Design Goal
The goal of this project is to analyze the weld joint near the bottom mounting plate to provide a baseline fatigue limit as well as how to improve the life of the joint including a manufacturing procedure.

Design Constraints
- Cannot exceed height of current design
- Must function the same as the current design
- Must meet 3g vibration, desired 5g
- Must withstand a 300 pound static load

Project Summary
Emerson-Rosemount Measurement is an industry leader in industrial pressure, level, temperature and flow measurement devices. There are 100,000 inline direct mount assemblies made each year. These assemblies are implemented in a vertical and horizontal position. This project focuses on the weld strength of the inline direct mount assembly in static and cyclical loads.