

**AutoCAD®**  
MEP 2010  
Compatible

**Autodesk**

## AutoCAD® MEP 2010 Tutorial Series

220 Video tutorials for the New or Upgrading User

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### *Topics covered:*

#### **Overview and User Interface**

Introduction  
MEP Workspaces  
Palette Interface  
MEP Tools on Tool Palette  
MEP Tools on Ribbon Interface  
AutoCAD Tools on Ribbon Interface  
Custom MEP Tools on Tool Palette  
Custom AutoCAD Tools on Tool Palette  
Content Browser and Tool Palettes  
Project Navigator Workflow  
New File Types  
New Project  
Copy Project Structure  
Move or Rename Project  
eTransmit Project  
Archive Project  
Project Navigator Templates  
Prefix Project Number  
External Reference Pathing  
Match View Layers to Sheet View  
Project Details  
Bulletin Board  
Project Image  
Levels  
Divisions  
Category  
Repath Project  
Save Current DWG as Construct  
New Construct

#### **Introduction to Drawing Management**

#### **Project Browser**

#### **Project Navigator**

### *Prerequisites:*

#### **Requirements:**

Disk version requires Windows XP or higher 32bit only.  
Internet Explorer 6.0+ Browser  
Adobe Flash Player  
DVD Drive  
Pointing device  
3 GB Drive Space

Online versions need only a high speed Internet connection, a browser and Adobe® Flash.

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01-603-641-3900

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## Project Navigator

Overlay One Construct to Another  
Copy Construct to Levels  
New Element  
New General View Drawing - Overall Design  
New General View Drawing - Enlarged Plan  
Where to Place Annotation  
How to Create a Section  
Modifying and Updating 2D Sections  
Display of Sections  
Edit Linework for a Section  
Merge Lines  
Material Boundary  
Adding Linework  
Creating Elevations  
Creating Details  
Convert Existing Detail to a View Drawing  
Adding Tags for Schedules  
Creating a Schedule  
Additional Tools for Schedules  
Display of Schedules  
Creating Subsets  
Modifying Subsets  
Creating New Sheets  
Adding Views to Sheets  
Changing Scale on a View  
Adding Titlemark  
Linking Section/Elevation Bubbles to Views on Sheets  
Creating a Sheet List  
Modifying Sheet List  
Updating Sheet List  
eTransmit  
Plotting Sheets  
Modelspace Template  
Create Paperspace Template  
Layout Sheet Size  
Page Setups and CTB/STB Setup  
Titleblock  
Titleblock Fields  
Project Property Data  
Adding HVAC Schematic Lines

## HVAC Schematic

**HVAC Schematic**

Adding HVAC Schematic Symbols  
HVAC Schematic System Definitions  
HVAC Schematic Line Styles  
HVAC Schematic Symbol Styles  
Creating HVAC Schematic Symbol Styles

**HVAC Spaces and Zones**

Space Styles  
Adding Associative Spaces  
Space and Zone Manager  
Adding NON-Associative Spaces  
Adding Zones

**MEP Settings**

Exporting Spaces and Zones to GBXML  
MEP Settings: Options dialog  
Duct Preferences - Routing  
Duct Preferences - Ducts, Vanes, Flanges, Flex and Connections  
Duct Preferences - Part Group Definition  
HVAC System Definitions

**HVAC Layout**

Duct Rise Drop Style  
HVAC Equipment  
Air Terminals  
Placing VAV/Terminal Units  
Modeling Single Line Duct  
Sizing One Line Duct  
Resizing Duct Layout  
Modeling 3D Duct  
Sizing 3D Duct  
Duct Transitions  
Adding Accessories  
Creating Profiles for Structural Members and Hangers  
Hanger Style and Hanger Tool  
Creating a Section

**HVAC Annotation**

Interference Detection  
Inserting Duct Size Label  
Inserting Tags for Air Terminals  
Custom Label Curves  
Creating Custom Property Set Definitions  
Creating Custom Tags Using Property Set Definitions  
Air Terminal Schedule  
Creating Custom Property Set Definition for Schedules

