



# **AUTOFLUID 10 training**

Beginner's program (Page 1/3)

Objectives: Designing 2D drawings using AUTOFLUID 10 in AutoCAD / BricsCad / ZWCAD

Prerequisites: For engineers, experienced draughtsmen and technicians

Proficient in operating the Autocad package or similar on a regular basis

Proficient in working with Microsoft Windows and Internet

**Duration**: 2 days

### **Basic settings**

- > Preference file
- > Working unit
- > Drawing scale

# **Sizes computation**

## There are 2 types of computations: local or on a network

- > Computation of air duct sizes
- > Computation of fluid duct sizes
- > Computation of sanitary duct sizes

## **Draughting**

- > Introduction to double line drawing
- > Duct structure
- > Specification knowledge
- > Double line or single line routing of :
  - > rigid circular ducts
  - > flexible circular ducts
  - > rectangular ducts
  - > pressure holding tubes
  - > drain pipes
  - > single line set of pipes
- > Cross section drawings and the distance between the centers within the set of pipes
- > Insertion of standard components in line or on already drafted ducts
- > Network intersections :
  - > hidden intersections
  - > cut intersections with offset
- > Customizable air conditioning terminal drawings (AHU, cassette...)

## **Arrows**

- > Automatic drawing and positionning of arrows indicating directions of flows
- > Automatic adjustment of the arrows directions
- > Representation of slopes



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#### **Texts**

- > Proportions
- > Choosing a style
- > Create automatic texts, frames, leader lines
- > Formatting of the most common information using prefixes and suffixes
- > Dimensioning

## The openings

- > Sizing and drawing openings using existing network drawings
- > Drawing openings without a network
- > Modifying openings
- > Creating a list in the paper space
- > Exporting the list into Microsoft Excel

#### **Quick Modifications Tools**

- > Swapping objects
- > Changing profiles
- > Changing text
- > Deleting an object
- > Moving an object onto a duct

### **Bills**

- > Creating zones
- > Network's bills
- > Bills of materials
- > Finding equipment using marker tags
- > Creating lists in the presentation space
- > Export lists into Microsoft Excel

# **Others**

- > Automatic redrawing of ducts after they are cut
- > Working with layers (freeze, transfer, lock, etc.)
- > Changing thicknesses





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# **Laying out drawings**

- > Automatic composition of the drawing in the layout
- > Automatic inserting of title blocks formatting
- > Creating detail views
- > Updating the scale of the views automatically
- > Inserting the file name, its file path and the list of related XREF in the margin automatically

### **AutoCOUPE**

- > Inserting the cutting plane on a cross section automatically
- > Creating accurate base maps from the top view of a plan
- > Module for inserting technical data while on the top view of a plan
- > Module for deleting technical data
- > Rendering and previewing a cross section
- > Automatic drawing of cross section and perfect positioning in the layout
- Module for quick adjustments to the thickness of slabs level, suspended ceilings and raised floors

# **Pressure drops computation**

- > Nearly all objects dimensions data is already available to the software because it is embedded in every object draughted in AUTOFLUID, as soon as they are created
- > Insert flow, flow direction, hidden lengths and equipment to complete the necessary information
- > Simply click on a selected segment of the chosen route to compute pressure drops
- > Display a schematic view of the route
- > Excel spreadsheet tracking linear and singular pressure drops
- > Tables and computation processes from reference studies in the industry (MEMENTO I.E IDEL'CIK, Air conditionning course PORCHER)

# Other computations

- > Fast computation of cumulated flow rates for basic sanitary feeds
- > Computation of levels while routing
- > Computation of levels in an existing drainage network drawing
- > Computation of levels in the case of a vertical displacement of a network in a cross section