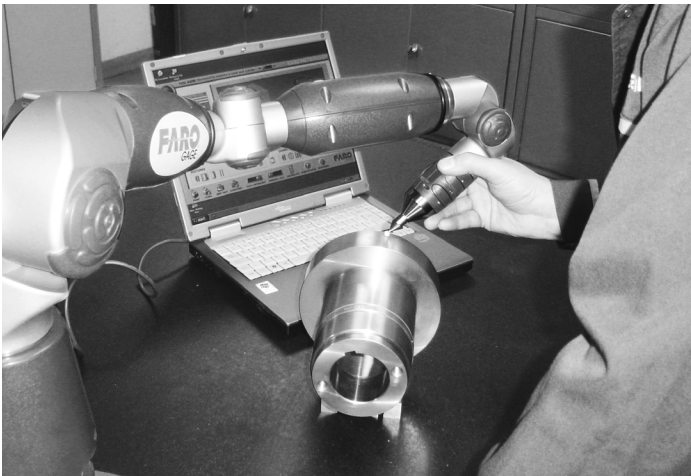




“As Quick as a Micrometer, as Accurate as a CMM”

UK-Based Bearings Manufacturer



Using the original Gage FaroArm®.

Bearings are foundational to precision engineering, capable of handling extraordinary loads and enabling machinery to move at exceptionally high speeds; they must operate within extremely fine tolerances, measured to exacting standards. A UK-based bearings manufacturer for the marine and power generation industries sought new ways to enhance their measuring expertise. They did so by purchasing the original FARO® Gage over a decade ago.

Out with the Old, In with the New

Like similar competitors, the company used a fixed-bed CMM and a large variety of hand tools. While the traditional CMM met the industry's accuracy requirements, its versatility was challenged in that the device was unsuitable for unskilled production operators. Traditional

hand tools such as micrometers, calipers, dial indicators, and height gauges were unable to achieve the wide variety of dimensional checks required and were subject to operator variability.

It is this dual shortcoming – product versatility and hand tool human error – that the Gage FaroArm® solved on the machine shop floor, thanks to its diverse 3D measurement capabilities and high-accuracy performance.

Before the purchase was approved, at issue was a basic question: could the Gage meet the industry's high-accuracy requirements?

The answer was a resounding “Yes.” In an R&R (Repeatability and Reproducibility) study the Gage performed comparably to the results from the fixed-bed CMM.

“This product rewrites the rules of inspection,” the company's Quality Engineer explained with enthusiasm. “A further application of the Gage was to measure parts in situ on the machine tool. This was previously being measured with a 600mm micrometer and proving difficult to get repeatability between the micrometer and the CMM. It's as quick as a micrometer, as accurate as a CMM.”

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Measurement Made Mobile

The simple truth is that a traditional CMM measures a 3-dimensional form, but it does so in a fixed location. A micrometer, while highly portable, is limited to measuring the distance between two points. The Gage is a better third way for 3D measurement solutions, working on the same theory as the CMM, but with the added benefit of portability and flexibility. Unlike a fixed CMM, the operator can verify the part is correct without having to remove it from the machine tool and lose datums.

Since the purchase of the Gage, additional benefits have been found, including the capability to measure geometric and dimensional tolerancing such as concentricity, parallelism, and squareness. Shop floor machinists regained the final inspection capability they require. And thanks to intuitive software, machine operators were able to measure their parts with only a 2-hour training course.

Thus, in the final analysis, the FARO Gage has performed admirably, having successfully removed the prior CMM bottleneck.



The new Gage FaroArm® is ideal for small and medium sized businesses for performing high accuracy tasks.

View more FARO case studies at www.FARO.com



The All-New FARO Gage.

Back by Popular Demand: The All-New FARO Gage

The Gage has long been the perfect inspection tool for machine shops of all sizes. Its versatility, high accuracy, durability, and affordability made the original Gage the instrument of choice.

The new Gage builds upon the powerful legacy of its predecessor and offers the following enhancements:

- Even more accurate with ISO 10360-12 accuracy certification
- Smart Probes allow faster inspection work thanks to autorecognition without recalibration after probe changes
- 25% longer reach while being 10% lighter
- WiFi and Bluetooth options
- Works with all FaroArm-compatible software