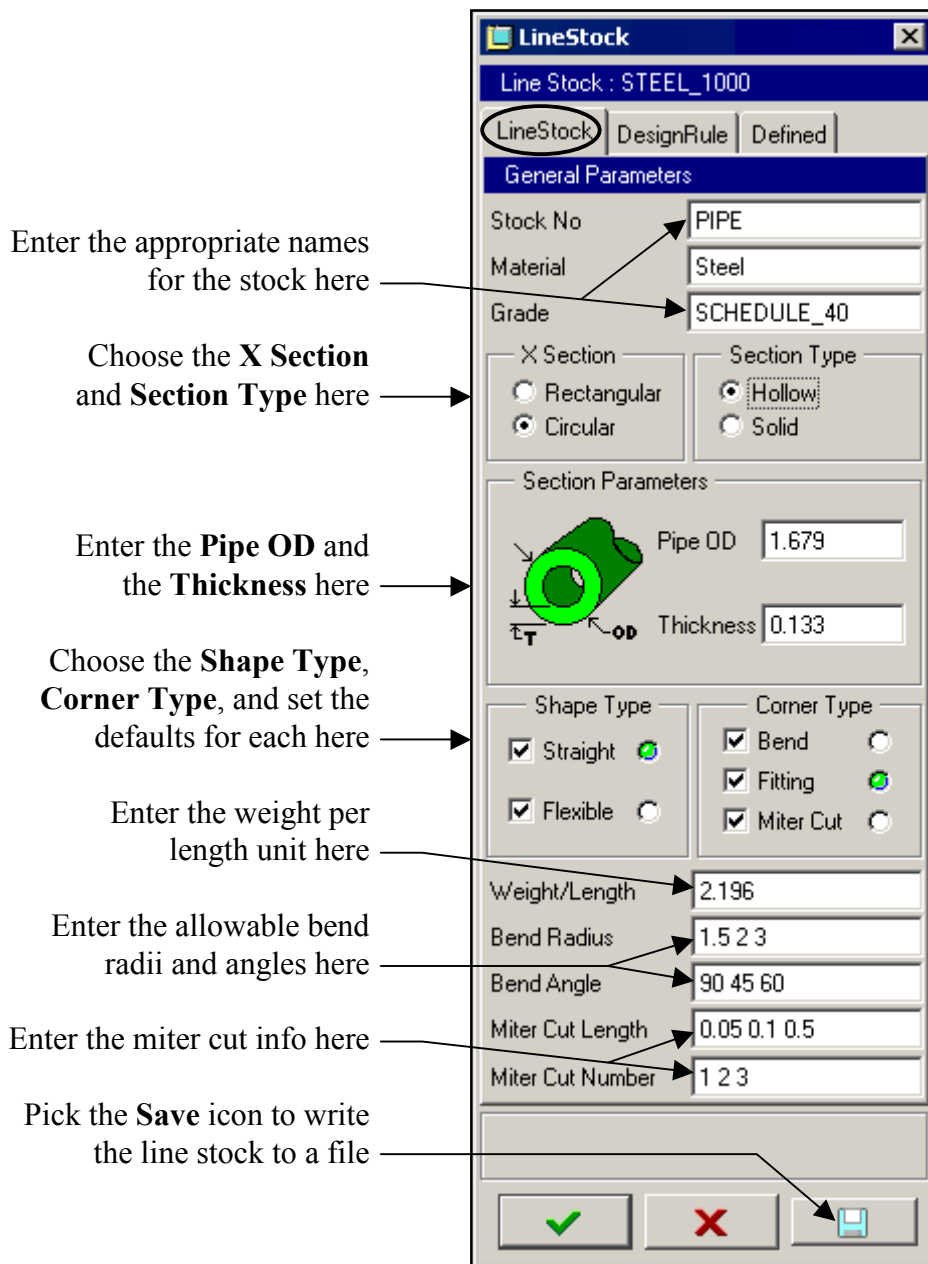


The Line Stock Dialog Box

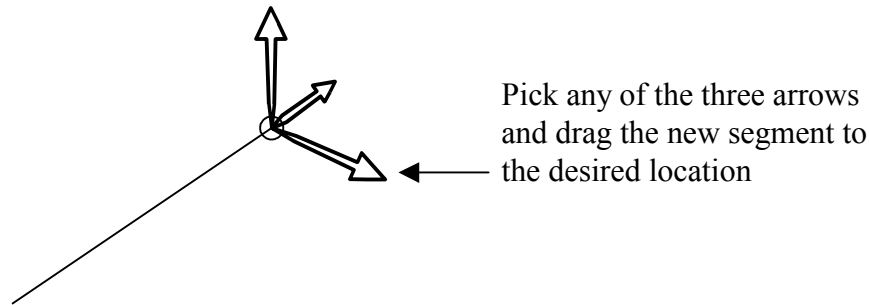
The **Line Stock** dialog box is used to define the pipe stock used in the piping design. This complex dialog box has three tabs as shown below and on the next two pages. Enter the appropriate information and choose the appropriate options for the pipe you are defining. In the **Shape Type** and **Corner Type** sections shown below, the filled dot is used to indicate the default action.

Pick the **Save** icon at the bottom of the dialog box to save the information to a file. The file is written to the folder defined by the `pro_pip_instk_dir` configuration option.

