

**TRICKY
GAPS,
TRUE
DATA**



**GAP & PROFILE MEASUREMENT IN
AUTOMOTIVE INDUSTRY**

SYSTEMS FOR MEASURING GAP, FLUSH AND RADIUS

THE HANDHELD AND ROBOT-ASSISTED CALIPRI MEASUREMENT DEVICES PROVIDE HIGHLY ACCURATE EVALUATION OF GAPS AND EDGES AND OFFER RESILIENT AND CROSS-PROCESS BASIS FOR DECISION MAKING EVEN FOR COMPLEX CONTOURS.



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The optoelectrical profile measurement devices record the profile of edges and gaps without any contact. An intuitive swivelling movement offers evaluation of previously inaccessible profile forms without mathematical estimations. In addition, our patented tilt correction completely rules out user influences.

It means: Whether it is used as a fully automatic robotic system inline or offline as a handheld device for final inspection, CALIPRI always measures the reality – regardless of the user and complexity.

COMPLETE MEASUREMENT

HIGHLY ACCURATE MEASUREMENT THROUGH SWIVELLING MOVEMENT

CALIPRI MEASURES THE REAL CONTOUR OF GAPS AND EDGES. EVEN NARROW AND UNDERCUT PROFILES CAN BE COMPLETELY RECORDED THANKS TO AN INNOVATIVE SWIVELLING MOVEMENT. NO MORE RUSH JOBS: MAKE IMPORTANT DECISIONS BASED ON VALID MEASUREMENT DATA!



The measurement process is based on laser light section technology. The user or the robot guides the sensor over the profile to be measured. The intelligent image processing system constantly measures partial segments of the contour from different angles and fits these together. In the process CALIPRI automatically compensates rolling and pitching of the sensor. The measurement results are reproducible and free of user influences.

Gap, flush and radius can be calculated directly from the measured data using a wide range of evaluation algorithms.

Flexible evaluation methods allow compatibility and traceability to mechanical gages, stencils, measurement results from other CALIPRI stations and CAD data. The parameters of the selected evaluation method can be adjusted to the user requirements and measurement situation within few seconds.



MANY STEPS, ONE METHOD

DIFFERENT PLATFORMS

COMPARABLE MEASUREMENT DATA THROUGH CROSS-PROCESS EVALUATION METHODS

COMPATIBLE SYSTEM VARIANTS GUARANTEE CONSISTENT USE AND ONE AND THE SAME MEASUREMENT PROCESS FOR ALL PROCESS STEPS. EASILY EXCHANGE MEASUREMENT PLANS BETWEEN DEPARTMENTS AND DRAW CONCLUSIONS ABOUT PREVIOUS PRODUCTION STEPS JUST AT THE TOUCH OF A BUTTON.

