



CIE Automotive optimises part measurement with Renishaw technology



Background:

CIE Automotive is a Spanish industrial group specialising in the manufacture of automotive components and subassemblies. It has 108 plants across four continents and clients, such as Renault and Mercedes-Benz.



Challenges:

Implement automated dimensional and geometric inspection solutions to replace traditional manual methods. These should ensure greater reliability, repeatability, and reproducibility in the part measurement process.



Solution:

CIE Automotive has integrated two Equator™ 300 and one Equator™ 500 gauges at its Vitoria-Gasteiz production facility. These new Renishaw gauges complement the existing on-machine inspection probes already in use.



Improved repeatability



Automatic data logging

“ The Equator™ gauges help us by alerting us to when we need to compensate for changes in ambient temperature. ”

CIE Automotive Mecauro (Spain)



CIE Automotive is an industrial group specialising in the supply of components and subassemblies for the automotive sector. With headquarters in Spain, it operates 108 production facilities across Europe, the Americas, Asia, and Africa, collaborating with manufacturers, such as Renault and Mercedes-Benz.



The automotive sector is undergoing significant changes, including a rapid shift toward electric vehicles, greater automation and digitalisation of production. Together with rising cost pressures as new brands enter the market, these factors are driving the need for higher quality and improved performance. To stay competitive, component manufacturers must invest in advanced manufacturing processes that meet increasingly strict tolerances and higher throughput requirement.



CIE Automotive is a leading supplier in the automotive sector.



CIE Automotive was seeking to increase the versatility of their inspection and quality control systems. The main objective was to increase reliability, repeatability, and reproducibility of the part measurement process.

Their operators were using standard manual devices such as micrometers, calipers and height gauges. “We work with parts that have tolerances of ± 11 microns, so a discrepancy of 4 microns between operators is a significant issue,” says Javier Otxoa, Quality Technician in the Metrology Department at CIE Automotive.

“ **We seek versatility. Production lines have a limited service life and, as they reach the end of their cycle, many devices can no longer be reused. However, the Equator™ system enables us to continue using the same measurement solution across both new and existing lines.** ”

Javier Otxoa (Quality Technician)

