INSTALLATION GUIDE
USER MANUAL

TOP-CHECK TRANSFER

For TOP-CHECK FE-B and TOP-CHECK FN-B with firmware version 10.1 and up

Version 3.1 dated **2021-02**

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QM-System ISO 9001:2015 zertifiziert

CONTENTS

TOP-CHECK TRANSFER (2021-02)

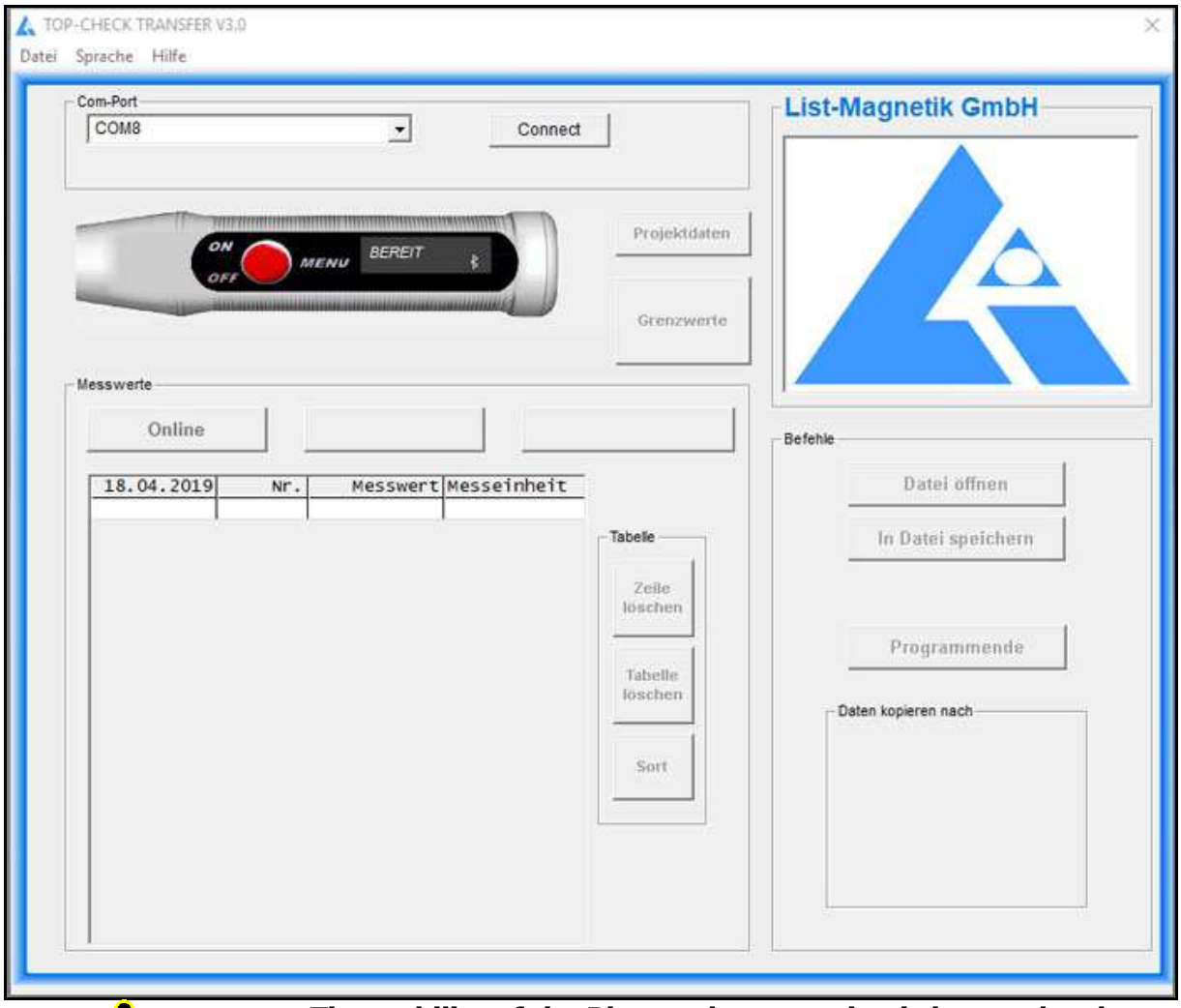
Version control

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\AppDat\Local to user\AppData\Roaming.

1. TOP-CHECK TRANSFER APPLICATION

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

With TOP-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.



The stability of the Bluetooth connection is better the closer you hold the device to the PC or Bluetooth dongle.

If you have connection problems, please shorten the distance to 30 cm.

2. PREPARING BLUETOOTH CONNECTION

Does your PC / laptop have a built-in Bluetooth interface?
If yes, skip point 2a and continue at 2b.

A) INSTALLATION OF THE BLUETOOTH USB DONGLE

For TOP-CHECK FE-B and TOP-CHECK FN-B a Bluetooth dongle is included as shown.

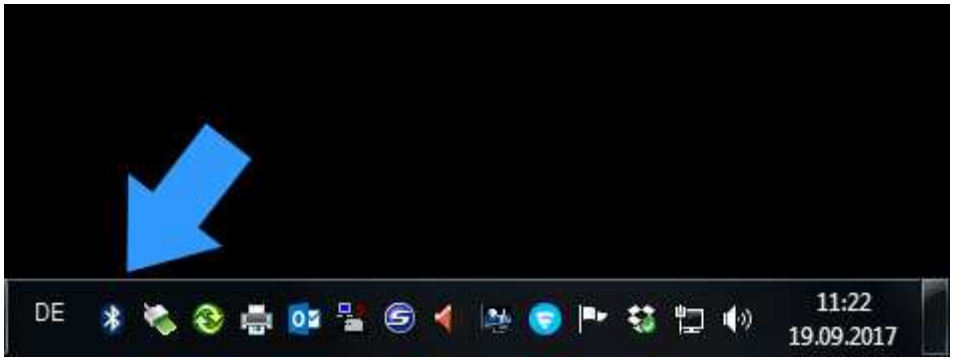
The additional installation of a driver software can be used for communication setup between TOP-CHECK and a Windows PC. Please check first, if the connection between TOP-CHECK and your PC via Bluetooth works without driver installation, only by inserting the Bluetooth dongle.
With Windows 10, it is easily possible without further installation.

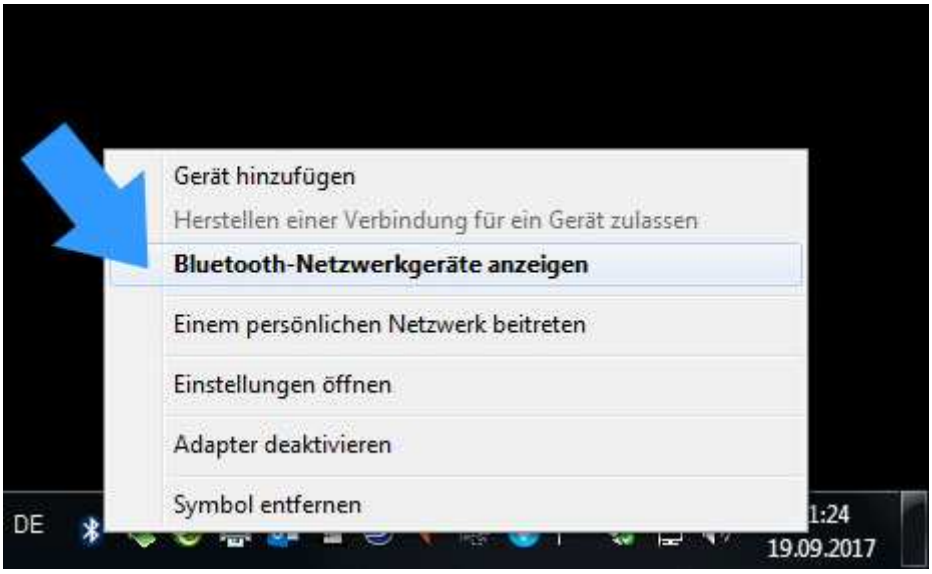
If you can't connect, perform the installation of the driver that can be obtained at **https://www.list-magnetik.com/en/download-en** . The file is named BCM20702 _..., depending on the version of your Windows operating system. It is available for Windows XP, Win 7 or Win 8.

