

AVEVA



DATASHEET

AVEVA™ Electrical and Instrumentation

Empower your multidisciplinary teams to create and manage high-quality electrical and instrumentation data and deliverables

AVEVA Electrical and Instrumentation is an engineering authoring tool where engineers and designers can quickly and effectively produce high-quality electrical and instrumentation designs and deliverables. Share discipline-specific data and design with project teams and provide real-time collaboration between electrical and instrumentation project disciplines.



AVEVA Electrical and Instrumentation is part of AVEVA™ Unified Engineering, our comprehensive 1D, 2D, and 3D engineering and design solution.

By situating all your tools in a common tech stack, AVEVA Unified Engineering empowers your teams to collaborate openly and continuously as they build the foundation of your digital twin. With fast time to value, it enables your teams to track, demonstrate, and deliver better, more efficient project outcomes.

PROCESS DATA SHEET			
EQUIPMENT			
Client	Serial Production	Tag No. 1	C-0002
Location	Cambridge	System 1	
Title	Gas Terminal	Contract No. 1	15-410-78145
Target Date	30-06-2013	Document No.	
Rev.	Prepared by	Approved by	Approved Date
GENERAL COMMENTS			
High about sea level 5m			
Outside temperature 25degC			
Country U.K.			
Inlet temperature 20degC			
DESIGN REQUIREMENTS			
Rev.	Description	Pressure Vessel	Comme
1	Manufacturer	Mechchem Enginst	
2	Phase Separation	C Na # 2 Phases C 3 Phases	
3	Material		
4	Orientation	Horizontal	
5	Weight	3900.00 kg	
6	Capacity	2200700000.00 m3	
7	Height / Length	4000.00 mm	
8	Internal Diameter	2000.00 mm	
9	External Diameter	2200.00 mm	
10	Design Pressure	15.00 MPa	80000.00
11	Design Temp.	15.00 degC	70.00
NOTES			
Name	Size	Specification	
D-0002/02	150mm	300B ANSI Flange(NAS1800B)	
D-0002/01	150mm	300B ANSI Flange(NAS1800B)	

The challenge

Complex capital engineering projects demand a sophisticated approach to electrical and instrumentation data that is integrated with all other engineering data and deliverables.

Your teams need to work across disciplines and locations to take a truly integrated, data-centric approach to information management and ensure consistency and accuracy.

Create high-quality project deliverables using feature-rich discipline functionality that seamlessly integrates with other project disciplines within a familiar, controlled environment.

When used as part of AVEVA Unified Engineering, engineers and designers have access to a one-stop-shop of multidisciplinary engineering design capabilities. Holistic project design allows users to share data seamlessly as they work within a single environment.

Features

Unified electrical and instrumentation engineering

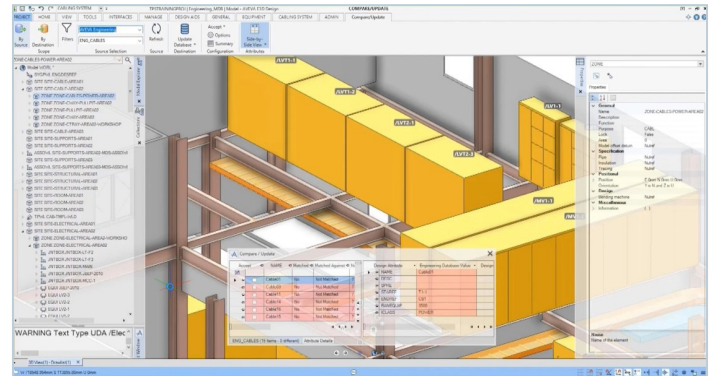
- Project disciplines operate in a common data-centric environment.
- Use common configurable data models.
- Create complex design drawings containing both electrical and instrumentation objects.
- Share a single platform for a truly data-centric approach.
- Access user-friendly, configurable data management and modeling tools.
- Rigorously control and manage change.

