Dimensional Data for Piping Module

Overview

The Dimensional Data for Piping (DDP) module enables you to store and manage three levels of dimensional data: default, working, and vendor. This structure represents the natural flow of information and activities related to dimensional data processing.

You can store and maintain default instrument dimensional data by classifying it per group, manufacturer, or process connection.

The DDP module also enables you to store and maintain dimensional data received from a vendor. This data can also be classified per group, manufacturer, or process connection.

Most significantly, the DDP module provides the means to transfer, store, and maintain certified vendor dimensional data for your instruments. This certified vendor data will then be transferred to your Working data which you use for the actual instruments in your database.

You can use the DDP module to transfer external dimensional data to your SmartPlant Instrumentation database and export of dimensional data from your database to an external 3-D piping design application.

In addition, the DDP module enables you to generate and print out various dimensional data reports that facilitate your dimensional data management. These reports can help you keep track of suspected data, data status, default dimensional data, and vendor dimensional data, and so forth.

Note

- The DDP module is available only if it is included in the software license that you purchased from Intergraph.

Principles of the DDP Module

This section provides general guidelines and a recommended flow of activities for the DDP module.

At the initial stage, you should select the appropriate instrument types and define their instrument profiles so that dimensional data handling is clearly specified. Based on the existing dimensional library and practices of dimensional data processing, you also classify the instruments by their type and pre-assigned DDP group by defining this group in the instrument type profile.

Next, define basic instrument parameters in the Instrument Index module or Specifications module, including the instrument manufacturer, model, and process connections.

Group definition coupled with basic information enables the dimensional data designer to provide piping designers with preliminary dimensions filled from the standard dimensional data library based on specified basic instrument parameters.

When requests for quotations are issued and vendor bids are evaluated, more detailed dimensional information supplied by vendors and manufacturers in electronic or hard copy form can be automatically imported or manually entered as vendor data.

This vendor data lets the designer re-evaluate dimensional data, if required, and issue vendor-certified dimensional data to the piping.

Starting from the moment when the preliminary dimensional data was selected for the instruments, you are able to release" this information to the piping design. This can be done in two forms — electronically or by providing a hard copy. Electronic form is an automatic transfer and processing of the structured data to a 3-D CAD system. Alternatively, dimensional data report or dimensional data sheet can be printed out and transferred to the piping design department in paper form.

The status of the dimensional data design can be tracked through the instrument status. You can also view the history information for the selected instrument modifications.

Controlling the modifications of critical definitions, such as a DDP group, instrument type, model, and process connections provides the means to manage and keep track of suspected data during the whole life cycle of the dimensional data design.

Starting the DDP Module

Use this procedure to start a DDP (Dimensional Data for Piping) module session.

Note

- The DDP module is available only if it is included in the software license that you purchased from Intergraph.

➢ **To start the Dimensional Data for Piping module**

- Do one of the following:
  - On the main toolbar, click .
  - On the **Modules** menu, click **Dimensional Data**.

Defining the Process Connection Class

This procedure enables you to define the required process connection class/rating. This represents the value of the maximum in-line pressure that the process connection can withstand.

➢ **To define the required process connection class/rating**

1. In the **Dimensional Data for Piping Module** window, on the **Tables** menu, click **Process Connection Classes**.
2. To create a new process connection class, click **New**.
3. Type the appropriate process connection class name and description.

   Note

   - You cannot delete a process connection class if it is associated with default, working, or vendor data.

Defining the Connection End Preparation

This option enables you to define the required process connection end preparation.

➢ **To define a process connection end preparation**

1. In the **Dimensional Data for Piping Module** window, on the **Tables** menu, click **Process Connection End Prep**.
2. To create a new process connection end preparation, click **New**.
3. Type the appropriate process connection end preparation name, design code, and description.

Additional Settings

You also have to make some additional settings for the dimensional data. These settings include the following:

- Equipment and equipment type
- Instrument manufacturer
- Instrument model

You access the appropriate dialog boxes from the **Dimensional Data for Piping Module** window and by selecting the required command on the **Tables** menu. These definitions are actually made in the Instrument Index module and can be accessed from the DDP module too.

For a detailed explanation about the above-mentioned features, see the Instrument Index module documentation.

Dimensional Groups

Defining Dimensional Groups

Defining the dimensional groups is the step in storing and managing dimensional data. You need dimensional groups to store, display, and manage default, working and vendor dimensional data. Moreover, instrument types are also associated with dimensional groups. Hence, new tag numbers whose instrument type is associated with a particular dimensional group will contain dimensional data and this dimensional record will be displayed in the **Working Data** window.

