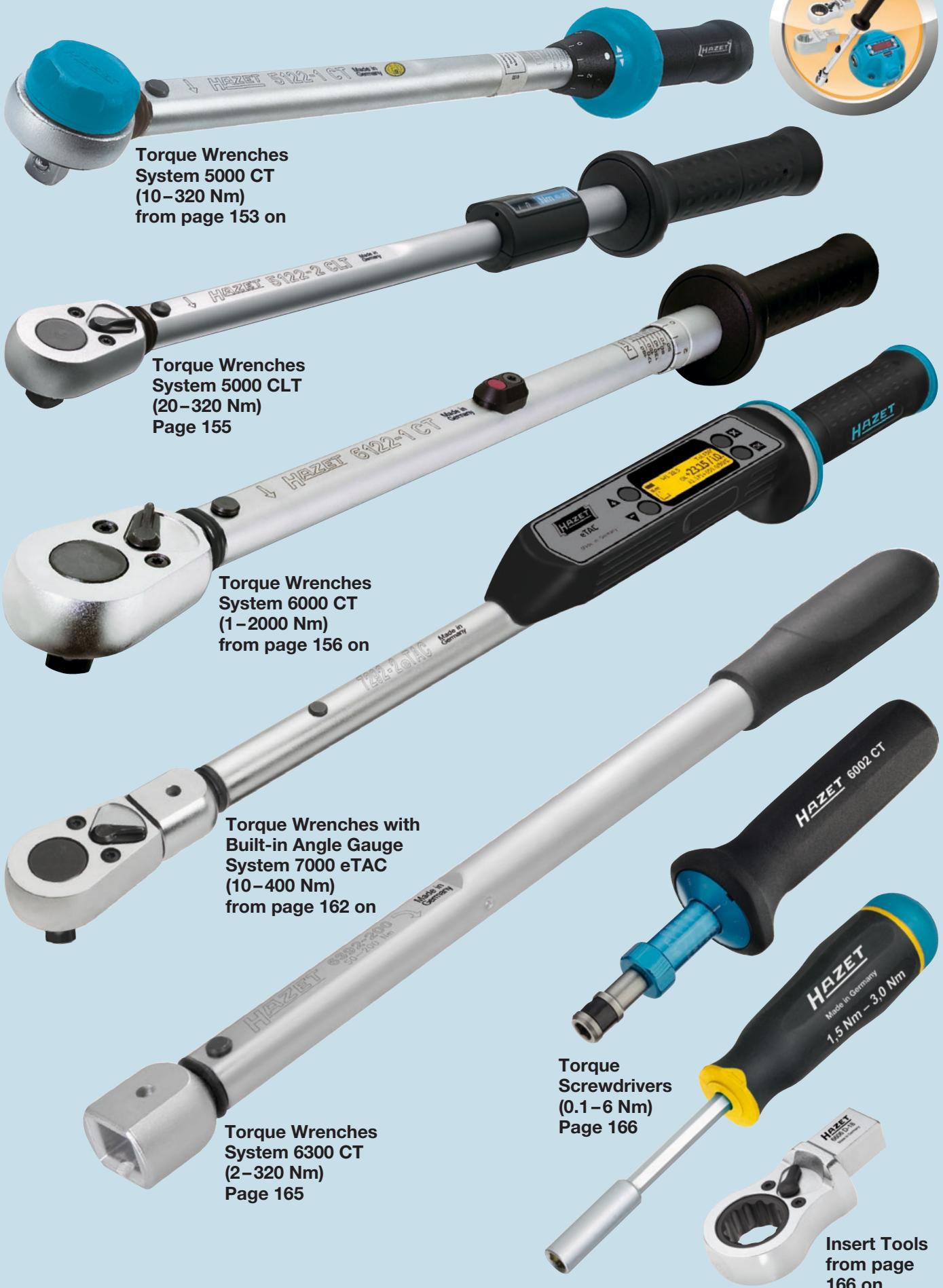




# Torque Tools





## Torque Tools

# HAZET Torque Wrench Service

## Our Examination and Calibration Service offers:

- Adjustment, calibration and repair of your torque wrenches
- Good preconditions for functional torque wrenches
- Regular working quality, provable in the long term
- Test sticker
- Examination certificate indicating the test values



So geht's

1. PDF-Formular vollständig ausfüllen und anschließend ausdrucken
2. Ausgedruckten Lieferschein mit Ware befügen
3. Ware sorgfältig verpacken, um Transportschäden zu vermeiden
4. Paket ausreichend frankiert an HAZET-WERK • Remscheid verschicken

Fragen: ☎ 02191 792-355 • fax 02191 792-523 • [service-center@hazet.de](mailto:service-center@hazet.de)

**HAZET®**  
Geniales Werkzeug

Für zügige Reklamationsbearbeitung bitte vollständig ausfüllen.

Formular	Name
	Strasse
	PLZ/Ort
	Telefon
	Fax
	eMail

Lieferschein-Nr.:  
Praktisch Lieferschein-Nr. frei wählbar, jedoch mindestens vierstellig)

Datum:

Rechnungsempfänger:

Warenrücksendung an:

Sehr geehrte Damen und Herren,  
anbei erhalten Sie folgende Werkzeuge zur Reklamation:  
Anzahl Artikel-Nr. Seriennummer \*) Reklamationsgrund

Durch HAZET Service-Center  
auszufüllen  
Eingangsdatum:

Meldungsnummer

Ort/Datum, Unterschrift und Firmenstempel  
428/355/06

\* Die Seriennummer/das Herstellatum gibt für die Produkte Drehmoment-Schlüssel, Pneumatik-Werkzeuge, Federspanner (4900) und Endloskette





# HAZET – Competence for Calibration of Torque and Rotation Angle

Accredited according to DIN EN ISO/IEC 17025

for measured values:

- Torque (DIN EN ISO 6789)
- Rotation angle (VDI/VDE 2648 page 2; without item 4.2)

Complies with special demands of ISO/TS 16949 for calibration laboratories (mandatory requirement for all suppliers of the automotive industry)

HAZET – owned calibration laboratory guarantees optimal technical calibration competence by accreditation

Authorized to issue calibration certificates



Deutsche Akkreditierungsstelle GmbH

Bereihene gemäß § 8 Absatz 1 AkkStelleG i.V.m. § 1 Absatz 1 AkkStelleGBV  
Unterzeichnerin der Multilateralen Abkommen von EA, ILAC und IAF zur gegenseitigen Anerkennung

## Akkreditierung



Die Deutsche Akkreditierungsstelle GmbH bestätigt hiermit, dass das Kalibrierlaboratorium

HAZET-WERK Hermann Zerver GmbH & Co. KG

Güldenwerther Bahnhofstraße 25 – 29, 42857 Remscheid

die Kompetenz nach DIN EN ISO/IEC 17025:2005 besitzt, Kalibrierungen in folgenden

Mechanische Messgrößen  
- Drehmoment

Dimensionelle Messgrößen  
- Winkel  
- Drehwinkel

Die Akkreditierungsurkunde gilt nur in Verbindung mit dem Bescheid vom 14.02.2013 mit der Akkreditierungsnr. D-K-17638-01 und ist gültig bis 13.02.2018. Sie besteht aus diesem Deckblatt, der Rückseite des Deckblatts und der folgenden Anlage mit insgesamt 2 Seiten.  
Registrierungsnummer der Urkunde: D-K-17638-01-00

Braunschweig, 14.02.2013

Seite hinzuweisen auf der Rückseite

im Auftrag  
Dr. Michael Wolf  
Leiter Abteilung 5



Deutsche  
Akkreditierungsstelle  
D-K-17638-01-00

<sup>1)</sup> DAkkS: Deutsche Akkreditierungsstelle GmbH  
(National accreditation body for the Federal Republic of Germany, Berlin)

<sup>2)</sup> PTB: Physikalisch Technische Bundesanstalt  
(PTB is the national metrology institute providing scientific and technical services)



# Torque Wrenches System 5000 CT

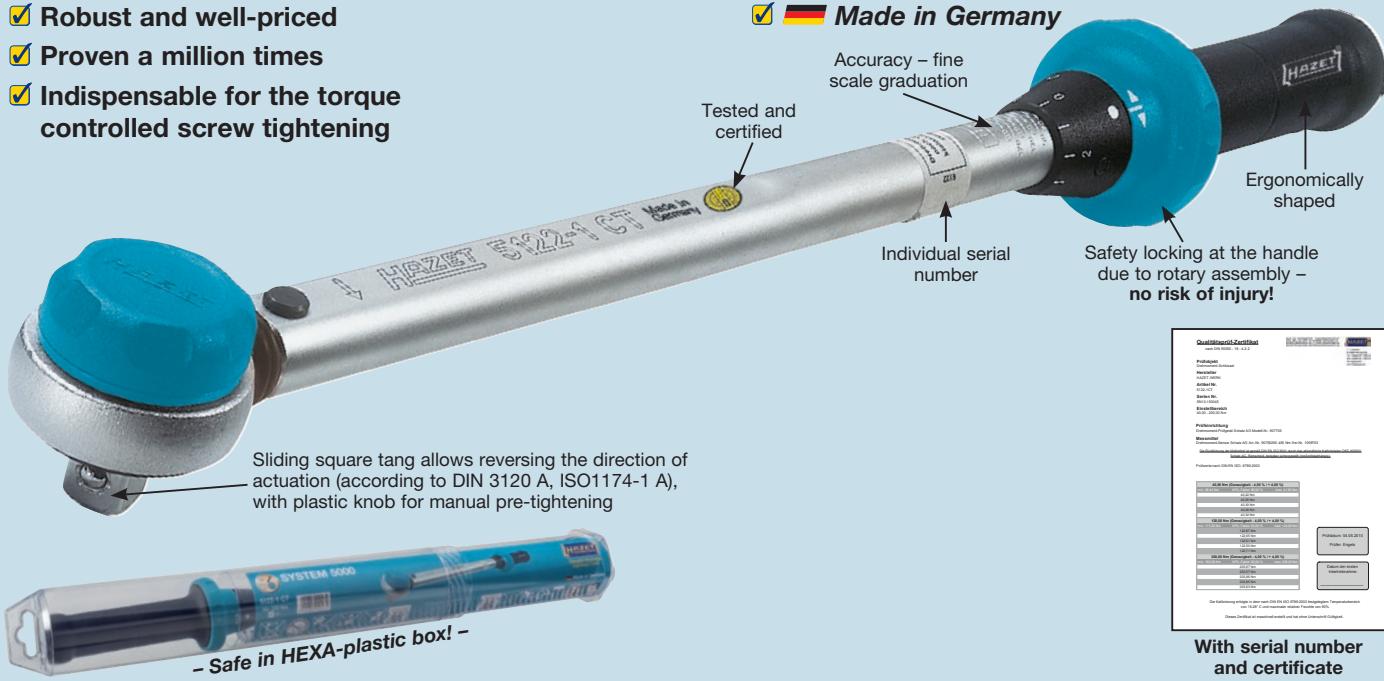
**"The Classic Workshop Tool!"**

- Torque ranges: 2.5 – 320 Nm**
- Release accuracy tolerance** (in direction of actuation)  
± 4% of the preset scale value according to DIN EN ISO 6789:2003 (D)
- Robust and well-priced**
- Proven a million times**
- Indispensable for the torque controlled screw tightening**

