



Customer

Motorcycle Manufacturer

Part

Footboards

Manufacturing Issues

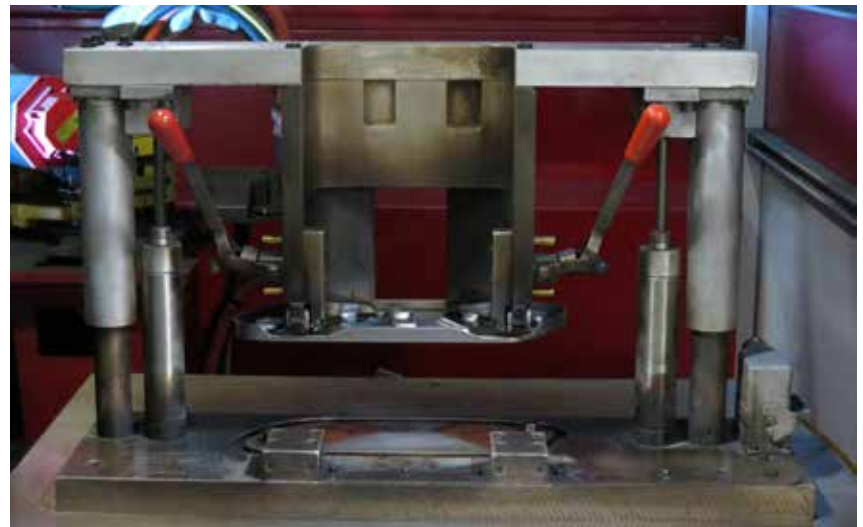
Increasing variability when welding hinges onto the footboards was risking the quality and functionality of the part.

Manufacturing costs were growing to an unacceptable level as production quantities continued to increase.

Manufacturing Solution

Robotic welding improved the accuracy and quality of the welding process and met the manufacturer's growing production demands. The robotic arm of the welder operates with exact precision versus the inherent variability of a human welder. The programming establishes welding at a continuous pace and increases production rates.

Each footboard required eight "1-inch" welds so Ultra designed and built a customized welding fixture. This established a stable location for the robotic arm to weld more consistently and at a faster rate.



And with two robotic welders, the CNC Panasonic Robotic Welder and the Genesis Robotic Welder, Ultra can produce two footboards at a time – **decreasing downtimes and increasing production rates.**



Solution Continued



A customized functional gage designed and built by Ultra tested the placement of the welded hinges ensuring the footboard was ready for assembly.

In addition, the metal stamping of the left and right footboards were completed at Ultra. Our Value-Added area completed the manufacturing process with visual inspections of the footboards.

Customer Outcome

Production rates were doubled and labor costs were decreased with the introduction of the robotic welder.

Precision and accuracy of the welding was improved for a more secure fit onto the final product.