Note

- The Domain Administrator first needs to import DDP library data, including default groups.

➢ To define a dimensional group

1. In the **Dimensional Data for Piping** window, on the **Tables** menu, click **Dimensional Groups**.
2. To create a new dimensional group, in the **Dimensional Groups** dialog box, click **New**.
3. Under **Dimensional Group**, type the group name.
4. Under **Description**, type the group description.
5. Select the **3 Points** and/or **4 Points** check boxes, depending on how many connection points you want to define.
6. In the **CAD Code** field, type the required CAD code.
7. To define the current group parameters, click **Properties**. See Defining Dimensional Group Properties for more details.
8. To assign a picture to the selected group, do the following:
   a) Under **Picture**, click **Assign**.
   b) In the **Select Group Picture** dialog box, navigate to the required file, and click **Open**.
9. To assign a dimensional data sheet form to the current group, under **Form**, click **Assign**.

Defining Dimensional Group Properties

This procedure enables you to define dimensional data parameters for a given dimensional group. These parameters then appear in the **Default Data** window, the **Working Data** window, and the **Vendor Data** window, as well as in the **Dimensions** section of the **Add Data,** and **Edit Data** dialog boxes. Thirty parameters are available for each dimensional group. You create an active parameter by typing its description, selecting it for use, and setting its allowed minimum value to be zero or greater than zero.

➢ To define dimensional group properties

1. In the **Dimensional Data for Piping Module** window, on the **Tables** menu, click **Dimensional Groups**.

   Note

   - At this point, you can modify general properties of the dimensional group.

2. Click **Properties**.

3. In the **Dimensional Group Properties** dialog box, under **Description**, type the required parameter description.

4. To include this parameter in the selected dimensional group, click under **Select**.

   Notes

   - To select all thirty parameters, select the **Select all** check box.
   - You cannot clear a **Select** check box for a parameter for which the dimensional group is assigned.

5. If you require the selected parameter to have a value greater than zero, select the **Release if Zero** check box.

   Note

   - Clearing **Release if Zero** does not prevent you from placing zeros in this field, but rather prevents the release of dimensional data by disabling the **Ready for Release** option.

6. Click **OK** to accept your definitions and return to the **Dimensional Groups** dialog box.

Duplicating a Dimensional Group

This option enables you to create a new dimensional group based on the same group parameters as the selected group.

➢ To duplicate a dimensional group

1. With the **Dimensional Groups** dialog box open, highlight the required group.
2. Click **Duplicate** to duplicate the selected group.
3. Click **OK** to accept your definitions, save the group data, and close the dialog box.

Assigning Dimensional Data Forms

Assigning a dimensional data form to a dimensional group consists of two stages:

- Assigning a .psr file to a dimensional data form
- Assigning the dimensional data form to a dimensional group.

➢ To assign a .psr file to a dimensional data form

1. In the **Dimensional Data for Piping Module** window, on the **Tables** menu, click **Dimensional Data Sheet Forms**.
2. To create a new dimensional data form, do the following:
   a) Click **New**.
   b) Type the form name and description in the appropriate fields.
3. Select the dimensional data form to which you want to assign a .psr file, and click **Assign**.
4. In the **Select Group Form** dialog box, navigate to the required .psr file and click **Open**.
5. In the **Dimensional Data Forms** dialog box, click **OK**.

➢ To assign a dimensional data form to a dimensional group

1. On the **Tables** menu, click **Dimensional Groups**.
2. Select the group to which you want to assign a dimensional data form, and under **Form**, click **Assign**.
3. In the **Assign Dimensional Data Form** dialog box, select a form, and click **OK**.

Associating an Instrument Type with a DDP Group

This option enables you to set the default dimensional group for new tag numbers that are associated with dimensional data. Note that this procedure is performed in the Instrument Index module.

➢ To associate an instrument type with a dimensional group

1. In the **Instrument Index Module** window, on the **Tables** menu, click **Instrument Types**.
2. From the **Process function** list, select the process function.
3. In the data window, select the instrument type.
4. Click **Profile**.
5. On the **General** tab, under **Dimensional data**, do the following:
   a) Select the **Include dimensional data** check box to associate the selected instrument type with dimensional data.
   b) From the **Group Name** list, select the dimensional group with which dimensional data will be associated by default.
6. Click **OK** to close the **Instrument Type Profile** dialog box and then click **OK** to close the **Instrument Types** dialog box.

