



# Training Overview

Piping & Outfitting modules



## NUPAS-CADMATIC Diagram

### User Training

This training is meant for diagram designers. The duration of the training is two days. No specific knowledge about the software is necessary when participating in this course. Only basic knowledge of making Piping and Instrumentation Diagrams (P&ID).

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<b>Elementary knowledge</b>	<b>Basic knowledge of making Piping and Instrumentation Diagrams (P&amp;ID)</b>
<b>Total training days</b>	<b>2 days</b>
<b>Maximum participants</b>	<b>4 users</b>
<b>Day 1</b>	<ul style="list-style-type: none"> <li>Introduction to NUPAS-CADMATIC Diagram</li> <li>Settings</li> <li>Useful commands</li> <li>Placing of Equipment, Piping, Armatures, Instruments</li> <li>Systems, pipelines and instrument tags</li> </ul>
<b>Day 2</b>	<ul style="list-style-type: none"> <li>Change objects</li> <li>Copy and edit data</li> <li>Labels</li> <li>Title and inquiries</li> <li>Move area</li> <li>Reference drawing</li> <li>Copy</li> <li>Link to 3D model (Plant Modeller)</li> </ul>



## NUPAS-CADMATIC Diagram

### Administrator Training

This training is meant for diagram key users and diagram administrators. The duration of the training is three days. A Diagram User Training is required when participating in this course.

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<b>Elementary knowledge</b>	<b>Diagram User training</b>
<b>Total training days</b>	<b>3 days</b>
<b>Maximum participants</b>	<b>4 users</b>
<b>Day 1</b>	Administrator's Tasks, Backups Structure Database Configuration, Armatures
<b>Day 2</b>	Instruments Labels Diagram Object Templates, Symbols Database queries
<b>Day 3</b>	Exercises: Armatures and Labels Exercises: Sheets Integration Database commands



## NUPAS-CADMATIC Plant Modeller / Pipe

### Basic User Training

This training is meant for 3D designers. The duration of the basic training is 5 days. No specific knowledge about the software is necessary when participating in this course, only some basic knowledge about pipe layout, making drawings and ISO/Spool drawings.

**Elementary knowledge**  
**Total training days**  
**Maximum participants**

**Basic knowledge about pipe layout and drafting**  
**5 days**  
**4 users**

<b>Day 1</b>	Introduction to NUPAS-CADMATIC Plant Modeller NUPAS-CADMATIC Desktop Following items are explained during the training project: Inquiries, Views, Navigation commands, object types Routing of pipes, placing equipment and standard components
<b>Day 2</b>	Continuing and finishing the training project PM Session, COS Database E-Browser navigation <sup>1</sup> Selecting Objects via Sets
<b>Day 3</b>	Making holes and penetrations Routing of Beams Model Plates Route HVAC Route Cable trays <sup>2</sup>
<b>Day 4</b>	PM Drawings, view tool, visualization tool / revision tool Annotating views and pages Bill of material (BOM) Plotting and Exporting documents
<b>Day 5</b> <sup>3</sup>	Manage ISOS, making and controlling the ISO groups NUPAS-CADMATIC Pipe Creating and updating ISO and Spool documents

<sup>1</sup> E-Browser full or light version must be available if training is on-site

<sup>2</sup> Only from version V5.2.0 or higher.

<sup>3</sup> Day 5 is only necessary if customer uses NUPAS-CADMATIC Pipe



## NUPAS-CADMATIC Plant Modeller / Pipe

### Advanced User Training

This training is meant for advanced 3D designers. A Plant Modeller / Pipe Basic User Training is required when participating in this course, and also some experience in the software (minimum 1 month of working with the software).

<b>Elementary knowledge</b>	<b>Plant Modeller / Pipe Basic User Training + 1 month of experience</b>
<b>Total training days</b>	<b>2 days</b>
<b>Maximum participants</b>	<b>4 users</b>
<b>Day 1</b>	Making Queries Collision Control Making E-Browser models / Walk Around Manage Tasks <sup>1</sup>
<b>Day 2</b>	Import - Export MDL, 3D Dump and 3DC/ eXchanger <sup>2</sup> Import Manager, Point Cloud Manager (see note 1) Import 2D DXF/DWG in views and drawings Elomatic Tools <sup>3</sup>

<sup>1</sup> Only from version V5.2.0 or higher.

<sup>2</sup> If the 3DC import/export function is explained, then AutoCAD<sup>®</sup> software and the NUPAS-CADMATIC eXchanger is required.

<sup>3</sup> Elomatic Tools must be installed when this training is on-site.



## NUPAS-CADMATIC Plant Modeller / Pipe

### Component Modeller User Training

This training is meant for Component Modeller designers. Basic knowledge of modelling is required when participating in this course. Though we recommend that the Basic User Training has been participated before this training.

