Accredited by the highest authority.
STAHLWILLE's calibration laboratory.

Controlled tightening of fasteners is becoming increasingly important and is a must for safety and quality assurance. As clear confirmation of its expertise in the field of controlled tightening, STAHLWILLE is accredited by the DAkkS accreditation authority (Deutsche Akkreditierungsstelle) as an approved calibration laboratory for »torque«.

The STAHLWILLE calibration service offers both works calibration certificates and DAkkS calibration certificates.

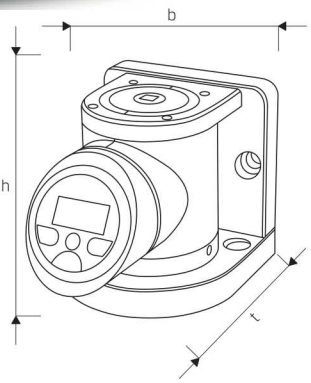
SmartCheck

Tester for torque wrenches and torque screwdrivers

- compact construction
- for horizontal or vertical mounting
- display, display mount and base body can be rotated through 180°
- three operating modes (track, first peak, peak hold)
- three measuring units (N·m, ft·lb, in·lb)
- the target torque and tolerances can be set individually to evaluate the readings
- operating mode using a mains adapter or battery (4 x AAA or 1 x 9 V block, adapter included)
- with integrated visual and audible overload protection mechanism
- the display and keypad are splash-proof, and the housing is made of impact-resistant plastic
- with certificate
- supplied in sturdy plastic box
- **display deviation value ± 1%**

SmartCheck **Torque Tester**

DESIGN AWARD 2017



code	No	capacity N·m	capacity ft·lb	capacity in·lb	⬡ "	b mm	h mm	t mm	g
96521201	**SmartCheck 10S ***	1-10	0.74-7.4	8.9-88.5	1/4	120	124	167	5210
96521202	**SmartCheck 10**	1-10	0.74-7.4	8.9-88.5	1/4	120	124	167	5210
96521203	**SmartCheck 100**	10-100	7-74	89-885	3/8	120	124	167	5310
96521204	**SmartCheck 400**	40-400	30-295	354-3540	3/4	120	124	167	5690
96521205	**SmartCheck 800**	80-800	59-590	708-7081	3/4	120	124	167	5690

*) for checking torque screwdrivers

Electronic torque tester for torque wrenches SENSOTORK® 7707 W (For complete calibration systems see p. 241, 245)

- compact torque tester for easy adaptation by replacement of the transducers
- high degree of accuracy thanks to flat transducer and conversion and digitalisation of readings within the transducer (see p. 239)
- high degree of safety through display showing actual torque read-off where clicking torque wrenches are used

7707 W Torque tester SENSOTORK®

Electronic torque tester for torque wrenches, consisting of:
- transducer (patent)
- holder
- display unit (registered design)
- tripod for display unit (with 1.5 m cable)
- spiral cable
- mains adaptor (110 V–230 V with interchangeable socket adaptors) or direct connection to 12 V in-car supply is possible
- square drive adaptor (No 7707-2W, No 7707-2-1W, No 7707-2-2W, No 7707-3W)
- kit for attaching the unit to a workbench or wall in a horizontal or vertical testing position
- for clockwise and anticlockwise use
- units of measurement: N·m, ft·lb, in·lb
- the easily interchangeable transducers are attached to the holder by means of a QuickRelease safety lock
- low lateral forces thanks to low-profile transducers
- automatic detection of the transducer
- flexible and user friendly because the unit can be used horizontally or vertically and the display unit can be placed in many positions
- additional tripod with 1.5 m cable for mounting the display unit to facilitate visual monitoring when using longer torque wrenches
- especially broad measuring range from approx. 2 % to 100 % of rated value
- the software No 7759-4, including USB hub and jack cable (see p. 249), enables readings to be transferred to the PC for documenting (no separate power supply needed, power comes from PC)
- while individual transducers are being recalibrated, the torque tester itself remains on-site for further use
- wide range of application (-20°C to +60°C)
- complies with DIN 51309: 2005, Class 2 and DKD-R 3-8: 2003
- with certificate
- supplied in sturdy plastic box

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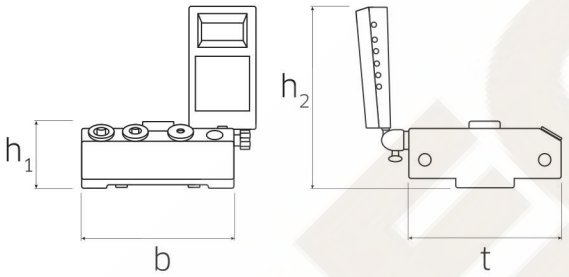
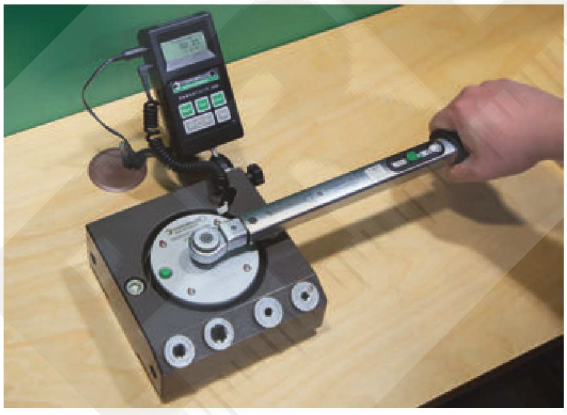




Interchangeable square drive adapters: A set of interchangeable square drive adapters are conveniently stored in the mounting block for a range of different drive sizes.