Vendor Data

Managing Vendor Data

Vendor data is used for data validation and verification purposes of dimensional data for piping design. You use Vendor data to certify the Working data prior to its release to piping.

Instead of inserting raw Vendor data manually, use the Import Utility to import a large amount of raw vendor information. After importing the Vendor data, you revise the raw vendor data to assign it to a dimensional group, verify the instrument tags, and, if required, manually modify the required vendor data details.

Sometimes multiple records for the same instrument can exist. This can happen if you import vendor data from several manufacturers. You can copy vendor data to the Working data if the manufacturer, model, the Dimensional Group, and the process connection values match the Working data values.

You can also indicate whether the imported data has been copied to the Working data. You can reset this indication every time import is performed for a specific record, thus creating a clear indication if the latest information has been copied to the Working data.

Managing Vendor data involves editing it and entering new dimensional vendor data for a selected instrument.

Vendor data is displayed in the **Vendor Data** window.

➢ To display and access vendor data

1. With the **Dimensional Data for Piping Module** window open, click  or click **Vendor Data** on the **View** menu.

2. In the **Select Dimensional Group** dialog box that opens, select the required dimensional group and click **OK**.

   The **Vendor Data** window opens displaying the existing vendor data records.

   You can customize the display and layout of the data in the **Working Data** window. The following options are available:

   - Determining the fields to be displayed
   - Sorting the data
   - Filtering the data

Entering Vendor Data

This feature allows you to enter vendor data manually. It is useful when adding a few records. If you want to enter numerous records, use the Import Utility.

➢ To enter vendor data manually

1. Open the **Vendor Data** window and do one of the following:
   - Right-click anywhere in the **Vendor Data** window and click **New Vendor Data** on the shortcut menu.
   - Click **New Vendor Data** on the **Actions** menu.
2. Beside **Tag number,** click **Browse** and then do the following:
   a) In the **Enter Tag** dialog box, type in the required tag number and click **OK** or click **Find** to find the required tag number.
   b) In the **Find Tag** dialog box, enter the required search parameters and click **Find** to find the required tag number.
   c) Under **Search Results**, highlight the required tag number and click **OK** to return to the **New Vendor Data** dialog box where this tag number is displayed in the **Tag name** field.
3. Select the required instrument manufacturer from the **Manufacturer** list.
4. Select the required instrument model from the **Model** list.
5. Type the required full and dry weight values and select the weight unit of measure from the **Weight UOM** list.
6. In the **Revision** field, type the revision number as needed.
7. Enter the default INLET and OUTLET values: type in the **Size** values and select the appropriate values from the **Class** and **End preparation** lists.
8. Enter the default **#3** and **#4** process connection values if needed: type in the **Size** values and select the appropriate values from the **Class** and **End preparation** lists.
9. In the **Dimensions** section, type in the default dimensional properties. Note that the **Dimensions** field names appear as you have defined them in the **Dimensional Groups** dialog box.
10. Type the **Full** and **Dry Weight** values.
11. Select the weight unit of measure from the **Weight UOM** list.
12. Click **OK** to save the data and close the dialog box.

Editing Vendor Data

This option enables you to edit vendor data. It is useful when you want to revise the raw vendor data imported from a manufacturer.

➢ To edit vendor data

1. In the **Vendor Data** window, highlight the records you want to edit and do one of the following:

   - Right-click the selected instruments and click **Vendor Data Properties** on the shortcut menu.

   - Click **Vendor Data Properties** on the **Actions** menu.

2. In the **Vendor Data Properties** dialog box, select the required instrument manufacturer from the **Manufacturer** list.

3. Select the required instrument model from the **Model** list.

4. Type the required full and dry weight values and select the weight unit of measure from the **Weight UOM** list.

5. In the **Revision** field, type the revision number as needed.

6. Enter the default INLET and OUTLET values: type in the **Size** values and select the appropriate values from the **Class** and **End preparation** lists.

7. Enter the default **#3** and **#4** process connection values if needed: type in the **Size** values and select the appropriate values from the **Class** and **End preparation** lists.

8. In the **Dimensions** section, type the default dimensional properties. Note that the **Dimensions** field names appear as you have defined them in the **Dimensional Groups** dialog box.

