

Groundbreaking coating thickness system for professional expert reports.

World first:
Freely configurable measuring system for image and data based documentation of expert reports on cars.



Paint Measurement

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Report #	License Number	VIN	Brand and Model	Date	Page
5	Keine Zulassung	NICHT BEKANNT	Audi A1	9/2/2011	1

Inspector	Comment
John Doe	Ein neues Audi A1

Max value (µm)	Min value (µm)	Average total (µm)
218.0	96.9	121.0



µm	Fender FL	Door FL	Side Part FL	Rear	Side Part RR	Door FR	Fender FR	Hood	Roof
Avg	116.6	116.6	121.9	134.3	115.3	112.8	115.7	134.4	128.0
Min	107.0	102.0	104.0	97.6	96.9	102.0	108.0	124.0	127.0
Max	124.0	133.0	134.0	218.0	138.0	120.0	127.0	153.0	130.0
01	117	117	109	117	130	120	127	132	128
02	115	116	118	149	117	109	118	131	128
03	115	102	115	114	118	102	116	137	127
04	107	133	123	141	114	118	110	124	130
05	124	122	132	145	103	119	123	139	127
06	118	117	104	102	96.9	109	114	153	128
07	121	120	130	218	138	115	116	126	
08	117	111	132	125	117	108	108	130	
09	115	111	134	97.6	104	115	109	138	

blue bold values: NFe, black values: Fe



A menu driven precision measuring system setting new standards for coating thickness measurement and complete documentation in the automotive industry.

The benefits of this innovative system

The measurement of coating thickness is one of the most important aspects of car assessment, damage detection and quality control.

Working closely with car experts, we developed a sophisticated test system to satisfy real-world requirements for measurement and documentation.

The world first CarCheck System PLUS, an advancement of the CarCheck System, now enables users to configure their measuring task for a car freely. This distinctive feature allows them to define the measuring process personally using the software, determining the car parts to be measured and the number of measurements per part freely. The gauge then guides the user through the complete measuring task based on this definition.

Create a detailed measuring report by embedding original photos (or standard graphs) after finalizing the measurement.

These image and data based measuring report help experts with their work saving time and money and fulfilling today's expectations of professional high quality expertise that even stand the test of difficult cases before court.

The CarCheck System PLUS includes the CarCheck gauge with measuring probe and the CarCheck software allowing for measurement analysis and complete documentation.

Measuring total coating thickness

The CarCheck System PLUS gauge measures the total coating thickness on each base material. It takes measurements of non-magnetic coatings such as paint, chrome or zinc on steel or iron (Fe) base material as well as electrical insulated coatings such as paint or Eloxal on non-ferromagnetic base material (NFe) like aluminum or zinc. The base material – if known – can either be set to a fix measuring mode or determined automatically by the probe itself.

Communication between gauge and computer

A USB wireless adapter provides bidirectional communication between gauge and PC.

- Instead of creating the measuring task with the gauge use the convenient PC software. After entering the parameters, simply send the information from the PC to the gauge by the click of a button.
- All the measurements recorded for different parts (such as fender or engine hood) are stored within the gauge and transmitted to CarCheck software for documentation and analysis using the provided USB wireless adapter. Here the original photo of the car to be measured is embedded within the measurement report.

Working with jobs

A job is the complete measurement of a car. You can store the measurement data of up to 10 jobs at one time. The gauge can store measurements of testing areas, with arbitrary names. This enables users to name a testing area "Engine Hood" for instance, to relate the measurements sorted within that component type to the particular part.

Using its internal calendar clock the gauge saves date and time with each measurement. Traceability and transparency with regard to clients increase the value of documenting the measuring results.

User-friendly features

Maximum clearness of display

- Display shows measurements in large digits
- Display light switches on automatically when measuring
- Change display orientation by 180 degrees

Maximum control

- Green LED within the keypad confirms successful measurement
- Various features, e.g. measurements, confirmed by acoustic signal
- Ongoing data transfer between gauge and PC shown by flashing red LED

Distinctive gauge features

- Easy-to-use and intuitive gauge with menu driven measuring system
- Applicable for single measurements
- Large measuring range: up to 5000 μm (5mm) total coating thickness
- Automatic substrate recognition (Fe/NFe)
- No time consuming calibration with reference foils
- Rugged high precision device
- 3 years manufacturer warranty – "Made in Germany"
- Probe cable for close and difficult to observe parts (included in scope of supply)





Technical data

Measuring range	0 ... 5000 µm
Resolution	0 ... 99.9 µm ... 0.1 µm / 100 ... 999 µm ... 1.0 µm / 1.0 ... 5.0 mm ... 0.01 mm
Probe	Dual probe, automatic substrate selection Fe/NFe *
Measuring method	Magnetic (Magnetic flux/Hall effect) or eddy current **
Standards	DIN EN ISO 2808, ISO 2178, ASTM B 499, ISO 2360, ASTM D 7091
Measuring modes	Single measurement, Measurement with structured storage
Measuring interval	ca. 1500 ms
Measuring accuracy **	0 ... 2000µm: ± (1 µm +2% of the measurement) / > 2000µm: ± 3.5% of the measurement
Memory capacity	max. 10 jobs / max. 200 parts / max. 10000 measurements
Settings	Radio on/off, display system info, buzzer on/off, date/time, unit µm/mil display light on/off, display orientation normal/flipped
Measuring surface	min. 20 x 20 mm
Radius of curvature	convex min. 5 mm / konkav min. 30 mm
Smallest substrate thickness	Fe: 0,2 mm / NFe: 0,05 mm
Interface	Wireless 2.4GHz, range max. 10m (in free field)
Temperature range	Operation: 0 ... 50°C, storage: -10 ... 60°C
Power supply	2 AA size batteries 1.5 V AlMn, or 2 AA size rechargeable batteries 1.2 V
Dimensions (length x width x height)	68 x 33 x 125 mm
Weight	125 g incl. batteries

* Measurements of non-ferromagnetic coating on ferromagnetic substrate (such as lacquer on steel or iron) and measurements of non-ferromagnetic and non-conductive coatings on non-ferromagnetic and conductive substrate (such as lacquer on aluminum, zinc, copper or brass)

** Manufacturer's calibration in regard to the supplied zero reference plates
Subject to technical modifications



Scope of supply CarCheck System Plus

- CarCheck gauge
- CarCheck probe Dual Fe/NFe 5mm/5mm
- Product CD with CarCheck PLUS software, device driver, user manual as PDF file
- Probe cable
- 2 zero reference plates (Fe and Al)
- 2 AA size batteries 1,5 V
- USB adapter for wireless data transfer between gauge and computer
- Printed short reference
- Inspection certificate of the measuring probe
- Soft pouch with belt clip
- Case for transport and storage



* According to our Terms and conditions