QR **QuickRelease** Rapid change and firm locking of the transducers thanks to the QuickRelease safety lock.

Code	No	Capacity N·m	Capacity ft·lb	Capacity in·lb	▢ "	b mm	h_1 mm	h_2 mm	t mm	g	g with box
96521086	**7707-1-3W** [1]	0.2–10	0.15–7.4	1.8–88.5	1/4	180	79	215	180	6255	9500
96521085	**7707-1-2W**	0.2–10	0.15–7.4	1.8–88.5	1/4	180	79	215	180	6255	9500
96521080	**7707-1W**	0.4–20	0.3–15	3.5–177	1/4	180	79	215	180	6255	9500
96521072	**7707-2W** [2]	2–100	1.5–74	18–885	3/8	180	79	215	180	7025	10300
96521083	**7707-2-1W** [3]	4–200	3–148	35–1770	1/2	180	79	215	180	7511	10975
96521084	**7707-2-2W** [4]	8–400	6–295	71–3540	3/4	180	79	215	180	7654	11100
96521082	**7707-3W** [4]	25–1100	18–812	221–9736	3/4	180	79	215	180	7495	11000

[1]) for calibrating torque screwdrivers
[2]) with square drive adaptor No 409M (1/4" ▢ x 3/8" ■)
[3]) with square drive adaptors No 7789-4 (1/4" ▢ x 1/2" ■). No 7789-5 (3/8" ▢ x 1/2" ■)
[4]) with square drive adaptors No 7787 (1/4" ▢ x 3/4" ■). No 7788 (3/8" ▢ x 3/4" ■). No 7789 (1/2" ▢ x 3/4" ■)

Which transducer is for which torque tool?

(for manually operated testing, calibration technology on page 238-247)

	7721	7721-0	7721-1	7722	7723-1	7723-2	7723-3	7724-1
760	●							
775	●							
TORSIOTRONIC	●							
71/80							●	●
71aR/80							●	●
73Nm/15			●	●				
755R/1			●					
755/4				●	●			
755/10					●	●		
755/20					●	●	●	
755/30						●	●	
730/5				●	●			
730/10					●	●		
730/12					●	●	●	
730/20					●	●	●	
730/40						●	●	
730/65							●	
730II/65							●	
730a/5				●	●			
730a/10					●	●		
730a/12					●	●	●	
730a/20					●	●	●	
730/2			●	●				
730/4				●	●	●		
730a/2-1		●	●					

	7721	7721-0	7721-1	7722	7723-1	7723-2	7723-3	7724-1
730a/2			●	●				
730a/4				●	●			
730/80							●	●
721/5				●	●			
721/15					●	●	●	
721/20					●	●	●	
721/30						●	●	
721QR/15					●	●	●	
721QR/20					●	●	●	
720Nf/80							●	●
721Nf/80							●	●
721Nf/100							●	●
730N/2			●	●				
730N/5				●	●	●		
730N/10					●	●		
730N/12					●	●	●	
730N/20					●	●		
730N/40						●	●	
730N/65							●	
730NII/65							●	
730N/80							●	●
730N/100							●	●
730Na/2			●	●				
730Na/5				●	●	●		
730Na/10					●	●		

	7721	7721-0	7721-1	7722	7723-1	7723-2	7723-3	7724-1
730Na/20					●	●		
730Na/40						●	●	
701/2			●					
730D/10				●	●	●		
730D/20					●	●		
730D/40						●	●	
730D/65							●	
730DII/65							●	
730D/80							●	
730D/100							●	
714/ 1		●	●					
714/ 2			●	●				
714/ 4				●	●			
714/ 6				●	●			
714/10				●	●	●		
714/20					●	●		
714/40						●	●	
714/65							●	
714/80							●	
714/100							●	
713R/6				●				
713R/20					●	●		
713R/40						●		
712R/6				●				

7721-7724 Transducers

QR

- patent
- for calibration of torque wrenches and torque screwdrivers
- high degree of accuracy thanks to conversion and digitization of readings within the transducer itself
- not susceptible to lateral forces due to low-profile construction
- can also be used as part of a calibration system (see p. 241, 245)
- with certificate
- supplied in sturdy plastic box
- measuring ranges by deviation of indication