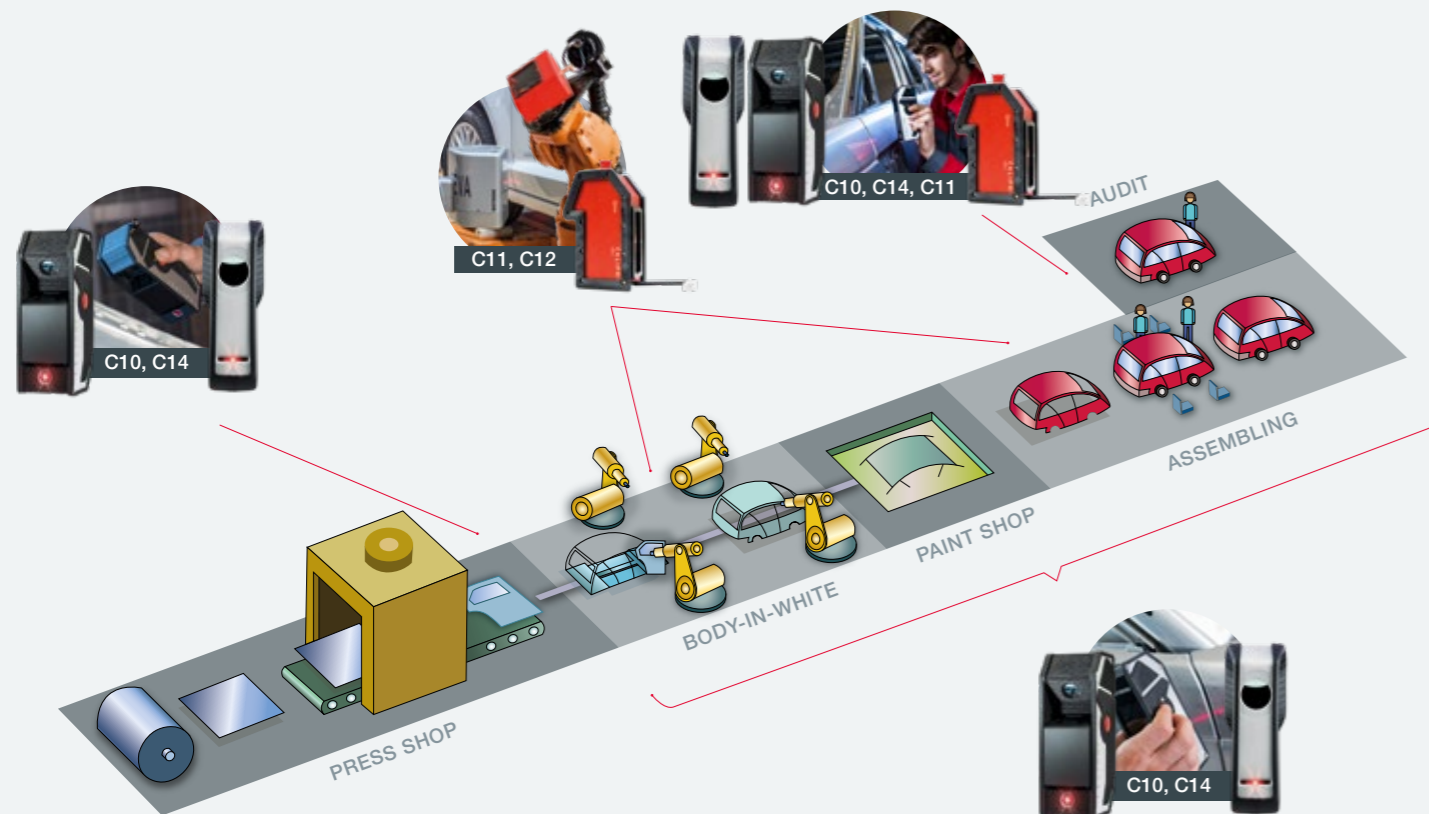
Depending on the respective user situation, you have the freedom to choose between handheld and stationary systems. The traceability and compatibility of the measurement results is guaranteed through cross-system evaluation methods and same type of measurement profile recording.



PRODUCT OVERVIEW

VARIANTS AT A GLANCE

| | CALIPRI C10 | CALIPRI C14 | CALIPRI C11 | | CALIPRI C12 |
|-----------------------------------|---|---|---|--|--|
| | | | LKF | RKF | |
| Design | Portable measurement device with Tablet-PC | Cable-free, portable measurement device with Tablet-PC | Stationary system with cable guidance on the side of the line | Stationary system with 360° cable guidance | Stationary system for robot arm |
| Purpose | Offline (sample measurement) | Offline (sample measurement) | In-Line (body shop, assembly) | Synchronized line, audit station | In-Line (body shop, assembly) |
| Operation | Manual | Manual | Semi-automatic | Semi-automatic | Fully automatic |
| Measurement data display | Sensor & Tablet-PC | Sensor & Tablet-PC | Monitor 1 | Monitor 1 | Monitor 1 (optional) |
| Profile display | Tablet-PC | Tablet-PC | Monitor 2 | Monitor 2 | Monitor 2 |
| Measurement plan selection | Manual | Manual | PLC-controlled | PLC-controlled | PLC-controlled |
| Data export | Manual (CSV, XML, customer-specific interface on request) | Manual (CSV, XML, customer-specific interface on request) | Automatic (CSV, XML, customer-specific interface on request) | Automatic (CSV, XML, customer-specific interface on request) | Automatic (CSV, XML, customer-specific interface on request) |



