

Mechanical Engineering - General Working Drawing Template

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The Mechanical Engineering - General Working Drawing Template includes drawing-tool, title-block, dimension, and annotation shapes for use in creating general technical drawings.

For information about how a particular shape behaves, right-click the shape, then choose Shape Help from the shortcut menu.

Working with technical drawing shapes

You can configure many shapes by right-clicking them and choosing the appropriate command from the shortcut menu. For example, right-click an Arc - Graphical shape to display its complementary arc.

In addition, you can change the characteristics of certain drawing-tool shapes by typing a value in the shape's text block. For example, add an Arc - Numeric shape to the drawing page, and while it's selected, type a new value (from 1 to 359). The arc automatically reshapes to show that value.

Setting up your drawing environment

By default, the Mechanical Engineering - General Working Drawing Template opens with an unscaled drawing page in landscape (wide) orientation. The ruler and grid are set to Fine resolution, and the ruler zero point and grid origin are at the lower-left corner of the drawing page. You can change these settings at any time.

To change the drawing scale and page settings:

1. Choose File > Page Setup.
2. On the Page Size and Drawing Scale tabs, choose the settings you want for the drawing size, the printed page size, and the scale, then click OK.

To change the measurement units, click the Page Properties tab and choose the unit you want to use from the Measurement Units list, then click OK.

To change ruler and grid settings:

1. Choose Tools > Ruler & Grid.
2. In the Ruler & Grid dialog box, choose the settings you want for the ruler and grid resolution, and for the ruler zero point and grid origin.

You can change the grid origin only of fixed grids. To set a fixed grid, choose Fixed under Grid Spacing, then type the values you want for the minimum spacing of the grid lines.

3. When you've finished adjusting the grid and ruler settings, click OK.

See also:

[Rotating and resizing pages](#)

[Setting page orientation and scale](#)

To create a mechanical drawing:

1. Use shapes on the General - Title Blocks stencil to add a title block and other reference information to the drawing.
2. Use shapes from the General - Drawing Tool Shapes stencil to draw outlines of objects.
Use control handles, right-clicking, and other shape-specific features to configure the shape the way you want.
3. Annotate components of the drawing using shapes from the General - Dimensioning, Engineering and the General - Annotation Symbols stencils.

4. To add text to a shape you want to label, click the shape, then type the text.

TIP For greater efficiency and accuracy when positioning shapes in technical drawings, use guides, guide points, and the Align and Distribute Shapes commands on the Tools menu.

See also:

[About positioning shapes precisely](#)

Using layers with technical drawings

A layer is a named category of shapes. When you create a technical drawing with the Mechanical Engineering Template, Visio Technical places the dimensioning and annotation shapes on layers. For example, when you drop a Horizontal Baseline shape, Visio adds the shape to a Dimensions layer.

When shapes are assigned to separate layers, you can treat the shapes separately. For example, you can hide or lock all layers except the one you want to work on or you can print shapes based on their layer assignments. You can also generate numeric or inventory reports for shapes on particular layers.

To view only one layer in a drawing:

1. Choose View > Layer Properties.
2. In the Layer Properties dialog box, under Visible, uncheck all the layers except the one you want to view, then click OK.

See also:

[About layers](#)

Working with shape properties

A custom property is a field in which you can store information. Shapes such as those on the Dimensioning, Engineering stencil, store the information in custom-property fields. To change the custom properties of a dimensioning shape, right-click the shape, then choose the appropriate command from the menu.

If you want to associate additional data with your technical drawing shapes, you can run the Custom Properties Editor to add properties.

To run the Custom Properties Editor:

- Choose Tools > Macro > Custom Properties Editor.

See also:

[Adding, editing, and deleting custom-property fields](#)

Generating reports from properties

If you've entered data for the properties associated with your technical drawing shapes, you can run the Property Reporting Wizard to generate inventory or numerical reports based on the data.

To run the Property Reporting Wizard:

- Choose Tools > Property Report.

See also:

[Creating reports from custom data](#)

Linking shapes to other drawing pages, other files, or World Wide Web locations

You can add navigational links to any shape in your diagram, so that users of the diagram can right-click the shape to jump to separate drawing pages, separate files, or documents on an intranet or the Web.

To add links to shapes:

- Choose Insert > Hyperlink.

See also:

[About using hyperlinks](#)

Placing Visio drawings on the World Wide Web

You can easily convert a Visio drawing to a format Web browsers can read. Then you can distribute the drawing on an intranet or the Web.

See also:

[Exporting shapes and drawings in .jpg or .gif format](#)

[Saving drawings as HTML pages](#)

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