

Du Fresne Manufacturing

Design For Manufacturability Case Study

Customer Challenge

- To reduce manufacturing cost 10% or more
- Improve structural integrity (eliminate warpage)
- Reduce pre-weld fixturing time

Background

- Existing design required 142 spot-welds
- Weld fixturing was complicated and inconsistent
- Poor spot-weld access
- Weldment was warped due to poor fixturing

Du Fresne DFM Results

- Changed 86 spot-welds to slot and tab (self fixturing)
- Robotically fuse weld 86 slot and tabs
- Split difficult to manufacture component into 2 parts
- Final cost after DFM was reduced by 14%!

