



PRODUCT SHEET

Octave Forte 3D

Changing how projects are engineered and designed



Today's global, fast-track projects demand tight control over cost and schedule, often across multiple design centers globally. For engineering, procurement and construction (EPC) companies, that means protecting intellectual property while preserving "best practice" design information for reuse.

Owner operators face a similar rhythm. They rely on both in-house and off-site resources for greenfield, revamp and maintenance projects. They also require the ability to standardize modules and maintain accurate as-built models for ongoing operations.

Forte 3D (formerly Intergraph Smart 3D) offers industry-leading capabilities that enable projects to meet cost and schedule deadlines with the highest quality possible. Its integrated project and as-built capabilities break through barriers imposed by traditional technologies to support a truly iterative design environment. The result? Sharper decisions, stronger execution and a clear competitive edge.

Solution

Forte 3D connects engineering design teams around shared specifications and provide critical material definitions downstream. At the project level, it brings clarity to discrepancies and approvals to eliminate out-of-sequence work and keep the project on track.

It shortens schedules by streamlining design processes for a wide scope of disciplines and workflows.

The solution also facilitates global, concurrent engineering, allowing contractors to manage and execute projects worldwide. It captures new and existing engineering knowledge so that it can be saved and reused.

As a fundamental component of SmartPlant Enterprise, Forte 3D delivers modeling capabilities needed to design facilities and maintain accurate 3D as-built representations. With customizable automation and a model reuse approach, its built to handle projects of any size and complexity.

Unique sustaining engineering capability

When integrated with the broader SmartPlant Enterprise, Forte 3D elevates visibility and collaboration across the project lifecycle. Stakeholders, from project managers to suppliers, gain clearer view of changes in both configuration and data. That clarity allows for better decisions and tighter control over how data flows downstream.

Full laser scan support

Forte 3D uses CloudWorx directly into the modeling environment. Users can manipulate, measure and work with laser scans without switching tools. Octave has reduced the administrative overhead tied to point cloud data, so teams can stay focused on design and not data management.

Enforced design rules increase data quality and ensure design integrity

Forte 3D enforces design rules to maintain accuracy and consistency. Forte 3D reduces design errors, minimizes engineering changes and cuts down on rework.

Continuous monitoring highlights the impact of changes in real time, ensuring all stakeholders work from the most current design state. Downstream updates to drawings are tracked automatically, so what reaches procurement and the field is always aligned and up to date.

Design reuse for a competitive edge

Captured design knowledge becomes a strategic asset. Forte 3D preserves and structures that knowledge so it can be reused across future projects to accelerate timelines and reduce costs. It creates continuity between projects while allowing room for innovation. Learn once and apply at scale.

Global, concurrent engineering capability enhances project execution

Forte 3D lets global teams work as one. Project databases can be replicated globally to facilitate the sharing of work or to transfer work to remote locations. All sites are automatically updated with the latest design changes in real-time.

Project transparency maximizes communication to minimize delays

With Forte 3D, in combination with SmartPlant Foundation or Octave InConcert Core, design reviews become more dynamic and collaborative from the earliest stage of a project. Feedback comes sooner. Changes cost less and alignment happens before delays take hold.



Multi-discipline design for better decisions

Forte 3D brings all disciplines into a single, visible environment. Teams can review, adjust and validate designs early and often. That visibility leads to faster decisions, more informed trade-offs and better outcomes across both and operations.

Better training and operations for increased safety

An accurate 3D model early in the process supports earlier safety planning and operator training when changes prove cost-effective. It also improves constructibility reviews and modularization options in design. This helps teams better plan downstream activities ranging from fabrication to transportation to constructibility. The result? Stronger cost control, tighter schedules and safer execution.

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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