ALWAYS READY TO MEASURE

HIGH AVAILABILITY THROUGH COMPREHENSIVE SERVICE

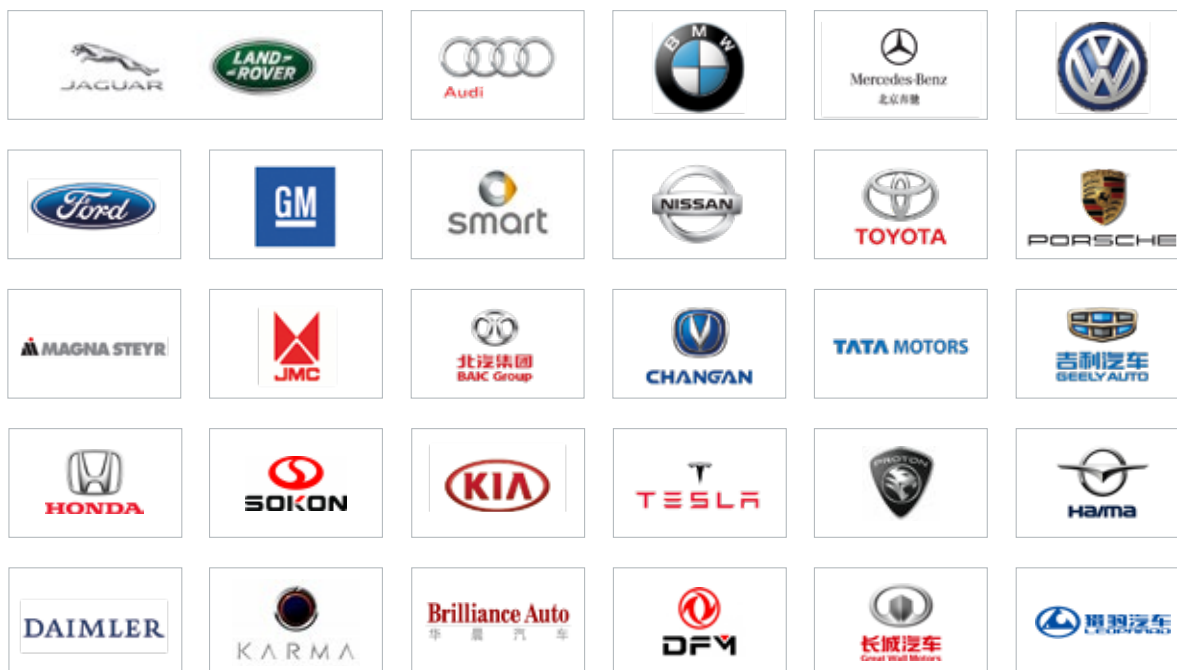
TO ENSURE THAT YOUR EMPLOYEES RECEIVE THE BEST TRAINING, WE OFFER ON-SITE TRAINING PROGRAMS FOR DIFFERENT KNOWLEDGE LEVELS AND USER GROUPS. SERVICE AGREEMENTS GUARANTEE 100% AVAILABILITY OF YOUR MEASUREMENT DEVICES.



If you require personal support, our experts from technical support can help you with any issues concerning the functionality, operation and application of your CALIPRI measurement devices. With partners across the globe, we are also represented on each continent – Nextsense is present everywhere where you are located. Whether you want to contact us by phone, email or remote connection – we have only one goal: to provide optimal solution for your company!

To ensure that you concentrate on your core competencies, we would be glad to take over the creation of your measurement plans. This includes smooth documentation apart from the creation of measurement points, visualization, entering tolerances and parameterization.

REFERENCES



ARE YOU INTERESTED IN OUR
CALIPRI C1X SYSTEMS AND
NEED MORE INFORMATION?

CONTACT US!

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