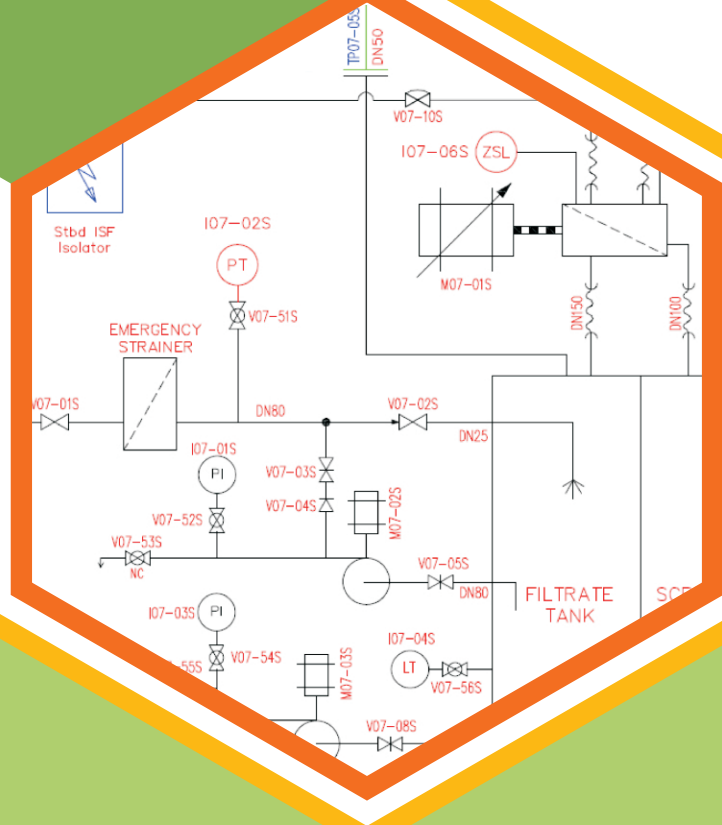
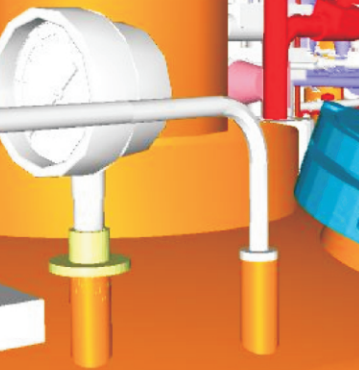


CADISON® P&ID Designer



Specification Driven Intelligent
P&ID Design Solution



A comprehensive solution for the creation of Intelligent PFDs, P&IDs, Instrumentations (measurements, hook-ups & I/Os), Calculations (pump sizing & pipe sizing), Specifications (media & pipe) and Report generation like BOM, MTO and Datasheets. It has many built-in productivity tools such as Configurable & Automatic Tagging, 'Symbol Editor' to create new symbols, Construction sets, etc.

CADISON® P&ID Designer – Ensure Design Integrity of Plant with Object-based Intelligent P&ID Solution

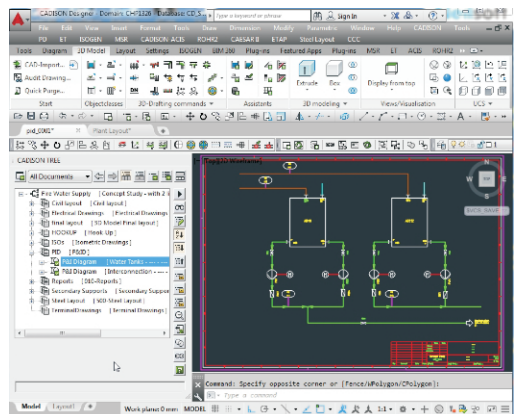


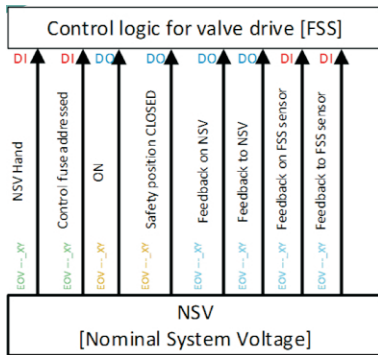
Key Features:

- Spec-driven P&IDs / PFDs with process data information
- Faster Creation and reusability of P&IDs with 'Construction Sets'
- Flexibility to configure the MPL Styles
- Configurable Tagging & Pipeline designation
- Hook-up drawings with instrumentation reports (I/O lists, BOM, etc.)
- Specifications and calculations for Media & Pipe Specification and Pump & Pipe sizing
- Built-in 'Logic Analyzer' for pre-defined quality checks for error-free P&IDs
- 'Mass Update' feature for efficient change management
- Integrated Report Generator with customization / configuration capability

Spec-driven P&IDs:

- User can create intelligent P&IDs with attribute data such as Pipe specifications (media, pipe class, pipe runs, etc.)
- Comprehensive selection of symbol libraries & catalogs (as per EN, ISO10628, ANSI, ISA, etc.)
- 'Symbol Editor' to create new symbols (with process information)
- Placement of pre-defined assemblies i.e. Construction Set using 'Drag & Drop' feature for faster creation of P&IDs and reusability
- Configurable & Automatic Tagging and pipeline designations as per the standards
- Flow direction management and consistency checks
- Cross-reference feature for the creation of P&IDs across multiple drawings
- Pre-defined quality checks with 'Logic Analyzer' for connectivity checks and design rule checks to maintain consistency and quality



