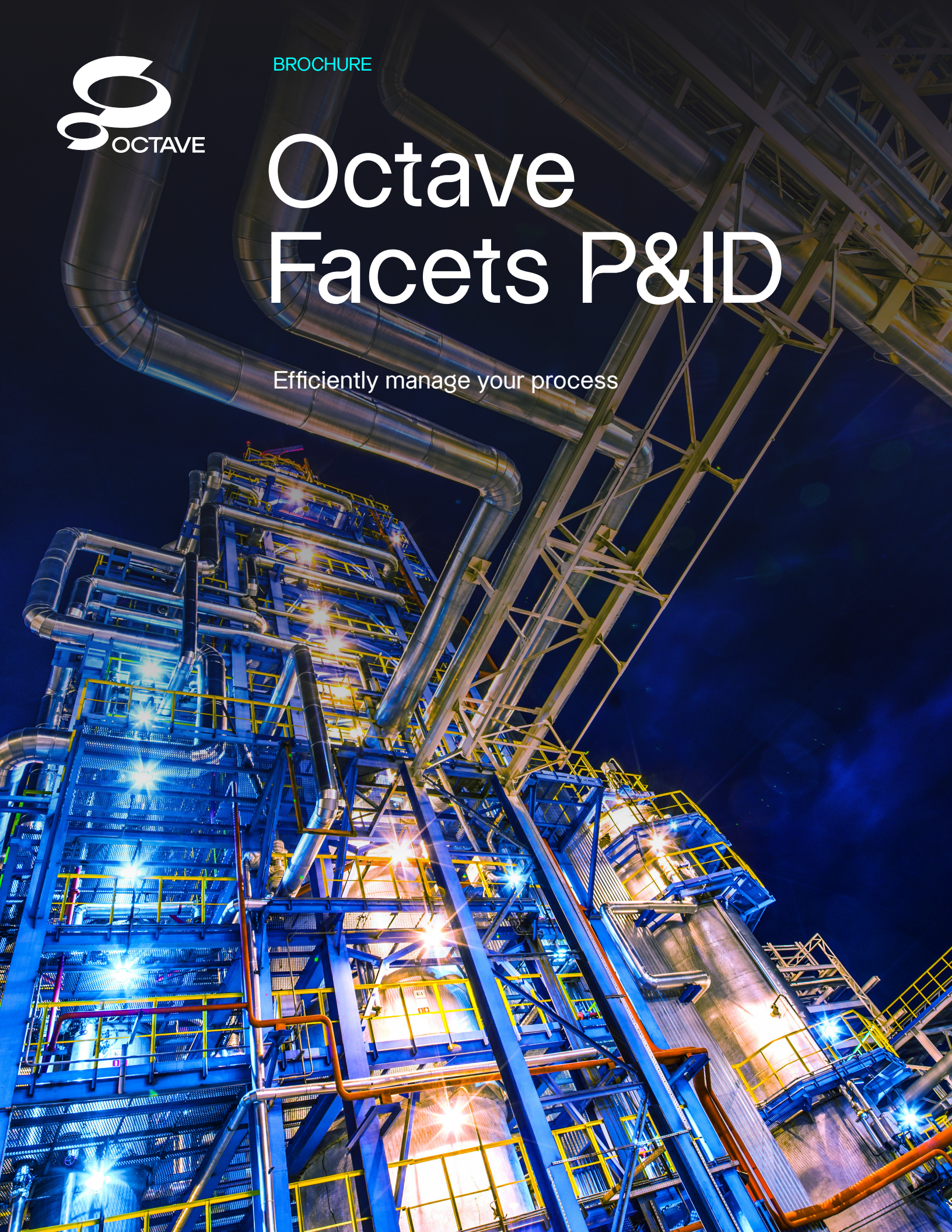
BROCHURE

Octave Facets P&ID

Efficiently manage your process



Facets

Facets P&ID

Develop and manage your P&IDs with Facets P&ID. Take advantage of a rules engine for data consistency, data reuse, change management and deliverables to support downstream tasks and integration.

Octave Facets Electrical
Octave Facets Instrumentation
Octave Forte Isometrics
Smart Engineering Integrity
Octave Facets P&ID
Octave Facets P&ID Engineer
Octave Facets P&ID Design Validation
SmartSketch

Task-based approach

It really does not matter which task is performed. In all cases, focus is the key to best results. Connecting these tasks in a smart way will result in better deliverables that will support your facility's engineering, construction and operations. All Octave Facets solutions are moving to a task-based approach, and this includes Facets P&ID. The solution offers tools like the Engineering Data Editor, system editing and more.

