

# Why Moving from AutoCAD to AutoCAD MEP Just Makes Sense!

If you create building mechanical, electrical, or plumbing (MEP) construction documents and are currently working with AutoCAD® software to produce your drawings, then you should take a look at the top 10 reasons why moving from AutoCAD to AutoCAD® MEP just makes sense.

AutoCAD has been the preferred drafting application for many mechanical, electrical, and plumbing drafters, designers, and engineers, until now. Many users have invested a fair amount of time getting up to speed on the latest AutoCAD version, not to mention setting it up to suit their specific application. But as these same customers seek higher levels of productivity, increased efficiency, optimal flexibility, and easier methods to collaborate with colleagues, they are beginning to realize that AutoCAD MEP could better fit their application needs. Read on to discover the top 10 reasons you should consider moving from AutoCAD to AutoCAD MEP, your better faster AutoCAD for design and documentation of MEP engineering projects.

## Top 10 Reasons at a Glance

1. Go Beyond “Lines, Arcs, and Circles”
2. Keep Up With Changes Fast
3. Get to Production-Ready Documents More Quickly
4. Accurate Construction Documents
5. Quickly Transition Between Design Phases
6. Maintain Coordination Between Disciplines
7. Accelerate the Documentation Process
8. Enforce CAD Standards
9. Put Your Designs to Work
10. Use Your AutoCAD Knowledge to Your Advantage

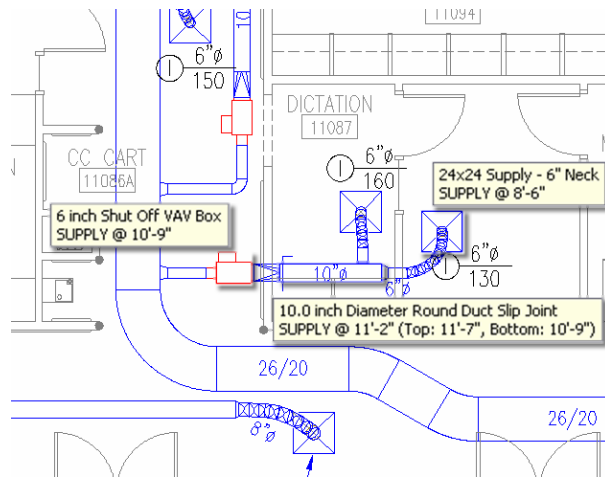
## Go Beyond “Lines, Arcs, and Circles”

### Design with Parts

**AutoCAD** was built as a powerful generic drafting tool to meet the needs of many diverse industries and user types: AEC, Civil, Manufacturing, and so forth. You work with basic geometry – lines, arcs, and circles – to represent your designs.

**AutoCAD MEP** was built with one and only one industry in mind – to provide you with a better, faster AutoCAD built specifically for mechanical, electrical, and plumbing (MEP) engineering design and documentation for buildings. You work with parts, like ducts, pipes, and equipment, which represent their real-world counterparts and add intelligence to your designs. A duct is a duct, a pipe is a pipe.

**Value to you** is increased productivity and reduced drafting time enabling you to produce a set of accurate construction documents quicker.



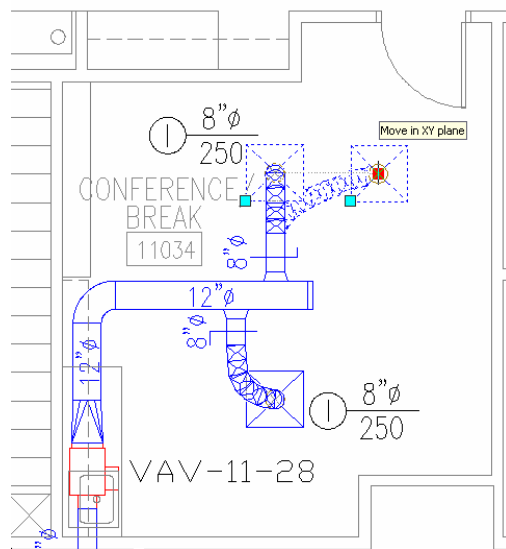
## Keep Up With Changes Fast

### Ease of Modification

With **AutoCAD**, keeping up with design changes can be a challenge. Daily revisions are a fact of life in most design projects, but when making changes becomes a manual process, significant time is lost and the chance for errors increases.