9. Type the **Full** and **Dry Weight** values.

10. Select the weight unit of measure from the **Weight UOM** list.

11. Click **Next** or **Previous** to display the next or the previous record if you have selected multiple records for editing.

12. Click **OK** to save the data and close the dialog box.

Working Data

Managing Working Data

This feature enables you to store and manage Working dimensional data. The **Working Data** window displays existing Working dimensional data for tag numbers entered in the Instrument Index module. Once you create a new tag number whose instrument type is associated with dimensional data and a dimensional group, the dimensional data for this tag will be displayed in the **Working Data** window.

You can also add more records to the Working data by copying from Vendor data or by copying preliminary default data from the Default Library if the Dimensional Group, manufacturer, model, and the process connection values match the Working data.

Managing Working data involves editing it, modifying the data status, entering the piping design area, and finally generating and printing out a Dimensional Data Sheet for a particular instrument.

You access Working data in the **Working Data** window.

➢ To display and access Working data

1. With the **Dimensional Data for Piping Module** window open, click  or click **Working Data** on the **View** menu.

2. In the **Select Dimensional Group** dialog box, highlight the required dimensional group and click **OK**.

   The **Working Data** window opens displaying the existing working data records for the instruments whose instrument type is associated with dimensional data and the current dimensional group.

    **Note**

   - You can customize the display and layout of the data in the **Working Data** window. The following options are available:
   - Determining the fields to be displayed
   - Sorting the data
   - Filtering the data
   - For a detailed explanation on how to carry out these procedures, refer to the Browser module, Defining a View Profile.

Editing Working Data

You can edit the working data either in the **Working Data** window or in the **Working Data Properties** dialog box. Note however, that not all the fields are accessible for editing in the **Working Data** window. Therefore, you should edit the data in the **Working Data Properties** dialog box.

➢ To edit working data

1. With the **Working Data** window open, highlight the required tags and do one of the following to open the **Working Data Properties** dialog box:

   - Right-click the selected tag numbers and click **Working Data Properties** on the shortcut menu.

   - Click **Working Data Properties** on the **Actions** menu.

2. Enter the default INLET and OUTLET values: type in the **Size** values and select the appropriate values from the **Class** and **End preparation** lists.

3. Enter the default **#3** and **#4** process connection values: type in the **Size** values and select the appropriate values from the **Class** and **End preparation** lists.

4. Under **Dimension values**, type the default dimensional properties. Note that the **Dimensions** field names appear as you have defined them in the **Dimensional Groups** dialog box.

5. Type the **Full** and **Dry Weight** values.

6. Select the weight unit of measure from the **Weight UOM** list.

7. Click **OK** to save the data and close the dialog box.

Piping Design Area

This option enables the piping designers to enter 3-D CAD design model or piping design area for the selected instrument. You can select multiple records from the **Working Data** window and enter or modify the piping design area as needed.

➢ To enter the piping design area

1. In the **Working Data** window, highlight the required instruments and do one of the following:

   - Right-click the selected instruments and click **Piping Design** on the shortcut menu.

   - Click **Piping Design** on the **Actions** menu.

   The **Piping Design Area** dialog box opens.

2. Type in the required design area name in the **Design Area** field and click **Save**.

3. Select the **Copy to all tags** check box to copy the design area name you have just entered to all the selected instruments or click **Preview** or **Next** to open the previous or the next record.

4. Click **OK** to accept the values and close the dialog box.

   Note that all the other fields in this dialog box are read-only.

Copying Working Data to Default Data

This option enables you to copy working dimensional data to the Default Library. The copied record includes all its definitions: the dimensional group, manufacturer, model, and the process connection values.

You can select only a single instrument at a time. This instrument will serve as a default example. For each selected instrument, the software can then search a default record with corresponding dimensional group, manufacturer, model, and process connection values.

➢ To copy working data to the default Library

1. In the **Working Data** window, highlight the instruments whose working data you want to copy to the Default Library and then do one of the following:

   - Right-click the selected tag numbers and click **Copy Working to Default** on the shortcut menu.

   - Click **Copy Working to Default** on the **Actions** menu.

2. Examine the information in this **view-only** dialog box and click **Copy** to copy the Working data to the Default Library.

   Note that the **Copy** button will be disabled if no matching values are found.

Copying Default Data to Working Data

This feature allows you to copy records with preliminary default dimensional data into the working data of the selected instrument. Copying default data from the Default Library is only possible if the dimensional group, manufacturer, model, and the process connection data match the working data.

