



A calibration management
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But is it also efficient?

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The systematic management of measuring and test equipment plays a central role in modern industrial production, ensuring interchangeability of parts and product quality as well as preventing product liability risks. In short, it creates the basis for a lasting and sustainable competitiveness of your enterprise.

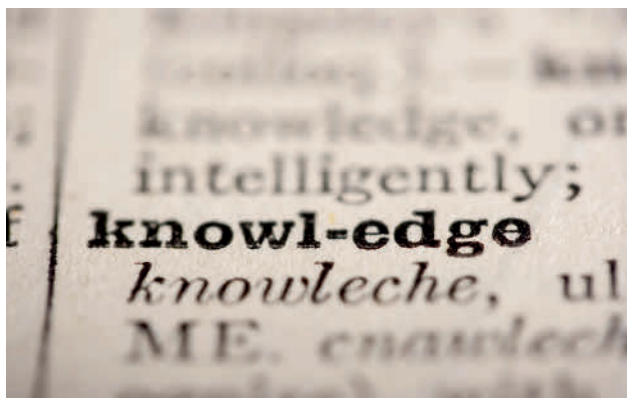
QMSOFT® - made to measure

QMSOFT® is the user-friendly and flexible tool for your calibration laboratory. It consists of combinable components which allow you to adapt the functionalities and the license volume to your specific requirements and budget, regardless of whether you wish to buy **QMSOFT®** for your own installation or to rent a hosted system.



Tolerance systems at the push of a button!

With **QMSOFT®**, determining the limits or tolerance values for standard gauges from the tables of the applicable standard is no longer a problem. **QMSOFT®** provides a large number of DIN, ISO, EN and other international standards at the push of a button. It can not get easier.



Calibration according to standards

QMSOFT® guides you step by step through the calibration, eliminating all secondary activities that are not directly related to the metrological process and thus allowing you to fully focus on the actual calibration. The standard-compliant calibration certificate is created fully automatically and stored in the **QMSOFT®** database.



QMSOFT® connects!

QMSOFT® communicates with all common measuring and calibration devices which permit the online transfer of measured values via interface, which helps to avoid error-prone manual entries. **QMSOFT®** is the ideal tool to integrate devices of various types, generations and manufacturers. Forget outdated, isolated proprietary solutions!



During the daily work, **QMSOFT®** generates many documents and information related to the calibrated items and makes them available to all **QMSOFT®** users across all workplaces. The range of applications of **QMSOFT®** extends from a simple workstation for tool dispensers to a complex calibration workstation in conjunction with one or more measuring devices.

QMSOFT® helps you to set up and organize a standard-compliant, audit-proof and efficient management system for your gauge equipment thanks to a complete documentation of the history events, including all calibration and movement data, documents and costs. The system actively supports you in fulfilling the requirements of ISO 9001, ISO 10012, ISO/TS 16949, ISO 17025 etc.

QMSOFT® is sector-neutral: you can also use **QMSOFT®** to manage equipment from any area. Even the management of your standard sheet collection, your measuring accessories, equipment, vehicles or of any other object is possible, as long as it can be clearly assigned by means of an ID number and a name.

Discover how **QMSOFT®** can increase the efficiency of your daily work in the calibration area!



More information about **QMSOFT®** as well as a free demo version can be found on our website:
www.lw-gmbh.com

If you do not have a metrological infrastructure to perform calibrations by yourself (i.e. calibrations are done by external laboratories), **QMSOFT®** helps you to manage your gauge stock. You may also want to record the use of test equipment in production and to support the gauge distribution and return processes. It does not matter functionally whether you use the software as a local standalone or as a client/server installation, as an individual or simultaneously on multiple workstations.



Your focus for this type of **QMSOFT®** application is on the key functional areas

- low effort for data maintenance, simple self-explanatory user interface
- efficient implementation of the functionality of a gauge/tool dispensing workstation
- assistance in maintaining data integrity through individual rules for the formation of number ranges, including appropriate uniqueness tests



The **QMSOFT®** gauge management program offers different configuration levels for editing and visualizing the gauge data, depending on the requirement of the user or the workplace, and, of course, also in various combinations. A sophisticated user rights system allows a customized adaptation to your needs.

