

# TUTORIAL



The purpose of this Tutorial is to show you what to do to create a project using SEE TECHNICAL.

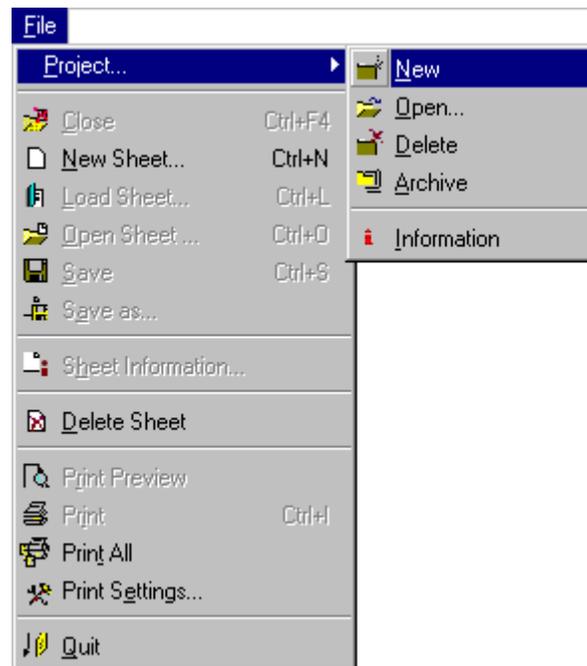
We will see how to create a new project and manage several pages using symbol insertion, connection, text, drawing....

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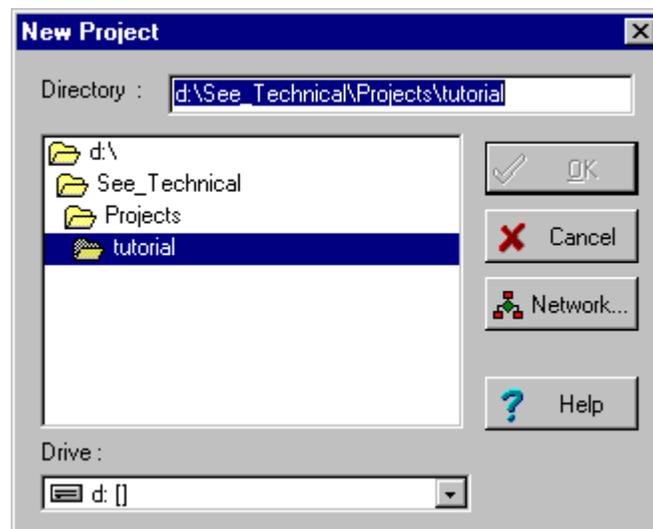
## Project creation

To create a new project, follow the instructions below:

- ◆ Select File / Project... / New



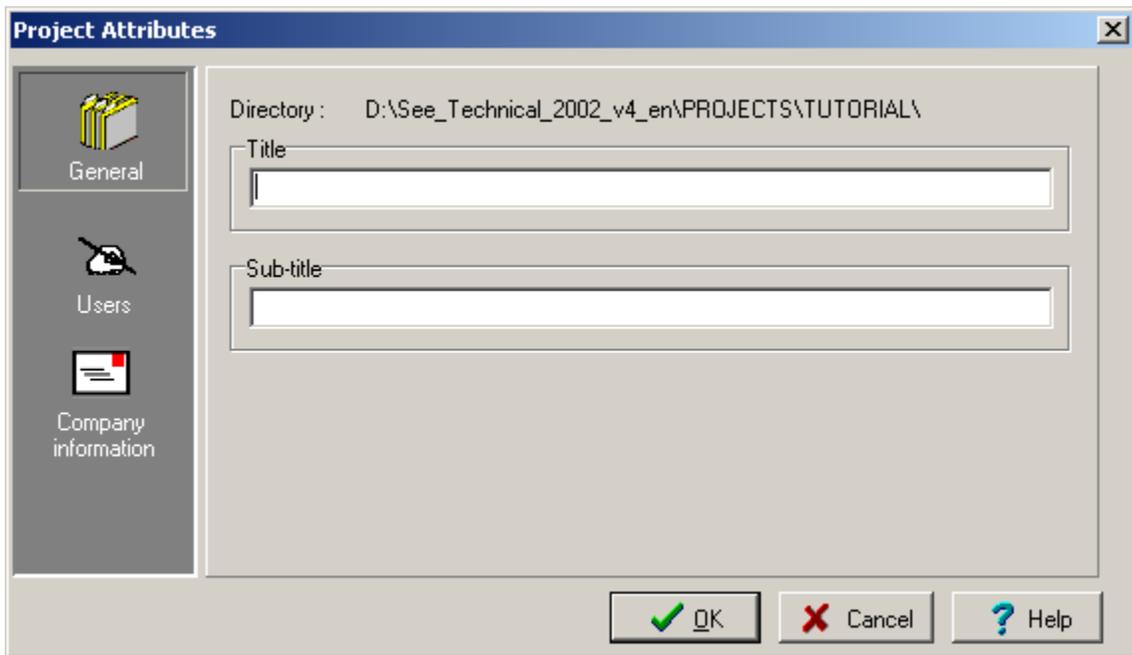
- ◆ The following window appears :



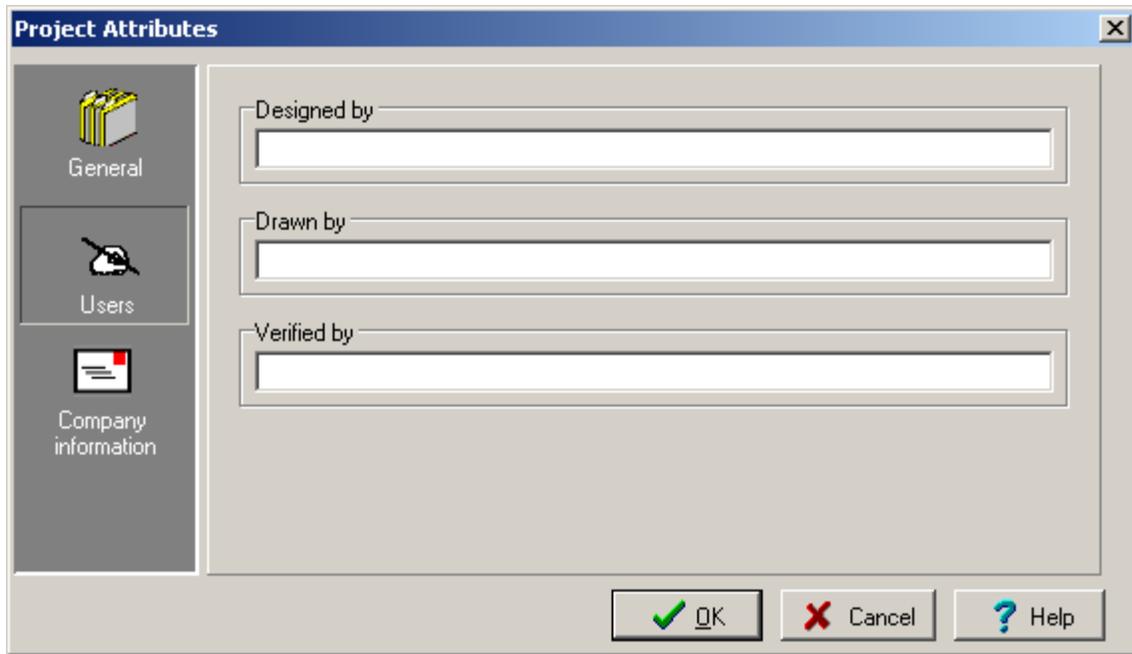
- ◆ Type in the new project name (Example : TUTORIAL)
- ◆ Click on . The "Project Attributes" window is displayed.
- ◆ Fill in the project information (Titles and sub-titles)  
This information will appear on the title block.  
(Example : Title = Project example)

## Warning

*The project title will appear on each page of the project in the title block.*



- ◆ Select  to enter the designer name, drafter name ....
- ◆ The following window is displayed:



Project Attributes

General

Users

Company information

Designed by

Drawn by

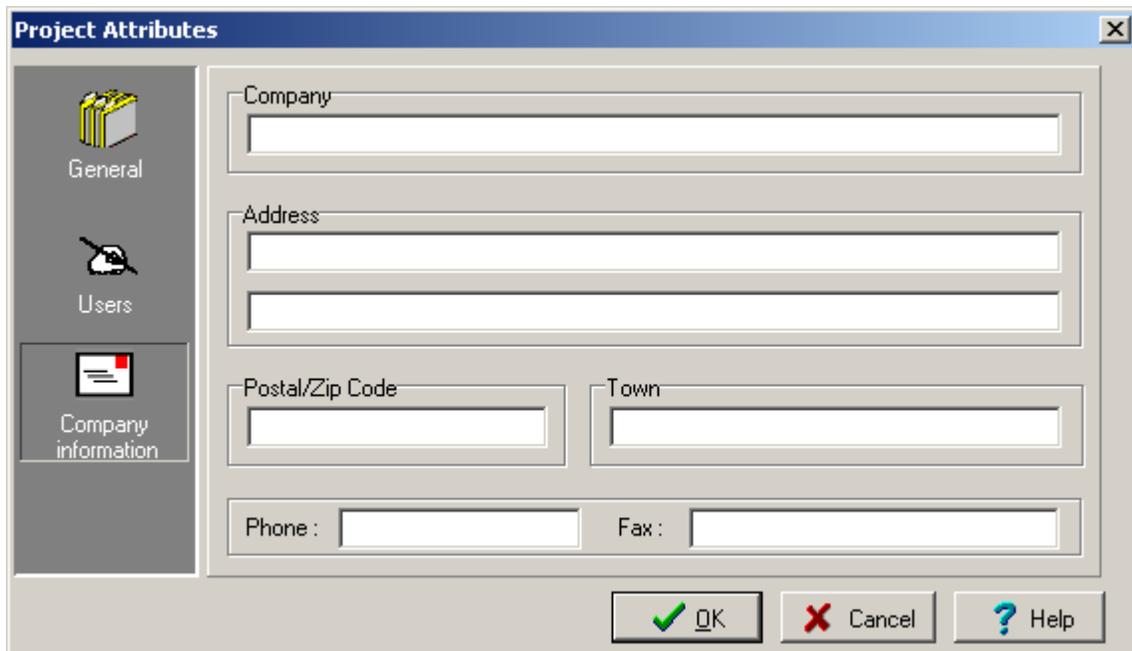
Verified by

OK Cancel Help

- ◆ Select the  button



- ◆ Select
- ◆ Enter all the information you need about your customer (or yourself). Information entered in this window will be displayed in your title blocks.



Project Attributes

General

Users

Company information

Company

Address

Postal/Zip Code

Town

Phone : Fax :

OK Cancel Help

- ◆ Select 
- ◆ In the Project Attributes window select 
- ◆ The project is now created.



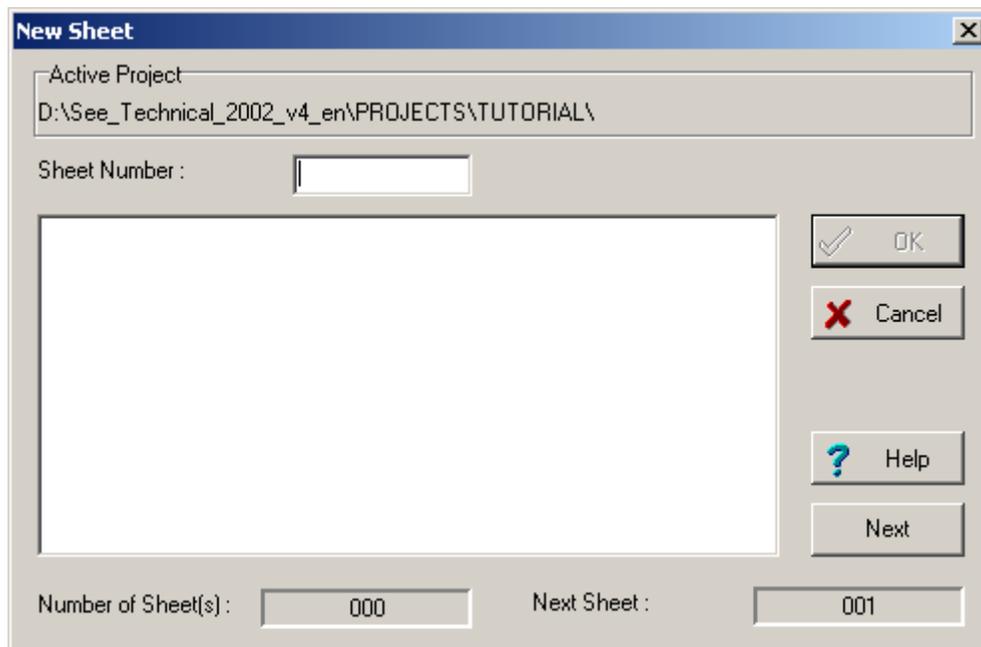
## Comment

*Project information may be modified by selecting the options **File / Project / Informations***

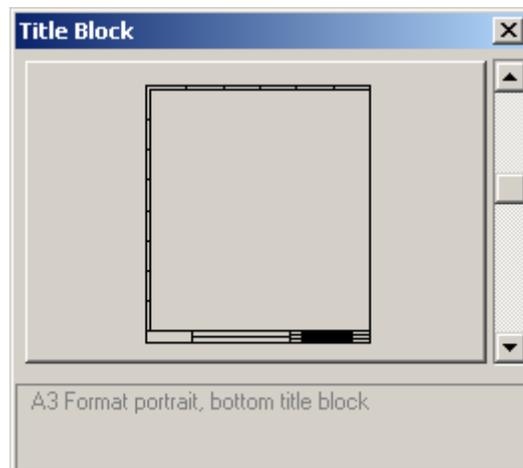
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## Sheet creation

After the creation of your project, the following window is displayed:



- ◆ Click on  or enter the sheet number.
- ◆ Select your title block by clicking on the icon representing the title block (see image below). You can select a different title block by using the vertical scroll bar.



- ◆ Enter the information of the first sheet (Title, sub-titles).  
(Example : Title = POWER, Sub-Title= MOTOR STARTER)

Information about sheet N° : 001

General

Users

Validation Index

Title :

Sub-Title :

Title Block used : A3 Format portrait, bottom title block

Sheet scale  /

**IMPORTANT**

- Each sheet has its own scale
- When creating a new sheet, the software assigns the scale of the active sheet

OK Cancel Help

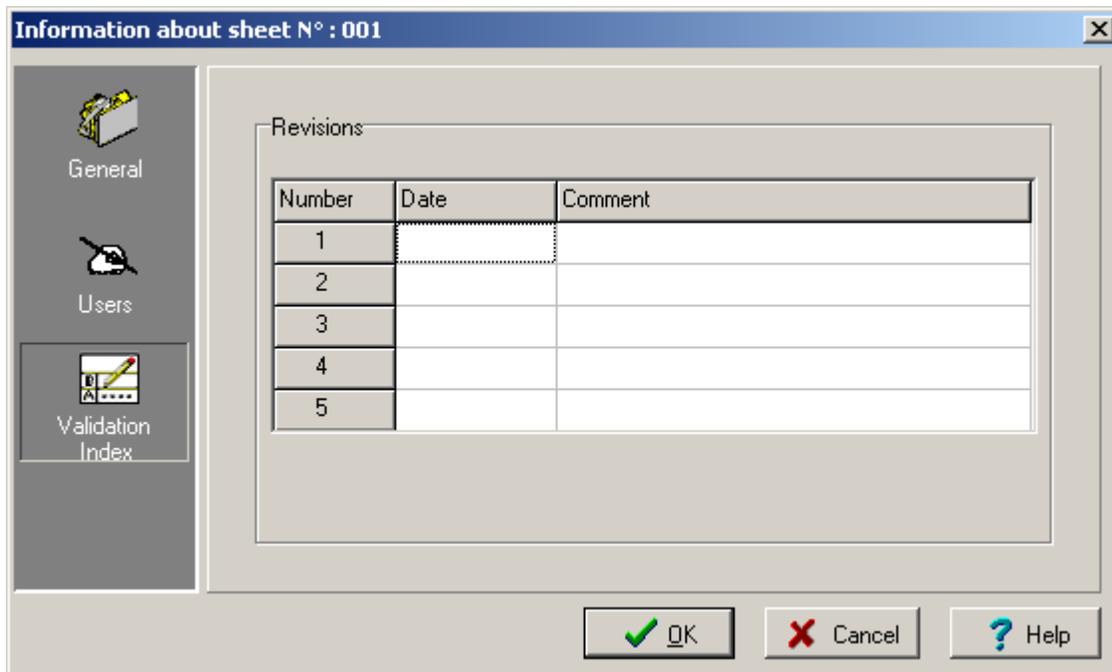
- ◆ If you wish, you can change the scale of the Title Block (by default 1/50)

## Warning

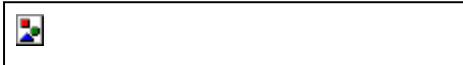
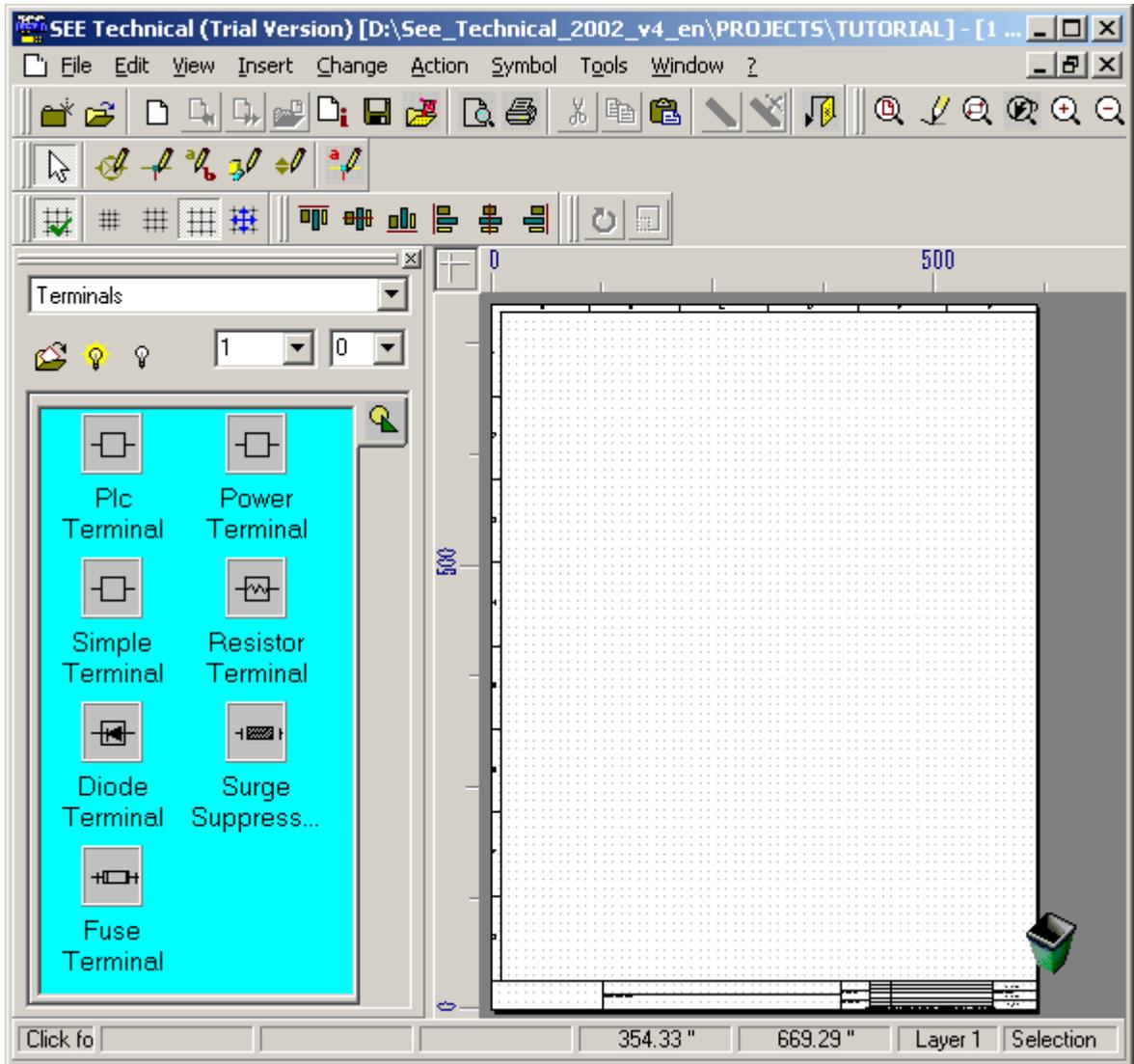
The sheet title will appear on the page in the title block.



