



# KELCH

Image Brochure

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# With KELCH you can relax at the machine.

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COMPANY

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TOOL HOLDERS / FLEXIBORE

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MEASURING AND TEST EQUIPMENT

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SHRINK FIT DEVICES & TECHNOLOGY

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TRANSPORT & STORAGE SYSTEMS (TUL)

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**BLUECOMPETENCE**

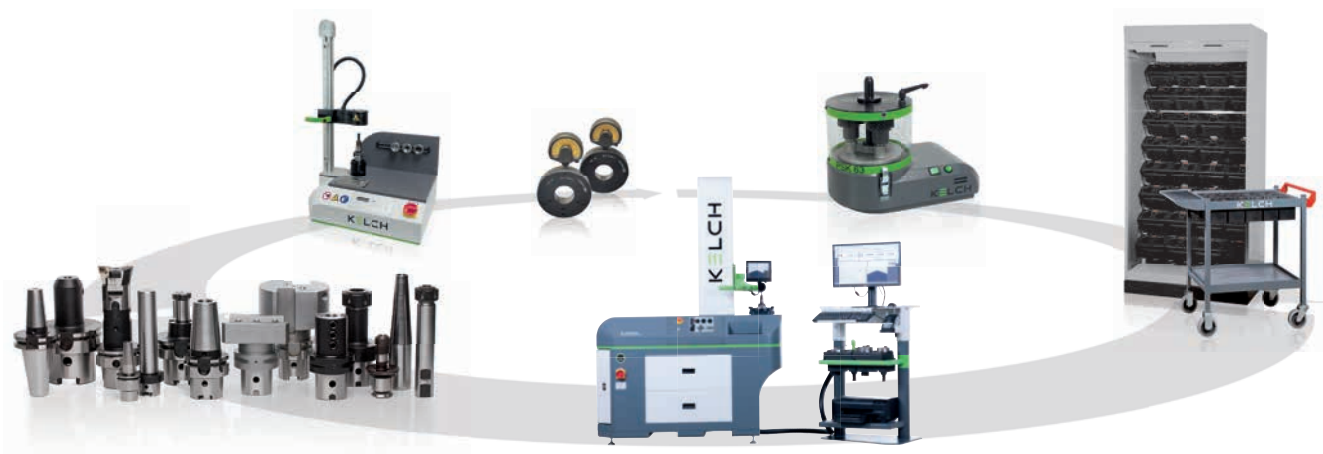
**Alliance Member**

# HIGHER PRECISION with KELCH.

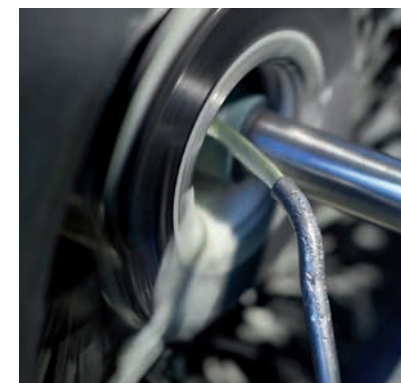
The secret behind the company's success is the "KEC" – KELCH Efficiency Circle. This includes products and services which, individually or combined, offer high performance in a closed system.

KELCH products are synonymous with precision and quality. These are standard quality criteria in manufacturing facilities across the world. However, KELCH still has so much more to offer: In addition to our in-depth and service-oriented consultancy, we offer a unique benefit in the form of a fully-developed product cycle which meets many requirements and solves manufacturing problems.

The KELCH Efficiency Circle is a manufacturing and logistics promise which our customers use to ensure their competitiveness. This is why so many customers place their confidence in us and we work hard to merit this every day. To sum up: We take reliable care of all the detailed issues around precision, tool holders, measurements, shrinking, tool setting, workshop logistics, tool cleaning and software.



## The „KEC“



Our work is characterised by the many details that we are faced with. All to support our customers.

A man with a mustache and safety glasses is looking intently at a precision measuring instrument, likely a coordinate measuring machine (CMM). The background is blurred, showing an industrial setting. The text is overlaid on the image in white boxes with green accents.

## COMPANY

CONTROL IS GOOD –  
MEASURING WITH KELCH  
IS BETTER.

KELCH – The Precision  
Company. For over 70 years  
the guarantee for better  
results due to innovative  
measuring technology.

