

INSTALLATION GUIDE USER MANUAL

MEGA-CHECK TRANSFER

For MEGA-CHECK Profi and MEGA-CHECK Master with firmware version 15.1 and up

Version 3.1 dated **2021-02**



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Version control

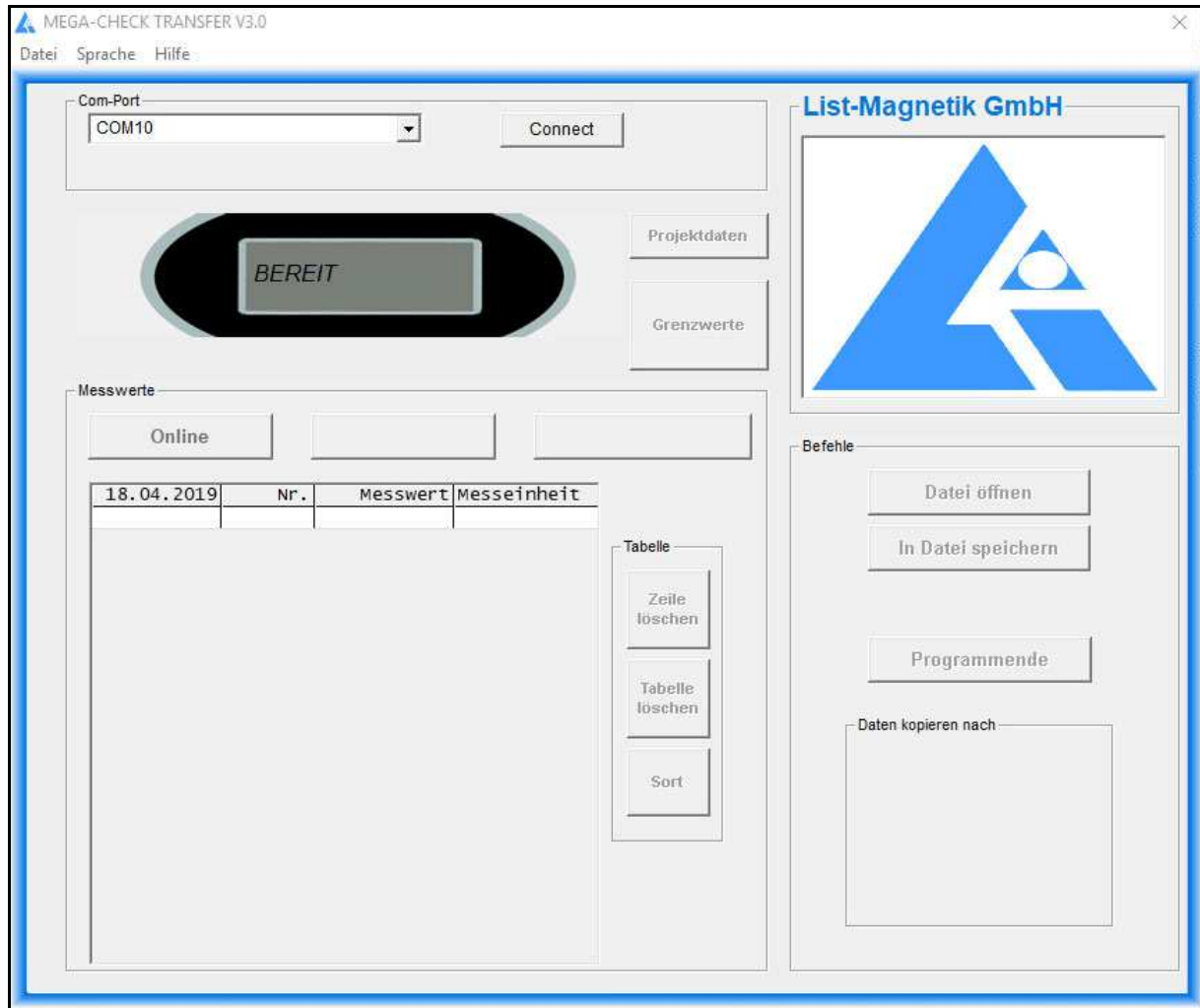
Version 3.1:

New function KeyEvents, limits enriched with 80-20 rule according to ISO 19840. The data path of user data is moved from user\AppData\Local to user\AppData\Roaming.

1. MEGA-CHECK TRANSFER APPLICATION

At <https://www.list-magnetik.com/en/applications/applications-overview> you can obtain the free of charge application **MEGA-CHECK TRANSFER** to transfer data from your MEGA-CHECK Profi and MEGA-CHECK Master device to a Windows PC or laptop.

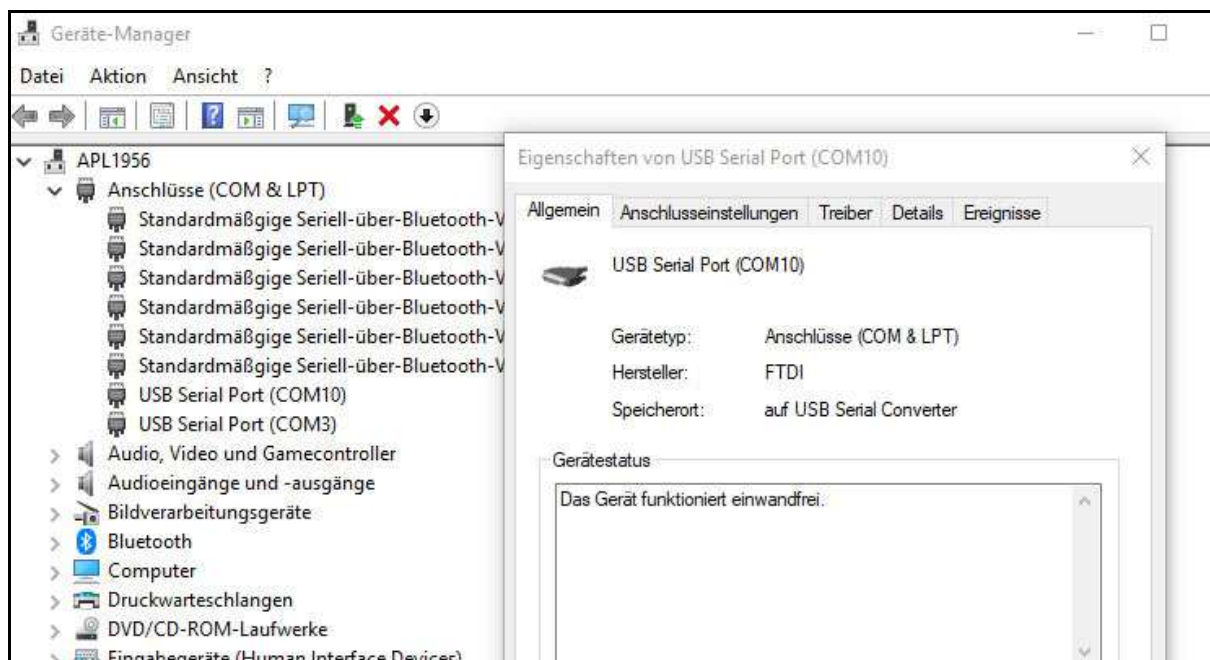
With MEGA-CHECK TRANSFER you can measure online, or read the device's memory, you can print the results or transfer them to various applications like Microsoft Word or Microsoft Excel.