With automatic close gap release – palpable and audible when torque setting is reached

Safe and fast adjustment of the desired torque value by turning the handle

**Made in Germany**



**With serial number and certificate**



## Torque Wrench – SYSTEM 5000-2 CT (with reversible ratchet), Release Accuracy Tolerance ± 4%

- Release accuracy tolerance (in direction of actuation): ± 4% of scale value

- Safe torque release:
  - palpable (close gap release)
  - audible ("click" sound)
- Easy and safe adjustment of the desired torque value by turning the handle
- User-friendly reversible ratchet
- **Service-friendly** (Do-it-yourself repair kits for ratchets available)
- Integrated shift lever with free-running function **reducing the risk of injury and malfunction**
- Accuracy – fine scale graduation
- Safety locking of the handle due to rotary assembly – **no risk of injury!**
- Ergonomically shaped
- With serial number and certificate
- Robust and well-priced
- Proven a million times
- Indispensable for the torque controlled screw tightening
- Square according to DIN 3120, ISO 1174-1, DIN EN ISO 6789:2003 (D)

**Made in Germany**



6.3 1/4"

HAZET No.	<i>l</i> mm	Drive	Nm	Graduation Nm		EAN-No 4000896+
5108-2 CT	232	■ 6.3 = 1/4"	2.5–25	0.25	1.5–16.4	119752

- Perfect for working on motorcycles and bicycles

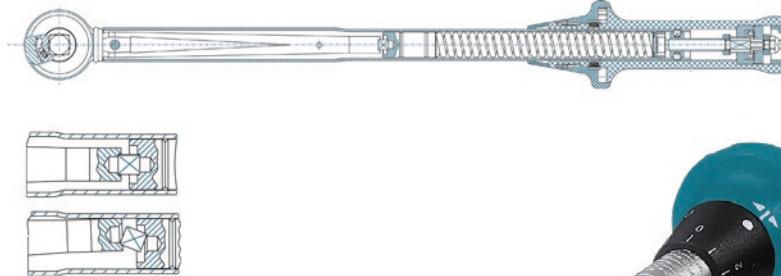
- Delivery in sturdy twistpack

5108-2 CT 232 ■ 6.3 = 1/4" 2.5–25 0.25 1.5–16.4 119752

## Torque Wrench – SYSTEM 5000 CT (with sliding square tang), Release Accuracy Tolerance ± 4%

- Release accuracy tolerance (in direction of actuation) ± 4% of scale value
- Tightening at torque setting is possible both to the right and to the left
- With automatic close-gap release when torque setting is reached
- Easy and safe adjustment of the desired torque value by turning the handle
- Safe lock at the handle
- Fine scale graduation
- With serial number and certificate
- Ratchet with sliding square tang with plastic knob for manual pre-tightening
- Changing the direction of actuation by inverting the ratchet's sliding square tang
- **Delivery in sturdy twistpack**
- DIN EN ISO 6789:2003 (D), Square according to DIN 3120, ISO 1174-1

**Made in Germany**



Das Fachmagazin für den ambitionierten Hobbyracer  
**CIRCUIT**  
Empfehlung 2-2008  
5110-1 CT

HAZET No.	<i>l</i> mm	Drive	Nm	Graduation Nm		EAN-No 4000896+
5110-1 CT	305	■ 10 = 3/8"	10–60	0.5	4.3–27.5	022397
5121-1 CT	389	■ 12.5 = 1/2"	20–120	1	6.8–42.5	022427
5122-1 CT	493	■ 12.5 = 1/2"	40–200	1	10.0–53.2	022472
5123-1 CT	614	■ 12.5 = 1/2"	60–320	2	11.6–85.1	022588

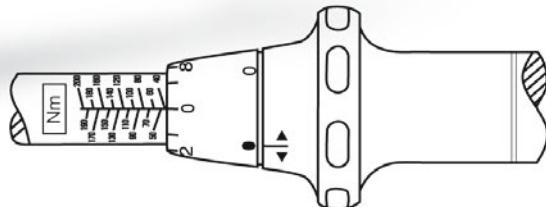
Sliding square tang with blue knob 10 = 3/8" ■

for 5110-1 CT

5110-04 - - - - - 151493

Sliding square tang with blue knob 12.5 = 1/2" ■  
for 5121-1 CT, 5122-1 CT, 5123-1 CT

5121-02 - - - - - 151509



**5110-04 / 5121-02**

# Torque Wrenches System 5000 CLT

## "For higher demands"

- Click-Lens-Type with value readout in the display – security for the user
- Torque ranges: 20 – 320 Nm
- Release accuracy tolerance (in direction of actuation)  $\pm 4\%$  of the preset scale value according to DIN EN ISO 6789:2003 (D)
- Torque release – palpable by close gap release – audible by click-sound
- Made in Germany

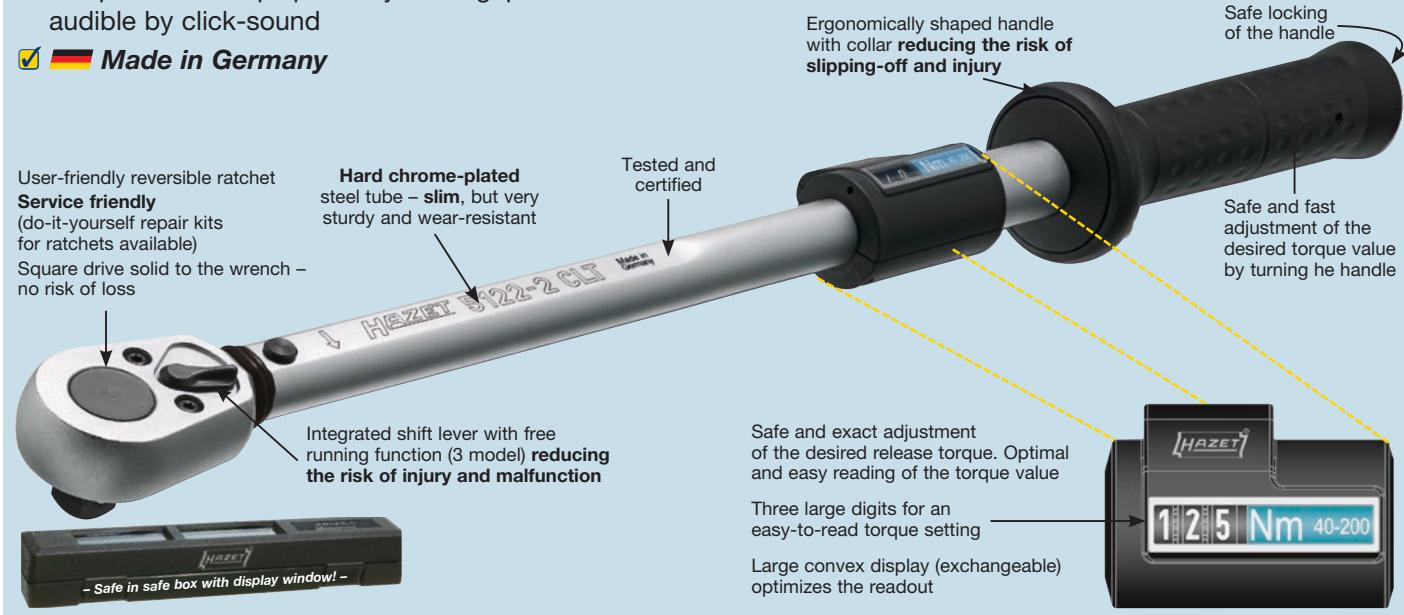
Awarded with the



design  
award  
2005



With serial number  
and certificate

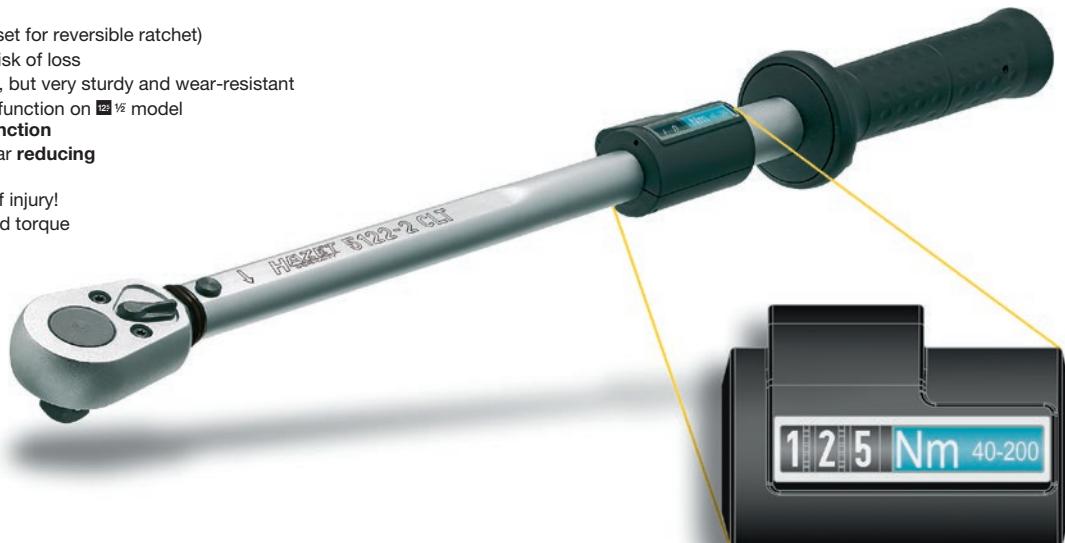


## Torque Wrench – SYSTEM 5000 CLT – Release Accuracy Tolerance $\pm 4\%$

Click-Lens-Type with value readout in the display ensuring safety and user friendliness

