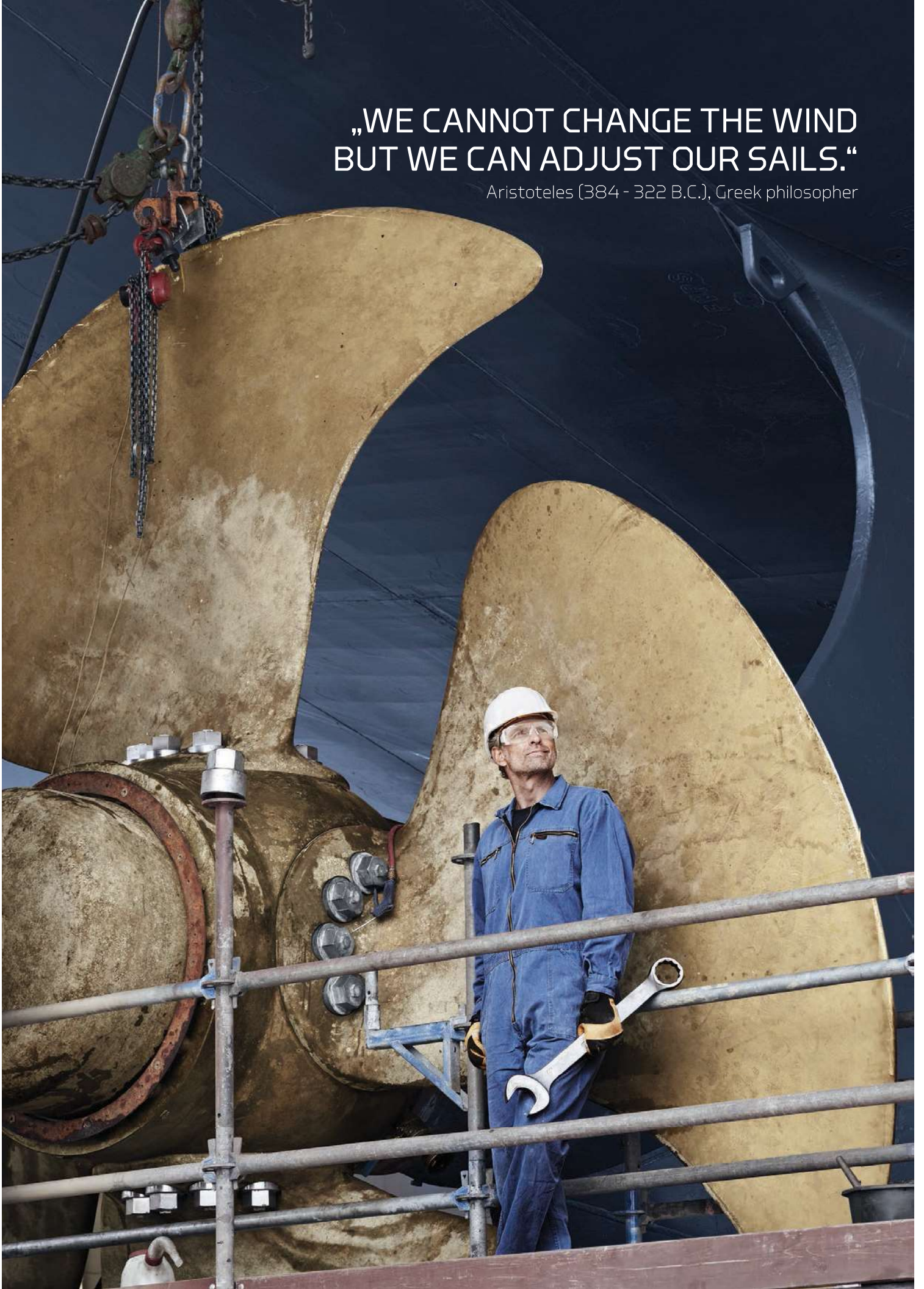


GEDORE TORQUE SOLUTIONS



„WE CANNOT CHANGE THE WIND
BUT WE CAN ADJUST OUR SAILS.“

Aristoteles (384 - 322 B.C.), Greek philosopher

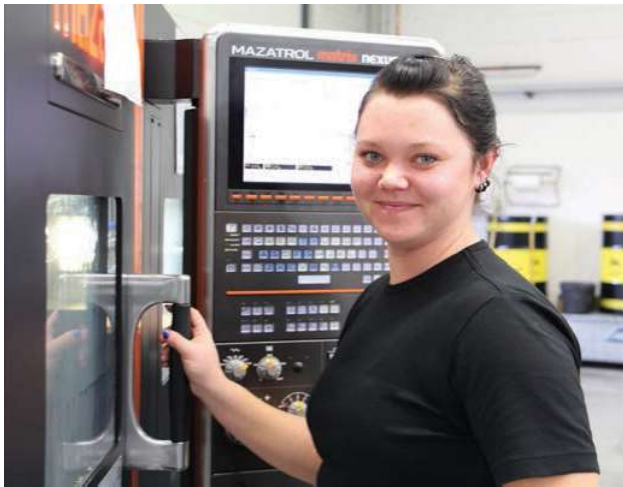


GEDORE



COMPANY AND SERVICES

YOUR SPECIALIST IN HIGH LEVEL TORQUE BOLTING TECHNOLOGY



From pioneer to high-tech centre

We have represented quality and innovation in all branches of bolting technology for 40 years.
Production based in Germany on state of the art machining centres ensures excellent quality and precision in our torque wrenches.
The difference is quite simply in the detail.

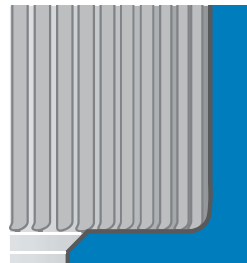


New production method