2. DETECTING THE COM-PORT FOR CABLE

After plugging in the USB cable into MEGA-CHECK and PC, a so-called COM port is formed. This assignment remains permanent. Before starting the application MEGA-CHECK TRANSFER you need to know what this port is called.

In the device manager of Windows, you will find a USB serial port with manufacturer "FTDI". That's the right COM port. You need the assigned COM port number when starting the application MEGA-CHECK TRANSFER.



3. INSTALLING THE APPLICATION

The installation package is called „MEGA-CHECK TRANSFER_Vxx_Setup.exe“ (xx = version number) and available for download at

<https://www.list-magnetik.com/en/applications/applications-overview>

If your firewall or virus scanner prevents or disallows an installation, you can ignore these warnings. The installation packages are free from viruses and advertisements, they are only distributed via our homepage.

The default paths used during installation are Windows 10

C:\Program Files (x86)\List-Magnetik\MEGA-CHECK TRANSFER

Constant program components

C:\ProgramData\List-Magnetik\MEGA-CHECK TRANSFER

C:\Users\<>\AppData\Local\VirtualStore\ProgramData\List-Magnetik\MEGA-CHECK TRANSFER

User-used and modified configuration data (COM port, language, limits, project data) and this manual

C:\Users\<>\AppData\Roaming\List-Magnetik\MEGA-CHECK TRANSFER

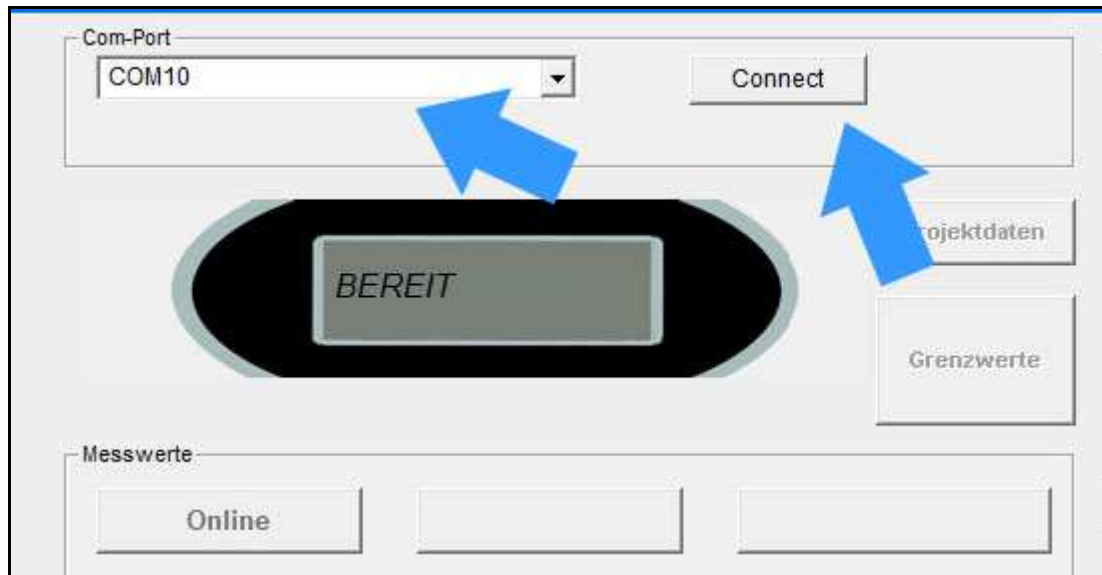
User created measurement series

Specification of the label of the project data

4. FUNCTIONS

STEP 1: CONNECT

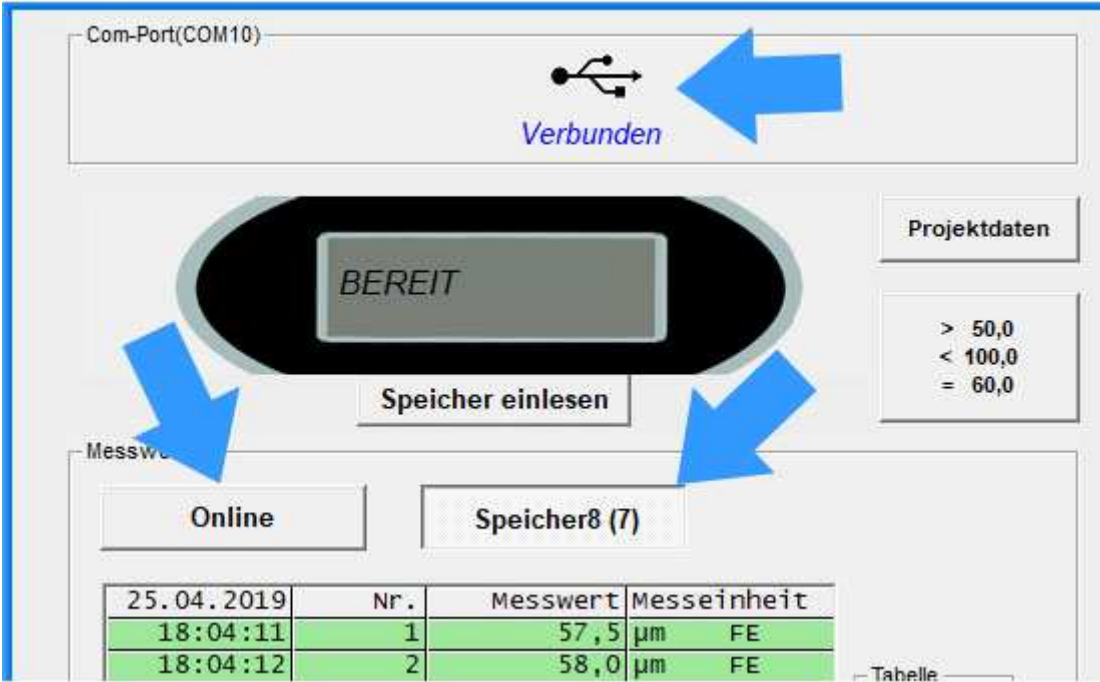
To connect, you need the number of the COM port, which you have determined in point 2. Your MEGA-CHECK must be switched on.



After successful connection, the name changes to "Connected" and the selection box for the COM port becomes invisible. The selected and connected COM port is now in the frame above.

The currently selected device storage is read in directly after establishing the connection. The name and number of the memory are shown in the column header. The left of the 2 buttons above the table is shown as "Online".

If you are in the Scan Measurement of the MEGA-CHECK Master, this scan memory with internal memory number 96 will be read as the current memory.