- Release accuracy tolerance  $\pm 4\%$  of scale value in direction of actuation
- Torque release – palpable by close-gap release – audible by click-sound
- User-friendly reversible ratchet
- Service-friendly (do-it-yourself repair set for reversible ratchet)
- Square drive solid to the wrench – no risk of loss
- Hard chrome-plated steel tube – slim, but very sturdy and wear-resistant
- Integrated shift lever with free-running function on  $\frac{1}{2}''$  model **reducing the risk of injury and malfunction**
- Ergonomically shaped handle with collar **reducing the risk of slipping-off and injury**
- Safety locking of the handle – no risk of injury!
- Easy and safe adjustment of the desired torque value by turning the handle
- Safe and exact adjustment of the desired release torque. Optimal and easy reading of the torque value
- Three large digits for an easy-to-read torque setting
- Large convex display (exchangeable) optimizes the readout
- With serial number and certificate
- Delivery in safe box
- Surface: hard chrome plated
- DIN EN ISO 6789:2003 (D)
- 

(E)



HAZET No.	$l$ mm	Drive	Nm	Graduation Nm		EAN-No. 4000896+
5121-2 CLT	435	■ 12.5 = $\frac{1}{2}''$	20-120	1	5.9-37.0	104215
5122-2 CLT	545	■ 12.5 = $\frac{1}{2}''$	40-200	1	9.0-47.4	104192
5123-2 CLT	660	■ 12.5 = $\frac{1}{2}''$	60-320	2	10.8-59.4	104222



# Torque Wrenches System 6000 CT

**"High-precision measuring tools for highest demands!"**

- Torque ranges: 1 – 2000 Nm**
- Release accuracy tolerance** (in direction of actuation)  
**± 2 % of the preset scale value** according to  
 DIN EN ISO 6789:2003 (3% of the preset scale value:  
 6150-1 CT, 6160-1 CT/4%: 6170-1 CT)  
 Accuracy tolerance ±3% of the preset scale value  
 according to US standards: 6114-1 CT up to 6132-1 CT
- Tested, with certificate**
- Knob for locking the set value**
- Square drive according to DIN 3120 A, ISO 1174-1A**
- Individual serial number**
- Reversible ratchets** **10 3/8**, **12 1/2**, **20 3/4**
- Ergonomically shaped**
- Safe torque release:**
  - palpable (close gap release)
  - audible ("click" sound)
  - optical (signal transmitter, depending on model)
- Made in Germany**



With serial number  
and certificate

- For applications requiring low torque ranges of 1–40 Nm**

- Especially suitable for:
  - Engines
  - Gearboxes
  - Industry
  - Machine construction
  - Model making





## Torque Tools – System 6000 CT

### Torque Wrench – SYSTEM 6000 CT – Release Accuracy Tolerance $\pm 2\%$ \*)

- With automatic close-gap release, palpable and audible when torque setting is reached
- Easy and safe adjustment of the desired torque value by turning the handle
- Release accuracy tolerance** (in direction of actuation)  $\pm 2\%$  of scale value  
6106-1 CT:  $\pm 4\%$  release accuracy tolerance
- Application: engines, gearboxes, machines, industry, model making
- Without signal transmitter
- DIN EN ISO 6789:2003 (D), Square according to DIN 3120, ISO 1174-1

**Made in Germany**



(E)



**6.3 1/4"**

HAZET No.	<i>l</i> mm	Drive	Nm	Graduation Nm	Tolerance	EAN-No. 4000896+
6106-1 CT	197	■ 6.3 = 1/4"	1–6	0.1	4	0.7– 4.4
6108-1 CT	198	■ 6.3 = 1/4"	2–10	0.2	2	1.4– 7.3
6109-2 CT	256	■ 6.3 = 1/4"	4–40	0.4	2	2.0–21.4

### Torque Wrench – SYSTEM 6000 CT – Release Accuracy Tolerance $\pm 2\%$

- Release accuracy tolerance  $\pm 2\%$  of scale value** in direction of actuation
- High-precision measuring tools for highest demands
- Hard chrome-plated** steel tube – slim, but very sturdy and wear-resistant
- Safe storage in safe box with display window
- Safety lock at the handle
- Safe torque release:
  - palpable (close gap release)
  - audible ("click" sound)
- Knob for locking the set value
- User-friendly reversible ratchet
- Service-friendly** (Do-It-Yourself repair kits for ratchets available)
- Integrated shift lever
- Easy and safe adjustment of the desired torque value by turning the handle
- Ergonomically shaped handle with collar **reducing the risk of slipping-off and injury**
- Accuracy – fine scale graduation
- With serial number and certificate
- Surface: hard chrome plated
- DIN EN ISO 6789:2003 (D), Square according to DIN 3120, ISO 1174-1

**Made in Germany**

**CIRCUIT**  
Ges Fachmagazin für den ambitionierten Hobbyzweig  
Testsieger 2-2008  
6121-1 CT

**AutoClassic**  
**EMPFEHLUNG**

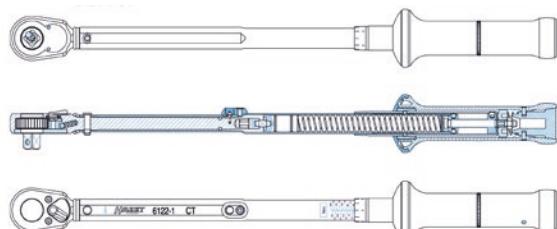
**REISE ride on!**  
**MOTORRAD**  
**EMPFEHLUNG**



HAZET No.	<i>l</i> mm	Drive	Nm	Graduation Nm	EAN-No. 4000896+
6110-1 CT	335	■ 10 = 3/8"	5– 60	0.5	1.9–24.7
6111-1 CT	389	■ 10 = 3/8"	20–120	1	6.7–42.4
6121-1 CT	435	■ 12.5 = 1/2"	20–120	1	6.0–37.4
6122-1 CT	543	■ 12.5 = 1/2"	40–200	1	9.0–47.5
6123-1 CT	659	■ 12.5 = 1/2"	60–320	2	10.8–59.6

Without signal transmitter

6143-1 CT	803	■ 20 = 3/4"	100–400	2.5	14.8–60.2
6144-1 CT	1040	■ 20 = 3/4"	200–500	2.5	21.8–55.3
6145-1 CT	1280	■ 20 = 3/4"	300–800	2.5	26.1–70.9



## Torque Wrench – SYSTEM 6000 CT – Release Accuracy Tolerance ± 3% (6170-1 CT 4%)

For highest torque values

- Especially suited for industrial climbers
- Application on wind turbines, dockyards, heavy industry, on commercial vehicles etc.
- To be disassembled in two parts (6170-1 CT: three parts) with release tool
- In carrier bag with carrying handle and shoulder strap
- Release accuracy tolerance ± 3% of scale value** (in direction of actuation) (6170-1 CT ± 4%)
- Screw tightening also possible with ratchet shaft. For torque controlled screw tightening always use the complete wrench.

Made in Germany



HAZET No.	/ mm	Drive	Nm	Graduation Nm	Tolerance		EAN-No. 4000896+
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### 1000 Nm Torque Wrench

**Weight only approx. 10 kg**

- Actuating force only 590 N (60 kg) at 1000 Nm
  - Length of ratchet shaft 903 mm, handle 930 mm
- |           |      |             |          |   |   |           |        |
|-----------|------|-------------|----------|---|---|-----------|--------|
| 6150-1 CT | 1788 | ■ 20 = 3/4" | 400-1000 | 5 | 3 | 24.1-60.7 | 141067 |
|-----------|------|-------------|----------|---|---|-----------|--------|

### 1600 Nm Torque Wrench

**Weight only approx. 14 kg**

- Actuating force only 685 N (70 kg) at 1600 Nm
  - Length of ratchet shaft 1205 mm, handle 1320 mm
- |           |      |           |          |   |   |           |        |
|-----------|------|-----------|----------|---|---|-----------|--------|
| 6160-1 CT | 2455 | ■ 25 = 1" | 600-1600 | 5 | 3 | 26.0-69.8 | 155316 |
|-----------|------|-----------|----------|---|---|-----------|--------|

### 2000 Nm Torque Wrench

**Weight only approx. 18 kg**

- Actuating force only 685 N (70 kg) at 2000 Nm
  - Length of ratchet shaft 1317 mm, extension 645 mm, handle 1203 mm
  - Total length (assembled): 3034 mm
- |           |      |           |          |   |   |           |        |
|-----------|------|-----------|----------|---|---|-----------|--------|
| 6170-1 CT | 3034 | ■ 25 = 1" | 800-2000 | 6 | 4 | 27.8-69.9 | 177776 |
|-----------|------|-----------|----------|---|---|-----------|--------|

## Torque Wrench – SYSTEM 6000 CT – US STANDARDS – Release Accuracy Tolerance ± 3%

- According to US standards
- Scale graduation in lbf.ft
- Release accuracy tolerance ± 3% of scale value** in direction of actuation
- With reversible ratchet
- Knob for locking the set value
- In safe box
- DIN EN ISO 6789:2003 (D), Square according to DIN 3120, ISO 1174-1

