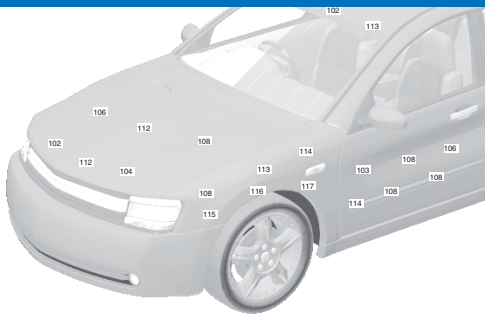


The new dimension of coating thickness measuring in the automobile industry

World novelty:
Menu-navigated
coating thickness
measurements of
car paint providing
automated
documentation.



QUALITY BY EXCELLENCE

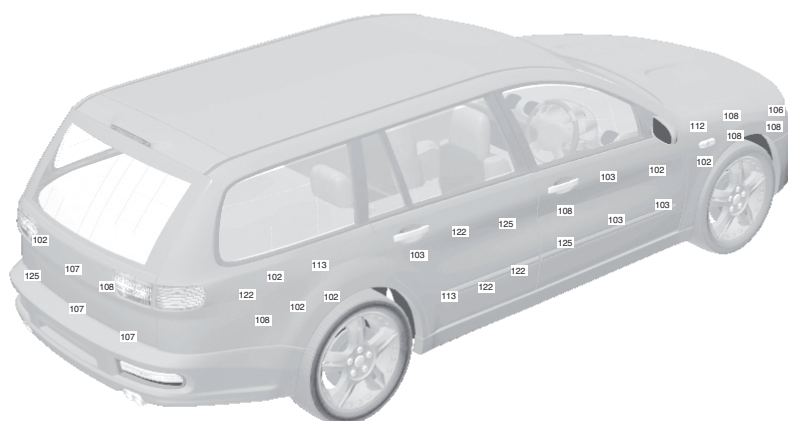
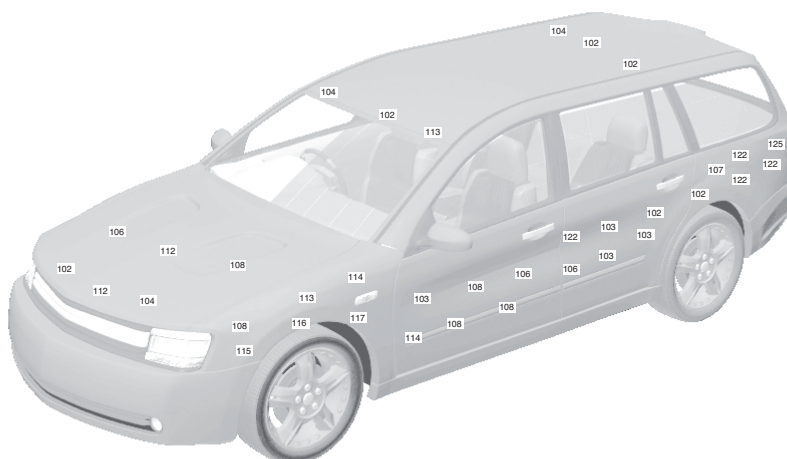


The CarCheck System: complete documentation

In addition to the usually used single measurements, the CarCheck system provides various menu-navigated measuring programs for different car types.

Select one of two measuring intensities for each type of car: basic measurements with 3 measurements per measuring object (fender, hood etc.) and intensive measurement with 6 measurements per measuring object. The gauge clearly indicates the measuring spot to be worked on in its display. After the measurement, the device automatically switches to the next spot. At the end of the measuring procedure, the entire measurements of all measuring tasks are saved in the gauge's memory. Analyze and document this data after transmitting it to a PC.

Car measurement		Max Mustermann Musterstrasse 28 50698 Cologne		Telefon 0221.12345678 Telefax 0221.12345679	info@max-mustermann.de www.max-mustermann.de	Place your logo here	
Paint							
Registration number BM - W 2007	Vehicle Identification Number (VIN) 121212121YXS5456	Colour Oriental Blau Metallic	Colourcode 118d / e70	Type of construction Limousine	Inspector Fritz Foerster	Date 09.10.2007	
Measurement method Intensivmessung	Number of samples 3	Customer				Page 1 / 2	
Measurement data							
	Sample 1 (µm)	Sample 2 (µm)	Sample 3 (µm)	Sample 4 (µm)	Sample 5 (µm)	Sample 6 (µm)	Average (µm)
Fender FL	Fe 108	Fe 113	Fe 114	Fe 115	Fe 116	Fe 117	114
Fender FR	Fe 103	Fe 108	Fe 106	Fe 114	Fe 108	Fe 108	108
Fender RL	Fe 122	Fe 103	Fe 102	Fe 106	Fe 103	Fe 103	107
Fender RR	Fe 107	Fe 122	Fe 125	Fe 102	Fe 122	Fe 122	117
Door FL	Fe 102	Fe 107	Fe 108	Fe 125	Fe 107	Fe 107	109
Door FR	Fe 122	Fe 102	Fe 113	Fe 108	Fe 102	Fe 102	108
Door RL	Fe 103	Fe 122	Fe 125	Fe 113	Fe 122	Fe 122	118
Door RR	Fe 108	Fe 103	Fe 102	Fe 125	Fe 103	Fe 103	107
Front	Fe 112	Fe 108	Fe 106	Fe 102	Fe 108	Fe 108	107
Trunk	Fe 102	Fe 112	Fe 104	Fe 106	Fe 112	Fe 112	108
Roof	Fe 104	Fe 102	Fe 113	Fe 104	Fe 102	Fe 102	105
Max. value (µm)		125		Min. value (µm)		102	
				Average total (µm)		110	