ONE-OFF OR THE TOTAL  
PACKAGE? THE CHOICE IS  
YOURS.

We offer both one-off and  
modular solutions. This means  
as a customer you always  
keep your flexibility.

CONSULTANCY AND  
SERVICE – A TRADEMARK  
OF KELCH.

Our ISO-certified procedures  
means that our service never  
stops. We are there for you. At  
all times and for every request.

AVAILABILITY AND  
QUALITY –THIS JUST GOES  
WITHOUT SAYING.

Sustainability also means  
availability in product and  
quality. Our products and  
spare parts in installed  
components are traceable  
and can therefore always  
be re-ordered again.\*

\* Except software

# 70 years of innovation and precision.

Kelch has been synonymous with innovative, high-precision tool holders, cleaning, shrink fit and tool presetters as well as measuring technology and tool logistics for 70 years. As a subsidiary of the HMCT Group we offer high-precision, extremely reliable and practical solutions ranging from the individual tool to the complete peripheral equipment you need for your cutting production. All our solutions use state-of-the-art technology and are of excellent quality. A comprehensive range of services and software packages complete our product offering making it an “all-inclusive full-service package”. We concentrate all activities in four business divisions so that we are in the best possible position to meet our customers’ requirements. All the divisions complement each other perfectly to form one whole. We are your partners for everything involving machining.

Our 5 company pillars are:

- PRECISION TOOLS
- PRESETTING TOOLS
- WORKPIECE MEASUREMENT
- AFTER-SALES (SERVICE)
- SOFTWARE



• We guarantee you maximum product quality – Made in Germany.



## TOOL HOLDERS



# Our tool holders – your maximum precision.

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High-performance interfaces ensure optimum machining results and are as important for high-performance machines as lubricants and energy. KELCH offers innovative solutions in this regard which guarantee maximum precision and stability. For example, i-tec®, the leading system for inductive shrink technology and the well-known SK, HSK and PSK tool holders and appropriate accessories at an attractive price/performance ratio. In addition, through our “KELCH CoolStream” tool holders, the cooling stream is deployed with pinpoint precision and ensures a longer cutting operating life, better chip removal and dimensional accuracy as well as more process safety for your tools. Always available with proven KELCH quality and precision.



FLEXIBORE





# The modular tool system KELCH Flexibore.

With our modular tool system “KELCH Flexibore” the name says it all – more flexibility with diversity of use.

