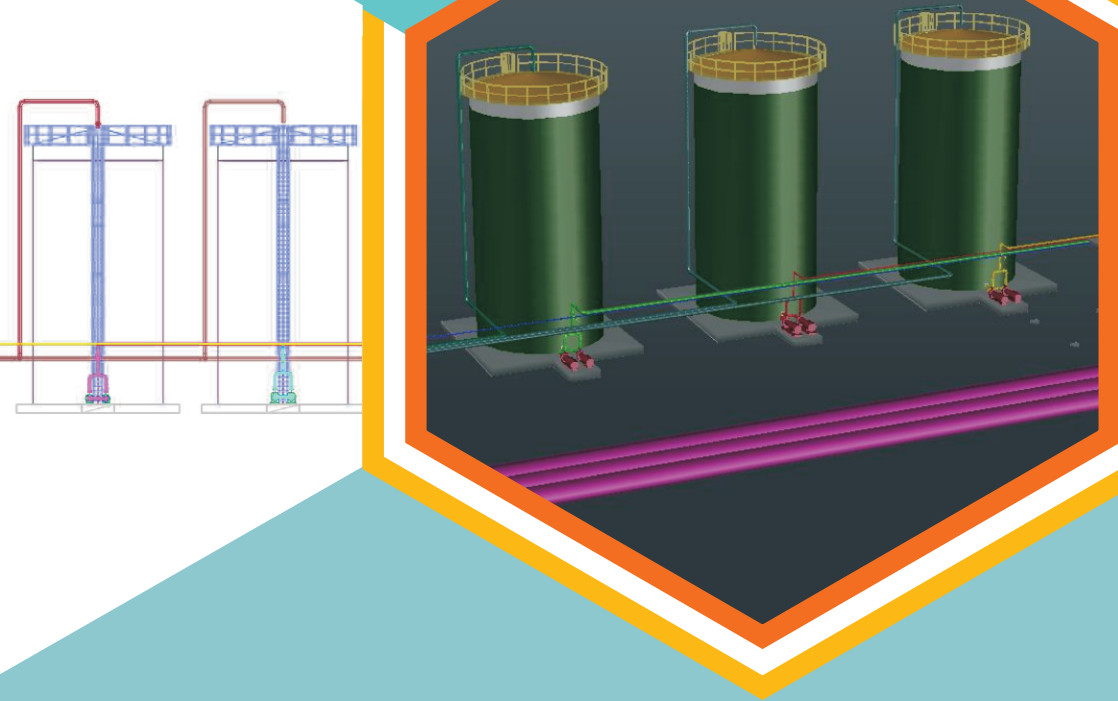


CADISON[®] 3D Designer



Intelligent & Integrated
3D Plant Design and Equipment
Engineering Solution



A complete plant design suite to create Plant Layout, Pipeline Routing, Equipment Modeling, Steel Layouts, GA & Isometric Drawing Creation and Report Generation. It offers various wizards / design assistants i.e. Tank Assistant & Nozzle Assistant for 3D vessels & tanks.

CADISON® 3D Designer - An Intelligent & Integrated Plant Information Modeling Solution with interfaces with standard CAE software

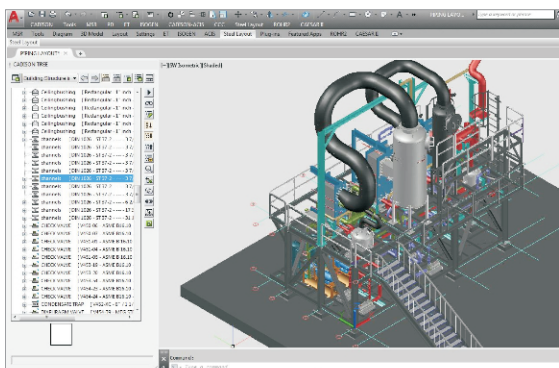
Key Features:

- CADISON enables an intelligent model-based process (BIM) for planning, design, construction and management of plant & plant equipment
- Built-in functionalities for data consistency and quality checks for error-free designs
- Automatic & Accurate 2D extractions (GA drawings & Isometrics)
- Integrated Steel Layout and Pipe Support Modeler for Steel structures and secondary supports
- Built-in Report Generator with customization / configuration capability
- Creates cohesive working space by interfacing with industry standard CAE software's – CAESER II & ROHR2, Inventor, Isogen, Equipment Simplifier, etc.