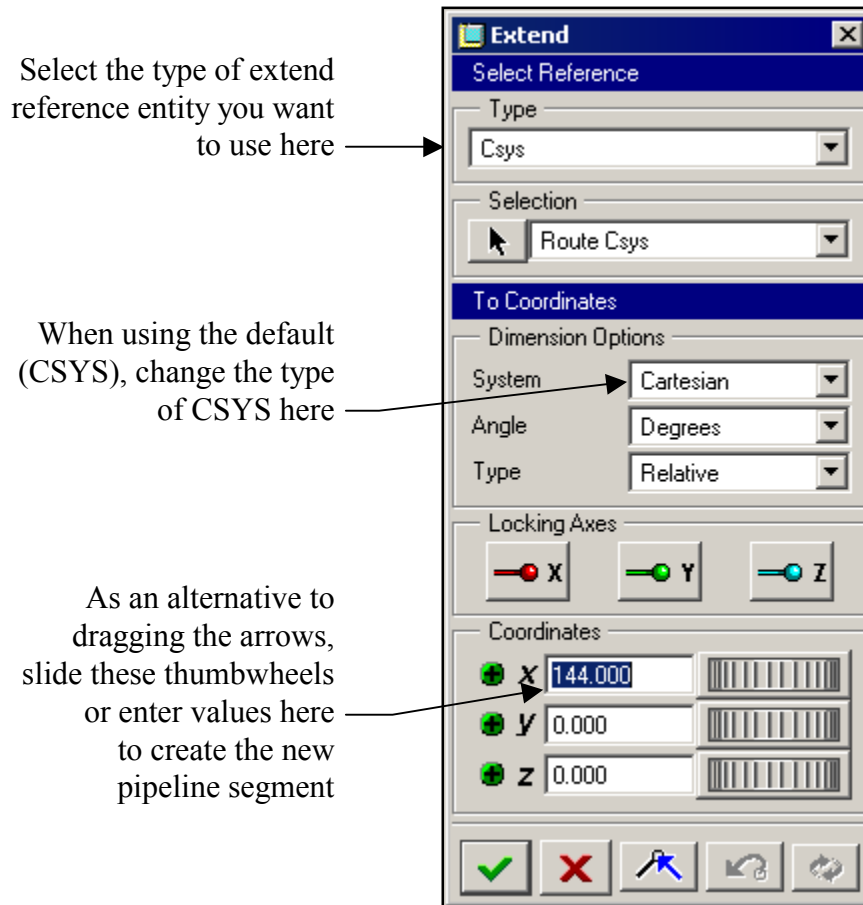


Extend

After the start point for a pipeline has been defined, use the **Extend** command in the ROUTE PIPE menu to define additional segments. When using this command, the system displays three arrows at the current point in the pipeline as shown below. Using the mouse, click left on any of the three arrows, drag the new segment to the desired location, then click the left mouse button again. Click the middle mouse button to complete the new segment. Continue this process as necessary then pick the checkmark in the dialog box to complete the last segment.



