to use. They become available again when the licenses are checked in.

Can license usage be reported?

Yes, license usage reporting is available inside the Licensing Portal. Reporting enables IT administrators/ license administrators to understand how your organization is using licenses. Having this visibility of how licenses are used enables IT administrators/ license administrators to decide who is using the licenses, check peak license usage, understand how to optimize the use of licenses, identify if additional licenses are required, etc.

Purchasing

What purchase options are available?

Perpetual licenses with or without maintenance, or lease licenses (minimum 3-month term) including maintenance, can be bought.

How is Aspect Pressure Vessel bought?

Aspect Pressure Vessel may be bought through our reseller network and direct from Octave. To find your local Octave sales office or reseller, visit hexagon.com/company/global-presence#

What is Octave Global Network Dealers?

Octave Global Network Dealers are the Octave Standard-bearer(s) around the world. They are the local face of Octave. They provide product sales and support in your local time zone and language. These dealers have certified instructors and consultation specialists to help clients define and meet their requirements at all levels. The worldwide network dealers work together to ensure that Octave's multinational clients have access to the right products, training, and consultation anywhere around the globe.

What is a Octave Authorized Reseller?

Authorized Resellers are the local Octave software experts who provide local sales and support to clients in their respective regions.

Is a free evaluation available for Aspect Pressure Vessel?

For a free evaluation, please contact us [here](#).

Can a live presentation be given by the local reseller or by Octave?

Yes, Octave and its resellers have personnel that provides live product presentations that answer simple to complex technical questions and understand project workflow-specific questions. For more information, please contact your local [distributor](#) or [contact Octave](#).

Can an online web demo be provided?

Yes, online web demonstrations can be arranged. Contact Octave or your local reseller for more information.

Training

Is training available?

Customers receive access to free Aspect Pipe Stress training content via Octave University.

Are example models provided with Aspect Pressure Vessel?

Yes – those can be accessed from the File tab, then click on the "Examples" folder.

Maintenance and Support

What does software maintenance provide?

Customers receive access to free Aspect Pressure Vessel training content via Octave Institute.

How do users get access to Octave Institute?

Users can request access [here](#).

Does maintenance include training?

No, training is not part of maintenance.

How do users request technical support?

Maintenance customers receive technical support via Octave's support system - [Octave Smart Community \(intergraph.com\)](#)

How do users get access to Octave Community?

Users can request access [here](#).

What documentation is provided with Aspect Pressure Vessel?

Comprehensive product documentation for all Octave products, Aspect Pressure Vessel included, is supplied online.

<https://docs.hexagonppm.com>

Can users request enhancements be made to Aspect Pressure Vessel?

Yes, everyone may submit product enhancement requests. Octave interacts with and listens to customers, then responds by developing new solutions and enhancing current products to address customers' needs in ways that improve their work processes. This customer-centric focus helps us grow our product line to serve an ever-broader base of users and applications, which further increases

opportunities for our clients to enjoy the benefits of interdisciplinary collaboration with other departments and organizations.

To submit a new feature/function/capability request, login to Octave Community, click on the IDEAS tile, then submit your idea.

How are the enhancement requests prioritized?

Enhancement requests are evaluated and prioritized based on a given industry and market. Octave prioritizes requests based on the benefit delivered to the highest number of our users.

Q.A./Certification

Is the software certified, and how?

The program is internally certified through thorough release criteria being met before the product is released. Quality Assurance procedures are aligned with ISO 9001:2015.

The Quality Assurance Manual, which shows the breadth of testing with peer-reviewed, published benchmarks against the Aspect Pressure Vessel calculations, is provided with Aspect Pressure Vessel. Any discrepancies are explained below the table. This can be accessed from within Aspect Pressure Vessel by going to the Help tab > View > QA Manual.

Is a Q.A. certificate provided with the software?

Yes. From the Help tab, go to View > QA Certificate.

Key Functionality

Design Codes

What are vessel design codes included in Aspect Pressure Vessel?

