

A CADWorx Add-On that gives easy access to 3D Model databases and provides utilities for Excel BOM exporting, costing, Isogen, pipe supports and more...

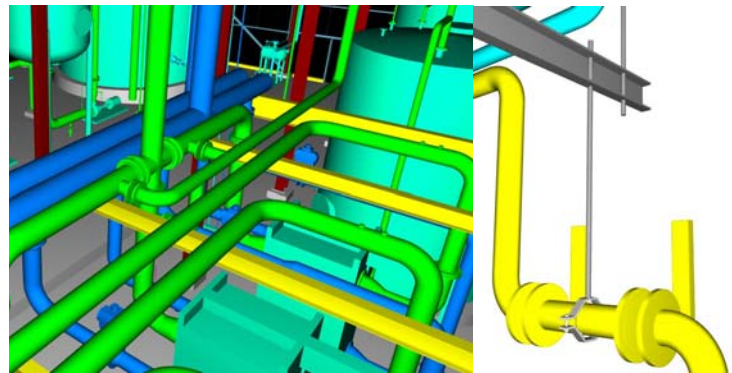
### Leveraging 3D Model Data

PLANTMO provides easy access to all the data associated with 3D CAD models and leverages that data over an entire plant life cycle.

- Engineering & Project Management
- Purchasing & Receiving Inspection
- Construction, Validation & Commissioning
- Operations & Maintenance
- Integrity Management & Turn Around Planning

### Functions that Make a Difference

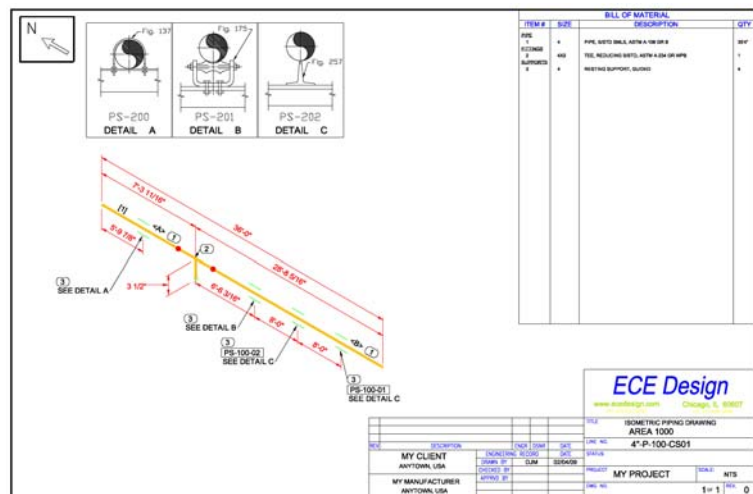
- Excel Worksheet Exporting**  
 PLANTMO exports component data to Microsoft Excel. Anyone using PLANTMO can generate a new Worksheet and use it to support project requirements.
- Automatic Bill of Material Roll Up**  
 PLANTMO can total a bill of material and sum up the associated cost.
- P&ID Discrepancy & Progress Reporting**  
 PLANTMO integrates with PIDMO to enable real-time assessment of 3D modeling status and quality against associated P&ID drawings.
- Automatic Cost Tracking & Estimation**  
 PLANTMO Monitors project cost real time. Everyone can see the total cost by 3D CAD Model, Line, Specification, or even Component type.
- Pipe Support Detailing Module**  
 PLANTMO includes a feature for managing pipe supports across an entire piping project. It can be used to compile pipe support bills of material, assign detail sketches and enter costs.
- Isogen Production Module**  
 PLANTMO enables CAD Operators the ability to batch isometrics and control drawing titleblock data and filenames.
- Fabrication Labor Module**  
 PLANTMO can apply labor such as a weld, pipe cut, end preparation, pipe tapping, and alike. Adding labor is the type of detailed information required to effectively manage costs, quality, schedules and many other aspects of a project.

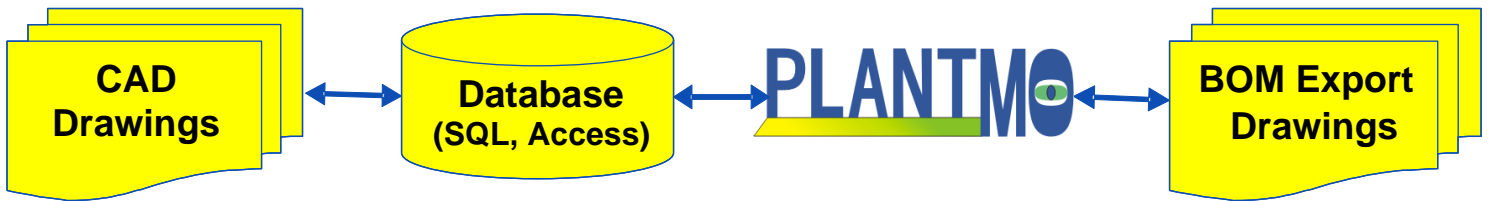


3D Plant Models "Linked" to PLANTMO Enables Excel BOM Exporting and Real-Time Costing