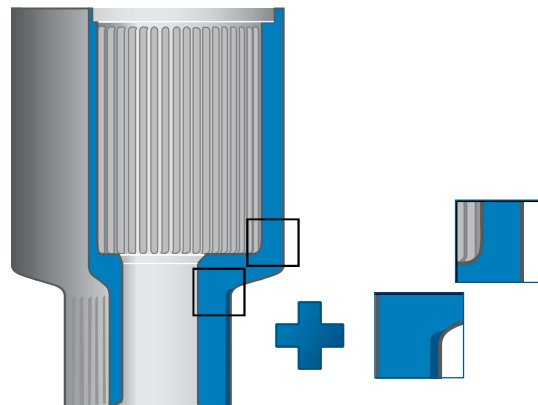
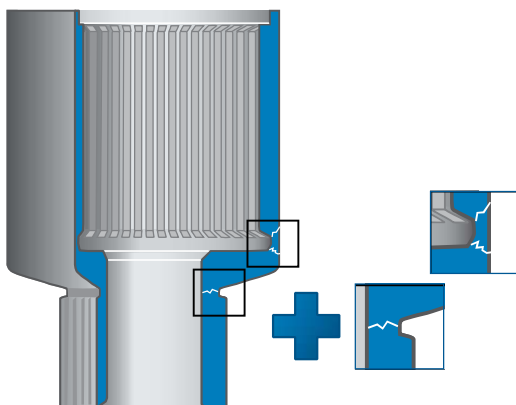
A patent-filed impact operation producing no grooves or notches at all. This enables a lighter and more stable gear housing than traditional type of machining.
Your advantage: more safety in the process of bolt tightening with greater convenience.

Customary operation

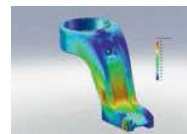
With the usual rolling impact operation, the cutting tool - at the serrated face runout - requires a design-necessitated „clearance cut“ to act as a notch.
Cracks in the material may form within if overloaded.
The notching needs to be countered by a thicker plate thickness in the gear.



