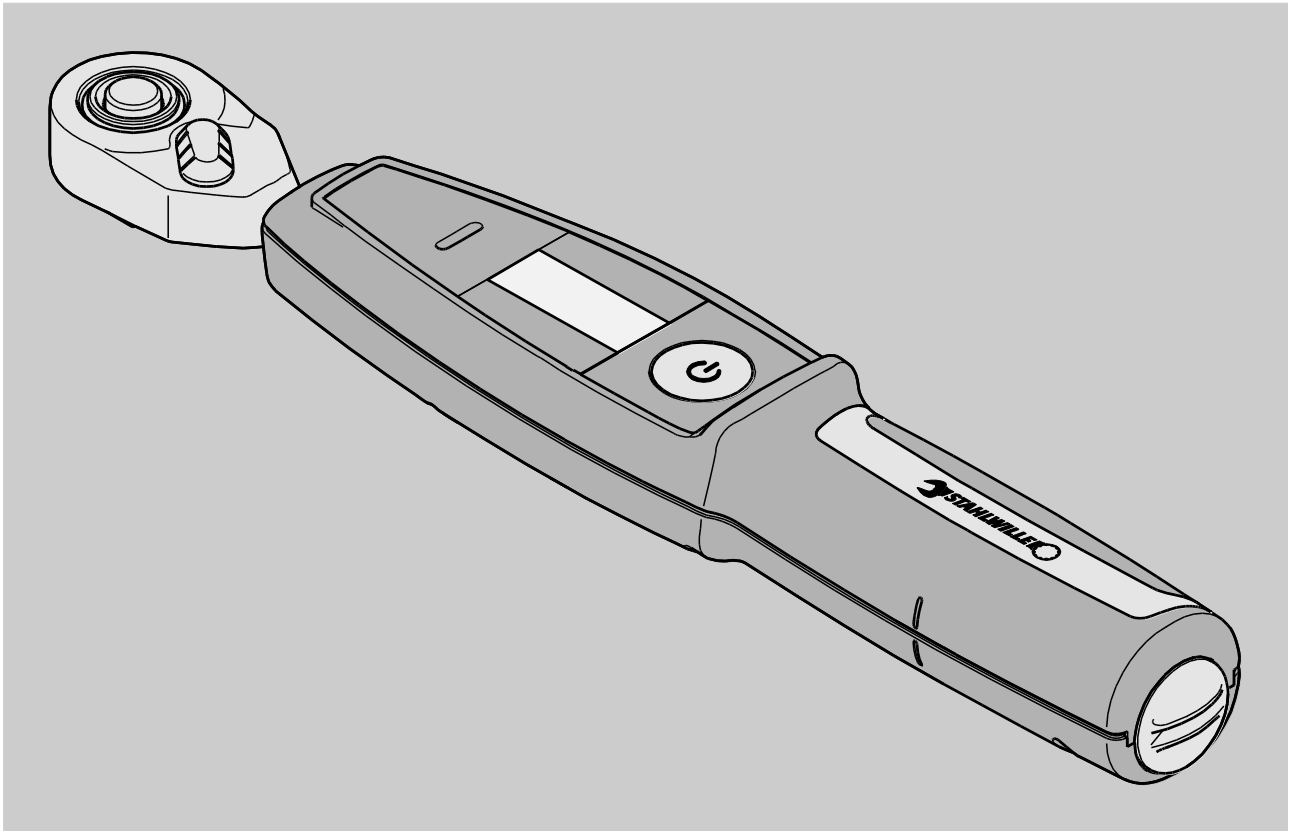


Electronic torque wrench

701



English version of original German operating instructions

for operators

9/2016

Always store these operating instructions together with the torque wrench at the operating location. Make sure that the operating instructions are available to the operators. Read and comply with the operating instructions.

Non-observance can lead to injuries.

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Introduction to the operating instructions

These operating instructions help you to use the electronic torque wrench 701 properly, safely and economically. The electronic torque wrench 701 will be referred to as torque wrench in the following.

These instructions are aimed at the operators of the torque wrench. We assume that these users possess general technical knowledge. In particular, these instructions are aimed at customer service installation engineers, trained specialist personnel and qualified and authorised operating personnel.

Each person who undertakes the following activities with and on the torque wrench must have read and understood the contents of these instructions:

- Transportation
- Usage
- Cleaning
- Maintenance or
- Disposal.

Compliance with these instructions helps to avoid dangers and to increase the reliability and service life of the torque wrench. In addition to the notes contained in these instructions, also always observe the legal and other regulations applicable at the installation location, such as e.g.:

- Accident prevention regulations
- Regulations for safe and proper work.
- Regulations on environmental protection.

Supplements

Regularly supplement the operating instructions at the relevant point of use with instructions based on

- Legal regulations concerning accident prevention,
- Legal regulations concerning environmental protection and
- Trade association stipulations.

Availability

These operating instructions form part of the torque wrench. You must always keep a complete and legible copy of the instructions at the location at which the torque wrench is used. Make sure that the instructions are available to the user. Enclose these instructions if you sell the torque wrench or pass it on in any other manner.

These operating instructions can also be downloaded from the "www.stahlwille.de" website.



Structural features

Defined structural features are assigned to the various elements within the operating instructions. You can therefore easily determine the type of text which this involves:

Normal text,

- Lists or

➤ Action steps.

i Notices with this symbol contain general information and information regarding the economical use of the torque wrench.

Manufacturer's address

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D-42349 Wuppertal

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E-mail: support@stahlwille.de

Internet: www.stahlwille.de

Safety

Proper use, operating area

The electronic torque wrench 701 is used for measuring torque values during the controlled tightening and release of threaded connections in the workshop area. To do this, an appropriate socket must be connected to the torque wrench.