MEASURING ONLINE

Now you can start your work.

For example, you can directly perform online measurements.

To do this, click on the "Online" button on the left above the measured value table.

The screenshot shows the 'TOP-CHECK TRANSFER V3.0' software interface. At the top left, there is a menu with 'Datei', 'Sprache', and 'Hilfe'. The main area is divided into several sections:

- Com-Port(COM8):** Shows a Bluetooth icon and the status 'Verbunden'.
- Projektdaten:** A button to access project data.
- Grenzwerte:** A button to access limit values.
- Messwerte:** A section with three buttons: 'Online (4)', 'FE-Speicher (8)', and 'NFE-Speicher (4)'. Below these is a table of measurements.
- List-Magnetik GmbH:** A section with a 'Chart' button and a 'Statistik:' box showing summary statistics.
- Befehle:** A section with buttons for 'Datei öffnen', 'In Datei speichern', 'Drucken', 'Programmende', and 'Daten kopieren nach' (Clipboard, MS Word, MS Excel).

The 'Messwerte' table contains the following data:

03. 04. 2019	Nr.	Messwert	Messeinheit
09:11:00	1	58,1	µm Fe
09:11:04	2	57,8	µm Fe
09:11:07	3	52,9	µm Fe
09:11:10	4	53,9	µm Fe

Com-Port(COM6)

Verbunden

Projektdatei

> 200,0
< 250,0
= 220,0

Speicher einlesen

Messwerte

Online (16) Speicher (5)

15.05.2019	Nr.	Messwert	Messeinheit
11:20:27	1	64,7	G
11:20:28	2	219,0	G
11:20:28	3	228,0	G
11:20:28	4	227,0	G
11:20:29	5	228,0	G
11:20:29	6	228,0	G
11:20:29	7	228,0	G
11:20:30	8	228,0	G
11:20:30	9	229,0	G
11:20:30	10	229,0	G
11:20:31	11	228,0	G
11:20:31	12	229,0	G
11:20:32	13	229,0	G
11:20:32	14	229,0	G
11:20:32	15	229,0	G
11:20:33	16	229,0	G

Tabelle

Zeile löschen

Tabelle löschen

Sort

Stopp

Befehle

Datei öffnen

In Datei speichern

Drucken

Programmende

Daten kopieren nach:

Clipboard

MS Word

MS Excel

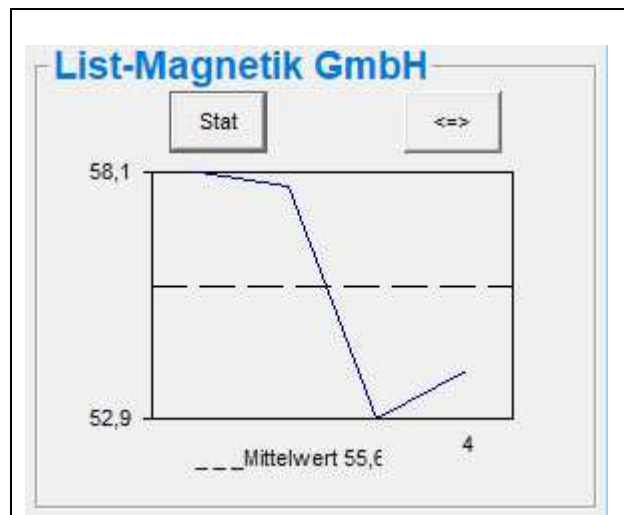
Statistik: mit Absolutwerten

ONLINE

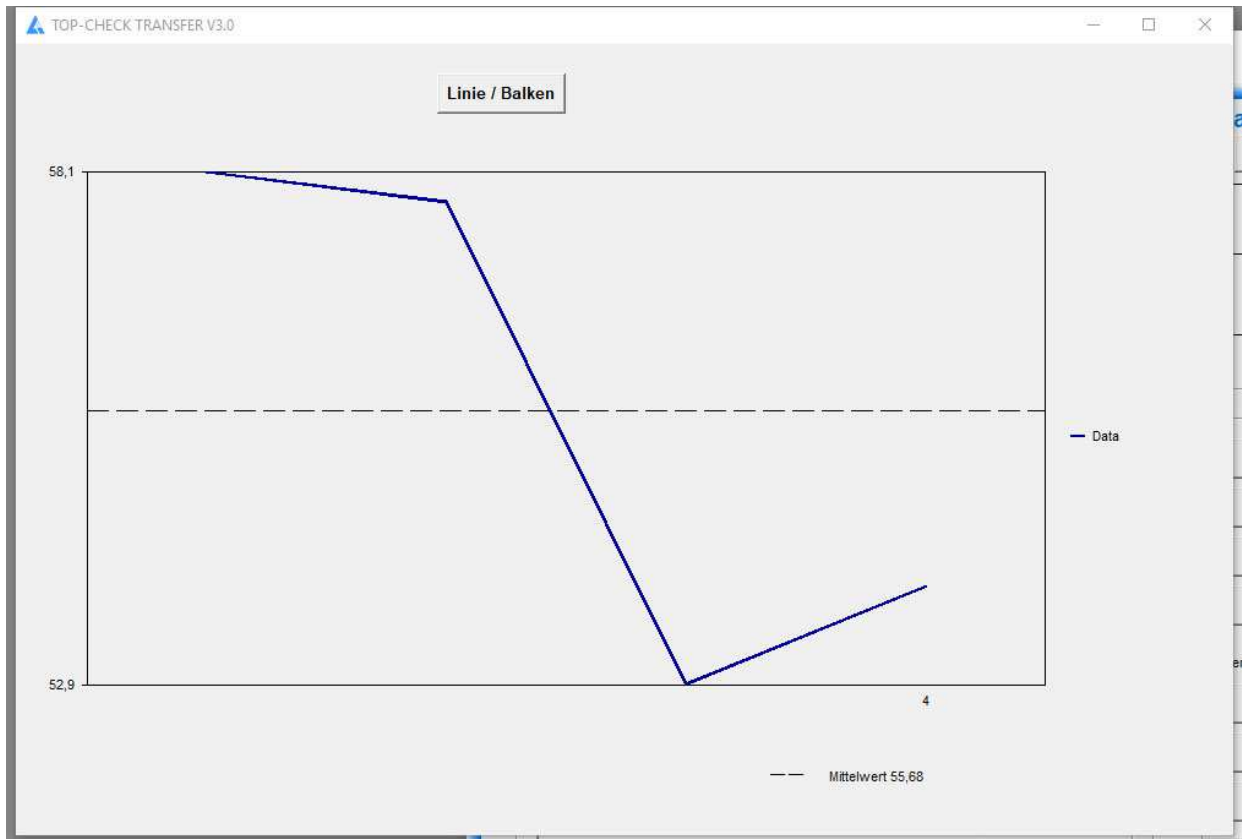
Anzahl 16
Minimum 64,70 G
Maximum 229,00 G
Mittelwert 217,61 G
Std. Abweichung 40,85 G

Statistical values are automatically generated from the second measurement: Minimum, Maximum, Average (Mean) and Standard Deviation.
Note: The Standard Deviation is calculated with $(n-1)$.