- ◆ Click on  to give the first index.



- ◆ Click on 
- ◆ The following window is displayed:



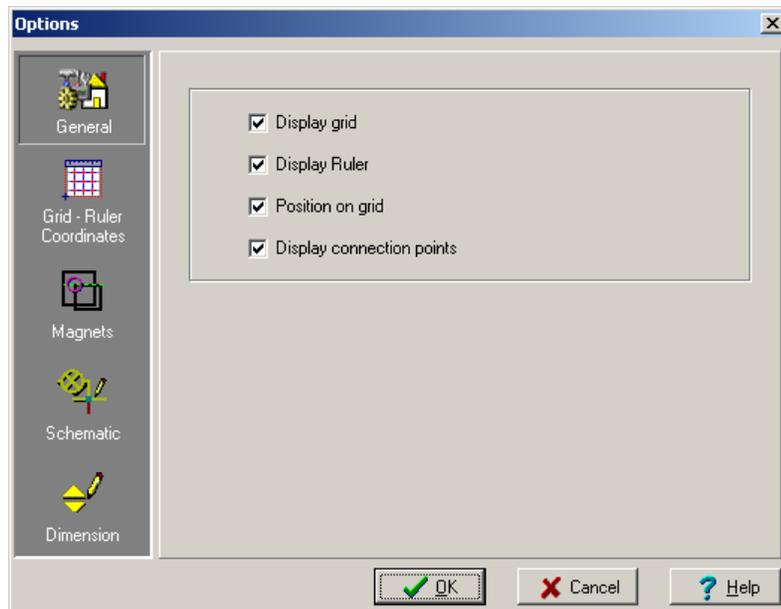
*You can modify the information of the sheet at any time by selecting **File / Sheet information***

## General Settings

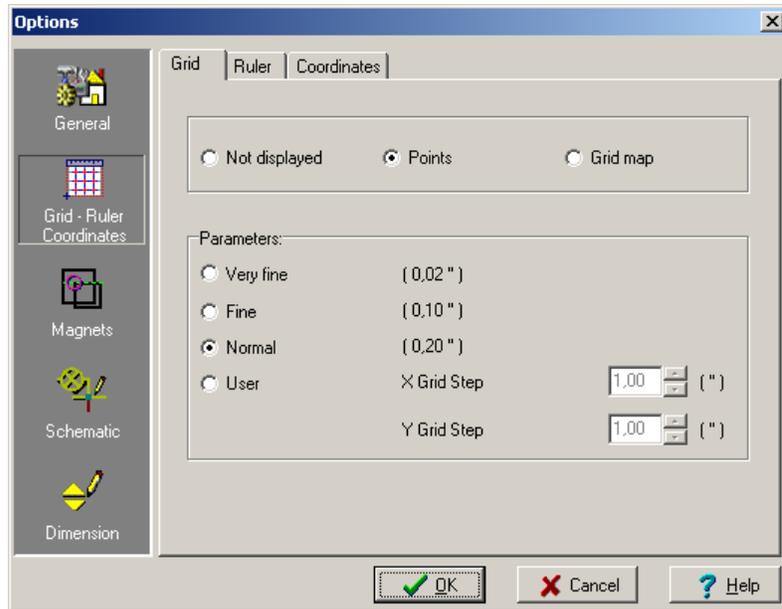
### *Coordinates display*

You can choose the units for coordinates display (X,Y).

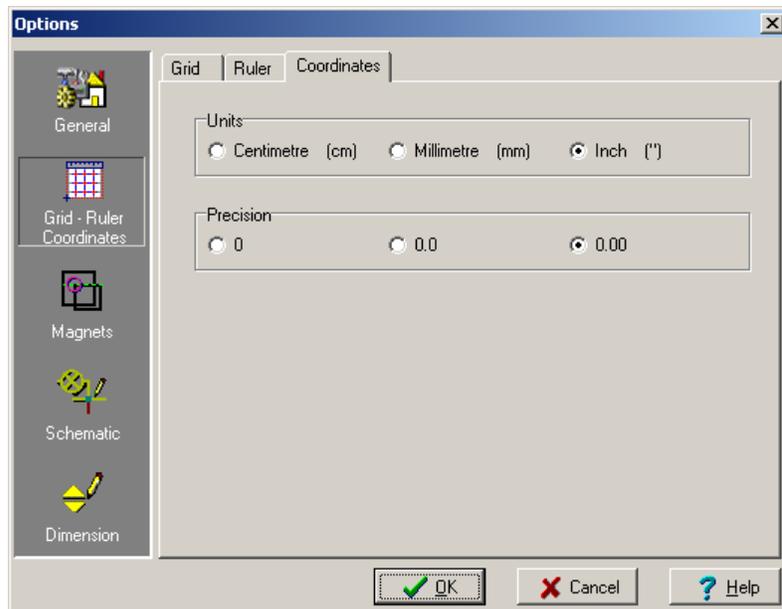
- ◆ Select Tools / Options
- ◆ A window is displayed.



- ◆ Click on the **Grid - Ruler Coordinates** tab. The window becomes as so :



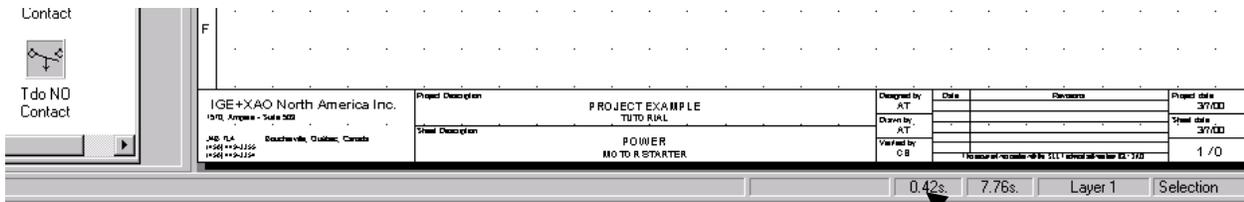
- ◆ Click on the **Coordinates** tab. The window becomes as so:



- ◆ Select the unit you want to use:

- Centimetre
- Millimetre
- Inch

- ◆ Click on 



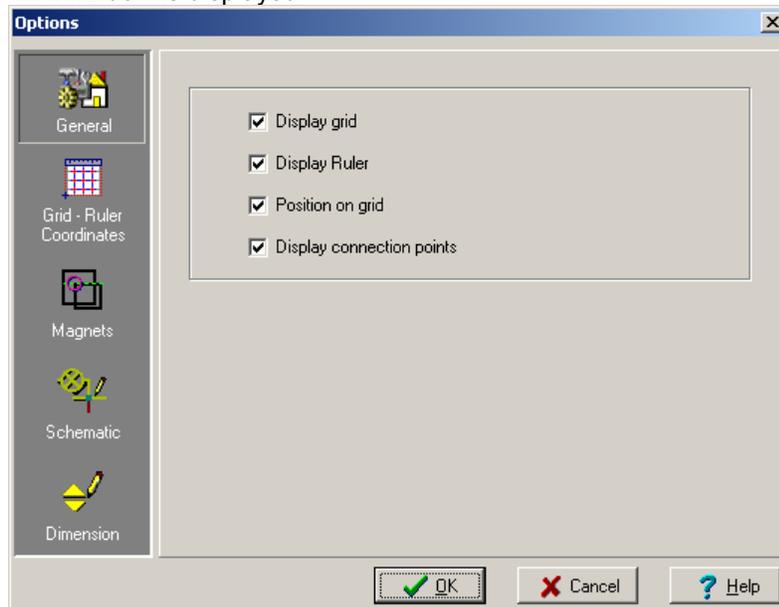
- ◆ Coordinates are displayed at the bottom right of the screen.

## Cursor Displacement

You can select from two methods to move the cursor :

- Free (1/100 of the selected unit)
- Snap on the grid

- ◆ Select Tools / Options
- ◆ A window is displayed.



- ◆ Activate  Position on the Grid to snap the cursor on the grid.

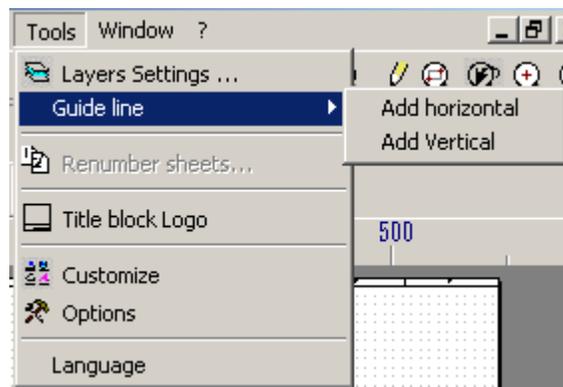
## Guide Lines

Guide lines are horizontal or vertical lines onto which inserted elements will automatically snap (Texts, Drawings, ..).

Elements will snap to a guide line as long as they are in its area of attraction.

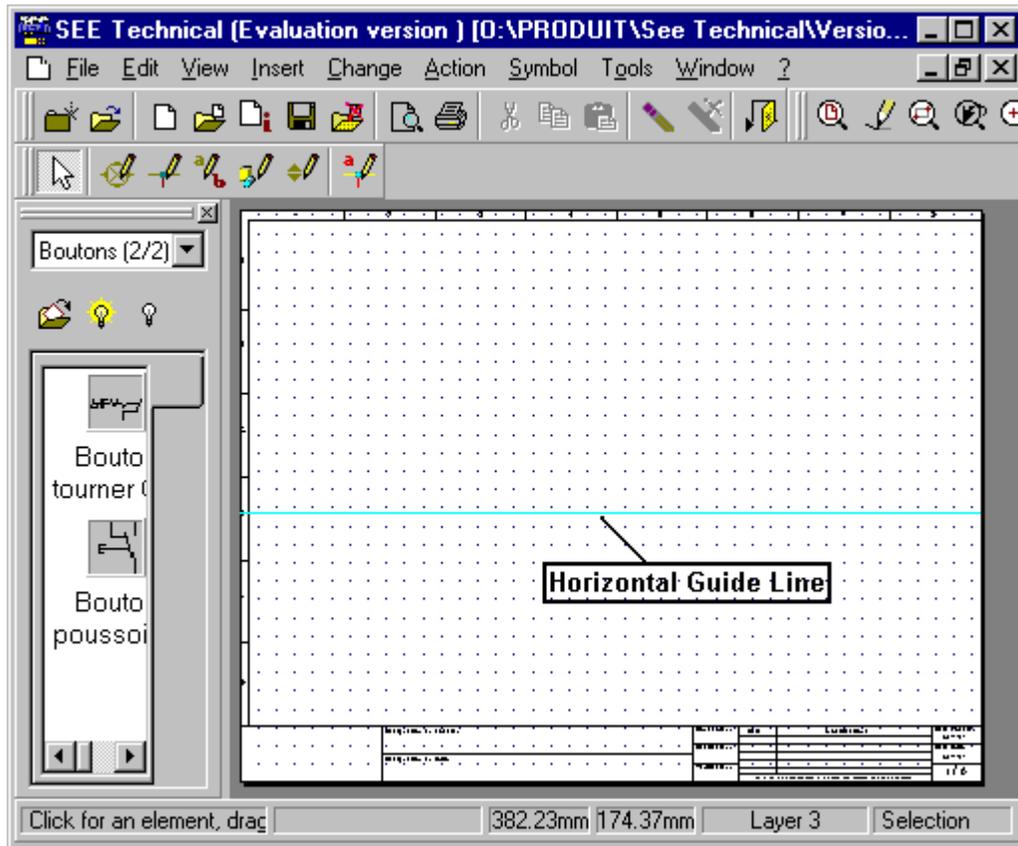
A guide line is defined using a specific line style and colour.

- ◆ Click Tools / Guide Line / Add Horizontal or Add Vertical.



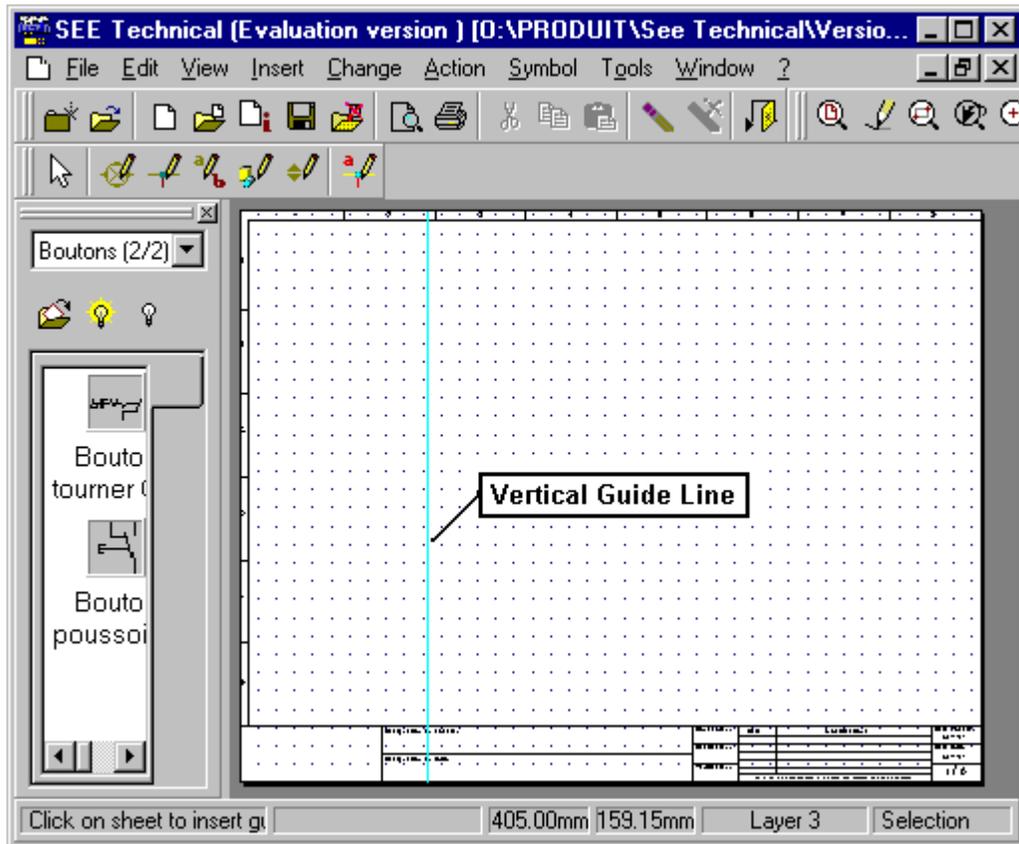
- ◆ Click to define its position.

- ◆ Example::

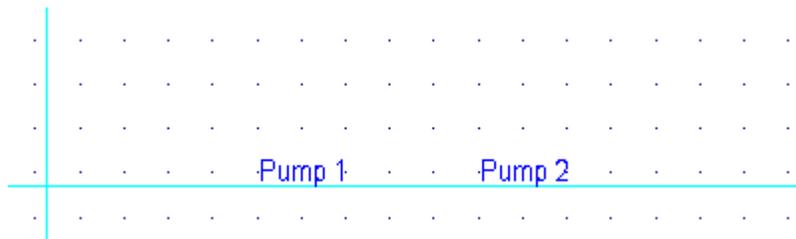


- ◆ The same method is used for Vertical Guide lines.

- ◆ Example:



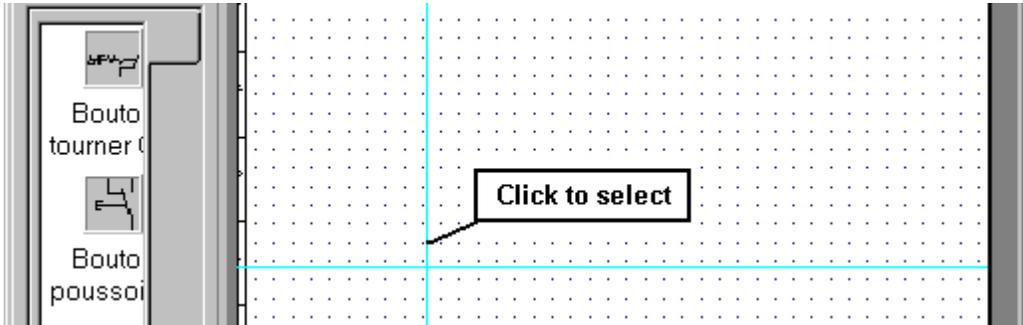
- ◆ All elements (Texts, Drawings,...), you will placed near a guide line will snap to it automatically.



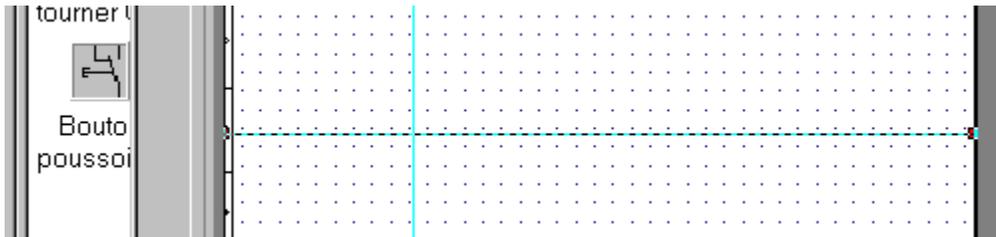
## Notes

To select a guide line, you must :

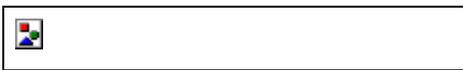
- ◆ Click on 
- ◆ Click on the guide line you wish to select



- ◆ The following window displays a selected guide line:



- ◆ It is then possible to move it, copy it or delete it.

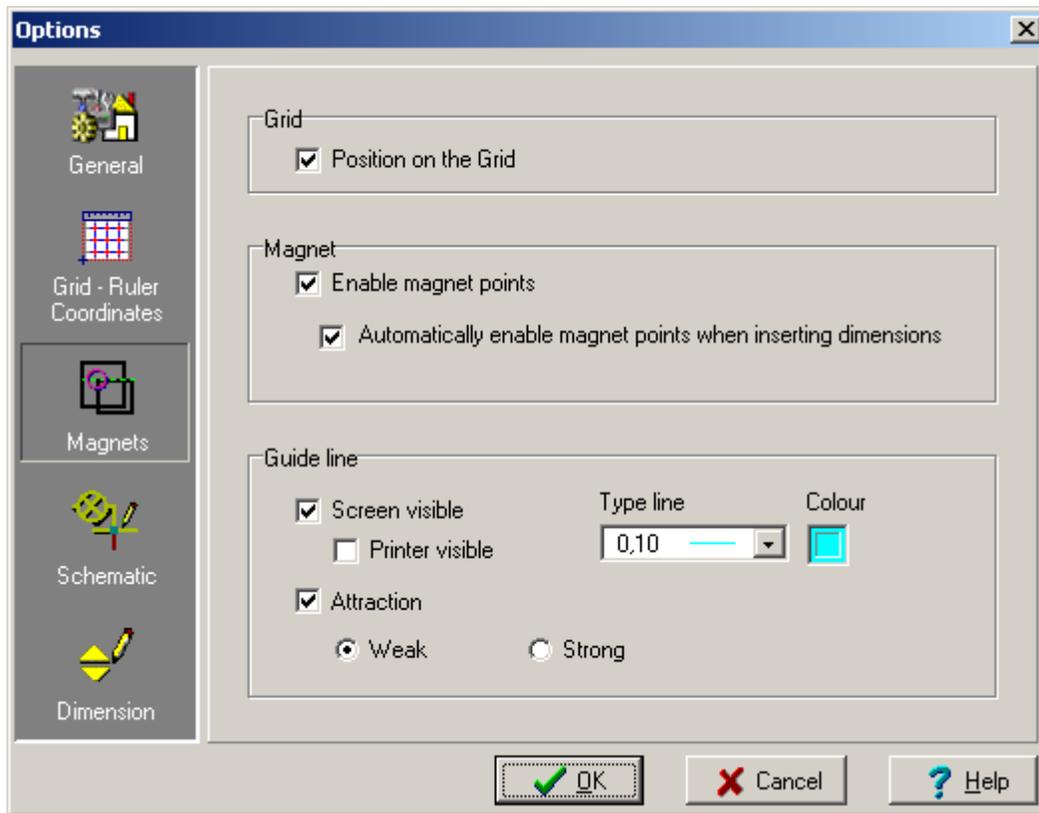


*It is possible to modify guide line settings.*

- ◆ Click Tools/Options



- ◆ Click on the . The window becomes as so



## Creation of an Electrical Schematic

We will now create the Power section of an electrical Diagram.