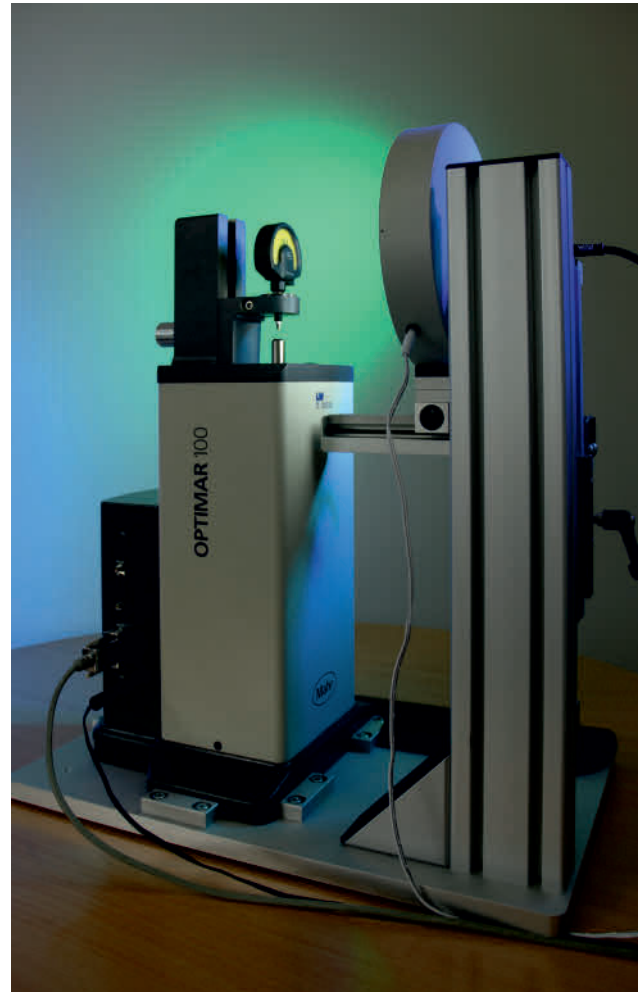


- simple report features for the monitoring of different types of due dates, including the e-mail notification of the owner of the gauge(s) and a downstream intervention management
- powerful search/sort and filter functions
- scalability for growing user numbers and data volumes
- data exchange compatibility with external calibration service providers (VDI2623, **QmLink®**), data interfaces to upstream/downstream systems that needs to work with gauge data

Let us or one of our sales partners demonstrate how well these functionalities have been implemented in **QMSOFT®**! We look forward to showing you the system in a remote session on your personal computer or during an on-site visit to your company.

You want more efficiency in your calibration processes? The **QMSOFT®** inspection programs are just the right solution for you! We offer specialized modules for many standard gauge types which help you to significantly reduce the following work steps and problem areas:

- standard-compliant and efficient determination of nominal sizes and tolerances (by push of a button from the designation of the gauge such as "M10", "20H7", etc.)
- standard-compliant and optimal acquisition and evaluation of measured values incl. the direct transfer of this values from the calibration device to **QMSOFT®**
- support of standard and guideline-compliant calibration procedures (VDI 2618)
- assistance for the use of the required metrological accessories (probes, wire sets, setting masters, etc.)
- creation of an audit-proof calibration certificate (template-based, including traceability and measurement uncertainty)
- standard-compliant conformance statement according to DIN EN ISO 14253-1 (all variants)
- passing on the calibration results and certificates to a downstream processes (for example a foreign gauge management system)



QMSOFT® supports not only conventional but also state-of-the-art calibration technologies such as optical and mechanical scanning methods (for example for calibrating cylindrical or tapered thread gauges) or image processing for the automated calibration of analogue and digital dial gauges.

The XML-based **QmLink®** data interface, which is integrated into each of the inspection programs, enables software developers to integrate the **QMSOFT®** inspection modules and tolerance calculation libraries into their own software environment. Several CAQ system vendors already use the **QMSOFT®** tolerance calculation libraries.

The enormous administrative efforts with which you are confronted today in addition to the actual calibration work can hardly be mastered within reasonable periods of time using traditional working methods or without the help of modern computer technology. **QMSOFT®** unfolds its full strength in the interaction of all its components and can perform a variety of sideline activities, support the workflow in the calibration laboratory and make the overall process transparent and traceable.

Several DAkkS-accredited national calibration centers in Germany
and various international calibration laboratories in Europe
already use the **QMSOFT®** system!

Central administration tools and features bring efficiency to your calibration laboratory: reference standards, traceability, measurement uncertainty, inspection procedures, authorizations, etc. can all be maintained in **QMSOFT®** under a uniform user interface and in a central location for all laboratory locations, and are therefore always up-to-date and immediately available at each individual workstation.



