Inspection

At RSL we can carry out full inspections on your product to help you increase manufacturing quality, identify process issues. We can carry out these inspections on any size product from a 0.1 – 4m, so we can perform an inspection of an entire car. We use the Geomagics Control in combination with our metrology grade 3D scanner to produce a highly accurate comparison between CAD models and physical parts. We can import native files from popular CAD systems including SolidWorks, CATIA, Siemens NX and Pro/ENGINEER. We can then relay the results to you in the form of an inspection report.

Ferrari 275 - In this case study we knew that the front end of this Ferrari 275 wasn’t quite right, but with only a visual inspection it was very difficult to know what exactly was wrong with the shape. The answer was to find a known ‘good’ reference car, then scan both cars and compare them. These two scans can then be overlaid one over the other which immediately highlights any issues. We can use a colour map with colours relating to deviation measurements to identify areas of the car that need attention. As can be seen from the image, the main problem here is from the centre of the front wheel arches forward. The solution for this car was to repair the front end with the help of a buck based on the good car, but blended into the existing bodywork.

Inspect with confidence - You rely on your inspection results. That is why Geomagic Control’s geometry calculation algorithms have been tested by America’s NIST, Britain’s NPL and independently certified by Germany’s PTB metrology authority as class 1 accuracy. Top manufacturers and OEM around the world trust Geomagic Control to measure thousands of parts every day.

USA - NIST – National Institute of Standards and Technology - [https://www.nist.gov/](https://www.nist.gov/)

Germany - PTB - Physikalisch-Technische Bundesanstalt - [https://www.ptb.de/cms/](https://www.ptb.de/cms/)

Britain – NPL - National Physical Laboratory - [http://www.npl.co.uk/](http://www.npl.co.uk/)