PlantStream
2025 Main Features

PlantStream AIDE

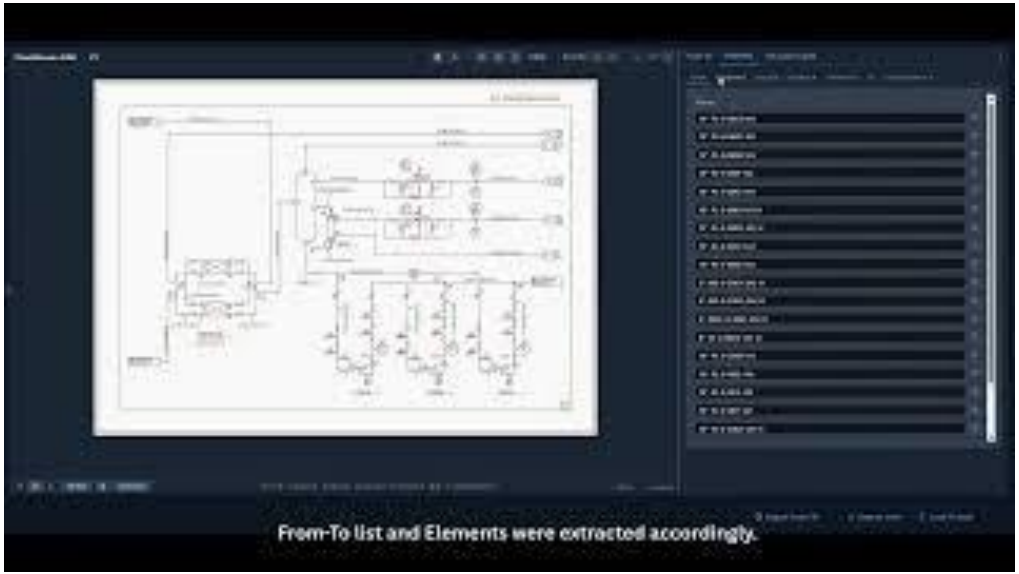
P&ID AI Data Extractor

Accelerate the Workflow from P&ID to 3D Modeling with AI
AI Supports the Entire Process from From-To List Creation to 3D Model Design

By simply uploading a P&ID, the AI recognizes lines, nozzles, and equipment, and instantly generates a From-To List.
This tool reduces the workload of creating From-To Lists by approximately 50%, significantly accelerating design speed.

Auto From to List Creation

Simply upload your piping diagrams, and our AI will automatically generate a connection list (From-To List). This significantly streamlines the initial design process and improves overall work accuracy.



https://youtu.be/ObvCD6xl3E4

Current Workflow

P&ID

Smart P&ID

AVEVA™ P&ID

AUTODESK AutoCAD Plant 3D

CSV

From-To List
piping

Cable list
electrical/control

Equipment list

Manual conversion work required!

