Standard Practices for Control Valves

Standard Engineering Practices

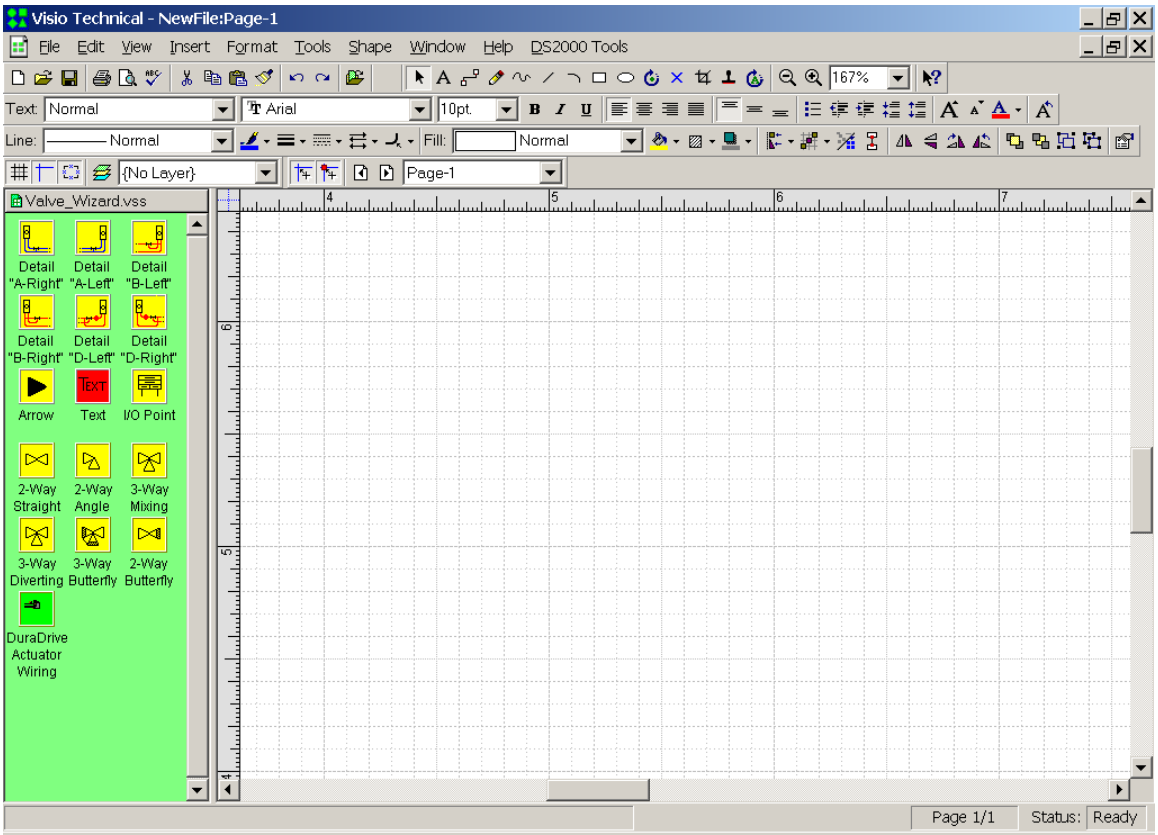
Document: 2.1

Date 3-14-02

Supersedes:

Designer Suite has 2 procedures that can be followed when working with valves.

1. The first procedure which was the original one introduced with the software, uses the Stencil entitled "Valve_Wizard".



When you bring these shapes onto your drawing, you are actually populating your drawing and project with valves that are added to your material inventory. When you complete **all** your systems(AHUs etc), you create your Valve Schedule by going to your Project Explorer, and selecting "Create Valve Schedule". This feature will inventory all the valves brought onto drawings, and create a Valve Schedule.

Confidential Information for Invensys Energy Solutions Employees and Affiliates
Building Systems - Americas
© 2002 Invensys. All Rights Reserved.

Some issues with this method:

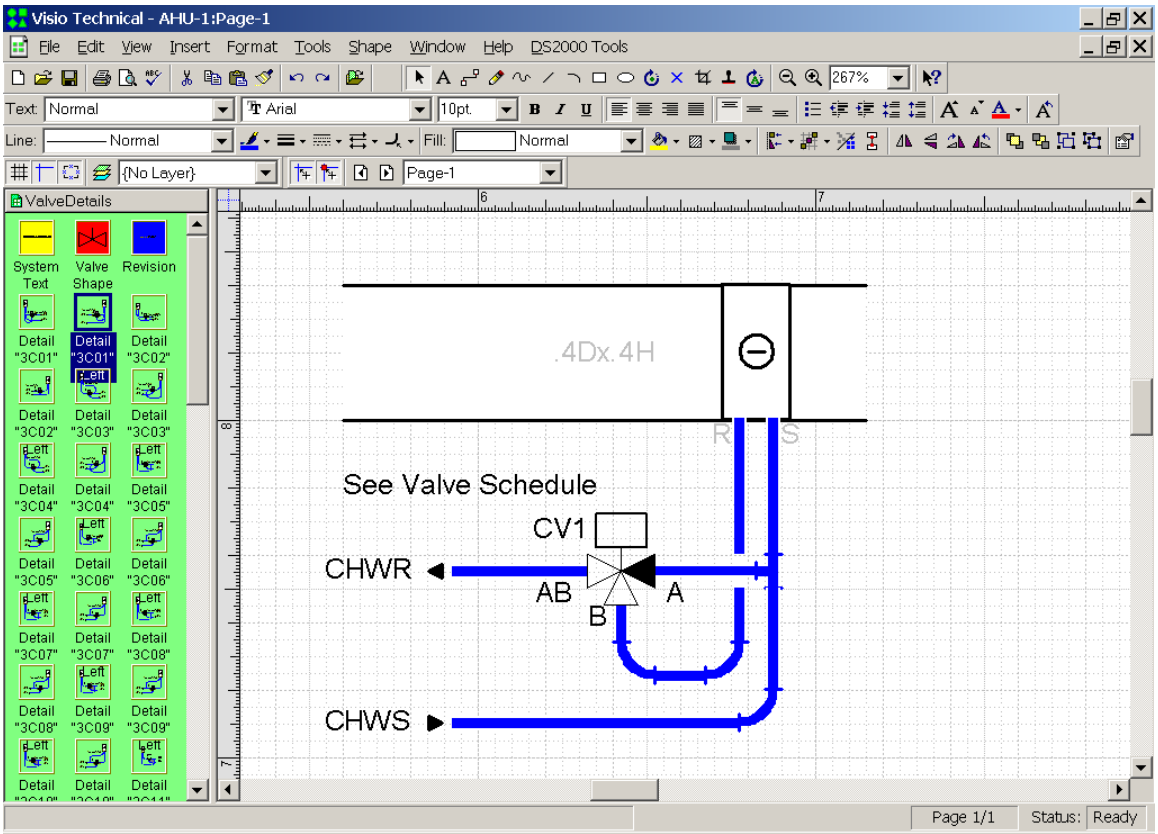
- we are often forced to create and submit a Valve Schedule before we actually create the system drawings. With this method it is necessary that we bring a shape onto a drawing before we can automatically add valves onto a schedule.
- If you have 50 VAV boxes that you want to add to your schedule, you have to bring in at least 5 valve shapes (you can put up to 10 valves under each shape).
- The Valve schedule is simply a snap shot of the inventory of valve shapes on the drawings. If you want to change a valve it is necessary to go to the shape on the drawing and make the change or in some cases you can perform a re-index of the valve at the Project Explorer and change certain properties.
- It is hard to control the order in which the valves are located on the schedule. If you do an Excel sort, the next time you add a valve and run another schedule, they will be back to the original order.

The second procedure which is a recent enhancement to Designer Suite uses the Excel Schedule as your starting point. **Detailed directions for this Valve Wizard Spreadsheet and Legend Sheet are in another document in this section.** With this method you can either type the valve model numbers on the spreadsheet, use the database table to help find and insert valves, initiate the Valve Wizard to help choose a valve, or use copy and paste features of Excel to duplicate. By selecting the associated detail, you can automatically create a Legend Sheet showing the proper piping.

With this method, the Valves are inventoried directly from the Valve Schedule when creating a project Total BOM.

When creating your actual system diagram (AHU etc.) use the new shapes located in the stencil titled "ValveDetails". These shapes do not add to your material inventory.

Confidential Information for Invensys Energy Solutions Employees and Affiliates
Building Systems - Americas
© 2002 Invensys. All Rights Reserved.



When bringing them into your drawing then ungrouping them, you have the ability to edit some the features. In most cases you should only have to change the BOM tag to match your Valve Schedule and possibly the actuator type.

You can see that it is important not to combine both procedures on the same project. If you use the new schedule then you bring in the shapes from the stencil "Valve_Wizard", you will add to your inventory of parts from both the schedule and the drawings, duplicating parts.

As part of the Standard Practices, **Invensys Field Offices will use the second procedure only. "Valve Wizard Spreadsheet and Legend Sheet"**

Since your drawings will be able to be used by others, it is important that we all use the same method. When you use a AHU drawing from the Systems Library or you copy a drawing from another employee, it is important to know that the piping detail will not add a part to your material inventory.

Confidential Information for Invensys Energy Solutions Employees and Affiliates
Building Systems - Americas
© 2002 Invensys. All Rights Reserved.