The report and calibration certificate templates in **QMSOFT®** allow the use of individual layout conceptions and avoid any dependency on current MS-Office product versions.

The **QMSOFT®** gauge management module works seamlessly with the **QMSOFT®** order management. From the receipt of gauges to the return of an order, you have all the necessary documents such as trace-cards, delivery notes and invoices efficiently under control. The order items (in our case these are usually gauges for which a calibration or other activities such as a repairs etc., are to be carried out) are traceably assigned to the specific order.



The **QMSOFT®** monitoring function can be used to visualize the processing status of calibration orders. Thus, all the staff working with the system is informed in real time about possible bottlenecks and urgencies. This allows well-founded forecasts for the return of orders in case customers ask for urgent information by phone.

Once the order processing is completed, **QMSOFT®** supports your commercial staff in the preparation of the invoice documents. **QMSOFT®** selects the calibration prices for the calibrated gauges from the price list in accordance with the defined service catalog, taking into account the discount rates and special prices agreed individually with the end customer. So you never lose track of your processes!



Essential **QMSOFT®** features are:

- SQL database with professional "client/server" functionality (Firebird- or MS-SQL server)
- CodeMeter®-based licensing (WIBU-SYSTEMS AG, USB hardware dongle, alternatively software-based CmAct licensing, floating license model)
- management of gauge data with free definition of database structures, conceptual and language worlds, simultaneous multilingualism also for database contents and calibration documents
- complete history of calibrations, change information and other data on arbitrary events
- increased process reliability through definition of step-by-step processes (status-dependent actions) and user-dependent blocking of input fields
- support for automatic tolerance calculation for standard gauge equipment (for example, plain and thread gauges, dial gauges, vernier calipers, micrometers, etc.)
- standardized inspection procedures for standard gauges
- integrated RFID / 2D code and barcode support
- three different editions (professional edition, lite edition, viewer edition) for the gauge management to support your special requirements
- client-capable database with addresses, contact persons, contact details
- storable construction rules for individual number ranges (for example, for a distinction between factory and DAkkS calibration certificates),
- comfortable and flexible data exchange with calibration service providers, synchronization options for the comparison of stand-alone computers (e.g. for field staff who need to work without a network connection to the central database)
- free design of the gauge lists by using a programmable report tool, export features into common standard document formats (MS-Excel, CSV etc.)
- tool-in-tool features for mapping logical relationships between multiple gauge individuals (e.g. complex devices)
- support for the generation of calibration certificates for special gauges by using the **QMSOFT®** integrated editor or, if required, by using MS Office products (MS-Word, MS-Excel)
- order management, monitoring and billing functions for commercial calibration service companies (service catalogs, customer-specific price lists, discount agreements) etc.



There are separate **QMSOFT®** modules for the administration of your gauge stock, for the recording and processing of the calibration orders, for the billing of the calibration and services and for the operation of workplaces for gauge distribution/return. Additional tools permit the monitoring of the laboratory utilization and the exhaustion of the license volume of your **QMSOFT®** installation.

QMSOFT®/QM-MANAGE

Gauge management (professional/lite/viewer)

QMSOFT®/QM-STOCK

Gauge distribution/return support

QMSOFT®/QM-LicenceMonitor

Recording of license utilization

QMSOFT®/QM-ORDER

Order management

QMSOFT®/QM-CALCUL

Billing of calibration services

QMSOFT®/QM-Scheduler

Monitoring of order processing status

Here is a list of the most important **QMSOFT®** inspection programs (a more detailed description of the individual components can be found on our website):

QMSOFT®/QM-PLAIN

Plain gauges, setting rings

QMSOFT®/QM-THREAD

Thread gauges (cylindrical threads)

QMSOFT®/QM-DIAL

Dial gauges, dial test gauges, dial indicators, inductive probes

QMSOFT®/QM-CALIP

Vernier calipers, height gauges

QMSOFT®/QM-MICRO

Micrometer gauges

QMSOFT®/QM-BLOCK

Gauge blocks and sets of gauge blocks (DIN, GOST, ANSI)

QMSOFT®/QM-PIN

Pins, measuring wires, feeler gauges (single gauges, sets of gauges)

