

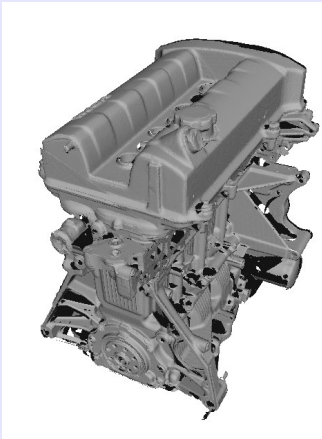
Global Inspection Solutions

The New Digital Mechanic

Background

Our client loved playing with engines, and tuning them for maximum performance. When his local club of like minded enthusiasts wanted to start building new high-performance parts in 3D cad, he wanted to start with a high quality digital scan to make designing new parts a breeze.

Our Process



We brought the complete engine into our studio, and cleaned off the heavy grease and dirt. We then masked off the ports and passages to prevent any debris from entering the engine. Once the engine was prepped and cleaned, we then coated it with a removable white powder developer to cut down the gloss on some of the shiny surfaces, and began scanning.

The engine was a complicated assembly of a lot of different parts, and posed a particular challenge for scanning. We took a series of scans from many different angles, reproducing as much detail as possible on the critical faces and fastener locations. We then reassembled the scans using our merging software tools, and

The Results

We scanned not only the engine assembly, but the transmission as well. Once the models were complete, we were then able to digitally install the transmission on to the engine, and create a complete assembly that captured not only the exterior surfaces, but the critical internal area where the clutch installs as well.

New parts could then be designed right on top of the scan, in digital 3D cad. No heavy lifting requires!