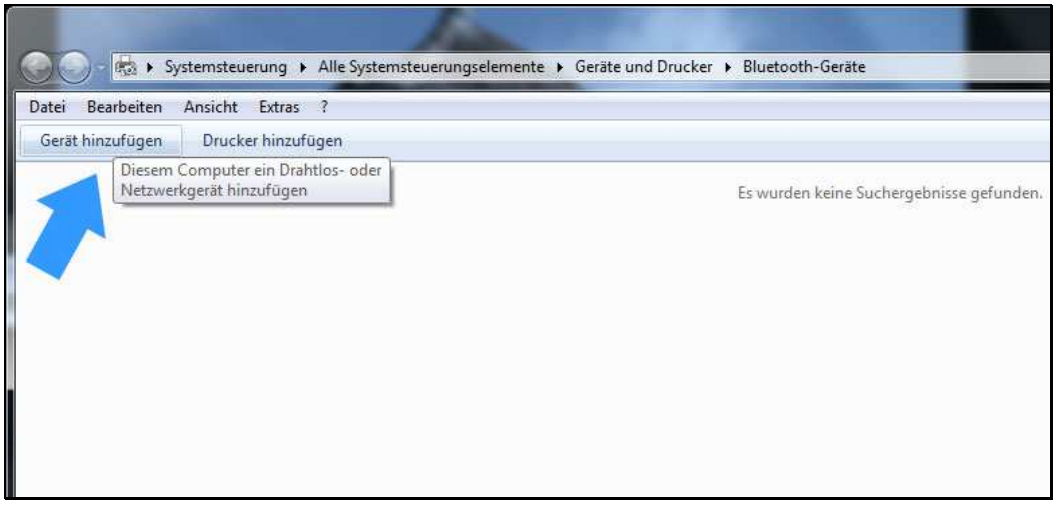
B) PAIRING TOP-CHECK

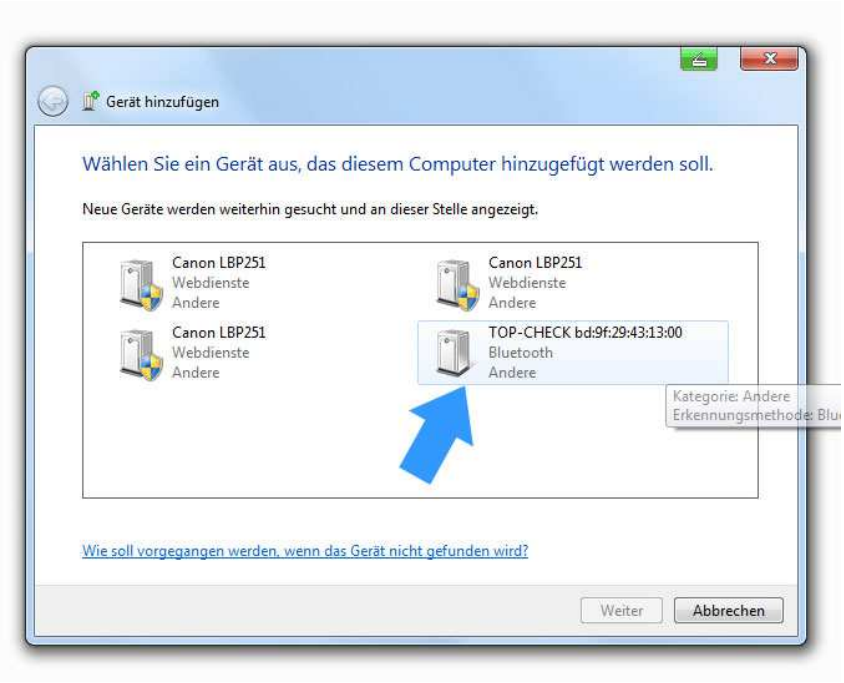
Your TOP-CHECK device must be paired with the PC.

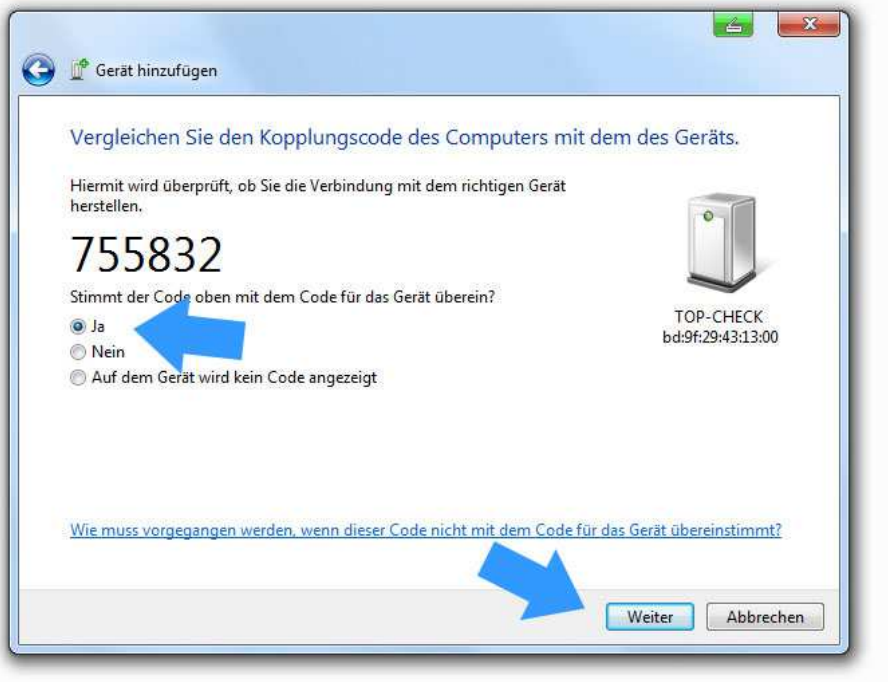
For this purpose, the coupling must be executed on both devices.
The function **SETUP / BLUETOOTH / ON** must be executed at the device, and afterwards a device search in the Bluetooth menu on the PC.







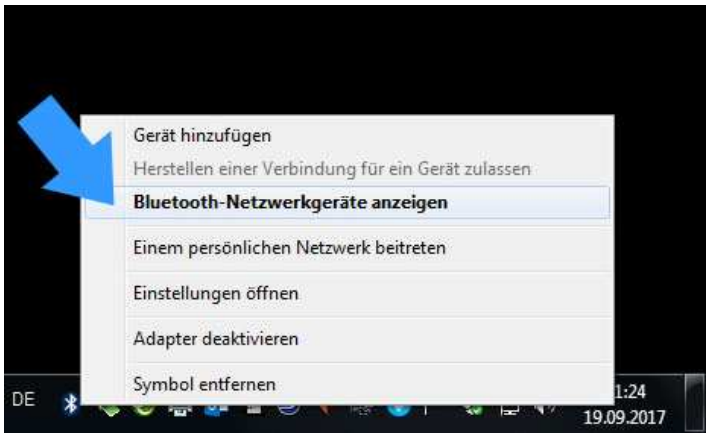




On the PC, the identified device must be selected, and the coupling request must be confirmed. An identification number is shown, which you can confirm but ignore.

DETECTING THE COM-PORT FOR BLUETOOTH

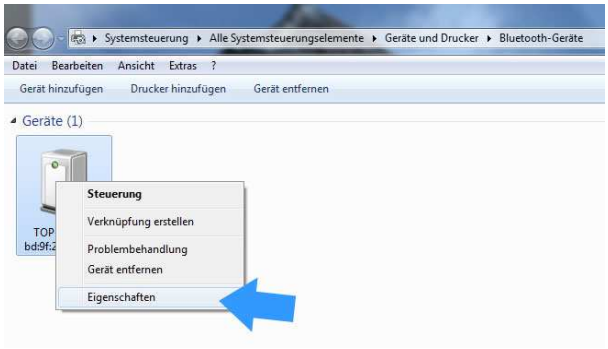
After successful coupling, TOP-CHECK is assigned to a so-called COM Port. This assignment remains permanent. Before starting the application TOP-CHECK TRANSFER, you must know the number of this port.

