Inserting Weld on Joints

The Weld.icc catalog file needs to be loaded on your catalog browser. It contains: ARC Edge, MIG Edge for corner edge weld with a bead size of 6.14 mm ARC Flat, MIG Flat for seam weld between the gap of two welding flat plates or linear gap fill with a bead size of 5.13

The image textures are from Vivid Details that came with Trispectives Professional and was converted to gray scale png image file

Special thanks to Cary O'Connor and Jonas Bryntesson for their insights.



Pertinent files for this tutorial can be downloaded from Tips and Tricks section of Discussion Forums at IRONCAD SUPPORT / USER COMMUNITY and from GrabCAD at grabcad.com/library/cosmetic-welds-1. Load Part1 model file. As reference for this tutorial, File name is Weldjoint1.ics Press key A to switch off Coordinate System and point cursor on lower flange along the vertical facet line of slot.



Once you have set the view, LMB select the ARC Edge for the Weld catalog. With the LMB depress, drag the ARC Edge catalog model to point on the flange



Orient the Weld in position as shown so it will place along the corner of the joint





Double click the LMB on the Weld so to set to Intellishape mode. This allows the length(height) to be pulled in position.



Next we have to Extract 3D Curve from the Surface tab.



Press and hold the Shift key and select the edges that will b used to create the curve. Orbit (F3) the scene view and select the the edges. On the blue line created from the Geometry Selection on the Properties pane.

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On the Scene Browser the 3D Curve line is listed as Part3. On the image below, the orange line is the 3D curve line created to serve as a path for the sweep. Select Sweep from Feature to create the full weld.



Select a point on the scene to zoom using the mouse scroll button. Select the face/section of the Weld and point the cursor on the orange line so it turns green for the path selection. As the preview shows sweep, LMB click on the OK/Check button to execute the sweep creation.

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Created full weld.