To toggle between the numeric statistic and a line diagram, please use the button **Chart** and **Stat**.



You can also switch to a larger view in the chart display with the button **<=>**. There, the representation can be selected as a line or bar chart.

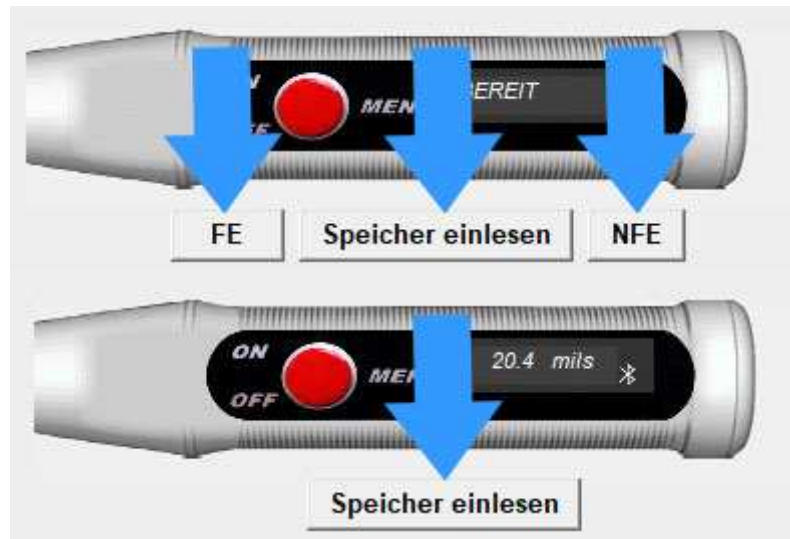


Note:

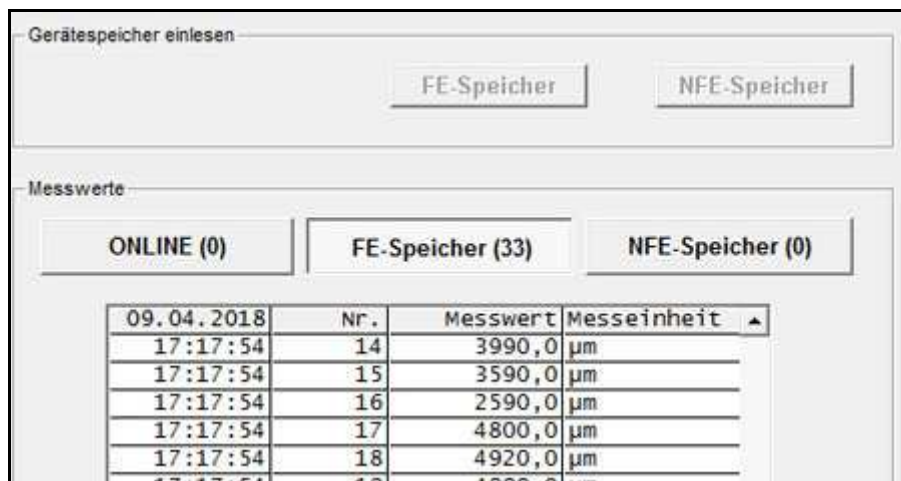
The online measurement series is saved in a separate file "online.mes". If you experience problems during the measurement, e.g. you get a program crash, you can load your measurement data from this file again. See chapter "Open file".

READ DATA FROM DEVICE

If you already have measured values in the device memory, these can be read from the device by the application. You can read it again at any time.



As long as the transfer is running all activities are blocked. The counter behind the title of the measurement series, counts the transferred measurements



Once the measurement series has been read, the buttons are active again and the statistical data is filled.

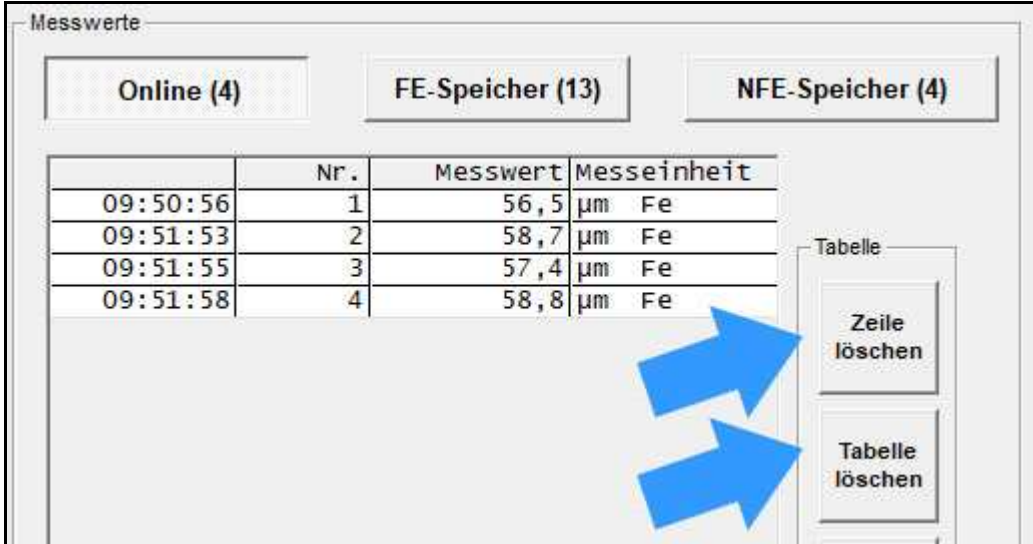
DELETE TAB, DELETE ROWS

The table of measured values can either be completely deleted or individual lines can be displayed. The statistics will be automatically corrected afterwards.

Note:

The data in the device will not be deleted.

By reading again from the device, the deleted values are added again.