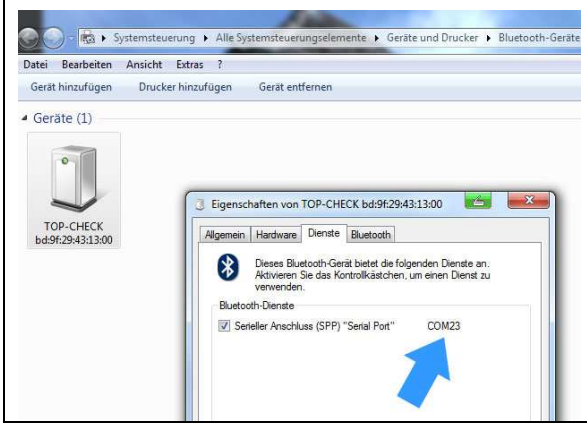


To do this, please determine the assigned COM port number in the Bluetooth device menu. You need to know this at the start of the application TOP-CHECK TRANSFER.

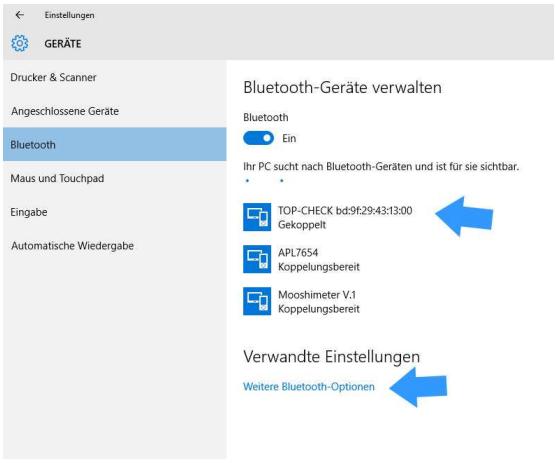
For Windows 10, 2 COM ports are displayed, take the "outbound" number.

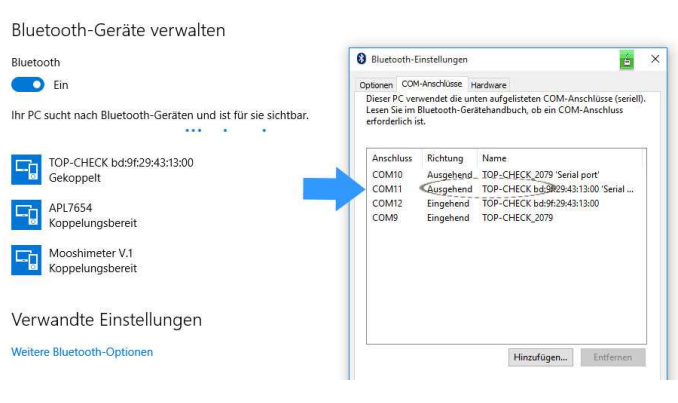
Windows 7





Windows 10





3. INSTALLING THE APPLICATION

The installation package is called „TOP-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\TOP-CHECK TRANSFER
Constant program components

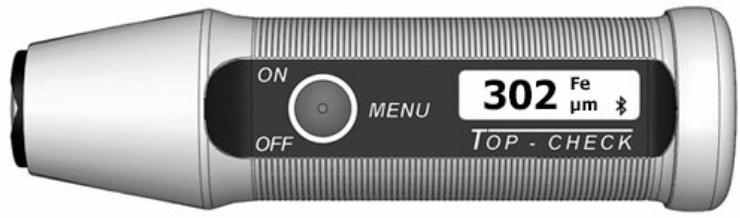
C:\ProgramData\List-Magnetik\TOP-CHECK TRANSFER
C:\Users\<>\AppData\Local\VirtualStore\ProgramData\List-Magnetik \TOP-CHECK TRANSFER
User-used and modified configuration data (COM port, language, limits, project data) and this manual

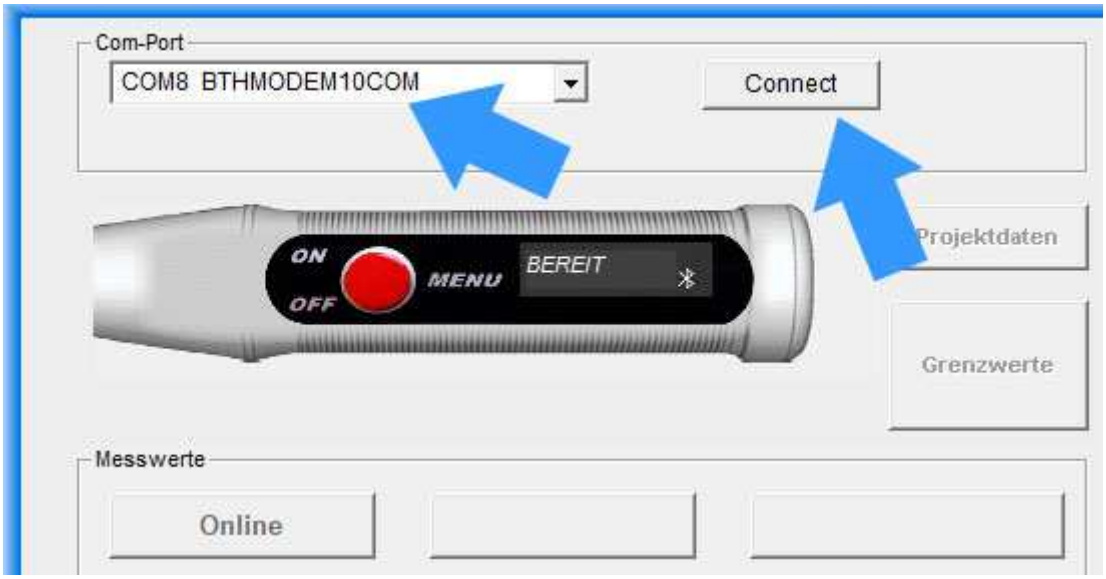
C:\Users\<>\AppData\Roaming\List-Magnetik\TOP-CHECK TRANSFER
User created measurement series
Specification of the label of the project data

4. FUNCTIONS

STEP 1: CONNECT

To connect, you need the number of the COM port that you detected in chapter 2. Your TOP-CHECK must be switched on, and Bluetooth must be active in TOP-CHECK. You can see it: the Bluetooth indicator at the bottom right.

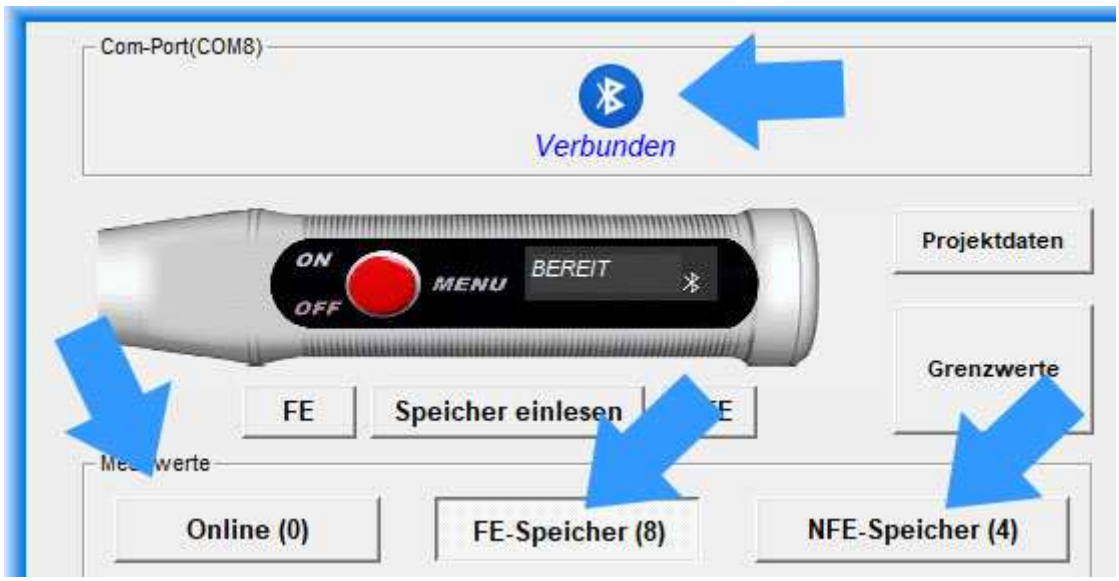




After successful connection, the description changes to "Connected" and the selection box for the COM port becomes invisible. The selected and connected COM port is now shown in the frame headline. This selected port is retained for the next program call even after the program has finished.