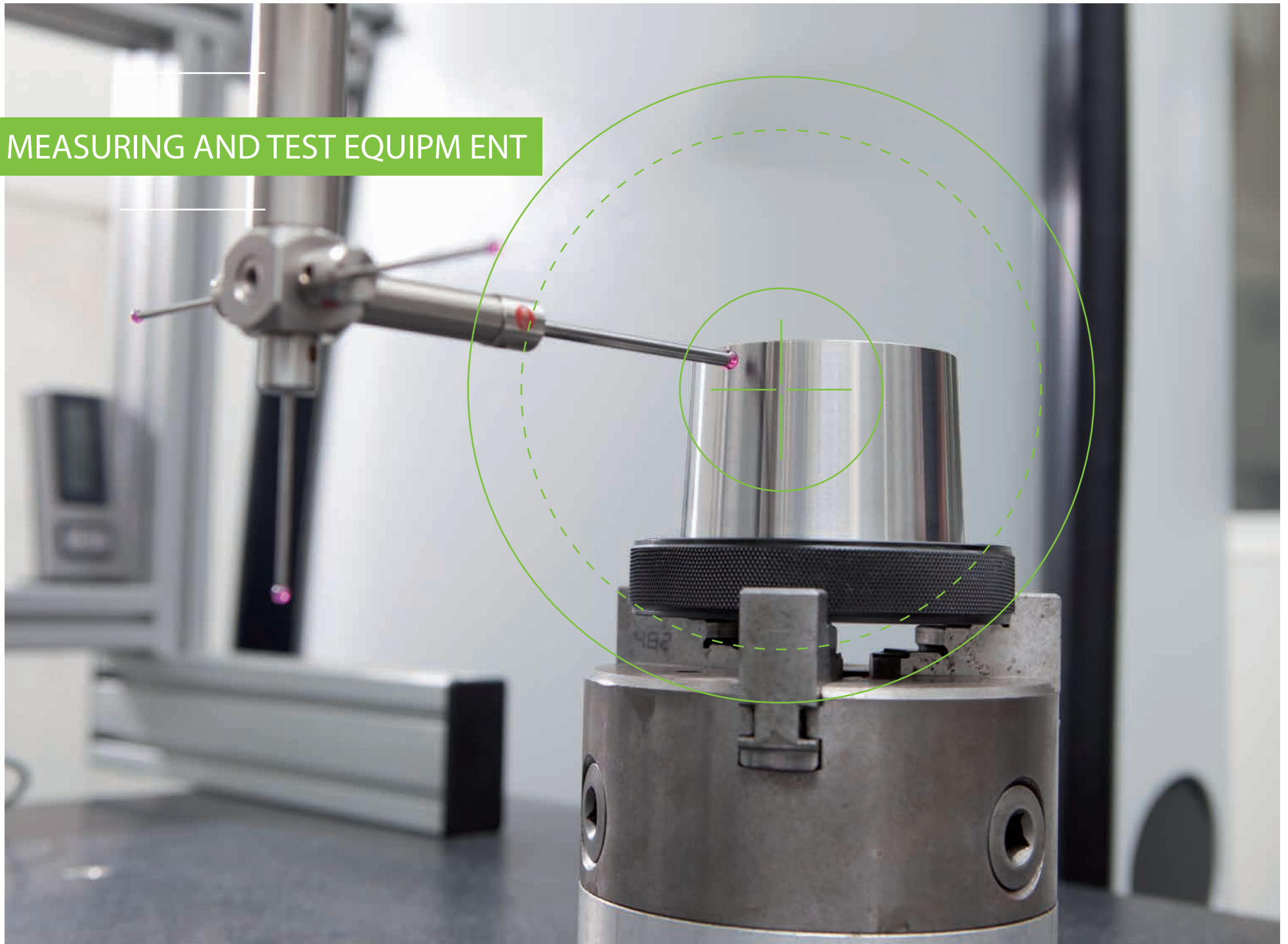
The KELCH FLEXIBORE SYSTEM is a proven product range consisting of insert holders and tool holders for the flexible, individual machining on all machining centres.

Due to its high degree of flexibility in the composition of all requisite tools, it can be perfectly adapted to the respective machining task. Base holders are available for all common steep taper, hollow shank and polygon shank designs. Lengths and diameters can be customized by using intermediate elements.

Our FLEXIBORE complements your individual machining spectrum by delivering maximum flexibility and precision.



## MEASURING AND TEST EQUIPMENT



# Your measurable advantage.

Our products include a range of measuring and test equipment that can be used in production, so that the desired quality objectives can be achieved.

The KELCH production range covers gauges, automated test devices and the electronic pull-back force measuring system "SAFECONTROL" for machine tool spindles. A complete range from a single source.

What is a manufacturing process without control?  
In essence, it has no value. Therefore we stand by our motto "Control is good – Measuring with KELCH is better."  
Our users and customers choose the safe option with our measuring equipment.

"Control is good –  
Measuring with KELCH  
is better."



• Precision on a moving conveyor belt.

## MEASURING EQUIPMENT CALIBRATION

### Our competitors calibrate with us. Any more questions?

We measure so that others can measure. Anyone wanting a precise calibration of measuring equipment is in good hands with us, as the perfect usage of a tool, as far as its quality and precision is concerned, is our own precision standard.

### With SAFECONTROL you have your quality under control!

SAFECONTROL measures the pull-back forces of clamping systems in machine tool spindles and is also used for the force measurement for various extensions and reductions. If the actual pull-back force is lower than the target pull-back force as specified by the machine manufacturer, then the dynamic relationship between the spindle and the tool deteriorates. This leads to reduced cutting performance, increased wear and tear and a lower operating life as well as to a deterioration in the achievable surface quality and stress on the main spindle and guides.

With SAFECONTROL you have the option at any time to check the pull-back force of the clamping system quickly, easily and efficiently in just a few simple steps.



• Einfache Bedienung.



• Schnelle Wertermittlung.



• Exakte Anzeige.