Import

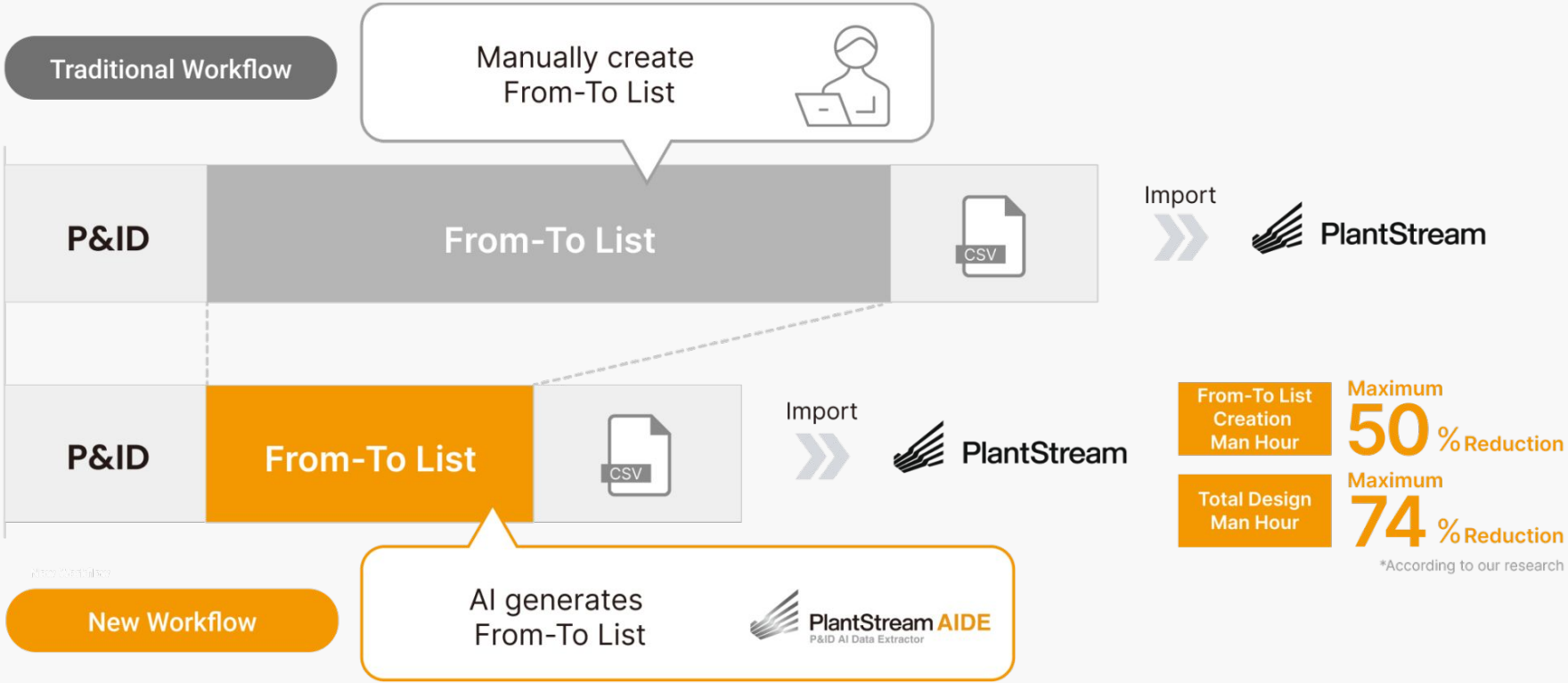
PlantStream

With AI:
Faster design process
Reduce human errors

Workflow with AI

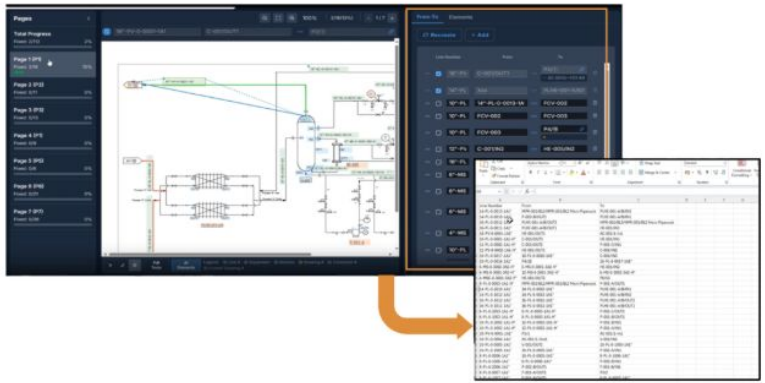
P&ID Import → Run with AI → Line, Nozzle, Equipment Recognition → Check → From To List → PlantStream Import → Auto Routing

PlantStream AIDE



Eliminate Time-Consuming Manual Work with AI

AI extracts piping connection data and enables one-click generation of From-To Lists that can be imported directly into PlantStream.



- AI analyzes P&ID diagrams and extracts line, nozzle, and equipment IDs
- Misidentified items can be easily reviewed and corrected with a single click
- Automatically generates From-To Lists for direct import into PlantStream
- Batch auto-piping design using the AI-generated From-To List and auto-routing feature
- Streamlines identification of changes when P&ID diagrams are updated

Implementation Benefits

Reduce Man Hour

by up to 74%

Significantly Reduce

Human Error

Reflect P&ID Changes Instantly

in the 3D Model

PlantStream - 2025 Main Features

PlantStream

Piping Layer

This feature enhances routing accuracy within equipment structures by introducing a proprietary routing algorithm, distinct from rack-based methods. It enables more precise and flexible piping design around complex equipment, allowing route selections that align with the designer’s intent and improving the efficiency of layout planning.

T-Post

It is now possible to create T-posts as a new structure. This adds to the types of structures that have been available so far, making it possible to model more flexibly.

Multilayer Pipe Shaft

Vertical pipe shafts can now be created on multiple layers. The route assist accuracy of the section across the pipe rack has been improved accordingly.

Mirror Function

When duplicating equipment, it is now possible to duplicate it in a position that mirrors the line symmetry. This allows for more flexibility in creating plot plans.