QMSOFT®/QM-TAPTHREAD

Tapered thread gauges

QMSOFT®/QM-SPLINE

Involute spline gauges, serration shaft gauges

QMSOFT®/QM-INSPECT

Free inspection plans

QMSOFT®/QM-SCALE

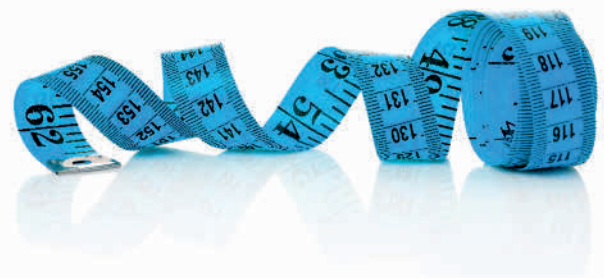
Graduated rules and tapes

QMSOFT®/QM-PRESS

Pressure gauges

QMSOFT®/QM-TORQUE

Torque wrenches and -screwdrivers



In addition to the programs mentioned above, we offer several specific modules for the inspection of a wide variety of gauge types. Upon customer request, we implement the required standards and inspection procedures in the system. Just contact us!

Gauges for cylindrical threads

Metric threads according to DIN 13:1999
 Thread gauges according to DIN ISO 1502:1996
 Metric ISO threads according to ISO 965:1998
 Metric ISO threads according to BS 3643:2007
 Metric ISO threads according to IS 4218:2001 / IS 2334:2001
 Metric ISO trapezoidal threads according to DIN 103:1977(1985)
 Metric ISO trapezoidal threads acc. to ISO 2901:2016 / ISO 2903:2016
 Metric ISO trapezoidal threads according to BS 5346:1976
 Metric ISO trapezoidal threads according to IS 7008:1999
 Metric ISO trapezoidal threads according to NF E03-622:2004-10-01
 Metric ISO trapezoidal threads according to NF ISO 2904:2004-10-01
 Metric ISO trapezoidal threads acc. to JIS B 0217-1/2:2013-04-22
 Pipe threads according to DIN EN ISO 228:2003
 Pipe threads according to IS 2643:2005/IS 10216:1988
 Screw taps for metric ISO threads according to DIN 802:2012
 UN thread gauges acc. to ANSI/ASME B1.1-1989(R2001), ANSI B1.2
 UN thread gauges acc. to ASME B1.1 (2003), ANSI/ASME B1.2
 UN thread gauges acc. to ANSI B1.1-1989 / BS 919-1:2007
 UN thread gauges acc. to ANSI B1.1-2003, BS 919-1:2007
 UNJ aerospace threads according to ASME B1.15-1995
 UNJ aerospace threads acc. to BS A 346:2000 (ASME B1.15)
 UNJ threads/thread gauges acc. to ISO 3161:1999 / ISO 15872:2002
 UNJ threads according to SAE AS8879:1996 (R2012)
 Steel conduit threads according to DIN 40431:1972
 Whitworth threads according to BS 84:2007, BS 919-2:2007
 Whitworth pipe threads according to DIN 259:1979
 Metric HELICOIL thread gauges according to Böllhoff
 Knuckle threads according to DIN 405:1997
 Buttress threads (metric) acc. to DIN 513:1985 / factory standard
 Metric MJ threads acc. to DIN ISO 5855:2009 (ISO 5855:1999)
 Metric MJ threads acc. to BS A 3581:2 (ISO 5855:1999)
 Gauges for Bolt threads for transition fits acc. to DIN 13-51:2013
 Gauges f. Unified HELICOIL Threads acc. to Böllhoff
 Unified HELICOIL threads acc. to MS 33537-1994 / MIL-T-21309
 Cyl. pipe threads "NPSM", "NPSL" acc. to ANSI/ASME 1.20.1-2013
 Cylindrical "Dryseal" pipe threads "NPSF" acc. to ANSI B1.20.3-1976
 Gauges f. metric ISO threads acc. to ANSI B1.16-M:1984
 Gauges f. metric ISO threads acc. to BS919-3:2007
 Gauges f. metric ISO threads acc. to NF E 03-152/153
 Metric ISO threads lower than 1 mm acc. to DIN 14 part 2 - 1987
 Cycle threads to assemble freewheels acc. to DIN ISO 6698:2015
 Aerospace - wire thread inserts acc. to DIN 65536-1:2014
 Gauges f. UN threads acc. to CNOMO GE40-008N
 ACME threads acc. to ASME/ANSI B1.5-1988
 Stub ACME threads acc. to ANSI B1.8
 General ACME threads acc. to B.S. 1104:1957 (1966)
 Buttress threads 7°/45°-ANSI B1.9-1973
 Metric HELICOIL threads (EG) acc. to DIN 8140:1999
 Threads for valves acc. to DIN 7756 - Februar 1979
 Threads for valves acc. to ETRTO V.7 - 1999
 Threads for valves acc. to ISO 4570:2002
 Galvanized threads acc. to DIN ISO 965-4:2002
 Threads for conduits and fittings acc. to DIN EN 60423:2008
 Thread setting gauges f. metric ISO threads DIN 2241:2006
 Screw threads for bicycles a. mopeds acc. to DIN 79012:2011
 VW 13004:2007-11 - Gauges f. metric ISO threads
 Gauges f. Whitworth pipe threads acc. to DIN 11
 Gauges f. side sockets connections acc. to DIN 477-1:2012-6
 Threads acc. to NIHS 60-30, 60-40
 Threads acc. to NIHS 06-02, 06-05 (SN 280 602, 605)
 Metric threads acc. to NIHS 06-03, 06-06 (SN 280 602, 605)
 Buttress threads acc. to DIN 20401:2004 / Werksnorm
 BSC - bicycle threads acc. to BS 811:1950 / BS 919-2:2007
 B.A. Threads acc. to BS 93:2008 / BS 919-2:2007
 ACME threads (clearance f. rail vehicles) acc. to DIN 263:2000
 Gauges according to VW 8.5.1/VW 11516
 VW Gauges f. special threads acc. to VW 01044
 ISO metr. threads f. interference fits acc. to DIN 8141:1993
 Gauges. for cylinder valve outlet thr. acc. to ISO 5145:2014(E)
 Metal end of stud metric threads acc. to SCANIA STD397
 Metric thr. bolts with reduced shank acc. to DIN 2510:1974
 Limit gauges for metric ISO threads acc. to JIS B 0251:2008
 Metr. coarse screw threads acc. to KS B 0211 / KS B 5221:2008
 Metr. coarse screw thr. acc. to JIS B 0209:1997/JIS B 0251:1975
 Metr. fine screw thr. acc. to JIS B 0211:1997 / JIS B 0252:1996
 Unified (UNC, UNF) Thread gauges acc. to JIS B 0255:1998
 Asymmetr. trapez. thr. (ART) 3°/45° acc. to NF E 03-611:2007
 Edison threads according to DIN 40 400:1981
 Knuckle threads f. steel sheet pieces acc. to DIN 7273:1970
 Facepieces f. respir. protect. dev. acc. to DIN EN 148-1:1999
 Threads for tripod mounts acc. to DIN 4503:1993