Measuring ranges by deviation of indication

Code	No	Display deviation value ± 1% of the reading N·m	ft·lb	in·lb	Display deviation value ± 0.5% of the reading N·m	ft·lb	in·lb	Display deviation value ± 0.25% of the reading N·m	ft·lb	in·lb	∅ mm	□ "	g	g with box
9652 1021	**7721** [1]	0,2-10	0,15-7,4	1,8-88,5	1-10	0,74-7,4	8,9-88,5	2-10	1,5-7,4	17,7-88,5	120	1/4	1735	2411
9652 1000	**7721-0**	0,2-10	0,15-7,4	1,8-88,5	1-10	0,74-7,4	8,9-88,5	2-10	1,5-7,4	17,7-88,5	120	1/4	1735	2411
9652 1026	**7721-1**	0,4-20	0,3-15	3,5-177	2-20	1,5-15	18-177	4-20	3-15	35-177	120	1/4	1735	2411
9652 1022	**7722**	2-100	1,5-74	18-885	10-100	7-74	89-885	12-100	9-74	106-885	120	3/8	2486	3223
9652 1023	**7723-1**	40-200	3-148	35-1770	20-200	15-148	177-1770	40-200	30-148	354-1770	120	1/2	2983	3605
9652 2023	**7723-2**	8-400	6-295	71-3540	40-400	30-295	354-3540	80-400	59-295	708-3540	120	3/4	3134	3745
9652 1028	**7723-3**	25-1100	18-812	221-9736	110-1100	81-812	974-9736	220-1100	162-812	1947-9736	120	3/4	2998	3761
9652 1029	**7724-1** [2]	150-3000	111-2214	1328-26553	300-3000	221-2214	2655-26553	600-3000	443-2214	5311-26553	195	1 1/2	10500	12000

[1]) for calibrating torque screwdrivers
[2]) for use with mechanical loader No 7792 and 7792-1 (S. 243)

Note!

Torque testers are measuring instruments! They have to be regularly calibrated and, where necessary, adjusted, using suitable calibration equipment. We recommend recalibrating every 12 months. DAkkS certificates must be ordered separately see p. 236

Accurate, dependable and safe.
STAHLWILLE calibration.

Calibration is the regular examination of the accuracy and reliability of torque tools. This is essential because torque tools are precision instruments which are very often in use in safety-relevant environments. In order to be able to deliver dependable measured values in the long term, it is essential that examination by means of calibration takes place at regular intervals and is documented.
A calibration system comprises several components:

The torque applied using the torque wrench is digitalised within the **transducer** and transmitted via USB cable to the PC, which ensures error-free transmission.

The **mechanical loader** is required for rapid, accurate fixing and operation of the torque wrench. The mechanical loader also ensures that the DIN EN ISO 6789 requirement for clicking torque wrenches is fulfilled, i.e. that, above 80% of the final torque value, the force can be applied slowly and steadily within the required time.

USB adapter – transfers the data to the PC.

The transducer is connected to the USB adapter by means of a **cable** with a jack and a self-locking precision plug.

The **square drive adapters** required to utilise the measuring range of the transducers are included; e.g. for transducer No 7728-100 (female 3/4" square drive) this is square drive adapter No 7787 (1/4" female to 3/4" male), No 7788 (3/8" female to 3/4" male) and No 7789 (1/2" female to 3/4" male).

Software – The data received in this way can then be used to issue and manage Declarations of Conformity or calibration certificates in accordance with DIN EN ISO 6789:2017.

5

Coordinated – down to the last detail.
STAHLWILLE calibration systems.

Mechanical loader

Laboratory transducers

Cable No 7751-1

7757-1 USB adaptor

USB cable

PC/printer not included

	No for full system	**7706-8 PC**	**7706-9 PC**	**7706-10 PC**	**7706-11 PC**
	Code	**96 52 10 68**	**96 52 10 69**	**96 52 10 70**	**96 52 10 74**
	Weight in kg	14.2	67.6	70.6	108.4
	Range N·m	1–10	2–100	2–1000	20–3000
	Mechanical loader	–	No 7791	No 7791	No 7792
	»Stand alone« test attachment for torque screwdrivers	No 7790	–	–	–
	Extension	–	–	No 7791-1	No 7792-1
	Laboratory transducers	No 7728-1S (1–10 N·m)	No 7728-2 (2–20 N·m) No 7728-10 (10–100 N·m)	No 7728-2 (2–20 N·m) No 7728-10 (10–100 N·m) No 7728-40 (40–400 N·m) No 7728-100 (100–1000 N·m)	No 7728-20 (20–200 N·m) No 7728-100 (100–1000 N·m) No 7728-300 (300–3000 N·m)
	USB adapter	No 7757-1	No 7757-1	No 7757-1	No 7757-1
	Jack cable	No 7751	No 7751	No 7751	No 7751
	Cable to No. 7728 (transducer to USB adapter)	No 7751-1	No 7751-1	No 7751-1	No 7751-1
	Square drive adapters	No 431 (3/8" O x 1/4" ■)	No 431 (3/8" O x 1/4" ■) No 409M (1/4" O x 3/8" ■)	No 7787 (1/4" O x 3/4" ■) No 7788 (3/8" O x 3/4" ■) No 7789 (1/2" O x 3/4" ■) No 409M (1/4" O x 3/8" ■)	No 7787 (1/4" O x 3/4" ■) No 7788 (3/8" O x 3/4" ■) No 7789 (1/2" O x 3/4" ■) No 7789-2 (3/4" O x 1½" ■) No 7789-3 (1" O x 1½" ■) No 7789-4 (1/4" O x 1/2" ■) No 7789-5 (3/8" O x 1/2" ■)
	Calibrating square drive insert tools	–	No 734K/4 (1/4" ■) No 734K/5 (3/8" ■)	No 734K/4 (1/4" ■) No 734K/5 (3/8" ■) No 734K/20 (1/2" ■) No 734K/40 (3/4" ■)	No 734K/4 (1/4" ■) No 734K/5 (3/8" ■) No 734K/20 (1/2" ■) No 734K/40 (3/4" ■)
	Adapters	No 3115 (1/4" ■ x 1/4" ⬢ E 6.3) No 3115/1 (1/4" ■ x 1/4" ⬢ C 6,3)	– –	–	–
	Calibration software	TORKMASTER	TORKMASTER	TORKMASTER	TORKMASTER
	DAkkS calibration certificates	1	2	4	3

