CADISON® PID Designer for Visio

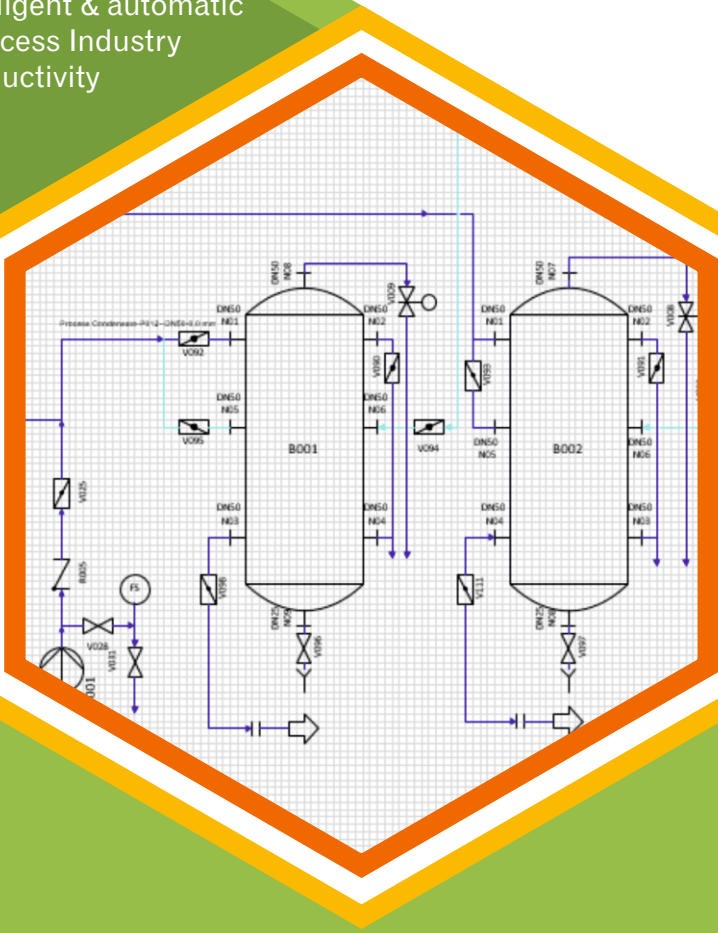
Rule-based engineering solution
enhancing Visio with intelligent & automatic
functionalities for Process Industry
to improve productivity

Item no.	Tag no.	
1.	FH/001	
2.	FH/002	
3.	PUA03A/001	condensat
4.	PUA03F/001	strainer
5.	PUA03F/002	strainer
6.	PUA03F/003	FILTER
7.	PUA03GV/002	GATE VALVE
8.	PUA03GV/003	GATE VALVE
9.	PUA03GV/004	GATE VALVE
10.	PUA03GV/005	GATE VALVE

CADISON

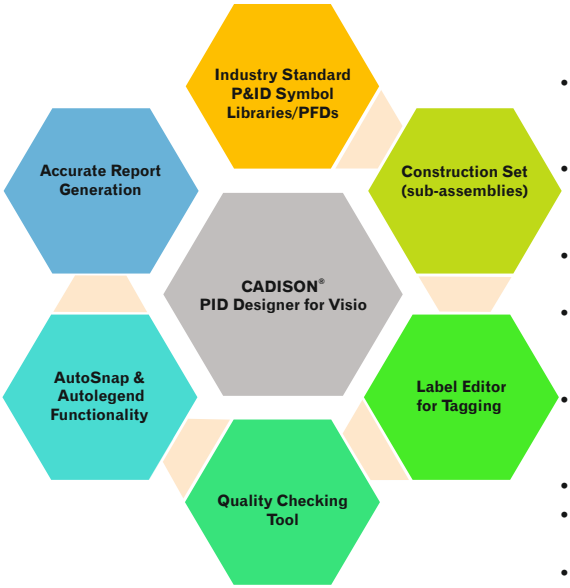
Customer:	ITandFactory
Project:	PILOT DEMO PROJECT
Project no.:	002

Tag no.	Description
PUA03A/001	condensate trap
PUA03F/001	strainer
PUA03F/002	strainer
PUA03F/003	FILTER
PUA03GV/002	GATE
PUA03GV/003	
PUA03GV/004	
PUA03	



An easy and quick-to-use tool to create intelligent PFDs and P&IDs using Microsoft Visio® Platform with all the data integrated in real-time with other CADISON modules. The combination of CADISON P&ID Designer with Visio bring the intelligence, object-oriented technology, report generation, document management, revision management and improved drawings generation capabilities for enhanced productivity.