Never exceed the maximum limit torque of 125 % of the nominal value.

Proper use additionally includes:

- Compliance with all of the notices contained in these operating instructions, particularly the safety instructions
- Observance of and compliance with the relevant accident prevention regulations of the responsible trade association and all other applicable safety regulations .

Any other use is regarded as improper.

EDUARD WILLE GMBH & CO. KG accepts no liability for damage arising as a result of this.

Basic safety instructions

The torque wrench is a precision tool and must accordingly be handled with care. Avoid mechanical, chemical or thermal influences which exceed the stresses involved in proper use.

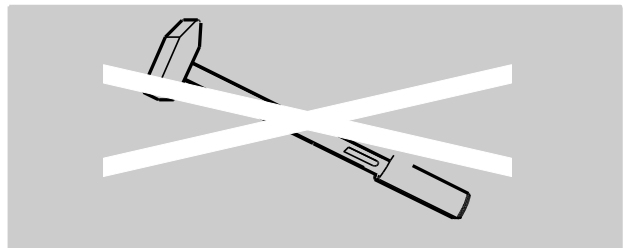


Make sure that extreme climatic conditions such as cold, heat and humidity are unable to influence accuracy.

Do not overload the torque wrench. Adhere to the measuring range data on the model plate under all circumstances. The torque wrench may otherwise be damaged.

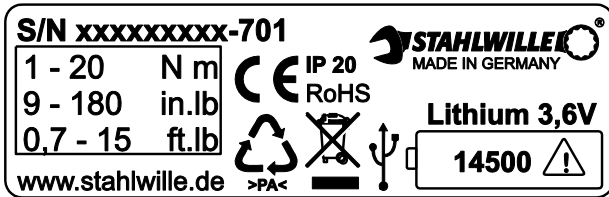
Avoiding risks of injury

- Do not use the torque wrench as an impact tool.



- Check the torque wrench and all accessories for damage prior to use. Never use a damaged torque wrench or damaged accessories.
- Batteries and small parts such as e.g. bits must be kept out of the reach of children. Children may put these into their mouths and swallow them.
- Never expose the torque wrench to rain, moisture or other fluids. Ingressing fluids can cause incorrect measured values and therefore unsafe threaded connections.
- Do not use the torque wrench in aggressive atmospheres. An ingressing aggressive atmosphere can cause incorrect measured values and therefore unsafe threaded connections.

- Never exceed the maximum limit torque of 125 % of the nominal value. Observe the specifications on the type plate.



Avoiding damage to the torque wrench

- Do not use the torque wrench as an impact tool.
- Check the torque wrench and all accessories for damage prior to use. Never use a damaged torque wrench or damaged accessories.
- Do not overload the torque wrench. Excessive or permanent overloading may lead to damage to the torque wrench.
- Never expose the torque wrench to rain, moisture or other fluids. Ingressing fluids can cause incorrect measured values and therefore unsafe threaded connections.
- Do not use the torque wrench in aggressive atmospheres. An ingressing aggressive atmosphere can cause incorrect measured values and therefore unsafe threaded connections.
- Do not allow any foreign bodies to enter the torque wrench housing. Always cover the PC connection socket when not in use.
- Do not use the torque wrench for the uncontrolled release of threaded connections which are e.g. rusted tight.
- Never exceed the maximum limit torque of 125 % of the nominal value.
- Never open the torque wrench housing.
- Make sure that all inserts and connectors which are used are firmly connected and correctly inserted.
- Leaking batteries can cause damage to the torque wrench. If the torque wrench is not used for a long time, remove the battery.

Avoiding malfunctions

- Check the device's accuracy at regular intervals, see page 24.
- Do not overload the torque wrench. Excessive or permanent overloading may lead to torque wrench measuring errors.
- Never exceed the maximum limit torque of 125 % of the nominal value.
- Do not kink the cables and connectors, and never expose these to excessive tensile forces or temperatures.
- Make sure that all inserts and connectors which are used are firmly connected and correctly inserted.

Environmental pollution due to incorrect disposal

- Dispose of cleaning agents and lubricants according to the regulations applicable at the operating location.
- Dispose of the torque wrench according to the regulations applicable at the operating location.

Handling batteries

- Batteries may contain poisonous substances which pollute the environment.
- Batteries must be kept out of the reach of children. Children may put these into their mouths and swallow them.
- Leaking batteries can cause damage to the torque wrench. If the torque wrench is not used for a long time, remove the battery. If a battery has leaked, put on protective gloves and clean the battery compartment with a dry cloth.
- Exchange a weakening battery in good time.
- Do not charge batteries.
- Always dispose of batteries according to the applicable legal regulations.
- Only use batteries which correspond to the data in the chapter entitled "Technical data".

Environmental conditions

Use the torque wrench at a temperature of 0 °C to +40 °C. At temperatures below +10 °C, the torque wrench battery control facility is no longer effective. Shut-off at low battery level is not active. However, the torque wrench can be used. The relative humidity must be 20-75 %, non-condensing.

Transport and store the torque wrench at a temperature of -10 °C to +40 °C. The relative humidity may be 20-75 %, non-condensing.

Duties on use of the torque wrench

Duties of the owner

The owner is obliged only to allow the following persons to work with the torque wrench:

- Persons who are familiar with the basic regulations concerning industrial safety and accident prevention, and who have been trained in using the torque wrench.
- Persons who have read and understood the chapter on safety and the warning notices contained in these instructions, and have confirmed this with their signature,
- Persons who are familiar with and have understood the requirements for calibrating torque wrenches.

Responsibility for the properly executed calibration and adjustment of torque wrenches is borne by the owner or user.