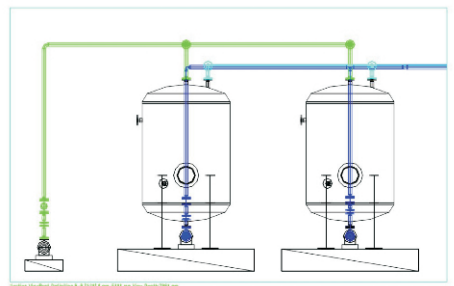
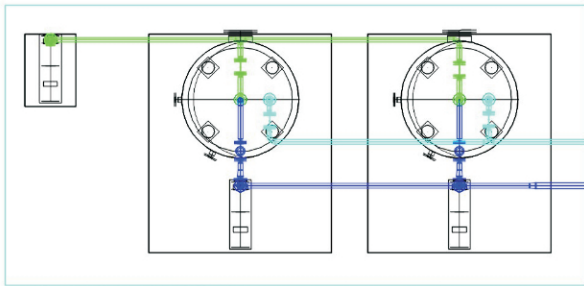
Intelligent 3D Layout Planning:

- A rule-based design module allows the User to build a fully detailed model of all piping systems, duct routing and equipment layouts based on component catalogs and engineering specifications (materials, media, etc.)
- Its intuitive features such as automatic pipe routing, '3D Clip' (to isolate 3D areas to work on complex drawings) allows Users to complete the 3D layouts efficiently
- It also provides wizards (design assistants) such as 'Tank Assistant' & 'Nozzle Assistant' for creating 3D vessels and tanks
- Interfaces with CAE Software – CAESER II & ROHR2 for quick and accurate analysis of piping system
- 3D interference / clash checking (in Navisworks) capabilities with configurable rule-based quality control tool 'Logic Analyzer' which helps eliminate the errors and data inconsistency
- Its drawing comparison feature ensures that a 3D installation drawing matches with CADISON P&ID drawing (object placements & connections, nominal size of pipelines, etc.)



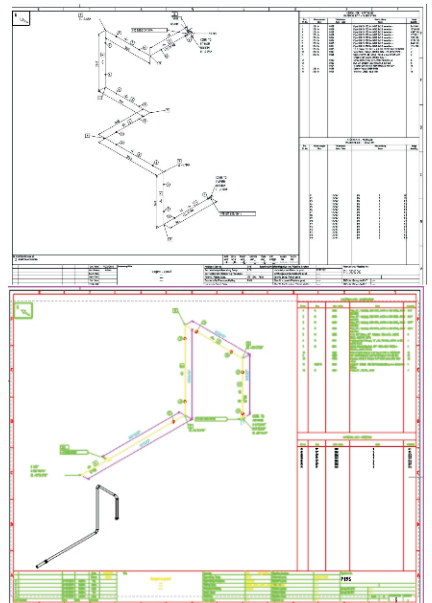
Equipment Layouts:

- CADISON® 3D Designer can import models (from equipment suppliers) through CAD interfaces such as Inventor (.sat), native AutoCAD® (.dwg) for layout design
- Users can also import large equipment models through CADISON equipment simplifier (a wizard designed for the automatic simplification of large Equipment)
- CADISON intelligently creates additional objects such as Flanges and Gaskets
- to use as connection points to continue pipe routing
- The User can create an accurate 3D design of process equipment and skid units (with all attribute data) for accurate documentation / reports
- The User can also take equipment or pipeline data / information from CADISON® P&ID or Plant structure through simple Drag & Drop and insert them in the 3D model