There are a variety of options in the **Extend** dialog box as shown below and on the next page.



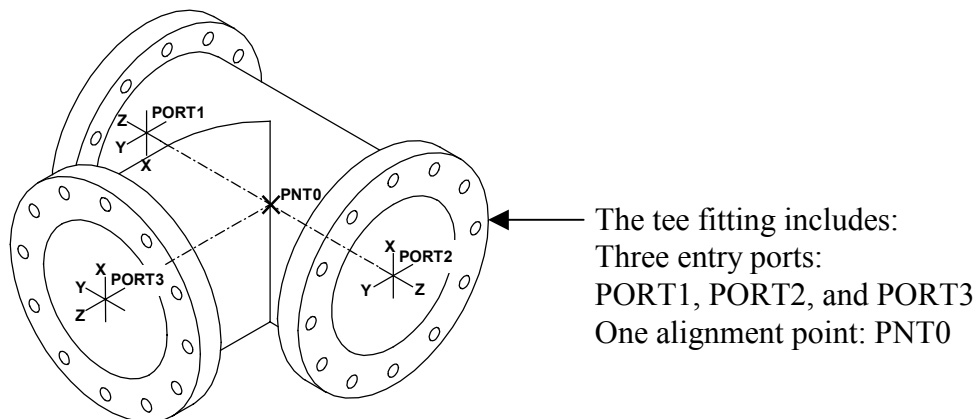
Insert Fittings

To add a fitting to the assembly, pick **Fitting, Insert**, then choose the appropriate type of fitting. Do not use **Component, Assemble** to add fittings to the assembly. The system requires different references to be selected depending on the type of fitting being assembled as listed below.

Fitting Type	Assembly Reference	Fitting Reference
End	A pipeline segment end.	A single datum point.
Corner	A corner between two pipeline segments.	No selection required.
Straight Break	A point along a pipeline segment.	An entry port and an alignment point.
Straight Continue	A point along a pipeline segment.	A single datum point.

The tee fitting shown below contains three coordinate systems used for entry ports. Notice the orientation of the positive Z-axis of each entry port, pointing away from the fitting and coaxial with the pipeline segments. The system trims (cuts) solid pipeline segments at the entry ports of fittings. Two of these entry ports are considered a ‘matched set’, because their Z-axes are coaxial.

The tee fitting also contains a single point, used to align the fitting with the break that is created in the pipeline segment. This point must lie on the axis between the ‘matched set’ of entry ports.