Duties of the personnel

All persons who work with the torque wrench must meet the following obligations:

- They must be familiar with and adhere to the basic regulations concerning industrial safety and accident prevention,
- They must have read and adhere to the chapter on safety and the warning notices contained in these instructions. They must have confirmed this with their signature.

Personnel training

- Only personnel which has been trained, familiarised and authorised by the owner may work with the torque wrench.
- Personnel undergoing on-the-job training may only work with the torque wrench under the supervision of an experienced person.
- The personnel must have knowledge of the operation of a PC and the software installed on it.
- The personnel must be familiar with the dangers which arise due to incorrect use of torque tools. In particular, they must be aware of the risks which can occur due to incorrect torque values.

Explanation of the warning notices

The following categories of notices are contained in these operating instructions:



WARNING

Notices containing the word **WARNING** warn of hazards which may possibly lead to severe or fatal injuries.



CAUTION

Notices containing the word **CAUTION** warn of hazards which may possibly lead to minor to moderate injuries.

Explanation of the notices referring to property damage

ATTENTION

Notices containing the word **ATTENTION** warn of hazards in which property damage may possibly occur.

Transportation, delivery, storage

Only transport the torque wrench in the original packaging and secure it against being dropped during transportation.

The torque wrench scope of delivery includes:

- One electronic torque wrench
- One plastic case
- One lithium battery, 3.6 V, type 14500
- One factory calibration certificate
- One quick guide
- One micro USB cable

Transport and store the torque wrench at a temperature of

–10 °C to +40 °C. The relative humidity may be 20–75 %, non-condensing.

Description

The electronic torque wrench 701 is used for measuring torque values during the controlled tightening and release of threaded connections in the workshop area. To do this, an appropriate socket must be connected to the torque wrench.


The torque wrench is an adjustable, displaying, electronic torque wrench with display. It corresponds to ISO classification type I, class C.

Device characteristics

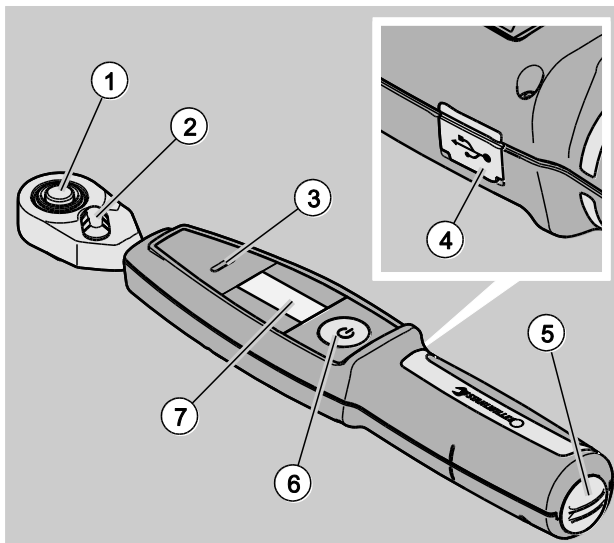
Characteristics of the torque wrench:

- Black/white graphical display with LEDs arranged alongside
- SENSOMASTER software for configuring the torque wrench and for exporting the data including
- Three function modes
 - Track (display mode with momentary value display)
 - Peak (display mode with peak value display)
 - User (execution of defined bolting type, in combination with the SENSOMASTER software only)
- Micro USB interface
- Bayonet lock for battery compartment
- Data storage (≤ 2500 bolting processes)
- Adjustable tolerances (with user function mode in combination with the SENSOMASTER software only)
- Acoustic and optical evaluation of the bolting type (with user function mode in combination with the SENSOMASTER software only)
- Values and parameters are stored electronically.
- Overload protection through acoustic, tactile and optical warning signal
- Automatic indication of the next calibration date according to time and/or number of cycles (optionally available in combination with the SENSOMASTER software, not active on delivery)
- Calibration and adjustment with the following STAHLWILLE calibration and adjustment facilities:
 - perfectControl® 7794-1
 - perfectControl® 7794-2
 - perfectControl® 7794-3
 - Manutork® 7791
- Various units can be set (N·m, cN·m, ft·lb, in·lb).
- After relieving the torque wrench, it is immediately functional again

- Tightening to the right and left is possible.
- The torque is shown on the display.
- Measurement is carried out irrespective of the force application point.
- Safe handling thanks to an ergonomically shaped handle. The correct gripping position can be seen and felt

 Various functions and settings are only possible in combination with the enclosed SENSOMASTER software. Notes on operating and using the SENSOMASTER software can be found in the separate software instructions.

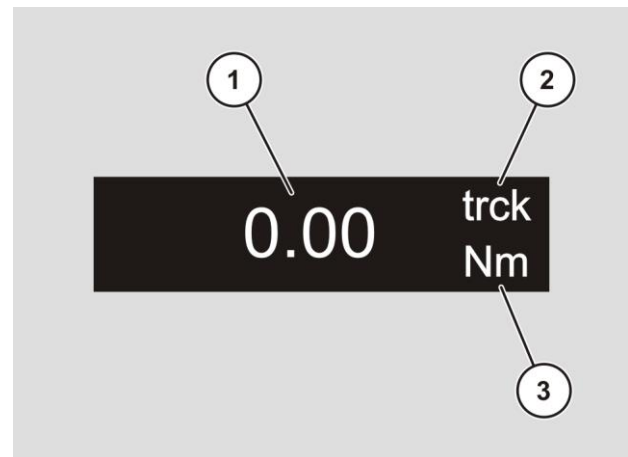
Overview of the device



No.	Explanation
1	QuickRelease button
2	Switching lever for setting the direction of rotation
3	LEDs
4	Socket cover for the PC connection
5	Rotary lock for the battery compartment
6	Operating button
7	Display