Housing based on a buttress root Buttress root in the jungle



HIGH MANUFACTURING DEPTH OF NEARLY 100%



We develop the torque wrenches for your future

Our specialists develop your torque wrenches with state of the art construction and analysis methods (CAD/CAM/FEM). If a suitable solution is not available in our product range, we can design a specifically customised solution for you. Your applications are our challenge.



Production steps of a gear body



Raw material



Turning



Indenting



Milling



Hardening



Precision testing before release

In our in-house test laboratory, all dynamic devices are precisely measured and configured before they are sent to you. The torque deviation is usually significantly under 3% for identical bolting operations. The individual factory calibration certificate is the proof that is required by every QM system as per DIN EN ISO 9001:2008.



CONSULTATION AND TRAINING BY SPECIALISTS



Always the right solution for you

Our experts can advise you on site and analyse your application case together with you in order to offer you the appropriate system.
Our extensive range of products offers you a professional solution.



In-house training

We offer safety instruction and training courses for you in our in-house training centre. Every participant is subsequently issued with a certificate as verification of training.




Financing

The best solution for you counts. We will be happy to consider your wishes and ideas with regards to the contractual arrangement. In order to provide you with flexibility, we can offer various options when purchasing our products, from leasing to paying by instalments.

THE FACTORY CALIBRATION CERTIFICATE

GEDORE
TOOLS FOR LIFE

Factory CALIBRATION CERTIFICATE
for Battery torque wrench



Date	12.01.2016	Manufacturer	GEDORE	Bolting Adapter:
Type	LDA-16ST	Inspector	Max Mustermann	M20x90: II 1-3
Serial No	DA07.00153	Temperature	23,1 °C	M24x120: I 1, II 4-7
Inventory No		min. torque:	250 Nm	M30x130: I 2-4
Model Year	2016	max. torque:	2180 Nm	M36x130: I 5-7
		Tolerance	5 %	

MEASURED VALUES 1. Gear [Nm]											EVALUATION				
Set.	1	2	3	4	5	6	7	8	9	10	Ave.	% Dev.	95% Value	100% Value	Sensor
1	556	540	550	548	550						549	1,05	521	576	
2	835	827	821	815	816						823	1,03	782	864	
3	1113	1141	1113	1148	1137						1130	1,43	1074	1187	
4	1424	1392	1402	1433	1423						1415	1,22	1344	1485	
5	1763	1734	1741	1755	1757						1750	0,69	1663	1838	
6	2034	1994	2021	2044	2016						2022	0,94	1921	2123	
7	2186	2233	2179	2220	2211						2206	1,03	2096	2316	

MEASURED VALUES 2. Gear [Nm]											EVALUATION				
Set.	1	2	3	4	5	6	7	8	9	10	Ave.	% Dev.	95% Value	100% Value	Sensor
1	233	242	238	237	236						237	1,38	225	249	
2	304	304	300	311	301						304	1,37	289	319	
3	416	412	416	403	408						411	1,34	390	432	
4	511	506	505	514	513						510	0,82	484	535	
5	629	633	628	649	632						634	1,35	602	666	
6	739	747	735	724	727						734	1,25	698	771	
7	778	771	785	768	785						777	1,00	738	816	

Sensor data sheet (in order to their appearance):
 1: Torque Sensor, Lorenz Messtechnik D-2271, SN: 102552, 15000 Nm
 2: Torque Sensor, Lorenz Messtechnik D-2268, SN: 104305, 2000 Nm
 All measured values in this document are executed with a regular proofed calibration equipment.
 So that the lead back to ISO 9000 ff are guaranteed.