A complete integration of P&ID solution with VISIO Platform for a perfect synergy between Sales & Marketing for Proposal and Basic Engineering Design



Key Features:

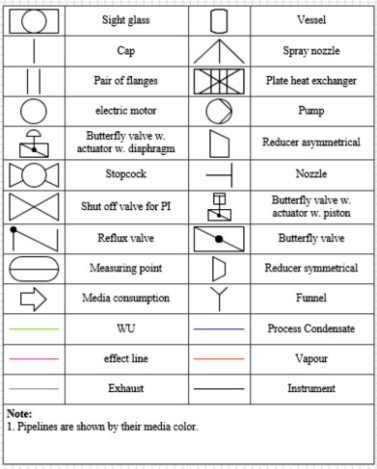
- Spec-driven process engineering solution for Conceptual and Detailed engineering
- Transform ideas into enginnering visualizations with Intutive and Intelligent P&IDs/PFDs
- Powerful Drafting Features with automated functionalities like AutoSnap, AutoLegend and AutoTagging capabilities
- Quality Checking Tools with built-in Logic Analyzer to check and rectify design errors
- Multi-Drawing Continuity with Cross References
- Built-in Symbol Editor and Construction set feature (symbols and typical sub-assemblies)
- Built-in Export Feature to Excel format (.csv/.xml format) or Drawing format (.dwg & .pdf format)
- Comprehensive reports generation
- Robust Document & Revision Management
- Built-in Project and Document Management tool
- Database Migrator tool helps the user to integrate project databases as well as system databases into another system without lengthy export/import procedures

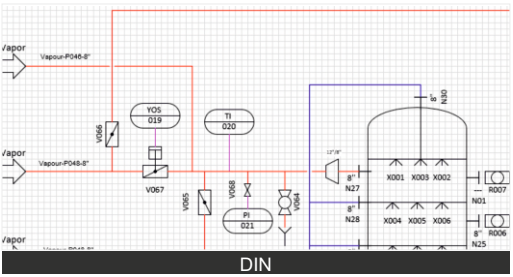
Industry Standard P&IDs/PFDs

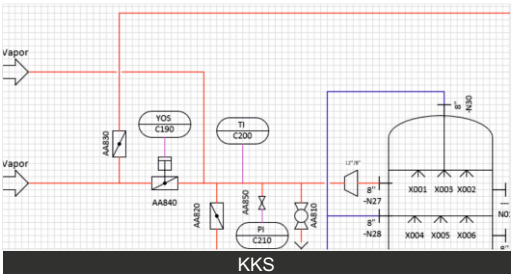
- Industry standard P&ID symbols & libraries (ISO 10628, IEC 62424, ANSI, ISA-5.1) with attribute data for Spec-driven Pipelines (PN10, PN16, PN40, LBS150, LBS300)
- All symbols and drawing elements have associated data properties (e.g. media, piping class, material, pressure, temperature)
- Create sub-assemblies of components using construction set feature and each component within construction set has associated data properties
- Dynamic generation of Symbols for flow direction control and cross reference across several drawings
- Creation of instrumentation datasheets, control logic symbols (valves & drives) for standardization
- Intuitive P&ID creation with simple ‘Drag & Drop’ with add-on automatic features and variety of smart connectors
- Cross reference feature of P&IDs across multiple drawings

Automated CAD Functionalities for Enhanced Productivity:

- **AutoSnap**: It allows user to align the object and place connection points on grid line
- **AutoLegend**: It automatically creates legend blocks in a drawing
- **AutoTagging**: Rapid and easy change between different standards and freely definable identification system/tagging such as DIN, KKS and ISA standards. Once an object gets added to a drawing, it maintains the uniqueness of the object across all drawings in the project







Robust User and Document Management

- User management helps in controlling and managing access rights for multiple users at an enterprise level
- Built-in-project setup enables organization to standardize workflow, templates (report & drawings) and project structures
- Robust features for document management - storage and retrieval (graphical & engineering data)
- The data can be used across projects and can be reused to create new projects

Revision Management

- Revision Marker allows users to communicate and locate the modification done in the drawing for quick & detail referencing for effective change management
- Ability to add the revision comments and communicate the same with automated/manual email notification for every revision
- Ability to mark the revised drawings, reports to create & maintain multiple (drawings) versions in project database. The revision information also gets updated in title block and reports