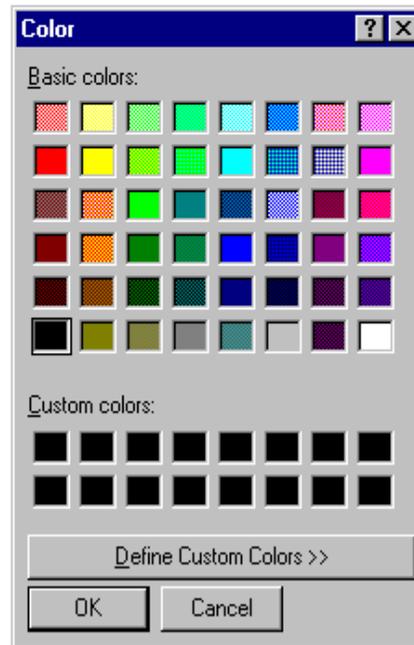
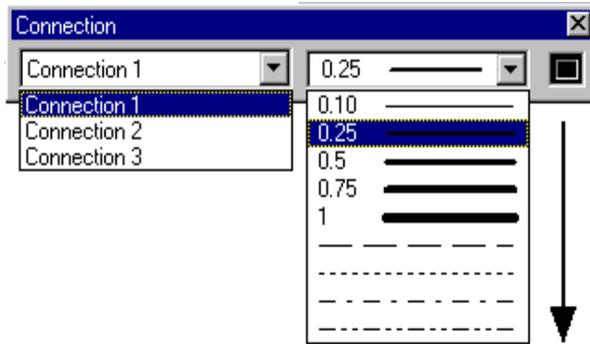
### *Insert Connection*

- ◆ Click on Insert / Connection in the menu or on the Connection button  in the toolbar.
- ◆ The following menu is displayed :

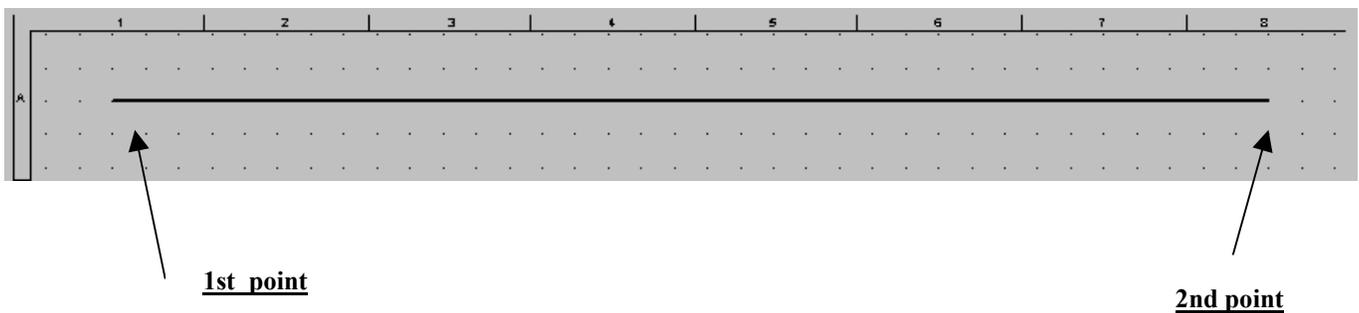


A connection is defined by :

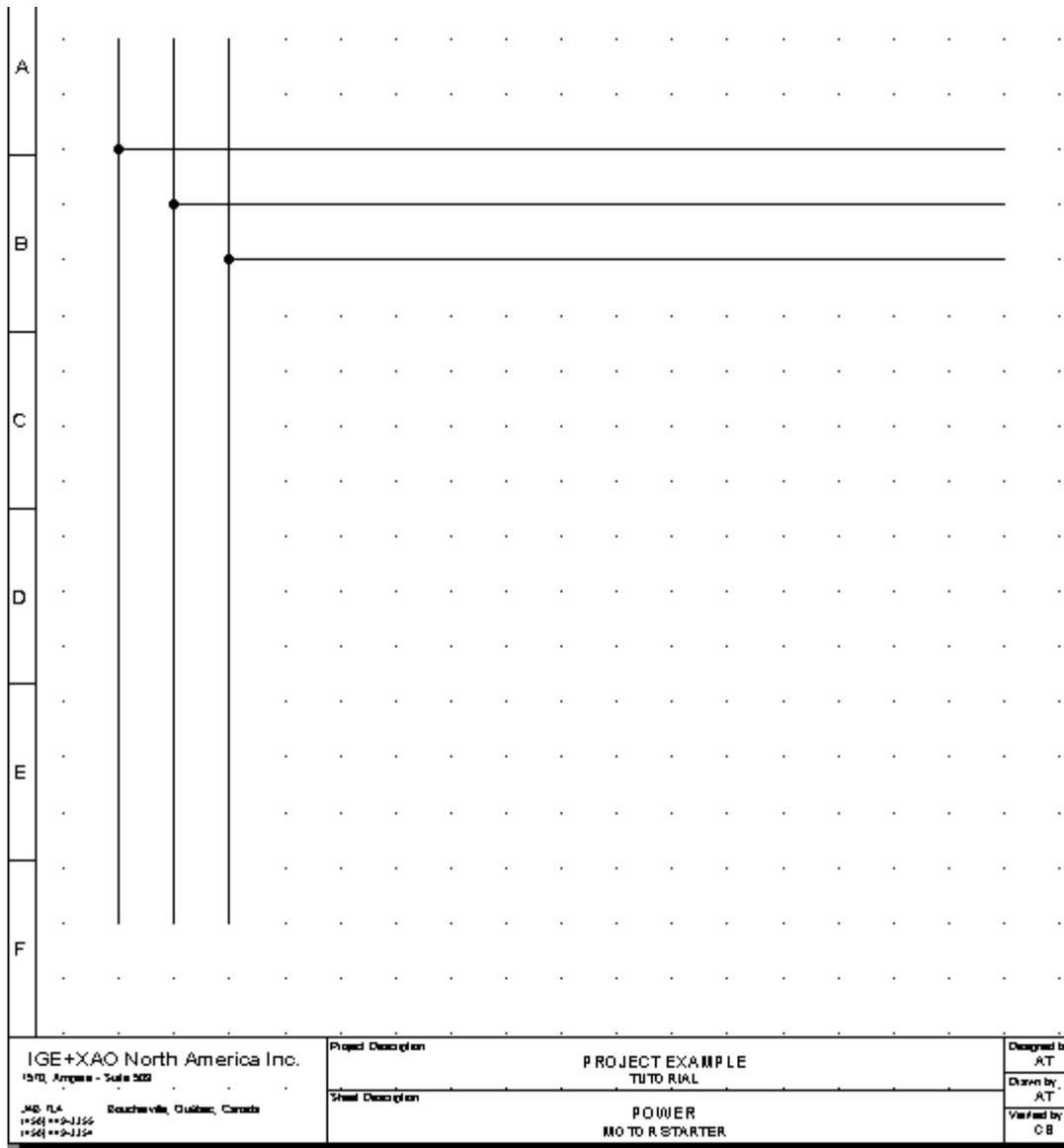
- A connection name
- Line style
- Colour



- ◆ Click the 1st and the 2<sup>nd</sup> point to draw a connection

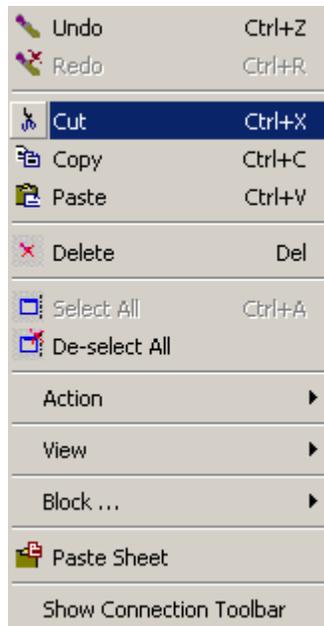


- ◆ Try to draw these lines:



To copy, delete or move a connection, :

- Click on the Selection button 
- Select a connection and click with the right mouse button
- This menu is displayed :



## Comment

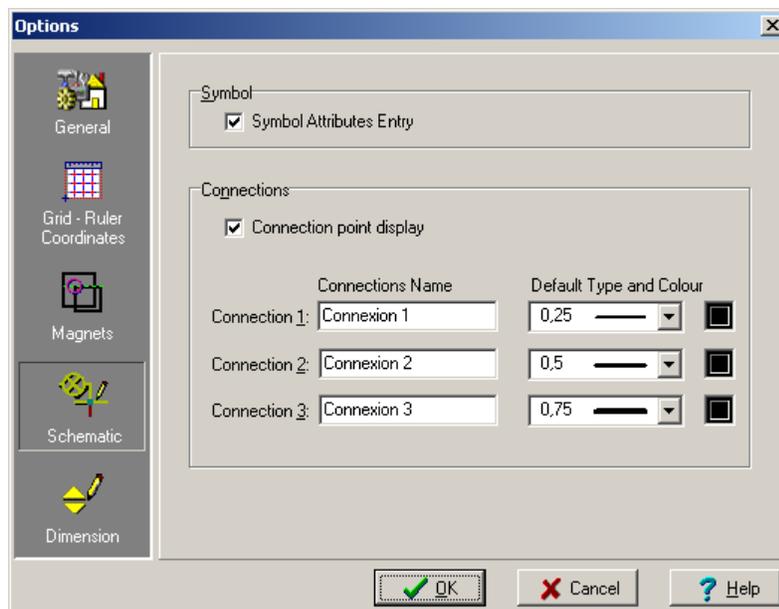
You can have up to three different connections.

You can change the name, line style and colour by selecting the function :

- Tools / Options

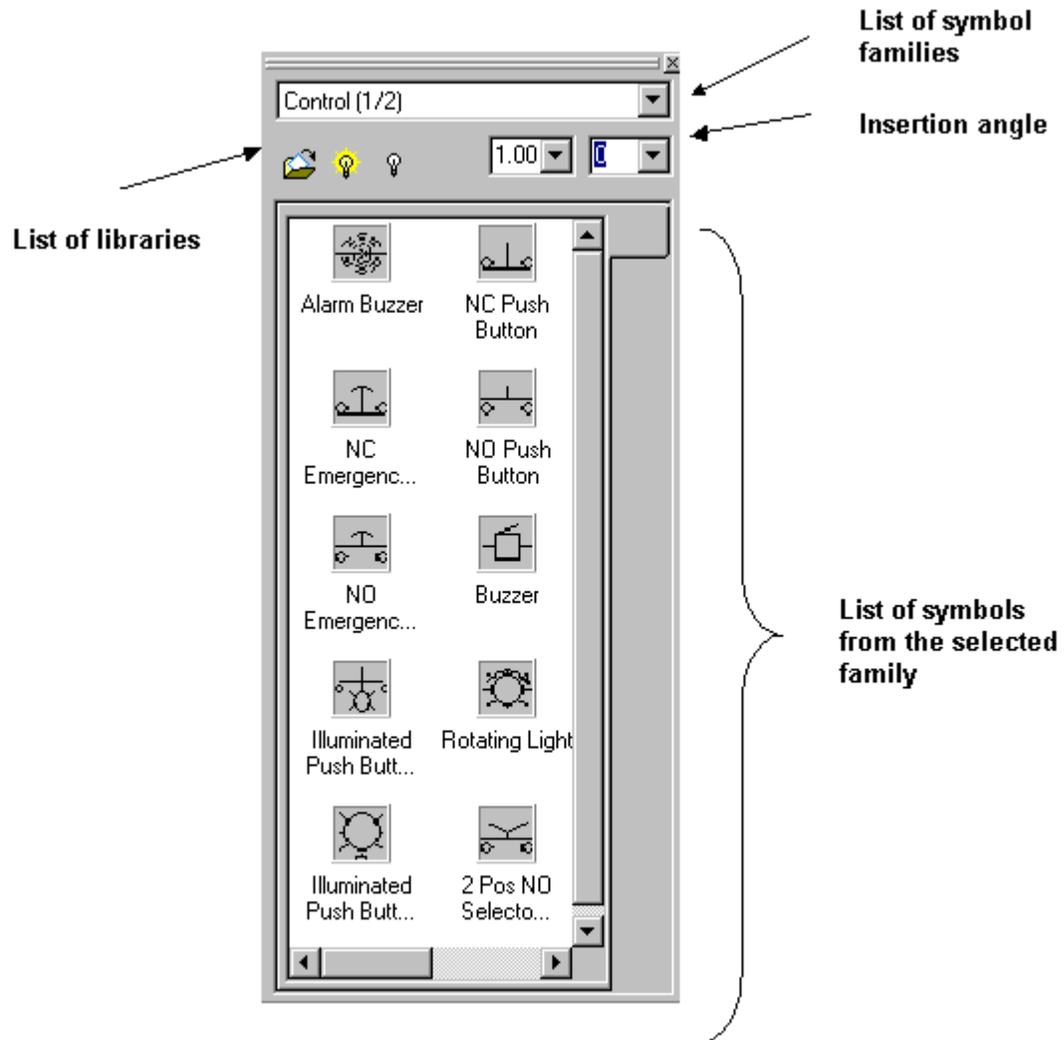


- Click on

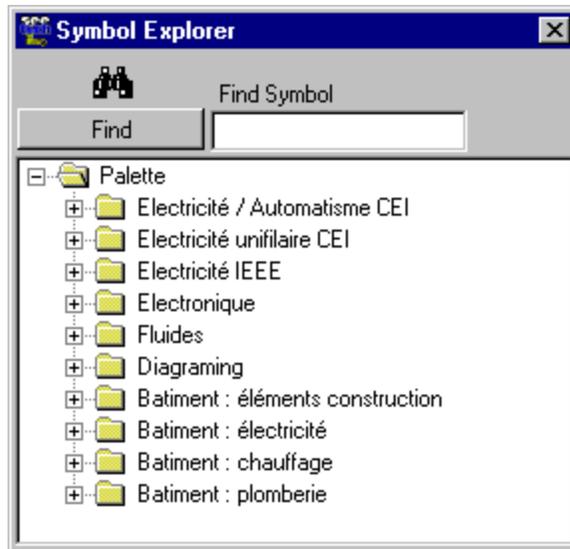


## Symbol Insertion

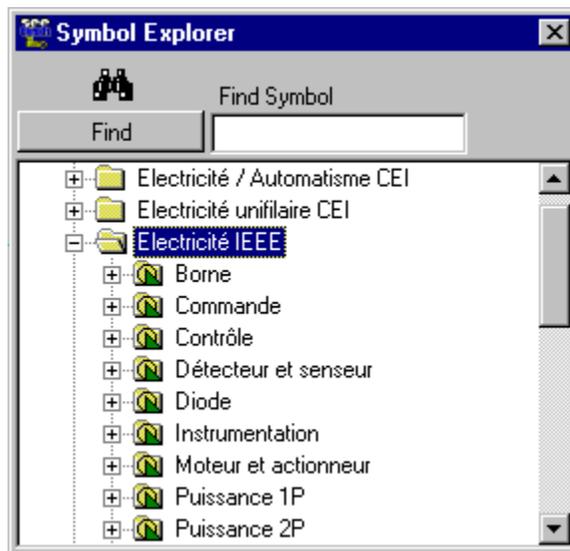
- ◆ Click on Insert / Symbol or the button 
- ◆ If it is not already displayed, the Pallet explorer appears :



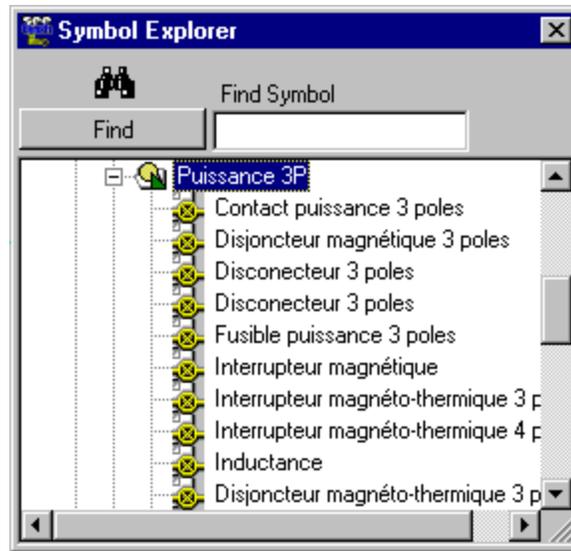
- ◆ Click on the “Change Palette” button  to change the symbol category. (IEEE, IEC, Building...)
- ◆ Select the pallet you want to use



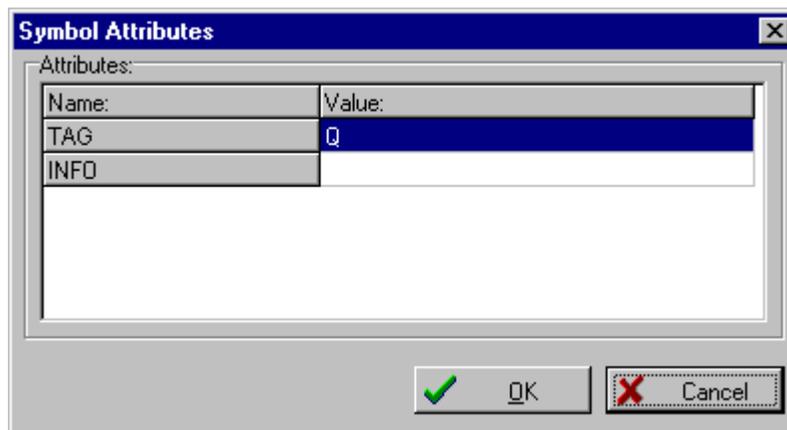
- ◆ Double-click on the symbol library you wish to select



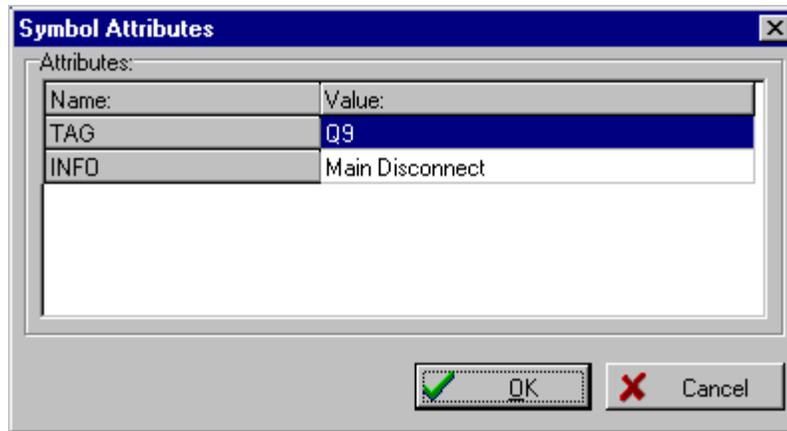
- ◆ Double-click on a family you wish to use.



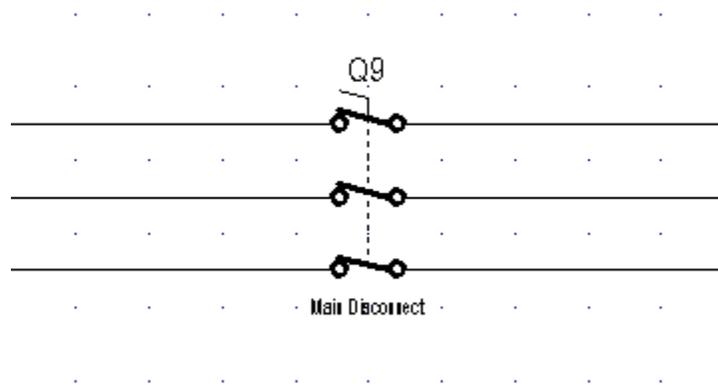
- ◆ Double-click on the symbol you want to insert
- ◆ Click on the sheet where you want to insert the symbol.
- ◆ The following window is displayed :



- ◆ Enter a Tag (component identifier, Example : MTR1, MTR2, etc...)
- ◆ Enter additional information as required (Voltage, Speed, Power...) (Example : 0.8HP).

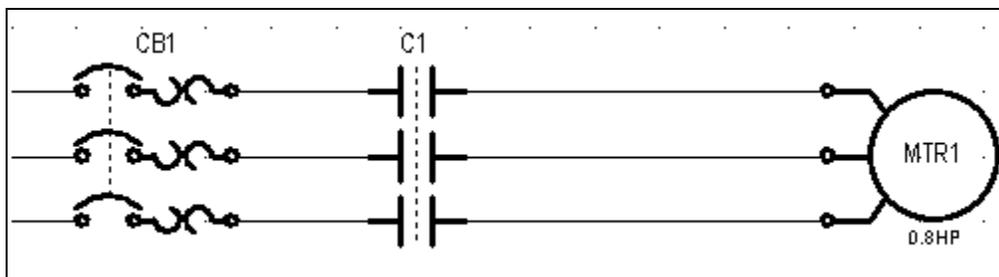


- ◆ You get :



- ◆ Insert a contactor (C1) and and circuit breaker (CB1) and a motor(MTR1) on an horizontal 3 phases.

