

3D IMAGING FOR ENGINE ASSEMBLY INSPECTION

ABSTRACT

Systems and methods for engine imaging are provided. An imaging system includes an optical sensor coupled to an insertion tool and a light source configured to output a light projection onto a component of the engine assembly. The system includes a processor configured to: receive data comprising a plurality of frames from the optical sensor captured while the component of the engine assembly is rotating, determine an angular displacement of the component between frames, and form a 3D point cloud of the component based on combining the data in the frames based on the angular displacement of the component between the frames.

[Figure 5A]