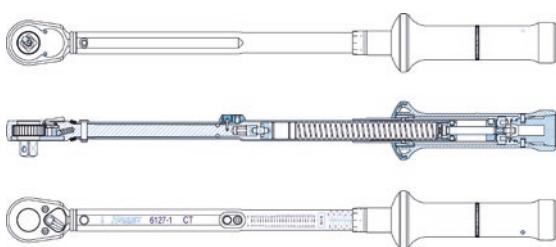
Made in Germany



HAZET No.	/ mm	Drive	Nm	Graduation lbf.ft	lbf.ft.		EAN-No. 4000896+
6114-1 CT	333	■ 10 = 3/8"	6.8- 54.2	0.5	5- 40	2.6-21.8	078424
6115-1 CT	390	■ 10 = 3/8"	27.1-135.6	0.5	20-100	9.1-48.2	025084
6127-1 CT	545	■ 12.5 = 1/2"	54.2-271.2	1	40-200	12.3-64.6	025381
6128-1 CT	660	■ 12.5 = 1/2"	67.8-339	2	50-250	12.2-62.6	076116

Without signal transmitter

6132-1 CT	1280	■ 20 = 3/4"	162.7-813.5	2	120-600	14.2-72.5	078455
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## Torque Tools – SYSTEM 6000 CT

### Torque Wrench – SYSTEM 6000 CT – Release Accuracy Tolerance ± 2%

- With plug-and-socket connection to accomodate insert tools
- Release accuracy tolerance** (in direction of actuation): ± 2% of scale value
- DIN EN ISO 6789:2003 (D)

**Made in Germany**

HAZET No.	<i>l</i> mm	Drive	Nm	Graduation Nm	Tolerance		EAN-No. 4000896+
6280-1 CT	180	9 x 12	2–10	0.2	2	1.3–6.6	026005
6282-1 CT	240	9 x 12	4–40	0.4	2	1.9–19.8	080540

9 x 12



(E)

### Torque Wrench – SYSTEM 6000 CT – Release Accuracy Tolerance ± 4%

- With plug-and-socket connection to accomodate insert tools
- Release accuracy tolerance** (in direction of actuation): ± 4% of scale value
- DIN EN ISO 6789:2003 (D)

**Made in Germany**

HAZET No.	<i>l</i> mm	Nm	Graduation Nm	Tolerance		EAN-No. 4000896+
6281-2 CT	125.4	5–13	0.2	4	4.4–11.8	183326

9 x 12



(E)

### Torque Wrench – SYSTEM 6000 CT – Release Accuracy Tolerance ± 2%

- With plug-and-socket connection to accomodate insert tools
- Release accuracy tolerance** (in direction of actuation): ± 2% of scale value
- In safe box
- DIN EN ISO 6789:2003 (D)

**Made in Germany**

HAZET No.	<i>l</i> mm	Drive	Nm	Graduation Nm		EAN-No. 4000896+
6290-1 CT	305	9 x 12	5–60	0.5	1.8–23.1	026043
6291-2 CT	388	9 x 12	20–120	1	5.6–34.7	026104
6291-1 CT	400	14 x 18	20–120	1	5.6–34.7	026074
6292-1 CT	510	14 x 18	40–200	1	10.8–44.9	026135
6293-1 CT	620	14 x 18	60–320	2	10.3–56.8	026173

9 x 12

14 x 18



(E)



### Torque Wrench – SYSTEM 6000 CT – Release Accuracy Tolerance ± 2%

- With plug-and-socket connection to accomodate insert tools
- Release accuracy tolerance** (in direction of actuation): ± 2% of scale value
- In safe box
- DIN EN ISO 6789:2003 (D)

**Made in Germany**

HAZET No.	<i>l</i> mm	Drive	Nm	Graduation Nm		EAN-No. 4000896+
<b>Without signal transmitter</b>						
6294-1 CT	715	14 x 18	100–400	2.5	14.9–60.9	026197
6295-1 CT	955	14 x 18	200–500	2.5	22.0–55.8	026203
6296-1 CT	1195	14 x 18	300–800	2.5	26.3–71.3	026210

14 x 18



(E)



**Explication of effective lengths of insert tools and further suitable insert tools see from page 166 on**



## Torque Tool Assortment

(E)



435 x 215 x 62 mm

## Torque Tool Assortment

(E)



578 x 235 x 88 mm

29 pieces, in sheet metal box with plastic insert

Made in Germany

Contents:

6290-1 CT 6402-1  
6450 c-7 8 9 10 11 12 13 14 15 16 17  
6612 c-10 11 12 13 14 17  
6630 c-7 8 10 11 12 13 14 15 16 17

**HAZET**

No.

EAN-No.  
4000896+

6290-1 CT/29

026067

28 pieces, in sheet metal box with plastic insert

Made in Germany

Contents:

6292-1 CT 6404-1  
6450 d-13 14 15 16 17 18 19 21 22 24 27 30 32  
6630 d-13 14 15 16 17 18 19 21 22 24 27 30 32

**HAZET**

No.

EAN-No.  
4000896+

6292-1 CT/28

026166

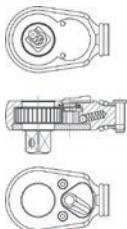
Explication of effective lengths of insert tools and further suitable insert tools see from page 166 on





## Torque Tools – System 6000 CT

### Replacement Set



Made in Germany

**HAZET**  
No.

EAN-No.  
4000896+

#### Replacement set for shift lever

consisting of: shift lever, screws, ball, compression spring  
for 1016, 1016/2,  
6132-1 CT, 6143 CT, 6143-1 CT,  
6143-01 CT, 6144 CT, 6144-1 CT, 6144-01 CT,  
6145 CT, 6145-1 CT, 6145-01 CT, 6146-1 CT

**1016/6**

001972

**Replacement set for ratchet wheel 20 = ¾"**  
consisting of: ratchet wheel, pawl, shift lever, screws,  
ball, compression spring  
for 1016, 1016/2,  
6132-1 CT, 6143 CT, 6143-1 CT, 6143-01 CT,  
6144 CT, 6144-1 CT, 6144-01 CT, 6145 CT,  
6145-1 CT, 6145-01 CT, 6146-1 CT

**1016/8 N**

001989

#### Replacement set for shift lever

consisting of: shift lever, screws, ball, compression  
spring for 1116, 6150-1 CT, 6160-1 CT

**1116/6**

003228

**Replacement set for ratchet wheel 25 = 1"**  
consisting of: shift lever, screws, ball, compression  
spring, pawl, ratchet wheel for 1116, 6160-1 CT

**1116/8 N**

003235

#### Replacement set for shift lever

consisting of: shift lever, screws, ball, compression spring, pawl  
for 8816 G, 8816 GK, 8816 P,  
8816 S, 8816 ST  
916 K, 2264-1,  
6110 CT, 6110-1 CT, 6111-1 CT,  
6114-1 CT, 6115-1 CT  
6402-1, 6402-1 S, 6408-1

**8816 P/6**

144617

**Replacement set for ratchet wheel 10 = ¾"**  
consisting of: ratchet wheel, pawl, shift lever,  
screws, ball, compression spring  
for 8816 G, 8816 GK, 8816 P, 8816 ST,  
6110 CT, 6110-1 CT, 6111-1 CT,  
6114-1 CT, 6115-1 CT, 6402-1

**8816 P/7 N**

042234

#### Replacement set for shift lever

consisting of: shift lever, screws, ball, compression spring  
for 6108-1 CT, 6109-1 CT, 6109-2 CT, 6401-1, 6401-1 S, 6408

**6401-1/6**

146048

**Replacement set for ratchet wheel 6.3 = ¼"**  
consisting of: ratchet wheel, pawl, shift lever, screws,  
ball, compression spring  
for 5108-2 CT, 6108-1 CT, 6109-1 CT, 6109-2 CT, 6401-1

**6401/7**

111169

#### Replacement set for ratchet wheel 6.3 = ¼"

consisting of: ratchet wheel, pawl, shift lever,  
screws, ball, compression spring  
for 6401-1 S

**6401-1 S/7**

111152

#### Replacement set for shift lever

consisting of: shift lever, screws, ball,  
compression spring, spring washer  
and locking ring  
for 6403-1, 6403-1 S, 6404-1, 6404-1 S

**6403-1/7**

070756

**Replacement set for ratchet wheel 12.5 = ½"**  
consisting of: ratchet wheel, pawl, shift lever, screws,  
ball, compression spring, spring washer, lockring  
for 6403-1, 6404-1

**6403-1/9**

070749

**Replacement set for ratchet wheel 12.5 = ½"**  
consisting of: ratchet wheel, pawl, shift lever,  
screws, ball, compression spring, spring washer, locking ring  
for 6403-1 S, 6404-1 S

**6403-1 S/9**

070817

### Replacement Set

**HAZET**  
No.

EAN-No.  
4000896+

#### Replacement set for lock

consisting of: lock spring, lock cap, cylinder,  
key, 2 headless screws  
for 6110 CT

**6110-26**

025046

#### Replacement set for twist lock

consisting of: lock spring, twist lock  
with 2 headless screws  
for 6010-1 CT, 6110-1 CT, 6114-1 CT, 6290-1 CT

**6110-27**

025053

#### Replacement set for lock

consisting of: lock spring, lock cap, cylinder,  
key, 2 headless screws  
for 6121 CT, 6122 CT, 6123 CT

**6122-26**

025282

#### Replacement set for twist lock

consisting of: lock spring, twist lock  
with 2 headless screws  
for 5121-2 CLT, 5122-1 CLT, 5123-2 CLT  
6021-1 CT, 6022-1 CT, 6023-1 CT,  
6111-1 CT, 6115-1 CT, 6121-1 CT,  
6122-1 CT, 6123-1 CT, 6127-1 CT,  
6128-1 CT, 6291-1 CT, 6292-1 CT,  
6293-1 CT, 6722 TAC, 6291-2 CT