5

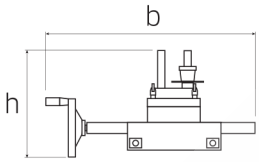
/M/a/n/u/t/o/r/k/®

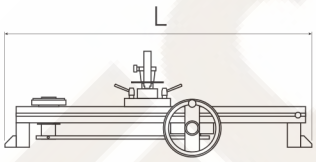
Mechanical loaders for torque wrenches and torque screwdrivers

Thanks to the modular design, end users can put together their own mechanical loader according to their specific requirements. Extensions with additional components are possible any time.
All the components are carefully matched to ensure compatibility and can be easily fitted.
This slot-in system is easy to use and has a very accurate fit.
The components can be quickly and easily locked together using the integrated screw joints.
The display unit can be attached at various points of the system via a holder.
In this way, every user can organize his or her work to suit themselves.

7791 Mechanical loaders up to 400 N·m

- **measurement possible without moving the point of application of force**
- thanks to a specially designed force transmission system, mechanical loader No 7791 avoids the risk of the point of force application shifting during the calibration process
- the lever below the test rail is actuated in a linear direction by the handwheel acting on a spindle
- the linear motion is translated into a rotary movement which acts on the transducer
- the torque wrench to be calibrated remains in the same position throughout the calibration process
- this prevents measuring errors caused by the point of force application being moved
- thanks to a low-friction linear ball bearing, the torque wrench is automatically levelled as it is placed in the unit
- a further linear ball bearing ensures the contact with the torque wrench is friction-free
- the reduction in lateral forces acting on the transducer and in the friction on the point of contact with the torque wrench results in a corresponding reduction in mismeasurement
- protected by national and international patents

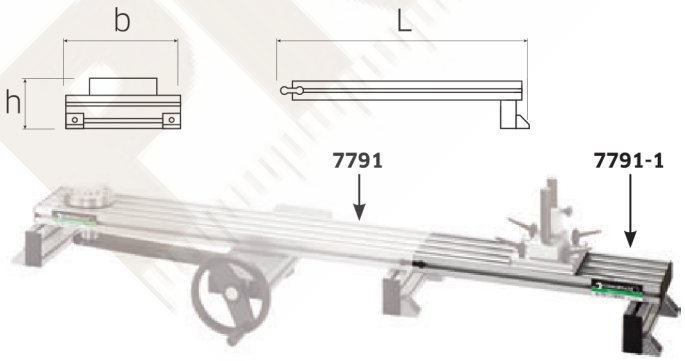




Code	Capacity N·m	for transducer	for torque wrenches with functional length (L_F) max. mm	Profile width mm	b mm	h mm	L mm	kg
52110091	–400	sizes 1-100	815	180	704	323	1069	44.8

7791-1 Extension unit for No 7791, 7794-1 and 7794-2 up to 1000 N·m

- with one pair of adapter plates No 7770-3 for height compensation between extension unit No 7791-1 and perfectControl® calibrating units No 7794-1 and No 7794-2

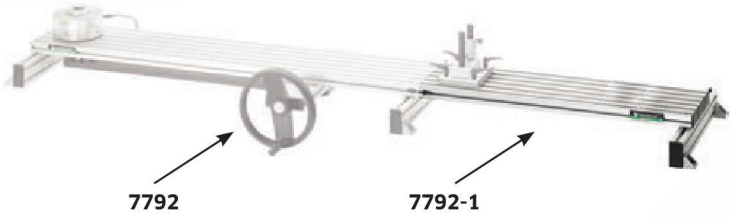


Code	Capacity N·m	for torque wrenches with functional length (L_F) max. mm	Profile width mm	b mm	h mm	L mm	kg
52110191	–1000	1390 (7791 + 7791-1)	180	308	135	673	8

7792 Mechanical loaders unit to 1000 N·m

Code	Capacity N·m	for transducer	for torque wrenches with functional length (L_F) max. mm	Profile width mm	b mm	h mm	L mm	kg
52110092	-1000	sizes 20; 100; 300	1390	270	722	323	1668.5	58

7792-1 Extension unit for No 7792 up to 3000 N·m

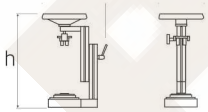


Code	Capacity N·m	for torque wrenches with functional length (L_F) max. mm	Profile width mm	b mm	h mm	L mm	kg
52110192	-3000	2390 (7792 + 7792-1)	270	558	135	1073	18.5

Test attachments for torque screwdrivers

7790 Mechanical loaders for torque screwdrivers

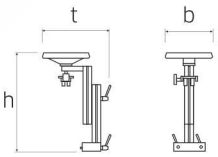
- can be bolted to mechanical loader No 7792
- the torque screwdriver to be calibrated is inserted in the square mount of the transducer and fixed using the universal central clamp
- the handwheel ensures that the required force is applied in a controlled manner to the torque screwdriver
- supplied without transducer or torque screwdriver



