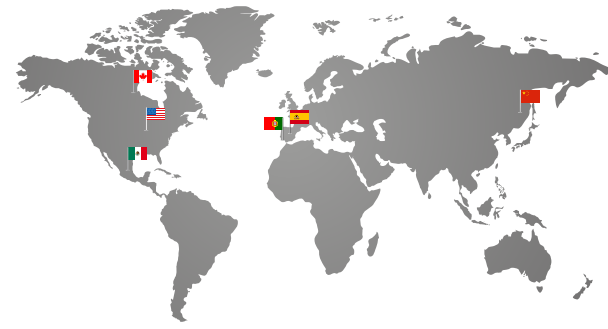**Contact Bluewrist Today!**

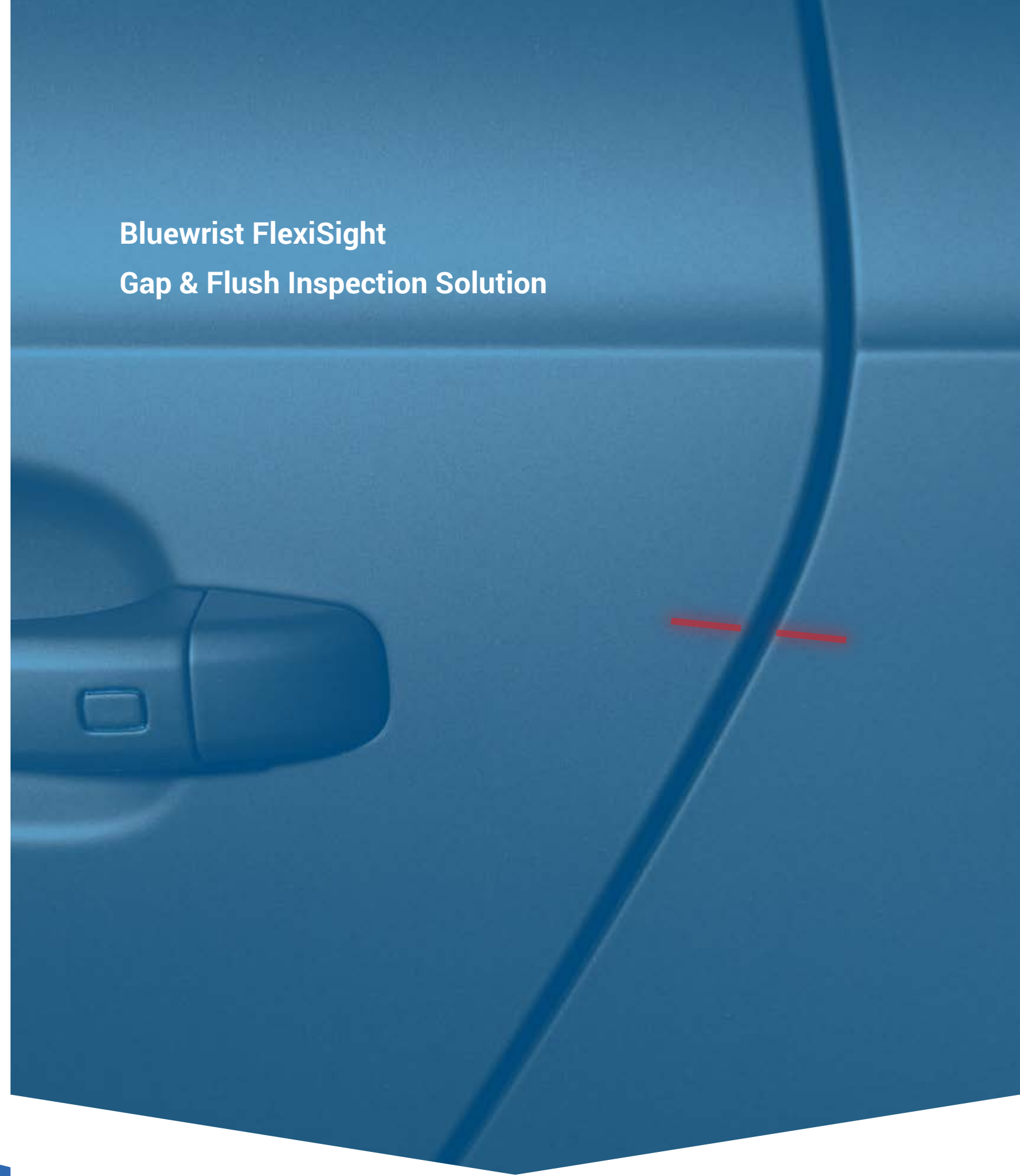📞 1+289-475-5211

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Bluewrist FlexiSight

Gap & Flush Inspection Solution

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FlexiSight Inline
Gap & Flush Inspection

The Bluewrist FlexiSight is a flexible inline gap & flush measurement solution that replaces traditional tools such as - feeler gauges, calipers, and transducers. Today's modern vehicle design features flowing contours, angled panels, edges with large radii and closure seals in the gaps, all of which have made quality and accuracy more difficult to achieve with traditional tools.

A single vehicle is assembled with components and parts manufactured by diverse suppliers around the globe with different control processes. Eventually, all of these parts must fit together seamlessly to make the finished product. This reality underscores the vital importance of fit quality control, gap & flush measurements, and how they play a crucial role in this process.

Gap & flush inspection of critical automotive components helps improve the aesthetics, aerodynamic performance, and fuel efficiency and prevent the potential failure of vital parts.

FlexiSight Gap & Flush Measurement	
Multiple Inspection Methods	
Dynamic	A 3D profiler is mounted on an industrial robot and programmed to follow the moving vehicle coming down the assembly line to perform the required gap and flush inspection. As the vehicle moves down the line, the robot tool frame is constantly updated to maintain accurate tracking of the inspection points.
Stationary	The vehicle arrives at a predetermined location and remains stationary. One or several industrial robots with 3D profilers at the end of arm tooling will follow the pre-programmed paths to perform the gap and flush inspection.

Bluewrist FlexiSight Fully Integrated Gap & Flush Inspection System for Seamless Compatibility and Reliable Performance

System Technical Specifications

Measurement Repeatability:
0.1mm at 3σ

Measurement Accuracy:
0.1mm at 3σ

Camera Technology:
3D Laser line profiler

Robot Motion
The robot's path can be programmed to follow a vehicle moving down the production line to provide full coverage

1 The robot mounted 3D line profile scanner performs dimensional measurements of vehicle gaps. The vehicle can be stationary or moving as it comes down the production line

comXtream

2 comXtream sends the scanned dimensional data to the Bluewrist Automation Server for further processing and analysis

3 SPCWORKS
SPCWorks reports the pass or fail measurement results in an easy-to-understand graphical format

Out-of-tolerance results automatically trigger the line PLC to notify production personnel

Historical trends are also recorded and can be easily reviewed for trend analysis

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