You can select numerous instruments whose default data you want to copy. For every selected tag number, the software can then search for values matching the working data. Only after matching dimensional group, manufacturer, model, and process connection values are found, the software copies the default data.

After successfully copying default data, the status of the copied records is set as Preliminary and its revision number as 0 (zero). The revision number will then be incremented from the last preliminary status by one, e.g., Preliminary 1.

➢ To copy default data to working data

1. In the **Working Data** window, highlight the tag numbers whose default data you want to copy and then do one of the following:

   - Right-click the selected tag numbers and click **Copy Default to Working** on the shortcut menu.

   - Click **Copy Default to Working** on the **Actions** menu.

   The software searches for instruments with matching dimensional group, manufacturer, model, and process connection values. Once matching values are found, the **Copy Dimensional data from Default Data** dialog box opens:

2. Examine the displayed data:

   - **Instruments selected** — this field shows how many tag numbers you selected whose default dimensions you want to copy.

   - **Instruments found** — this field shows how many tag numbers in the working data match the values in the default data.

   - **Instruments with incomplete data** — this field shows how many tag numbers in the working data have incomplete data.

   A progress bar opens under the data status indication showing you the data copying progress. For every instrument with matching values, default dimensional values are copied.

3. Click **Copy** to copy the data.

   A progress bar opens under the data status indication showing you the data copying progress.

   Note the following possibilities:

   - If the instrument contains no working data, the copied default dimensions will be marked as **ready for release**.
   - If the instrument contains working data, you will be prompted if you want the working data to be overwritten by the default data. The copied dimensions will be marked as **suspected**.
   - If the instrument contains working data whose status is certified", a warning message will appear informing you that the working data for this instrument is certified by vendor. You will be prompted whether you want the working data to be overwritten by the default data. If you choose to overwrite it, the dimensional data status will marked as **suspected**.

Copying from Vendor Data to Working Data

This feature allows you to copy certified vendor data to the working data of a selected instrument. Copying vendor data is only possible if the dimensional group, manufacturer, model, and the process connection data match the working data.

You can select numerous instruments for which you want to copy vendor data. For each selected instrument, the software can then search for matching dimensional group, manufacturer, model, and process connection values. Once matching values are found, the software opens the **Copy from Vendor to Working** dialog box that displays the number of instruments selected and the number of instruments found with matching values.

➢ To copy from vendor data to working data

1. In the **Working Data** window, highlight the tag numbers for which you want to copy vendor data and then do one of the following:

   - Right-click the selected tag numbers and click **Copy from Vendor to Working** on the shortcut menu.
   - Click **Copy from Vendor to Working** on the **Actions** menu.

   The software searches for instruments with matching dimensional group, manufacturer, model, and process connection values. Once matching values are found, the **Copy from Vendor to Working** dialog box opens:

2. Examine the displayed data:

   - **Instruments selected** — this field shows how many tag numbers you selected for which you want to copy vendor dimensions.
   - **Instruments found** — this field shows how many tag numbers in the working data match the values in the vendor data.
   - **Instruments with incomplete data** — this field shows how many tag numbers in the working data have incomplete data.

   A progress bar opens under the data status indication showing you the data copying progress. For every instrument with matching values, vendor dimensional values are copied including the vendor revision number. This data will be marked as **copied to working data**.

3. In the **Set Status** section, select the dimensional data status of the working data as required: **Preliminary**, **Design**, or **Certified**.

4. Click **Copy** to copy the data.

   Note the following possibilities:

   - If the instrument contains no working data and all required dimensional data is defined, the data will be marked as **ready for release**.
   - If the instrument contains working data, you will be prompted if you want the working data to be overwritten by the vendor data. The copied dimensions will be marked as **suspected data** and **copied from vendor**.

Modifying Working Data Status

This option enables you to display and modify the current status of Working dimensional data for the selected instrument. Three status stages are available: Preliminary, Design, and Certified. Within each status, a revision number (from zero to 99) indicates the progress of the dimensional data handling. An instrument status can be described as a combination of these two parameters: the status of the Working dimensional data and the revision number, for example PRELIMINARY 1 or DESIGN 5.

Note that when you modify the data status because of any dimensional data management, you will be able to reset the suspected data" flag and mark the data as correct and ready for release to piping.

Caution

- The Working data status cannot be changed to CERTIFIED unless a purchase order has been issued and entered in the Instrument Index or Specifications module.