Display sets also facilitate the task-based approach. Based on any criteria, you can filter the P&ID view for tasks such as commissioning, inspection and checking certain systems. Facets P&ID also offers the as-built mode so that owners and EPCs can carve out a part of the plant on which to perform work, and later merge that back to create the as-built of the new situation for the operational team.

Facets P&ID Engineer focuses on your engineering tasks. The solution aims on adding and modifying data in a spreadsheet- like environment. Plus, all the rules are based on the data entered. This helps to break down silos, enabling engineers from other disciplines to also use this environment. For example, the control system engineer can add instrument tags in a single source, with all the rule checks, making it directly available for others.

The Facets solution suite matrix

Solution	Complimentary applications				
Facets P&ID*	Process engineer	Engineer	Engineering integrity	Design validation	Octave Aspect
Facets Electrical			Engineering integrity		Octave Aspect
Facets Instrumentation	External editor	Operational excellence	Engineering integrity		Octave Aspect

*ISO 15926 integrated capability

All can export to Forte 3D (formerly Smart 3D) and SmartPlant Enterprise for owner operators. An interface to PDMS is also available.

Improving quality and productivity

The latest version of the solution offers significant changes to boost data quality and productivity. With the integration of Octave's digital backbone, Facets P&ID connects to all project data and bidirectionally enables faster design iterations and closer project collaboration for an overall more informed, productive team.

- Engineering Data Editor reports honor display-applied auto filters to manage the desired display of the resulting reports.
- Automated validation when a user replaces symbols in the drawing.
- AutoCAD® and MicroStation export-related improvements.
- Selected assembly from a drawing can be saved to AutoCAD or MicroStation.
- Save As from within Facets P&ID translates using Display Set symbology. Color filters are defined to AutoCAD.
- Save As from Drawing Manager enables the use of Display Set layers and symbology from last session.

Plant group to pipe run relationships shared via integration points allow other applications to leverage the same information throughout the engineering process.

Bridging the gaps

Data sharing is the cornerstone of productivity and data quality drivers. Engineering is a team sport and communication is essential for a winning game.

Facets P&ID offers several options to facilitate communication with other disciplines. It is the baseline for the facility, so many look for data from the solution to drive their tasks and decision-making.

The application programming interface (API) enables you to link to any third-party tool, such as hydraulic analysis or pipe sizing. The P&ID is exported in the ISO 15926 format and can communicate with other tools that read that format. Facets P&ID is a part of Octave's digital projects, meaning it shares, in near real time, object-level information as well as the defined sheets to Octave's digital backbone for improved transparency and collaboration with other team disciplines and project team members.

Final data can be shared with JV partners on a project using connected or disconnected work-sharing to protect process IP.

Deployment

Facets P&ID is designed for the process, power and marine industries and by the engineers and designers in those industries.

The solution has a proven track record over many years, successfully supporting both large and small-scale projects. Facets P&ID offers flexibility in deployment, including options for a single office environment, worksharing and various cloud hosting services.

Project execution, operation and maintenance all focus on risk management. Plant owners are looking at CAPEX budgets, schedule and plant uptimes. Facets P&ID fits well in this scenario to manage and reduce risks. Making sure the data is accurate from early on and available to stakeholders at any time will yield the measurable business benefits that engineering and operations need.

Accelerated learning curves

Today's users expect a modern look and feel. But more importantly, an interactive solution must be easily understood by the engineers and designers using the software. This helps users to work as efficiently as possible without the confusion of too many options or complicated, IT-type terminology.

The latest version of Facets P&ID harmonizes the user experience across the different Octave Facets solutions.

Another aspect of user interaction can be seen in Facets P&ID Automation. This powerful tool enables you to automatically create designs based on numerical inputs. For example, this has been done with power plant designs which were based on standard design components. The complete P&ID set was created overnight!

Value proposition

Gain value across the workflow. Facets P&ID fits your workflow from front-end design all the way to operations and maintenance. Engineering is normally a process beginning with assumptions and ideas and ending in final and as-built design. Facets P&ID is designed to support this real-world scenario.

Tasks	Labor Hours	
	Without Facets P&ID*	With Facets P&ID*
Component take-off (1x)	40	1
Validation/checking (1x)	80	2
Making updates/changes	35	15
Design reuse (automate)	100	20
Change management	50	5
Design reviews	30	20
Total project	**335**	**63**

80% savings

Changes to the design basis can be quickly implemented in the project. Facets P&ID offers change control, giving you visual and report comparisons of different versions of a P&ID. With Facets P&ID, changes can also be compared to the Forte 3D model at any point in the project schedule. There is no need to wait until the final P&ID is done.

With Facets P&ID, industrial companies can leverage significant and measurable business benefits with reduced hours as well as enhanced productivity.

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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