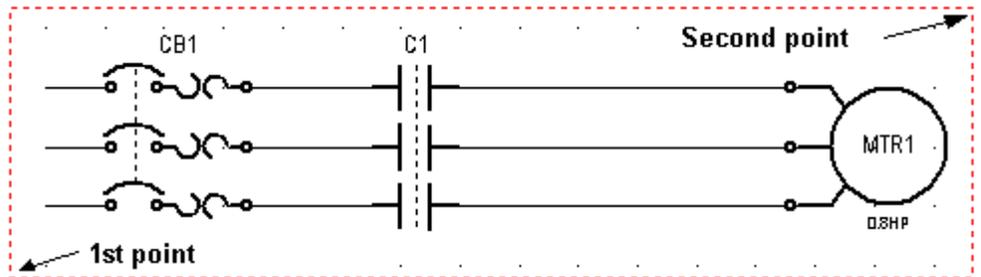
- ◆ You get :



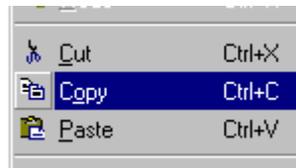
- ◆ Click on



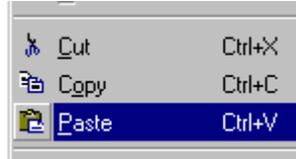
- ◆ Draw a box (Click and drag) around the motor starter



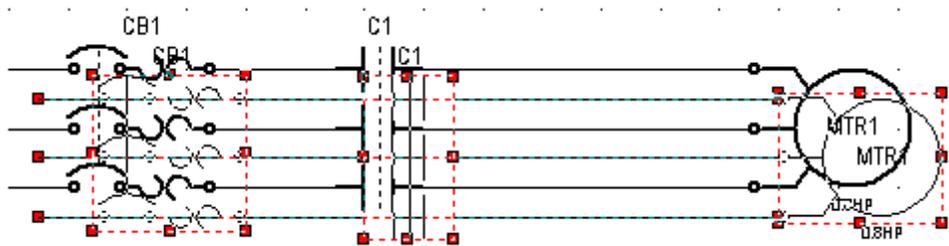
- ◆ Right click with the mouse on the selected area.
- ◆ Select **Copy**



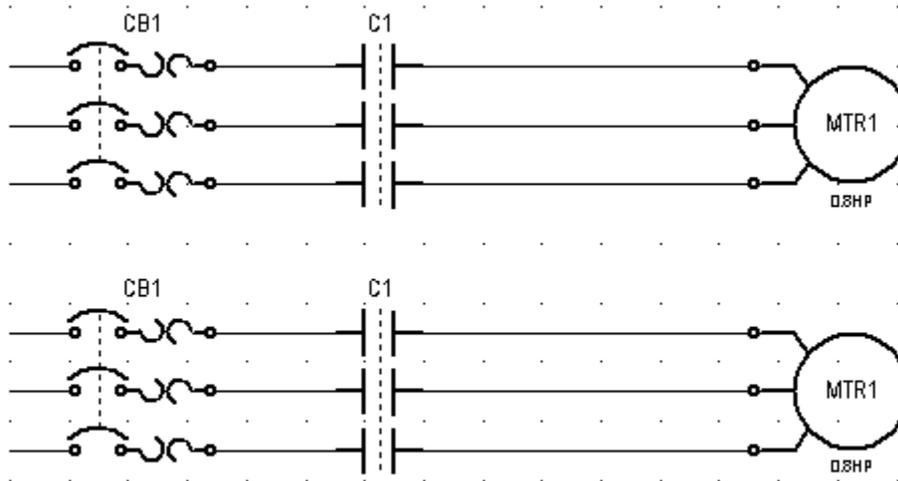
- ◆ Right click again anywhere on the graphic area .
- ◆ Select **Paste**



- ◆ You get :



- ◆ Click and drag the new motor starter to place in its new position.
- ◆ You get :



- ◆ Double click on symbols from the new motor starter to modify the value of there Tag and Information attribute ( CB2, C2, MTR2).



## Comment

In the Symbol Pallet window, it is possible to create your own families, called **User Families**. This allows you to classify existing symbols from different families into a single one. Therefore, you can group together symbols you are using more often then others, saving you from constantly browsing from one family to the other.

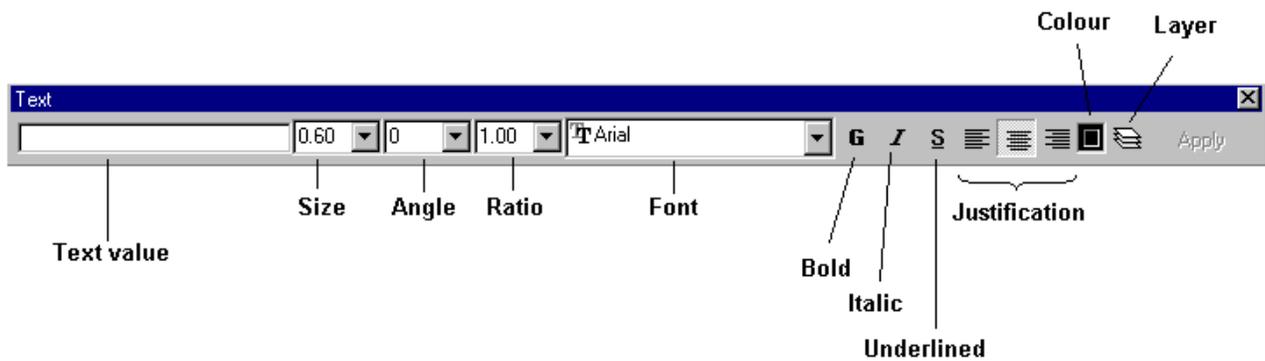
For more information, see the help files:

Menu <?> / **Help – Main Window – Symbol Pallet – User Pallet.**

## Inserting Text

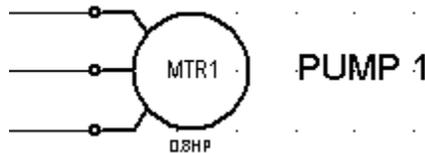
- ◆ Click on Insert / Text or the button
- ◆ The following tool bar is displayed :





The ratio represents the compression factor (width) of text.

- ◆ Select the different settings
- ◆ Click on the graphic area where you wish to insert a text
- ◆ Enter a text value (Example : Pump 1)
- ◆ You get :



- ◆ Do the same operation for all texts.



## Comment

To modify the value of an existing text, follow the procedure below

- Click on 
- Double-click on the text to modify



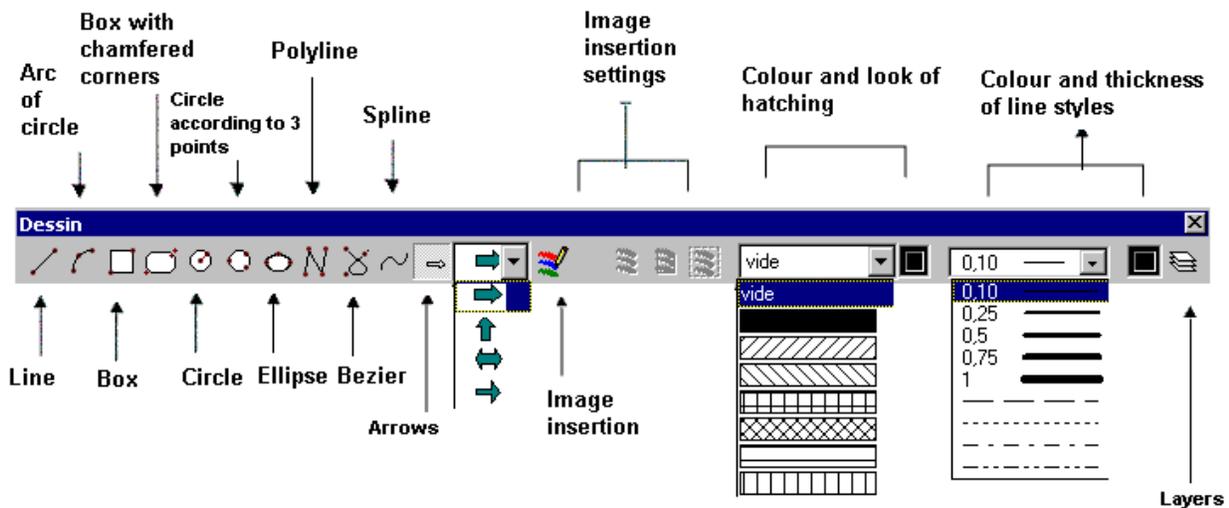
- Enter the new text value in the Text value field of the "Insert / Text" tool bar.



### Inserting drawings

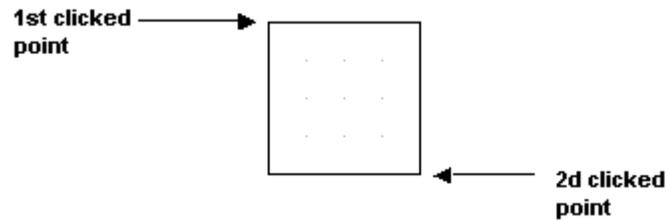
This function allows you to insert standard drawings (lines, circles, boxes, etc..).

- ◆ Click "Insert / Drawing » or the button 
- ◆ The following tool bar is displayed :



- ◆ Select the style, thickness and colour of your line
- ◆ Select the type of drawing you wish to insert (Ex: Box)

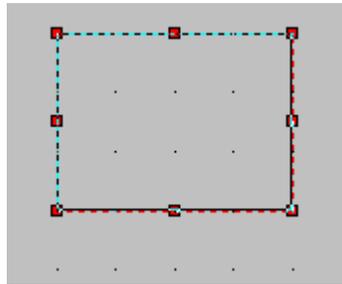
- ◆ Click a 1st and 2d point to insert your drawing .



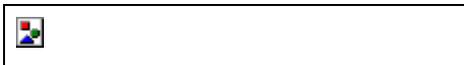
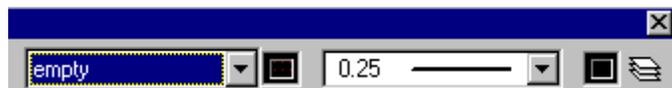
## Comment

To modify the drawing follow the procedure below :

- Click 
- Click the drawing to modify



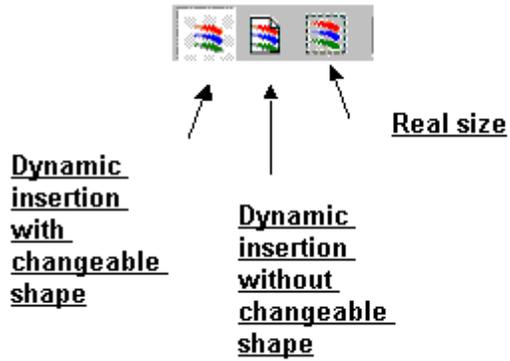
- Select a new setting in the "Insert / Drawing" Tool bar (Modify hatching, line thickness and line style)



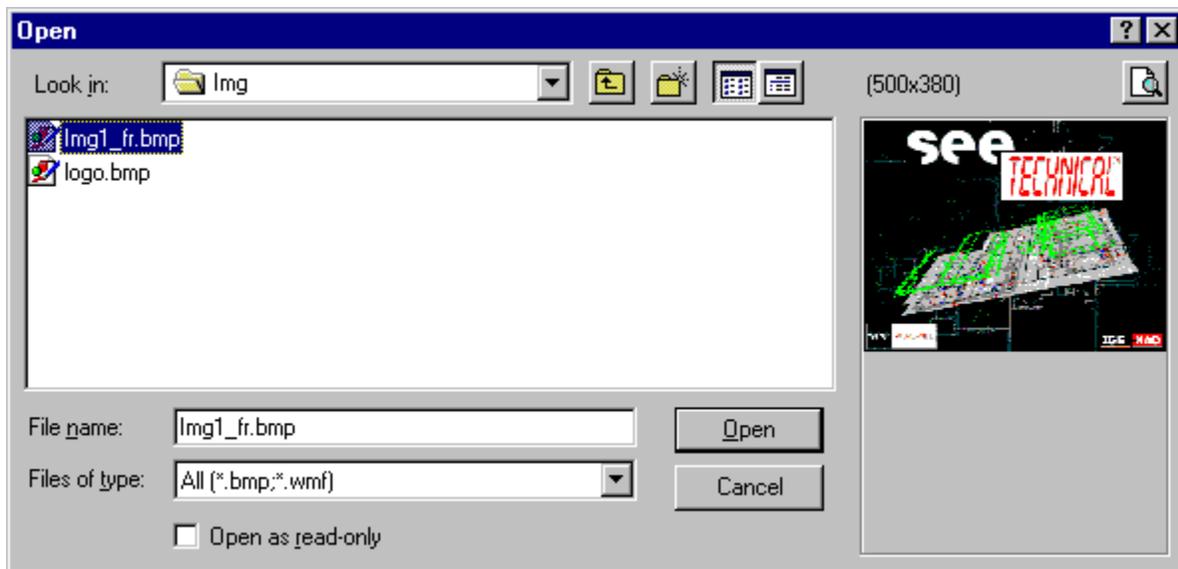
To insert a perfect square, click on the Box drawing insertion and draw your box while pressing the SHIFT key on the keyboard .

- ◆ It is possible to insert a BMP or WMF image on your Sheet

- ◆ Click on  to insert the image
- ◆ Select on of the three settings



- ◆ Click one point if you selected « Real size » or otherwise draw a box by defining two points.
- ◆ Select the image file from the following window:



- ◆ Click  to insert your image.

### *Inserting a Connection Text*

This function allows you to associate a text to a connection.

(Example: a wire colour, a wire number...)

- ◆ Click «Insert / Connection text » or the button



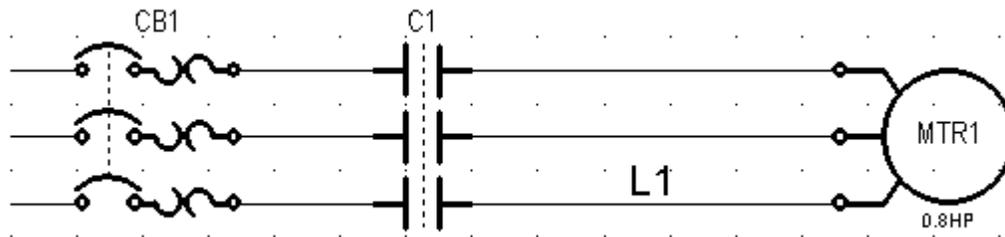
- ◆ The following tool bar is displayed :



- ◆ For a standard text, select the size, ratio, font, ...
- ◆ Click on the connection you wish to associate a text
- ◆ Enter the value.



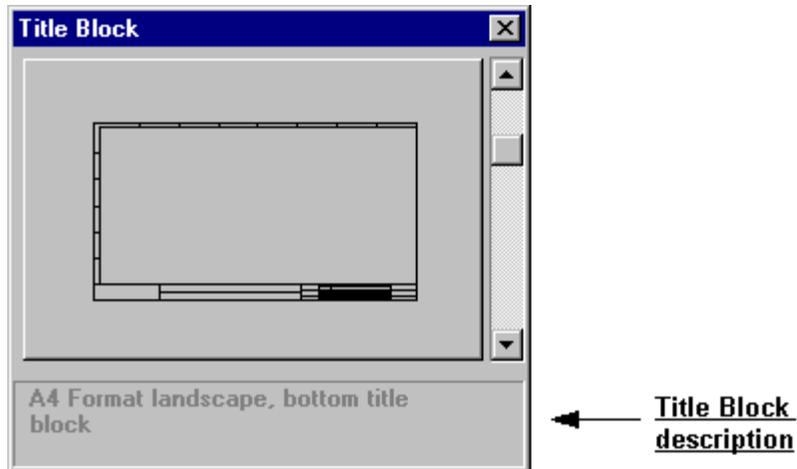
- ◆ The text is automatically placed in line with the middle of the connection length.
- ◆ You get:



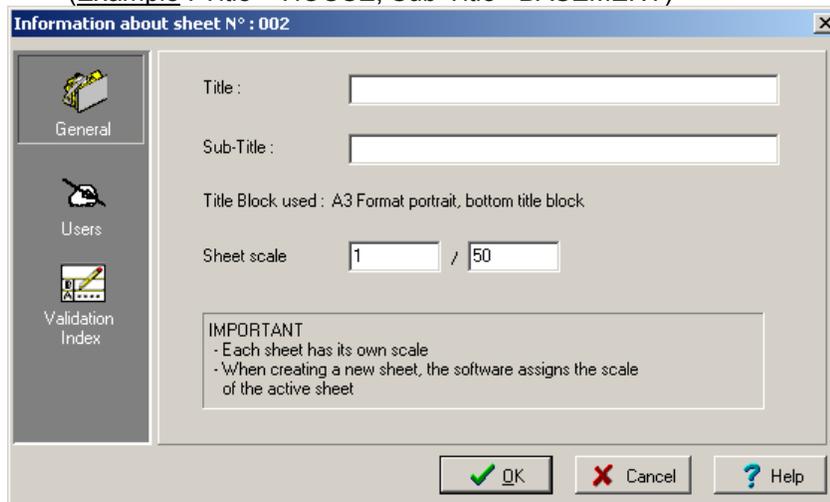
### *Creating a building diagram*

To create a new sheet:

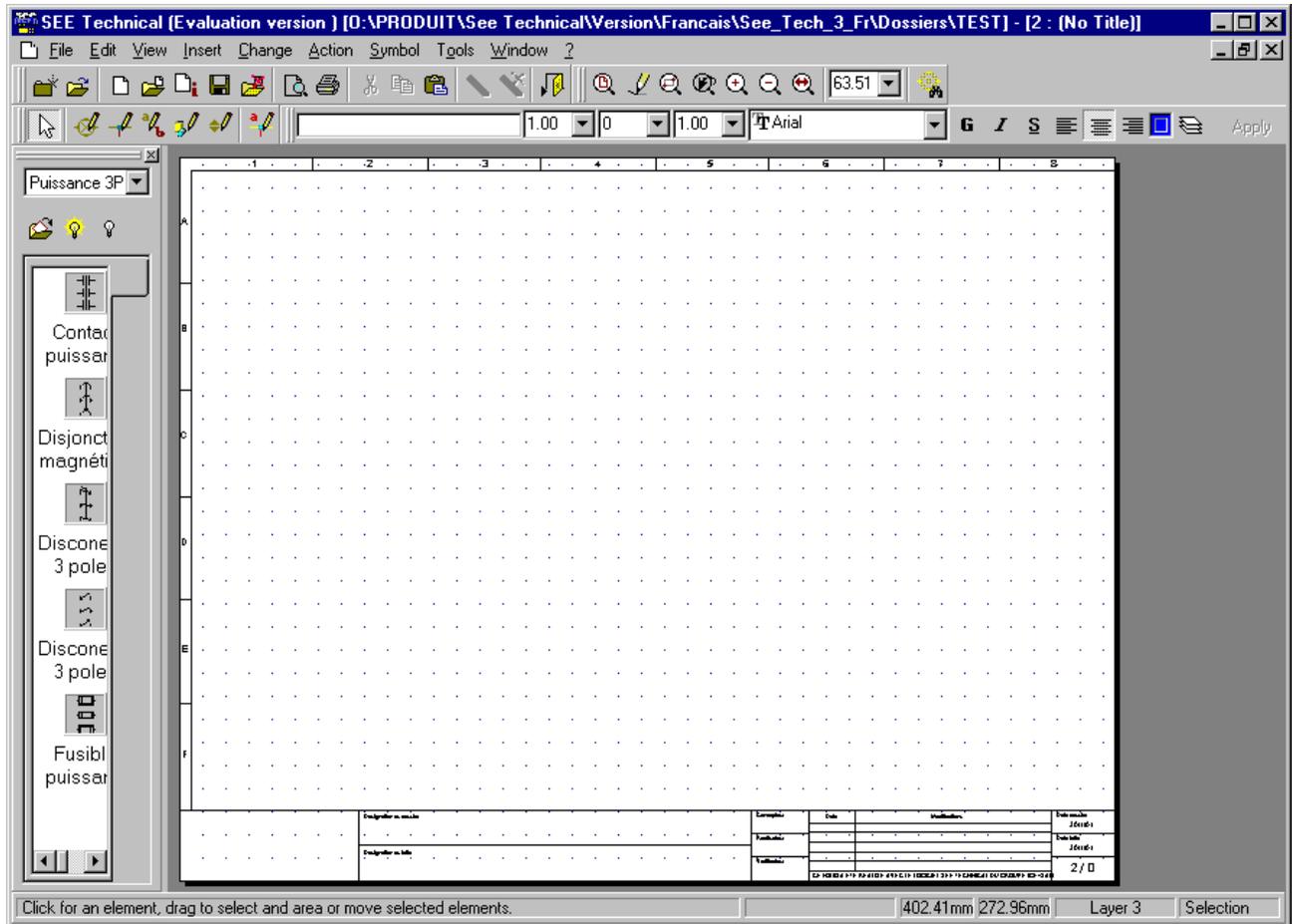
- ◆ Click "File / New Sheet"
- ◆ Click  or type in a number
- ◆ Select a title block .



