

Pipes And Valves - All Stencils Template

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The Pipes and Valves - All Stencils Template includes shapes for use in creating industrial piping and valve diagrams.

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

Setting up your drawing environment

By default, the Pipes And Valves Template opens with an unscaled drawing page in portrait (tall) 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 page settings and drawing scale:

1. Choose File > Page Setup.
2. On the Page Size tab and the Drawing Scale tab, 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 pipe plan:

1. Use shapes from the General - Title Blocks stencil to add a title block and other reference information to the drawing. To open the Title Blocks stencil, choose File > Stencils > Annotation > General - Title Blocks.

2. Use shapes from the Pipes And Valves stencils to lay out the components.

Use control handles, right-clicking, and other shape-specific features to configure the shapes the way you want.

3. Use shapes from the General - Connectors stencil to create a single-line pipe between valves and other components. Glue each end of the connector to connection points on the other shapes.

The endpoints turn red, indicating that they're glued to the connection point.

4. To add or replace existing text, select a shape, then type.

The text blocks of most pipe and valve shapes have a control handle you can drag to reposition text.

5. Use shapes from the General - Annotations stencil to annotate the drawing.

Working with pipe and valve shapes

You can configure many pipe and valve shapes by right-clicking them and choosing the appropriate command from the shortcut menu. For example, right-click a Crossings shape to choose from three different types of crossings.

Using layers with piping drawings

A layer is a named category of shapes. When you create a piping drawing with the Pipes And Valves Template, Visio Technical places the pipe and valve shapes on layers. For example, when you drop a Power Signal shape, Visio Technical adds the shape to a Valves layer. To find out what layer a shape is assigned to, right-click the shape, then choose View > Shape Layer.

When shapes are assigned to separate layers, you can treat the layers of 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](#)

Incorporating a piping drawing into a building layout

If you want to add your piping drawing to an existing building layout, you can use a background page to create the piping drawing on top of the building layout. Your existing layout can be a Visio Technical drawing, or you can import a drawing from another application. For example, if you created the layout in AutoCAD, you can open the file in Visio Technical using the AutoCAD file converter. To open an AutoCAD file, choose File > Open. In the Open dialog box, under Files Of Type, choose AutoCAD (*.dwg, *.dxf).

To incorporate piping into a building layout:

1. In an open space-plan drawing, choose Insert > Page to create a new page.
2. In the Page dialog box on the Page Properties tab, type a name for the page, then click Size/Scale on the Drawing Scale tab. Under Drawing Scale, choose No Scale (1:1). Click OK twice.
3. Choose Edit > Go To, then choose the page that contains the space plan. Then choose File > Page Setup > Page Properties. On the Page Properties tab, choose Background to make the space plan a background page.
4. Choose View > Layer Properties. In the Layer Properties dialog box, click Visible to show all the space plan layers. Under Visible, check Building Envelope to show only that layer.
5. Choose Edit > Go To, then choose the piping page. Then choose File > Page Setup and on the Page Properties tab, under Background, choose the page that contains the space plan. Visio Technical displays the walls of the space plan on the background.
6. Drop piping and valve shapes on the drawing page to create the piping for the building. When you finish creating the piping, choose View > Layer Properties. Click Visible to show all the layers.

See also:

[Using backgrounds for common page elements](#)

Working with shape properties

A custom property is a field in which you can store information. Shapes such as those on the Pipes And Valves stencils store the information in custom-property fields. To change the custom properties of a pipe or valve shape, right-click the shape, then choose the appropriate command from the shortcut menu.

If you want to associate additional data with your pipe or valve 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 associated custom-property data with your pipe or valve shapes, you can run the Property Reporting Wizard to generate inventory or numerical reports based on the data. For example, you can create an inventory of all the In-line Valve Shapes in the drawing.

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. For example, you can link the drawing page to a document in which you maintain the drawing's parts list.

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 Technical 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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