**HVAC Annotation**  
**Creating HVAC Parametric Parts - Air Terminal**

Creating Custom Schedule Table Styles

Creating Parametric Parts - Content Builder

Creating Parametric Parts - Workplanes

Creating Parametric Parts - Profiles

Creating Parametric Parts - Modifiers

Creating Parametric Parts - Dimensions and Parameters

Creating Parametric Parts - Adding Additional Workplanes

Creating Parametric Parts - Adding Additional Profiles

Creating Parametric Parts - Adding Additional Dimensions and Parameters

Creating Parametric Parts - Adding Geometry and Dimensions/Parameters

Creating Parametric Parts - Adding Additional Modifiers

Creating Parametric Parts - Adding Connectors

Creating Parametric Parts - Modifying Catalog with Parameters

Creating Parametric Parts - Modifying Catalog with Additional Parameters

Creating Parametric Parts - Validating MVPPart

**Creating HVAC Block-Based Parts - Fan-Powered Terminal Unit**

Creating HVAC Block Based Parts - Content Builder

Creating HVAC Block Based Parts - Part Behavior

Creating HVAC Block Based Parts - Assigning Block Definition

Creating HVAC Block Based Parts - Assigning Image

Creating HVAC Block Based Parts - Creating Connectors

Creating HVAC Block Based Parts - Placing Connectors

Creating HVAC Block Based Parts - Catalog Properties

**Adding Additional Sizes to HVAC Block-Based Parts - Fan-Powered Terminal Unit**

Adding Additional Sizes to HVAC Block Based Parts - Source Drawing

Adding Additional Sizes to HVAC Block Based Parts - Adding the Block Definition to the Catalog

Adding Additional Sizes to HVAC Block Based Parts - Adding the Connectors to the Additional Sizes

Adding Additional Sizes to HVAC Block Based Parts -

<b>Piping Schematic</b>	Modifying Catalog for New MVPart Schematic Lines Schematic Symbols Schematic System Definitions Schematic Line Styles Creating Schematic Symbol Styles Tagging Schematic Lines and Symbols
<b>Piping Settings</b>	Piping Preferences MEP Options Piping System Definitions Piping Routing Preferences Piping Rise Drop Style
<b>Piping Layout</b>	Adding Piping Equipment Adding Piping Equipment Modeling Piping Additional Grips for Piping Parallel Piping Pipe Accessories Creating Profiles for Structural Members and Hangers Hanger Style Hanger Tool
<b>Piping Annotation</b>	Inserting Pipe Size Tag Inserting Pipe System Tag Inserting Equipment Tag Inserting Flow Arrows Pipe Takeoff Schedule
<b>Creating Pipe Parametric Parts - PVC Wye Fitting</b>	Creating Parametric Parts - PVC Wye Fitting - Content Builder Creating Parametric Parts - PVC Wye Fitting - Workplanes Creating Parametric Parts - PVC Wye Fitting - Adding Profiles Creating Parametric Parts - PVC Wye Fitting - Adding Geometry and Constraints Creating Parametric Parts - PVC Wye Fitting - Adding Constraints Creating Parametric Parts - PVC Wye Fitting - Adding Additional Constraints Creating Parametric Parts - PVC Wye Fitting - Applying Connection Points Creating Parametric Parts - PVC Wye Fitting - Define

<b>Creating Pipe Parametric Parts - PVC Wye Fitting</b>	Connection Points Creating Parametric Parts - PVC Wye Fitting - Validating Parts Creating Parametric Parts - PVC Wye Fitting - Editing Catalog Creating Parametric Parts - PVC Wye Fitting - Continue Editing Catalog
<b>Plumbing Settings</b>	Plumbing Preferences Plumbing System Definitions Plumbing Line Style Plumbing Line Fitting Styles Plumbing Fixture Unit Table Styles
<b>Plumbing Layout</b>	Adding Plumbing Equipment - Ribbon Interface Adding Plumbing Equipment - Tool Palette Adding Plumbing Lines Adding Plumbing Lines Using Grips Adding Plumbing Accessories Sizing Plumbing Lines
<b>Plumbing Annotation</b>	Annotating Plumbing Lines Tagging Plumbing Fixtures Plumbing Fixture Schedule
<b>Electrical Settings</b>	Electrical Preferences Conduit Preferences Cable Tray Preferences Electrical System Definitions Load Definitions Electrical Panel Styles Electrical Devices Wire Styles Part Group Definitions Schematic Styles
<b>Electrical Layout</b>	Adding Devices Adding Spaces and Devices Placing Electrical Panels Circuiting Panel to Panel Circuiting Devices Overloading Circuit Wiring Devices Multiple Single Phase Circuiting Placing Lighting Fixtures EPD File in a Project

**Electrical Layout**

Wiring Lighting Fixtures  
Placing Switch Gear  
Modeling Conduit  
Modeling Cable Tray  
Offsetting with Conduit  
Inserting One Line Symbols  
Schematic Lines

**Electrical Annotation**

Tagging Home Runs  
Device Tag  
Lighting Fixture Tag  
Lighting Fixture Schedule  
Creating Custom Fixture Schedule  
Creating Custom Schedule Table Style  
Creating Panel Schedule

**Electrical Symbols**

Creating Custom Symbols  
Creating Custom Switch Board MVPart  
Custom Switch Board MVPart - Content Builder  
Custom Switch Board MVPart - Connectors