The device storage is read directly after establishing the connection. It is automatically detected, whether it is a TOP-CHECK FE-B or a TOP-CHECK FN-B, and the names of the memories (FE Memory 1 / FE Memory 2 or FE Memory / NFE Memory) are shown in the column headers.

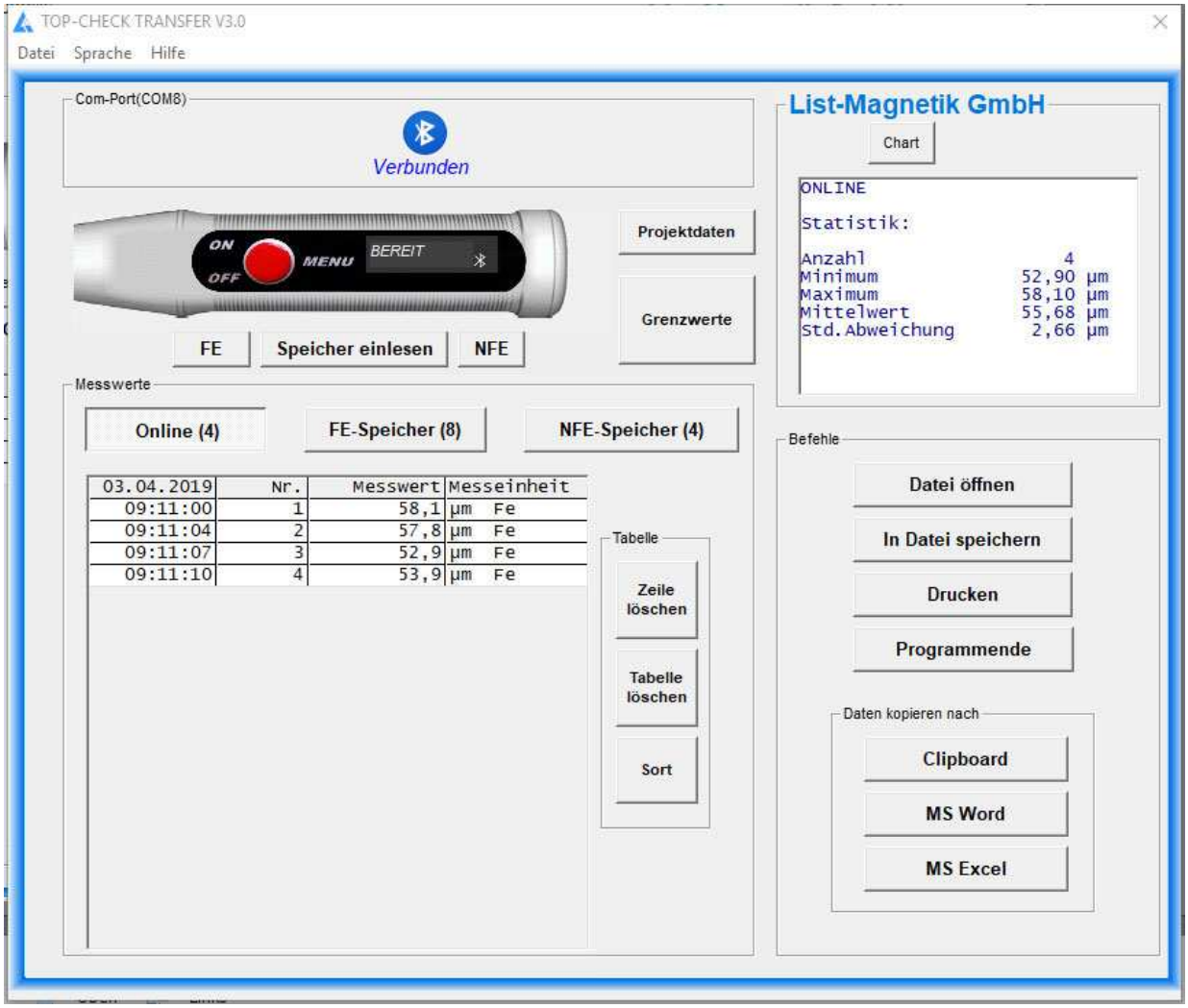
The leftmost of the 3 buttons above the table is shown as "Online"

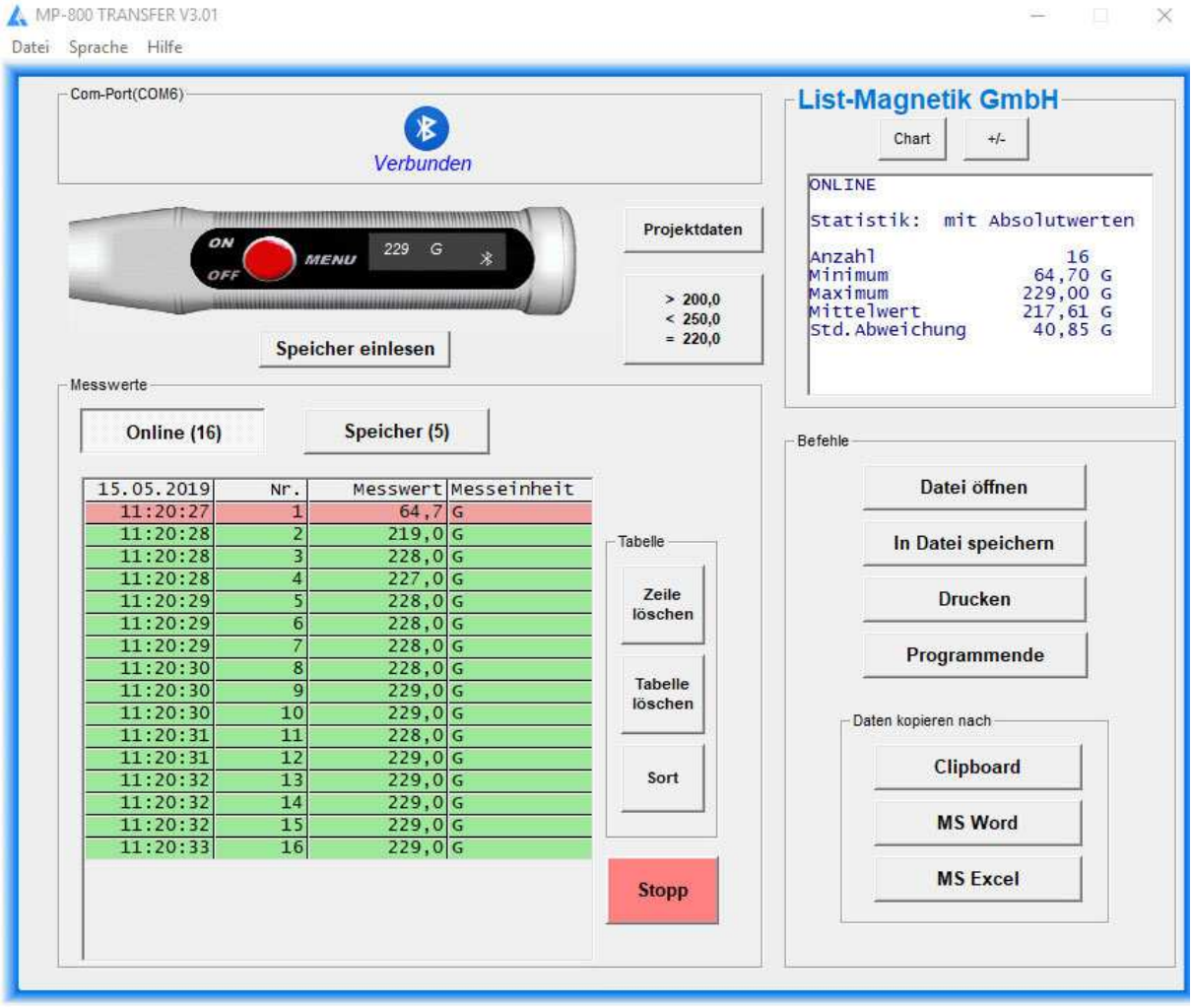

Com-Port(COM8)
Verbunden
ON
OFF
MENU
BEREIT
Projektdaten
Grenzwerte
FE
Speicher einlesen
Online (0)
FE-Speicher (8)
NFE-Speicher (4)

MEASURING ONLINE

Now you can start your work.