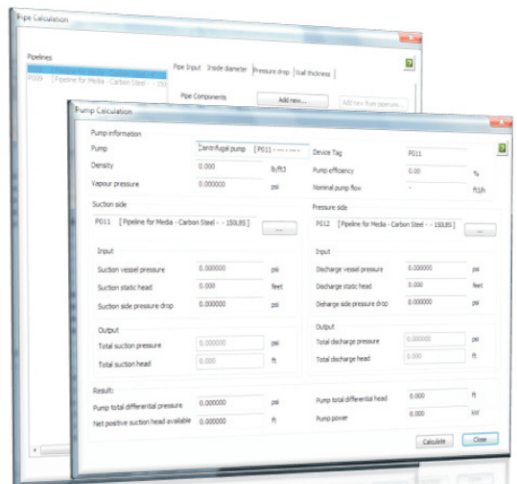


Built-in Instrumentation Capabilities:

- It links P&IDs with instrumentation details (e.g. field devices, instruments, signals, etc.)
- It has a provision to define the structure and interconnection of the individual components of an instrument (predefined as 'Typical')
- Once the measuring point is specified by the process engineer in a P&ID drawing, Instrumentation engineers assign 'Typicals'
- User can create Hook-up drawings with BOM details
- Reports such as signal or I/O lists, measurement point lists, datasheets, etc. can be extracted from a P&ID drawing

Pipe Sizing & Pump Sizing Calculations:

- The Pipe Sizing calculation focuses on Pipe Internal Diameter Calculation of pipe, Pipe Thickness Calculation and Pressure Drop Calculation using 'Resistance Factor' method
- The User can determine the diameter of pipe based on flow and acceptable velocity of media
- The User can also select an appropriate pump with 'Pump Sizing' feature, which is based on flow rate, total differential head, discharge static head, suction static head, frictional head losses, pump power parameters, etc.
- Pump calculation automatically identifies suction and discharge side pipelines from P&ID based on the connection points



Effective Revision and Change Management:

- Quick change of primary objects in a P&ID drawing using 'Exchange Graphics' feature (all inline objects also get updated automatically)
- Save time by using 'Mass Update' functionality, wherein Data can be exported from CADISON in .CSV / XML format and import back with modifications
- Effective Revision Management of drawings and reports

Report Generation:

- Integrated Report Generator enables the user to generate various types of reports (like valve lists, equipment lists, measurement lists, pump datasheets, etc.)
- Easily create datasheets in .XLSX, PDF, word format using existing templates
- The User can pre-configure the report formats as per the company standards

Equipment List					
Neilsoft		equipment list			Revision
Customer: Project: Project no:					
Item no.	Tag number	Designation	Manufacturer Type	Specification	P&ID Diagram
1	10001	Valve	Valve	Carbon Steel, Low Alloy Steel for high temperature service	
2	10002	Valve	Valve	Carbon Steel, Low Alloy Steel for high temperature service	
3	10011	Back valve	Valve	Carbon Steel, Low Alloy Steel for high temperature service	
4	10012	Control Valve	Valve	Carbon Steel, Low Alloy Steel for high temperature service	

Instrument List							
Neilsoft		Instrument List					
Customer: Project: Project no:							
Item no.	Tag	Tag No.	Local/ Remote	TAG SUFFIX	Usage	Service	Fluid
1	FRADR - 10002	FRU-1015-1-13	R	ASH	PRESSURE INDICATOR RECORDER ALARM SWITCH HIGH	G200 AUTOGRAVE	Water (H2O) + CO2
2	TRADR - 10001	FRU-1015-1-13	R	ASH	TEMPERATURE INDICATOR RECORDER ALARM SWITCH HIGH	G200 AUTOGRAVE	Water (H2O) + CO2

Pipeline List					
it:factory		Pipeline list			Revision: (Date: no. Date: 10 sep 2010) 001
Customer: Project: Project no:					
Customer: Project: Project no:					
Item no.	Tag number	Designation	Material	Specification	P&ID Diagram
1001	10011	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1002	10012	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1003	10013	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1004	10014	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1005	10015	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1006	10016	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1007	10017	Pressure to Cooling Water	Carbon Steel	ASTM A105	

Valve List					
it:factory		Valve list			Revision: (Date: no. Date: 10 sep 2010) 001
Customer: Project: Project no:					
Customer: Project: Project no:					
Item no.	Tag number	Designation	Material	Specification	P&ID Diagram
1001	10011	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1002	10012	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1003	10013	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1004	10014	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1005	10015	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1006	10016	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1007	10017	Pressure to Cooling Water	Carbon Steel	ASTM A105	

Pump-Spec-Sheet					
it:factory		Pump-Spec-Sheet			Revision: (Date: no. Date: 10 sep 2010) 001
Customer: Project: Project no:					
Customer: Project: Project no:					
Item no.	Tag number	Designation	Material	Specification	P&ID Diagram
1001	10011	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1002	10012	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1003	10013	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1004	10014	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1005	10015	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1006	10016	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1007	10017	Pressure to Cooling Water	Carbon Steel	ASTM A105	

Equipment List					
it:factory		Equipment list			Revision: (Date: no. Date: 10 sep 2010) 001
Customer: Project: Project no:					
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1005	10015	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1006	10016	Pressure to Cooling Water	Carbon Steel	ASTM A105	
1007	10017	Pressure to Cooling Water	Carbon Steel	ASTM A105	

Benefits:

- P&ID Designer Spec-driven solution for intelligent P&IDs and PFDs
- Engineering Solution with calculation capabilities (Pipe sizing & Pump sizing)
- Built-in Revision Management and Change Management for Error Free P&IDs
- Quick Project Planning & Cost Estimation with Reusability of P&ID data for future projects
- Reduction in 'Check & Validation' of drawing objects
- Report (configurable) generation capabilities
- Faster review and design approval process by Owner Operators
- Asset Information Management (for maintenance)
- Integration with 3D, Electrical Modules for design verification and visual inspection improves the consistency between P&ID, 3D and Schematics