Gauges for tapered threads

Pipe threads for tubes and fittings acc. to BS21:1985
 NPT Pipe threads acc. to ANSI/ASME B1.20.1-2013
 Dryseal pipe threads (NPTF, PTF, NPSI, NPSF) acc. to ASME B1.20.5-1991
 ANPT - Taper pipe threads, Aeronautical form acc. to AS71051:2007
 Pipe threads acc. to ISO 7/2 - 1982(E)
 Pipe threads acc. to ISO 7/2:2000 (EN 10226:2005)
 Pipe threads acc. to DIN 2999:1983
 Whitworth pipe threads acc. to DIN 3858:2005
 External tape pipe threads and gauges acc. to DIN 158:1997
 Gauges for taper pipe threads acc. to JIS B 0253-1985
 Dryseal pipe threads (NPTF, PTF, NPSF, NPSI) acc. to ASME USAS B2.2 - 1968
 Gauges for Gas valve threads acc. to DIN 477-7:1984
 Gauges for gas cyl. valves W 31,3 x 1/14 acc. to DIN 477:2014
 Taper thread gauges for gas cyl. valves acc. to ISO 11363-2:2018

Cylindrical plug gauges and -rings, setting rings, snap gauges

Plain limit gauges acc. to DIN EN ISO 1938-1:2016-03
 Reference disk gauges acc. to DIN EN ISO 1938-1:2017-05
 Plain limit gauges acc. to DIN 7150-2:2007
 Limits and tolerances on plain limit gauges acc. to BS 969:2008
 Plug gauges and spherical plug gauges acc. to DIN 7164:2017-03
 Setting ring gauges acc. to DIN 2250-1:October 2008
 Setting ring gauges acc. to DIN 2250-1:November 1989
 Einstellringe und Leerringe nach ANSI/ASME B89.1.6-2002
 Master Rings and Ring Gages acc. to ASME B89.1.5-1998(R2014)
 Plain setting rings - Metric units - acc. to BS 4064:1966
 Plain setting rings - Inch units - acc. to BS 4065:1966
 Plain limit gauges acc. to NF E 02-202:1994 (GE40-001N)
 Master setting rings acc. to NF E 11-011:1992
 Plain plug standard gauges and discs acc. to NF E 11-012:1992
 Working and Inspection gauges acc. to VW 190206:2011
 Master setting rings acc. to VW 193260
 Plug Gauges with TiCN coating acc. to VW 190207
 Tolerances f. general use acc. to DIN ISO 2768-1
 Workpiece tolerances acc. to ISO 286-1/2:2010