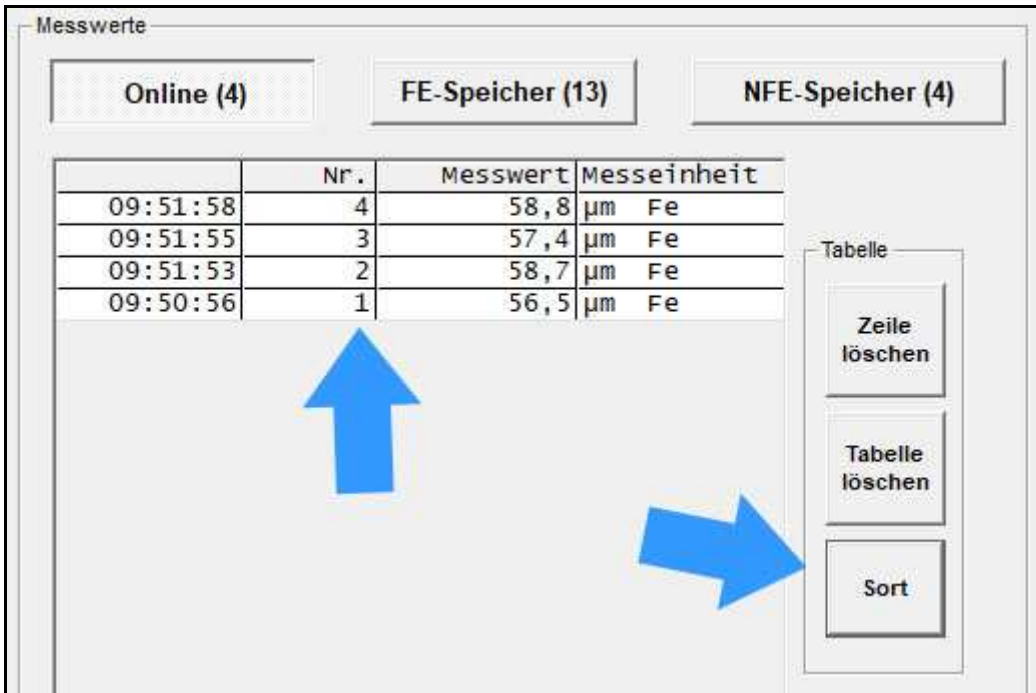
The screenshot shows the 'Messwerte' interface with three tabs: 'Online (4)', 'FE-Speicher (13)', and 'NFE-Speicher (4)'. The 'Online (4)' tab is active, displaying a table with the following data:

	Nr.	Messwert	Messeinheit
09:50:56	1	56,5	µm Fe
09:51:53	2	58,7	µm Fe
09:51:55	3	57,4	µm Fe
09:51:58	4	58,8	µm Fe

To the right of the table is a 'Tabelle' panel containing two buttons: 'Zeile löschen' and 'Tabelle löschen'. Two blue arrows point from the table area towards these buttons.

SORT TABLE

The tables with the measured values can be sorted in descending order from the last to the first one.



The screenshot shows the 'Messwerte' interface with the same three tabs. The 'Online (4)' tab is active, and the table is now sorted in descending order of measurement value:

	Nr.	Messwert	Messeinheit
09:51:58	4	58,8	µm Fe
09:51:55	3	57,4	µm Fe
09:51:53	2	58,7	µm Fe
09:50:56	1	56,5	µm Fe

The 'Tabelle' panel now includes a third button, 'Sort', in addition to 'Zeile löschen' and 'Tabelle löschen'. A blue arrow points to the 'Sort' button, and another blue arrow points to the 'Tabelle' panel.

PROJECT DATA

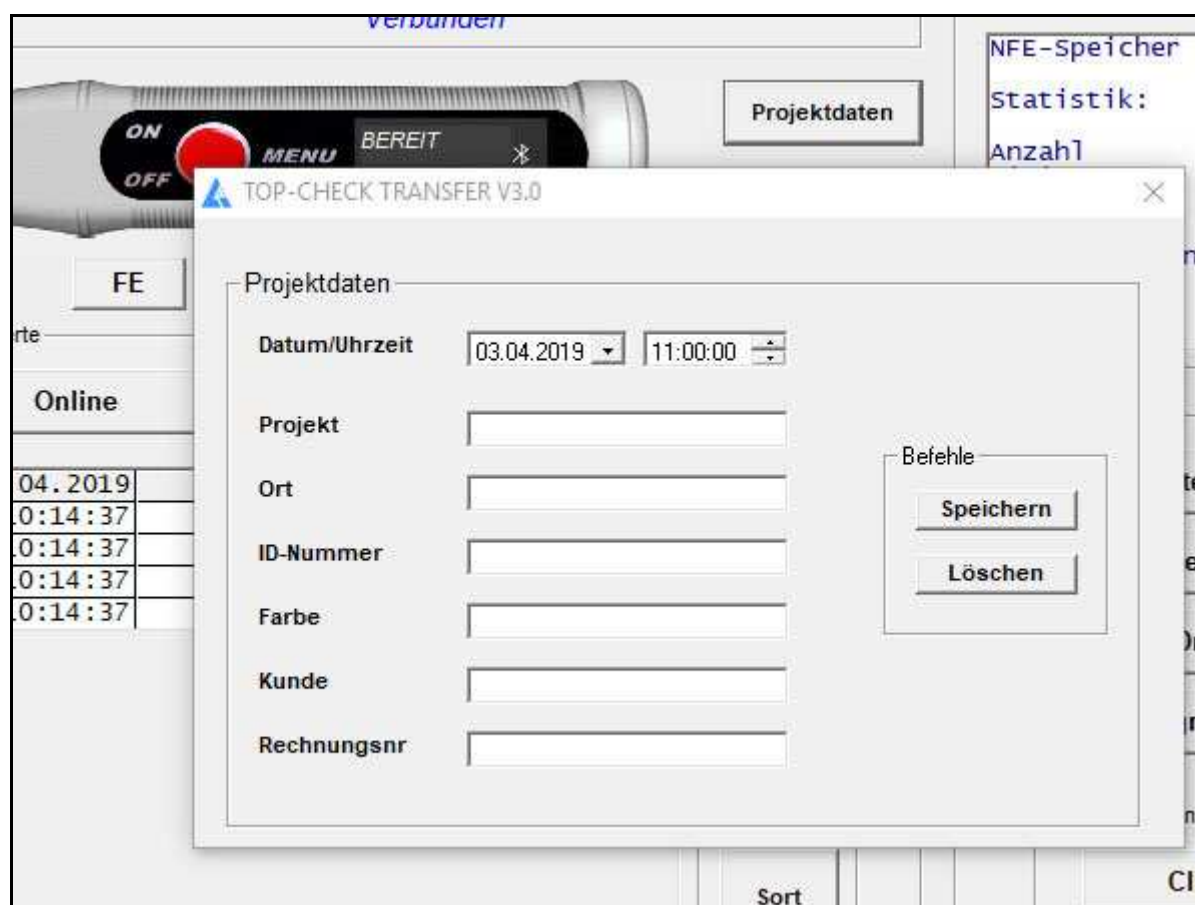
MEGA-CHECK TRANSFER allows you to edit project data for a measurement series. This project data will then be provided during printing, when transferring to Microsoft Word or Microsoft Excel, so that you can document the series of measurements.

You have a date / time information and 6 free text fields as project data available.

The free text fields can be defined by the user. In the configuration file "Projekt.ini" on the user data directory („C:\Users\\AppData\Roaming>List-Magnetik\MEGA-CHECK TRANSFER"), you can define 6 fixed terms in German and English for yourself.