- ◆ Enter information for the second sheet (Title, Sub-Title).  
(Example : Title = HOUSE, Sub-Title= BASEMENT)

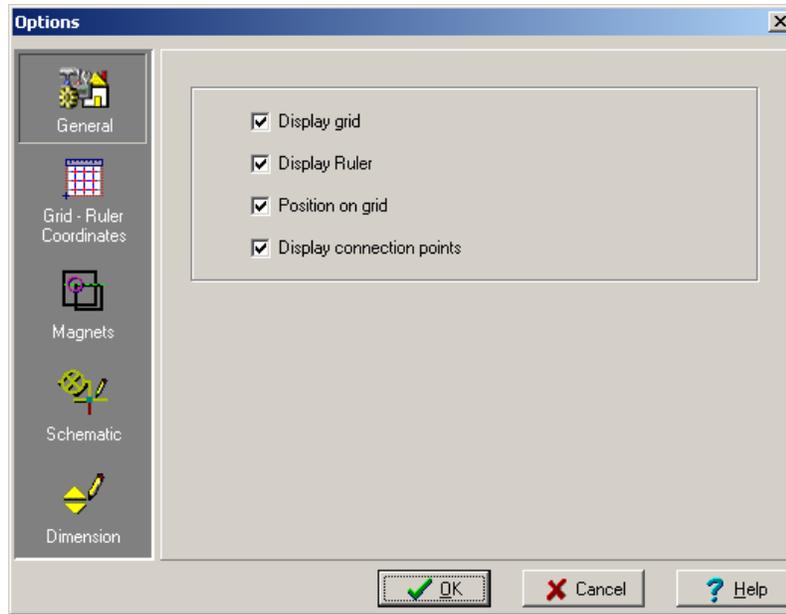


- ◆ You can assign users names and revision index.
- ◆ You get:

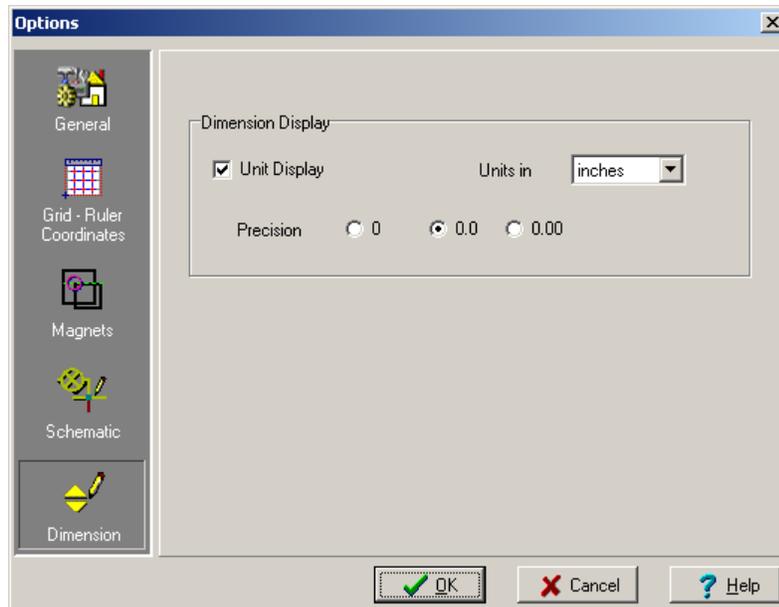


## Setting the scale

- ◆ Click "Tools / Options"
- ◆ The following window is displayed:



- ◆ Click on the **Dimension** tab
- ◆ You get:



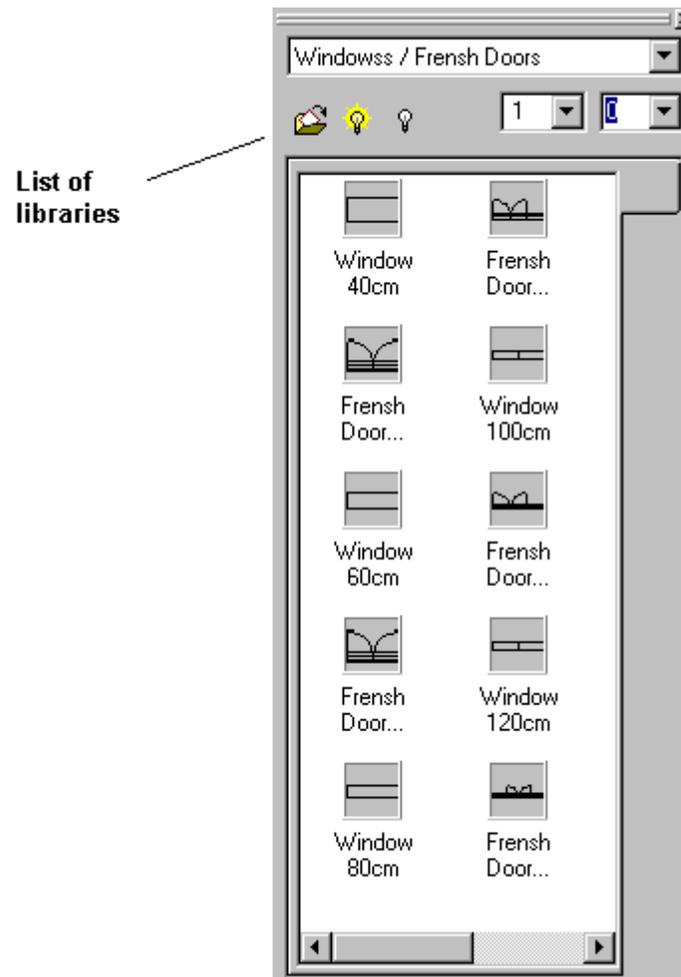
- ◆ Enter the working scale (Example: 1/50).

## *Inserting Walls*

A wall is a symbol.

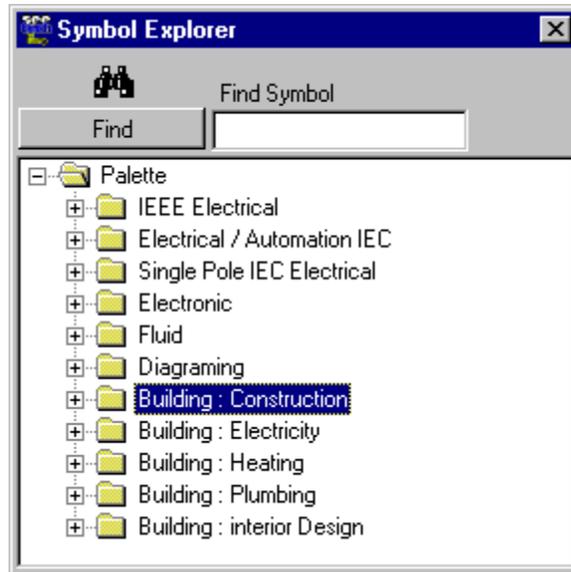
◆ Click “Insert / Symbol” or the button 

◆ If it is not already displayed, the Pallet explorer appears :

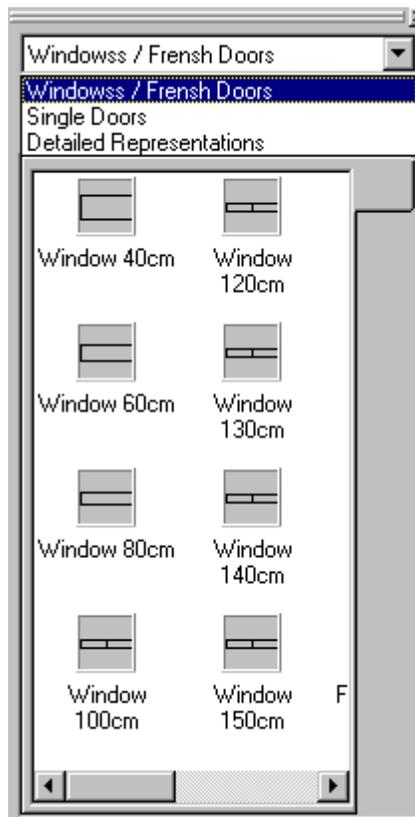


◆ Click on the icon  to change symbol library.

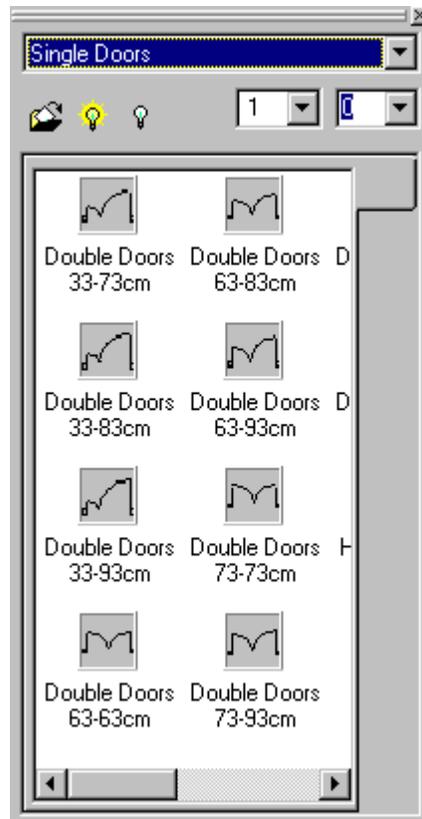
◆ The following window is displayed:



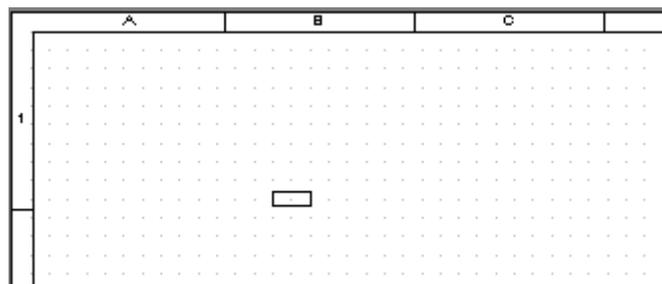
- ◆ Double-click on Building: Construction
- ◆ Close the window
- ◆ You get:



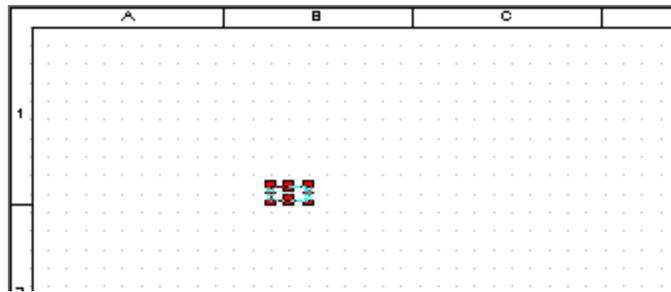
- ◆ Select the “Single doors” family
- ◆ You get:



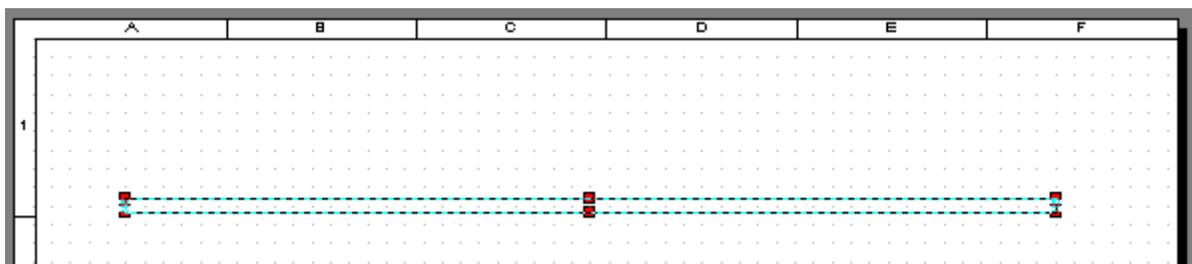
- ◆ Select the “Frontage” symbol.
- ◆ Insert it as a horizontal wall.



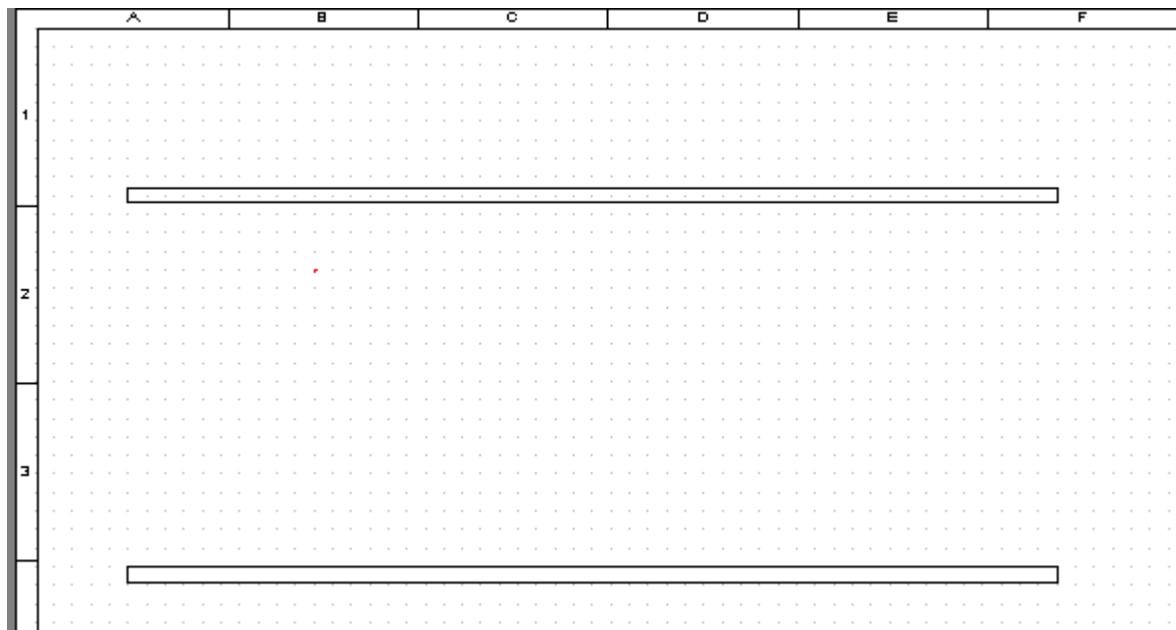
- ◆ Click 
- ◆ Select your wall



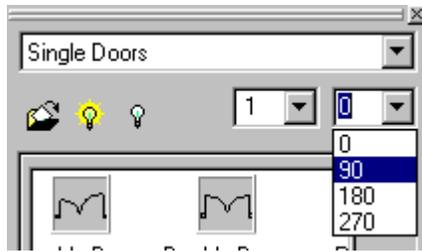
- ◆ Place your cursor on the right extremity of the symbol
- ◆ Click and drag to stretch it.



- ◆ Insert a second horizontal wall
- ◆ You get:



- ◆ Select a 90° angle

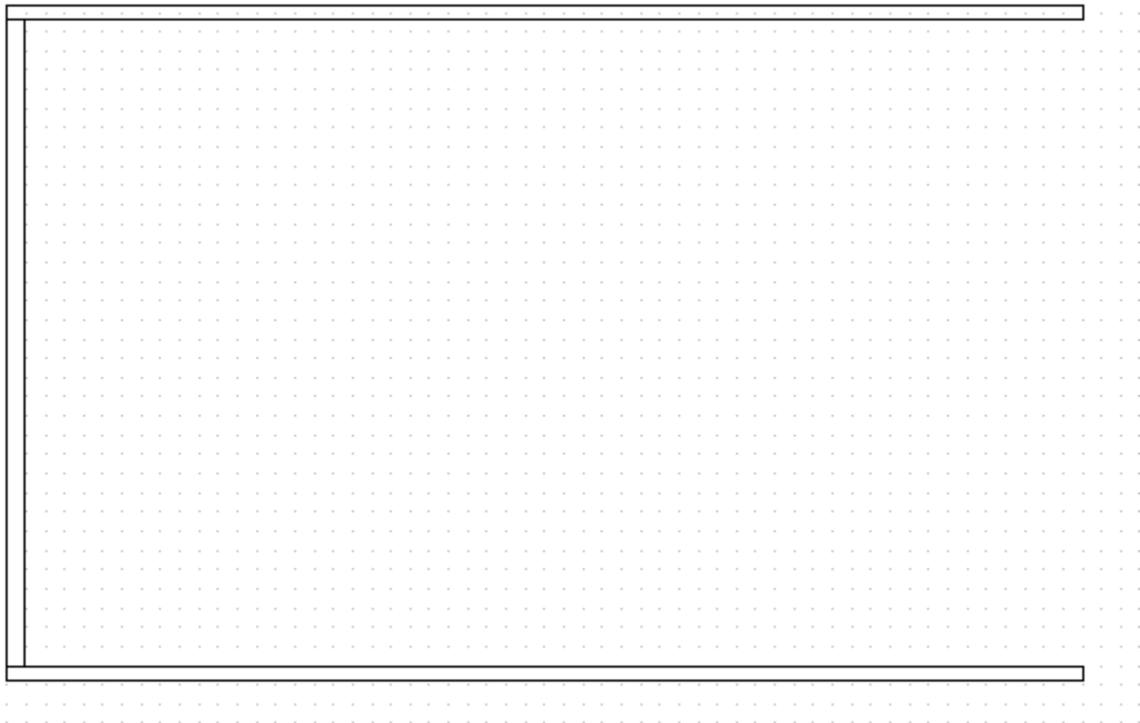


- ◆ Insert a vertical wall

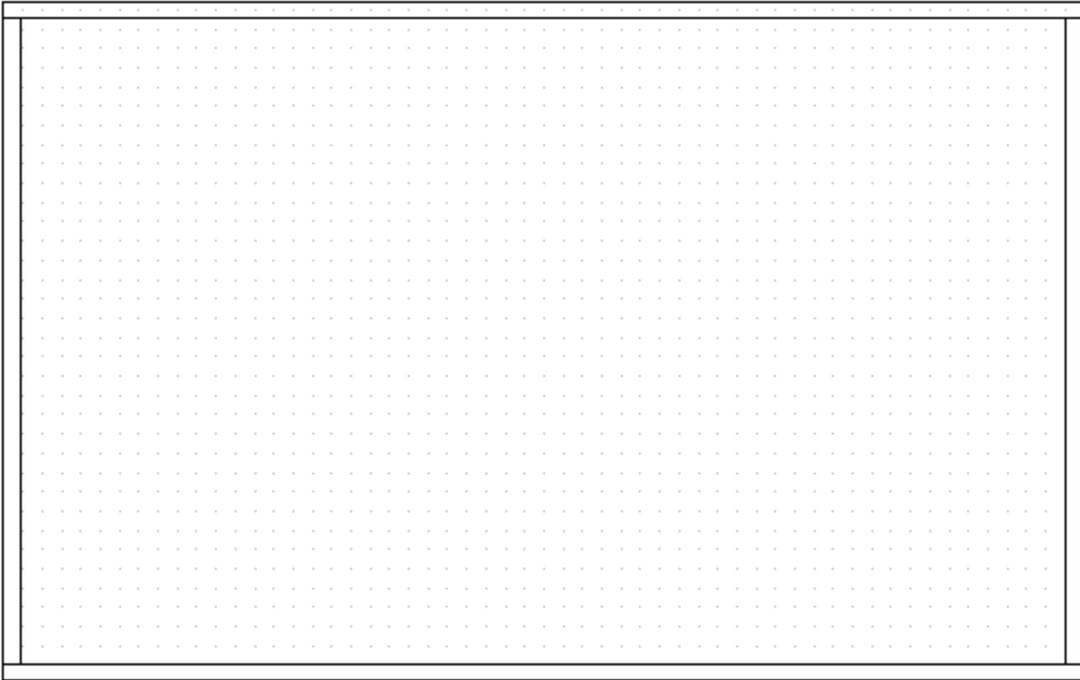


Press the SHIFT+CTRL keys to define a magnet on one of your wall extremities or in the middle.

