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Usage of Photogrammetry and White Light system for Periodic Aerospace Tooling Inspection

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Abstract:

Aerospace companies perform periodic certification, calibration and repair of their production tooling. These tasks were once performed with transits and levels, which progressed into multiple theodolite set ups, and today are typically done using laser trackers. This paper will exam the next possible step in the evolution of tooling inspection, the combined performance of photogrammetry and a “white light” measurement system. One selected system will be evaluated for its accuracy, repeatability, advantages and disadvantages, and applicability for typical tool types, including jig and fixtures, sheet metal press, and layup molds. A technical paper will be included outlining the test methodology, as well as findings and results.