Code	Capacity N·m	for transducer	b mm	h mm	t mm	kg
58521090	-10	7728-1S	250	442-593	351	9

7791-2 Test attachment for torque screwdrivers

- can be bolted onto mechanical loader No 7791
- the torque screwdriver to be calibrated is inserted in the square mount of the transducer and fixed using the universal central clamp
- the handwheel ensures that the required force is applied in a controlled manner to the torque screwdriver



Code	Capacity N·m	b mm	h mm	t mm	kg
52110291	-10	250	442-593	351	3.7

Accessory

7750-1 Holder

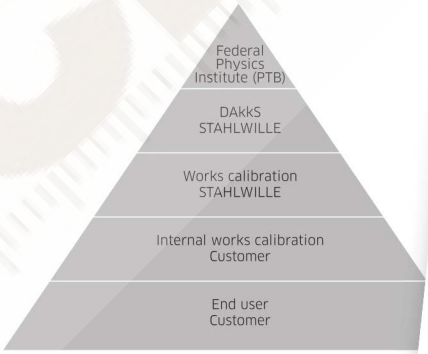
- for display unit No 7750
- can be bolted to test attachments

code	g
52101050	165

Audited. Documented. Certified.
STAHLWILLE DAkkS calibration laboratory.

STAHLWILLE's DAkkS calibration laboratory for torque is accredited by the German Accreditation Service (DAkkS) in accordance with DIN EN ISO/IEC 17025:2005. The transfer torque wrenches and torque transducers in use in the calibration laboratory are subject to regular examination by the German Federal Physics Institute (PTB) in Braunschweig.

The accuracy of the torque wrenches must be proved in a series of steps and these must be traceable. Only in this way can the reliability of the readings be guaranteed. During the first stage, the end-user checks the accuracy of the torque tools in-house using suitable calibrated testing equipment. At the next stage, this test equipment is checked in STAHLWILLE's DAkkS calibrating laboratory. This accreditation by the German Calibration Service (DKD) in accordance with DIN EN ISO/IEC 17025:2005 guarantees the direct link between the measuring equipment and the national standard as laid down in DIN EN ISO 9001:2008.



Relationship between the national standard and the equipment

CONFORMS TO STANDARDS.

The accreditation means the specific requirements listed in Technical Specification ISO/TS 16949 relating to testing laboratories are fulfilled. This is absolutely essential for all suppliers in the automotive sector.

Precisely matched products.
perfectControl calibration systems.

Motor driven calibrating unit No. 7794-2

Manual calibrating unit No 7794-1

\+

Laboratory transducers

→ **Cable No 7751-1**

7757-1 USB adaptor

→ **USB cable**

PC/printer not included

No for full system	7794-2/400	7794-2/1000	7794-1/400	7794-1/1000
Code	**96 52 10 78**	**96 52 10 79**	**96 52 10 76**	**96 52 10 77**
Weight in kg	62.1	69.8	53.2	60.9
Range N·m	1–400	1–1000	1–400	1–1000
Motor driven calibrating unit	No 7794-2	No 7794-2	–	–
Manual calibrating unit	–	–	No 7794-1	No 7794-1
Extension	–	No 7791-1	–	No 7791-1
Laboratory transducers	No 7728-1 (1–10 N·m) No 7728-6 (6–60 N·m) No 7728-40 (40–400 N·m)	No 7728-1 (1–10 N·m) No 7728-6 (6–60 N·m) No 7728-40 (40–400 N·m) No 7728-100 (100–1000 N·m)	No 7728-1 (1–10 N·m) No 7728-6 (6–60 N·m) No 7728-40 (40–400 N·m)	No 7728-1 (1–10 N·m) No 7728-6 (6–60 N·m) No 7728-40 (40–400 N·m) No 7728-100 (100–1000 N·m)
USB adapter	No 7757-1	No 7757-1	No 7757-1	No 7757-1
Jack cable	No 7751	No 7751	No 7751	No 7751
Spiral cable	No 7752	No 7752	No 7752	No 7752
Cable for No 7728	No 7751-2	No 7751-2	No 7751-2	No 7751-2
Square drive adapter	No 409M (1/4" □ x 3/8" ■) No 7787 (1/4" □ x 3/4" ■) No 7788 (3/8" □ x 3/4" ■) No 7789 (1/2" □ x 3/4" ■) No 7789-4 (1/4" □ x 1/2" ■) No 7789-5 (3/8" □ x 1/2" ■)	No 409M (1/4" □ x 3/8" ■) No 7787 (1/4" □ x 3/4" ■) No 7788 (3/8" □ x 3/4" ■) No 7789 (1/2" □ x 3/4" ■) No 7789-4 (1/4" □ x 1/2" ■) No 7789-5 (3/8" □ x 1/2" ■)	No 409M (1/4" □ x 3/8" ■) No 7787 (1/4" □ x 3/4" ■) No 7788 (3/8" □ x 3/4" ■) No 7789 (1/2" □ x 3/4" ■) No 7789-4 (1/4" □ x 1/2" ■) No 7789-5 (3/8" □ x 1/2" ■)	No 409M (1/4" □ x 3/8" ■) No 7787 (1/4" □ x 3/4" ■) No 7788 (3/8" □ x 3/4" ■) No 7789 (1/2" □ x 3/4" ■) No 7789-4 (1/4" □ x 1/2" ■) No 7789-5 (3/8" □ x 1/2" ■)
Calibration square drive insert tools	No 734K/4 (1/4" ■) No 734K/5 (3/8" ■) No 734K/12 (3/8" ■) No 734K/20 (1/2" ■) No 734K/40 (3/4" ■) No 734K/100 (3/4" ■)	No 734K/4 (1/4" ■) No 734K/5 (3/8" ■) No 734K/12 (3/8" ■) No 734K/20 (1/2" ■) No 734K/40 (3/4" ■) No 734K/100 (3/4" ■)	No 734K/4 (1/4" ■) No 734K/5 (3/8" ■) No 734K/12 (3/8" ■) No 734K/20 (1/2" ■) No 734K/40 (3/4" ■) No 734K/100 (3/4" ■)	No 734K/4 (1/4" ■) No 734K/5 (3/8" ■) No 734K/12 (3/8" ■) No 734K/20 (1/2" ■) No 734K/40 (3/4" ■) No 734K/100 (3/4" ■)
Calibration software	TORKMASTER	TORKMASTER	TORKMASTER	TORKMASTER
DAkkS calibration certificates	3	4	3	4

