



Discover the Secret Sauce: AutoCAD MEP - Reloaded to Complete Your Workflows

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MP6289 In this class you will learn about tools that extend the basic use of AutoCAD MEP software to a next level. This includes calculations for building, pipes, and ducts based on local standards, as well as lighting analysis. Additional content makes AutoCAD software usable in many more areas than before.

Learning Objectives

At the end of this class, you will be able to:

- Learn about calculation on MEP systems based on local standards
- Learn how additional content enables you to build more accurate systems
- Learn about lighting analysis with AutoCAD MEP software and Dialux
- Learn about E-Klimax output for sheet metal cutting

About the Speaker

Thorsten Stern

Thorsten works in Central Europe as a technical specialist for Architectural industry, focusing on AutoCAD Architecture and Revit as well as Data Management with Vault.

Michael Göhring

Michael works in Central Europe as a technical specialist for the mechanical, electrical, and plumbing industry.

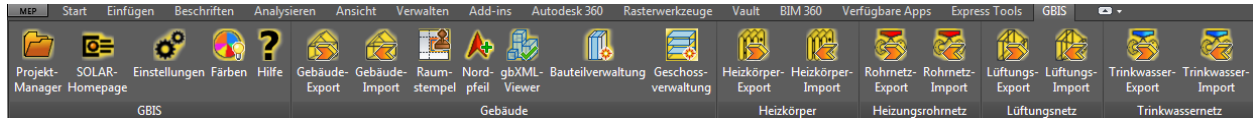
His experience in the plant industry, his studies in facility engineering, and his previous work for an Autodesk Reseller enable him to understand customers' needs.

Adoption of improvements and getting the most out of technology has always been in the focus of Michaels professional and personal life.

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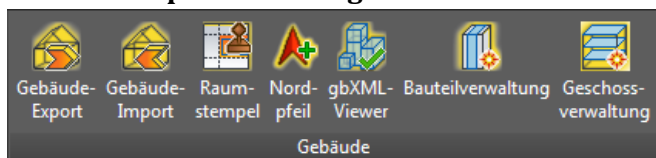
Learn about calculation on MEP systems based on local standards

Reuse 3D-Architecture to do your calculations with SOLAR-Computer



First of all you are able to select the SC Project either within Revit or in SOLAR-Computer. This makes sure that you are exporting in importing from a consistent project.

SOLAR-Computer Building



This section of the GBIS Interface will allow you to export your building geometry to the different building based Products within SOLAR-Computers Products like:

- Heating Loads (EN 12831)
- Cooling Loads (VDI 2078 / VDI 6007)
- Energy Efficiency (EnEV 2014)

The Buildingexport is combining the gbxml modell export together with mappings through the API to apply certain parameters to the export.

Since you are able to define the components with their according U-Values in SOLAR-Computer you have the ability to do a component mapping so that each Revit Family type gets assignment of it's corresponding SOLAR-Computer part. In particular this means that a certain Window type within Revit gets the declaration of AF01 (outer Window 01) and this is a specific window defined in SOLAR-Computer component editor.

After exporting your Building you will have all of the needed component information to do your calculations.

To make it easier to identify which Room or part you have selected within SC, Revit will automatically zoom towards what you have selected in SC.

After finishing your calculations you can close the calculation side and go back to revit to do the import of calculated data. This will write back all relevant data like: changed room temperatures, Heating load per room, room usage and many more. You will even get back the different zones that have been defined in energy efficiency calculations.

SOLAR-Computer drinking water



This Workflow can be applied to Heating or cooling pipe systems as well as Ventilation Systems.

All you need to do, to export the Drinking Water system to SC is to have all of your toilets, urinals, showers and so on connected to a system. Then there is a need to define the startingpoint by selecting a pipe and adding "SC-Wurzel" in the comment parameter. This will allow SC to identify where you want your topology to be started.

Pressing the Exportbutton will go through all of your sanitary systems and export them into SC Projectfolder. This export includes:

- Fresh water
- Hot water
- Circulation pipes
- Waste water pipes

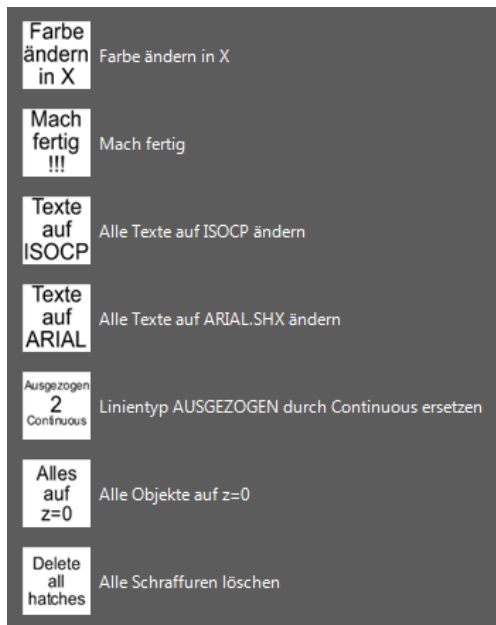
You will have the possibility to export either the topology without any dimensions to do a dimensioning or you can output the system like it is designed to calculate mass flow and pressure drop.

After doing your calculations you can reimport the results. You can write back relevant data towards fittings and equipment and do a redimensioning for all of your pipes.

Learn how additional content enables you to build more accurate systems

Revit MEP Reloaded provided by Planaid

Collection of Architectural cleanup tools:



Pipe Content – Ready to use:



Learn about lighting analysis with AutoCAD MEP software and Dialux

STF-Export and Import available as subscription benefit for AutoCAD MEP.

Download at Subscription center:

<http://subscription.autodesk.com/sp/servlet/download/item?siteID=11564779&id=23157326>

Use command *Dialuxexport* to export your AutoCAD Architecture rooms into a stf-file. This one could be opened in Dialux and lighting calculations as well as positioning of lighting fixtures could be done.

The saved STF-File could be reimported into AutoCAD MEP with *Dialuximport* which will create the lighting fixtures within your drawings.

Learn about E-Klimax output for sheet metal cutting

Extract your MEP-Design directly to E-Klimax for sheet metal cutting