LPU: 201101171

1 Secure DataMatrix Code

2 Individual factory calibration certificate for every planet gear unit system torque wrench with individual serial number for article identification

3 Transparency and safety resulting from deviation data taking the efficiency into consideration

4 Various languages available on request

5 Three to five complete measurement series per torque level depending on the device type

6 The torque values are readable on the label:

1. GANG 1. GEAR 1. VITESSE	
1	627 Nm
2	1093 Nm
3	1296 Nm
4	1550 Nm
5	1722 Nm
6	1973 Nm
7	2189 Nm
GEDORE	
Ser.-Nr. DA07.00153	
GEDORE Torque Solutions GmbH	
Bertha-Benz-Str. 12-71665 Vaihingen/Enz	
T. +49 70 42 / 94 41-0	
Made in Germany	

2. GANG 2. GEAR 2. VITESSE	
1	236 Nm
2	335 Nm
3	442 Nm
4	532 Nm
5	614 Nm
6	680 Nm
7	737 Nm
GEDORE	
MJ. 2016 Pmax. 560W	
TYP LDA-16ST C €	
www.gedore-torque-solutions.com	
Made in Germany	

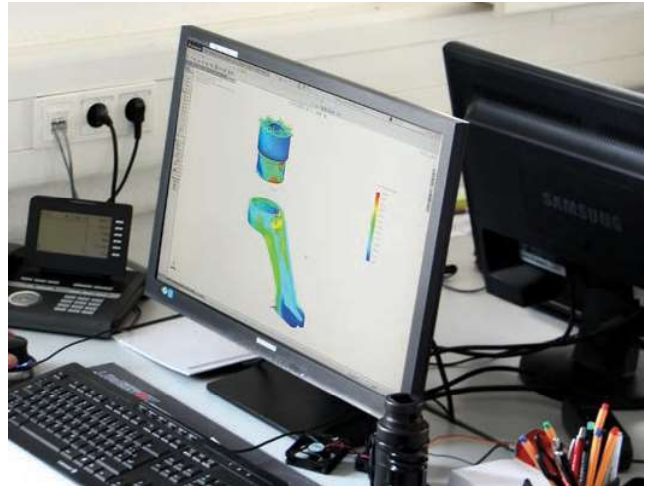
Individual factory calibration certificate for all planet gear unit system torque wrenches in the series:
 LDA/LAW, LDE/LEW, LPK/LPK-X and LKV
 Tested on standard or original bolts
 We recommend annual tool inspection of the devices, a new factory calibration certificate can be issued following this inspection if required



SPECIAL REACTION ARM VERSIONS

The reaction arm of a high-torque wrench is one of the most important components on the device. It absorbs all reaction forces produced during bolting operations. It therefore has to be stable. In addition, reaction arms require a place in their surroundings where they can support themselves. They therefore not only need to be stable, but also suitable for a variety of environments.

As bolts can be located anywhere, it is possible that the standard reaction arm does not always fit and only a custom design can correctly absorb the reaction force. We are specialised in this area. Custom reaction arms can be built and force effects simulated (FEM) in our own development department in Vaihingen/Enz.



REFERENCE PROJECTS



Football stadium TSG Hoffenheim

The roof structure of the football stadium belonging to TSG 1899 Hoffenheim was mounted with our cordless torque wrench.

Metropol Parasol, Sevilla

The new landmark in Sevilla, Spain, was mounted with the high-torque cordless torque wrench (LDA). A total of 21900 bolted connections were tightened on the wooden construction.



