# Teslascan®



### Teslascan makes magnetism visible!

The Teslascan scans the test object, for example a mechanical watch movement, lineby-line with a magnetic field sensor as in an image scanner. This unique technology makes it possible to obtain and evaluate detailed magnetisation data on specific zones or individual components inside an object.

## Three-dimensional visualisation

Highly sensitive sensors measure the magnetic flux density as absolute values. With the position data, the Teslascan combines the individual values to create a three-dimensional visualisation. The result is evaluated at a glance and no details remains hidden.

## Easy location with camera imaging

The scanned magnetisation measurement data can be overlaid with an image of the test object, courtesy of the integrated camera. Magnetised zones can then be identified immediately and located with ease on the object.



## Graphic, colour representation of the magnetic flux density



Balance wheel





Pallet fork

Escape wheel



Mechanical watch movement two-dimensional



Mechanical watch movement three-dimensional

## Mechanical watch movement before and after the demagnetization



## Tolerance



Mechanical watch movement over the tolerance







Rotor under the tolerance







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- Magnetic field scanner for measuring and locating magnetic components
- Line-by-line item scanning with a resolution of up to 0.5 mm
- Measuring field size adjustable to 100 x 100 mm
- Highly accurate Hall sensor with a resolution of 0.5  $\mu$ T for measuring magnetic flux density
- Integrated camera enables overlaying of measured values with an image of the test object, making location easy
- Magnetisation displayed in 3D
- Colour coding with a configurable tolerance range
- Powerful PC-based software for straightforward evaluation of measurement data
- Simple start-up and intuitive operation

### General

	Special cover glass (Gorilla Glass) for measuring area and display with LED backlight
Interface	1x USB Typ B
Dimensions	300 x 300 x 172 mm (w x d x h)
Casing	Aluminium-steel, black/silver
Weight	9.8 kg
Mains connection	Mains adapter 100-240V~/12V 90W

### PC Software Teslascan

Operating system	Windows 8.1 Pro or Windows 10 Pro, 64-bit Prozessor: Quadcore processor i5 or i7 Graphics card: at least 1 GB RAM and full OpenGL support Screen resolution: min. 1280 x 1024 pixels
Languages	English, German, French

## Detecting the magnetic field

Size of the measuring area	max. 100 x 100 mm
Selectable scanning step	0.5, 1.0, 2.0 and 4.0 mm
Measuring range	- 600 to + 600µT (- 6 to + 6 Gauss)
Resolution	0.5µT
Repeatability	± 2µT (0.33% FS)
Measurement of the ma- gnetic flux density	x-, y- and z-axis
Graphic representation of the magnetic flux density	x-axis, y-axis, z-axis, 3-axis vector