The Integration between PlantStream and AutoCAD Plant3D

Exporting P&ID created with AutoCAD to PlantStream

By creating a PlantStream From to List from the P&ID created with AutoCAD, it is possible to import data from AutoCAD Plant3D to PlantStream easily, thus achieving advanced piping design.

Exporting models created with PlantStream to Navisworks

The model created with PlantStream can be exported to the Autodesk NavisWorks in RVM or DWG format.

Importing NavisWorks FBX files into PlantStream

By importing Navisworks FBX files into PlantStream, it is possible to utilize PlantStream for retrofitting existing plants.
※Only geometry data can be imported for existing modifications.

Exporting model created with PlantStream to AutoCAD Plant3D

With the addition of this feature, it will be possible to start the design process in PlantStream with a 3D-centric basic design, and then seamlessly integrate that data with AutoCAD Plant3D. This will enable the use of the 3D piping models created in PlantStream for detailed design directly within AutoCAD Plant3D.

PlantStream - 2025 Main Features

PlantStream

Saved View

The viewpoint position, orientation, scale, and clipping settings can now be saved and applied. It makes easier to manage and navigate complex 3D scenes and when you need to quickly return to a specific view configuration.

Nozzle Pattern - Horizontal Vessels

This new feature offers enhanced control over the piping layout, allowing for more precise and efficient designs. By adjusting custom parameters in the Properties tab, users can fine-tune nozzle positions to better suit specific project requirements.

Nozzle Support for FBX Equipment

You can now add nozzles to FBX elements imported as “Equipment” in PlantStream. Once imported, the FBX model is automatically organized under the Equipment hierarchy, enabling better integration with your piping layout.

Single Rack Pro

Function designed to support more flexible pipe rack modeling suitable for detailed engineering phases such as FEED and EPC. This marks the first step toward expanding PlantStream’s capabilities beyond early-phase layout into more advanced and customizable design workflows.

DWG import

This feature enables the direct import of DWG data, allowing existing design files such as Plot Plans to be utilized for more accurate and efficient modeling. Compared to paper-based workflows or data conversion processes, it significantly improves productivity in the early design phase.

Addition of SUS Piping Material

In addition to conventional CS materials, SUS materials have been added to the default database. This enhancement allows a wider range of materials to be handled within 3D models, further improving the accuracy of piping weight calculations. It also increases the reliability of material-based design studies and quantity simulations, enabling more practical evaluations from the early design stage.

PlantStream
2026 Key New Features

PlantStream - 2026 New Features

PlantStream

Automatic Valve Placement

Automatically optimizes valve placement along piping routes. This not only streamlines design work but also produces layouts that are closer to the designer’s intent and more realistic for practical use. Manual adjustments are significantly reduced, enabling highly complete designs even in the early stages.

Automatic Support Design

Automatically calculates support positions based on piping routes to generate accurate quantities and weights of supports. The results can also be exported to detailed design CAD software, greatly improving the design workflow with constructability in mind. From design to quantity control, the entire process is seamlessly integrated, contributing directly to shorter schedules and reduced costs.

Slope Piping Design

Supports routing design for sloped piping, particularly useful for flare line design by enabling evaluation of pipe rack heights and promoting more rational plant-wide layouts. It excels in gravity flow and drainage design, making optimized piping—previously difficult—much easier to achieve.

Equipment Spacing

Provides automated spacing of major equipment layouts with consideration for maintenance and safety standards. This allows for practical layout studies that account for field operations. Designers can quickly validate arrangements that balance both safety and efficiency.

PlantStream - 2026 New Features

PlantStream

NWD Import

Enables importing of Navisworks (NWD) files, ensuring smooth integration with external design data. It also improves efficiency in designing steam tracing and small-bore piping required during EPC projects. By facilitating data consolidation across different design environments, it enhances overall project consistency.

Open API / Command-Line Batch Processing

With the release of an open API, PlantStream can now integrate seamlessly with external systems such as layout planning tools, cost estimating tools, and analysis platforms. Customization for company-specific workflows is greatly enhanced, driving further automation and efficiency. This provides a flexible foundation to support unique workflows and digital transformation initiatives.

PlantStream Help Center Renewal

The renewed Help Center introduces an AI-powered assistant that not only answers user questions directly but also suggests improvements for auto-routing and provides solutions for error resolution. By leveraging an always up-to-date knowledge base, it enhances support quality, reduces learning costs, and boosts overall team productivity.