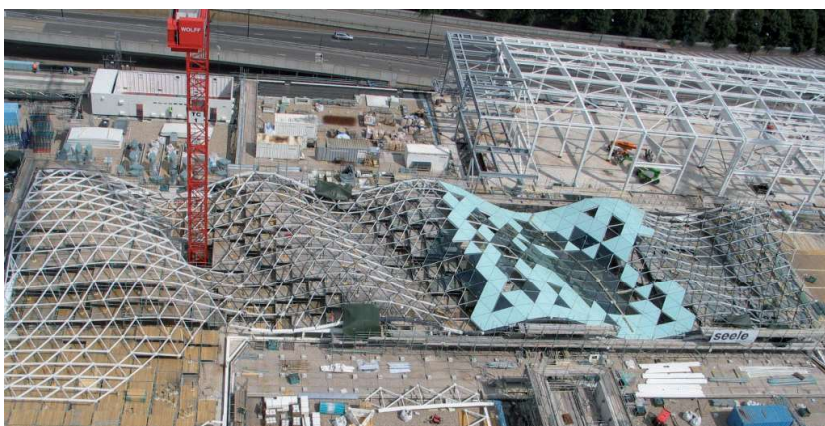
source: MERK Timber GmbH



Shopping centre in England

A custom electric torque wrench was specially developed for the curved roof structure of a shopping centre in England where the bolts were difficult to access.

source: seele holding GmbH & Co. KG



QUALITY WRENCHES REQUIRE A QUALITY MANAGEMENT SYSTEM



We represent high-quality tools Made in Germany

In order to ensure correct and on time procurement of the raw materials and smooth production of the torque wrenches, GEDORE Torque Solutions GmbH implements a quality management system and is certified to the latest DIN EN ISO 9001:2008 standard.

Each dynamic torque wrench is examined as to its torque range at the factory and provided with an individual factory calibration certificate. This individual certificate and the extremely high quality standard of our products are the proof that is required by every QM system in compliance with DIN EN ISO 9001:2008.

Certified to DIN EN ISO 9001:2008



Reg.-Nr. 353736



Certificates




CERTIFICATE

This is to certify that

GEDORE

GEDORE Torque Solutions GmbH
Bertha-Benz-Straße 12
71665 Vaihingen/Enz
Germany

has implemented and maintains a **Quality Management System**.

Scope:
Development, production and sales of high torque wrenches

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 9001 : 2008

Certificate registration no.	353736 QM08
Valid from	2015-11-15
Valid until	2018-09-14
Date of certification	2016-01-05

DQS GmbH

G. Blechschmidt
Götz Blechschmidt
Managing Director

Accredited Body: DQS GmbH, August-Schanz-Straße 21, 60433 Frankfurt am Main




CERTIFICATE

THE INTERNATIONAL CERTIFICATION NETWORK

IQNet and
DQS GmbH Deutsche Gesellschaft zur Zertifizierung von Managementsystemen
hereby certify that the company

GEDORE Torque Solutions GmbH
Bertha-Benz-Straße 12
71665 Vaihingen/Enz
Germany

has implemented and maintains a **Quality Management System**.