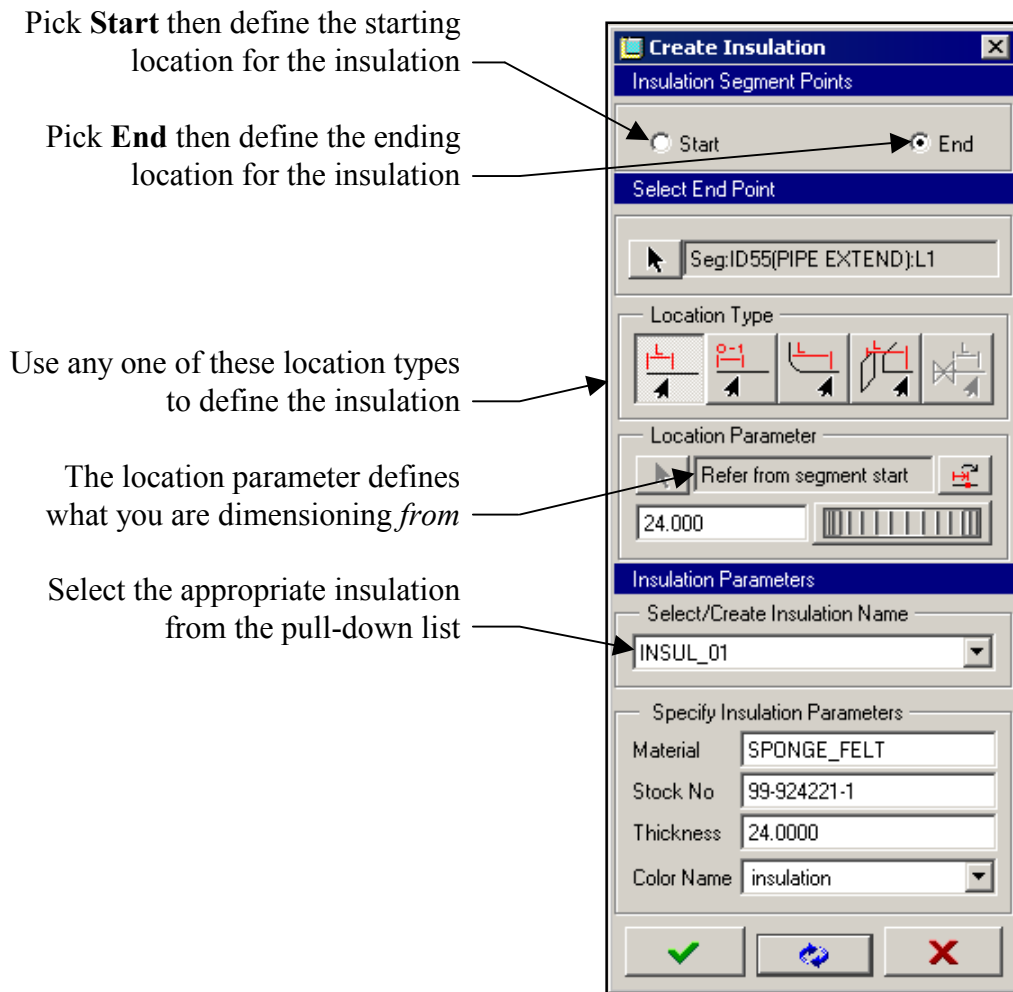


The tee fitting includes:
 Three entry ports:
 PORT1, PORT2, and PORT3
 One alignment point: PNT0

Tee Fitting References

Applying Insulation

Pipeline segments can have insulation applied using the **Fabrication, Insulation** command. The **Create Insulation** dialog box is used to select the appropriate insulation and to locate the insulation on the pipeline. You must define the starting location for the insulation using **Start** and the ending location for the insulation using **End** as shown below. Each of these locations can be defined using any one of the five 'location types' as described on the next page.



