

Case Study

Efficiency through Accuracy

TSR welding by SAW Twin-head technique

Location - Hazira

The Process

To achieve dimensional accuracy, we have replaced manual methods of welding with Twin-head SAW technique for welding of TSR (tray support ring). Conventionally, welding of TSR's was done by manual SMAW or GMAW process.

There was a need to develop mechanized welding process like SAW to overcome limitations of manual welding processes.

The Benefits

The Challenge

1. Low Productivity of conventional processes.
2. High rejection and rework due to distortion of TSR's.
3. Wastage of resources in weld dressing for visual inspection.

1. Increase in efficiency leading to zero rejection and rework due to angular distortion.
2. 100 % acceptance in dimensional inspections.
3. Increase in time savings; up to 84 Welder Man-days saved.
4. Improvement in weld finish achieved thus, reducing the need for additional dressing before inspection.

The Impact
Total cost savings - 2,24,000 INR.
(Consumable + Manpower + Electricity)