<b>Elementary knowledge</b>	<b>Basic knowledge of modelling</b>
<b>Total training days</b>	<b>2 days</b>
<b>Maximum participants</b>	<b>4 users</b>
<b>Day 1</b>	Modelling of Equipment (pump, bollards, heat exchangers, etc.) Importing 3DC or 3D Dump <sup>1</sup>
<b>Day 2</b>	Parametric modelling of Equipment Attributes

<sup>1</sup> If the 3DC import/export function is explained, then AutoCAD® software and the NUPAS-CADMATIC eXchanger is required.



## NUPAS-CADMATIC Plant Modeller / Pipe

### Administrator Parts & Specs Training

This training is meant for administrating catalogue parts, specifications, bending machines and joint materials of NUPAS-CADMATIC Piping Module. A good knowledge of NUPAS-CADMATIC Plant Modeller is required. A Plant Modeller / Pipe Basic User Training, the Advanced User Training and the Component Modeller training is therefore required when participating in this course, and also some experience in the software (minimum 1 month of working with the software).

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<b>Elementary knowledge</b>	<b>Plant Modeller / Pipe Basic User Training, Advanced User Training, Component Modeller Training + 1 month of experience</b>
<b>Total training days</b>	<b>3 days</b>
<b>Maximum participants</b>	<b>4 users</b>
<b>Day 1</b>	<ul style="list-style-type: none"> <li>Quantity definitions</li> <li>Geometry types</li> <li>Connection type &amp; compatibilities</li> <li>Internal shapes of piping components</li> <li>Making Geometries of piping components &amp; standard components</li> </ul>
<b>Day 2</b>	<ul style="list-style-type: none"> <li>Dimension tables</li> <li>Isometric Symbols</li> <li>Catalogue parts</li> <li>Piping specifications</li> <li>Systems &amp; pipelines</li> </ul>
<b>Day 3</b>	<ul style="list-style-type: none"> <li>Joint materials (bolts, nuts, gaskets etc.)</li> <li>Plate materials</li> <li>Bending machines</li> <li>Penetrations</li> <li>Beams &amp; beam specifications</li> <li>Cable trays &amp; cable tray specifications</li> <li>Cable trays lines</li> </ul>



## NUPAS-CADMATIC Plant Modeller / Pipe

### Administrator Document Production Training

This training is meant for administrating document production of NUPAS-CADMATIC piping module. A good knowledge of NUPAS-CADMATIC Plant Modeller is required. A Plant Modeller / Pipe Basic User Training, the Advanced User Training and the Component Modeller training is therefore required when participating in this course.

<b>Elementary knowledge</b>	<b>Plant Modeller / Pipe Basic User Training, Advanced User Training, Component Modeller Training + 1 month of experience</b>
<b>Total training days</b>	<b>4 days</b>
<b>Maximum participants</b>	<b>4 users</b>
<b>Day 1</b>	<ul style="list-style-type: none"> <li>Model attributes &amp; Attribute Classes</li> <li>Project Settings &amp; Coordinate references</li> <li>Color pallet &amp; Surface shading</li> <li>Customizing eBrowser publish</li> <li>COS attributes</li> <li>Object browser queries, hierarchies, search, favorites, column views</li> <li>Icons</li> </ul>
<b>Day 2</b>	<ul style="list-style-type: none"> <li>Document flow</li> <li>Reserved tag names</li> <li>Material files &amp; header files</li> <li>Instructions controlling generation of documents (ICGD)</li> <li>Format Control object</li> </ul>
<b>Day 3</b>	<ul style="list-style-type: none"> <li>Drawing Sheets without &amp; with BOM</li> <li>Customizations of BOM (PmMfile.mac &amp; PiCustomMfile.mac)</li> <li>Isometric name generation &amp; break rules</li> <li>Isometric Settings (Manage ISOS &amp; PIPE)</li> </ul>
<b>Day 4</b>	<ul style="list-style-type: none"> <li>2D symbols</li> <li>Differences of text type symbols &amp; general symbols</li> <li>Differences between PM and PI</li> <li>Isometric axis symbol</li> <li>Labels (object, connection, point)</li> <li>Drafting Styles, Line attributes &amp; layer styles</li> <li>Drawing export configuration (for export to AutoCAD)</li> <li>Automatic labeling</li> <li>Coordinate labels</li> </ul>



## NUPAS-CADMATIC Administrator Specialism

### Administrator COS & IT Training

This training is meant for administrating the software and the COS environment for NUPAS-CADMATIC. A Plant Modeller / Pipe Basic User Training, the Advanced User Training and the Component Modeller training is therefore required when participating in this course, and also some experience in the software (minimum 1 month of working with the software).