Comment:



QNix® 1500: Measuring coating thickness the traditional way

The CarCheck System: a menu driven precision measuring system setting new standards for the measurement and documentation of coating thickness within the automobile industry.

The coating thickness measurement of paint is the most important measurement in the area of vehicle appraisal and the determination of accidental damage. It also serves as an indicator for sufficient corrosion protection during the vehicle's production. Until now however, there has neither been a menu driven measuring system nor systematic solutions for documentation or the inspection of lacquer coatings in the automobile industry.

The world novel CarCheck system from AUTOMATION Dr. Nix offers systematically navigated coating thickness measuring and provides the basis for a complete documentation and constant process control in the future.

In the past, it was only possible to measure the thickness of lacquer coating using conventional measuring gauges and take a note of the results usually by hand in self-made graphs and tables. The data of vehicles and customers had to be entered in a painstaking process and then printed on company paper. A close and ongoing cooperation with paint and vehicle experts of the industry

confirmed the increasing request to develop a measuring system that meets the real demands of measurement and documentation – the CarCheck System.

The CarCheck System consists of the CarCheck measuring gauge and the CarCheck software. The CarCheck gauge is much more than usual coating thickness measuring devices. Clear measuring instructions in the display guide the user through the complete measurement process – the measuring of a complete vehicle. Two arbitrary measuring programs for different types of vehicle are available. The measurements taken are stored in the gauge and can be transmitted wirelessly to the CarCheck documentation and administration software via the USB wireless interface.

A self-explanatory job wizard guides the user easily through the CarCheck software: from preparing the measuring task in the gauge to completing the final mea-

suring report. After inputting the operator and user data, the vehicle is specified by all relevant characteristics such as the vehicle identification number, and then allocated to its owner. As soon as this data is available, the program prepares the required documentation automatically, even allowing for personal comments.

This documentation provides an analysis of the coating thickness measurements in table form, a schematic image of the vehicle type and all relevant vehicle and customer data. The digital signature of the user and his company address legalise the documentation as a binding report: easy and safe providing a reliable operation for automobile experts, the CarCheck System offers the essential means for testing, evaluating and determining accidental damage of vehicles.

Now the automobile industry has the chance to reduce cost of their production processes efficiently by saving material and time. The car dealers and paint shops obtain comprehensible quality documentation – especially in the area of warranty.



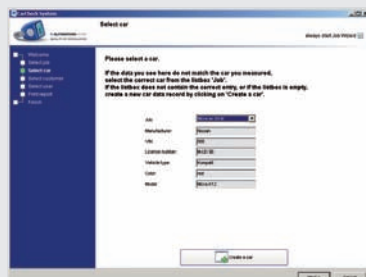
Product highlights

- fully automated menu-navigated measuring system, including single measurements
- detailed documentation with analysis and managing software
- high measuring range, up to 5 mm
- compact gauge, programmable via the PC beforehand
- no time consuming calibration
- rugged measuring system
- easy to use
- 3-year warranty



Individual, task-oriented documentation of measurements

The included adapter provides the means for wireless communication between gauge and PC via a USB interface. Measuring data is saved in the gauge until the user deletes it using the provided software. The menu of the gauge is – similar to modern cell phones – easy to navigate ensuring a safe and intuitive operation of the measuring system that meets all requirements of a modern generation. The included management and analysis software is similar in use to Microsoft Office® products facilitating the handling of the gauge even more.



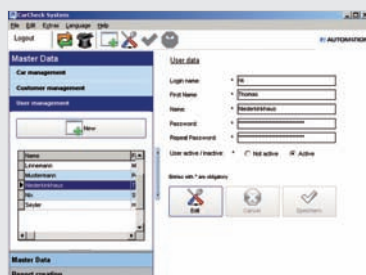
Job Wizard

A competent job wizard makes the operation of the CarCheck software as easy as child's play. All actions are self-explanatory and keep the user from operating the software wrongly. Step by step, the job wizard guides the user from entering the vehicle and customer data to starting the measuring process on the vehicle and the final print out of a complete report. Easy and safe – without previous knowledge of the program.



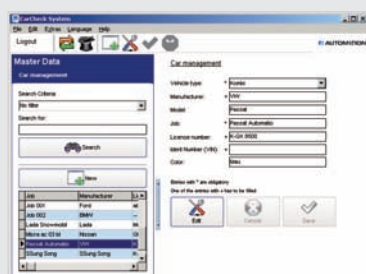
Report

Create and print out measurement reports after transmitting measurements. The report shows complete and detailed data regarding vehicle, customer, etc. and all measurements in table form to ensure fast analysis.