Example:

```
Projekt;Project;  
Ort;Location;  
ID-Nummer;ID No.;  
Farbe;Color;  
Kunde;Customer;  
Rechnungsnr;Invoice No.;
```



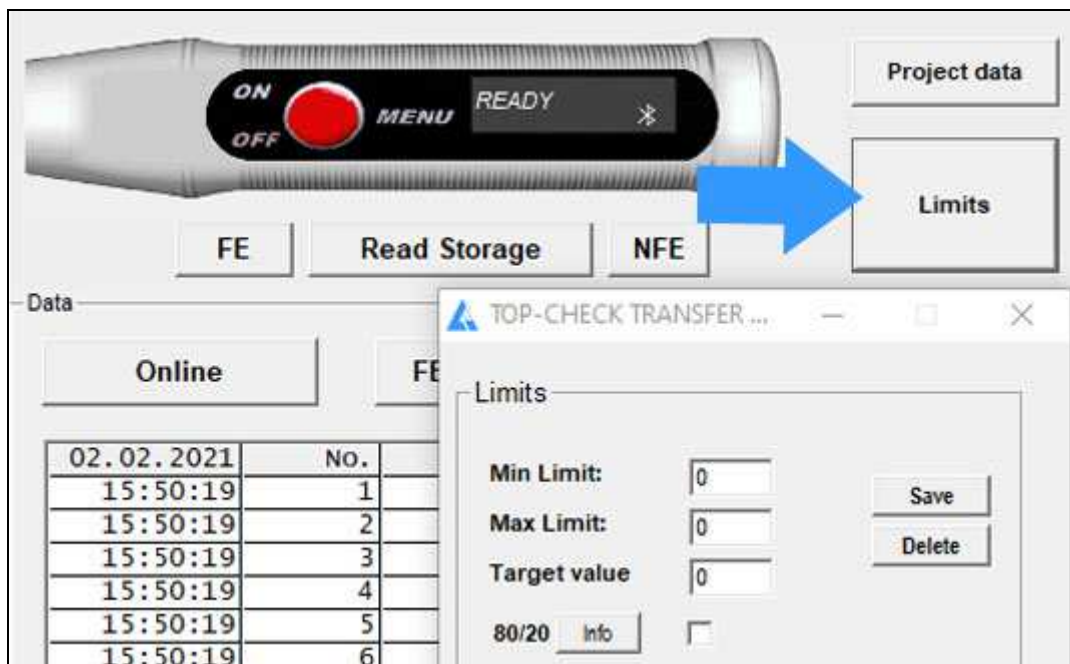
LIMITS, 80/20 RULE

With limit values, an evaluation of your measured values after falling below or above a corridor is possible. If you have specified limit values, the measured values are highlighted in green (= in the corridor) or red (= outside). In addition, a target can be preset. The limits (Min Limit / Max Limit) and the target value are displayed in the charts (line or bar).

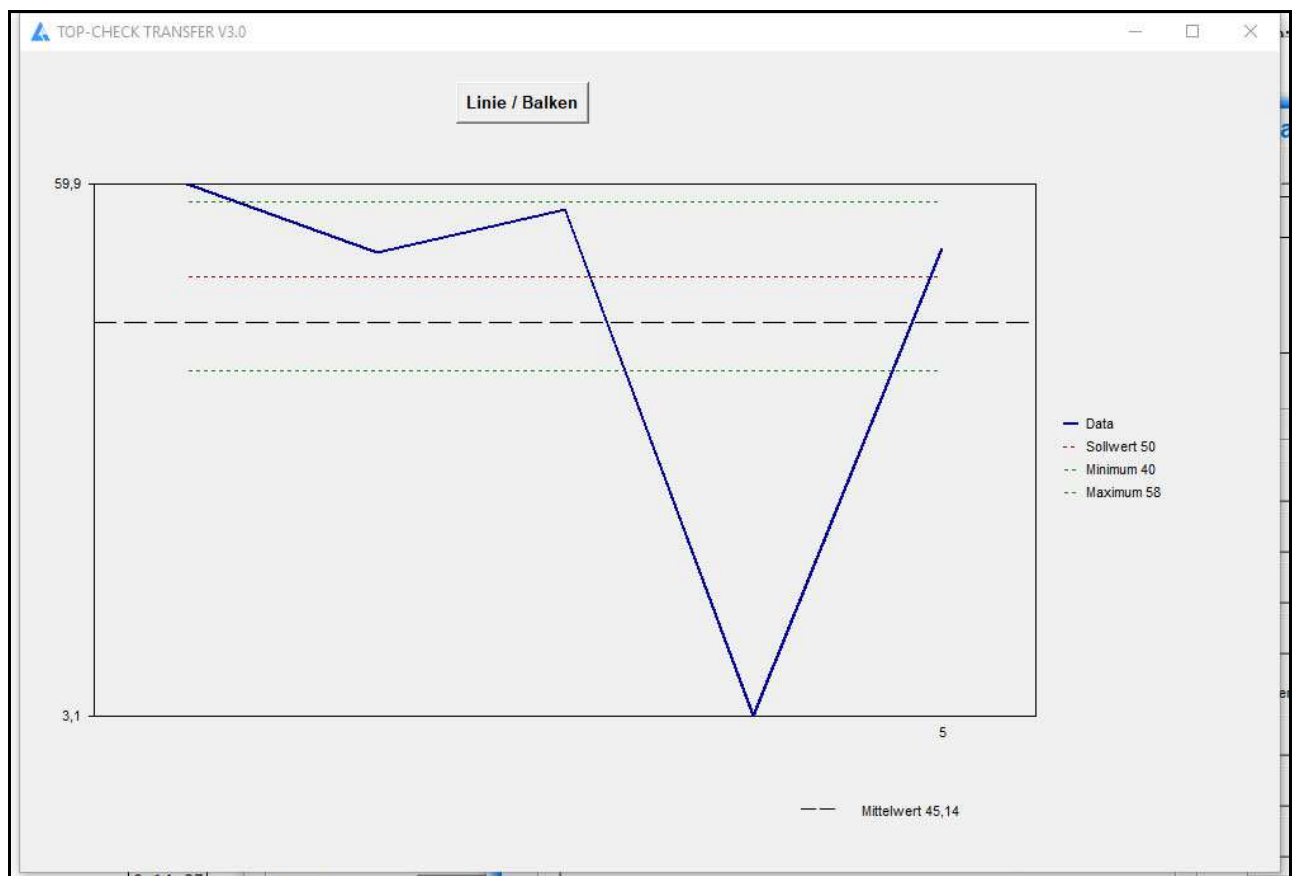
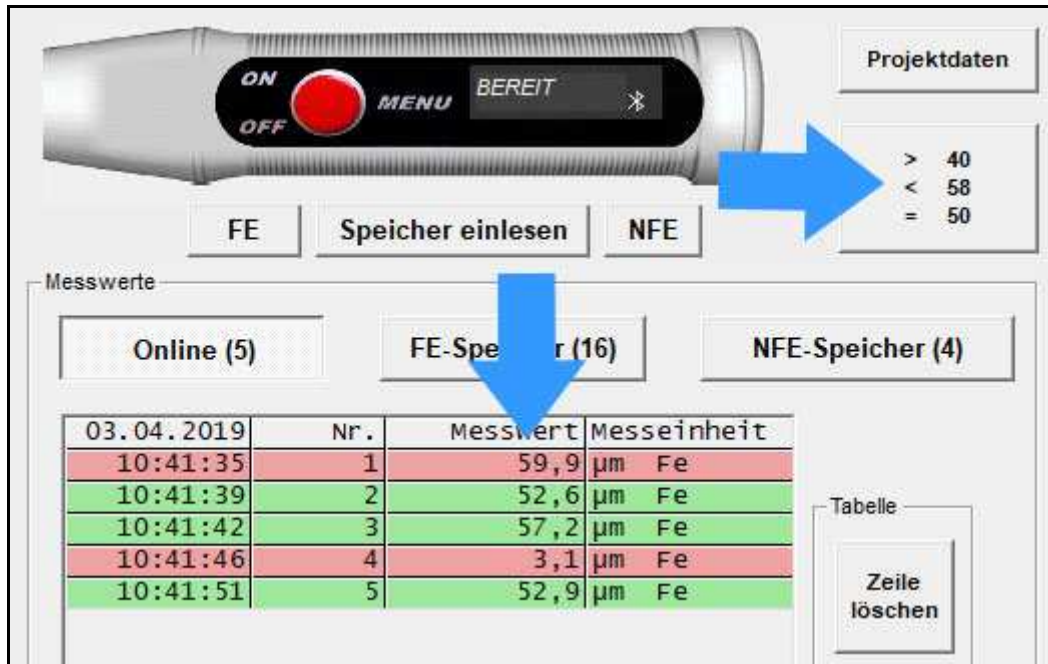
The implementation of the 80/20 rule according to ISO 19840 (Corrosion protection of steel structures by protective paint systems) can be switched on and off separately. If the 80/20 rule is applied, the minimum limit is automatically set to 80% of the target.