# Smart technology for intelligent interfaces.

As a machine/tool interface HSK requires cross-system thinking. Measurement gauges are used for the direct comparison measurement of HSK tool shanks and spindles for the optimum use of HSK tool holders in the machine. Our measurement gauges are based on calibrated and certified master gauges and are manufactured according to a specifically agreed production procedure. This ensures ongoing maximum precision in all usage areas. Our measuring gauges are available in mechanical, pneumatic and electronic design versions – and always with the highest quality.

## GAUGES



## CLEANING DEVICES



# Always nice and clean.

Maximum fitting precision is the result of residue-free cleaning. Even the smallest dirt residues lead to inaccuracies on the tool system and can lead to waste during machining.

By using clean tool holder tapers you can help ensure that the relevant tools can deliver precision production. You also encourage the system protection of the machine spindle and your tools.

From the table-top taper cleaning device RoWi to the automatic taper cleaner in the machine tool, KELCH offers you a comprehensive product range which ensures smooth process flows.



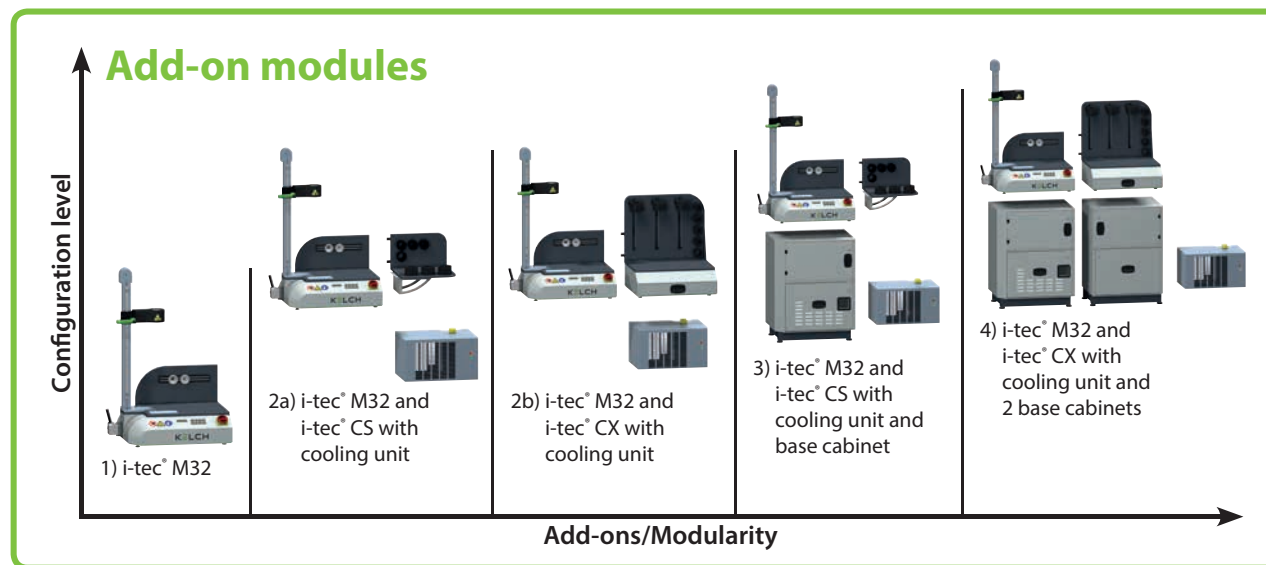
## SHRINK FIT DEVICES & TECHNOLOGY





# Shrinking with precision.

Shrinking technology remains a forerunner as regards the requirement for run-out precision, imbalance and clamping force of the tool holders in machining production. KELCH has for many years ensured a consistently high level of process safety for our customers. A wide range of tools and shrink fit devices from the i-tec® range are available as options for different user groups and applications. From the entry-level model i-tec® M to the shrink fit device i-tec® M-CX for customers with higher volume requirements, we cover a wide range of shrink fit devices for many applications. Our patented contact cooling technology ensures gentle and consistent cooling of heated shrink tool holders.



## TRANSPORT & STORAGE SYSTEMS (TUL)

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# Everything in order?

KELCH Transport and Storage Systems (TUL) offer you the most rational way of transporting and provisioning tools. Our flexible transport and storage systems ensure that the right tool is available at the right place at the right time. Be they universally usable tool mounting plates, transport and provisioning trolleys or workshop fittings, KELCH products bring movement into your production and order to your tool inventory. For example, VariTUL and TULmobil offer you various solutions

for flexible transport and storage so that tools can be made available quickly and safely and that any corresponding accessories reach the right location. In conjunction with the TUL mounting plates you can create the perfect transport and storage unit for your tools. To complete your workshop logistics, you are in the best hands with our cleverly designed cabinet, shelf and workbench storage systems.