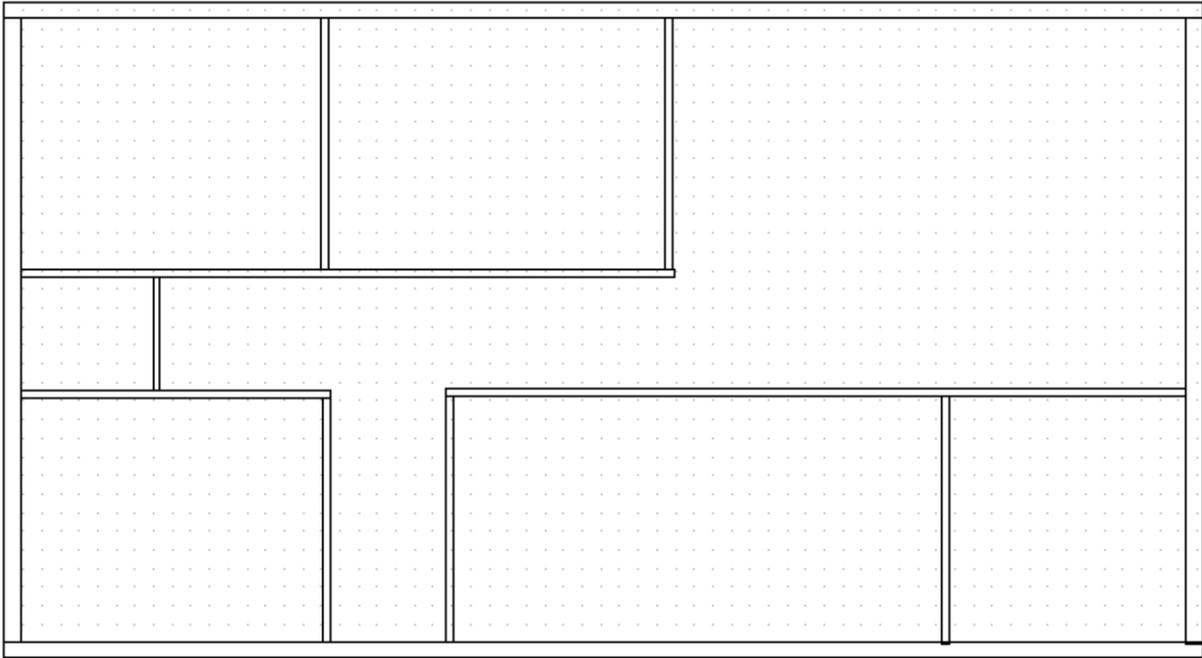
- ◆ Zoom on your Wall.
- ◆ Click 
- ◆ Select your wall
- ◆ Place the cursor on the extremity of the wall
- ◆ Click and drag to stretch it.
- ◆ You get



- ◆ Insert a second vertical wall
- ◆ You get:



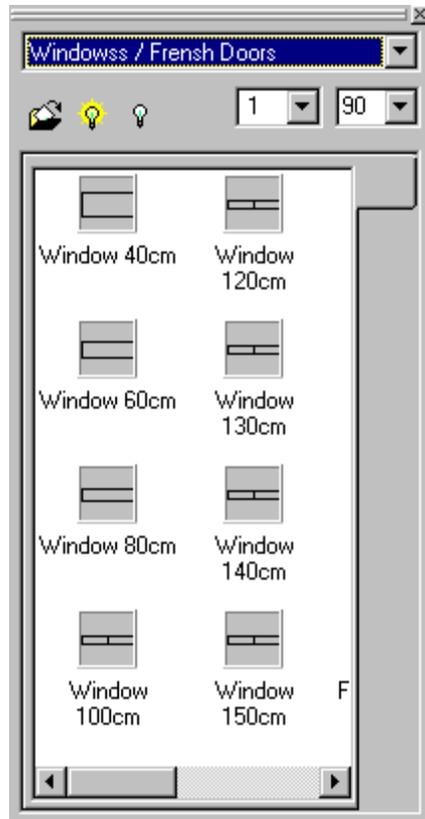
- ◆ Select the “Partition” symbol
- ◆ Insert, with the same method, interior walls.
- ◆ You get:



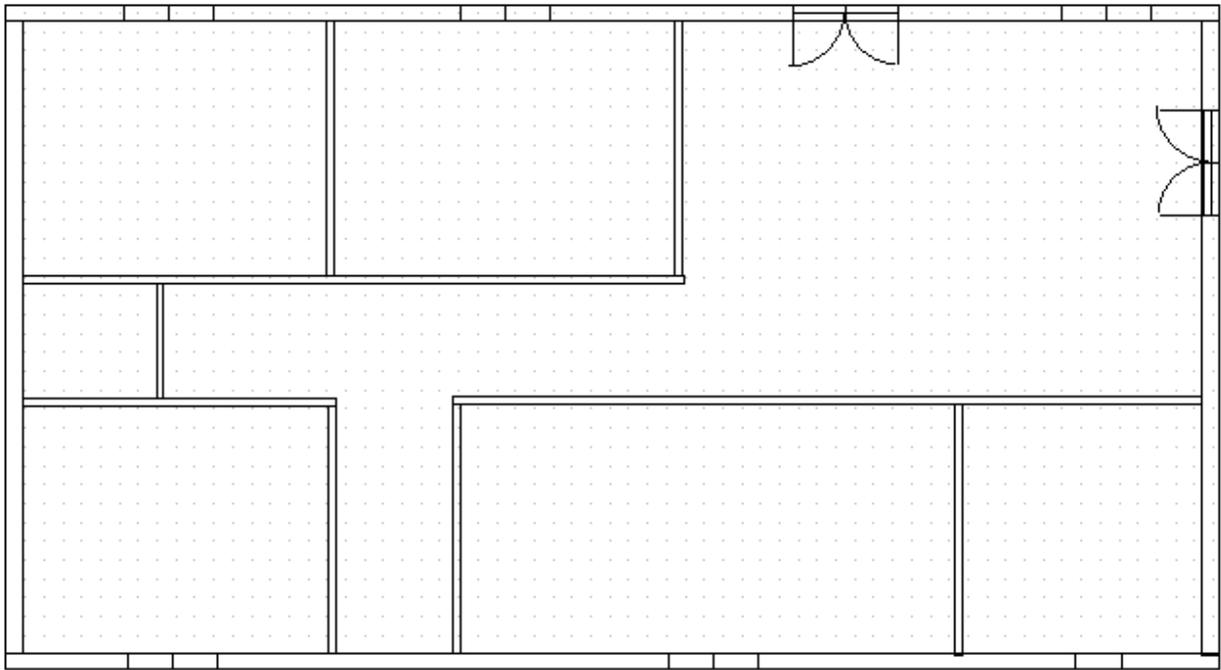
- ◆ Select the “Windows / French doors” family.



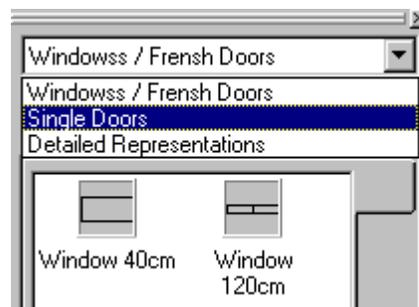
- ◆ Symbols from this family are displayed



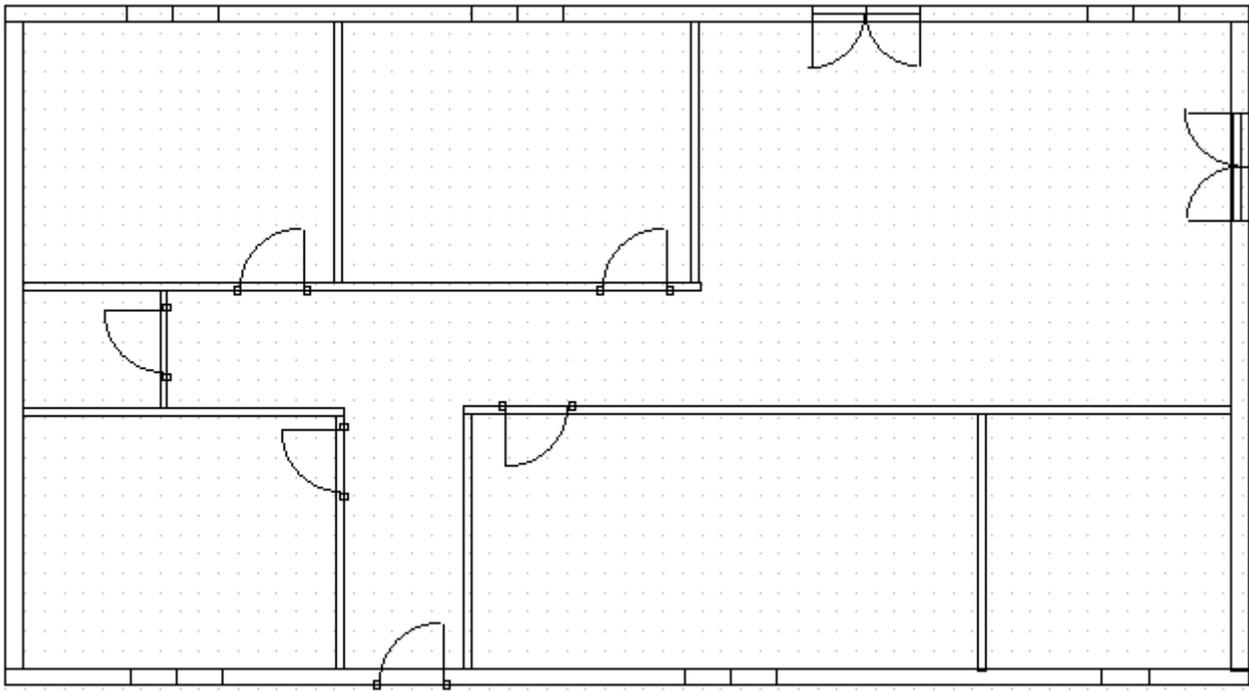
- ◆ Select the “window 120cm” symbol.
- ◆ Insert your windows°
- ◆ You can un-snap from the grid by clicking 
- ◆ Insert windows using the same method than for walls.
- ◆ You get:



- ◆ Select the “Single Doors”



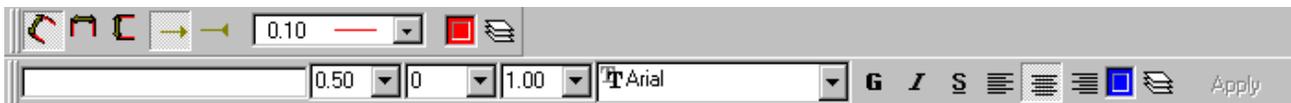
- ◆ Insert your doors using the same method.
- ◆ You get:



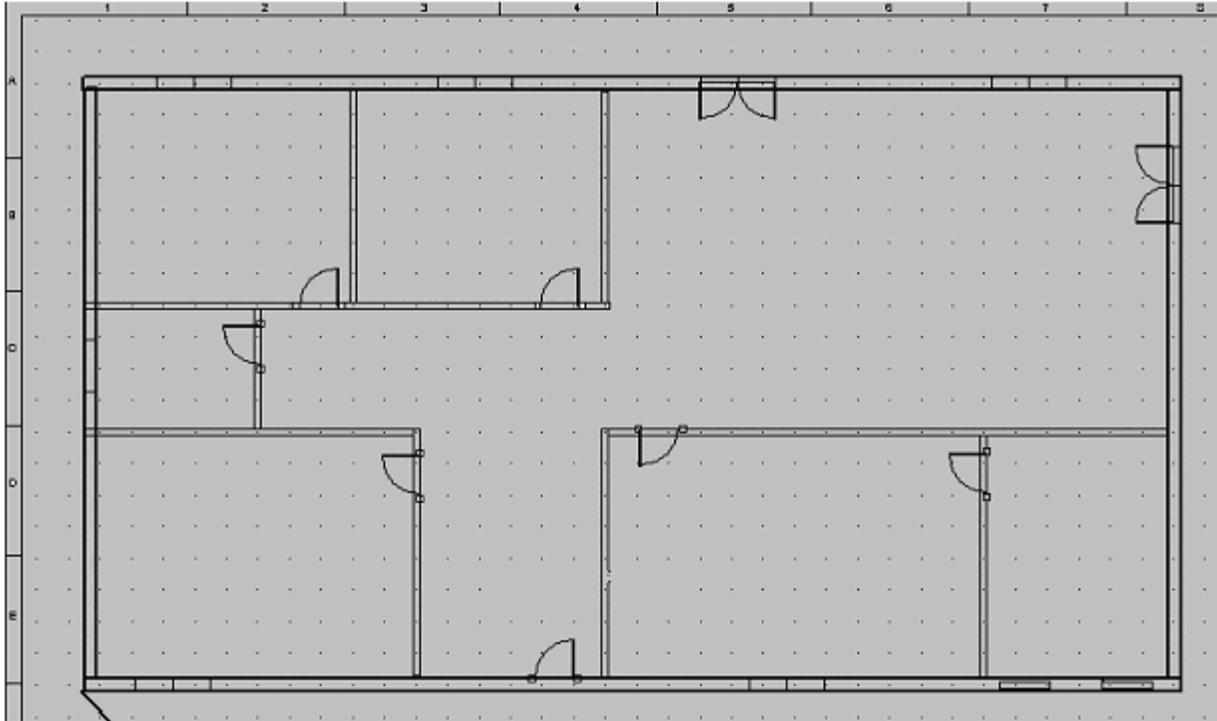
### *Inserting dimensions*

This function allows you to place dimension lines on your diagram.

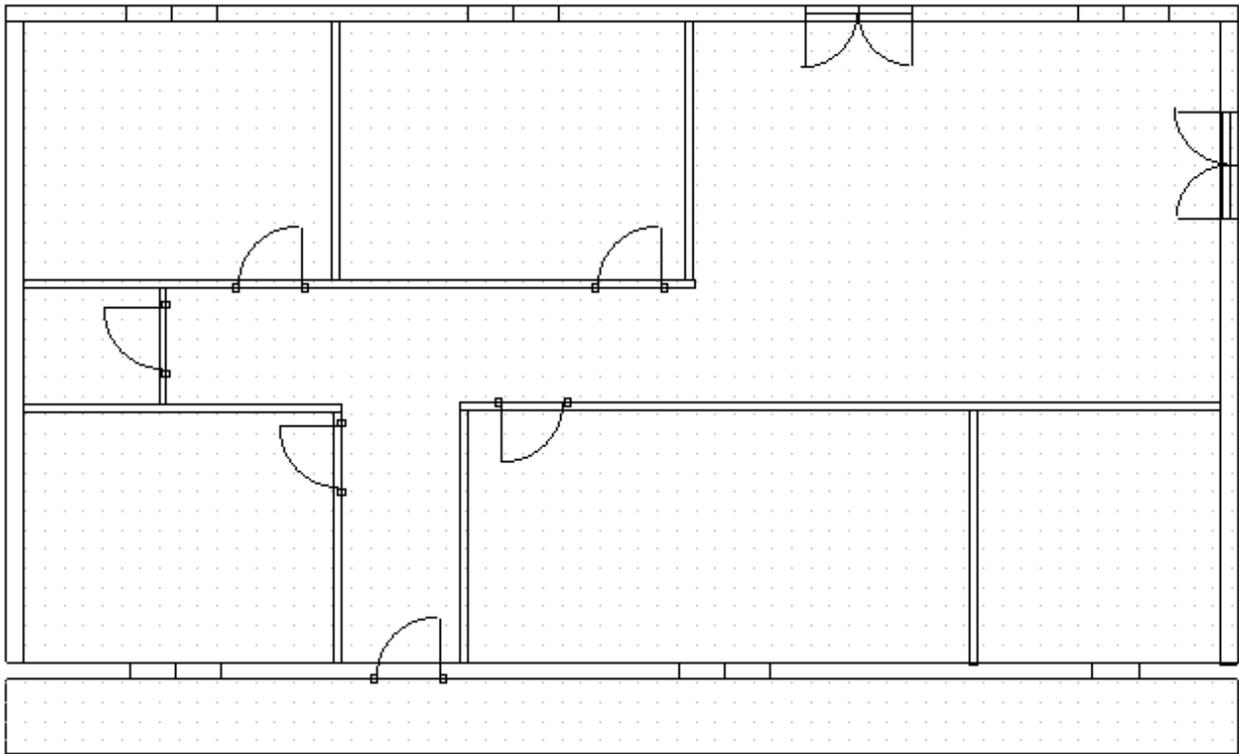
- ◆ Click “Insert / Dimension” or the button 
- ◆ The following tool bars are displayed :



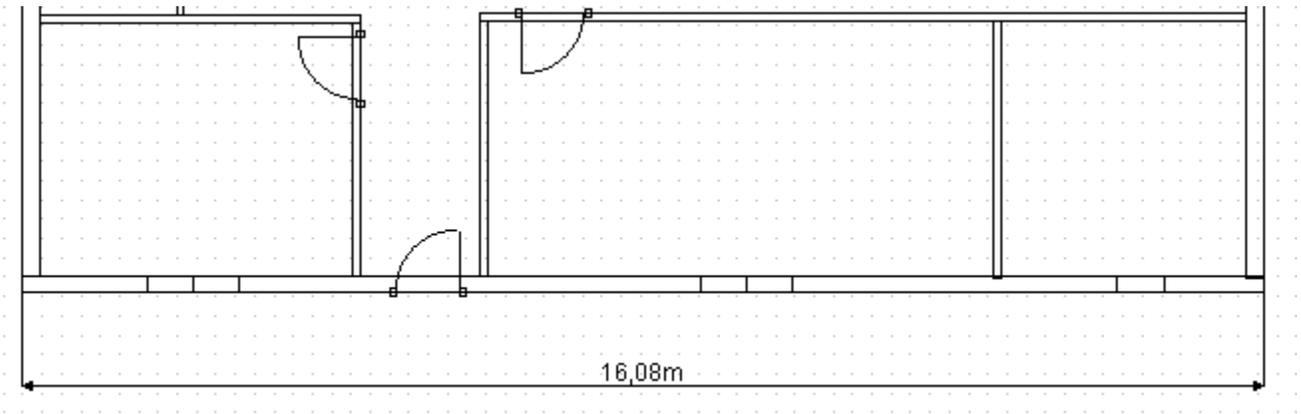
- ◆ Select the font and dimension size
- ◆ Select the graphic appearance, the thickness and colour of your dimension.
- ◆ Press the SHIFT+CTRL keys and click your first point.



◆ Press the SHIFT+CTRL keys and click your second point.