With **AutoCAD MEP**, keeping up with design changes is easy – change the size of a duct and the entire run automatically resizes; drag a pipe to a new location and the system will stretch and update to fit; add additional electrical devices and be alerted when the circuit is overloaded. And since your construction documents are linked to your design model, make the change once and AutoCAD MEP does the rest.

**Value to you** is being able to make changes fast while ensuring those changes are reflected throughout an entire set of construction documents.



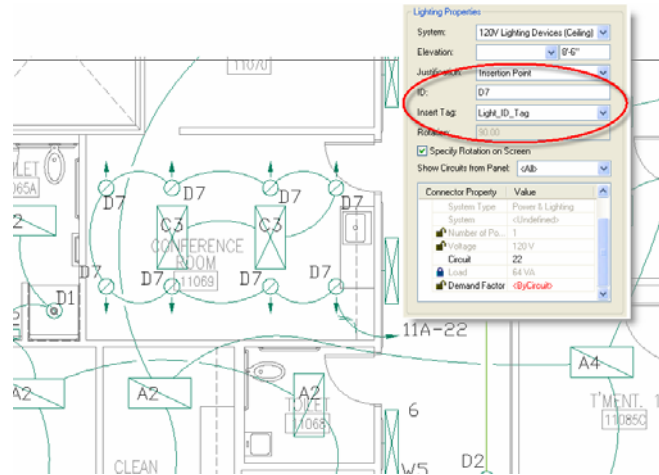
# Get to Production-ready Drawings More Quickly

## Construction Annotation

With **AutoCAD**, much of the time invested in producing a set of construction documents is spent on simple annotation tasks – such as adding labels. These tasks can be time-consuming and error-prone.

With **AutoCAD MEP** automated labeling tools are provided that streamline the annotating of construction documents. Automatically place labels as you lay out your system designs. Make changes to those designs and watch the labels update right before your eyes.

**Value to you** is being able to reduce many of those manual drafting tasks while ensuring the accuracy of your construction documents.



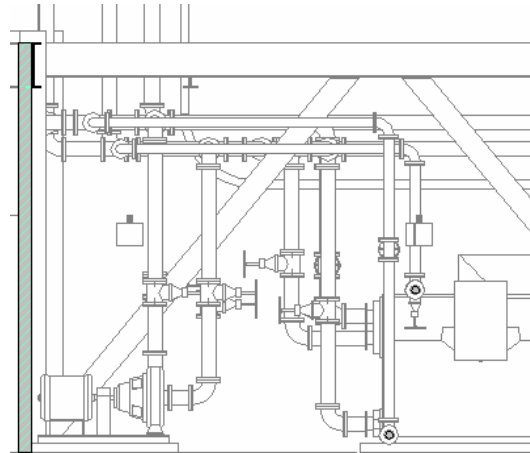
## Accurate Construction Documents

### Sections and Elevations

In **AutoCAD**, section and elevation views can be more time-consuming to create – sketching from scratch based on the plan views of your designs, and then manually verifying and updating when design changes are made.

In **AutoCAD MEP** section and elevation views are generated instantly. With a few simple steps to identify the view you want to section and the plane that cuts through the design, views are created directly from the AutoCAD MEP design. And when design changes happen, a simple refresh updates the views automatically.

**Value to you** is significantly reduced time spent developing multiple views of your designs, while ensuring complete coordination and design accuracy.

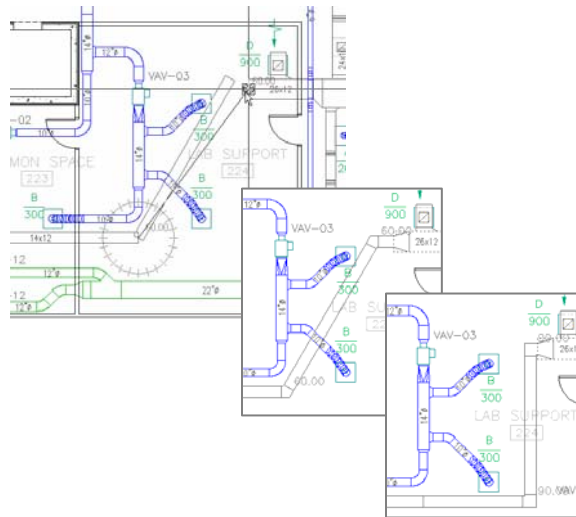


## Quickly Transition between Design Phases

### Ease of Layout

In **AutoCAD**, you work in a familiar CAD drafting environment that most users have customized with symbol libraries, custom drafting routines, and so forth, to speed up the design process.

