

CenterLine Welding Gun Provides World Class Cost Savings to Chrysler

Background

The Windsor Assembly Plant (WAP) recently became the first Chrysler vehicle production facility to receive **bronze status** for its efforts in implementing **World Class Manufacturing (WCM)**. WCM is a methodology that focuses on reducing waste, increasing productivity, and improving quality and safety in a systematic and organized way. Bronze status is the highest ranking of any of Chrysler's North American manufacturing facilities. As part of the audit process, Chrysler presented a number of Kaizen project accomplishments. One key project was the integration of CenterLine welding guns for a floor pan welding application. This project helped the plant realize extensive maintenance cost savings.

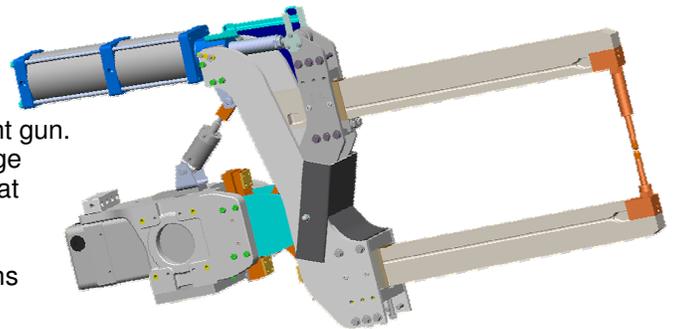


The Problem

In evaluating production operations, Chrysler identified a critical robot weld station with the highest maintenance costs, and targeted it for a Kaizen project. A gun design review indicated that several component parts had higher than normal wear and replacement needs; this led to increased downtime incidents and high part replacement costs. A root cause analysis revealed that the existing gun was subjected to excessive reach while welding the floor pan. This condition added stress to several key weld gun components, causing premature component failure and significant lost production time.

The Solution

After reviewing the existing gun design, the plant welding group established a detailed list of specifications that would be required for floor pan robot welding guns. This list was used to determine whether to upgrade the existing gun or purchase a new replacement gun. The group's decision was to purchase a CenterLine engineered large throat welding gun. Aside from supplying a more robust package that was less prone to premature wear and failure, the CenterLine gun design also facilitated ease of access to consumable components which improved the effectiveness of routine maintenance inspections and greatly reduced the time needed to replace worn components.



Customer Benefit

The new CenterLine gun provided Chrysler with a long list of cost and operational benefits, in particular:

- A **78% reduction in maintenance costs**.
- An **85% improvement in Mean Time to Repair**. *The CenterLine gun averaged 25 minutes compared to an average of 180 minutes for the gun style it replaced.*

As a result of these findings, an additional 11 guns were replaced. A post implementation assessment indicated that the project realized a **5.29 BCR (benefit/cost ratio)***.

Call today to discuss how CenterLine welding guns can help you control your production costs while enabling you to produce the weld quality you demand.

* A **BCR** is the ratio of the benefits of a project or proposal, expressed in monetary terms, relative to its costs, also expressed in monetary terms. A ratio >1 indicates a viable project.