

Military & Defense Case Study

Design-to-Cost: Chemical Detector Probe Cover Optimization

Challenge: Roanwell Corporation designs and manufactures rugged communications equipment that meets or exceeds commercial and military requirements. Their capabilities include conceptualization, design, prototyping and production of handsets, headsets, microphones, earphones, switchboxes, amplifiers, cable assemblies, and accessories. They needed a metal chemical detector probe cover manufactured. The part was a green probe case/housing installed on a military ground vehicle and was made out of 4 components requiring extensive brazing.

Solution: Absolute Manufacturing worked closely with their customer, Roanwell to optimize the design of the probe cover. Design and manufacturing engineering worked together to optimize the cover design to enhance manufacturability while reducing cost.

Result: The resulting solution reduced part count by 25% while eliminating a braze. This significantly reduced cost while mitigating risk and improving manufacturing cycle time. This allowed Absolute to produce the final product with 100% on time delivery and quality rating..