**6122-27**

025299

#### Replacement set for optical signal transmitter

consisting of: red button, compression spring,  
black housing, pin, screw  
for 6021-1 CT, 6022-1 CT, 6023-1 CT,  
6110 CT, 6110-1 CT, 6111-1 CT,  
6114-1 CT, 6115-1 CT, 6121 CT,  
6121-1 CT, 6122 CT, 6122-1 CT,  
6123 CT, 6123-1 CT, 6127-1 CT,  
6128-1 CT, 6291-1 CT, 6291-2 CT,  
6292-1 CT, 6291 CT, 6292-1 CT, 6293-1 CT

**6122-29**

025305

#### Replacement set for shift lever

consisting of: shift lever, screws, ball,  
compression spring, spring washer, locking ring  
for 5121-2 CLT, 5121-2 CT,  
5122-2 CLT, 5122-2 CT, 5122 ST-1  
5123-2 CLT, 5123-2 CT, 5128-2 CLT,  
6121-1 CT, 6121 CT, 6122-1 CT,  
6122 CT, 6123-1 CT, 6123 CT,  
6127-1 CT, 6128-1 CT, 6722 TAC

**6122/7**

025329

#### Replacement set for ratchet wheel 12.5 = ½"

consisting of: ratchet wheel, pawl, shift lever,  
screws, ball, compression spring, spring washer, locking ring  
for 5121-2 CLT, 5121-2 CT,  
5122-2 CLT, 5122-2 CT, 5122 ST-1,  
5123-2 CLT, 5123-2 CT, 5128-2 CLT,  
6121 CT, 6121-1 CT, 6122-1 CT,  
6122 CT, 6123-1 CT, 6123 CT,  
6127-1 CT, 6128-1 CT, 6722 TAC

**6122/9 N**

025343

#### Replacement set for ratchet wheel 20 = ¾"

consisting of: ratchet wheel, pawl, shift lever,  
screws, ball, compression spring  
for 6150-1 CT

**6150/8**

151431

#### Reversible ratchet with screw, complete

(exchangeable): 20 = ¾"  
until end of 2004  
for 6132-1 CT, 6143 CT, 6143-1 CT,  
6144 CT, 6144-1 CT,  
6145 CT, 6145-1 CT, 6146-1 CT

**6143-01**

111190

#### Replacement set for twist lock,

consisting of: twist lock, lock spring  
and cylinder screw  
for 6132-1 CT, 6143-1 CT, 6144-1 CT,  
6145-1 CT, 6150-1 CT, 6160-1 CT  
6243-1 CT, 6244-1 CT, 6245-1 CT,  
6146-1 CT, 6246-1 CT,  
6294-1 CT, 6295-1 CT, 6296-1 CT

**6144-01/3**

025527

#### Reversible ratchet with pin, complete

(exchangeable): 20 = ¾"  
since 2005  
for 6132-1 CT, 6144 CT, 6144-1 CT,  
6145 CT, 6145-1 CT, 6146-1 CT

**6145-01**

111206



# Electronic Torque Wrench with Built-in Angle Gauge – SYSTEM 7000 eTAC

- As Basic and TOP Version
- 10–400 Nm
- Choice of measuring units:  
Basic Version Nm/lbf.ft  
TOP Version Nm/lbf.ft/lbf.in/kgf.m
- Precise torque  
Basic Version  $\pm 2\%$ ,  $\pm 1$  digit  
TOP Version  $\pm 1\%$ ,  $\pm 1$  digit
- Rotation angle range  
up to 999 degree
- 360° LED-signal
- Vibration
- Audible signal
- Display 180° switchable
- Documentation



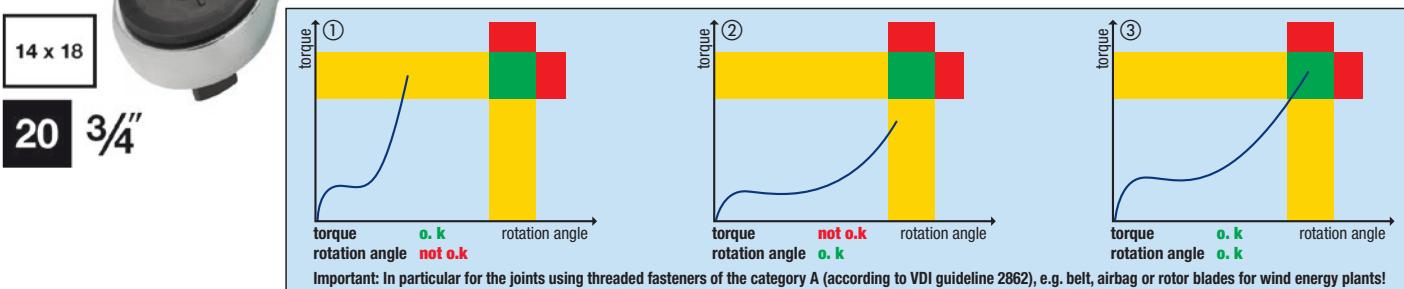
For Smartphones  
with QR-Reader (App)





## Torque Tools - System 7000 eTAC

### Electronic Torque Wrench with Built-in Angle Gauge – SYSTEM 7000 eTAC – Basic Version



- Testing accuracy  $\pm 2\% / \pm 1$  digit (or  $\pm 1^\circ$ ) in rotation to the right or left**
- High-precision torque wrench with built-in angle gauge
- Ergonomic tool design, especially geared to the user and suitable for the professional use
- 2-component handle made of impact resistant fiber-glass reinforced plastic with soft handle elements
- Three signals alert the user during screwing process: audible signal (buzzer), vibration signal and a LED display with "traffic light function" that is visible from all around.
- Big and easily readable display, 180° rotatable
- Indication of the measuring values in 13 mm font size, including a rating of the screwing process (o.k./not o.k.) Indication
- Simple and clearly structured menu navigation with easily readable 5 mm font size in English and German
- Safety switch-on and switch-off (2 different buttons) and automatic energy-saving stand-by mode (time dependent)
- Choice of measuring units: Nm and lbf.ft
- Rotation angle range up to 999 degree
- Menu locking to prevent unintentional change of setting values, 4-digit code is freely selectable.
- Memory capacity up to 200 readings, incl date and time (data reading in the display)
- Indication of battery condition and memory
- 4 standard batteries (AA – 1.5 V) ensure long service life

- Includes detailed operating instructions and certificate in aluminium frame case with foam insert, also includes HAZET Insert Reversible Ratchet
- Offers possibility to select or program the effective length for other insert tools (precondition for the correct torque/angle measurement)
- Measured data may be read-out via Mini-USB port
- Release accuracy tolerance according to ISO 6789–DIN EN ISO 6789–NF EN ISO 6789

**Made in Germany**

HAZET No.	l mm	Drive	Nm	kg	EAN-No. 4000896+
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• Delivery includes insert reversible ratchet 6402-1 ■ 10 = 3/8"

• Length with/without insert tool: 425.5 mm/380.5 mm

• Weight with/without insert tool: 870 g/780 g

**7291-1 eTAC** 380.5 9 x 12 10–100 2.9–28.7 160938

• Delivery includes insert reversible ratchet 6404-1 ■ 12.5 = 1/2"

• Length with/without insert tool: 580 mm/518 mm

• Weight with/without insert tool: 1250 g/980 g

**7292-1 eTAC** 518 14 x 18 20–200 4.1–40.7 160952

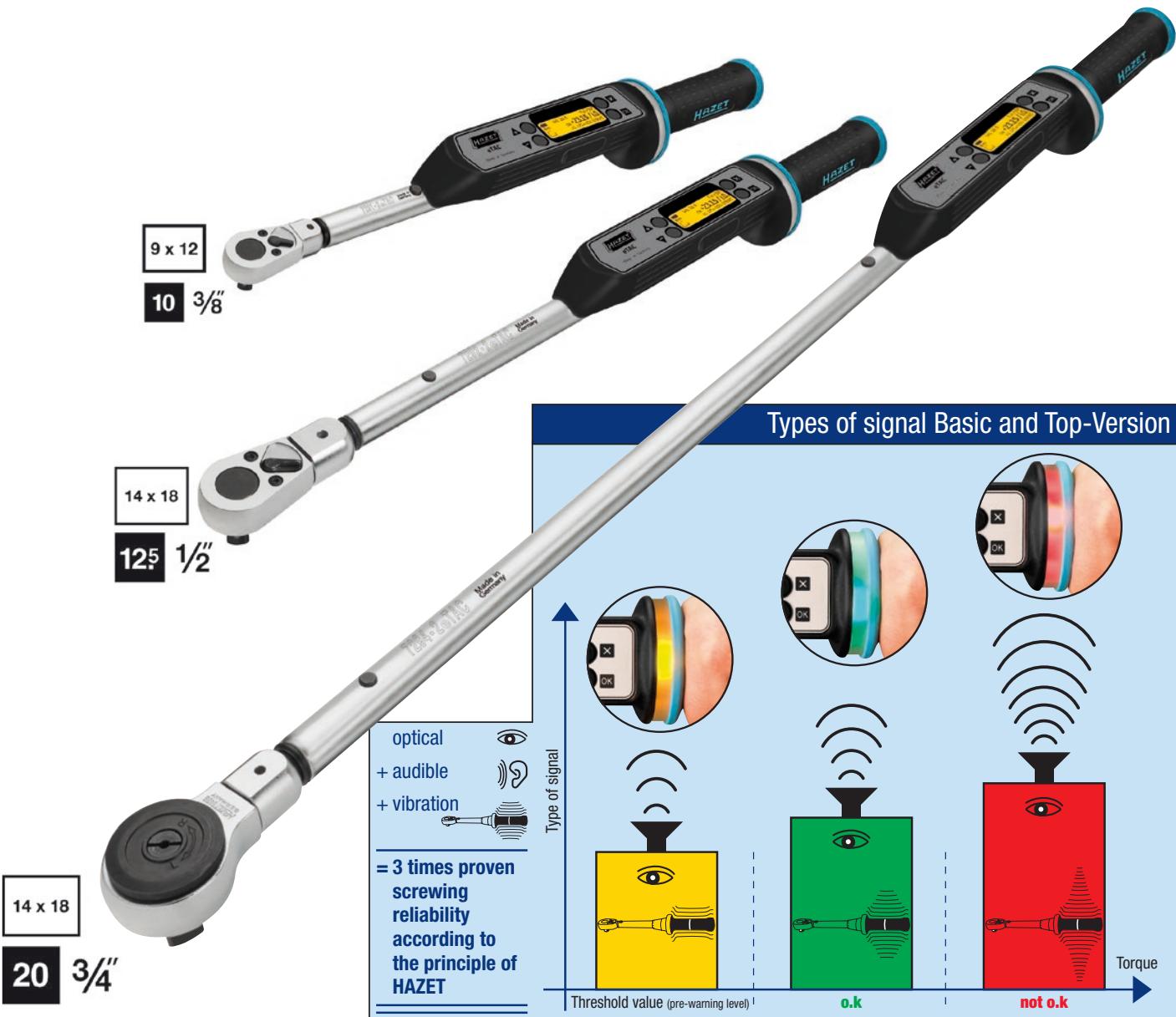
• Delivery includes insert reversible fine tooth ratchet 6406 ■ 20 = 3/4"