Dial gauges, lever gauges, dial indicators

Digital dial gauges acc. to DIN EN ISO 13102:2012
 Dial indicators with mechanical indication acc. to DIN 879:1999
 Dial test indicators (lever type) acc. to DIN 2270:1985
 Dial test indicators (lever type) acc. to DIN 2270:2017-02
 Mechanical dial gauges acc. to NF E 11-050:1990
 Dial indicators with mechanical indication acc. to NF E 11-053:2013
 Digital dial gauges acc. to NF E 11-056:2016
 Mechanical dial gauges acc. to NF E 11-057:2016
 Mechanical dial gauges acc. to AS 2103
 Mechanical dial gauges acc. to BS 907:2008
 Dial test indicators (lever type) acc. to BS 2795:1981
 Dial gauges acc. to IS : 2092 - 1983
 Lever type dial gauges acc. to IS : 11498-1985
 Dial indicators acc. to ASME/ANSI B89.1.10M-2001
 Mechanical Dial Gauges acc. to JIS B 7503:1992
 Mechanical Dial Gauges acc. to JIS B 7503:2011



Dial test indicators acc. to JIS B 7533:1990
 Mech. dial gauges acc. to JIS B 7503:2011 (diam. < 50 mm)
 Mechanical dial gauges acc. to JIS B 7533:2015
 Mechanical dial gauges acc. to JMAS 2001
 Dial gauges with 0.01 mm reading acc. to KS B 5206 - 1984
 Dial gauges with 0,001 mm reading acc. to KS B 5207 - 1984
 Lever type dial test indicators acc. to KS B 5238-1976
 Electr. digital-indicator gauges acc. to BS EN ISO 13102:2012

Micrometers

External micrometers acc. to EN ISO 32611
 Micrometers acc. to DIN 863-1:2017 (DIN EN ISO 32611)
 Micrometers acc. to DIN 863:1999
 External micrometers acc. to BS 870:2008
 Internal micrometers acc. to BS 959:2008
 Depth micrometers acc. to BS 6468:2008
 Micrometer heads acc. to BS 1734:1951
 Micrometers acc. to Federal Spec. GGG-C105 C-1987
 Internal micrometers acc. to AS 2101:1978
 External micrometers acc. to NF E 11-095:2013
 Depth micrometers acc. to NF E 11-097:1998



Calipers

EN ISO 13385-1
 BS 887:2008
 BS 6365:2008
 BS 1643:2008
 NF E 11 091
 JIS B 7517:1993
 IS:3651-1982 (R2010)
 IS:2921-1988 (R2013)
 IS:4213-1991 (R2010)



Good networking and good connections are not only important for your personal professional development, they are also extremely helpful in the everyday work of the calibration laboratory! In the calibration environment, working efficiently and comfortably naturally means that measured values are transferred automatically from the measuring device without tedious manual entries.

QMSOFT® already supports a wide range of measuring instruments. Currently, the list of supported device and interface types contains well over 100 entries from various manufacturers, and it is constantly expanding. We are happy to advise you on the possibilities of operating your measuring device in conjunction with **QMSOFT®**.



In combination with suitable interface technology, which can also be obtained from L&W GmbH, the **QMSOFT®/QM DeviceServer** can support the modernization (retrofit) of older calibration equipment whose mechanical components are still well preserved, but whose interface technology is outdated.

A welcome side effect of this modernization is a considerable increase in the utility value of the measuring workstation, enabling you to realize functions that are not possible in offline operation.