In **AutoCAD MEP** you are still working in that same familiar CAD drafting environment; however, now you are working with a robust library of industry-based parts and discipline-specific tools for even faster layout of your designs. Common tasks, such as laying out a duct run or creating an electrical circuit, are automated replacing the traditional methods using AutoCAD software.



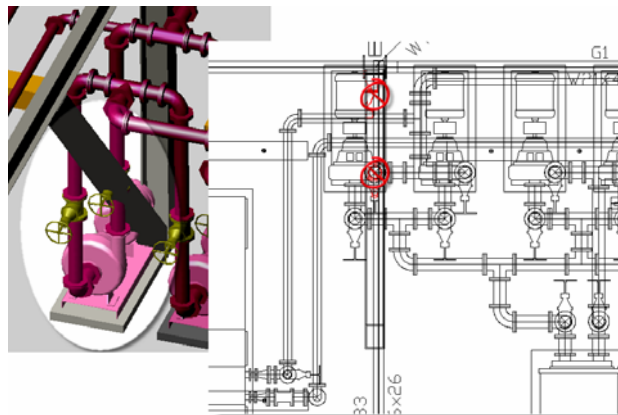
**Value to you** is working with automated tools that drastically improve your drafting productivity while reducing the pain of managing your customized AutoCAD versions.

## Maintain Coordination between Disciplines

### Interference Detection

With **AutoCAD**, coordination between disciplines involves visually checking multiple views of your designs, which is a manual process and can be time-consuming.

With **AutoCAD MEP** coordination across your entire project is automated. By leveraging the design created in AutoCAD MEP, you can take advantage of the automated collision detection tool, quickly identifying conflicts in your designs before construction begins.



**Value to you** is that you can make faster design decisions, produce more accurate construction documents, and avoid time-consuming rework later in the project.

# Accelerate the Documentation Process

## Schedules

In **AutoCAD**, creating schedules can be a time-consuming task. Even with customized tables and data extraction capabilities, keeping your schedules accurate across an entire project is still a manual process.

In **AutoCAD MEP** you produce schedules that are directly linked to your design. As your design changes, the schedules are automatically updated. And since schedules can include calculated values, even detailed design information, such as heating or electrical load requirements, can be captured in the schedules or extracted for use in other applications, such as Microsoft® Excel.

11C													
VOLTS/PHASE/WIRE 120/208/3/4		PANEL SIZE & TYPE NO.00		MAIN SIZE & TYPE 100A MLO		CABINET SURFACE	MIN SCC 30K	FED FROM	NOTES				
CIRCUIT NO.	TRIP AMPS	NO. POLES	AREA SERVED	PHASE LOAD VA			AREA SERVED	NO. POLES	TRIP AMPS	CIRCUIT NO.	CONN. LOAD		
				A	B	C					VA	AMPS	FACTOR
1	20	1	Patient RM RC	640									
3	20	1	Patient RM RC		640								
5	20	1	Patient RM RC			640							
7	20	1	Patient RM RC	640									
9	20	1	Patient RM RC		640								
11	20	1	Patient RM RC			640							
13	20	1	Patient RM RC	0		0							
15	20	1	Patient RM RC	1680									
17	20	1	Patient RM RC		360								
19	20	1	Patient RM RC			0							
21													
LOAD CATEGORY				CONNECTED LOAD VA	DEMAND FACTOR	ESTIMATED LOAD VA							
Standard				29580	100%	29580							
TOTAL				29580	100%	29580							

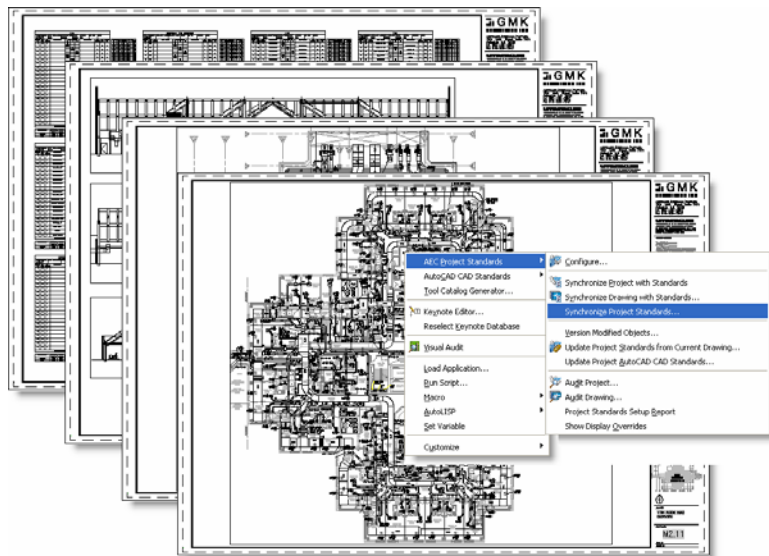
**Value to you** is a significant reduction in time spent producing schedules and helping ensure schedule accuracy even when changes are made late in the project.