perfectControl®

7794-2 Motorised calibrating and adjusting tool from 1 to 400 N·m

The electronic perfectControl® calibrating unit with its electric drive considerably reduces the amount of effort and time required for calibration and adjustment tasks on torque wrenches

- measurement possible without moving the point of application of force
- prevents faulty readings thanks to precision-mounted spindle and finely regulated motor
- extremely accurate calibration thanks to optimised bearings and square drives for the transducers
- rapid, easy change of transducers thanks to quick-release latching system
- convenient pushbutton controls for clockwise and anticlockwise measurements with automatic speed compensation
- saves time because the bridge support is locked in place using a single-handed eccentric lever
- transmission of readings to a PC via USB interface for further processing, analysis and archiving
- a Declaration of Conformance or a calibration certificate can be printed or saved as a PDF file after calibration
- as found / as left calibrations can be documented
- during calibration, DIN EN ISO 6789:2003 in numerous languages is supported. Additional standards and works standards are available on request
- can be upgraded to perfectControl® calibrating unit No 7794-3 for angle-controlled wrenches
- **calibration up to 1000 N·m is possible using the easily attached extension unit No 7791-1 (see p. 242)**
- design patent
- protected by national and international patents
- both clicking and indicating torque wrenches can be calibrated
- calibration of transducers is possible using reference torque wrenches No 7770-10, 7770-100 and 7770-1000, available on request.
- the unit is supplied without the torque wrench, transducers or notebook
- **transducers laboratory No 7728 (see p. 248)**

product design award 2011

Content:
6 calibrating square drive insert tools No 734K (sizes 4, 5, 12, 20, 40, 100)
6 square drive adaptors (No 409M, No 7787, No 7788, No 7789, No 7789-4, No 7789-5)
1 USB adaptor No 7757-1
1 software Torkmaster 7731-1
1 jack cable No 7751
1 spiral cable No 7752
1 spiral cable No 7751-2 with jack plug and self-locking precision plug
1 low-temperature cable connector
1 hexagon key wrench No 10760CV size 2 mm are included

5

Code	Capacity N·m	for transducer	for torque wrenches with functional length (L_F) max. mm	Profile width mm	b mm	h mm	L mm	kg
96521093	1-400	7728 (sizes 1-100)	815	180	640	328	1060	58.1

Made in Germany

7794-1 Manual calibrating unit from 1 to 400 N·m

- as for perfectControl® No 7794-2, but the drive is via an ergonomically designed handwheel
- **calibration up to 1000 N·m is possible using the easily attached extension unit No 7791-1 (see p. 242)**
- protected by national and international patents
- supplied without torque wrench, transducer or notebook
- **transducers laboratory No 7728 (see p. 248)**

Content:
6 calibrating square drive insert tools No 734K (sizes 4, 5, 12, 20, 40, 100)
6 square drive adaptors (No 409M, No 7787, No 7788, No 7789, No 7789-4, No 7789-5)
1 USB adaptor No 7757-1
1 software Torkmaster 7731-1
1 jack cable No 7751
1 spiral cable No 7752
1 spiral cable No 7751-2 with jack plug and self-locking precision plug
1 low-temperature cable connector
1 hexagon key wrench No 10760CV 2 mm are included

Code	Capacity N·m	for transducer	for torque wrenches with functional length (L_F) max. mm	Profile width mm	b mm	h mm	L mm	kg
96521092	1-400	7728 (sizes 1-100)	815	180	705	355	1060	47

7794-3 Automated calibrating and adjusting unit from 1 to 400 N·m

- **automatically calibrates electronic torque and angle-controlled wrenches made by STAHLWILLE**
- design patent
- protected by national and international patents
- model is the same as perfectControl® No 7794-2, except it is additionally suited to calibrating angle-controlled wrenches. Optimum adaptation to working height with motorised height adjustment
- calibration up to 1000 N·m is possible using the easily attached expansion unit No 7791-1 (see p. 242) and set of adapter plates No 7791-4, Code 52110491
- supplied without torque wrench, transducer or notebook