- ◆ Click where you wish the dimension value to be displayed.
- ◆ You get:

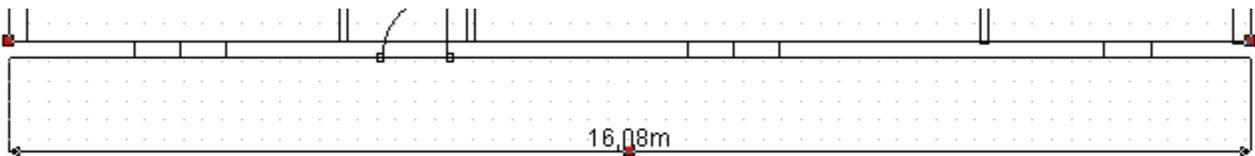


*The dimension value will be recalculated every time you move or modify the dimension.*

## Comment

### 1- Modifying an inserted dimension

- Click 
- Click the dimension to modify

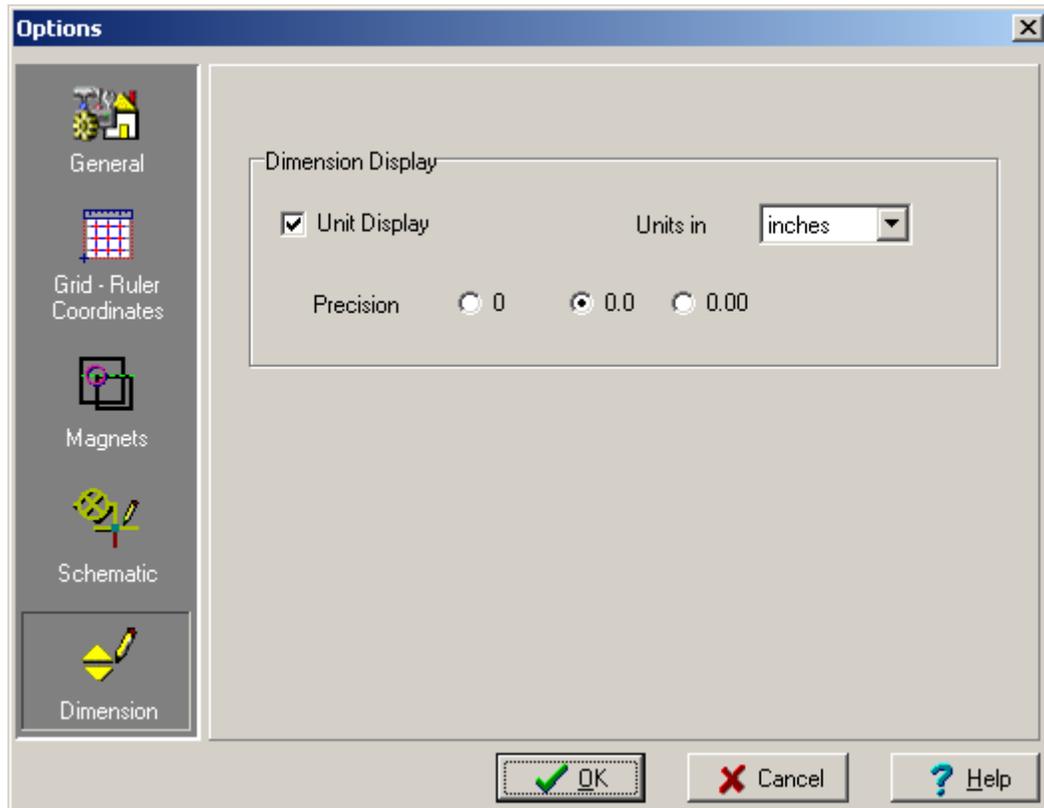


- Enter new settings

18m	1,00	0	1,00	Arial
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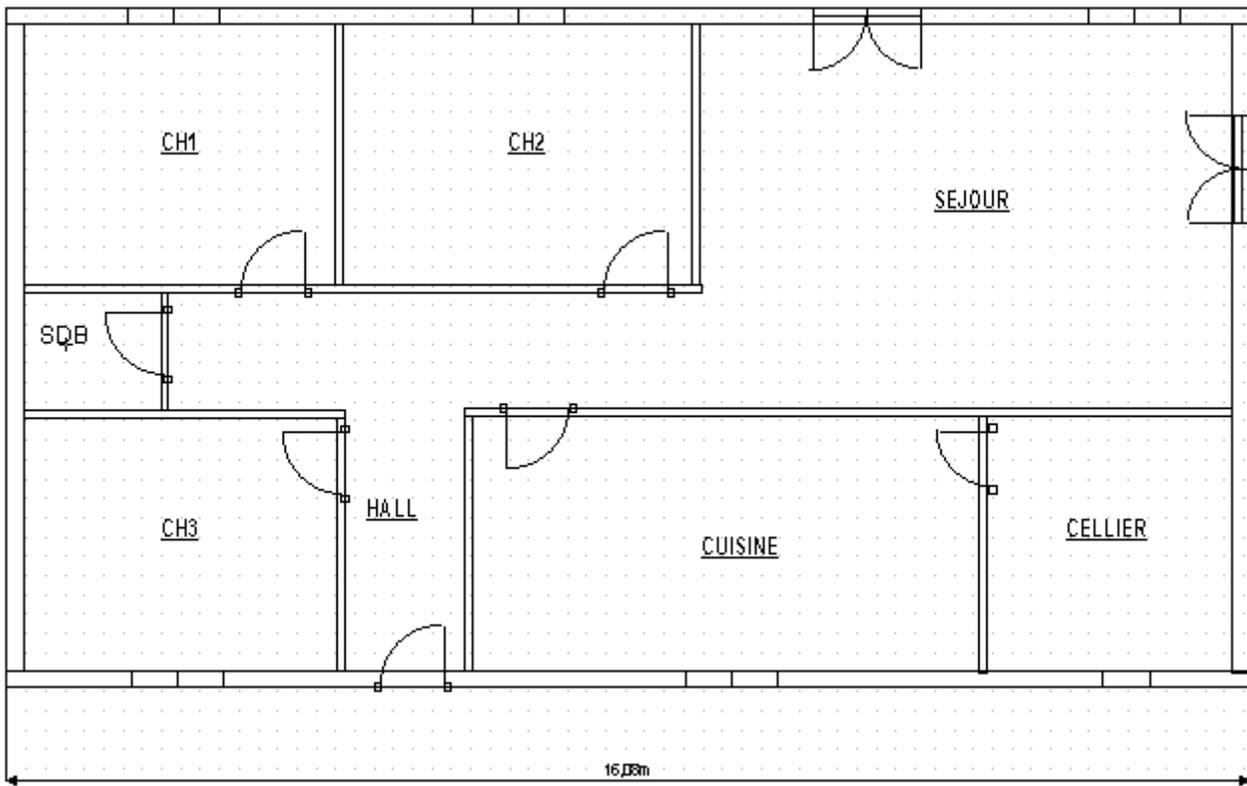
## 2- Settings

- ◆ You can modify default settings :
  - Click "Tools / Options"
  - Click the "Dimension" icon

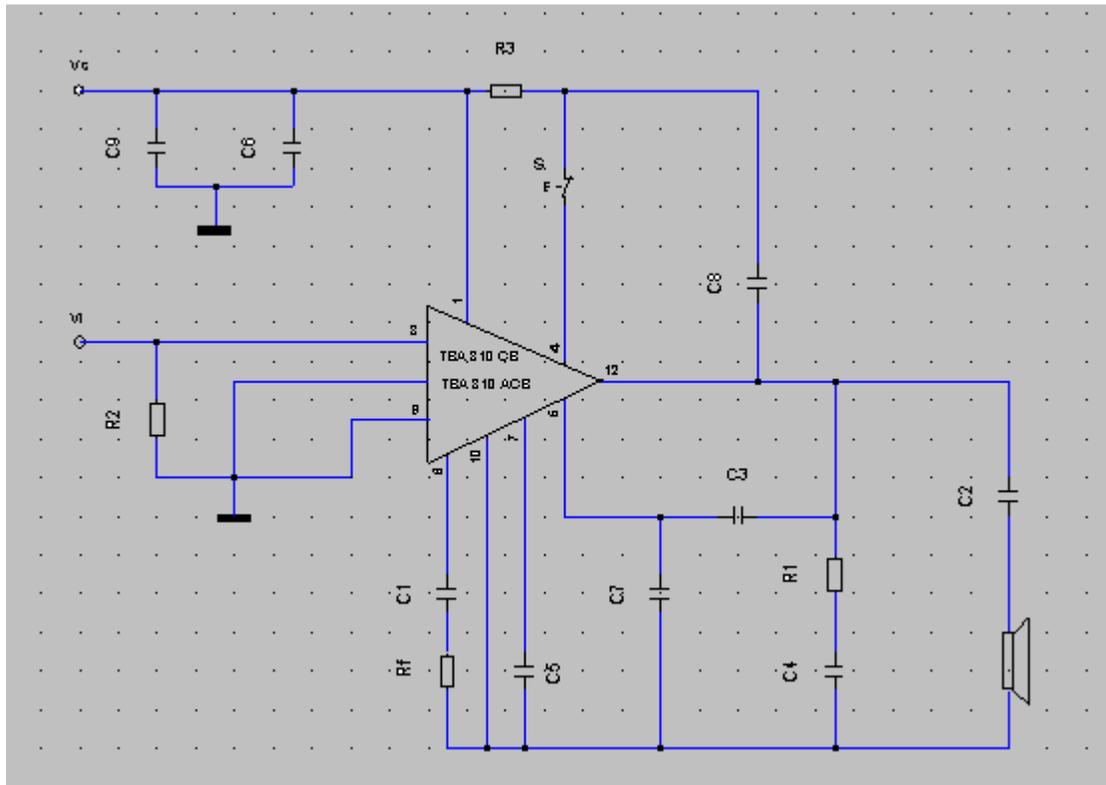


- ◆ Insert texts on your drawing.

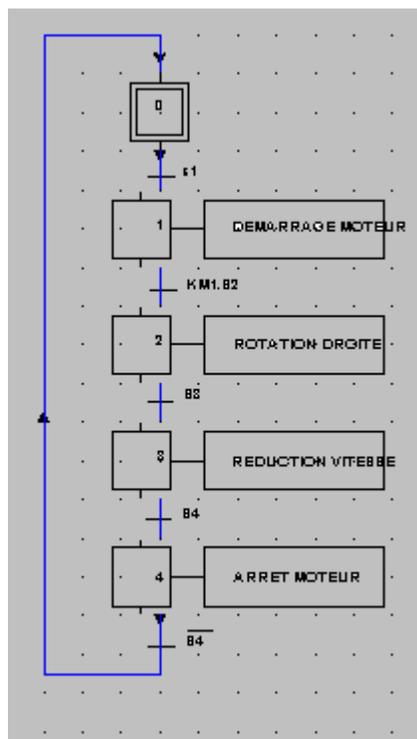
◆ You get:



## Example of schematic

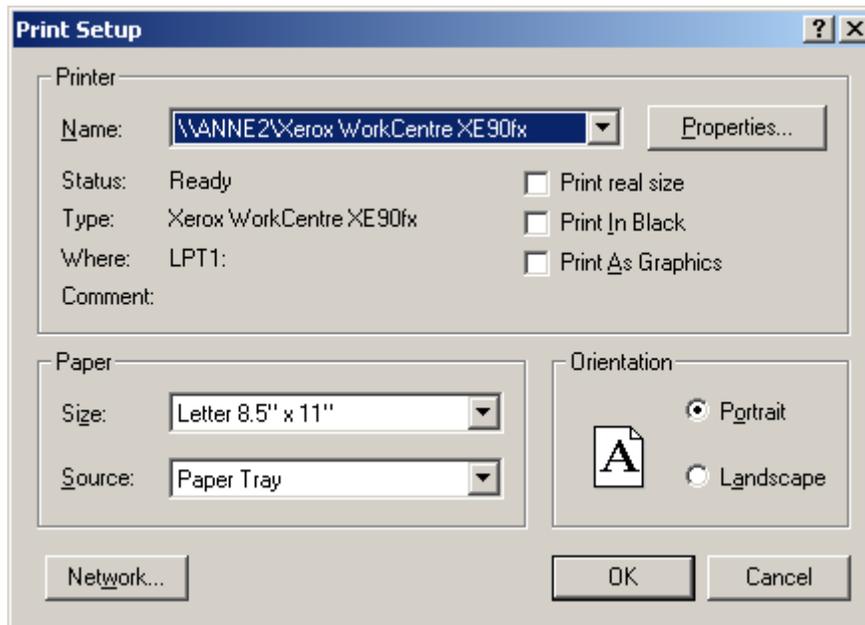


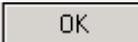
## Audio filter



## Printing your diagrams

- ◆ Click “File / Print settings”
- ◆ The following window is displayed:



- ◆ Select a printer and its settings
- ◆ Click 
- ◆ Click “File / Print” or the button 



### Comment

*It is possible to display a print preview on screen before printing your sheet.*

Click “File / Print Preview”

# Blocks

A block is saved information, in a file, of a part of your sheet.

Once saved, a block can be inserted back on as many sheets as you wish.

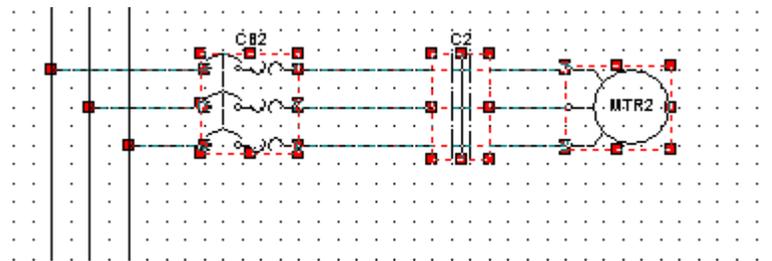
Example: We will create a block from our motor starter diagram.

## Creating a block

- ◆ Open the power sheet (previously created in this tutorial)

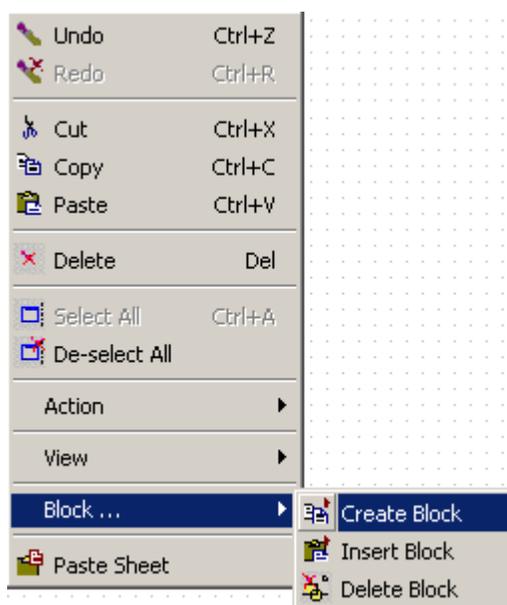
- ◆ Click 

- ◆ Click and drag to draw a box around the area you wish to create as a block.

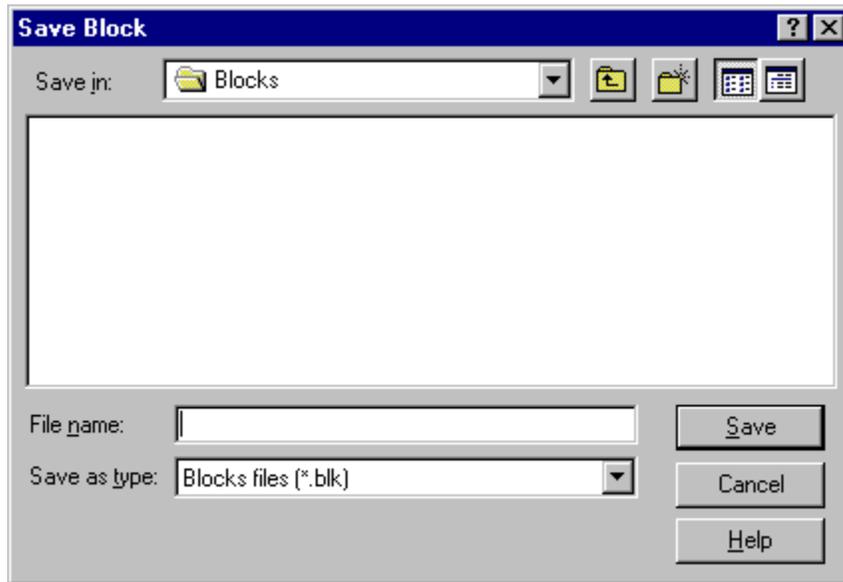


- ◆ Right click on the area

- ◆ Click Block / Create block



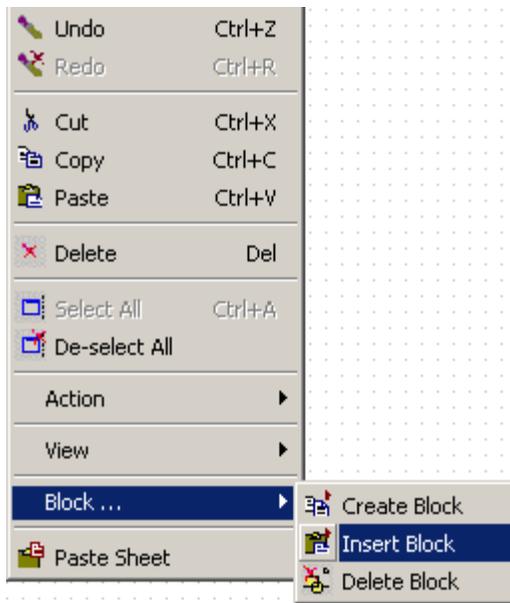
- ◆ The following window is displayed:



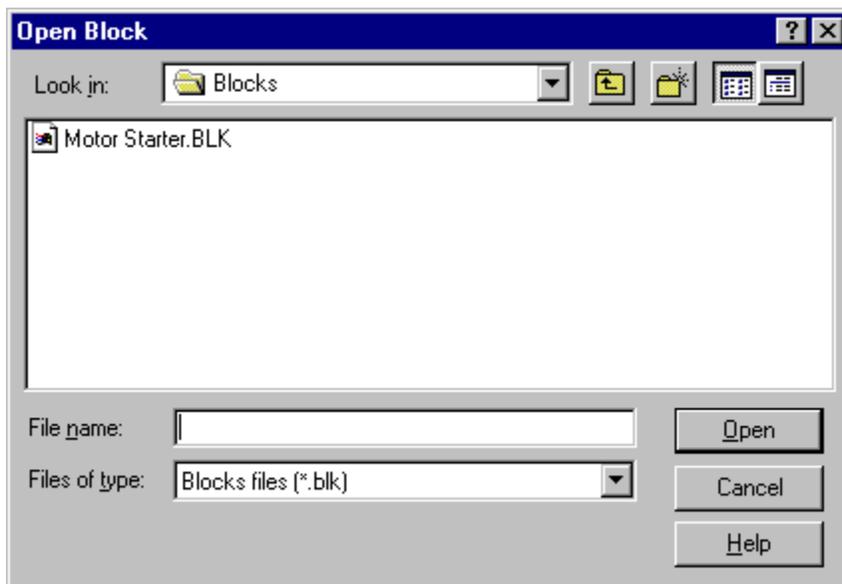
- ◆ Enter a name for your block (Example: Motor starter)
- ◆ Click 
- ◆ The block is saved on your hard drive.

## Inserting a block

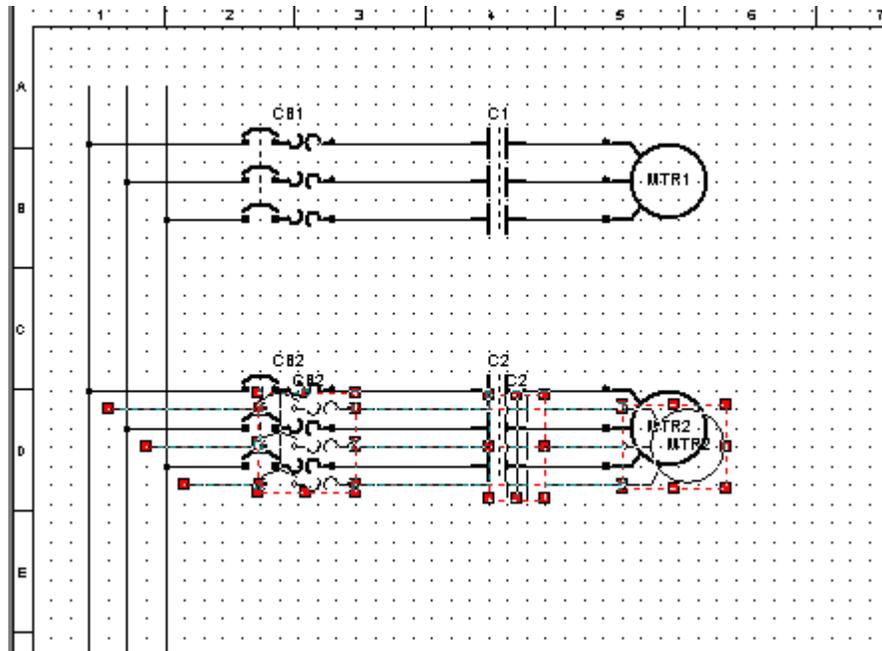
- ◆ Open or create a sheet
- ◆ Right click anywhere on the sheet.
- ◆ The following contextual menu is displayed:



- ◆ Click “Block / Insert Block”
- ◆ Select a block to insert from the following window:



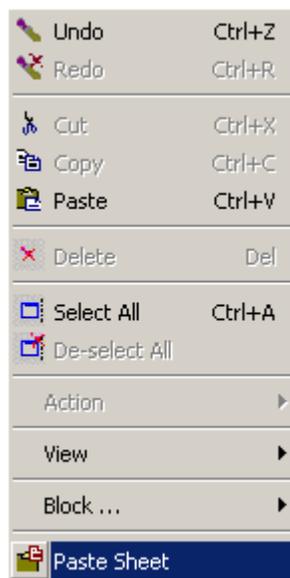
- ◆ Click 
- ◆ You get:



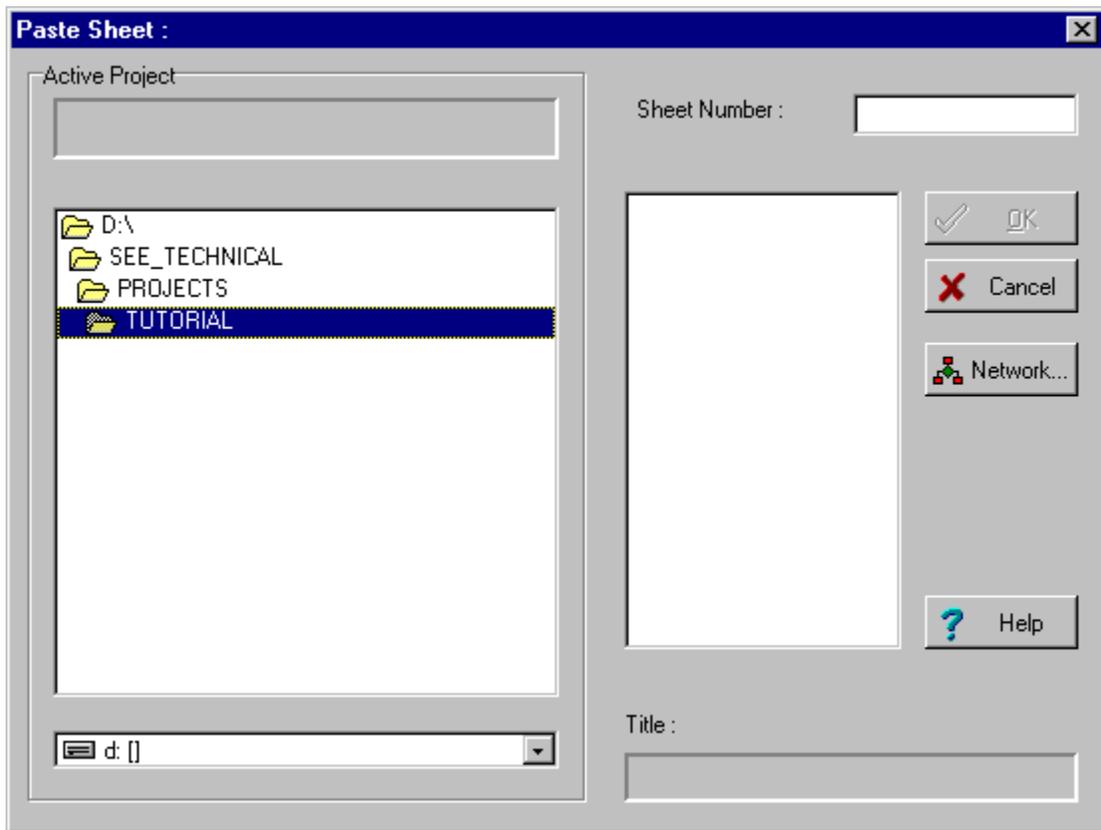
- ◆ Click and drag the block to its position.