ASME VIII Division 1, ASME VIII Division 2 (Class 1 and Class 2), EN-13445, PD 5500, EN-1591, AD 2000

What are heat exchanger design codes included in Aspect Pressure Vessel?

ASME UHX, TEMA, EN-13445, PD5500

Is it possible to use different / switch versions of design codes?

Yes. For checking old vessels, different versions of the ASME design code can be selected, as can different versions of the ASME Material database. Design codes can be switched easily from the dropdown design code selection. Materials will need to be reselected for a particular design code.

What Wind and Seismic Codes are included?

There are several wind and seismic codes included with Aspect Pressure Vessel. For the most up-to-date list please follow the links:

Wind Codes: <https://docs.hexagonali.com/r/en-US/PV-Elite-Help-V25/Version-25/1267225>

Seismic Codes: <https://docs.hexagonali.com/r/en-US/PV-Elite-Help-V25/Version-25/1267227>

Does Aspect Pressure Vessel include the AD 2000 Code?

Yes, Aspect Pressure Vessel now supports the AD 2000 German pressure vessel standard.

Modeling

What are the recommended steps to building a heat exchanger?

Building a heat exchanger model requires specific data inputs and heat exchanger-specific load cases. The

user must be aware of these requirements. A knowledge base article is available, which discusses these in more detail. Please contact Octave and request the "Aspect Pressure Vessel: Designing a Heat Exchanger – the Pitfalls" knowledge base article.

Also, check the examples available at Octave University.

What standards apply to heat exchangers?

ASME, EN13445 and TEMA.

Does Aspect Pressure Vessel need an external database (Access, SQL, Oracle) to work?

No. Aspect Pressure Vessel uses its file format, which does not require any additional databases.

Can a user create their own units file?

Yes. Every unit (length, temperature, pressure etc.) can be adjusted to the users' requirements.

Does Aspect Pressure Vessel support the creation of customized materials?

Yes. Materials can be edited or added and appear at the material database's bottom. Does Aspect Pressure Vessel support the modelling of pipework connected to equipment nozzles? Yes. Connected pipework and the effects of that pipework can be included.

Can TEE elements that are found in ASME code be included in a model?

No.

Does Aspect Pressure Vessel support the modeling of equipment with clamped connections as used in the Pharmaceutical and Food Beverage industries?

Not at present, but clamped connections are planned to be included in a future release.

Can rectangular vessels be modeled and analyzed in Aspect Pressure Vessel?

Yes. The Aspect Pressure Vessel module CodeCalc includes ASME Appendix 13 for rectangular vessels.

Design and analysis of rectangular vessels for all supported design codes will be included in a future release.

Can rectangular or oval openings be created/modeled?

Not at present, but these are planned to be included in a future release.

Can rectangular vessels be modeled and analyzed in Aspect Pressure Vessel?

Yes. Aspect Pressure Vessel now supports rectangular vessels for all supported codes.

Analysis

What loads can be applied to the analysis model?

Temperature, Pressure, Wind Loading, Seismic Loading, Weight, additional forces/moments, Vortex Shedding.

Are trunnions considered in vessel lift calculations?

Yes, the calculation of vessel lifting can include trunnions.

Does the software support creation of customized load cases?

Yes. Load Cases can be configured by creating combinations of the loads.

Does Aspect Pressure Vessel perform local stress analysis on nozzles according to EN 13445?

Yes.

Does Aspect Pressure Vessel perform fatigue analysis according to EN 13445?

Yes. EN-13445 Section 17 Fatigue calculations are included.

Does Aspect Pressure Vessel perform structural verification of vertical vessels subject to wind and earthquake according to EN 13445 and ASME VIII Div. 1?

Yes. Wind and seismic codes are available as listed above, plus users can also add user-defined loads such as Pressure vs. Elevation for wind and Response Spectrum or g-loads for seismic.

Does Aspect Pressure Vessel perform Transportation analysis?

Yes.

Does the software incorporate data for flanges according to ASME and EN standards?

Yes, both ASME and EN standard flanges are available.

Is it possible to perform analysis according to API 579?

