

CUT-TO-FIT™ TECHNOLOGY

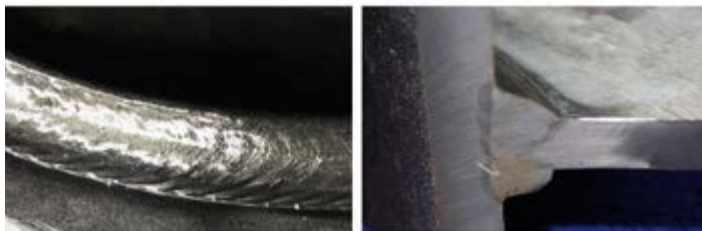
CUT OPENINGS TO FIT IMPERFECT TUBES & STRUCTURAL SHAPES

Cut-to-Fit™ Technology uses Robotic Through-the-Torch Sensing to measure the geometry of any imperfect tube or structural shape. The system then automatically generates and verifies a modified torch path to fit the measured geometry.

Within just a few minutes the robot can cut a custom fitted opening in a base plate with a plasma torch, switch to a pulsed GMAW torch at a tool changing station, then perform a full penetration, two-sided weld custom fitted to the geometry of the structural shape.

Oxygen assisted cutting immediately provides an optimum “ready to weld” surface. Through-the-Arc Tracking™ allows the torch to manipulate the weld groove to follow an inconsistent centerline. Adaptive Fill compensates for groove width variation.

Cut-to-Fit™ Technology creates perfect welds on less than perfect, “real world” parts!



Above: Perfectly fitted, full penetration, two-sided weld with the quality of automation.

Right: Adaptive Fill can adapt to handle any weld joint.



Parts once impossible to automate are now a robot reality!