Tag	Drawing	Item	Long Description	Size	Line No	Cost	Extended Cost
P-1500	DWG	40MP-0150	[40MP] S-CLAMP GASKET	1 1/2"	1 1/2"-W-1016-ST3	\$8.00	\$8.00
P-1500	DWG	40MP-0200	[40MP] S-CLAMP GASKET	2"	2"-W-1016-ST3	\$8.00	\$8.00
XV-1515	P-1500	0134	ITT VALVE DIAPHRAGM CLAMP	1 1/2"	1 1/2"-WFR-1001-ST3	\$0.00	\$0.00
XV-1509	P-1500	0134	[40MP] S-CLAMP GASKET	1 1/2"	1 1/2"-WFR-1001-ST3	\$8.00	\$8.00
XV-1509	P-1500	0134	ITT VALVE CLAMPED	1 1/2"	1 1/2"-CIPS-1007-ST3	\$0.00	\$0.00
XV-1508	P-1500	0134	[40MP] S-CLAMP GASKET	1 1/2"	1 1/2"-CIPS-1007-ST3	\$8.00	\$8.00
XV-1507	P-1500	0134	ITT VALVE CLAMPED	1 1/2"	1 1/2"-CIPS-1006-ST3	\$0.00	\$0.00
P-1500	DWG	0134	ITT VALVE DIAPHRAGM CLAMP	1"	1"-FW-1005-ST3	\$0.00	\$0.00
P-1500	DWG	140908P081	[S14AW] PIPERULE LONG WELD. BPE DT-22	3/4"	3/4"-CHEM-1010-ST3	\$46.00	\$46.00
P-1500	DWG	TUBE_7-0075	A268/A270 TUBING BPE-ST	3/4"	3/4"-CHEM-1010-ST3	\$24.00	\$52.09
P-1500	DWG	020186P081	[S2CKW] 90° ELBOW BW/PRL BPE DT-12	3/4"	3/4"-CHEM-1010-ST3	\$24.00	\$24.00
P-1500	DWG	40MP-0075	[40MP] S-CLAMP GASKET	3/4"	3/4"-CHEM-1010-ST3	\$10.00	\$10.00
P-1500	DWG	TUBE_7-0150 TBE	A268/A270 TUBING BPE-ST TBE	1 1/2"	1 1/2"-W-1014-CF1	\$0.00	\$0.00
P-1500	DWG	TUBE_7-0150 TBE	A268/A270 TUBING BPE-ST TBE	1 1/2"	1 1/2"-W-1014-CF1	\$0.00	\$0.00
P-1500	DWG	TUBE_7-0150 TBE	A268/A270 TUBING BPE-ST	1 1/2"	1 1/2"-CIPS-1006-ST3	\$26.00	\$1.67
P-1500	DWG	40MP-0150	[40MP] S-CLAMP GASKET	1 1/2"	1 1/2"-CIPS-1006-ST3	\$8.00	\$8.00
F-1500	P-1500	0103	CODE 7 FILTER, 5 INCH	1 1/2"	1 1/2"-W-1016-ST3	\$0.00	\$0.00
P-1500	DWG	40MP-0200	[40MP] S-CLAMP GASKET	2"	2"-W-1017-ST3	\$8.00	\$8.00
Grand Total:						\$ 4,036.96	

PLANTMO enhances Isogen isometrics so they can include Pipe Supports and Labor





## Integration with CAD Technology

### Performance Improvement

ECE knows how to improve plant design project performance and has built this knowledge into *PLANTMO*. *PLANTMO* links and manages plant/equipment lifecycle data and records from design through decommissioning. Thus, *PLANTMO* becomes a key contributor to performance improvements.

### PLANTMO for Engineering & Inspection

Centralized 3D CAD model data enables project management by keeping information accessible and updated real-time with design and project administration activities. Systematically, *PLANTMO* improves engineering, construction, inspection and validation performance.

- Consolidating and Organizing Design Information
- Improving Information Availability
- Real-time Compliance Assessment
- Streamlining Information Exchange with Vendors
- Compiling and Monitoring Component and Project Cost
- Managing Installation & Operation Qualification Data
- Receiving, Approving and Organizing Documentation

### PLANTMO for Operations

Making engineering, construction inspection, and qualification information available for transfers to operations and maintenance will improve company performance. Plant reliability and availability improvements are realized by:

- Transferring As-Built Data for Validation and Integrity Management.
- Validating Component and System Performance
- Boosting Business Performance through Effective Inspection / Maintenance
- Improving Turnaround (TAR) Planning and Estimation

Contact us to learn more about how *PLANTMO* can be integrated with existing company processes to improve overall project performance.

### System Requirements

*PLANTMO* requires minimal computer resources and will run on computers with Windows operating system.

Recommended Software Requirements:

- Window XP or later
  - Microsoft Office 2000 or later
  - Microsoft Access 2000 or later
- Optional

- AutoCAD 2004 or later
- CADWorx PLANT Professional
- Microsoft SQL Server 2005

Recommended Hardware Requirements:

- 1.8 GHz Processor
- 1 GB RAM
- 20 MB installation disk space



1000 W. Monroe St. – Suite 2E  
Chicago, IL 60607  
Phone 312-235-6960  
[www.ecedesign.com](http://www.ecedesign.com)

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