Yes, Aspect Pressure Vessel includes API 579 'Fitness for Service' capabilities. Aspect Pressure Vessel has Part 4 (General Metal Loss), Part 5 (Local thinning/ Groove Like Flaw), and Part 6 (Pitting). Levels 1 and 2 are available in Aspect Pressure Vessel.

Integration and Interoperability

Does the software integrate with Forte 3DWorx?

Yes. Aspect Pressure Vessel has a bi-directional interface with Forte 3DWorx (formerly CADWorx). Forte 3DWorx can both read and write a native Aspect Pressure Vessel file.

Does Aspect Pressure Vessel integrate with Aspect Pipe Stress?

Yes, piping loads from Aspect Pipe Stress (formerly CAESAR II) can be imported so that they are included in the analysis.

Does the software integrate with Forte 3D?

Yes. Aspect Pressure Vessel can export a VUE file, which can be processed with Smart Interop Publisher to create a ZVF file that can be referenced into the main Forte 3D (formerly Smart 3D) model.

Can the analysis model be exported to 3D CAD format e.g., .dwg file?

Aspect Pressure Vessel can export the vessel to a STEP file for 3D CAD integration. Aspect Pressure Vessel can also create a .dxf file.

Which file formats can be imported into the software?

Aspect Pressure Vessel can import HTRI data for heat exchangers to populate the information needed for tubesheet analysis.

Does the software integrate with BricsCAD?

Yes, a bi-directional interface is provided via Forte 3DWorx running on BricsCAD.

Does the software integrate with solid modelers, like SolidWorks and Inventor?

Yes. Freely downloadable plugins are available from Octave Community, allowing a Aspect Pressure Vessel file to be imported and further developed to support the production of 2D deliverables needed for vessel fabrication.

Deliverables

What outputs does the software produce?

Aspect Pressure Vessel can generate detailed reports, including equations used in the calculations. These reports can be exported to Microsoft Word or PDF format.

Are reports customizable?

No, the reports are standard.

Is it possible to generate a fabrication drawing directly from Aspect Pressure Vessel?

No. For Fabrication drawings, the vessel or heat exchanger model can be imported into Forte 3DWorx running on BricsCAD Mechanical, or the free plugins for Solidworks/Inventor can be used to import there. Once the import is complete, the functions of the 3D Solid Modeler can be used to generate fabrication drawings based on the analysis model.

Software Upgrades

How often is a new version of Aspect Pressure Vessel released?

Octave supplies 4 types of software release

Release Type	Numbering convention	Request from your local Octave sales office	Download from ALI Smart Community
Major	XX.XX.XX.XXXX	Yes	No
Minor	XX.XX.XX.XXXX	Yes	No
Service Pack	XX.XX.XX.XXXX	No	Yes
Hotfix	XX.XX.XX.XXXX	No	Yes

A new major version is typically released every 12 months.

1-2 service packs are typically supplied for each major product release, spaced roughly 6-8 months apart.

Who has access to the latest Aspect Pressure Vessel upgrades?

All users with current maintenance contracts are entitled to use the latest software upgrades.

- US customers can open a service case against product=upgrade in Octave Community.
- International customers should contact their local order administrator or Octave sales office.

How are users informed that an Aspect Pressure Vessel upgrade is available?

If 'Subscriptions' for each product used are configured inside Octave Community, maintenance customers are automatically notified whenever a major, minor, service pack or hotfix version is released.

How are Aspect Pressure Vessel upgrades supplied?

Octave operates a "pull" system for the supply of software upgrades; that is, major/minor upgrades are not shipped automatically to maintenance customers when the software is released; customers need to request upgrades themselves when they need them e.g., a release has a fix/enhancement that the customer has been waiting for.

Online Resources

How can customers keep informed of up-to-date product-related information?

Sign up for specific solution updates via the [Subscription Management Center](#) to stay updated on the latest offerings, news, events, etc.

Where can customers find useful information and other resources related to Aspect Pressure Vessel?

Visit the [Resource Center](#), then filter resources using the 'Type' drop-down.

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

©2026 Intergraph Corporation and/or its affiliates. All rights reserved.