<b>Elementary knowledge</b>	<b>Plant Modeller / Pipe Basic User Training, Advanced User Training, Component Modeller Training + 1 month of experience</b>
<b>Total training days</b>	<b>3-4 days</b>
<b>Maximum participants</b>	<b>4 users</b>
<b>Day 1</b>	<ul style="list-style-type: none"> <li>Installation of Software</li> <li>Installation of License server</li> <li>COSserver</li> <li>Installation of COSserver</li> <li>Event Log</li> </ul>
<b>Day 2</b>	<ul style="list-style-type: none"> <li>Directory Structure</li> <li>Profiles (.prf files)</li> <li>Local cache files</li> <li>Create project, workspaces and design areas</li> <li>COS schema, object types and attributes</li> <li>Users and security policies</li> </ul>
<b>Day 3</b>	<ul style="list-style-type: none"> <li>BackUp</li> <li>Globally Distributed Design</li> <li>Create Satellite</li> <li>ICT – notes</li> <li>Debug databases</li> </ul>
<b>Additional Day 4</b>	Conversion of V4 project to V5 <sup>1</sup>

<sup>1</sup> This training can be given separately if customer needs this.



## NUPAS-CADMATIC Administrator Specialism

### Administrator HULL – PIPING link Training

This training is meant for administering the HULL – PIPING link for NUPAS-CADMATIC. A good knowledge of NUPAS-CADMATIC Plant Modeller and some knowledge of NUPAS-CADMATIC Hull is required. All Plant Modeller and PIPE user trainings and all administrator trainings are therefore required when participating in this course.

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<b>Elementary knowledge</b>	<b>All Plant Modeller &amp; Pipe User &amp; Administrator trainings + 1 month of experience</b>
<b>Total training days</b>	<b>1 day</b>
<b>Maximum participants</b>	<b>4 users</b>
<b>Day 1 <sup>1</sup></b>	How to set up NUPAS-CADMATIC Plant Modeller → Hull communication. Set up Hull Agent and settings in NUPAS-CADMATIC Hull. How to set up penetrations in the project and library environment

<sup>1</sup> NUPAS-CADMATIC Hull Software and license must be available when training is on-site.



## NUPAS-CADMATIC Administrator Specialism

### Script Programming Training

This training is meant for Customizing NUPAS-CADMATIC Piping Module. A good knowledge of NUPAS-CADMATIC Plant Modeller is required. All Plant Modeller and PIPE user trainings and all administrator trainings or all Diagram trainings are therefore required when participating in this course.

<b>Elementary knowledge</b>	<b>All Plant Modeller &amp; Pipe User &amp; Administrator trainings or All Diagram trainings + 1 month of experience</b>
<b>Total training days</b>	<b>3 days</b>
<b>Maximum participants</b>	<b>4 users</b>
<b>Day 1</b>	<ul style="list-style-type: none"> <li>Programming concepts and vocabulary</li> <li>Nupas-Cadmatic script syntax</li> <li>Script debugger</li> <li>Using UltraEdit as script editor</li> <li>Nupas-Cadmatic script hooks</li> </ul>
<b>Day 2</b>	<ul style="list-style-type: none"> <li>User interfaces</li> <li>Read/write files</li> <li>Operating with tag records</li> <li>1D and 2D arrays</li> <li>Accessing COS objects</li> </ul>
<b>Day 3</b>	<ul style="list-style-type: none"> <li>Building 3D model</li> <li>Generating Views</li> <li>Material Management</li> <li>2D annotations</li> </ul>



## NUPAS-CADMATIC Plant Modeller Support Designer

### User Support Training

This training is meant support designers for NUPAS-CADMATIC. A good knowledge of NUPAS-CADMATIC Plant Modeller is required. A Plant Modeller / PIPE basic user training is therefore required when participating in this course, and also some experience in the software (minimum 1 month of working with the software).

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<b>Elementary knowledge</b>	<b>Plant Modeller &amp; Pipe Basic User training + 1 month of experience</b>
<b>Total training days</b>	<b>1 day</b>
<b>Maximum participants</b>	<b>4 users</b>

<b>Day 1</b>	<ul style="list-style-type: none"> <li>Inserting primary supports (clamps, slides, etc)</li> <li>Standard supports / custom supports</li> <li>Constructing secondary support</li> <li>Beam Tool</li> <li>Using support wizard</li> <li>Generating support drawings</li> <li>Automated drawing generation</li> </ul>
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## NUPAS-CADMATIC Plant Modeller Support Designer

### Administrator Support Training

This training is meant for Administrating NUPAS-CADMATIC Support design and support drawing generation. A good knowledge of NUPAS-CADMATIC Plant Modeller and support module is required. All Plant Modeller / PIPE user & Administrator trainings and User Support training are therefore required when participating in this course, and also some experience in the software (minimum 1 month of working with the software).

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<b>Elementary knowledge</b>	<b>All Plant Modeller &amp; Pipe User &amp; Administrator trainings and User Support training + 1 month of experience</b>
<b>Total training days</b>	<b>1 days</b>
<b>Maximum participants</b>	<b>4 users</b>
<b>Day 1</b>	<ul style="list-style-type: none"> <li>Support templates for standard supports &amp; custom supports</li> <li>Support templates for support wizard</li> <li>Configuration scripts for support designer</li> <li>Fastening materials</li> <li>Primary supports in piping specification</li> <li>Support drawing sheets / ICGDs – special requirements</li> <li>Support listings – special requirements</li> </ul>

# TRAINING