Scope:
Development, production and sales of high torque wrenches

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 9001 : 2008

Valid from	2015-11-15
Valid until	2018-09-14
Date of certification	2016-01-05

Registration number: DE-353736 QM08




 Michael Drechsel
President of IQNet


 Götz Blechschmidt
Managing Director of DQS GmbH

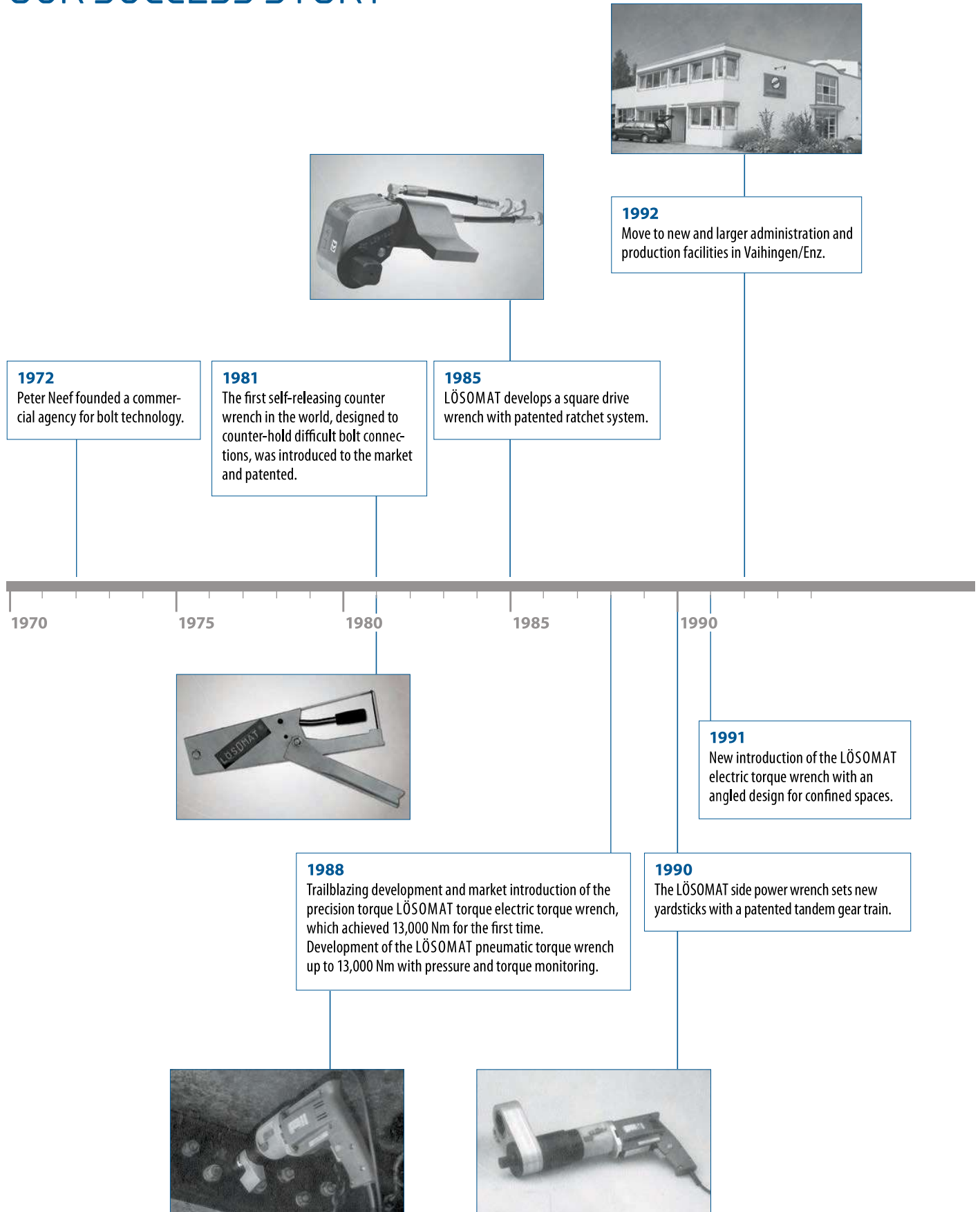


IQNet Partners*:

AENOR Spain AFNOR Certification France AIB-Vinçotte International Belgium APCER Portugal CCG Cyprus
CISQ Italy CQC China CQM China COS Czech Republic Cro Cert Croatia DQS Holding GmbH Germany
FCAV Brazil FONDONORMA Venezuela ICONTEC Colombia IMNC Mexico Inspecta Certification Finland INTECO Costa Rica
IRAM Argentina JQA Japan KFG Korea MIRTEC Greece MSZT Hungary Nemko AS Norway NSAI Ireland PCBC Poland
Quality Austria Austria RR Russia SIGE Mexico SII Israel SIQ Slovenia SIRM QAS International Malaysia
SOS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUCOS Serbia
IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc.

* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com

OUR SUCCESS STORY



**2010**

LÖSOMAT awarded the Plus X Award in the categories "Ease of Use" and "High Quality" for the cordless torque wrench. Also awarded the "Best Product 2010" award.

**2008**

LÖSOMAT becomes a wholly owned subsidiary of the Gedore Group.

**2012**

Company's anniversary – 40 years of LÖSOMAT

2007

A world innovation presented here:
The LÖSOMAT cordless torque wrench with microprocessor controlled switch-off electronics up to 4,000 Nm.