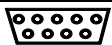
Elements on the display

During the tightening procedure, the current torque value (1) is shown on the display. The following information is also displayed:



No.	Explanation
1	Torque value or function-specific symbols (see following table)
2	Set function mode Peak (peak) Track (trck) User mode (user)
3	Unit set for the torque

Depending on case, symbols are displayed additionally or instead of this information. The symbols have the following meanings:

Symbol	Explanation
	Battery status indicator: battery full
	Battery status indicator: battery almost full
	Battery status indicator: warning, battery almost empty The yellow LED flashes; the torque wrench can be used.
	Battery status indicator: battery empty The torque wrench switches off automatically.
	Taring process running
	An error has occurred
	Serial mode: the torque wrench is connected to an adjustment and calibration device (with fully automatic calibration in combination with interface adapter 7761 only)

Meaning of the LEDs

With the exception of the status displays described in the section entitled "Eliminating faults or malfunctions" from page 22 in the event of a malfunction, the LEDs have the following meaning:

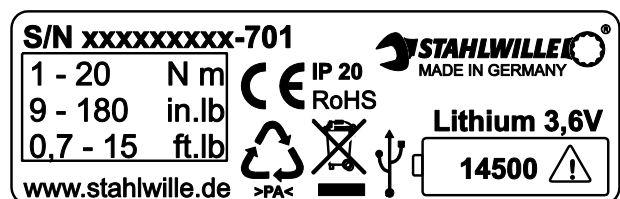
Colour	Explanation
Green	The torque in "User" function mode lies within the defined tolerance (with defined tolerance).
Yellow	The set pre-warning threshold has been exceeded during a bolting process in "User" function mode.
Red	The torque in "User" function mode exceeds the defined tolerance (with defined tolerance).

Accuracy

The torque wrench corresponds to DIN EN ISO 6789. Each torque wrench is supplied with a factory calibration certificate.

Identification

The torque wrench is identified with a serial number which is printed on the model plate.



Symbols and markings

The following symbols and markings can be found on the torque wrench:

CE symbol



The CE symbol confirms full adherence to the "Basic (safety) requirements" defined in EU directives.

Disposal



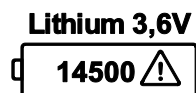
Do not dispose of the torque wrench in household refuse. Dispose of the torque wrench through a certified specialist disposal company.

Handle material



This symbol identifies the material used in the handle (polyamide) for recycling.

Battery arrangement



This symbol indicates the type and maximum voltage of the batteries to be used.

USB interface



This symbol identifies the presence of a USB interface.

Protection type

IP20

Protection type of the torque wrench according to DIN 60529

Technical data

Dimensions	
Length	210 mm
Width	31 mm
Height	26 mm
Function length (LF)	160 mm
Weight including battery	Approx. 145 g
Battery	Lithium battery, 3.6 V, type 14500
Measuring range	
N·m	1–20
cN·m	100–2000
in·lb	9–180
ft·lb	7–15
Display deviation	±4% of reading
Display resolution	
N·m	0.01
cN·m	1.0
in·lb	0.1
ft·lb	0.01
Overload limit	125 % of nominal value

Accessories

The following accessories are available for the torque wrench:

- Socket wrench bits 1/4"
- CROW-RING spanners 1/4"
- CROW-FOOT spanners 1/4".

Service

STAHLWILLE offers the following service for the torque wrench:

- Downloading of current software and operating instructions from "www.stahlwille.de"
- Repairs
- Checking and readjustment (including accuracy guarantee and new factory calibration certificate).
- DAkkS calibration certificate (DAkkS: Deutsche Akkreditierungsstelle GmbH) can be supplied

STAHLWILLE has an accredited DAkkS laboratory for the torque measurement.

Preparing for operation

Prerequisites for use

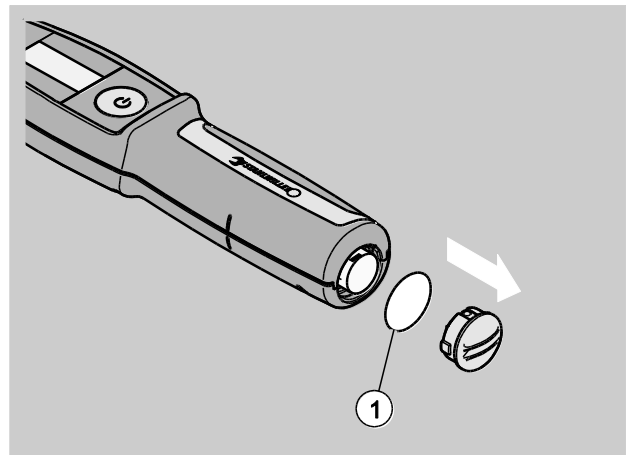
- The user must be standing securely during use.
- Sufficient freedom of movement must be available for the user.
- The operating location must be sufficiently bright.
- The operating temperature must be 0 °C to +40 °C.
- Prior to use, the torque wrench must be able to adapt to the climatic conditions during subsequent use for at least one hour.
- The torque wrench must be protected against harmful influences caused e.g. by soiling or moisture.

Prior to initial use

The torque wrench is supplied with the battery inserted. To prevent premature discharge of the inserted battery, an isolation disc is fitted.

The isolation disc must be removed prior to initial use. Proceed as follows:

- Turn the cover counter-clockwise to stop.
- Remove the cover.
- Remove the isolation disc (1).
- Dispose of the isolation disc.



- Insert the lock in the cover into the battery compartment recesses.
- Press the cover on gently.
- Turn the cover clockwise to stop.