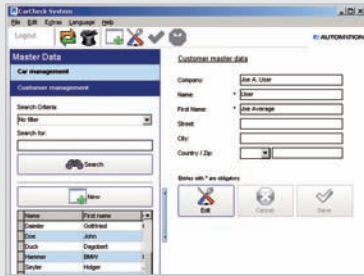
User management

The „User Management“ menu allows for any number of users to be managed by the admin. Only managed users can create reports – the documentation of a complete measurement session. This user's name is then included in the documentation.



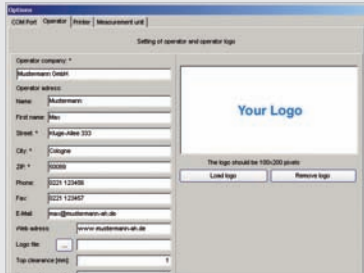
Vehicle management

The „Vehicle Management“ menu allows for any number of vehicles to be managed. Pre-defined vehicles can be saved. In the same way, the data of a vehicle is prepared before sending it to the gauge and including it in the report.



Customer management

The „Customer Management“ menu allows any number of customers and their personal data to be managed. This personal data is also included in the report.



Customization

Using the „Options“ menu, the user can print out a complete documentation with his companies data. That way, the company's name, address and logo is included in the documentation.

Technical data



Measuring range	Fe: 0 – 5000 µm, NFe: 0 – 5000 µm					
Resolution	0.1 µm in a range under 100 µm, 1 µm in a range between 100 and 999 µm, 0,01 mm in a range from 1000 µm					
Measuring mode	Substrate selection Fe/NFe automatic Single measurement, basic measurement (3 measurements per vehicle part), intensive measurement (6 measurements per vehicle part)					
Measuring principle	Magnetic: magnetic field variance/Hall-effect Fe* and Eddy-current NFe*					
Standard & specification	DIN EN ISO 2808 BS 3900-C5	DIN 50981 ASTM B 499	DIN 50984 ASTM D 1400	ISO 2178 ASTM D 1186	ISO 2360 ASTM D 7091	BS 5411 (3 & 11)
Measuring interval	1500 ms					
Measuring accuracy in regard to the Automation's standard	± (1 µm + 2% of the measurement) in a range between 0.0 and 2.0 mm ± 3.5% of the measurement form 2.0 mm					
Memory	Up to 10 jobs (vehicle measurements)					
Settings	Radio: on/off Display system info Signaler: on/off Date/time			display: unit: µm/mil light: auto/off orientation: standard/rotated		
Minimum area measured (mm x mm)	20 x 20					
Minimum curvature	Convex: 5 mm, concave: 30 mm					
Minimum substrate thickness	Fe: 0.2 mm, NFe: 0.05 mm					
Wireless interface	Yes					
Operating temperature	Between 0 and 50° C					
Storage temperature	Between -10 and 60° C					
Power supply	2 AA 1.5 V batteries					
Dimensions (LxWxH in mm)	68 x 33 x 125					
Weight incl. batteries	125 g					

Fe* measurements of non-ferro- or non-ferrimagnetic coatings on ferro-magnetic substrate e.g. measurements on iron or steel substrate

NFe* measurements of non-ferro- or non-ferrimagnetic and non-conductive coatings on non-ferro- or non-ferri-magnetic and conductive substrate e.g. measurements of aluminum-, zinc-, copper-, brass- und certain types of high-grade steel substrates

Subject to technical modifications



Quality by excellence

Worldwide, the coating thickness gauges from AUTOMATION Dr. Nix are considered a standard of excellent quality „Made in Germany“. Confirmed by their easy, safe and convenient use and their long-lasting reliable operation. Each of our gauges and systems is exclusively manufactured in Germany. Our most strict quality standards guarantee rugged and safe operation in worldwide use.



Our service means serving the customer.

For more than 4 decades, it has been the obligation of the long-established company AUTOMATION Dr. Nix GmbH & Co. KG to provide users worldwide with innovative devices, systems and services. To support them in manufacturing and securing high quality coatings and surfaces, and in increasing their added value by precisely measuring, checking and documenting the quality and productivity of the customer's processes.

CarCheck System – consists of

CarCheck gauge

- Dual Fe 5mm/NFe 5mm measuring probe
- 1m adapter cable for external probe
- Zero reference plates, Fe and NFe
- 2 AA 1.5 V batteries
- Soft pouch with belt clip
- User manual and reference guide
- Model approval certificate
- CarCheck documentation and management software
- USB adapter for wireless interface providing bidirectional data transfer between gauge and PC
- Case for transport and storage

CarCheck software

- Documentation and analysis software for transmitting measurements and preparing of the measuring task at the gauge
- Compatible with Windows XP Service Pack 2 and higher
- Selectable language (German and English)
- Integrated help file
- Any number of customers, vehicles and users
- Current updates of firm- and software in the download area



* according to our terms and conditions

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