Content:
6 calibrating square drive insert tools No 734K (sizes 4, 5, 12, 20, 40, 100)
6 square drive adaptors (No 409M, No 7787, No 7788, No 7789, No 7789-4, No 7789-5)
1 USB adaptor No 7757-1
1 software Torkmaster 7731-1
1 jack cable No 7751
1 spiral cable No 7752
1 spiral cable No 7751-2 with jack plug and self-locking precision plug
1 low-temperature cable connector
1 hexagon key wrench No 10760CV 2 mm are included

Code	Capacity N·m	for transducer	for torque wrenches with functional length (L_F) max. mm	Profile width mm	b mm	h mm	L mm	kg
96521094	1-400	7728 (sizes 1-100)	815	180	640	884-1134	1060	230

7728 Transducers laboratory

- patented
- for laboratory environments
- with optimised measuring range
- for calibrating torque wrenches and torque screwdrivers
- for use together with perfectControl® calibrating unit No 7794 or calibration system No 7706
- high degree of accuracy thanks to conversion and digitization of readings within the transducer itself
- with high-grade self-locking precision plug
- not susceptible to lateral forces due to low-profile construction
- with DAkkS calibration certificate
- **max. display deviation value ± 0.5% of the reading**
- further details on request
- supplied in sturdy plastic box
- measuring ranges by deviation of indication

Code	size	Display deviation value ± 0.5% of the reading N·m	in·lb	ft·lb	Display deviation value ± 0.25% of the reading N·m	ft·lb	in·lb	∅ mm	"	g	g with box
96524011	**1S [1]**	1-10	8,9-88,5	0,74-7,4	2-10	1,5-7,4	18-88,5	120	1/4	1735	2415
96524001	**1**	1-10	8,9-88,5	0,74-7,4	2-10	1,5-7,4	18-88,5	120	1/4	1735	2415
96524002	**2**	2-20	18-177	1,5-15	4-20	3-15	35-177	120	1/4	1735	2415
96524004	**4**	4-40	35-354	3-30	8-40	6-30	71-354	120	3/8	2486	3136
96524006	**6**	6-60	53-531	4,5-45	12-60	9-45	106-531	120	3/8	2486	3136
96524010	**10**	10-100	89-885	7-74	20-100	14-74	177-885	120	3/8	2486	3136
96524020	**20**	20-200	177-1770	15-148	40-200	30-148	354-1770	120	1/2	2983	3170
96524040	**40**	40-400	354-3540	30-295	80-400	60-295	708-3540	156	3/4	4846	5507
96524065	**65**	65-650	575-5753	48-479	130-650	96-479	1151-5753	156	3/4	4846	5507
96524080	**80**	80-800	708-7081	59-590	160-800	118-590	1416-7081	156	3/4	4846	5507
96524100	**100**	100-1000	885-8851	74-738	200-1000	148-738	1770-8851	156	3/4	4846	5507
96524300	**300 [2]**	300-3000	2655-26553	221-2214	600-3000	443-2214	5310-26553	195	1 1/2	10500	12000

[1]) for calibrating torque screwdrivers
[2]) for use with mechanical loader No 7792 and 7792-1 (S. 243)

5

TORKMASTER.
Simple, professional calibration.

Need to adjust torque wrenches and torque screwdrivers and calibrate them in compliance with the standards, generate Declarations of Conformance and calibration certificates to DIN EN ISO 6789? This is exactly what the STAHLWILLE TORKMASTER software is for. At the highest standard of safety and with minimum effort for the user.

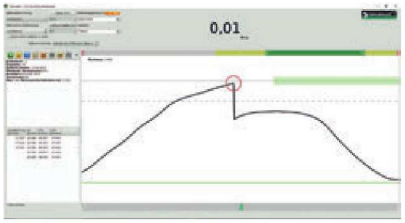
The **optional CAQ interface** enables connection to the superordinate CAQ system, which in this way has access to all inspection data at all times. The user is not required to do anything – all the data and logs of the calibration process are securely transmitted.

Accessories for workshop torque tester and calibration systems

7759-4 USB adaptor, jack cable and software Torkmaster

Link between perfectControl® or transducer (7721-7724) and PC. For adjusting and calibrating torque wrenches and torque screwdrivers. Produces calibration certificates in accordance with DIN EN ISO 6789, which can be printed out or saved as PDF files.

- as found / as left calibrations can be documented
- graphical representation of the torque progression
- user management
- 17 languages
- equipment testing system



System requirements:

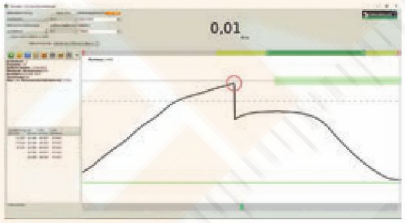
- PC
- Microsoft Windows XP SP3 or later operating system
- USB connection

Code	L m	g
96583629	1.5	65

7759-6 USB adaptor, cable and software Torkmaster NEW

Link between perfectControl® or transducer (7728) and PC. For adjusting and calibrating torque wrenches and torque screwdrivers. Produces calibration certificates in accordance with DIN EN ISO 6789, which can be printed out or saved as PDF files.