Quality Checking Tools to Check and Rectify Design Errors

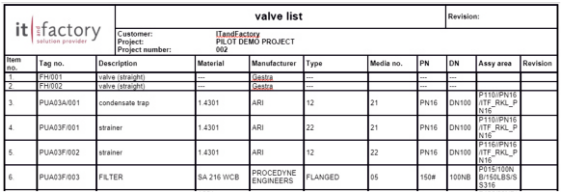
- Built-in 'Logic Analyzer' feature with pre-defined check routines and ability to add own rules
- Quick navigation throughout the project or drawing or objects

Cross References

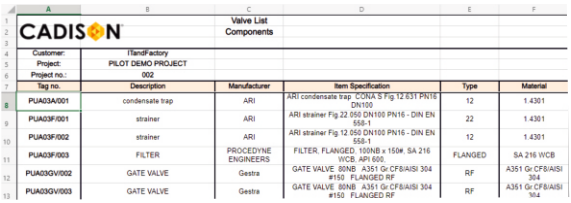
- Cross reference in a Drawing enables users to continue process diagram of single system across multiple drawings
- It provide the information (to & from) of continuity in both drawings, it also enable the user to traverse between these drawings intuitively with minimum number of clicks

Export Feature to Excel format or .dwg format

- Share drawing or project data with other teams by exporting to Microsoft Excel, .csv and .vsd formats. Users can also import feedback/modifications for updating the P&IDs in the exported .csv files
- Built-in 'Symbol Editor' feature and Construction Set/Assembly Editor to create & manage your own symbol libraries
- Drawing export to .dwg format



it factory solution provider	valve list							Revision:		
	Customer: ITandFactory Project: PILOT DEMO PROJECT Project number: 002									
Item no.	Tag no.	Description	Material	Manufacturer	Type	Media no.	PN	DN	Assy area	Revision
1.	FH001	valve (straight)	—	Gestra	—		—	—		
2.	FH002	valve (straight)	—	Gestra	—		—	—		
3.	PUA03A/001	condensate trap	1.4301	ARI	12	21	PN16	DN100	PT10/PN16 /ITF_RKL_P N16`	
4.	PUA03F/001	strainer	1.4301	ARI	22	21	PN16	DN100	PT10/PN16 /ITF_RKL_P N16`	
5.	PUA03F/002	strainer	1.4301	ARI	12	22	PN16	DN100	PT16/PN16 /ITF_RKL_P N16`	
6.	PUA03F/003	FILTER	SA 216 WCB	PROCEDYNE ENGINEERS	FLANGED	05	150#	100NB	PD15/100N B/150LBS/S S316	



CADISON	Valve List Components				
Customer:	ITandFactory				
Project:	PILOT DEMO PROJECT				
Project no.:	002				
Tag no.	Description	Manufacturer	Item Specification	Type	Material
PUA03A/001	condensate trap	ARI	ARI condensate trap CONA S Fig.12.631 PN16 DN100	12	1.4301
PUA03F/001	strainer	ARI	ARI strainer Fig.22.050 DN100 PN16 - DIN EN 558-1	22	1.4301
PUA03F/002	strainer	ARI	ARI strainer Fig.12.050 DN100 PN16 - DIN EN 558-1	12	1.4301
PUA03F/003	FILTER	PROCEDYNE ENGINEERS	FILTER, FLANGED, 100NB x 150#, SA 216 WCB, API 600.	FLANGED	SA 216 WCB
PUA03GVI/002	GATE VALVE	Gestra	GATE VALVE 80NB A351 Gr.CF8/AISI 304 #150 FLANGED RF	RF	A351 Gr.CF8/AISI 304
PUA03GVI/003	GATE VALVE	Gestra	GATE VALVE 80NB A351 Gr.CF8/AISI 304 #150 FLANGED RF	RF	A351 Gr.CF8/AISI 304

Accurate Reports Generation

- Pre-defined reports (e.g. valve lists, equipment Lists, measurement lists, etc.) in excel or word and ability to define company wide formats
- Easily create datasheets in *.xlsx or *.docx formats, using existing Excel templates

Benefits:

- Quick creation of intelligent Spec-driven P&IDs without any errors and delays
- Quick productivity of planner through easy learning
- Comprehensible visual change and revision management
- Built-in Quality Checking tool ensures proper connections and adherence to standards
- High rate of planning security through rule-based work
- Improves productivity by at least 30% and more
- Rapid changeover of views to plant, local and calculation world
- Safeguarding the uniqueness of numbering/tagging system
- Automatic structure and hierarchy formation according to standard (e.g. drive is subordinate to pump)