**2005**

LÖSOMAT develops and patents the first automatic control unit for hydraulic units that functions without the need for any sensors in the hydraulic torque wrench.

**2015**

With the LHD, LÖSOMAT develops the new generation of heavy duty screw connections. Brushless Technology and the Powerbox make this torque wrench durable and usable in all weathers.



1995

1996

The LÖSOMAT hydraulic torque wrench sets new yardsticks with regards to size and weight up to 27,000 Nm.



2000

2007

The LÖSOMAT HRPV series makes it possible for the first time in modern unit technology to modularly configure hydraulic units. Each module can be retrofitted.



2005

2010

2011

LÖSOMAT opens their first branch in United Kingdom under the name "LÖSOMAT UK".



2015

GEDORE**2016**

LÖSOMAT Schraubtechnik Neef GmbH is fully integrated into the GEDORE Group and receives a new name: GEDORE Torque Solutions GmbH

2014

LÖSOMAT developed the rail track wrench (LDB). With this wrench, users can bolt and drill in vertical and horizontal positions as well as in dual combination on a rail car. In 2015 LÖSOMAT receives the Competence Prize for Innovation and Quality Baden-Württemberg for developing the Railway Torque Wrench LDB-10.

**2009**

LÖSOMAT moves to new company premises with double the production area in Vaihingen/Enz.



GEDORE TORQUE SOLUTIONS GMBH WORLDWIDE



Germany
GEDORE Torque Solutions GmbH

Bertha-Benz-Straße 12
71665 Vaihingen/Enz

Tel.: +49(0) 7042 / 9441-0
Fax: +49(0) 7042 / 9441-41
torque-solutions@gedore.com
www.torque-solutions-gedore.com

Europe



Austria
GEDORE Austria GmbH

GEDORE-Straße 1
8190 Birkfeld / Stmk.

verkauf@gedore.at
www.gedore.at



Belgium
SAB-BNL nv

Vriesenrot 22
Industrieterrein Hoogveld Zone B
9220 Dendermonde

brecht@sab-bnl.be
www.sab-bnl.be



Czech Republic
GEDORE Polska Sp. z o.o.

ul. Żwirki i Wigury 56a
43-190 Mikołów · Poland

gedore@gedore.pl
www.gedore.pl



Denmark
EP Tools A/S

Industrivej Nord 9B, Birk
7400 Herning

ernst@eptools.dk



Finland
Raahen Pultti Oy

Varikkotie 2
92100 Raahen

merja@pultti.net
www.pultti.net



France
GEDORE France SARL

Parc d'activités des Béthunes - La Mare II
10, avenue di Fief - Bât. 12
BP 79144 Saint-Ouen-l'Aumône
F-95074 CERGY PONTOISE CEDEX

info-klann@gedore.fr
www.gedore.fr
www.klann.fr



Greece
C. Canetti & Co.

269 Messogion Ave
152 31 Halandri

sales@kanetis.gr
www.kanetis.gr



Hungary
Gero Tools S.R.L.

Comuna Selimbar
Str. Mihai Viteazu nr. 245A
557260 Sibiu · Romania

calin.minduc@gerotools.ro
www.gerotools.ro



Netherlands
GEDORE Technag B.V.

Flemingweg 7
2408 AV Alphen aan den Rijn

technag@gedore.nl
www.gedore.nl



Norway
Tech-Tools AS

Postboks 37
2021 Skedsmokorset

post@techtools.no
www.techtools.no



Poland
GEDORE Polska Sp. z o.o.

ul. Żwirki i Wigury 56a
43-190 Mikołów · Poland

gedore@gedore.pl
www.gedore.pl



Romania
S.C. Gero Tools S.R.L.