As a result, the color orange is then used for measured values in the corridor between the minimum limit (80%) and the target value (100%). An evaluation is carried out in the statistics window. The series of measurements is "OK" if (every single point must be fulfilled)

- No measured value is above the Max Limit
- No measured value is below the Min Limit
- The average of the measured values is not below the target value
- Only a maximum of 20% of the measured values are below the target value (orange cases)



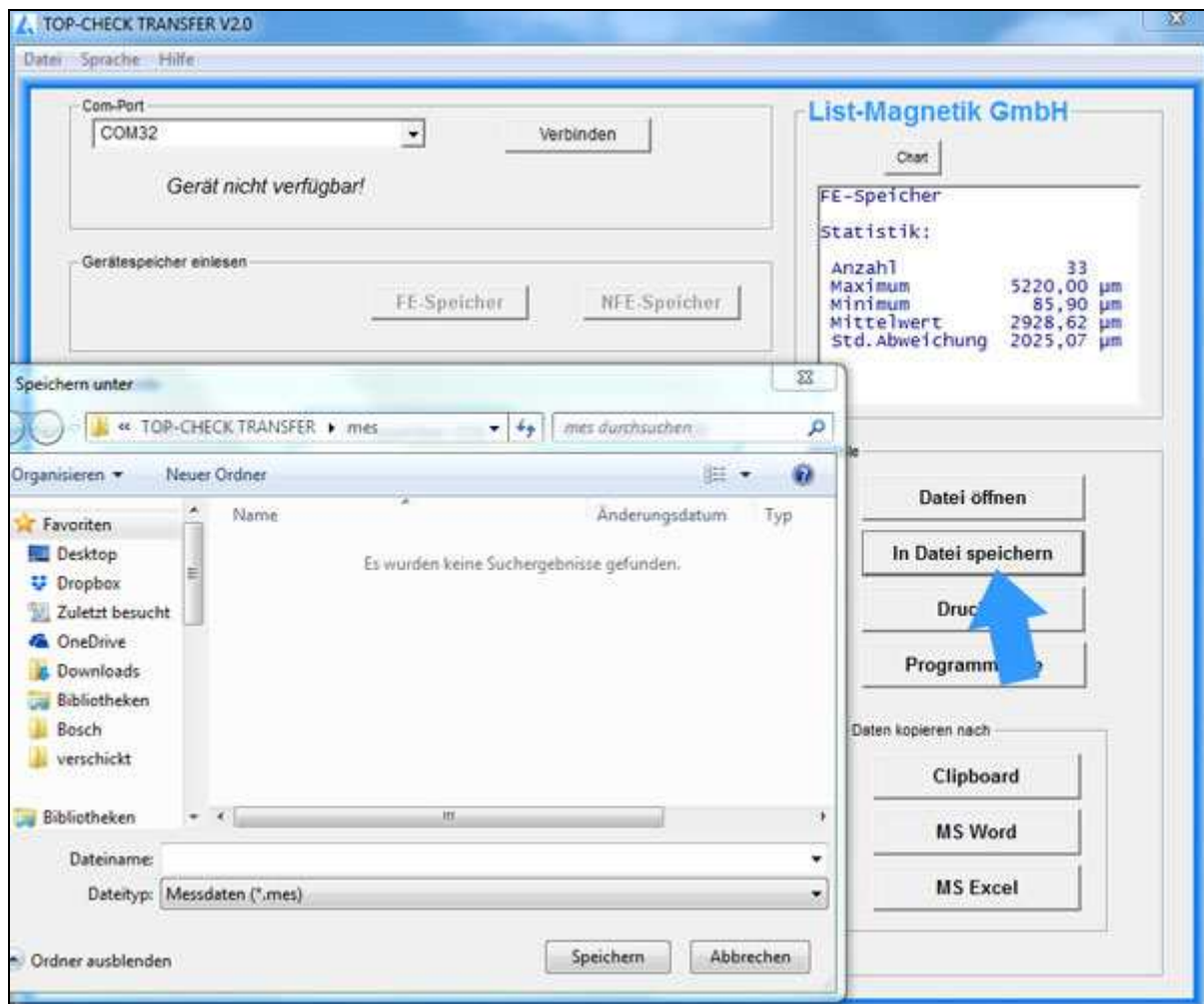
Example: Input of min limit = 40, max limit = 58.



Representation of the limits and the target in the line chart

OUTPUT: FILE, PRINTER, APPLICATIONS

The measurement series can be stored in a file.
Files of type ".mes" are readable with a text editor.



With the button "Open Data File" such a series of measurements can be read again from file, for example to print it or to transfer to Excel.

