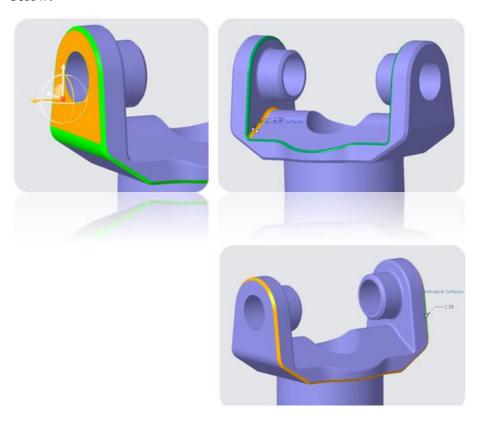
PTC Creo 4.0 Sneak Peek: What's New in Data Exchange

Automatic Recognition of Rounds and Chamfers Created in PTC Creo Elements/Direct

When importing from PTC Creo Elements/Direct Modeling, you can keep the design intent for the rounds and chamfers created in PTC Creo Elements/Direct Modeling. If you are using Flexible Modeling in PTC Creo Parametric or you are working in PTC Creo Direct, rounds and chamfers are automatically recognized. This includes support for rounds, chamfers, and direct modeling tools as described below:



- Rounds
 - Constant radius rounds
 - Round transitions
 - Surface continuity
- Chamfers
 - OD/D chamfers
 - D1/D2 chamfers
 - Type and parameters are mapped to PTC Creo Parametric type and parameters to keep geometrical representation.
- Direct modeling support—Automatically detects and adjusts if adjacent faces are modified by direct modeling operations such as with Move, Substitute, Offset, and so on.

PNote

There is no support for nonconstant rounds. Rounds and chamfers may map to different PTC Creo Parametric round and chamfer types This is to keep the geometry as close as possible to the original geometry when modifying the 3D model.

Recognition of Additional 3D Model Attributes from PTC Creo Elements/Direct

When importing PTC Creo Elements/Direct Modeling models, the attributes as described below are transferred from PTC Creo Elements/Direct Modeling to PTC Creo Parametric:

- Model instance name
 - Parameter to visualize the instance name of the top component
 - O Type: Model Parameter
 - Name: CED_INSTANCE_NAME

· Model Name

• Model parameter to visualize the model name of the component

Type: Model Parameter

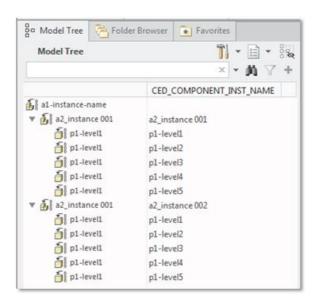
○ Name: CED_MODEL_NAME

• Component instance name

• Parameter to visualize instance names of all subcomponents

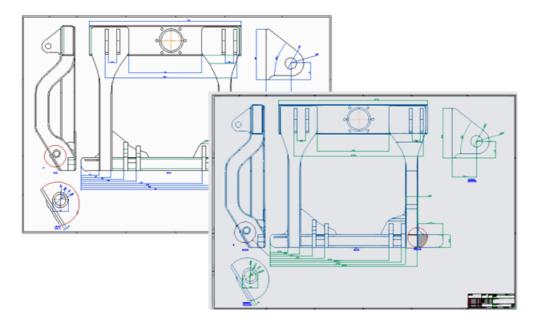
O Type: Feature Parameter

○ Name: CED_COMPONENT_INST_NAME



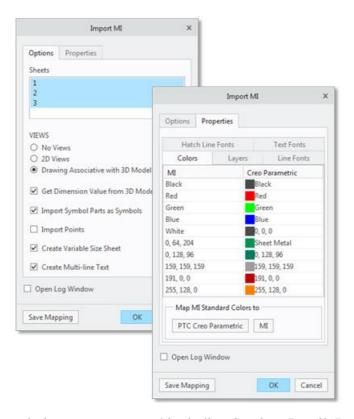
Associative Drawing Import from PTC Creo Elements/Direct Modeling

When you import a PTC Creo Elements/Direct Modeling 3D model, you can use drawings associated with the PTC Creo Elements/Direct Modeling 3D model. After import, the drawing maintains full association with the 3D Model.



There are additional options to support this process in the **Import MI** dialog box, as described in the list below:

- The option Drawing Associative with 3D Model is added.
- Different methods of opening a drawing to import are supported:
 - Import a *.bdl file (2D with 3D)
 - Import a PTC Creo Elements/Direct drawing (MI) with the 3D model that you have selected or a model that is in memory. There is a validation check to confirm that the drawing fits with the 3D model.
 - On the Properties tab, you can set the color mapping, text fonts, and line fonts.



All general views are supported including Section, Detail, Partial, and Isometric. Display Styles such as **Hidden Line**, **No Hidden**, **Shading**, and **Shading With Edges** are also available.

The following items are supported:

- Supported components in a view are assemblies, solid parts, quilts (face parts), 3D curves, and 2D sketches
- Component lists
- All dimension types
- Associative text with reference line
- Associative center lines
- Drawing frame including title block
- Multisheet drawings