• Length with/without insert tool: 1018.5 mm/942.5 mm

• Weight with/without insert tool: 3200 g/2300 g

**7294-1 eTAC** 942.5 14 x 18 40–400 4.4–43.8 160976

## Electronic Torque Wrench with Built-in Angle Gauge – SYSTEM 7000 eTAC – TOP Version



Menu languages now also available: Italian, French and Chinese (sep. HAZET-No. on request)

- Testing accuracy  $\pm 1\% / \pm 1$  digit (or  $\pm 1^\circ$ ) in rotation to the right or left
- High-precision torque wrench with built-in angle gauge
- Ergonomic tool design, especially geared to the user and suitable for the professional use
- 2-component handle made of impact resistant fiber-glass reinforced plastic with soft handle elements
- Three signals alert the user during screwing process: audible signal (buzzer), vibration signal and a LED display with "traffic light function" that is visible from all around.
- Big and easily readable display, 180° rotatable
- Indication of the measuring values in 13 mm font size, including a rating of the screwing process (o.k./not o.k.) Indication
- Simple and clearly structured menu navigation with easily readable 5 mm font size in English and German
- Safety switch-on and switch-off (2 buttons) and automatic time dependent and energy-saving stand-by mode
- Choice of measuring units: Nm, lbf.ft, lbf.in and kgf.m
- Rotation angle range up to 999 degree
- Menu locking to prevent unintentional change of setting values, 4-digit code is freely selectable.
- Indication of battery condition and memory
- 4 standard batteries (AA – 1.5 V) ensure long service life
- **Setting of the signals:** audible signal (buzzer) on/off and vibration on/off
- Alterable threshold value (pre-warning level)
- Switchable display backlight
- Memory capacity up to 2000 readings, incl. date and time

- Offers possibility to program flow charts and sets of parameters
  - Programmable: angle control during torque tightening and torque control during angle tightening
  - Includes detailed operating instructions and certificate in aluminium frame case with foam insert, also includes HAZET Insert Reversible Ratchet
  - Offers possibility to select or program the effective length for other insert tools (precondition for the correct torque/angle measurement)
  - Measured data may be read-out via Mini-USB port
- Listed on the MERCEDES-BENZ GOTIS information platform
- Release accuracy tolerance according to ISO 6789–DIN EN ISO 6789–NF EN ISO 6789

**Made in Germany**

HAZET No.	l mm	Drive	Nm	EAN-No.
7291-2 eTAC	380.5	9 x 12	10–100	2.9–28.7 160945

- Delivery includes insert reversible ratchet 6402-1 ■ 10 =  $3/8''$
- Length with/without insert tool: 425.5 mm/380.5 mm
- Weight with/without insert tool: 870 g/780 g

7291-2 eTAC 380.5 9 x 12 10–100 2.9–28.7 160945

- Delivery includes insert reversible ratchet 6404-1 ■ 12.5 =  $1/2''$

• Length with/without insert tool: 580 mm/518 mm

• Weight with/without insert tool: 1250 g/980 g

7292-2 eTAC 518 14 x 18 20–200 4.1–40.7 160969

- Delivery includes insert reversible fine tooth ratchet 6406 ■ 20 =  $3/4''$

• Length with/without insert tool: 1018.5 mm/942.5 mm

• Weight with/without insert tool: 3200 g/2300 g

7294-2 eTAC 942.5 14 x 18 40–400 4.4–43.8 160983



# Torque Screwdrivers

For applications requiring low torque ranges of 0.1 – 6 Nm

- Especially for e.g.:
- Screwed connections in plastic materials
  - Connections on switch cabinets
  - Model making

## Torque Screwdrivers



6.3 1/4"

- Fast and precise setting of torque values with hex-head wrench (HAZET 2100-06, included in delivery)
- Torque release clearly palpable and audible by ratcheting when torque setting is reached
- Unlimited loosening torque without torque function
- Bit holding adapter with magnet for all current bits with  $\frac{1}{4}$ " drive or HAZET-Adapter 2304 for the connection with  $\frac{3}{8}$ " sockets HAZET 850
- Release accuracy (tolerance) according to EN ISO 6789
- Application: For all screw connections with low torque e.g. disc brakes on bicycles

Contents:

Torque handle with bit holding adapter 2239-7,  
hex-head wrench 2100-06

Made in Germany

HAZET No.	Drive	Nm	Tolerance	EAN-No. 4000896+
For torque values from 0.6 up to 1.5 Nm				
6001-1.5/3	$\bigcirc 6.3 = \frac{1}{4}"$	0.6-1.5	10	141678
According to VW Service Information				

e.g. for the fastening screws at the air-filter housing on 1.4 l engine with turbocharger on VW Eos, Golf, Golf Plus and Passat

6001-3.0/3	$\bigcirc 6.3 = \frac{1}{4}"$	1.5-3	6	141685
6001-5.4/3	$\bigcirc 6.3 = \frac{1}{4}"$	3-5.4	6	141692

Adapter ■ 6.3 =  $\frac{1}{4}"$  – ● 6.3 =  $\frac{1}{4}"$

2304	■ 6.3 = $\frac{1}{4}"$	-	-	016020
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## Torque Screwdriver – SYSTEM 6000 CT – Release Accuracy Tolerance – $\pm 5\%$



- Release accuracy tolerance (in direction of actuation):  $\pm 5\%$  of scale value
- For screwdriver bits with  $6.3 = \frac{1}{4}"$  outside hexagon drive
- Operation of sockets ( $\square$  drive  $6.3 = \frac{1}{4}"$ ) in conjunction with adapter HAZET 2304
- Application, e.g. on screwed connections in plastic materials and connections on switch cabinets and model making
- DIN EN ISO 6789:2003 (D)

HAZET No.	l mm	Drive	Nm	Graduation Nm	cNm	EAN-No. 4000896+
6002 CT	170	$\bigcirc 6.3 = \frac{1}{4}"$	0.1-1.2	0.01	10-120	023004
6003 CT	230	$\bigcirc 6.3 = \frac{1}{4}"$	1-6	0.1	100-600	023011
Adapter ■ 6.3 = $\frac{1}{4}"$ – ● 6.3 = $\frac{1}{4}"$	-	■ 6.3 = $\frac{1}{4}"$	-	-	-	016020

# Insert Tools



**Suitable Torque Wrenches**  
see pages 159 and 165

## Tool Hanger



- Forged from solid steel
- With plug-and-socket connection to accommodate insert tools
- For loosening tight screwed connections
- Without any torque functioning

Made in Germany

HAZET No.	Drive	l mm	EAN-No. 4000896+
6396	9 x 12	405	027132
6397	14 x 18	635	027149

## Insert Reversible Ratchet



- 40 teeth
- Max. 200 Nm
- Surface: chrome-plated
- Square according to DIN 3120, ISO 1174-1

Made in Germany

HAZET No.	l mm	Drive	Drive	l <sub>w</sub> mm	EAN-No. 4000896+
6602-1	81	■ 10 = $\frac{3}{8}"$	14 x 18	36	179695
6604-1	81	■ 12.5 = $\frac{1}{2}"$	14 x 18	36	179701

## Data for effective length on Torque Wrenches with (different) Insert Tools

MDE = Torque to be selected

MDV = Prescribed torque

l<sub>j</sub> = Standard length adjustment with adjusting device

l<sub>1</sub> = Effective length of torque wrench

l<sub>2</sub> = Gauge dimension of adjusting device

l<sub>w</sub> = Gauge dimension of extended insert tool

$$MDE = \frac{(l_1 + l_2) \times MDV}{l_1 + l_w}$$

Dimensions of various HAZET Torque Wrenches:

HAZET No.	l <sub>1</sub> mm	Adjusted with l <sub>2</sub> mm	HAZET No.	l <sub>1</sub> mm	Adjusted with l <sub>2</sub> mm	HAZET No.	l <sub>1</sub> mm
6280-1 CT	140	6401-1 (S)	19.5	6292-1 CT	432	6404-1 (S)	38.5
6282-1 CT	200	6401-1 (S)	19.5	6293-1 CT	547	6404-1 (S)	38.5
6290-1 CT	245	6402-1 (S)	30	6294-1 CT	640	6406	44
6291-1 CT	330	6404-1 (S)	38.5	6295-1 CT	880	6406	44
6291-2 CT	312	6402-1 (S)	30	6296-1 CT	1120	6406	44
							6392-320 (V) 570
							6391- 12 (M) 100
							6391- 25 (M) 130
							6391- 35 (V) 130
							6391- 50 (V) 190
							6391- 85 (V) 260
							6392-200 (M) 345



## Torque Tools - Insert Tools

### Insert Reversible Ratchet



- 6401-1 20 teeth – max. 40 Nm
  - 6402-1 30 teeth – max. 120 Nm
  - 6403-1 32 teeth – max. 120 Nm
  - 6404-1 32 teeth – max. 300 Nm
  - Drop-forged
  - Surface: chrome-plated
  - Square according to DIN 3120, ISO 1174-1
- Made in Germany**