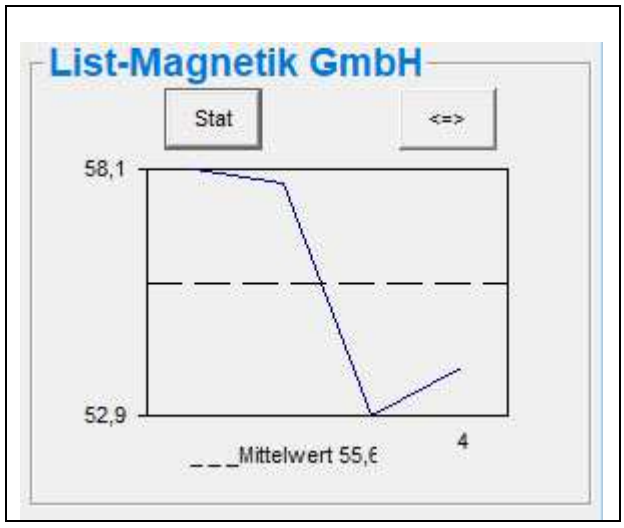
For example, you can directly perform online measurements.
To do this, click on the "Online" button on the left above the measured value table.



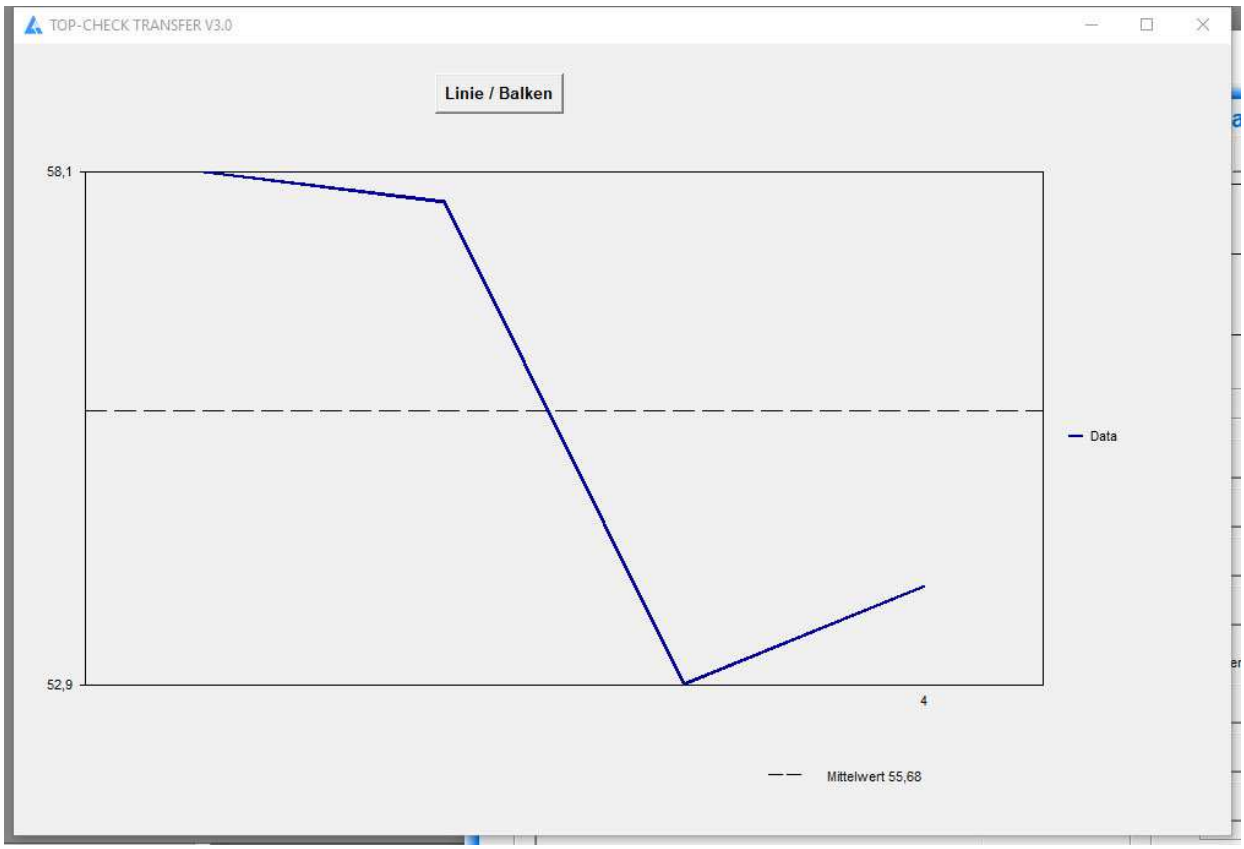


Statistical values are automatically generated from the second measurement: Minimum, Maximum, Average (Mean) and Standard Deviation.
Note: The Standard Deviation is calculated with (n-1).

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.

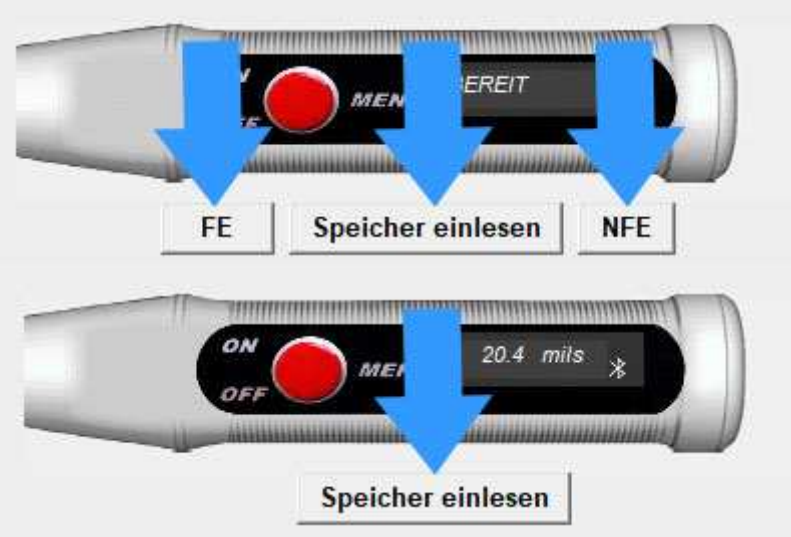


Note:

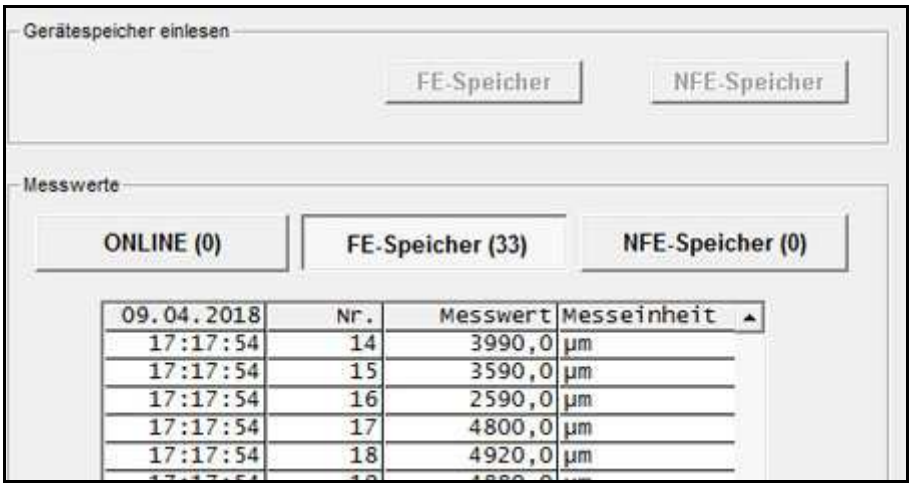
The online measurement series is saved in a separate file "online.mes". If you experience problems during the measurement, e.g. you get a program crash, you can load your measurement data from this file again. See chapter "Open file".