Built-in graphical canvas

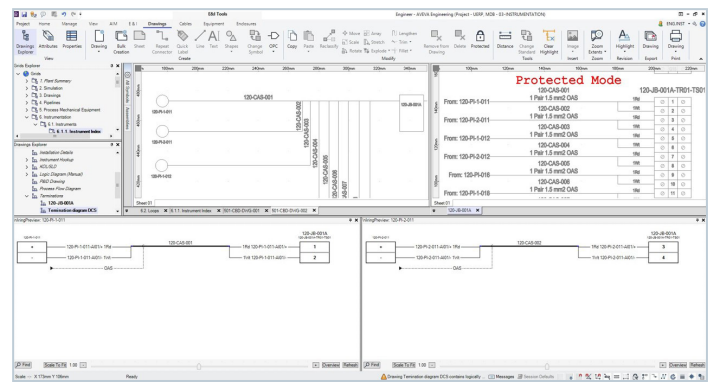
- A built-in graphical canvas gives your teams the tools to create 2D deliverables with a bi-directional link to consistent engineering data.
- Drag and drop engineering objects in an intuitive design environment.

Streamline engineering and design outcomes

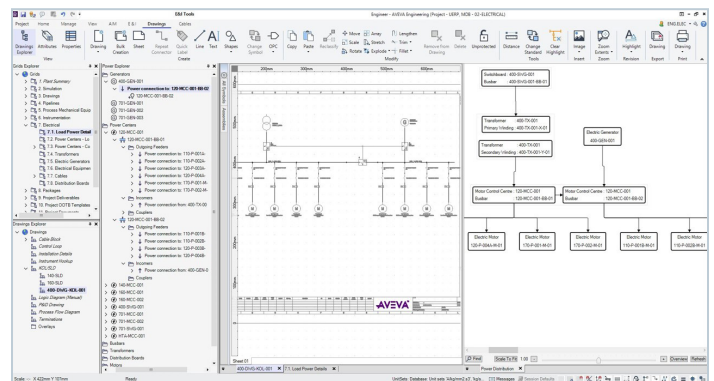
- Produce drawings automatically or manually.
- Set project standards and mandatory design rules.
- Create multiple and complex naming conventions.
- Configure data validation.
- Integrate directly with 3D models.
- Determine cable sizing.
- Reduce checking time.
- Integrate with procurement tools.
- Take advantage of the configurable library data.
- Create enclosure designs with templates.



Design data across disciplines is stored on the same database



Engineer and design quickly and efficiently



Multi-window workflow

Business benefits

More efficient engineering and design

- Deliver engineering projects faster.
- Reduce error-related costs.
- Create reports with native user-friendly reporting tools.

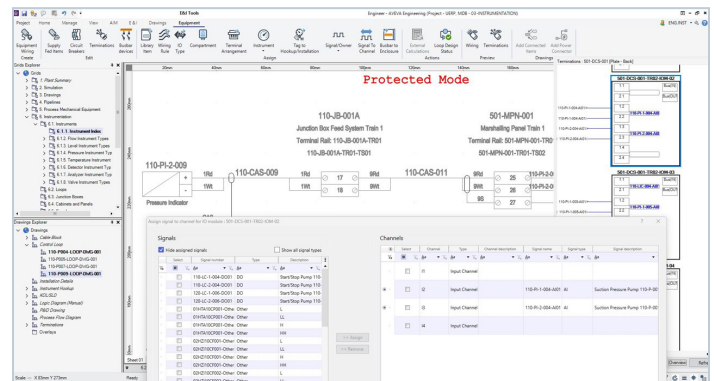
Global work and shared administration

- Integrate and automatically synchronize data from distributed project teams.
- Save time and effort by integrating additional design tools.
- Reduce administration overheads by using a common platform.

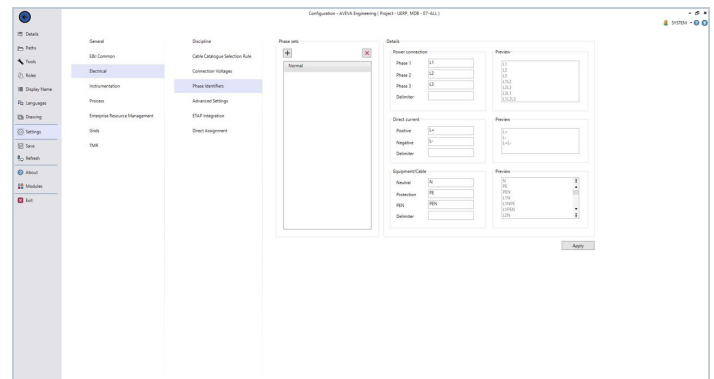
High-quality engineering deliverables

- Organize and optimize production of datasheets, equipment lists, and load lists.
- Unify disciplines that typically have their own catalog of materials for cables and cableways.
- Create consistency across engineering data and deliverables.
- Use intelligent graphical deliverables to reflect the underlying engineering design data accurately.
- Accurately generate key deliverables:

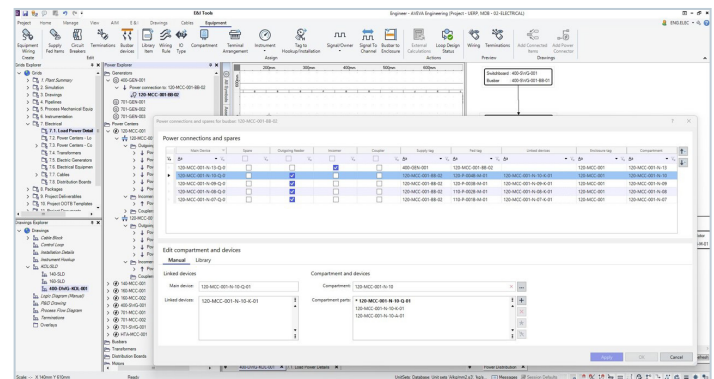
- Electrical and instrumentation datasheets
- Load lists
- Key one-line diagrams
- Single-line diagrams
- Cable block diagrams
- Termination drawings
- Installation details
- Cable schedules, including routing information
- Bills of materials (BoM)



Intuitive user interface for complex design



Global project configuration and customization



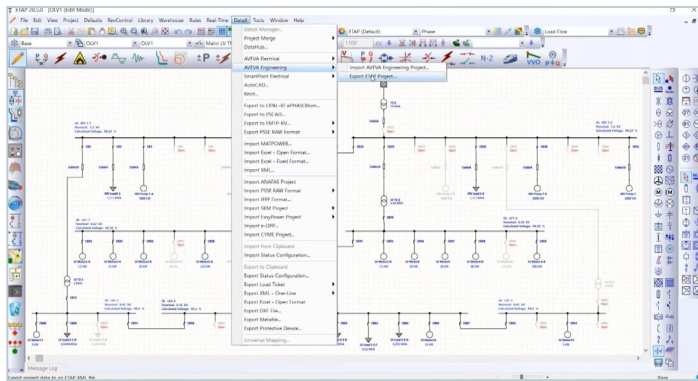
Detailed, integrated, data-centric engineering and design

Enhanced project management and governance

- Maintain project setup and control with enforced mandatory design rules and project standards.
- Integrate with all industry-standard document management systems.
- Compare and highlight reports.

ETAP integration

- Integrate with the industry-leading electrical analysis tool.
- Initiate projects in either AVEVA Electrical and Instrumentation or ETAP and maintain data integrity between applications.



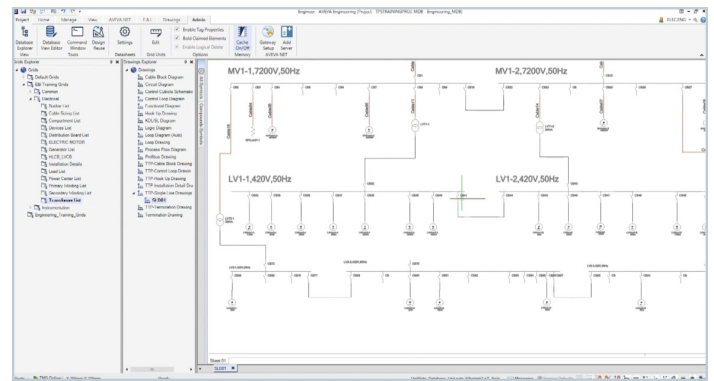
- Combine projects with AVEVA™ E3D Design to control the whole life cycle of electrical design, from analysis and functional design to the 3D physical layout.

Connect your teams, data, and processes with the cloud

Grow sustainably with Connect and transform faster, reduce costs and optimize at scale.

Significantly reduce your internal infrastructure requirements by storing up-to-date project data in the cloud.

Flexible, adaptive licensing scales easily with your team and project needs



Move seamlessly between ETAP and AVEVA tools

For more information about AVEVA Electrical and Instrumentation and AVEVA Unified Engineering, please contact your local AVEVA representative, or visit: aveva.com/en/products/unified-engineering

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