HAZET No.	<i>l</i> mm	Drive	Drive	<i>l</i> <sub>2</sub> mm	EAN-No. 4000896+
6401-1	46.5	■ 6.3 = 1/4"	9 x 12	19.5	027439
6402-1	61	■ 10 = 5/16"	9 x 12	30	027460
6403-1	74.5	■ 12.5 = 1/2"	9 x 12	38.5	027521
6404-1	83.5	■ 12.5 = 1/2"	14 x 18	38.5	027552



- Fine tooth, **72 teeth**, rotation angle 5°
  - Drop-forged
  - Surface: chrome-plated
  - Square according to DIN 3120, ISO 1174-1
- Made in Germany**

HAZET No.	<i>l</i> mm	Drive	Drive	<i>l</i> <sub>2</sub> mm	EAN-No. 4000896+
6401 N	46	■ 6.3 = 1/4"	9 x 12	17.5	115204
6402	58.5	■ 10 = 5/16"	9 x 12	26	027453
6403	58.5	■ 12.5 = 1/2"	9 x 12	26	027514
6404	70.5	■ 12.5 = 1/2"	14 x 18	27	027545
6406	101	■ 20 = 5/8"	14 x 18	44	027576



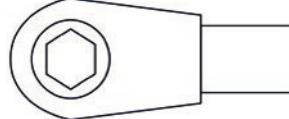
- **With locking device and quick release press button**
  - 6401-1 S 20 teeth
  - 6402-1 S 30 teeth
  - 6403-1 S 32 teeth
  - 6404-1 S 32 teeth
  - Drop-forged
  - Surface: chrome-plated
  - Square according to DIN 3120, ISO 1174-1
- Made in Germany**

HAZET No.	<i>l</i> mm	Drive	Drive	<i>l</i> <sub>2</sub> mm	EAN-No. 4000896+
6401-1 S	46.5	■ 6.3 = 1/4"	9 x 12	19.5	027446
6402-1 S	61	■ 10 = 5/16"	9 x 12	30	027477
6403-1 S	74.5	■ 12.5 = 1/2"	9 x 12	38.5	027538
6404-1 S	83.5	■ 12.5 = 1/2"	14 x 18	38.5	027569

### Insert Reversible Ratchet for Bits



- For screwdriver bits
  - Drop-forged
  - Surface: chrome-plated
- Made in Germany**



HAZET No.	<i>l</i> mm	Drive	Drive	<i>l</i> <sub>2</sub> mm	EAN-No. 4000896+	
6408	46.5	○ drive 6.3 = 1/4"	20 teeth	9 x 12	19.5	027583
6408-1	46.5	○ drive 8 = 5/16"	30 teeth	9 x 12	30	027590

### Replacement Set



**Made in Germany**

HAZET No.	EAN-No. 4000896+
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#### Replacement set for shift lever

consisting of: shift lever, screws, ball, compression spring, pawl  
for 8816 G, 8816 GK, 8816 P,  
8816 S, 8816 ST, 916 K, 2264-1,  
6110 CT, 6110-1 CT, 6111-1 CT, 6114-1 CT,  
6115-1 CT, 6402-1, 6402-1 S, 6408-1

**8816 P/6** 144617

#### Replacement set for ratchet wheel 10 = 3/8"

consisting of: ratchet wheel, pawl, shift lever, screws, ball, compression spring  
for 8816 G, 8816 GK, 8816 P, 8816 ST,  
6110 CT, 6110-1 CT, 6111-1 CT,  
6114-1 CT, 6115-1 CT, 6402-1

**8816 P/7 N** 042234

#### Replacement set for shift lever

consisting of: shift lever, screws, ball, compression spring  
for 6108-1 CT, 6109-1 CT, 6109-2 CT, 6401-1, 6401-1 S, 6408

**6401-1/6** 146048

#### Replacement set for ratchet wheel 6.3 = 1/4"

consisting of: ratchet wheel, pawl, shift lever, screws, ball,  
compression spring  
for 5108-2 CT, 6108-1 CT, 6109-1 CT, 6109-2 CT, 6401-1

**6401/7** 111169

#### Replacement set for ratchet wheel 6.3 = 1/4"

consisting of: ratchet wheel, pawl, shift lever, screws, ball,  
compression spring  
for 6401-1 S

**6401-1 S/7** 111152

#### Replacement set for shift lever

consisting of: shift lever, screws, ball, compression spring,  
spring washer and locking ring  
for 6403-1, 6403-1 S, 6404-1, 6404-1 S

**6403-1/7** 070756

#### Replacement set for ratchet wheel 12.5 = 1/2"

consisting of: ratchet wheel, pawl, shift lever, screws,  
ball, compression spring, spring washer, locking ring  
for 6403-1, 6404-1

**6403-1/9** 070749

#### Replacement set for ratchet wheel 12.5 = 1/2"

consisting of: ratchet wheel, pawl, shift lever, screws,  
ball, compression spring, spring washer, locking ring  
for 6403-1 S, 6404-1 S

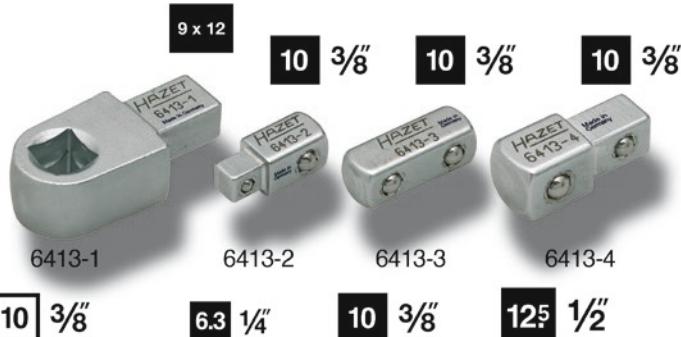
**6403-1 S/7** 070817

#### Replacement set for ratchet wheel 10 = 3/8"

consisting of: ratchet wheel with quick-release press-button,  
pawl, shift lever, screws, ball, compression spring  
for 8816 S, 6402-1 S as well as for refitting 8816 P, 8816 G, 8816 GK,  
8816 ST, 6110 CT, 6110-1 CT, 6111-1 CT, 6114-1 CT, 6115-1 CT, 6402-1  
**8816 S/7** 048465



## Insert Holder with Square Drives



- Set of 4 pieces

**Made in Germany**

Contents:

6413-1 2 3 4

HAZET No.	Drive	EAN-No.
6413/4	9 x 12	027651

## Components

**Made in Germany**

HAZET No.	<i>l</i> mm	Drive	Drive	<i>l</i> * mm	EAN-No.
Holder square insert 9 x 12					
<input type="checkbox"/> drive 10 = 3/8"					
6413-1	43.5	■ 10 = 3/8"	9 x 12	17.5	027644
Sliding square tangs					
<input type="checkbox"/> 10 = 3/8"					
6413-2	22	■ 6.3 = 1/4"	■ 10 = 3/8"	-	048908
6413-3	26	■ 10 = 3/8"	■ 10 = 3/8"	-	048892
6413-4	30.4	■ 12.5 = 1/2"	■ 10 = 3/8"	-	048885

## Insert Square Drive



- Surface: chrome-plated
- Square according to DIN 3120, ISO 1174-1

**Made in Germany**

HAZET No.	<i>l</i> mm	Drive	Drive	<i>l</i> * mm	EAN-No.
6414	63.5	■ 12.5 = 1/2"	14 x 18	25	027668
6416	70	■ 20 = 3/4"	14 x 18	25	027682

## Insert Bit Holder



- Surface: chrome-plated
- ISO 1173

**Made in Germany**

HAZET No.	<i>l</i> mm	Drive	Drive	<i>l</i> * mm	EAN-No.
6420 b	40.5	○ 6.3 = 1/4"	9 x 12	17.5	027903
6420 c	41.5	○ 8 = 5/16"	9 x 12	17.5	027910
6420 d	58	○ 8 = 5/16"	14 x 18	25	027927

## Insert Adapter



- Surface: chrome-plated

**Made in Germany**

HAZET No.	<i>l</i> mm	Drive	Drive	<i>l</i> * mm	EAN-No.
Square insert 14 x 18 to 9 x 12					
6423 c	50	14 x 18	9 x 12	34	027934
Square insert 9 x 12 to 14 x 18					
6423 d	45	9 x 12	14 x 18	20	057559

## Blank-End Insert



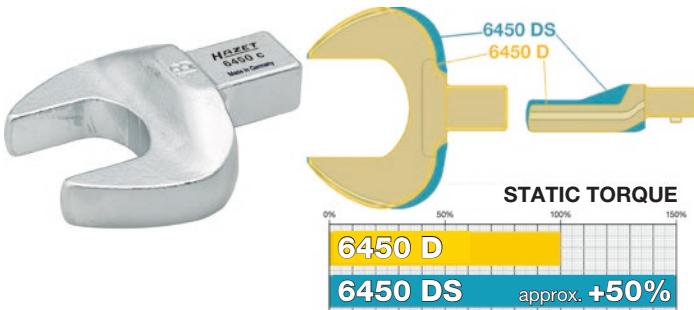
- Spring, bolt and cover included in delivery

**Caution: when welding-on tools, the release torque values may change.  
Please pay attention to effective lengths  
(see table at the bottom of page 166 )**

**Made in Germany**

HAZET No.	<i>l</i> mm	Drive	EAN-No.
6430 c	25	9 x 12	027958
6430 d	38	14 x 18	027965

## Insert Open-End Wrench



- Surface: chrome-plated

**Made in Germany**

HAZET No.	<i>S</i> mm	<i>l</i> mm	Drive	<i>l</i> * mm	EAN-No.
6450 c- 7	7	36.5	9 x 12	17.5	028429
6450 c- 8	8	37	9 x 12	17.5	028436
6450 c- 9	9	37.5	9 x 12	17.5	028443
6450 c-10	10	38	9 x 12	17.5	028320
6450 c-11	11	38.5	9 x 12	17.5	028337
6450 c-12	12	38.5	9 x 12	17.5	028344
6450 c-13	13	39	9 x 12	17.5	028351
6450 c-14	14	42	9 x 12	20	028368
6450 c-15	15	42.5	9 x 12	20	028375
6450 c-16	16	43	9 x 12	20	028382
6450 c-17	17	43.5	9 x 12	20	028399
6450 c-18	18	44	9 x 12	20	028405
6450 c-19	19	45	9 x 12	20	028412



