Corner Relief

About Corner Relief

Corner relief helps control the sheet metal material behavior and prevents unwanted deformation. To utilize the corner relief option you must have at least one ripped edge and the 3D notes turned on (**Utilities > Environment**).

You can create four types of corner relief:

No Relief	None	Circular	Obround
No relief is added. The corner retains the default V- notch characteristic.	Generate a square corner. The default V- notch characteristic is removed.	Add a circular relief. The corner has a circular section removed.	Add an obround relief. The corner has an obround section removed.

There are four possible ways to apply corner relief to bends or converted parts:

- Create the corner relief as a feature (**Feature > Create > Corner Relief**)
- Create default relief automatically while unbending (**Set Up > Corner Relief**)
- Create default relief for all corners in the model or part templates (Set Up > Parameters)
- Define the corner relief in the conversion feature dialog box (Feature > Create > Conversion)

You can use and dimension corner relief that is smaller than the deformation area bordered by the tangent lines of the intersecting bends.

To Create Corner Relief (Feature)

- 1. Click **Insert > Corner Relief**. The **GET SELECT** menu appears.
- 2. Select the 3D Note(s) needing similar corner relief. Click **Done Sets**.
- 3. Define the corner relief to apply:
 - **No Relief**—No relief is added. The corner retains the rip characteristic.
 - None—Generates a square corner. The default V-notch characteristic is removed.
 - **Circular**—Adds a circular relief. The corner has a circlular section removed.

- **Obround**—Adds an obround relief. The corner has an obround section removed.
- 4. Define the dimensions for the relief:
 - **Thickness**—Uses a default radius that is equal to the thickness of the sheet metal wall.
 - **Thickness * 2**—Uses a default radius that is twice the thickness of the sheet metal wall.
 - Enter Value—Uses the absolute value that you type in the Enter dimension value box.

To relieve another corner, click **Add**. Click **Done Sets** after selecting all desired corners.

5. Click **OK** on the **CORNER RELIEF** dialog box. The corner relief is created.

To Set Corner Relief (Default)

- 1. Click **PART > Set Up**. The **PART SETUP** menu appears.
- 2. Click **Sheet Metal**. The **SMT SETUP** menu appears.
- 3. Click **Corner Relief**. The **CRNR TYPE** menu appears.
- 4. Define the type of relief to use as the default:
 - **No Relief**—No relief is added. The corner retains the rip characteristic.
 - **None**—Generate a square corner. The default V-notch characteristic is removed.
 - **Circular**—Add a circular relief. The corner has a circlular section removed.
 - **Obround**—Add an obround relief. The corner has an obround section removed.
- 5. Define the dimensions for the relief:
 - **Thickness**—Use a default radius that is equal to the thickness of the sheet metal wall.
 - **Thickness * 2**—Use a default radius that is twice the thickness of the sheet metal wall.
 - **Enter Value**—Use the absolute value that you type in the **Enter dimension value** box.
- 6. Click **Done/Return**. The default corner relief is set.