Attaching a socket



CAUTION

Risk of injury due to unsuitable sockets.

- Use only the appropriate sockets listed in the STAHLWILLE catalogue.



CAUTION

Risk of injury due to exceeding the maximum load-bearing capability of the sockets.

- Make sure that you do not exceed the maximum load-bearing capability of the sockets.

The maximum load-bearing capability of the sockets may be lower than the maximum permissible torque of the torque wrench.

ATTENTION

Damage to the measuring elements of the torque wrench possible.

- Protect the torque wrench e.g. against hard jolts or dropping.

- Make sure that the sockets are the correct profile and size for connection with the threaded connection to be tightened.

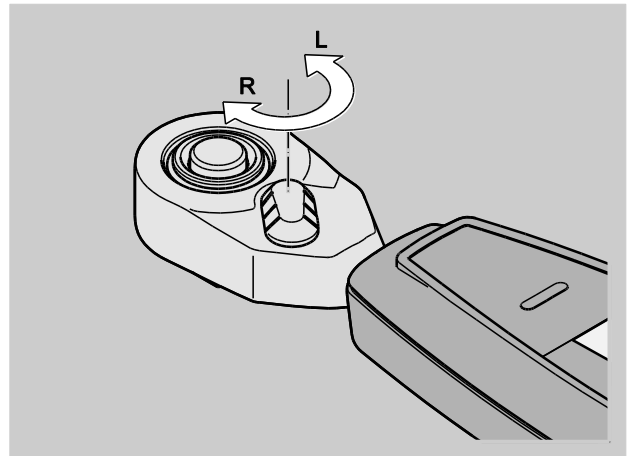


WARNING

Risk of injury due to unintentional movement of the ratchet switching lever.

- Prior to the bolting process, use the switching lever to set the desired working direction.
- Do not touch the switching lever during the process.

- Use the switching lever to set the desired working direction.

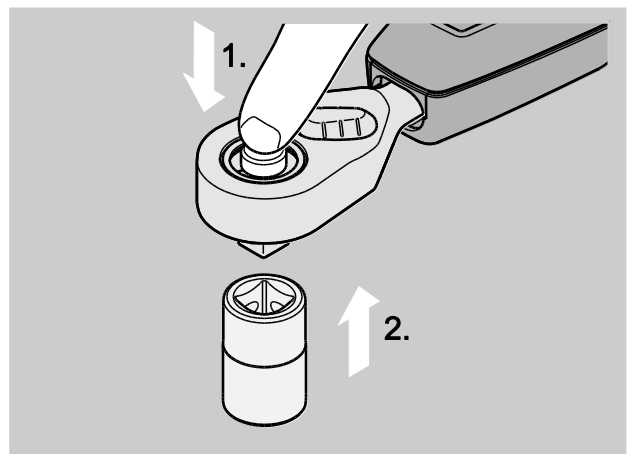


CAUTION

Risk of injury due to incorrectly mounted sockets.

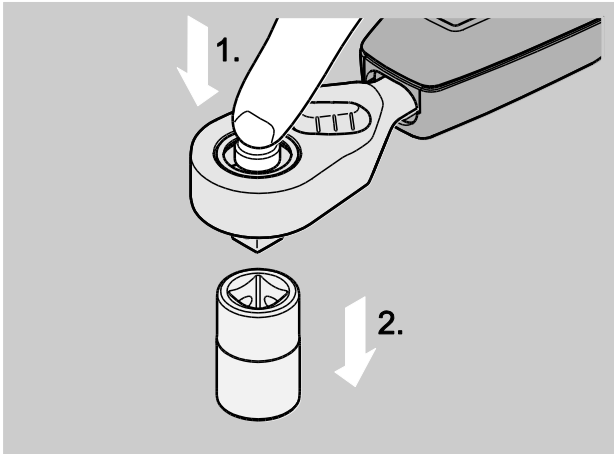
- Make sure that the sockets are secured against loss by releasing the button.

- Place the appropriate socket onto the square drive of the reversible ratchet until it audibly engages.



Proceed as follows to remove the socket:

- Press the green QuickRelease button (1).
- Pull out the socket (2).



Switching the torque wrench on and off

- To switch the torque wrench on, briefly press the operating button.

The red LED lights up. The torque wrench vibrates.

The start logo is displayed. You can now additionally display the serial number and other data on the torque wrench. Proceed as follows to do this:

- Press the operating button briefly whilst the model number is displayed.

The following data are each displayed in succession for approx. five seconds:

- Firmware version
- Serial number (S/N)
- Bootloader version
- Hardware version

After displaying the start logo or the additional information, the torque wrench is automatically tared. The taring symbol is displayed. Once taring is completed, the battery's state of charge is displayed for approx. two seconds. If the state of charge is sufficient, the torque wrench is now ready to use. The set function mode and the selected unit are shown on the display. If the state of charge is not

sufficient, the corresponding symbol is displayed constantly. In this case, replace the spent battery with a new battery of the same type.

- ❗ When the torque wrench is not in use, it switches off after a specified period of time. A shut-off time of 3 minutes is defined in the factory. The shut-off time can be defined using the SENSOMASTER software. Notes on the SENSOMASTER software can be found in the software instructions.

- To switch the torque wrench off manually, press and hold the operating button.

After a short while, the taring symbol is displayed.

- Keep pressing the operating button.

The torque wrench is switched off approx. five seconds after initially pressing.

Using the torque wrench



WARNING

Risk of injury due to incorrect torque values.

- Make sure that the threaded connection is tightened using the correct torque value.



WARNING

Risk of injury due to unintentional movement of the ratchet switching lever.