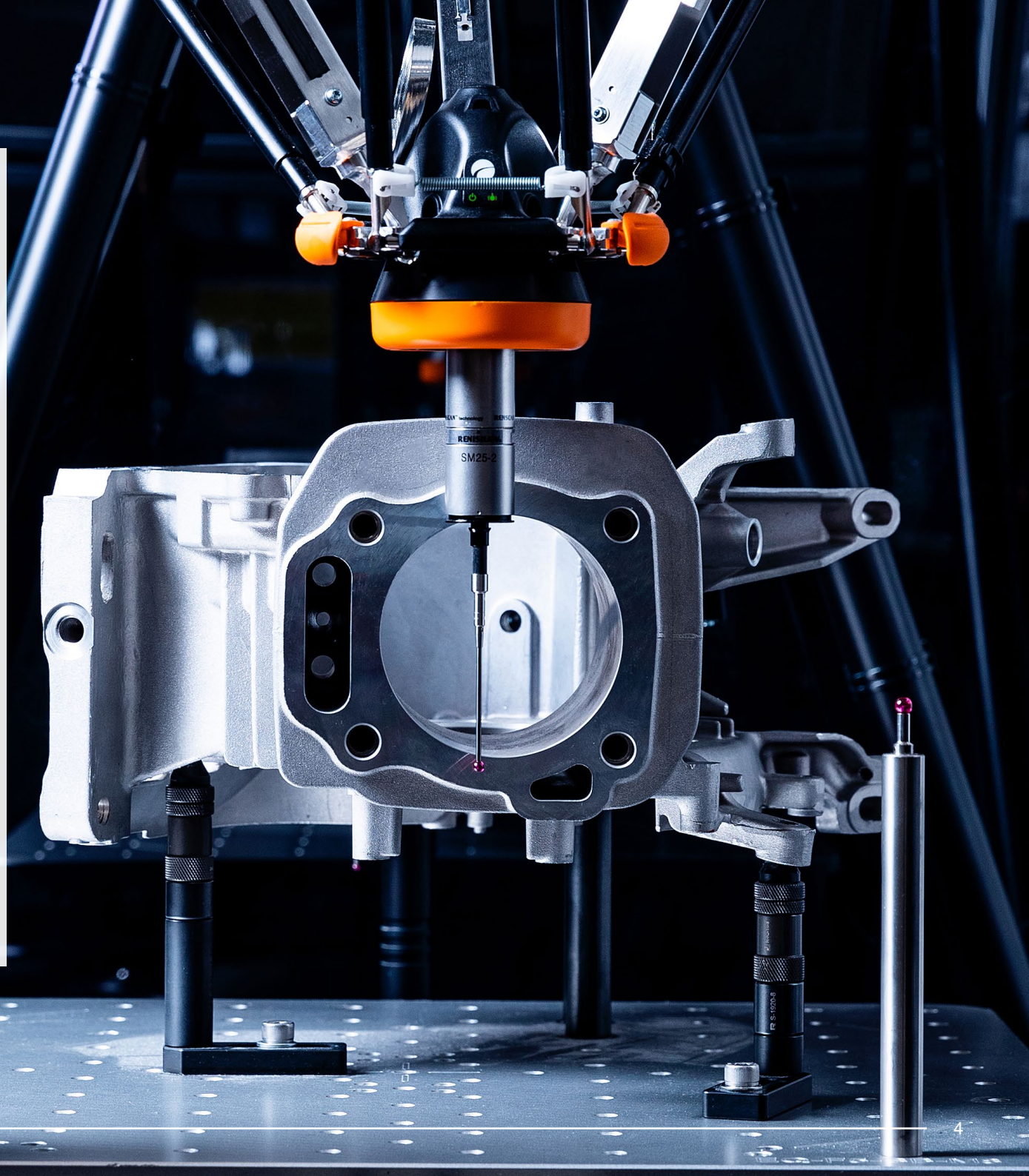


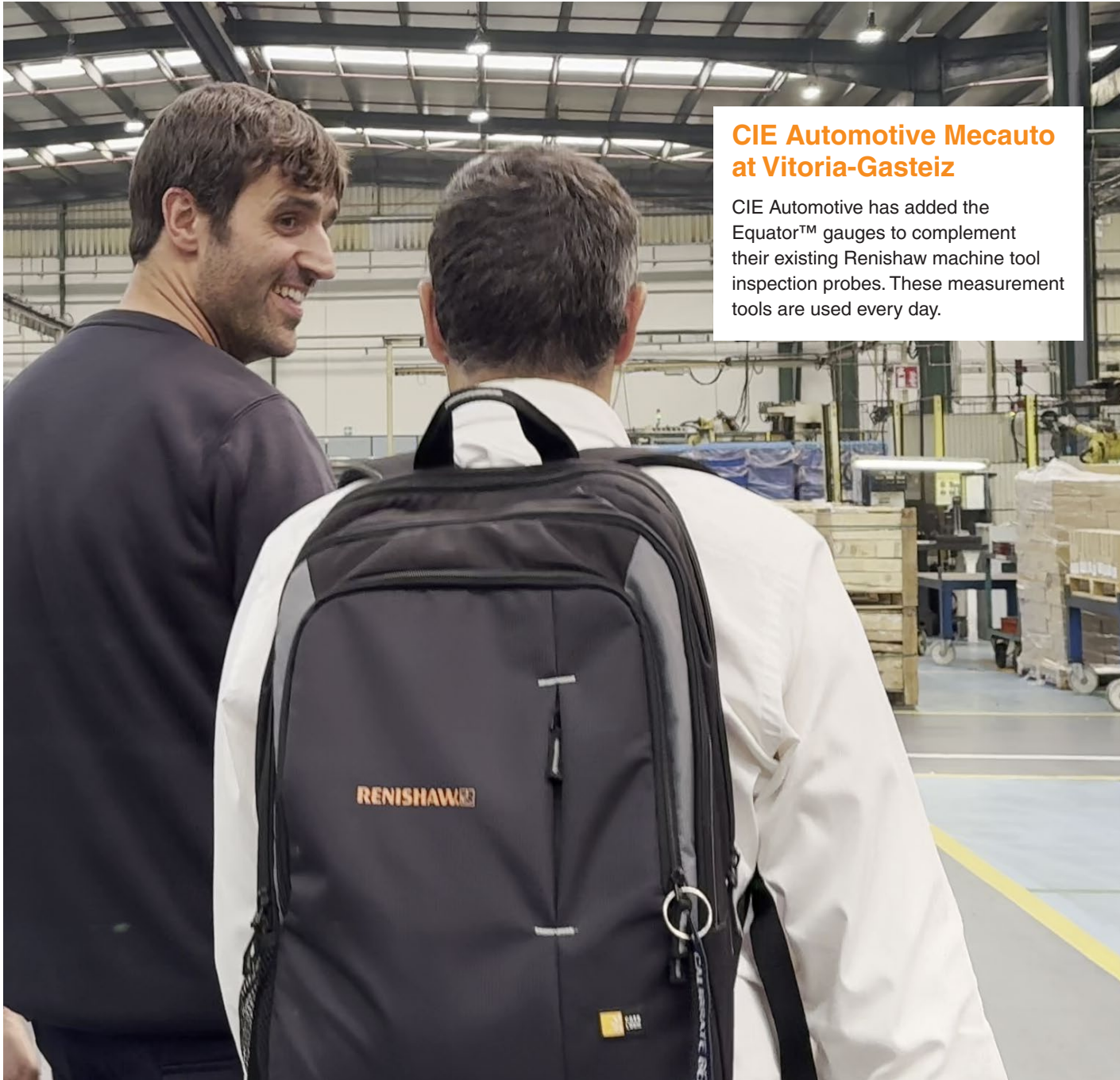
Introducing Equator™ gauges has enabled CIE Automotive to improve the repeatability and reproducibility of part measurement across the plant.