Comuna Selimbar
str. Mihai Viteazu nr. 245A
557260 Sibiu jud. Romania

calin.minduc@gerotools.ro
www.gerotools.ro



Slovakia
GEDORE Polska Sp. z o.o.

ul. Żwirki i Wigury 56a
43-190 Mikołów · Poland

gedore@gedore.pl
www.gedore.pl



Spain
GEDORE Ibérica, S.L.

c/Arangutxi 12 · Pol. Ind. Jundiz
01015 Vitoria - Alava

gedore@gedore.es
www.gedore.es



Sweden
Hydro Pascal AB

Flamtegelvägen 53
23839 Oxie

info@hydropascal.com
www.hydropascal.com



Switzerland
Atico AG

Dammstraße 7
8112 Otelfingen

info@atico.ch
www.atico.ch

	Turkey GEDORE el Aletleri SAN. ve TIC. Ltd. Sti	Istanbul Ankara Karayolu 35. km TR 34953 Tuzla-Istanbul	info@gedore.com.tr www.gedore.com.tr
	United Kingdom GEDORE Torque Ltd.	Tannery Lane, Gosden Common Bramley, Guildford, Surrey, GU5 0AJ	salesandrepairs@gedore-torque.com www.gedore-torque.com
	United Kingdom LÖSOMAT UK	Unit 7 Springvale Business Centre Millbuck Way · Sandbach · Cheshire CW11 3HY	sales@losomat.co.uk www.losomat.co.uk
	Ukraine GEDORE Polska Sp. z o.o.	ul. Żwirki i Wigury 56a 43-190 Mikołów · Poland	gedore@gedore.pl www.gedore.pl

Worldwide

	Brazil Ferramentas GEDORE do Brasil S.A.	Rua Vincentina Maria Fidelis, 275 Sao Leopoldo-RS CEP 93025-340	sales@gedoretools.com www.gedore.com.br
	Brazil KDOWIDAT Ferramentas Especiais LTDA	Rua da Aviação, 141 7053140 Guarulhos – SP – Brasil	ricardo.ciquiguti@gedore.com.br www.gedore.com.br
	Chile Comercializadora Servi All Ltda.	Los Topacios No. 573 La Chimba · 124000 Antofagasta	ventas@serviall.cl www.serviall.cl
	China GEDORE Tool Trading (Shanghai) Co. Ltd.	B1/f., Block 2, 1358 Pingan Road, Minhang Shanghai, China 201109	info@gedore.cn www.gedore.cn
	Dubai GEDORE TOOLS MIDDLE EAST FZE	P.O. Box 372042 West Wings 3 Office # 209 Dubai Airport Free Zone	
	India GEDORE India Private Ltd.	374, Udyog Vihar Phase II Guragon – 1220016, Haryana	info@gedore.in www.gedoreindia.com
	India Mekaster Tools Ltd.	908, Ansal Bhawan 16, Kasturba Gandhi Marg New Delhi – 110 001	support@mekastertools.com www.mekastertools.com
	Russia OOO GEDORE Tool Center	ul. Bakhroschina H32 G 1 115054 Moskau Tel. 007/495/7240074	GTC000-Russia@gedore.com
	South Africa / Africa GEDORE Tools S. A. (PTY) Ltd.	P.O. Box 68 New Germany 3620	general@gedoresa.co.za www.gedore.com.br
	South Korea Dong Jin Power Co. Ltd.	RA-1226, Chungang Circulation Complex Seoul	dongjin@djpower.co.kr
	South Korea Enertec Korea	Daejo-2dong, Kangseo-Gu Busan, 618-804 Korea	enertec@enerteckorea.co.kr www.enerteckorea.co.kr
	Taiwan DEAMARK Ltd.	No. 6, Lane 5. Lin Sen N. Rd. 100 R.O.C Taipei	tomlee@deamark.com.tw www.deamark.com.tw
	USA GEDORE TOOLS, INC.	7187 Bryhawke Circle, Suite 700 North Charleston, SC 29418	info@gedoretool.com www.gedoretools.com