- Prior to the bolting process, use the switching lever to set the desired working direction.
- Do not touch the switching lever during the process.



CAUTION

Risk of injury due to slipping.

- Make sure you are standing securely whilst using the torque wrench.
- Ensure adequate freedom of movement when using the torque wrench.



CAUTION

Risk of injury due to overloading the torque wrench.

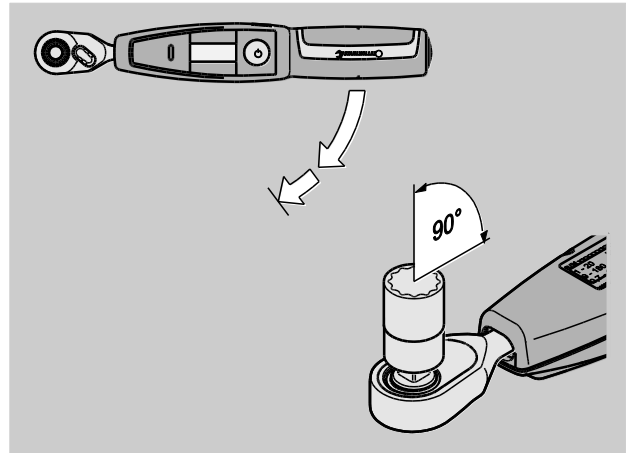
- End the tightening procedure when the desired torque is shown on the display.

ATTENTION

Damage to the measuring elements of the torque wrench possible.

- Protect the torque wrench e.g. against hard jolts or dropping.

- Switch the torque wrench on.
- Select the desired unit for the torque.
- Select the desired function mode.
- Make sure that the socket is fastened correctly and engaged securely on the torque wrench.
- Only actuate the torque wrench using the handle.
- Grip the handle centrally.
- Tighten tangentially to the swivelling radius and at right angles to the bolting axis.



Selecting units

The following units can be selected for the torque:

- N·m,
- cN·m,
- ft·lb,
- in·lb.

The unit N·m is set in the factory.

- Switch the torque wrench on.

The unit currently set for the torque is displayed. Proceed as follows to change the displayed unit:

- Press the operating button briefly three times in succession.

The next possible unit is displayed and set.

- Repeat pressing the operating button three times until the desired unit is displayed.

The selected unit remains set even after switching off.

Selecting the function mode

The following function modes can be used:

- Track: display mode with momentary value display
- Peak: display mode with peak value display
- User: function mode defined in the SENSOMASTER software (this function mode is only displayed if a user bolting type has been created with the SENSOMASTER software and transferred to the torque wrench.)

"Peak" function mode is set in the factory.

➤ Switch the torque wrench on.

The currently set function mode is displayed.

Proceed as follows to change the function mode:

➤ Press the operating button briefly twice in succession.

The next possible function mode is displayed and set.

➤ Press the operating button briefly twice in succession again.

If no bolting type is stored in the torque wrench, the originally set function mode is now displayed and set again.

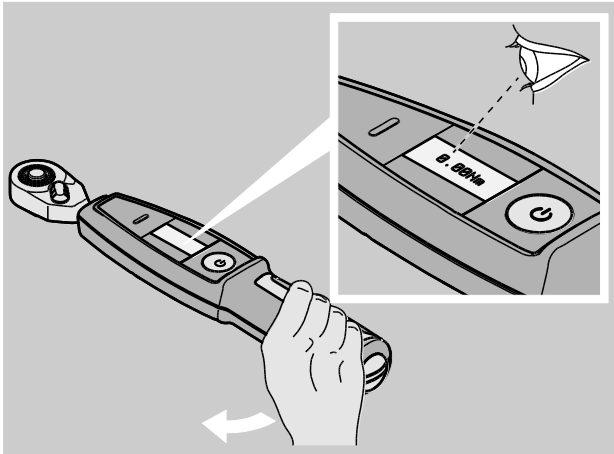
If a bolting type is stored in the torque wrench, "User" function mode is now displayed.

The set function mode remains set even after switching off.

Working in "Track" function mode

In this function mode, the currently generated torque is measured and shown on the display.

- Whilst tightening, monitor the torque value on the display.
- Tighten evenly and without interruption in the final phase until you see the desired target torque value.



During the bolting process in "Track" function mode, the following displays and signals are provided depending on the settings which have been undertaken:

- The current torque value is displayed.
- When you have reached 125 % of the nominal torque value (overload), this is displayed:
 - The torque wrench noticeably vibrates at intervals.
 - "Overload" is shown on the display.
 - The red LED flashes.

Several short beeps are audible.

Proceed as follows to display the last peak value again:

- Press the operating button once.

The last peak value is displayed.

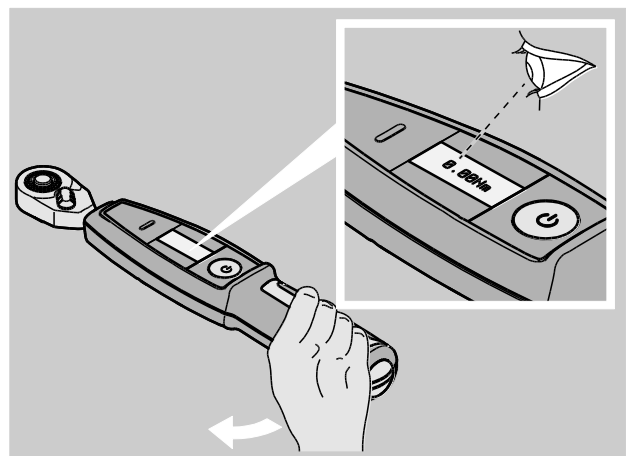
- To save the displayed value, press the operating button a second time whilst it is displayed.

