BP AUTOMATION
A DIVISION OF BRANDSTROM ENGINEERING

ANALYZE: MUFFLER WELDING PROCESS

CLIENT CHALLENGE

BP Automation was approached by the client to ***analyze its existing process for welding muffler end caps and to propose a more efficient solution.*** In order to grow their business and meet customer demand, the client needed to significantly increase output. In addition, the current process was labour intensive and the client was struggling to find and retain sufficiently skilled welders for a relatively menial task. Several years of working with competing suppliers had failed to provide an adequate solution.

THE BP AUTOMATION SOLUTION

At BP Automation, we analyzed the problem from a different perspective—we looked at it backwards. Previous efforts to enhance the process had focused on moving the welding torch around a stationary muffler. Through a detailed process analysis, BP Automation determined that moving the muffler around two stationary welding torches could significantly increase the output and minimize the required labour.

RESULTS

1. Reduced welding time from 35.0 minutes to 2.5 minutes (per muffler)
2. Automated solution replaced the job of 9 welders
3. Staff resources were able to be deployed in more strategic areas to help manage demand
4. Increased annual production from 80,000 mufflers to 120,000 mufflers

Automated Muffler Welding Machine