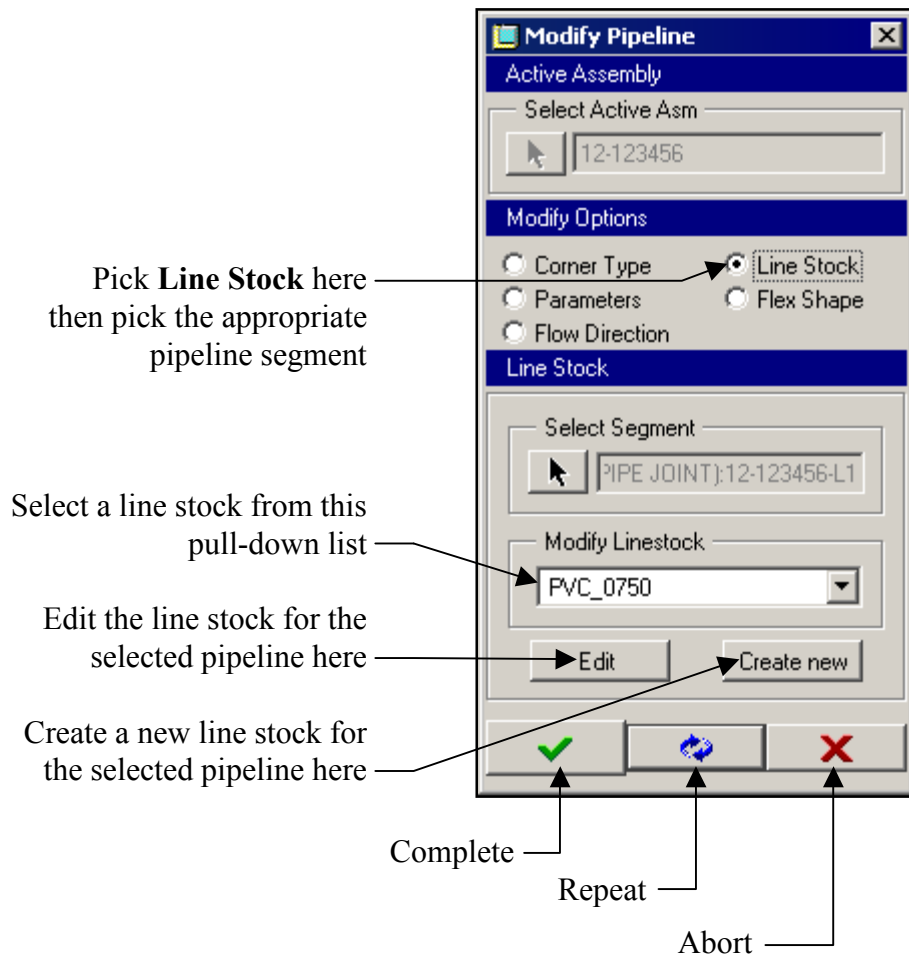
Note

The pipeline segment must have a solid pipe created before the system will display the insulation.

Modify Line Stock

The **Line Stock** option in the **Modify Pipeline** dialog box is used to assign a different line stock or alter the current line stock assigned to the selected pipeline segment. Pick **Modify Pipe** in the PIPING menu, then pick **Line Stock** in the dialog box as shown below.

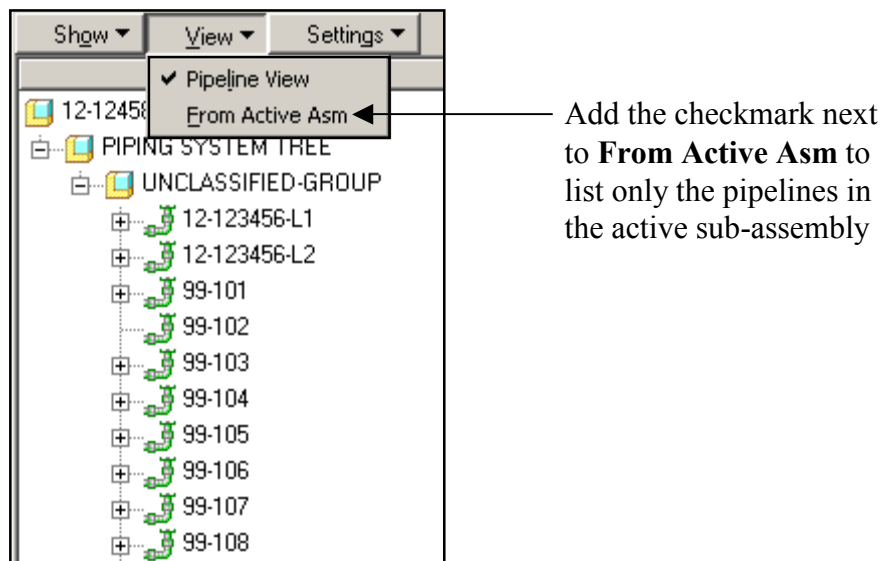
- You can select a new line stock from the pull-down list if other line stocks have been defined or read into the current piping assembly.
- Pick **Edit** to alter the current line stock assigned to the selected pipeline segment.
- Pick **Create New** to create a new line stock for the selected pipeline segment.



About the Piping System Tree

The **Piping System Tree** is a useful tool when working in a large piping design.

- The pipelines are listed in alphanumeric order by name.
- Expand a pipeline by picking the + sign to the left of the pipeline name.
- Expand the entire tree by picking **Show, Expand All**
- All pipelines in the top-level assembly and in all sub-assemblies are listed. You can limit the pipelines listed to the active sub-assembly by picking **View, From Active Asm** as shown below.



- The components of each pipeline (segments, fittings, bends) are listed in the order of the flow direction for the pipeline.
- Select any pipeline to highlight it in the graphics window.
- The right mouse button popup menu contains shortcuts to these commands:
 - **Pipeline** – Hide and show pipelines.
 - **Label** – Create and manage pipeline labels.
 - **Solid** – Create and manage pipe solids.
 - **Insulation** – Create and manage insulation.
 - **Flow** – Display and reverse the flow direction.
- The system will issue a warning if the design contains pipelines with no segments or other pipeline components.
- Pipelines and components cannot be reordered when using the piping system tree.