



PRODUCT SHEET

Octave Forte 3DWorx

Flexible and scalable, DWG file-based plant design



Capabilities

Intelligent 3D piping design

Specification-driven design

Efficient specification management

Dynamic pipe supports

Detailed bill of materials

Equipment library administration

Ducting/cable trays

Collision checking

Isogen isometrics

Live database links

Intelligent process diagrams

Model/P&ID synchronization

Links to stress analysis

As-builts from point clouds

Octave Forte 3DWorx (formerly CADWorx Plant Professional) enables efficient plant design for both greenfield and brownfield projects by providing a complete range of tools for creating intelligent 3D plant designs with DWG-based deliverables. The solution provides unparalleled flexibility and productivity that has helped thousands of corporations create cost-effective project deliverables. Leverage point cloud data in combination with easy-to-use Forte 3DWorx to execute brownfield projects with greater accuracy than gathering field data through more manual processes.

Modules that are included in the Forte 3DWorx Design Suite bundle:

- **Forte 3DWorx**
 - Equipment in Forte 3DWorx
- **Forte ReviewWorx** (formerly CADWorx Design Review Professional)
- **Forte StructureWorx** (formerly CADWorx Structure)
- **Facets P&IDWorx** (formerly CADWorx P&ID Professional)

Process and instrumentation diagrams

Forte P&IDWorx software provides productivity tools to create intelligent process diagrams. With Forte P&IDWorx, Forte 3DWorx plant models can be linked for change management control, making your 3D models synchronized with your piping and instrumentation diagrams (P&IDs) and avoiding costly field mistakes.

Software automation increases productivity

The auto-routing capabilities of Forte 3DWorx allows piping designers to create 3D piping models quickly, accurately and intuitively. The software allows the designer to focus on design tasks by generating 3D models automatically.

Configurable Piping Rules assist designers during their workflow by automating piping component placement and ensure that project standards are adhered to which improves accuracy and yields cost savings during project execution.

Automatic isometrics

Isometrics drawings can be produced from piping layouts or project databases. Forte 3DWorx includes Forte Isogen for automated isometric production.

Piping specifications

Ready-to-use specifications in metric and imperial formats are included. The Specification Editor allows the creation of parametrically-driven piping specifications. Import utilities for Forte Reference Data (formerly Smart Reference Data) provide the administrator with dozens of ready to use international specifications.

Database links

Users can create accurate, user-configurable bills of material in the most popular database formats. The optional live database links in Forte 3DWorx provide real-time design status and valuable information backup to project administrators who have a desire to improve the accuracy and efficiency of their designers.

Equipment modeling

Powerful equipment modeling capabilities are included to provide the most complete plant models. Designers can link to Aspect Pressure Vessel (formerly PV Elite) to import equipment into their Forte 3DWorx models or jump start their Aspect Pressure Vessel designs by exporting from Forte 3DWorx. Administrators can build their own libraries of equipment to suit the needs of their industry and projects.

Walkthrough capabilities

Forte ReviewWorx is included for model visualization and 3D design coordination with its powerful collaboration utilities and markup tools.

Collision checking

Clash detection in Forte 3DWorx helps identify conflicts in the current model and against externally referenced files. Reserve space for installation and usability of components so that you can catch clashes in the 3D model environment, not in the field. Options enable clashes to be reported at any time during the design process.

Ducting and cable trays

HVAC ducting and cable tray routines are included. Square, rectangular, round and oval shapes, with transitions, are available.

Change management

Automated and intuitive routines make changing piping sizes and specifications quick and easy.

Integration with analysis software

Forte 3DWorx includes Forte StructureWorx for effective structural design and links to Aspect Pipe Stress (formerly CAESAR II) for pipe stress analysis, Aspect Pressure Vessel for equipment analysis and Aspect Structure (formerly GT STRUDL) for structural analysis. This allows the reuse of the 3D model components for a time-saving and accuracy-improving workflow solution.

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.

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