- as found / as left calibrations can be documented
- graphical representation of the torque progression
- user management
- 17 languages
- equipment testing system



System requirements:

- PC
- Microsoft Windows XP SP3 or later operating system
- USB connection

Code	L m	g
96583631	1.5	72

7751 Jack cable

- connection between transducers 7721-7724 and USB adaptor or display unit
- with jacks at both ends, 90° angled

Code	L m	g
52110051	1.5	50

7751-1 Cable for No 7728

- for connecting laboratory transducers 7728 to a USB hub or display unit
- with jack plug, 90° angled, and self-locking precision plug

Code	L m	g
52110054	1.5	38

7752 Spiral cable

- connection between transducer and display unit or USB adaptor
- with jacks at both ends, 90° angled

Code	L max. mm	g
52110052	500	35

7751-2 Spiral cable for No 7728

- for connecting laboratory transducers 7728 to a USB hub or display unit
- with jack plug, 90° angled, and self-locking precision plug

Code	L max. mm	g
52110057	500	32

7750 Display unit

- registered design
- for displaying the actual torque as measured
- units of measurement: N·m, ft·lb, in·lb
- modes of operation: track, peak hold, first peak (only with manual operation)
- additional display of actual torque applied with clicking torque wrenches
- swivels to any desired position thanks to universal ball-joint

Code	g
52100050	182

7760 Mains adaptor

- Input:
  110 V-230 V AC
- Output:
  9 V DC, with interchangeable socket adaptors

Code	g
52110056	201

7761 Interface adaptor

- required for automated calibration and adjustment of angle-controlled torque wrenches No 714 using calibrating and adjusting units perfectControl® No 7794-2 and 7794-3

Code	g
52110061	26

7761/3 Interface adaptor set

Contents:
- No 7761 interface adaptor
- No 7752 spiral cable
- No 7760 mains adaptor

Code	g
96521161	255

7311/7312 Plastic box, empty

- for safe storage and transport of transducers (please order inlays separately)

Code	No	for transducer	g
81500003	**7311**	7721; 7722; 7723; 7728 1-20	554
81500004	**7312**	7724-1; 7728 40-100	1346

7313/7314 Inlays for plastic box

Code	No	for transducer	g
83071030	**7313**	7721; 7722; 7723; 7728 1-20	77
83071031	**7314**	7724-1; 7728 40-100	242

409M Adaptor

- 1/4" socket x 3/8" plug (6.3 x 10)

code	L mm	∅ mm	g
11030010	13	28	14

7787 Square drive adaptor

- 1/4" socket x 3/4" plug (6.3 x 20)

Code	L mm	∅ mm	g
58521087	15.5	29	41

7788 Square drive adaptor

- 3/8" socket x 3/4" plug (10 x 20)

Code	L mm	∅ mm	g
58521088	23.5	29	50

7789 Square drive adaptor

- 1/2" socket x 3/4" plug (12.5 x 20)

Code	L mm	∅ mm	g
58521089	23.5	29	40

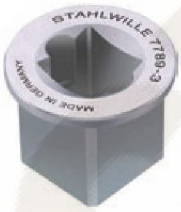
7789-2 Square drive adaptor

- 3/4" socket x 1 1/2" plug (20 x 40)

Code	L mm	∅ mm	g
58523089	44	60	380

7789-3 Square drive adaptor

- 1" socket x 1 1/2" plug (25 x 40)



Code	L mm	∅ mm	g
58524089	44	60	280

7789-4 Square drive adaptor

- 1/4" socket x 1/2" plug (6.3 x 12.5)

Code	L mm	∅ mm	g
58524090	15.5	29	25

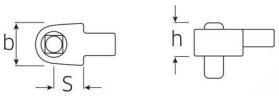
7789-5 Square drive adaptor

- 3/8" socket x 1/2" plug (10 x 12.5)

Code	L mm	∅ mm	g
58524091	15.5	29	28

734K Calibrating square drive insert tools

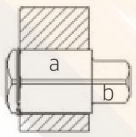
- without a ball or pin (so not suitable for bolt tightening)
- optimum measuring results during calibration thanks to reduced lateral forces



Code	size	■ "	mm	b mm	h mm	S mm	g
58243004	**4**	1/4	9x12	20	16.7	17.5	76
58243005	**5**	3/8	9x12	20	16.7	17.5	76
58243012	**12**	3/8	14x18	27	21.5	25	199
58243020	**20**	1/2	14x18	27	21.5	25	218
58243040	**40**	3/4	14x18	40	29.3	25	410
58241100	**100**	3/4	22x28	43	29.3	55	907

70VK Calibrating square drive units

- without a ball or pin (so not suitable for bolt tightening)
- optimum measuring results during calibration thanks to reduced lateral forces



Code	size	for No	a "	b "	L mm	g
59011014	**11**	734/4	3/8	1/4	24.7	12
59011003	**3**	735/5	3/8	3/8	27.6	17
59011012	**12**	734/10; 734/20	1/2	3/8	32.5	34
59011011	**502 1/2**	734/20	1/2	1/2	36.9	60
59011008	**8**	734/40; 734/80; 734/100	3/4	3/4	52.2	138