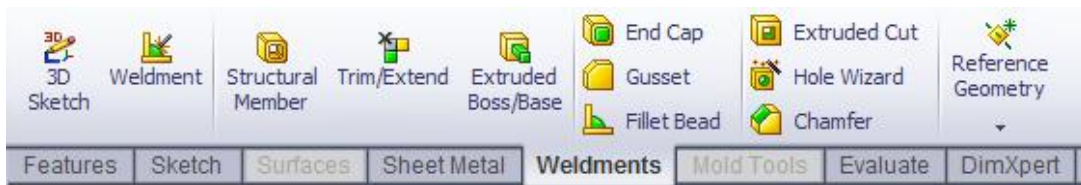


# Weldments Toolbar

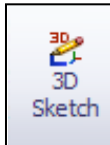
*Description:* Aids in the design of a welded structure. The weldments feature uses three-dimensional sketches to build centerlines of common structural members. This feature also allows the user to trim members as desired and add welds, end caps, gussets, chamfers, and holes for fasteners. The weldments feature will also build an excel file keeping track of the structures cut list.

*Note:* While using the 3D Sketch tool, always check the XYZ orientation of the sketch (hitting tab will change the major direction).

## Weldments Toolbar At A Glance



## Weldment Tools



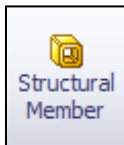
*3D Sketch:*

A non planar sketch in the major directions (x y and z). Used to guide structural members.



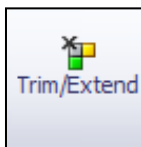
*Weldment:*

A multibody part consisting of structural members. This icon will be added to the design tree when a structural member is created.



*Structural Member:*

Add or edit a structural member. The types of structural members are pipe, angle iron, c-channel, rectangular tube, s section, and square tube. *Note: There are limited sizes to choose from, but the size can be altered by entering the sketch of the structural member. Additional members can be found in the design library. See SolidWorks help for additional information.*



*Trim/Extend:*

Trim or extend structural members so that they butt up correctly for welding. This feature also allows the user to input a desired gap between members to account for weld material.



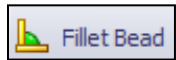
*End Cap:*

Allows the user to close off open structural members. *Note: Can only cap members with linear edges (straight or angled members).*



*Gusset:*

Adds supports between two intersecting members with planar faces. The two gussets that the user can add are a triangular profile and a polygonal profile. Use the property manager to specify the dimensions.



*Fillet Bead:*

Allows the user to add a fillet weld (full length, intermittent, or staggered) to any intersecting weldment entities.

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