

August 7, 2025  
Arent Inc.

## [New Product Release] Introducing a New AI Tool for the Plant Industry “PlantStream P&ID AI Data Extractor”

Automatically Generates Piping Connection Lists from P&ID Using AI  
Early Trial Access Now Available via PlantStream, Full Launch Planned for This Winter

Arent Inc. (Headquarters: Minato-ku, Tokyo; CEO, President and Representative Director: Hiroki Kamobayashi; TSE Growth: 5254) is pleased to announce the release of a new AI-powered tool designed to streamline early-stage plant design: *PlantStream P&ID AI Data Extractor* (hereinafter, **PlantStream AIDE**). Early access to the tool trial is now available, with a full-scale launch scheduled for this winter.

This solution enables users to upload a piping and instrumentation diagram (P&ID), and the AI automatically extracts and organizes piping connection information (From-To List). This dramatically reduces the time spent on manual data organization—cutting work time by approximately 50%.

A promotional graphic for PlantStream AIDE. The background is dark with industrial piping. At the top left is the Arent logo. In the center, the text 'PlantStream AIDE' is displayed in white and orange, with 'P&ID AI Data Extractor' below it. To the right is a gold medal icon with 'AI' and '2025'. A large orange banner across the middle contains the text 'Accelerate the Workflow from P&ID to 3D Modeling with AI'. Below this, a white box states 'AI Supports the Entire Process from From-To List Creation to 3D Model Design'. Another white box highlights 'Reduces Design Man-Hours with AI by 74%\*'. At the bottom, it says 'Say Goodbye to Manual Work. PlantStream AIDE Revolutionizes the Workflow.' and '★ According to our research'. On the right, there are images of a P&ID diagram and a data table.

**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

**Reduces Design Man-Hours with AI by 74%\***

Say Goodbye to Manual Work.  
PlantStream AIDE Revolutionizes the Workflow.

★ According to our research

## ■ Background and Strategic Positioning

Arent is executing an "Application Integrated Platform Strategy," in which highly specialized applications for architecture, civil engineering, and plant sectors are developed in-house or acquired via M&A, and seamlessly integrated to address industry-specific challenges. These solutions enhance productivity at the operational level.

PlantStream AIDE is a key component of this strategy. It streamlines the creation of piping connection data during the early phase of plant design using AI, significantly improving design speed. The tool is also expected to integrate with *PlantStream®*, Arent's flagship 3D CAD solution for plant piping design, as part of a broader ecosystem to support plant engineering workflows.

## ■ Product Overview

- **Product Name:** PlantStream P&ID AI Data Extractor
- **Use Case:** Extracting piping connection data and generating From-To Lists from P&ID drawings
- **Target Users:** Companies involved in plant and piping design
- **Early Trial Access Release:** Early August 2025
- **Official Launch:** Winter 2025 (Planned)
- **Delivery Model:** Cloud-based SaaS (Planned)
- **Pricing:** To be determined

## ■ Challenges Addressed & Key Benefits

Creating a From-To List by manually interpreting P&ID drawings is time-consuming, labor-intensive, and prone to human error. This task often depends on individual expertise and can become a bottleneck in the design process.

With PlantStream AIDE, users simply upload a P&ID, and the AI instantly analyzes and outputs the connection list. Even if misrecognitions occur, corrections can easily be made via drag-and-drop within the interface—no advanced CAD or piping knowledge required.

### ▼ Expected Benefits:

- **Reduces task time by approximately 50%**
- **Minimizes errors and omissions in connection data**
- **Achieves a 93% reduction in man-hours from From-To list generation to 3D model design**

### ■ Product Demo Video

▼ Watch how the AI extracts From-To List from a P&ID diagram:

<https://youtu.be/7RfQmDj8ajs>

### ■ Future Development Ideas

The following features are scheduled for sequential release to further enhance operational efficiency:

- **Automated Recognition of Valves and Equipment**  
AI automatically identifies valves and equipment on drawings, significantly reducing manual workload.
- **Automated Extraction of Material Quantities**  
Material quantities required for construction are automatically extracted from drawings to support estimation processes.
- **API Integration with Other Tools (e.g., PlantStream®)**  
Integration with external design and management tools enables seamless data exchange and unified workflows.
- **Marking and Change Management on P&ID**  
Provides functionality to mark and track changes directly on P&ID diagrams, improving the accuracy and responsiveness of change management.

### ■ Contact

For product details or inquiries:

<https://plantstream3d.com/jp/plantstream-pid-ai-data-extractor/>

## About Arent Inc.

Arent Inc. is a digital transformation (DX) specialist dedicated to "democratizing tacit knowledge." Leveraging mathematical methods and deep industry expertise, Arent structures the know-how of the construction and plant sectors to support systemization and commercialization.

By transforming advanced Japanese technical assets into scalable products, Arent addresses key structural challenges such as labor shortages, long working hours, and skills transfer.

### Company Overview

- Company Name: Arent Inc.
- Head Office: KDX Hamamatsucho Building, 2-7-19 Hamamatsucho, Minato-ku, Tokyo, Japan
- Representative: Hiroki Kamobayashi, CEO, President and Representative Director
- Established: July 2, 2012
- Capital: JPY 811 million
- Business Description: DX consulting, system development, and system sales for the construction industry
- Corporate Website: <https://arent.co.jp/>