



# ROSE METAL INDUSTRIES, LLC.

A TRADITION OF EXCELLENCE

## Case Study: MK93 Adjustment Arm

Similar to the other robotic weldments we make for the MK93 Mod-2 machine gun mount used by U.S. Armed Forces, this Adjustment Arm sub-assembly is made to strict military standards and quality assurance provisions. The production process starts out with a sheet of  $\frac{1}{4}$ " HRPO 4130 steel that is precision laser cut and precisely formed to ensure component consistency. That is critical for controlling the weld joint location, weld gap, and weld distortion on tightly tolerance assemblies. Following robotic welding a final machining is required to hold GD&T, it is then phosphated and CARC coated.



**Product Description** – Adjustment Arm Assembly,  
MK93 Mod 2 Machine Gun Mount

**Market** – Military

**Materials** – ASTM 4130 steel, Plate thicknesses of .250"

**Processes** – Single Arm Robotic MIG Welding, using Farris wheel positioner

**Overall Size** – 2.58" x 7.24" x 13.00"

**Total Weld Length** – 10.8"

**Tightest Tolerances** – +.002"/- .000" for machined hole diameters with .005" True position

**Assembly Weight** – 3.90 lbs

**Quantities** – Production lot sizes of 800 pc to 1,000 pcs

**Inspection** – Welds to AWS D1.1 and TACOM/Military specs – Multiple check fixtures, AWS Certified Visual ND and Macro-Etch weld inspection; Dimensional – CMM with COC required

**Please have us quote on your next requirements!**

ROBOTIC WELDING, FABRICATING & FORGING SPECIALISTS



REGISTERED TO ISO 9001: 2000

