



AUTOMOTIVE — STAMPING & WELDING

How the FARO ScanArm Helped a Tier 1 Automotive Supplier Reduce Inspection Time by 50%

PROBLEM:

A stamping and welding facility that produces under-carriage frames for Honda's acclaimed line of trucks and SUVs — including the Odyssey, Pilot and Ridgeline — became the automaker's Tier 1 supplier. They used multiple methods, including a traditional CMM, calipers, height gages, patterns and templates in order to measure the frame components. But they required a more accurate and streamlined way of ensuring that the parts they produced matched Honda's specified requirements. The answer also had to be portable, easy to use, and economical.

SOLUTION:

The FARO ScanArm: a system that offers contact and non-contact measuring in one complete tool. Portable and durable enough for any shop environment, the ScanArm provides the accuracy of a fixed CMM with the ease and maneuverability of a hand tool. The Tier 1 supplier's engineers chose FARO above other systems because set-up time was less than half, cost was roughly half, and the data was just as accurate.

They use the Arm's hard probes to digitally collect and store basic geometric measurements, then use the non-contact Laser Line Probe to scan up to 19,200 points per second. The data is captured and easily analyzed with more than 30 different industry-leading 3-D modeling software packages. This supplier chose Polyworks Inspector and Modeler.

The ScanArm's versatility allows them to measure stampings, welded components, fixtures, weld jigs and dies. They use the computerized reporting features for more advanced operations, including problem solving and analysis, body fit analysis, and reverse engineering. The reporting allows engineers to provide more accurate data to their Die Maintenance Department.

The result, an overall improved method for checking dies.

ROI:

The simple switch to scanning floor frames directly on the fixture with the ScanArm reduced their stamping inspection time by 50% from their previous method using scale and taper gages.

One of their Quality Engineers noted that one of the greatest rewards was being able to demonstrate their advanced measurement capabilities to their parent company.



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