Note also that you can select multiple instruments for status modification.

➢ To modify working data status

1. In the **Working Data** window, highlight the instruments whose working status you want to modify and then do one of the following:
   - Right-click the selected instruments and click **Modify Status and Revision** on the shortcut menu.
   - Click **Modify Status and Revision** on the **Actions** menu.
2. On the **Status** tab, click **Set status** and select the required status from the **Status** list. The list displays the selected status and becomes unavailable until you click **Set status** again.
3. Click **Raise to next revision** to raise the revision number if needed.
4. Click in the **Description** text box and type a short status description.
5. Select the **Reset Suspect Flag** check box to remove the suspected data status for the current instrument.
6. Click **Save** to save your settings.
7. Click **Next** or **Previous** to display the next or previous selected tag number.
8. Click **OK** to close this dialog box or click the **History** tab to open the **History** tab folder.

Default Data

Managing Default Dimensional Data

This feature enables you to store and manage preliminary dimensional data for your instrumentation design. You can use standard (default) dimensions of known manufacturers who are likely to supply the instruments. This Default data is stored in the Default Library which allows you browse through the data, modify it, and copy it to the Working data as needed. Once sufficient Default data is available, the DDP designer can provide this data to the piping designers for their preliminary design. The Default data will then be replaced or modified according to the actual dimensional data received from the manufacturers.

Caution

- Note that you must first define the appropriate dimensional group, the process connection data, and the manufacturer before you can start entering default data. Remember that only one set of default dimensional data can exist for a domain.

Entering Data into the Default Library

Use this procedure to add default dimensional data for a given dimensional group.

➢ **To enter default data into the default Library**

1. With the **Dimensional Data for Piping Module** window open, click **Default Library** on the **View** menu or click  on the toolbar.

2. In the **Select Dimensional Group** dialog box, highlight the required group and click **OK**.

   Caution

   - If you select **All Groups**, you will not be able to edit the data and no process connection values will be displayed.

3. On the **Actions** menu, click **New Default Data**.

4. In the **Default Data Properties** dialog box, select the required instrument manufacturer from the **Manufacturer** list.

5. Select the required instrument model from the **Model** list.

6. Enter the default INLET and OUTLET values: type in the **Size** values and select the appropriate values from the **Class** and **End preparation** lists.

7. Enter the default **#3** and **#4** process connection values if needed: type the **Size** values and select the appropriate values from the **Class** and **End preparation** lists.

8. In the **Dimensions** section, type in the default dimensional properties. Note that the **Dimensions** field names appear as you have defined them in the **Dimensional Groups** dialog box.

9. Type the **Full** and **Dry Weight** values.

10. Select the weight unit of measure from the **Weight UOM** list.

11. Click **OK** to save the data and close the dialog box.

Editing Default Data

Use this procedure to edit default data for a given dimensional group.

➢ **To edit default dimensional data**

1. Open the **Default Data** window for the required dimensional group.
2. Right-click the entries that you want to edit, and on the shortcut menu, click **Default Data Properties**.
3. Select the required instrument manufacturer from the **Manufacturer** list.
4. Select the required instrument model from the **Model** list.
5. Enter the default INLET and OUTLET values: type in the **Size** values and select the appropriate values from the **Class** and **End preparation** lists.
6. Enter the default **#3** and **#4** process connection values: type in the **Size** values and select the appropriate values from the **Class** and **End preparation** lists.
7. In the **Dimensions** section, type in the default dimensional properties. Note that the **Dimensions** field names appear as you have defined them in the **Dimensional Groups** dialog box.
8. Type the **Full** and **Dry weight** values.
9. Select the weight unit of measure from the **Weight UOM** list.
10. Click **OK** to save the data and close the dialog box.

Customizing the Default Library Display and Layout

You can customize the display and layout of the data in the Default Library. The following options are available:

- Sorting the data
- Filtering the data

Determining the fields to be displayed

For a detailed explanation on how to carry out these procedures, refer to the Browser module, Defining a View Profile.

Services

Generating a Dimensional Data Sheet

This feature enables you to produce a dimensional data sheet for a selected instrument. The dimensional data sheet can complement or serve as an alternative for the automatic 3-D CAD piping design.

A dimensional data sheet includes general tag information, dimensional data of the specific group, and the graphic schematic or detailed presentation of the instrument and its dimensions.