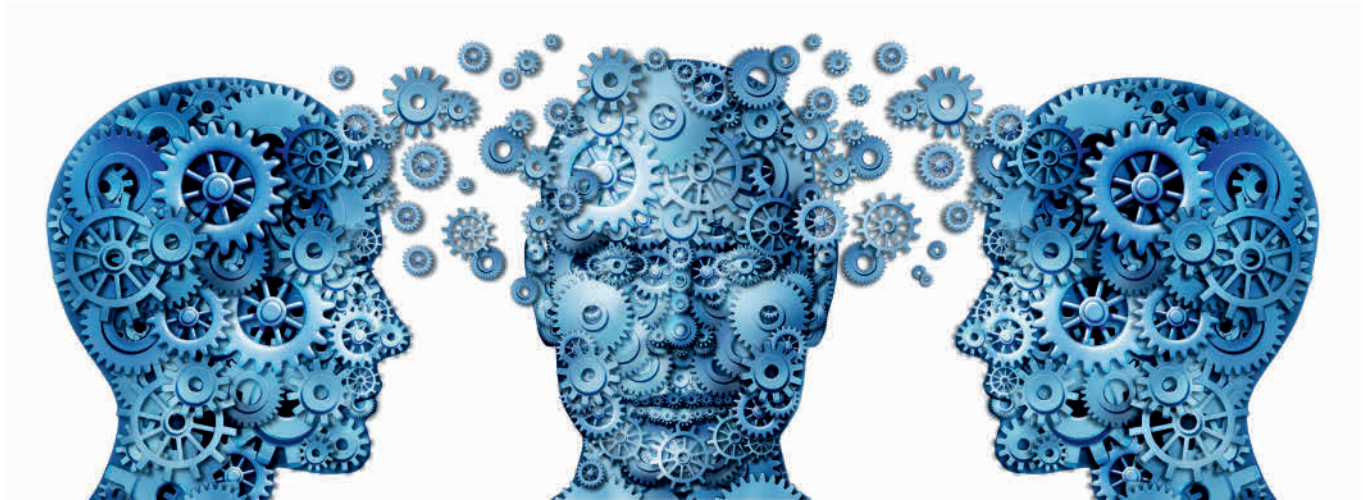
Contact us, we are happy to support you in exploring the possibilities of how to use your usual measuring devices also under current operating systems and computer environments!



The module **QMSOFT®/QM-DeviceServer** realizes the measuring device communication and is also able to transport measured values over a network by using a socket communication. This allows the integration of proprietary interface hardware into a terminal server environment which usually cannot support such special instrument interfaces.



The frictionless data exchange between different IT systems is increasingly becoming a key feature of IT systems. Based on modern XML technologies, **QMSOFT®** can provide gauge data in different exchange formats for other systems or transfer data from these systems into the **QMSOFT®** world, thus allowing the embedding in a higher-level ERP or CAQ landscape. In this way, you can combine the technical and content-related competences of different software-worlds into one system.



QMSOFT® data interface QmLink®

```
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<QMLINK>
  <Gauge Count="1">
    <Gauge GaugeType="TYPE_MICRO_EXTERNAL" Client="Master OMR" GUID="LAC18192F2A4F9192E8D016C646520">
      <ManagementData>
        <FIELD QMLINK="IDENTIFICATION" DataType="0" DataTypeName="string">P0431</FIELD>
        <FIELD QMLINK="STATUS" DataType="0" DataTypeName="string">STATUS_USABLE</FIELD>
        <FIELD QMLINK="ALLOCATION" DataType="0" DataTypeName="string">Drehsch/Verfahren</FIELD>
        <FIELD QMLINK="DEPARTMENT" DataType="0" DataTypeName="string">410</FIELD>
        <FIELD QMLINK="MANUFACTURER" DataType="0" DataTypeName="string">Zewa</FIELD>
        <FIELD QMLINK="MANUFACTURER DESIGNATION" DataType="0" DataTypeName="string">GS.100SL</FIELD>
        <FIELD QMLINK="REGISTRATION" DataType="4" DataTypeName="date">27/07/2004</FIELD>
        <FIELD QMLINK="ADDRESS_Z4" DataType="0" DataTypeName="string">A</FIELD>
      </ManagementData>
      <MATURITY>
        <MATURITY>
          <FIELD QMLINK="LASTINSPECTION" DataType="4" DataTypeName="date">15/04/2019</FIELD>
          <FIELD QMLINK="NEXTINSPECTION" DataType="4" DataTypeName="date">15/04/2021</FIELD>
          <FIELD QMLINK="INSPECTION_PERIOD" DataType="11" DataTypeName="period">12 MONTH</FIELD>
          <FIELD QMLINK="INSPECTION_PERIOD_VALUE" DataType="1" DataTypeName="integer">2</FIELD>
          <FIELD QMLINK="INSPECTION_PERIOD_UNIT" DataType="0" DataTypeName="string">LAST_YEAR</FIELD>
        </MATURITY>
      </MATURITY>
      <INSPECTION_PROPERTIES>
        <Settings>
          <InspectMaster>true</InspectMaster>
          <InspectExtension>true</InspectExtension>
          <ValueMaster>true</ValueMaster>
          <ValueExtension>true</ValueExtension>
          <InspectError>true</InspectError>
          <ValueOnlyUsed>false</ValueOnlyUsed>
          <SuperValuation>false</SuperValuation>
          <PresetMeasure>true</PresetMeasure>
          <EnterDeviations>true</EnterDeviations>
          <MeasureInfo>true</MeasureInfo>
        </Settings>
        <F_PMAX Rows="1" Count="6">
          <VALUE-0</VALUE>
          <VALUE-1</VALUE>
          <VALUE-10</VALUE>
          <VALUE-15</VALUE>
          <VALUE-20</VALUE>
          <VALUE-25</VALUE>
        </F_PMAX>
      </INSPECTION_PROPERTIES>
    </Gauge>
  </Gauge Count="1">
</QMLINK>
```