## Copying an entire sheet

- ◆ Create a new sheet
- ◆ Right click anywhere on the sheet
- ◆ The following contextual menu is displayed:



- ◆ Click “Paste Sheet”
- ◆ Select the source Project and the sheets to copy from that project.



- ◆ Click 
- ◆ Click and drag to set it's position.

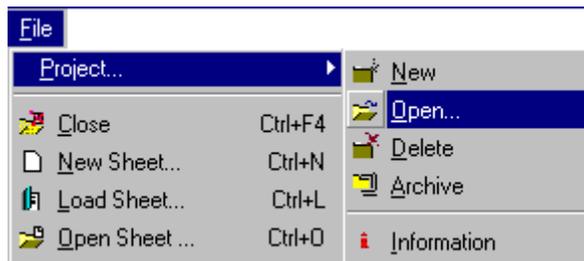
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## Operations on Projects

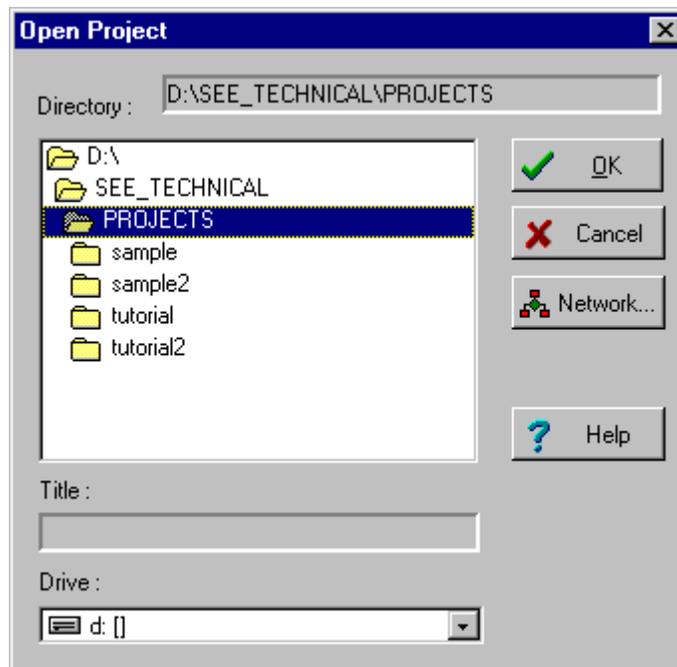
### Opening a Project

To open an existing Project:

- ◆ Click “File / Project / Open” or the button 



- ◆ Select the Project you wish to open in the following window:



- ◆ Click  **OK**

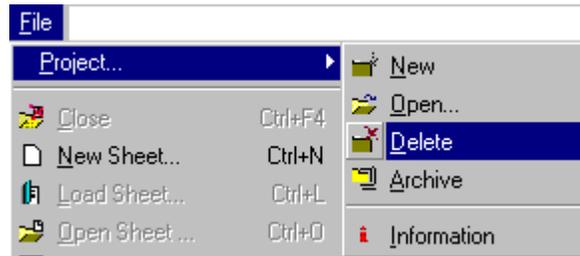
## Deleting a Project



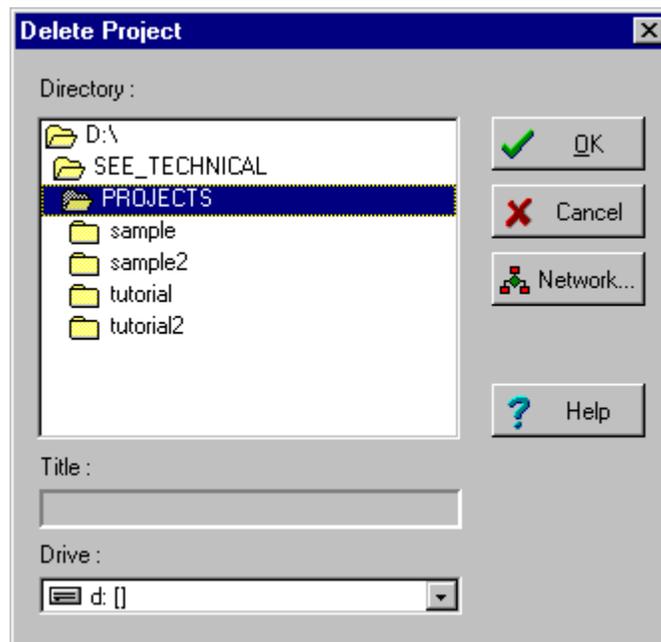
### Comment

*It is impossible to delete the active Project.*

- ◆ Click File / Project / Delete



- ◆ Select the Project you wish to delete in the following window:



- ◆ Click 
- ◆ A Confirm window will be displayed:



- ◆ Click 



*It is impossible to delete the active Project.*

*The following window will be displayed:*



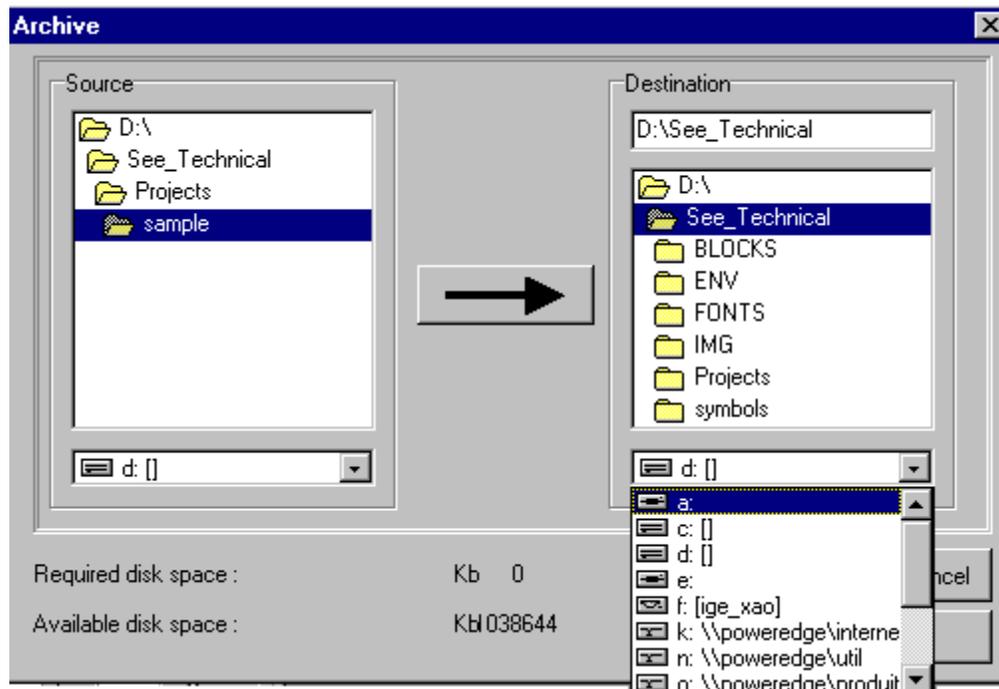
## Archiving a Project

This function allows you to archive (backup) a Project on diskettes or any other storing device.

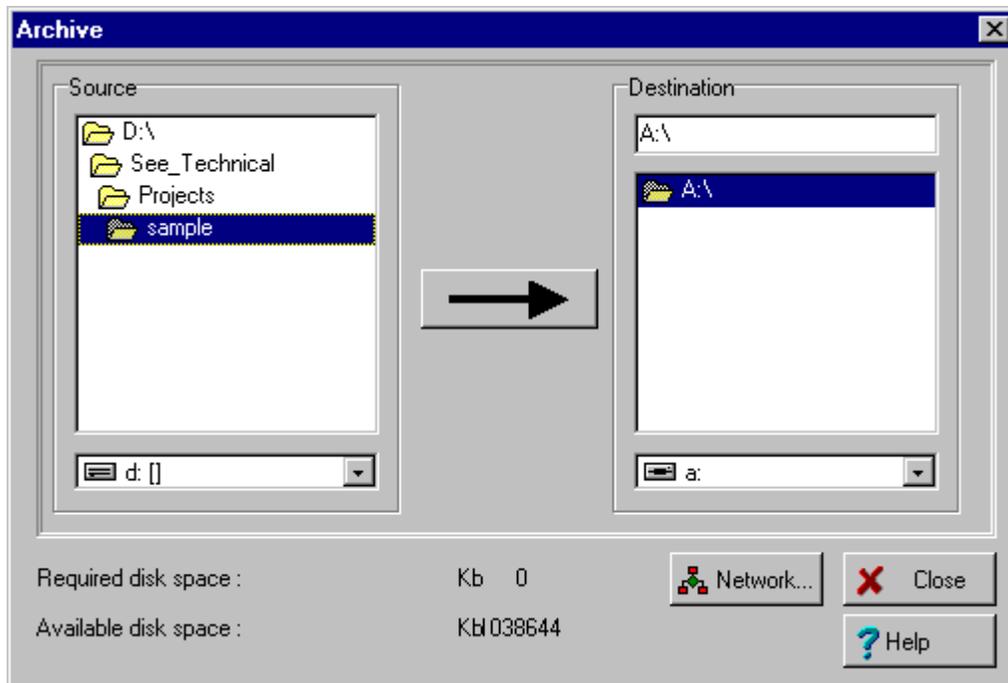
- ◆ Click “File / Project / Archive”



- ◆ The following window is displayed:



- ◆ Select the Project to archive from the left part of the window.  
(Example: The SAMPLE Project)
- ◆ Select the disk drive where you wish to archive the Project on the right part of the window.  
(Example: On the "A" drive)
- ◆ Select the directory where you wish to archive the Project on the right part of the window. (Example: Sample)



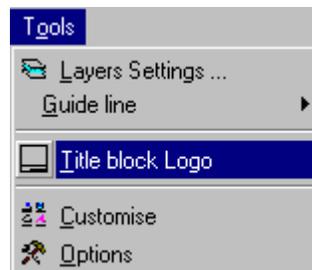
- ◆ Click 
- ◆ Click 
- ◆ Your Project is archived.

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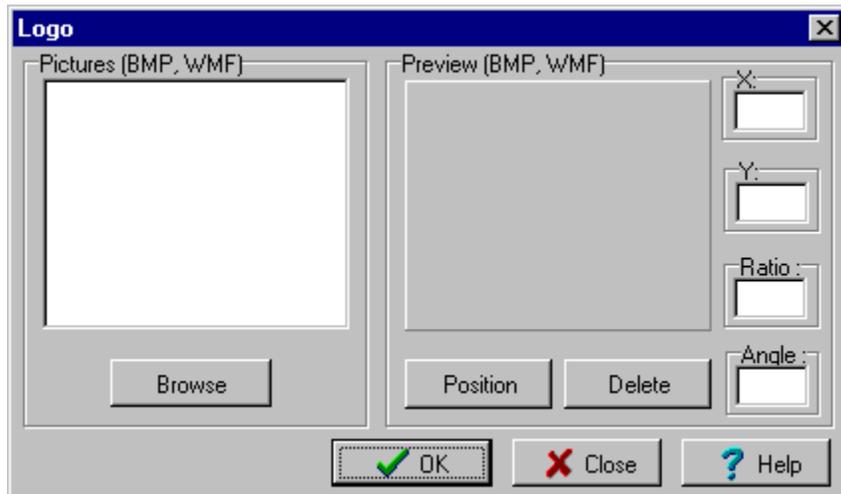
## Customising your Title Block

It is possible to add a Logo to title blocks.

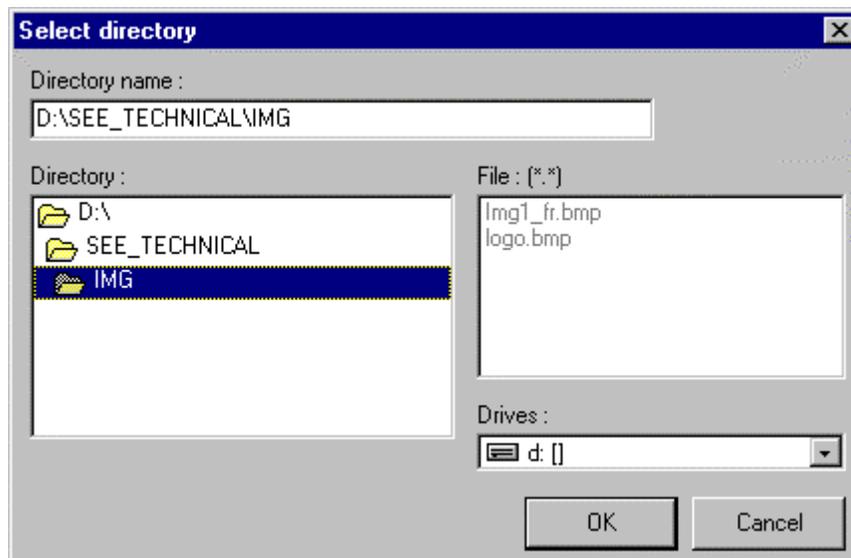
- ◆ Click "Tools / Title block Logo"

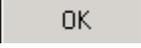


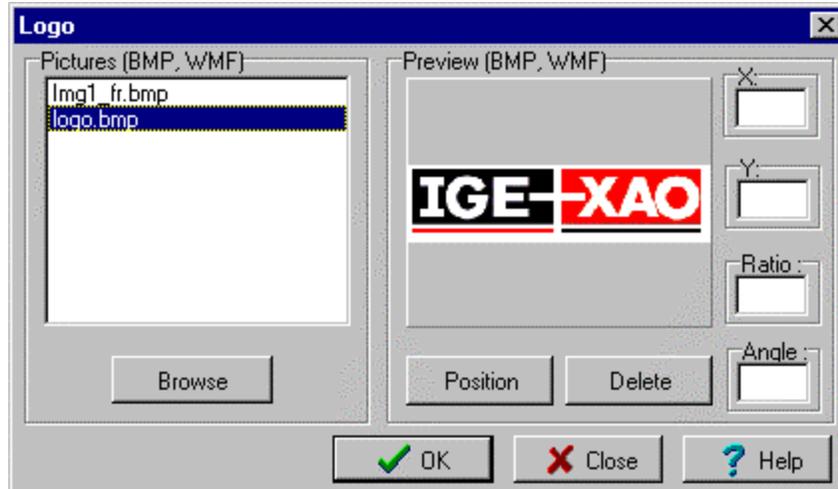
- ◆ The following window is displayed:



- ◆ Click  to select the directory where your logo is stored.



- ◆ Click 
- ◆ You get:



- ◆ Click on
- ◆ Click the insertion point (corresponding to the bottom left corner of your logo) or type in the coordinates.
- ◆ Click
- ◆ You get:

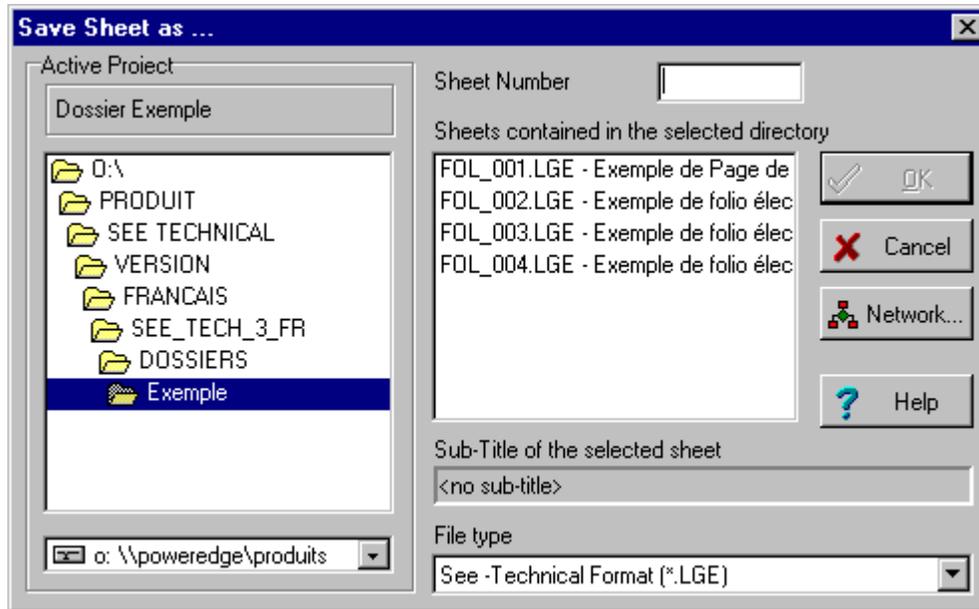



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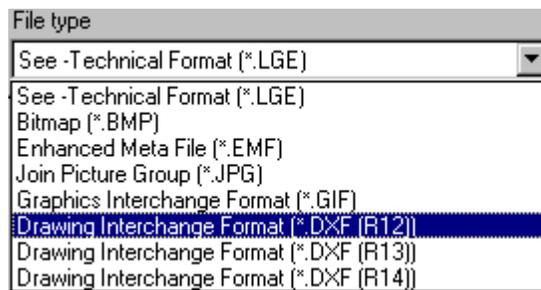
## Exporting sheets

It is possible to save sheets in a different file format such as Bmp, Emf, Jpg, Gif or Dxf.

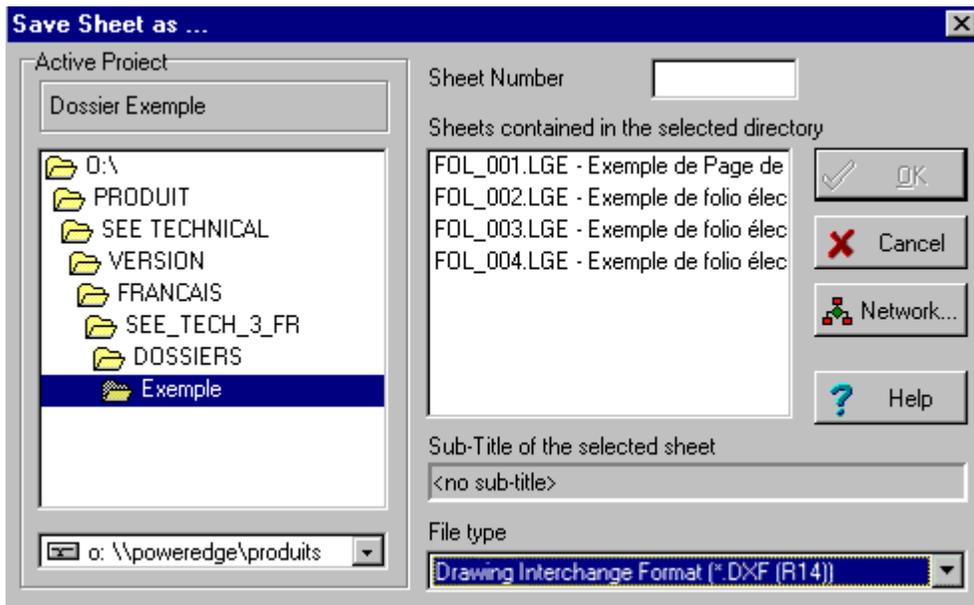
- ◆ Open a sheet.
- ◆ Click File / Save as
- ◆ The following window is displayed:



- ◆ Select a file format (Exemple: Dxf).



- ◆ We get:



- ◆ Click .
- ◆ The sheet is saved within the Project directory.