➢ To generate a dimensional data sheet

1. In the **Working Data** window, highlight the required instrument and do one of the following:

   - Right-click the selected instrument and click **Dimensional Data Sheet** on the shortcut menu.

   - Click **Dimensional Data Sheet** on the **Actions** menu.

2. In the **Dimensional Data Sheet** window that opens, you can do the following:

   - Enter or modify the values in the dimensional data sheet fields.
     Click in the appropriate field to type a value or select a value from a list.
     Note that not all the fields are accessible for editing.

   - Manage and enter dimensional data sheet revisions. Click  to open the **Revisions** dialog box where you can enter and modify revisions.

   - Save the dimensional data sheet as an external file, click  .

   - Print out the dimensional data sheet, click  .

    **Tip**

   - You can also preview and print dimensional data sheets in batch mode.
     For details, see Printing Dimensional Data Sheets.

Tracking the Data Status History

This option allows you to track the Working data status history.

➢ To track the Working data status history

1. With the **Modify Status** dialog box open, click the **History** tab to open the **History** tab folder.

2. Examine the information and click **Edit** to type in any appropriate description if necessary.

3. Click **OK** to accept the values and close the dialog box.

Generating DDP Reports

You can generate and print out the following reports:

Report	Description
Group List	Contains a detailed list of all existing Dimensional Groups and their parameters, such as group name, description, associated picture file, cad group identifier, and dimensional parameter definitions.
Dimensions List	Displays a detailed list of all dimensional data for each instrument that is associated with dimensional data.
Suspected Data List	Presents a list of all the instruments for which dimensional data must be re-evaluated due to some changes made to the instrument definitions. For example, if the process connection or any other key parameter has been changed, the data is marked as suspected". This report shows the cause of the suspected data flag.
Status History	Contains all the dimensional data status history per all Tags whose dimensional data status has been changed.
Suspected Data History	Displays a list of all Tags whose dimensional data was or still is marked as suspected". The report also presents the reasons for the suspected data" indication.
Default Library List	Contains a list of general default definitions for the elements of the Default Library.
Default Dimensional Data	Lists detailed definitions of the elements in the Default Library.
Vendor Dimensional Data	Contains a detailed list of vendor dimensional data.
Data Sheets	Allows you to display data sheets associated with specific tag numbers.
Empty Sheet Forms	Allows you to display field names and dimensional properties only, without displaying the values. An empty sheet form also displays a dimensional group diagram.

➢ To generate a Group List, Dimensions List, Default Library List, Default Dimensional Data, or Vendor Dimensional Data report

- With the **Dimensional Data for Piping Module** window open, on the **Reports** menu, click a report menu command.

➢ To generate a Suspected Data List, Status History, or Suspected Data History report

1. With the **Dimensional Data for Piping Module** window open, on the **Reports** menu, click the appropriate menu command.

2. In the **Report Parameters** dialog box, in the **Report Per** section, select if you want the report to include data for all the instruments associated with dimensional data or just for the selected groups.

3. In the **Show data for** section, select if you want the report to be generated for the current <plant> or the current <unit>, and click **OK**.

Printing Dimensional Data Sheets

Use this procedure to open a print preview of one more dimensional data sheets and print dimensional data sheets in batch mode.

Batch preview and printing is available either from the **Dimensional Data for Piping Module** window or from the **Working Data** window.

➢ To print dimensional data sheets from the Dimensional Data for Piping Module window

1. On the **Reports** menu, click **Data Sheets**.
2. In the **Select Tags for Printing Dimensional Data Sheets** dialog box, find the required instruments.
3. Under **Search results**, select source tag numbers.
4. Click **OK**.

➢ To print dimensional data sheets from the Working Data window

1. In the **Working Data** window, select one or more instruments.
2. Do one of the following:
   - On the **Actions** menu or shortcut menu, click **Print Dimensional Data Sheets**.
   - On the **Working Data** window toolbar, click  .

Tip

- Clicking  only prints the instrument list displayed in the **Working Data** window.

Printing Empty Sheet Forms

Use this procedure open a print preview and print one more empty sheet forms. An empty sheet form is a form that does not contain any values. Such a form only displays the names of the fields and dimensional properties, and also display the dimensional group diagram. Each dimensional group is associated by default with one sheet form.

➢ To print empty sheets forms

1. On the **Reports** menu, click **Empty Sheet Forms**
2. In the **Print Empty Sheet Forms** dialog box, select one or more dimensional groups.
3. Click **OK**.