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 them again at any time, either one of the two memories (FE / NFE) individually, or both together.



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

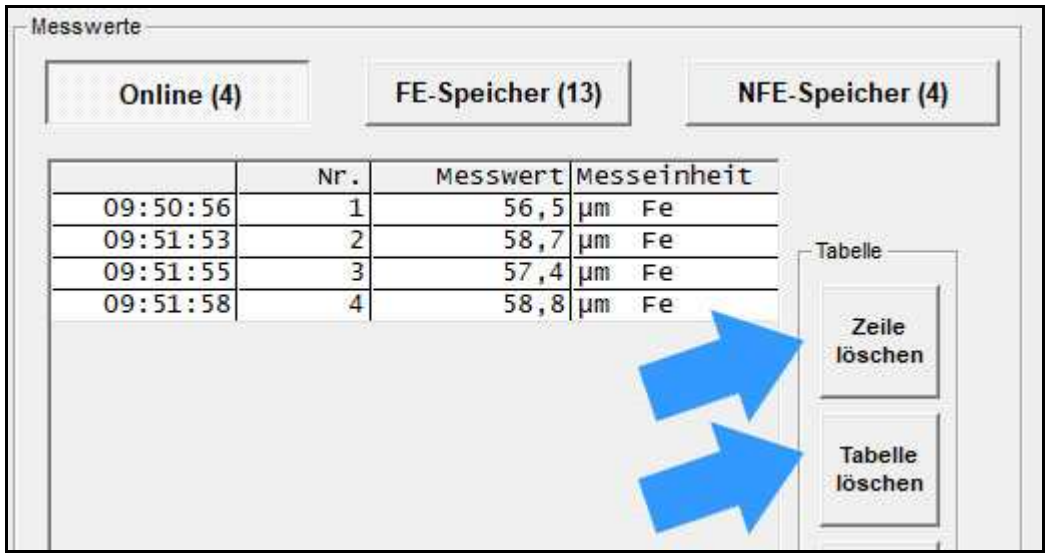


Once the measurement series has been read, the buttons are active again and the statistical data is filled.

DELETE TAB, DELETE ROWS

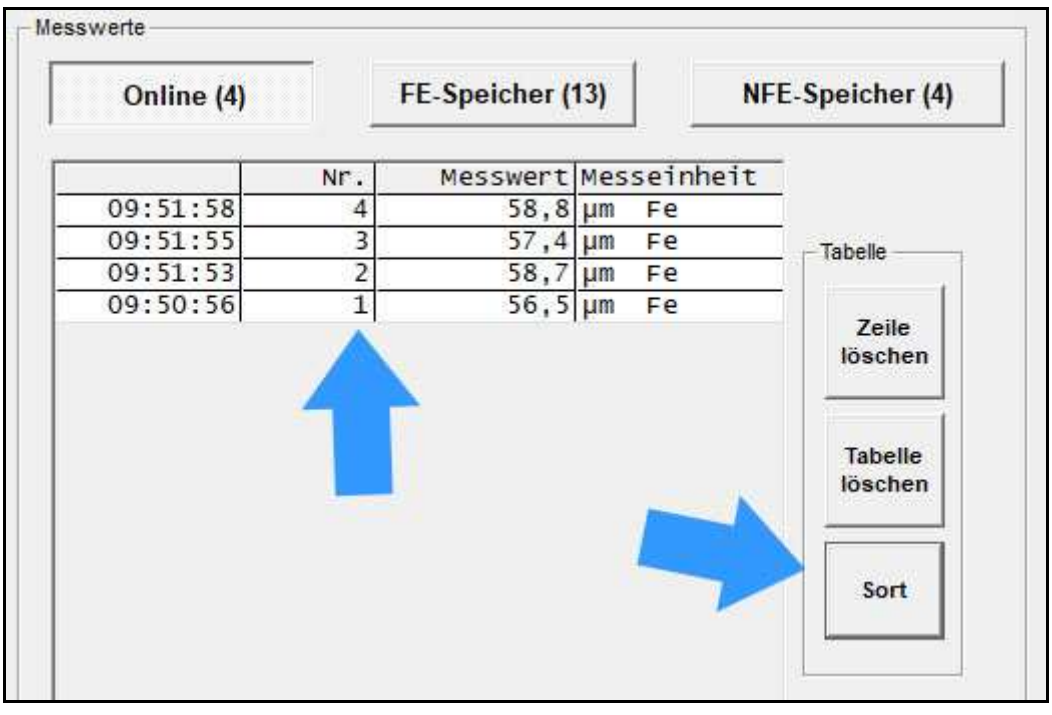
The table of measured values can either be completely deleted or individual lines can be displayed. The statistics will be automatically corrected afterwards.

Note:
The data in the device will not be deleted.
By reading again from the device, the deleted values are added again.



SORT TABLE

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



PROJECT DATA

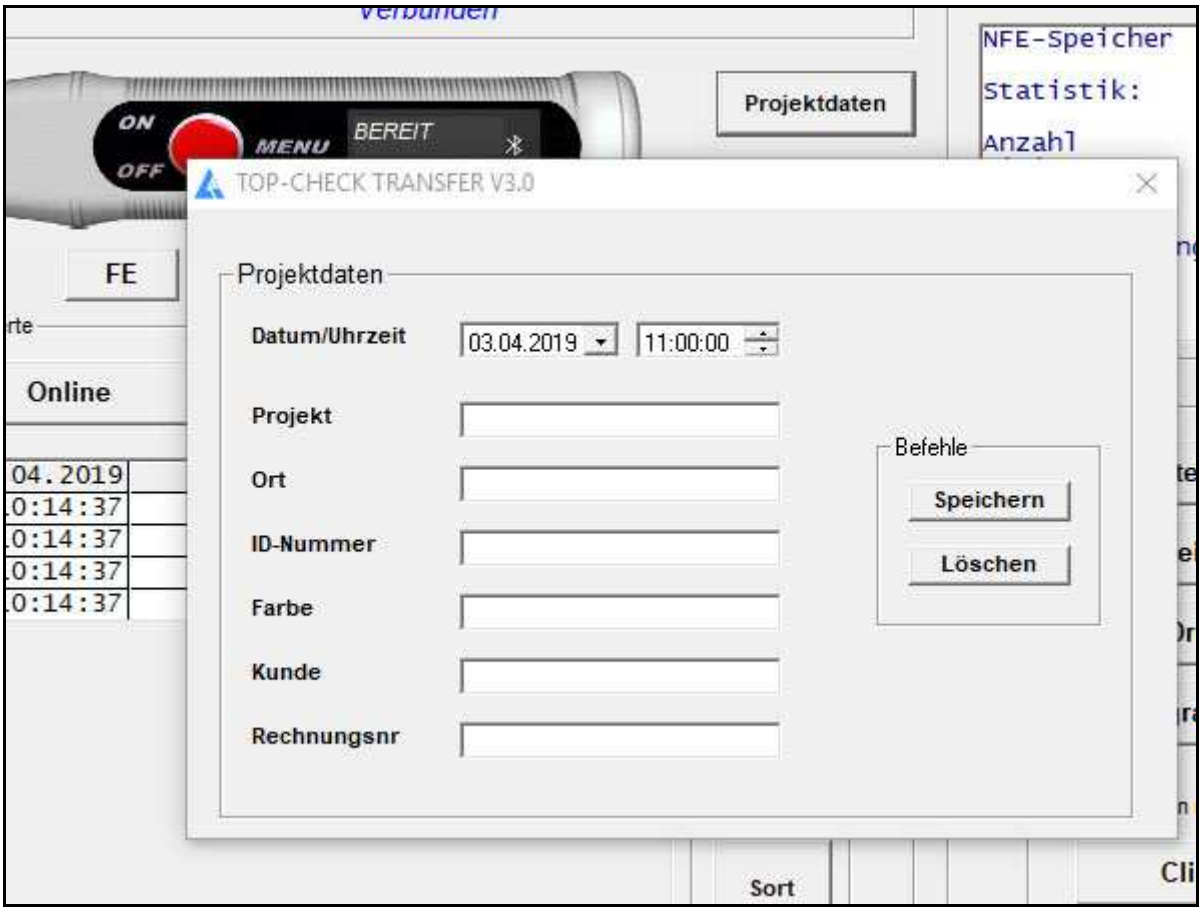
TOP-CHECK TRANSFER allows you to edit project data for a measurement series. This project data will then be provided during printing, when transferring to Microsoft Word or Microsoft Excel, so that you can document the series of measurements.