By automating inspection, the Equator gauges have eliminated the uncertainty resulting from the use of manual devices.

“ Depending on the Equator™ systems available on site, we operate across three shifts. The Equator 300 gauges are used five days a week, while the Equator 500 runs seven days a week. For the latter, in-line operator control involves checking one part per machining centre every hour. ”

Javier Otxoa (Quality Technician)





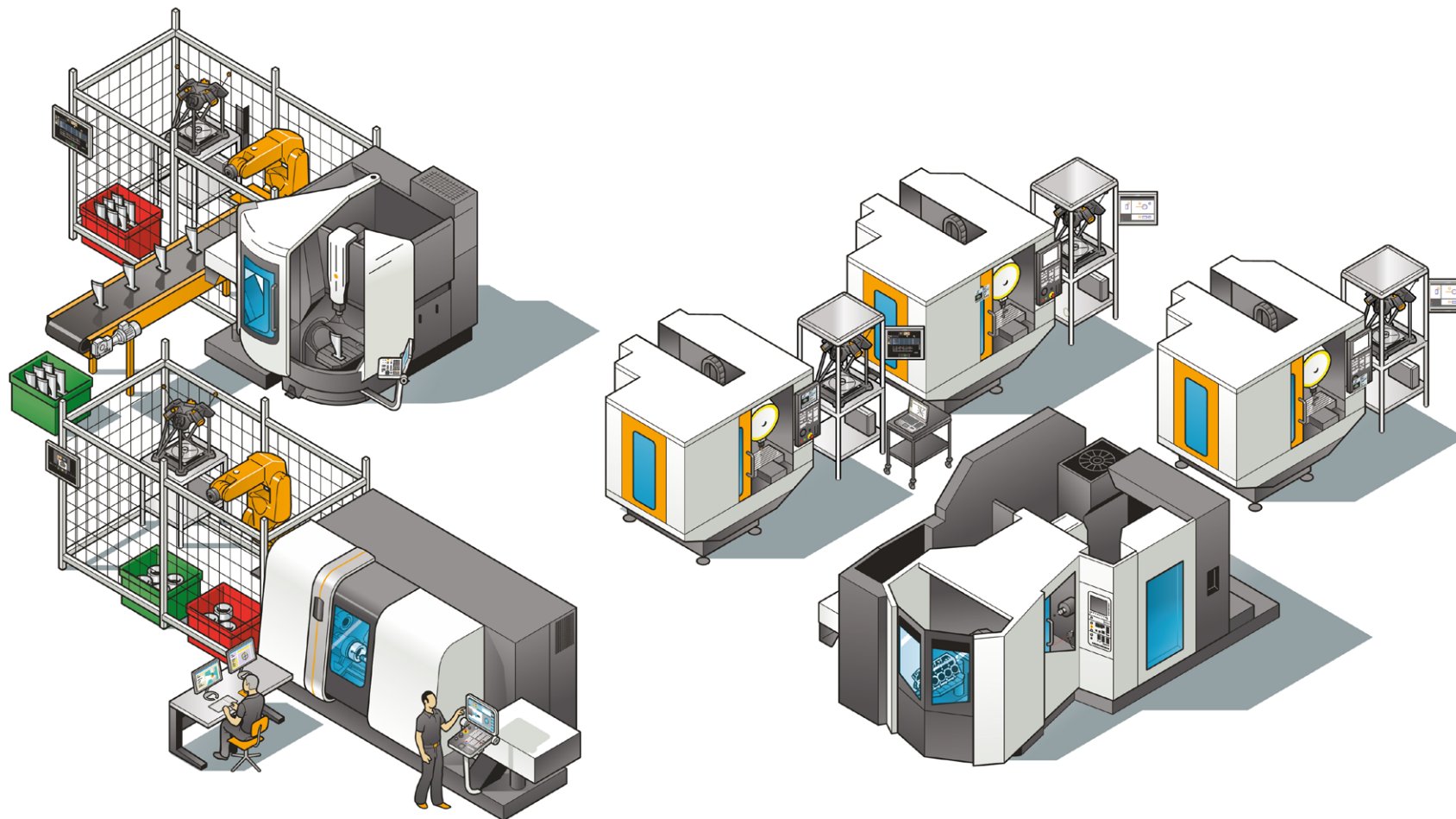
CIE Automotive Mecauto at Vitoria-Gasteiz

CIE Automotive has added the Equator™ gauges to complement their existing Renishaw machine tool inspection probes. These measurement tools are used every day.

An additional benefit is being able to cope with large variations in daily and seasonal temperatures. “In summer, we can have 15 °C degrees at night and 35 °C during the day, so the Equator gauges help us, alerting us when we need to compensate for ambient temperature,” notes Javier Otxoa.

Furthermore, CIE Automotive has achieved automatic recording of measurement data, making it easier to carry out process capability studies that allow them to assign operators to higher value-adding tasks.





www.renishaw.com/cie-mecauro

 #renishaw

 +44 (0) 1453 524524

 uk@renishaw.com

WHILE CONSIDERABLE EFFORT WAS MADE TO VERIFY THE ACCURACY OF THIS DOCUMENT AT PUBLICATION, ALL WARRANTIES, CONDITIONS, REPRESENTATIONS AND LIABILITY, HOWSOEVER ARISING, ARE EXCLUDED TO THE EXTENT PERMITTED BY LAW.

RENISHAW RESERVES THE RIGHT TO MAKE CHANGES TO THIS DOCUMENT AND TO THE EQUIPMENT, AND/OR SOFTWARE AND THE SPECIFICATION DESCRIBED HEREIN WITHOUT OBLIGATION TO PROVIDE NOTICE OF SUCH CHANGES.

© 2025 Renishaw plc. All rights reserved. This document may not be copied or reproduced in whole or in part, or transferred to any other media or language by any means, without the prior written permission of Renishaw. RENISHAW® and the probe symbol are registered trade marks of Renishaw plc. Renishaw product names, designations and the mark 'apply innovation' are trade marks of Renishaw plc or its subsidiaries. Other brand, product or company names are trade marks of their respective owners. Renishaw plc. Registered in England and Wales. Company no: 1106260. Registered office: New Mills, Wotton-under-Edge, Glos, GL12 8JR, UK.

Issued: 10.2025