# Enforce CAD Standards for Drawing Consistency

## Project Standards

**AutoCAD** helps to manage and provide consistency of CAD standards, which, like it or not, is a necessary part of the drawing process. The tools provided enable you to establish CAD standards and apply them across individual drawings.

**AutoCAD MEP** takes it one step further. From one central location you establish, maintain, and synchronize standards, such as styles and display settings, for your entire project. Generate reports that indicate which drawings do not comply with the standards and how they differ. Then choose how to automatically update the drawings to meet the standards.

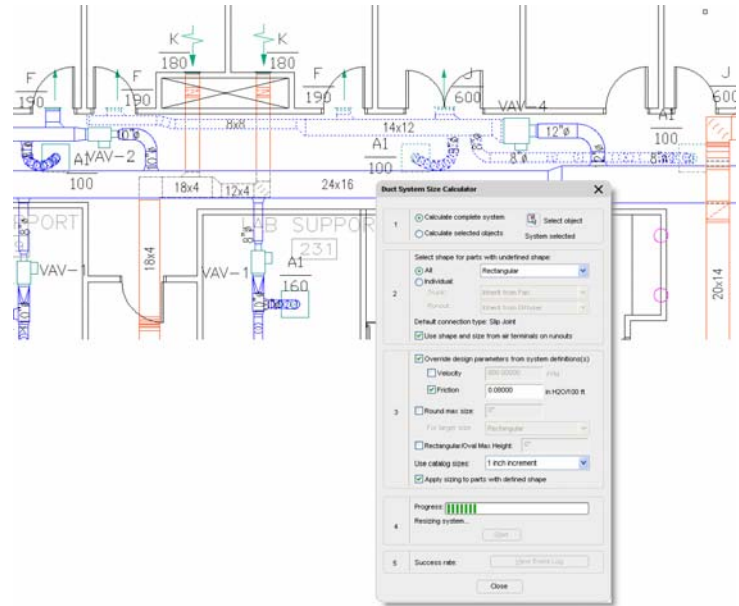


**Value to you** is being able to enforce CAD standards for your entire project automatically from a single location.

## Put Your Designs to Work Engineering Calculations

With **AutoCAD** drawings, the design information required to perform engineering calculations is typically extracted manually. The design drawings are referenced and the design data is transcribed as needed.

With **AutoCAD MEP**, you can work seamlessly with your design layouts to perform engineering calculations. Built-in sizing calculators and the support of multiple file formats, such as ddXML and gbXML, enable you to directly access the rich engineering data stored on the parts in your design layouts. Plus, with bi-directional capabilities you can automatically update your design layouts based on the results of the calculations.

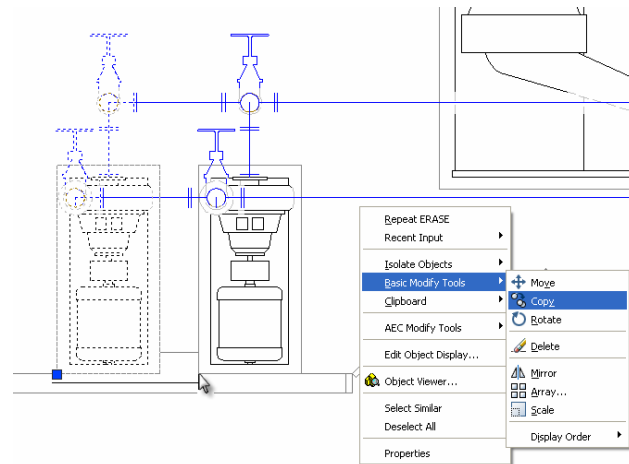


**Value to you** is minimizing errors and saving time by eliminating the need to manually transfer most design information.