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\<Your Name>\AppData\Roaming\List-Magnetik\TOP-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.;
```



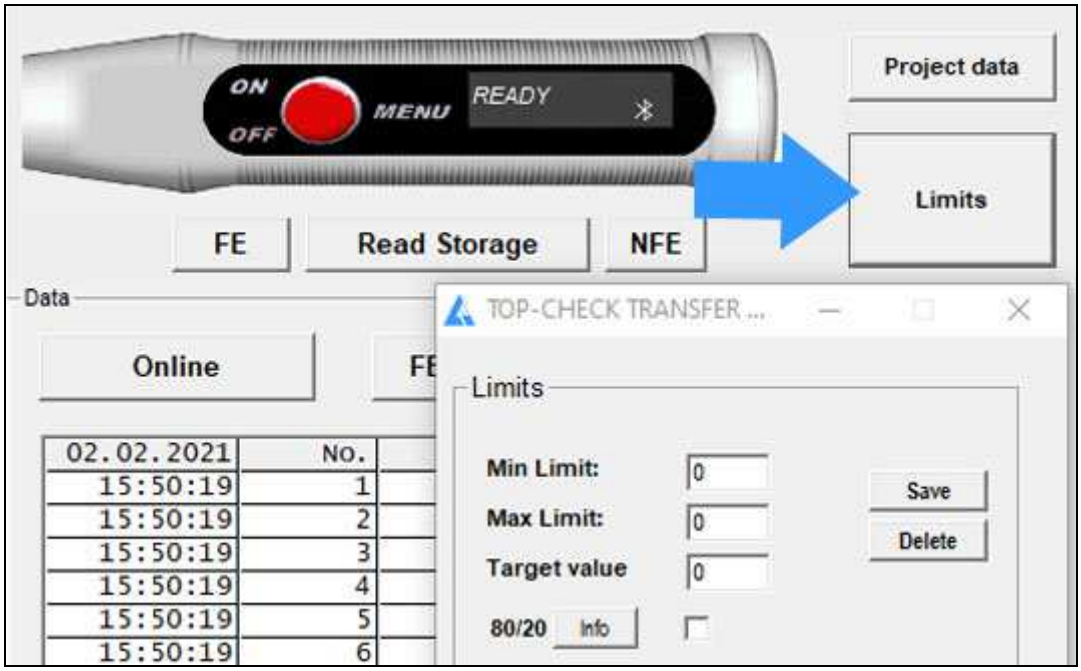
LIMITS, 80/20 RULE

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).

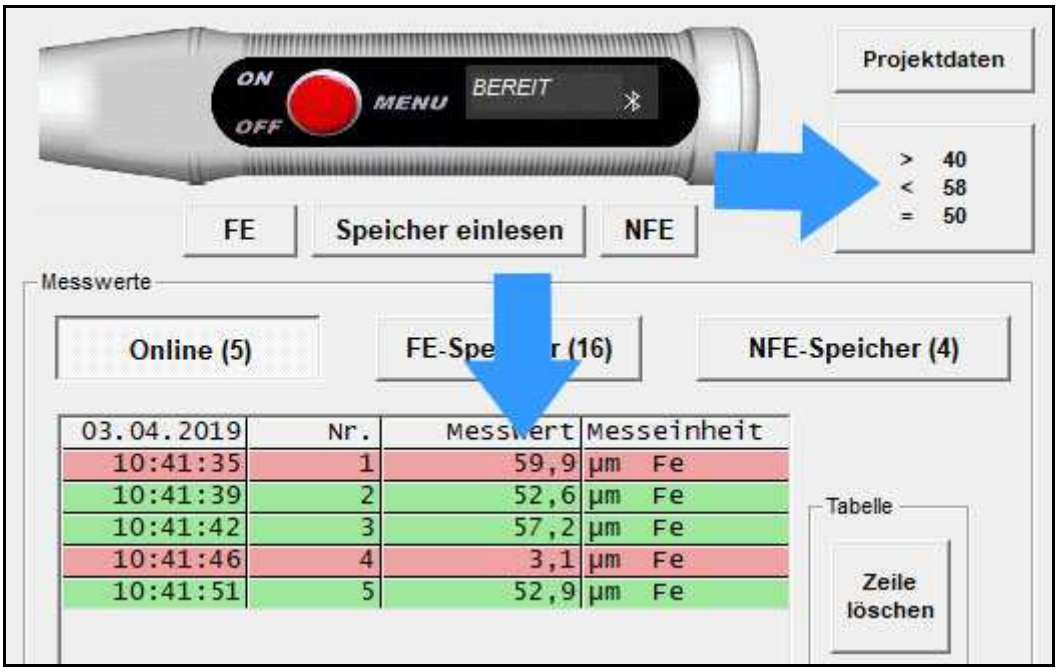
The implementation of the 80/20 rule according to ISO 19840 (Corrosion protection of steel structures by protective paint systems) can be switched on and off separately. If the 80/20 rule is applied, the minimum limit is automatically set to 80% of the target.

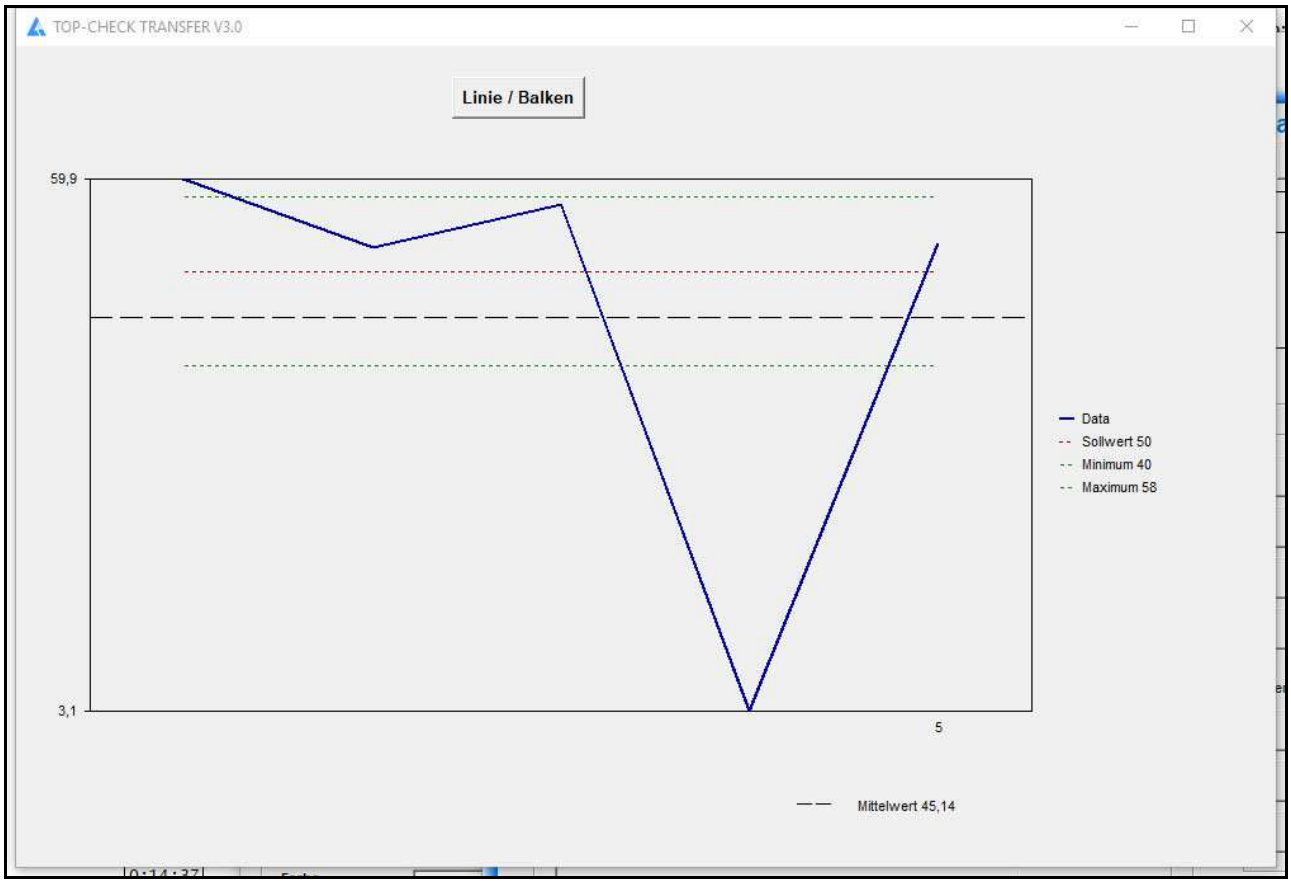
As a result, the color orange is then used for measured values in the corridor between the minimum limit (80%) and the target value (100%). An evaluation is carried out in the statistics window. The series of measurements is "OK" if (every single point must be fulfilled)

- 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

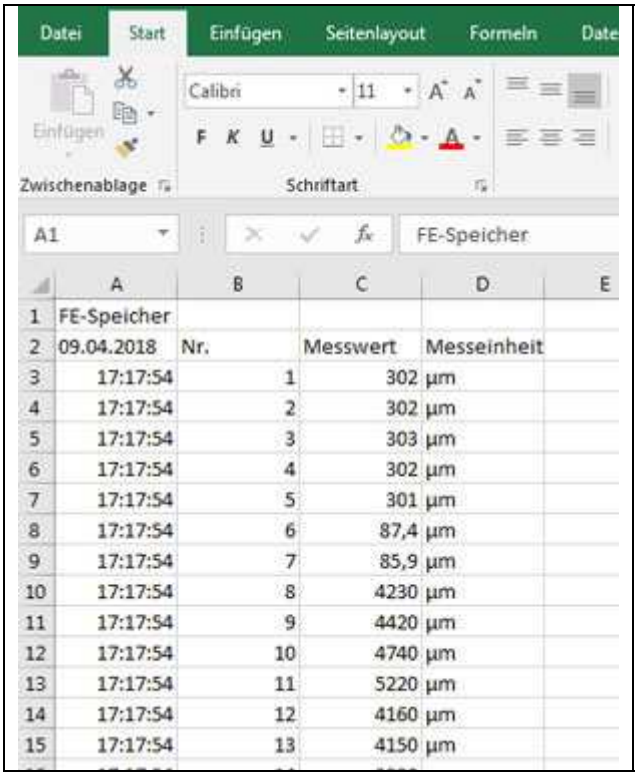
09.04.2018	Nr.	Messwert
17:17:54	1	302,0 µm
17:17:54	2	302,0 µm