## Torque Tools - Insert Tools

### Insert Open-End Wrench

HAZET No.	S mm	l mm	Drive	l* mm	EAN-No. 4000896+
6450 d-13	13	56.5	14 x 18	25	028450
6450 d-14	14	57	14 x 18	25	028467
6450 d-15	15	57.5	14 x 18	25	028474
6450 d-16	16	58	14 x 18	25	028481
6450 d-17	17	58.5	14 x 18	25	028498
6450 d-18	18	59	14 x 18	25	028504
6450 d-19	19	59.5	14 x 18	25	028511
6450 d-21	21	60.5	14 x 18	25	028528
6450 d-22	22	61	14 x 18	25	028535
6450 d-24	24	62	14 x 18	25	028542
6450 d-27	27	68.5	14 x 18	32.5	028559
6450 d-30	30	70	14 x 18	32.5	028566
6450 d-32	32	71.5	14 x 18	32.5	028573
6450 d-34	34	73.2	14 x 18	32.5	050178
6450 d-36	36	73.3	14 x 18	32.5	072507
6450 d-38	38	72.7	14 x 18	32.5	072514
6450 d-41	41	79	14 x 18	40	028580

Reinforced design for up to 50% higher torque values

6450 DS-30	30	70	14 x 18	32.5	164134
6450 DS-32	32	71.5	14 x 18	32.5	164141
6450 DS-34	34	73.2	14 x 18	32.5	164158
6450 DS-36	36	73.1	14 x 18	35	164165
6450 DS-41	41	79	14 x 18	40	164172

### Ratcheting Insert Box Wrench



With reversing switch

- 40 teeth
- Max. 320 Nm
- Drop-forged
- Deep-set reversing switch prevents unintentional change-over
- Especially suitable for HAZET Torque Wrenches 6291-1CT – 6293-1CT
- Extra flat design with deep offset allows application in areas with restricted access
- Surface: chrome-plated

**Made in Germany**

HAZET No.	S mm	l mm	Drive	l* mm	EAN-No. 4000896+
6606 D-16	16	81	14 x 18	36	179923
6606 D-17	17	81	14 x 18	36	179886
6606 D-18	18	81	14 x 18	36	179893
6606 D-19	19	81	14 x 18	36	179909
6606 D-21	21	81	14 x 18	36	179916

### TORX® Box-End Insert Tool



• For outside TORX® screws

• Surface: chrome-plated

**Made in Germany**

HAZET No.	l mm	Drive	Ø mm	l* mm	EAN-No. 4000896+
6609 d-E 10	58	14 x 18	E10	9.42	054794
6609 d-E 11	58.5	14 x 18	E11	10.08	054800
6609 d-E 12	59	14 x 18	E12	11.17	054817
6609 d-E 14	60	14 x 18	E14	12.90	054824
6609 d-E 16	61	14 x 18	E16	14.76	054831

### TORX® Box-End Insert Tool

HAZET No.	l mm	Drive	Ø mm	Ø mm	l* mm	EAN-No. 4000896+
6609 d-E 18	62	14 x 18	E18	16.70	25	054848
6609 d-E 20	63.5	14 x 18	E20	18.49	25	054855
6609 d-E 22	64.3	14 x 18	E22	20.32	25	054862
6609 d-E 24	65.3	14 x 18	E24	22.16	25	054879

### Flare Nut Insert Tool



- Surface: chrome-plated

**Made in Germany**

HAZET No.	S mm	l mm	Drive	l* mm	EAN-No. 4000896+
6612 c-10	10	42.3	9 x 12	17.5	028726
6612 c-11	11	42.8	9 x 12	17.5	028733
6612 c-12	12	43.4	9 x 12	17.5	028740
6612 c-13	13	43.7	9 x 12	17.5	028757
6612 c-14	14	44.4	9 x 12	17.5	028764
6612 c-16	16	45.4	9 x 12	17.5	028771
6612 c-17	17	45.9	9 x 12	17.5	028788
6612 c-18	18	46.1	9 x 12	17.5	028795
6612 c-19	19	46.8	9 x 12	17.5	028801
6612 c-21	21	48	9 x 12	17.5	028818
6612 c-22	22	48.8	9 x 12	17.5	028825

### Insert Box Wrench



- With Traction profile

• Surface: chrome-plated

**Made in Germany**

HAZET No.	S mm	l mm	Drive	l* mm	EAN-No. 4000896+
6630 c- 7	7	40	9 x 12	17.5	028955
6630 c- 8	8	40.6	9 x 12	17.5	028962
6630 c-10	10	42.1	9 x 12	17.5	028832
6630 c-11	11	42.8	9 x 12	17.5	028849
6630 c-12	12	43.5	9 x 12	17.5	028856
6630 c-13	13	43.8	9 x 12	17.5	028863
6630 c-14	14	45	9 x 12	17.5	028870
6630 c-15	15	45.5	9 x 12	17.5	028887
6630 c-16	16	46.5	9 x 12	17.5	028894
6630 c-17	17	47	9 x 12	17.5	028900
6630 c-18	18	47.8	9 x 12	17.5	028917
6630 c-19	19	48.8	9 x 12	17.5	028924
6630 c-21	21	50	9 x 12	17.5	028931
6630 c-22	22	50.8	9 x 12	17.5	028948
6630 d-13	13	60.8	14 x 18	25	028979
6630 d-14	14	61.5	14 x 18	25	028986
6630 d-15	15	62	14 x 18	25	028993
6630 d-16	16	62.9	14 x 18	25	029006
6630 d-17	17	63.6	14 x 18	25	029013
6630 d-18	18	64.3	14 x 18	25	029020
6630 d-19	19	65.3	14 x 18	25	029037
6630 d-21	21	66.5	14 x 18	25	029044
6630 d-22	22	67.3	14 x 18	25	029051
6630 d-24	24	68.8	14 x 18	25	029068
6630 d-27	27	76.8	14 x 18	31	029075
6630 d-30	30	78.5	14 x 18	31	029082
6630 d-32	32	79.8	14 x 18	31	029099
6630 d-34	34	81.3	14 x 18	31	029105
6630 d-36	36	82.5	14 x 18	31	029112
6630 d-41	41	85.5	14 x 18	31	029129



# Testers and Accessories

## Mechanical Angle Dial

- For tightening screws as a function of the torsion angle
- To be used with operating tools with ■ drive 12.5 =  $\frac{1}{2}$ " (resp. 20 =  $\frac{3}{4}$ ") and tools with □ drive 12.5 =  $\frac{1}{2}$ " (resp. 20 =  $\frac{3}{4}$ ')
- With flexible magnetic holder for the fixing point
- Range 0–360°, graduation 1°, 95 mm Ø

Made in Germany



HAZET No.	Drive	Drive	EAN-No.
6690	■ 12.5 = $\frac{1}{2}$ "	■ 12.5 = $\frac{1}{2}$ "	029266
6690-1	■ 20 = $\frac{3}{4}$ "	■ 12.5 = $\frac{1}{2}$ "	029273

## Electronic Torque Tester 1-25 Nm

According to DIN EN ISO 6789:2003

- Accuracy tolerance  $\pm 1\%$
- 3 operation modes:
  - Tracking mode
  - Click mode for click point indication (1st peak)
  - DIAL mode for peak value indication (final peak)
- Supplied in delivery: Mains adapter and RS-232C connection cable to computer and printer
- Compatible with HAZET testing software 7901 E-D
- Big and easy to read LED status display with 3 LED
- Quick wall or table fixation with 4 screws
- Simple handling
- Calibration in Nm, torque units lbf.ft and lbf.in may also be selected
- Possibility to enter target torque setting and percentage tolerance setting
- In plastic case with foam insert
- Weight device: 3.28 kg
- Weight incl. case and mains adapter: 4.66 kg
- Measuring range 1–25 Nm (max. torque)
- Fix hexagon socket, ISO 1173 C-6.3 =  $\frac{1}{4}$ " adapters included  $\frac{3}{16}$  –  $\frac{1}{4}$ " and  $\frac{10}{32}$  –  $\frac{1}{2}$ "
- H 97.5 x Ø 160 mm



HAZET No.	Nm	EAN-No.
7903 E	1–25	167425



6.3  $\frac{1}{4}$ "

## Electronic Torque Tester 10-350 Nm

According to DIN EN ISO 6789:2003

- Accuracy tolerance  $\pm 1\%$
- 3 operation modes:
  - Tracking mode
  - Click mode for click point indication (1st peak)
  - DIAL mode for peak value indication (final peak)
- Supplied in delivery: Mains adapter and RS-232C connection cable to computer and printer
- Compatible with HAZET testing software 7901 E-D
- Big and easy to read LED status display with 3 LED
- Quick wall or table fixation with 4 screws
- Simple handling
- Calibration in Nm, torque units lbf.ft and lbf.in may also be selected
- Possibility to enter target torque setting and percentage tolerance setting
- In plastic case with foam insert
- Weight device: 3.28 kg
- Weight incl. case and mains adapter: 4.66 kg
- Measuring range 10–350 Nm (max. torque)
- Fix square socket, 12.5 =  $\frac{1}{2}$ "
- H 97.5 x Ø 160 mm



125  $\frac{1}{2}$ "



HAZET No.	Nm	EAN-No.
7901 E	10–350	140671

Production of tool trolleys  
Plant 3, Remscheid



Blanking  
Plant 1, Remscheid



Production of combination wrenches  
Plant 1, Remscheid



Production of sockets  
Plant 2, Heinsberg



Production of combination wrenches  
Plant 1, Remscheid



Production of reversible ratchets  
Plant 1, Remscheid



Production of torque wrenches  
Plant 1, Remscheid