The value is saved. The green LED flashes once. Each value can only be saved once.

Working in "Peak" function mode

During a bolting process, the current torque is measured and the maximum torque value achieved during it is shown on the display. This is the so-called peak.

- Whilst tightening, monitor the torque value on the display.
- Tighten evenly and without interruption in the final phase until you see the desired target torque value.



During the bolting process in "Peak" function mode, the following displays and signals are provided depending on the settings which have been undertaken:

- The peak torque value is displayed.
- When you have reached 125 % of the nominal torque value (overload), this is displayed:
 - The torque wrench noticeably vibrates at intervals.
 - "Overload" is shown on the display.

- The red LED flashes.

Several short beeps are audible.

- The peak value which is achieved is shown on the display for approx. 3 seconds. This time value can be set using the SENSOMASTER software.

- To immediately save the displayed value, press the operating button once whilst the value is displayed.

The green LED flashes once.

Proceed as follows to display the last peak value again:

- Press the operating button once.

The last peak value is displayed.

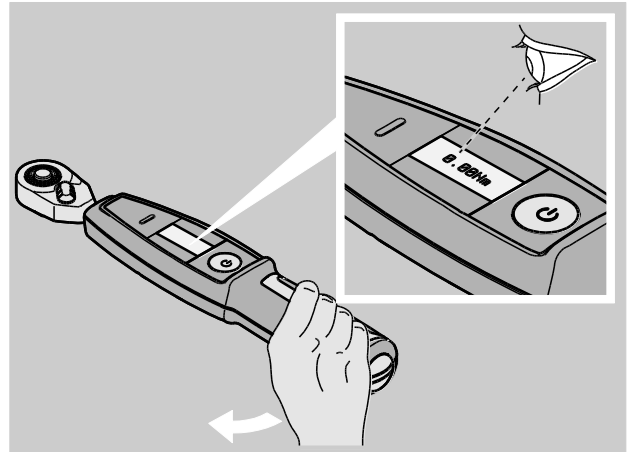
- To save the displayed value, press the operating button a second time whilst it is displayed.

The value is saved. The green LED flashes once. Each value can only be saved once.

Working in USER function mode

This function mode is only available if you have undertaken corresponding pre-settings in the SENSOMASTER software. These pre-settings must then be transferred to the torque wrench. Working in USER function mode does not differ from working in the two other function modes.

- Whilst tightening, monitor the torque value on the display.
- Tighten evenly and without interruption in the final phase until you see the desired target torque value.



During the bolting process in "User" function mode, the following displays and signals are provided depending on the settings which have been undertaken:

- The current torque value is displayed.
- When you have reached 125 % of the nominal torque value (overload), this is displayed:
 - The torque wrench noticeably vibrates at intervals.
 - "Overload" is shown on the display.
 - The red LED flashes.

Several short beeps are audible.

- When the set pre-warning torque is exceeded, the yellow LED lights up.
- When the set torque is reached, the green LED lights up.
- When the set tolerance range is exceeded, this is indicated through the set optical, tactile or acoustic signals.
- The peak value which has been reached is shown on the display.

Proceed as follows to display the last peak value again:

- Press the operating button once.

The last peak value is displayed.

- To save the displayed value, press the operating button a second time whilst it is displayed.

The value is saved. The green LED flashes once. Each value can only be saved once.

Saving bolting values

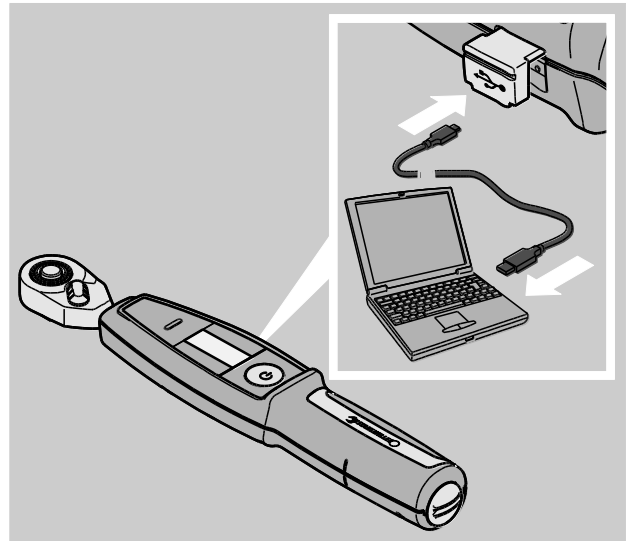
- To save the last torque value displayed, briefly press the operating button twice.

The green LED flashes once. The value has been saved.

Up to 2500 values can be saved. To evaluate the values using the SENSOMASTER software, the torque wrench must be connected to a PC. Further information can be found in the software instructions.

Connecting a PC

- Make sure that the torque wrench is **switched off**.
- Pull out the PC connection socket cover to the side.
- Insert the micro USB connector to stop into the PC connection socket in one movement.
- Insert the USB connector into the PC's USB connection.



- Make sure that the connectors are firmly seated.
- Start the SENSOMASTER software installed on the PC.
- Switch the torque wrench on.

The connection between the torque wrench and the PC is established automatically.

Data can now be transferred between the PC and the torque wrench. Further information can be found in the software instructions.







Proceed as follows to disconnect the torque wrench from the PC after data transfer:

- Remove the micro USB connector from the torque wrench PC connection socket.
- Close the PC connection socket with the cover.

Eliminating faults or malfunctions

Fault table

Faults are shown on the torque wrench display with an alternating fault code and a warning triangle. Faults are additionally indicated using optical and acoustic signals.