17:17:54	3	303,0 µm
17:17:54	4	302,0 µm
17:17:54	5	301,0 µm
17:17:54	6	87,4 µm
17:17:54	7	85,9 µm
17:17:54	8	4230,0 µm
17:17:54	9	4420,0 µm
17:17:54	10	4740,0 µm

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

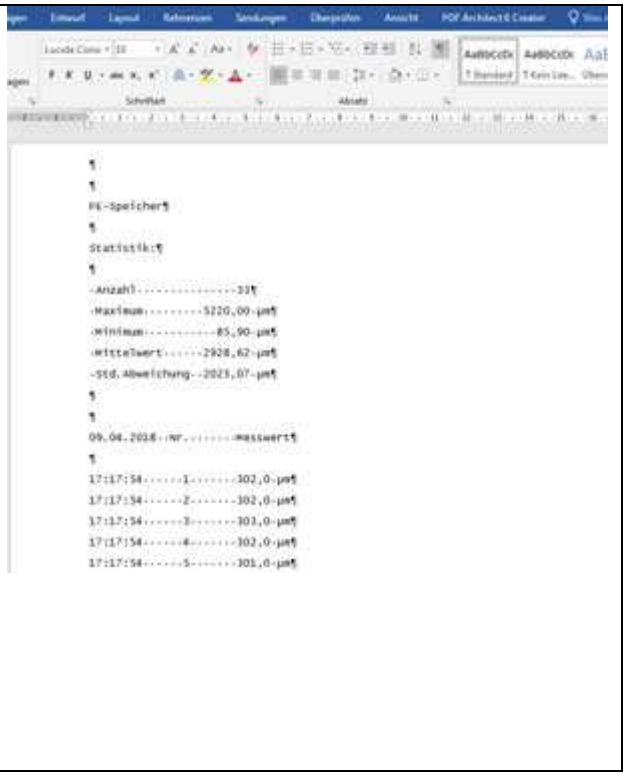
Via Clipboard you can hand over the measuring series to subsequent applications.

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.



	A	B	C	D	E
1	FE-Speicher				
2	09.04.2018	Nr.	Messwert	Messeinheit	
3	17:17:54	1	302	µm	
4	17:17:54	2	302	µm	
5	17:17:54	3	303	µm	
6	17:17:54	4	302	µm	
7	17:17:54	5	301	µm	
8	17:17:54	6	87,4	µm	
9	17:17:54	7	85,9	µm	
10	17:17:54	8	4230	µm	
11	17:17:54	9	4420	µm	
12	17:17:54	10	4740	µm	
13	17:17:54	11	5220	µm	
14	17:17:54	12	4160	µm	
15	17:17:54	13	4150	µm	



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.

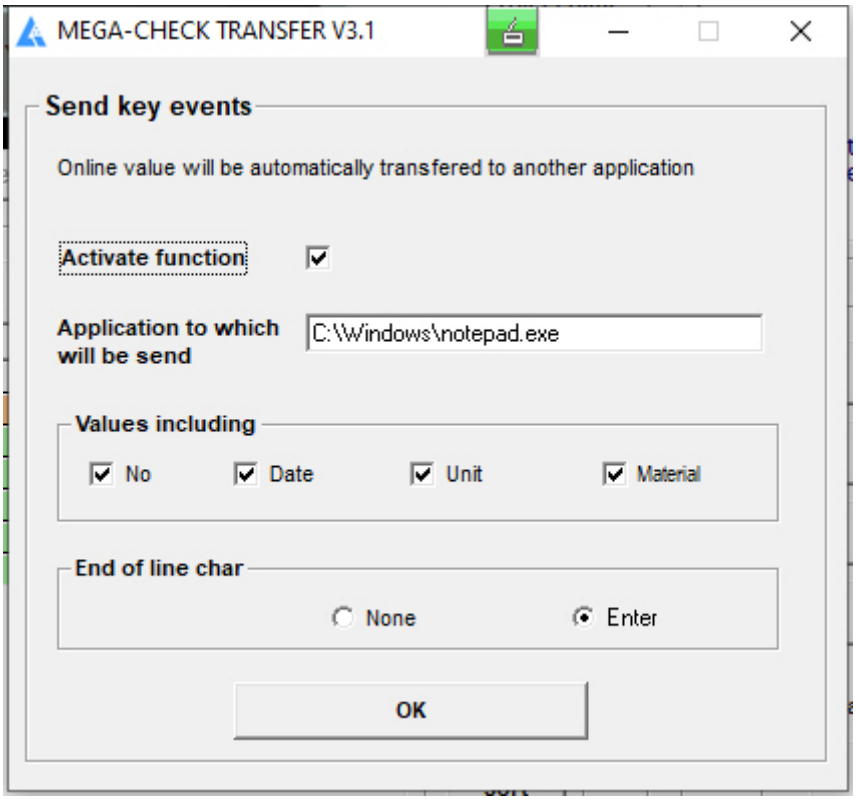
Under "Info" your device data (type, firmware version, MAC address) are visible.

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 TOP-CHECK TRANSFER. It shouldn't be started before.