

Multi-Projection Resistance Welding Cell

Application

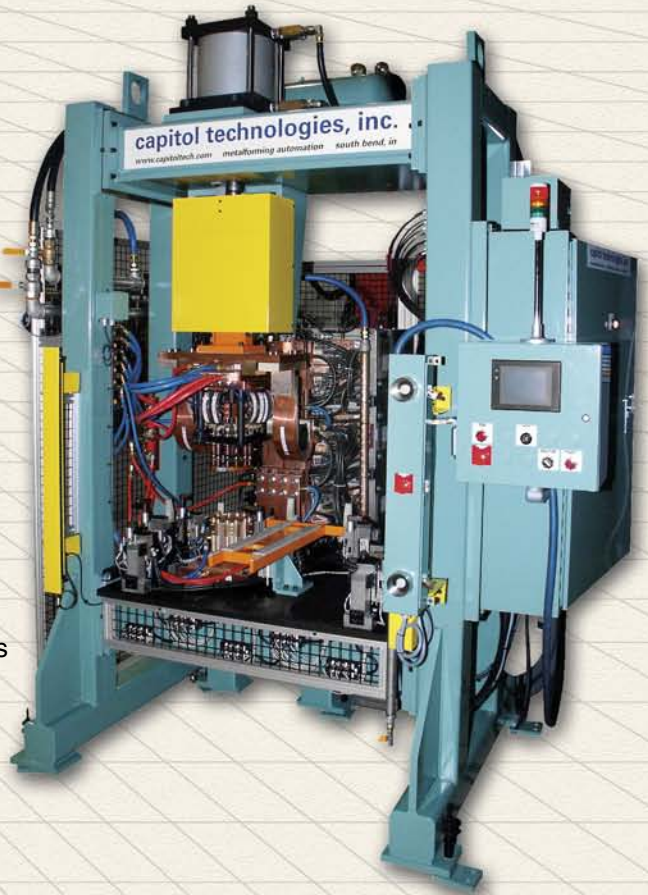
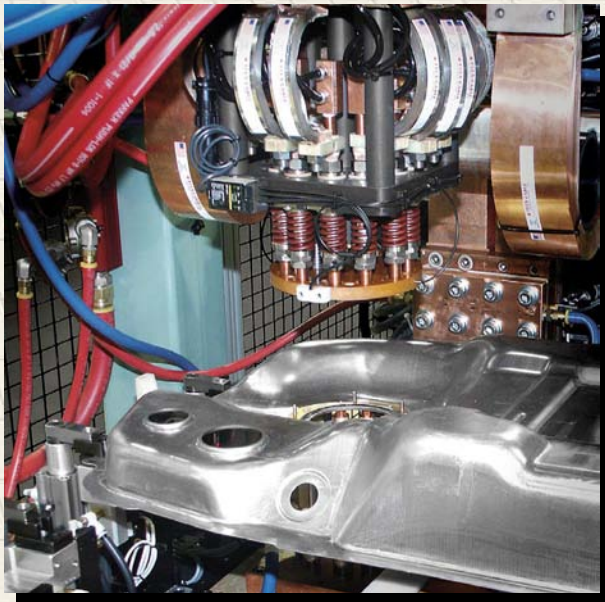
Processing safety welds for three (3) styles of automotive gas tanks

Process Description

Capitol Technologies' stand-alone Multi-Projection Resistance Welding Cell was designed and built around the customer's critical parameters. A 3-phase DC welding process coupled with a series of custom water-cooled upper and lower electrodes was used to achieve success for this application. The electrode's unique design evenly distribute the cylinder force and balance the available welding current to less than 7% total deviation point-to-point allowing the **twelve (12) projection locations** to be processed simultaneously. A secondary welding current monitoring circuit verifies that the process is functioning within pre-defined operating parameters and alerts the operator when a failure occurs.

Features


- ◆ Compact machine footprint (96" x 144")
- ◆ Quick change custom tooling with integral Poke Yoke features
- ◆ Pre-Weld part presence sensing
- ◆ Pneumatic part clamping and locating pins with position sensing logic



- ◆ Automated part stripper mechanism aids the operator during part unload
- ◆ Light curtain and dual palm activation buttons for operator safety
- ◆ WAC-30051 DC Weld Control
- ◆ 300 KVA DC Transformer
- ◆ MM-122A Myachi Weld Control
- ◆ OMRON programmable controller and operator interface panel

Specifications

Force Requirements 691 lbs. x 12 tips
 Cylinder Size 11.81"/ 300mm
 Stroke Distance 7.87"
 Weld Current 86,000 Amps
 Cycle Time 8-10 seconds
 Cell Footprint 96" x 144"

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