## Use Your AutoCAD Knowledge to Your Advantage AutoCAD-based

With **AutoCAD**, you have the security of a familiar software solution that you have spent years using. And chances are you have also spent countless hours customizing your AutoCAD solution to suit your individual needs.

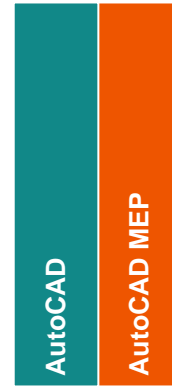
With **AutoCAD MEP**, you get a complete version of AutoCAD. Therefore, not only can you leverage all your AutoCAD knowledge and customization, but also take advantage of software that has been designed specifically for the MEP engineering design process.



**Value to you** is you get all the powerful tools of AutoCAD MEP that automate many of those tedious drafting tasks, and all the benefits of the latest features in AutoCAD too. How's that for the best of both worlds!

## Get the Most Functionality

This table examines AutoCAD and AutoCAD MEP software products, and their respective features, in an effort to help you make the best choice for your business. AutoCAD software itself is the world's leading customizable and extendable CAD application for drafting and design documentation. AutoCAD MEP is the discipline-specific application based on the familiar AutoCAD platform. Built especially for building MEP engineering design and documentation, AutoCAD MEP enables customers to realize immediate productivity gains within existing ways of working by accelerating design and documentation of their projects.



<b>Production of Construction Documentation</b>		
Automated sheet management	•	•
Manages/updates project standards	•	•
Direct editing and instant onscreen feedback	•	•
Import/export data in DWG, DWF™, and other formats	•	•
Centralized management of project files		•
Work in multiple views and schedules, with bi-directional associativity		•
Automated display support for multiple display representations		•
Automated schematic and annotation tools		•
Automatic generation of sections and elevations		•
<b>MEP Engineering Tools</b>		
Purpose-built tools for mechanical, electrical, and plumbing design		•
Provides standards-based part libraries		•
Provides routing tools for ductwork, piping, cable tray, and conduit		•
Built-in sizing calculators for duct, pipe, and wire		•
Manages electrical circuit design		•
Automated system zoning		•
Automated tools for converting sketches to system designs		•
Supports drawing connectivity through xrefs		•
Automatic generation of 3D model		•
Provides interference checking tools		•
Provides creations tools for customized symbols and parts		•
Automatic generation of thematic design plans		•
<b>Additional Features</b>		
Supports multi-user/multi-discipline project environment	•	•
Supports collaboration/workflow with professionals using AutoCAD	•	•
Customizable user interface	•	•
Supports rendering, visualizations, and presentation graphics	•	•
Customizable API supports variety of in-house functions	•	•
Wide variety of third-party applications available	•	•

## AutoCAD MEP

Take advantage of all that AutoCAD MEP has to offer – tools for the MEP engineering industry, a better faster AutoCAD to generate plans, sections, elevations, and schedules – and get the best of both worlds with an AutoCAD-based discipline-specific solution. For more information about AutoCAD MEP, go to [www.autodesk.com/autocadmep](http://www.autodesk.com/autocadmep).

## What our Customers are Saying

Making the move to AutoCAD MEP has already translated into customer successes. Here are some comments from engineering firms that have realized that AutoCAD MEP is a better fit for their application needs:

*“The clarity of the final product blew the client away. As a result, we significantly reduced the number of requests for information, both during the bidding process and onsite during construction.”*

—Doug Reinbold, PE, Principal, Reinbold Engineering Group

*“AutoCAD MEP has created the next jump in productivity. It’s definitely faster for creating drawings, eliminating mistakes, and saving on drawing time. With AutoCAD MEP, we estimate our engineers are creating construction documents 50% faster and modifying those 70% quicker.”*

—Reg Monteyne, Senior Vice President, Flack+Kurtz

*“After implementing AutoCAD MEP, we have seen a 50% jump in productivity. It’s giving our engineers the ability to reduce their drafting time and improve accuracy. Because of this, we’re saving time on project revisions and getting accurate construction documents completed on time.”*

—Tom Harris, P.E., President and Principal Electrical Engineer, Harris Consulting Engineers

## Now is the Time

Now is the time to take a look at AutoCAD MEP. Plan your upgrade today and soon you’ll be spending more time designing and less time drafting, ultimately producing accurate construction documents quicker. To locate the reseller nearest you, visit [www.autodesk.com/reseller](http://www.autodesk.com/reseller).

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