

**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.

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.

MANY  
STEPS,  
ONE  
METHOD

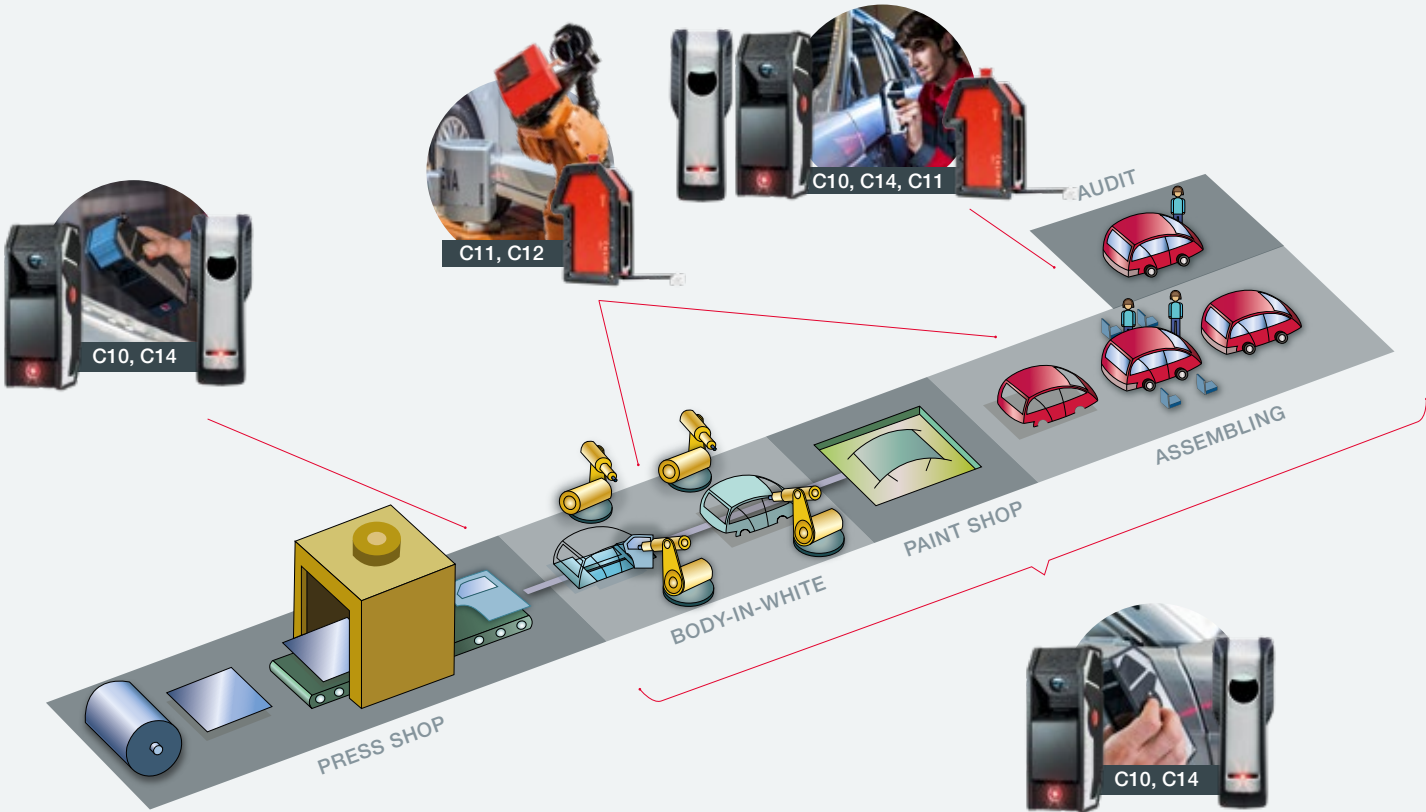




PRODUCT OVERVIEW

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

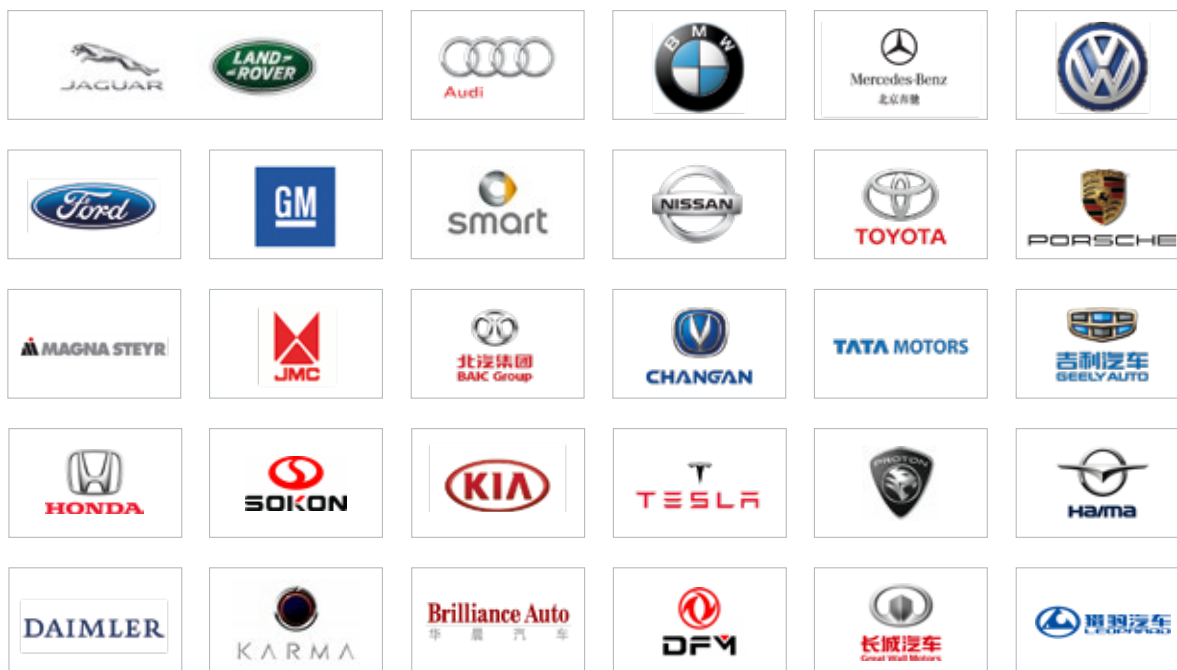
TO ENSURE THAT YOUR EMPLOYEES RECEIVE THE BEST TRAINING, WE OFFER ON-SITE TRAINING PROGRAMS FOR DIFFERENT KNOWLEDGE LEVELS AND USER GROUPS. SERVICE AGREEMENTS GUARANTEE 100% AVAILABILITY OF YOUR MEASUREMENT DEVICES.

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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