We have provided **QMSOFT®** with the **QmLink®** data interface based on the markup language XML for the transmission of gauge data. This format allows the structured and completely loss-free transmission of the **QMSOFT®** database contents, including all the documents and properties assigned to the gauges and their histories on various physical paths (e-mail, data carriers, etc.).

This interface forms the basis for the successful and comfortable data exchange between a calibration laboratory and the calibration customers.

The disclosure of this interface allows developers to create their own implementations in their software.

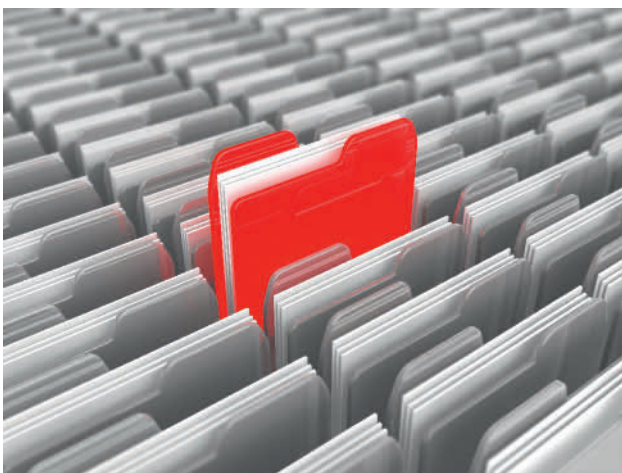


CDE data format according to VDI 2623

Another XML-based data exchange format was published in the year 2012 by the Technical Committee 3.14 in the VDI: the guideline VDI/VDE 2623 - "Format for the exchange of data in the test equipment management - Definition of the Calibration Data Exchange Format (CDE format)". This data format is gradually spreading in the area of quality assurance. As an active member of the responsible VDI technical committee, L&W GmbH is involved in the development and implementation of guideline VDI/VDE 2623 and has implemented it in **QMSOFT®**.

VDI/VDE-RICHTLINIEN	
VEREIN DEUTSCHER INGENIEURE VERBAND DER ELEKTROTECHNIK ELEKTRONIK INFORMATIONSTECHNIK	Format für den Austausch von Daten im Prüfmittelmanagement Definition des Calibration Data Exchange-Format (CDE-Format)
Format for data exchange in management of measuring and test equipment – Definition of Calibration Data Exchange-Format (CDE-Format)	
Einsprüche bis 2009-04-30 • vorzugsweise in Tabellenform als Datei per E-Mail an gma@vdi.de Die Vorlage dieser Tabellen kann abgerufen werden unter: http://www.vdi-richtlinien.de/einsprueche • in Papierform an VDI/VDE-Gesellschaft Mess- und Automatisierungstechnik Postfach 10 11 39 40002 Düsseldorf	
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The DCC data format definition



Within the framework of the project "GEMIMEG - Safe and Robust Calibrated Measuring Systems for Digital Transformation", promoted by the Fraunhofer HHI and the Physikalisch-Technische Bundesanstalt (PTB) and funded by the German Federal Ministry for Economic Affairs and Energy (BMWi), a number of well-known partners from industry and research are currently working together on the project "Digital Calibration Certificate" (DCC) as part of the activities in the field of "Digital Transformation of Metrological Services".

This project will enable the electronic processing and transfer of calibration results. Cryptographic methods protect them from manipulation. The target group of the DCC are all partners in industry and in any area of metrology who need proof of the metrological traceability of their measurement results. **QMSOFT®** will support the DCC format once appropriate format definition is released.

We keep a close eye on the technical developments in the field of data interfaces and implementing new formats as needed. With **QMSOFT®** you are always up to date with the latest technology!

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