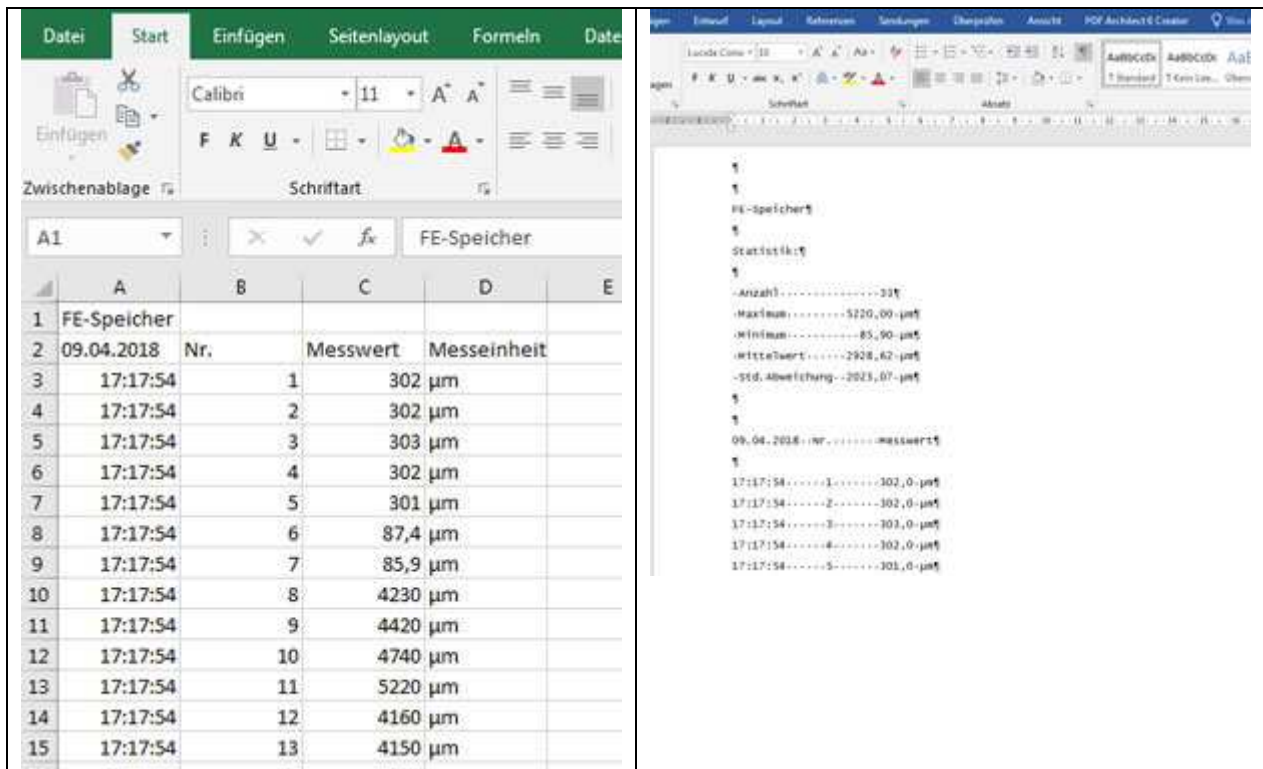
FE-Speicher		
Statistik:		
Anzahl		33
Maximum	5220,00	μm
Minimum	85,90	μm
Mittelwert	2928,62	μm
Std. Abweichung	2025,07	μm
09.04.2018		
	Nr.	Messwert
17:17:54	1	302,0 μm
17:17:54	2	302,0 μm
17:17:54	3	303,0 μm
17:17:54	4	302,0 μm
17:17:54	5	301,0 μm
17:17:54	6	87,4 μm
17:17:54	7	85,9 μm
17:17:54	8	4230,0 μm
17:17:54	9	4420,0 μm
17:17:54	10	4740,0 μm

Example of a print output via button **Print**

Via Clipboard you can hand over the measuring series to subsequent applications.

The Buttons **MS Word** and **MS Excel** only will work if the named Microsoft Office components are installed, but not with Open Office.

When transferring to Excel, you have the choice of outputting the data as a table or, in addition, graphically as a chart.



OPEN DATA FILE

With then "Open Data File" button you can read in a saved data file again.

For example, you can read in the automatically generated online measurement series after a cancellation.

LANGUAGE AND HELP

The language can be switched between German and English in the upper menu bar.

In the Help menu, the manual can be opened in PDF format.

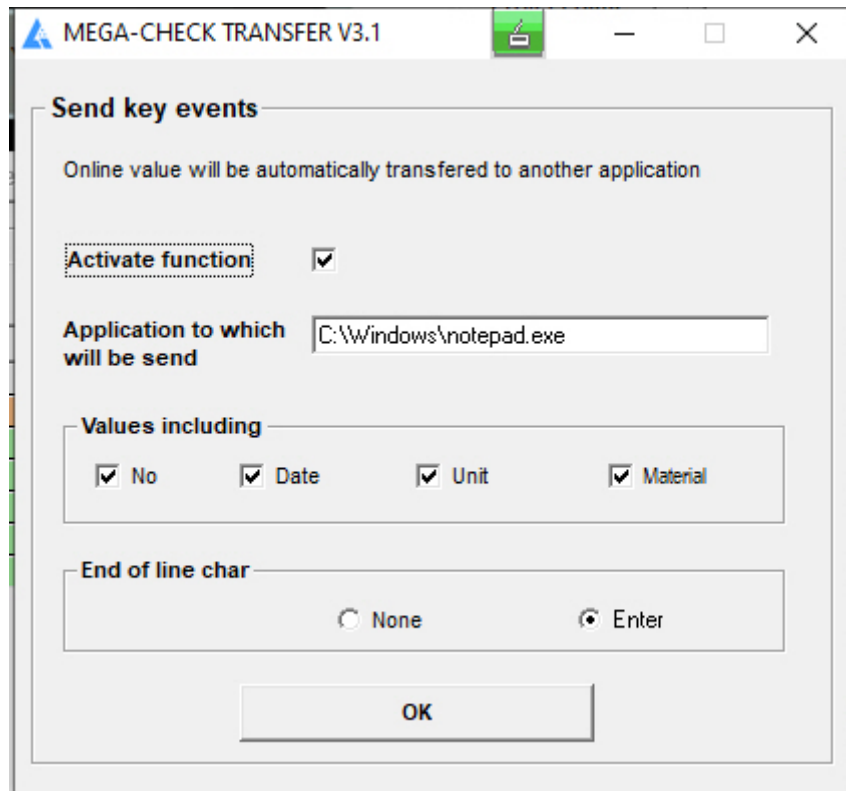
Under "Info" your device data (type, firmware version, MAC address) are visible.

KEYEVENTS

REALTIME DATA TRANSFER TO THIRD PARTY APPLICATIONS

With the "KeyEvents" function, an additional output can be made in real time to another application for online measurement. For example, this can be a CAQ system. The function can also be tested with the Windows text editor (notepad.exe).

To activate the function, select the "KeyEvents" tab in the header. An popup appears.



If you activate the function (by ticking the box), you must also select an application that is to receive the online data. To do this, look for the "EXE", the executable program on your PC.

With the output, you can transfer the number of the measured value, the measurement date, the measuring unit and the base material (FE / NFE). Make your choice by ticking the appropriate box. You can also select whether the entry is limited by a line feed or not.

Please note: The third-party application to which the data is transferred is started from MEGA-CHECK TRANSFER. It shouldn't be started before.