Fault code	Signals	Cause	Remedy
E1 	Red LED flashing	Electronic fault	Send the torque wrench to the manufacturer for repair.
Not adjusted LR	–	Electronic fault	Send the torque wrench to the manufacturer for repair.
No serial number	–	Electronic fault	Send the torque wrench to the manufacturer for repair.
E3 and ">0<" 	Red LED flashing	The torque wrench is loaded during taring. The measuring element is damaged	Switch the torque wrench off and on again. Tare the torque wrench manually. If the fault message persists, send the torque wrench to the manufacturer for repair.
 The torque wrench is switched off again after switching on.	Red LED flashing	The battery is empty.	Replace the battery with a full battery of the same type.
	Yellow LED flashing	The battery is almost empty.	Replace the battery with a full battery of the same type in the near future.
E4 	Red LED flashing	The torque wrench has been overloaded.	Calibrate the torque wrench or have it calibrated. Use above 110 % is to be avoided.
E5 	Red LED flashing	Calibration is due.	Calibrate the torque wrench or have it calibrated.

Fault code	Signals	Cause	Remedy
E6⚠	Red LED lights up and three acoustic signals per second are audible	Electronic fault	Send the torque wrench to the manufacturer for repair.

Replace the battery

Make sure that the current supply for the torque wrench is guaranteed. Use only a lithium battery, 3.6 V, type 14500.

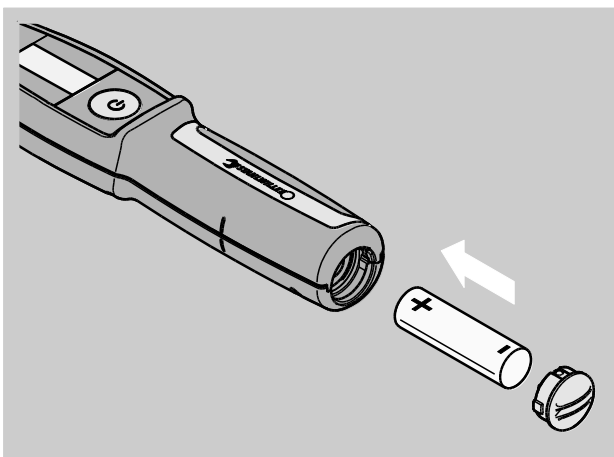


CAUTION

Risk of injury due to exploding batteries.

- Do not charge batteries.
- Replace empty batteries with full batteries of the same type.

- Turn the cover counter-clockwise to stop.
- Remove the cover.
- Remove the spent battery.
- Insert the fresh battery as shown, with the positive terminal first.



- Insert the lock in the cover into the battery compartment recesses.
- Press the cover on gently.
- Turn the cover clockwise to stop.

Taring the torque wrench manually

Manual taring is necessary if, for example, a value which is not zero is shown on the display after bolting processes.

ATTENTION


Incorrect measurements due to moving or loading the torque wrench during the taring process.

- Make sure that the torque wrench is not moved or loaded during taring.
- Store the torque wrench so that the square drive lies free.

- Place the switched on torque wrench onto a flat surface.

No lateral forces must act on the square drive during taring. To ensure this, the square drive must e.g. lie over the edge of a bench.

- Press the operating button for approx. two seconds.

The  symbol is shown on the display. The torque wrench is tared within a few seconds. "0", the set function mode and the selected unit are then shown on the display. The torque wrench is tared and ready for use.

Cleaning

ATTENTION

Material damage possible due to incorrect cleaning.

- Clean the torque wrench using a dry, clean cloth only.

Calibrating

Apart from regular calibration, the torque wrench is maintenance-free.

The internal components of the torque wrench are subject to normal wear during use. The accuracy of the torque wrench must therefore be checked at regular intervals.

In the event of damage to the torque wrench or malfunctions, repair with subsequent calibration is necessary.

Repairs may only be undertaken by STAHLWILLE.

- ❗ Returns to STAHLWILLE must always take place without the lithium battery. If necessary, return the torque wrench in its plastic case without the lithium battery.

Calibration or adjustment of the torque wrench may only be performed using a suitable calibration device.

Torque wrenches are test equipment. The calibration interval is dependent on the following operating factors, etc.:

- Frequency of use
- Typical load during use
- Environmental conditions during the working process
- Storage conditions.

The period of time for calibration arises from the test equipment monitoring procedure defined within

your company (e.g. ISO 9000 ff). If test equipment monitoring is not undertaken within your company, have the torque wrench calibrated or adjusted after a maximum of 12 months starting from initial use (DIN EN ISO 6789).

If the fault code "5" is displayed after switching on the torque wrench and the red LED flashes, the torque wrench should be calibrated as soon as possible according to the specifications of DIN EN ISO 6789.

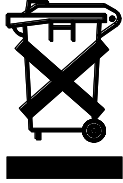
- To continue working, acknowledge the message by pressing the operating button once.
- Have the torque wrench calibrated according to the specifications of DIN EN ISO 6789 as soon as possible.

Accessories for calibration

STAHLWILLE offers the following accessories for calibrating and adjusting the torque wrench:

- Calibration and adjustment facility perfectControl®
 - 7794-1 (torque)
 - 7794-2 (torque)
 - 7794-3 (torque and angle)
- Calibration facility Manutork® 7791

Disposal



Dispose of the torque wrench through a certified specialist disposal company. Observe and comply with the applicable regulations. If in doubt, contact your local or municipal administration.

- Dispose of spent batteries properly.
- Dispose of the spent batteries e.g. at a collection point.

The torque wrench is manufactured from steel.

The handle is manufactured from polyamide (PA).

The torque wrench also contains electronic components which have to be disposed of separately.

WEEE registration No.: DE 70431151

WEEE = Waste Electrical and Electronic Equipment