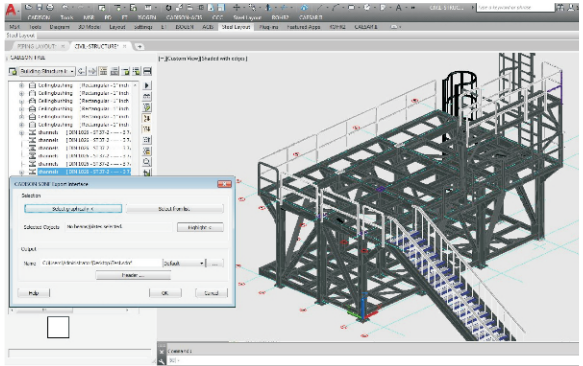
Automatic 2D Extractions (GA Drawings & Isometrics) form 3D Model:

- Ease of Extraction of Piping Isometric (through built-in ISOGEN) from CADISON® 3D Designer for fabrication
- Isometric views / templates can be configured / customized as per project requirements
- 3D pipeline image (real view) in isometric view helps during erection of complex pipelines
- The User can simultaneously create isometrics and Piping General Arrangement drawings
- Easy extraction of equipment layouts & construction drawings (with Vessel details, Nozzle orientation, etc.)
- Features such as 'Section Box' enables the User to create multiple sections in a GA drawing
- Easy insertion of system generated symbols (pipe end cut, insulation and flow direction) for better visualization of the GA drawings
- Centre line representation, Hidden line representation, Hatching command, X-REF layer settings are few of the other key features



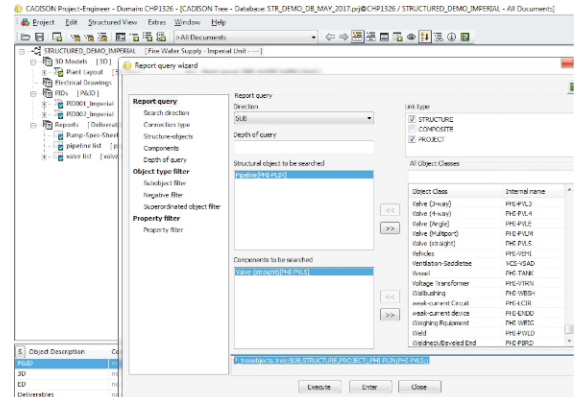
Steel Layout and Pipe Support Modeler:

- Easier Placement of Steel Structures (as per the standards) for quick layout creation. e.g. Ladders, Staircases, Handrails, etc.
- Built-in SDNF (export) interface with Tekla or Advance Steel for further detailing
- Placement of pre-defined supports with Pipe Support Modeler
- Automatic Hook-up drawings (of a selected type of support)



Report Generation:

- Integrated Report Generator enables the User to generate various types of reports (Pipe fitting BOQ, Steel & Pipe Support MTOs, Pipeline list, etc.)
- Easily create datasheets in .XLSX, PDF, word format using existing templates
- User can pre-configure the report formats as per the company standards



Benefits:

- A Plant Information Modeling solution for Design Review, Reports, Maintenance, and Asset Management for Owner Operators
- Efficient 3D Layout / Space Planning with built-in capabilities (Steel layout, Pipe support, Isogen, etc.) in one system
- Interface(s) with Inventor / Equipment Simplifier for importing equipment models for further planning
- Flexibility and customization capabilities enable the creation of organization-specific standards
- Reusability & Modularity of every CADISON objects and models for future projects
- Reduction in time, man-hours and cost spent on 'Check & Validation' of drawing objects with various CADISON built-in features
- Accurate Construction Deliverables (GA and Isometrics)
- Integration with P&ID, Electrical Modules for design verification and visual inspection improves the consistency between P&ID, 3D and Schematics