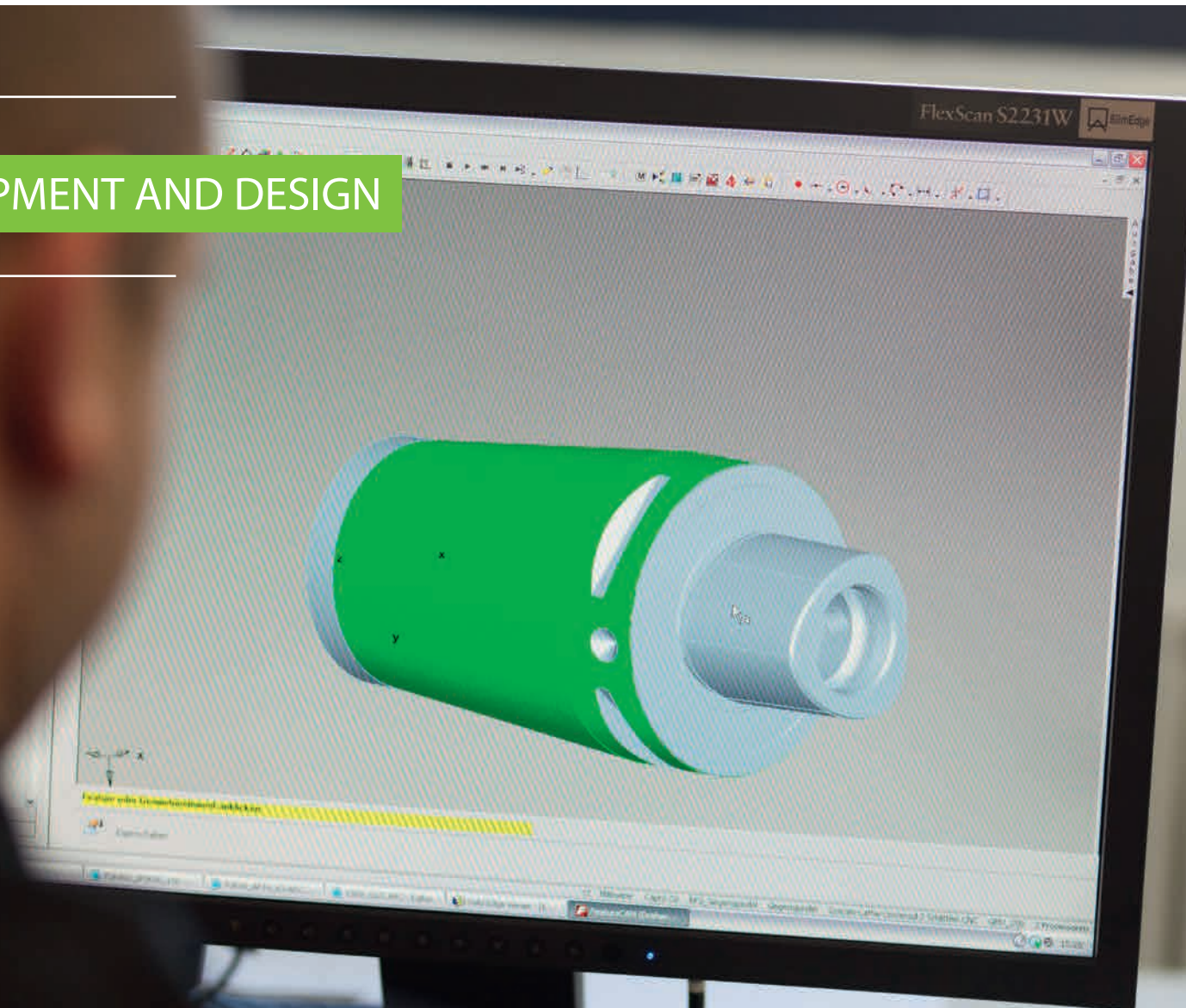
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Everything in its place and  
available on command.

Not a dream, but  
feasible reality  
thanks to KELCH.

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## DEVELOPMENT AND DESIGN



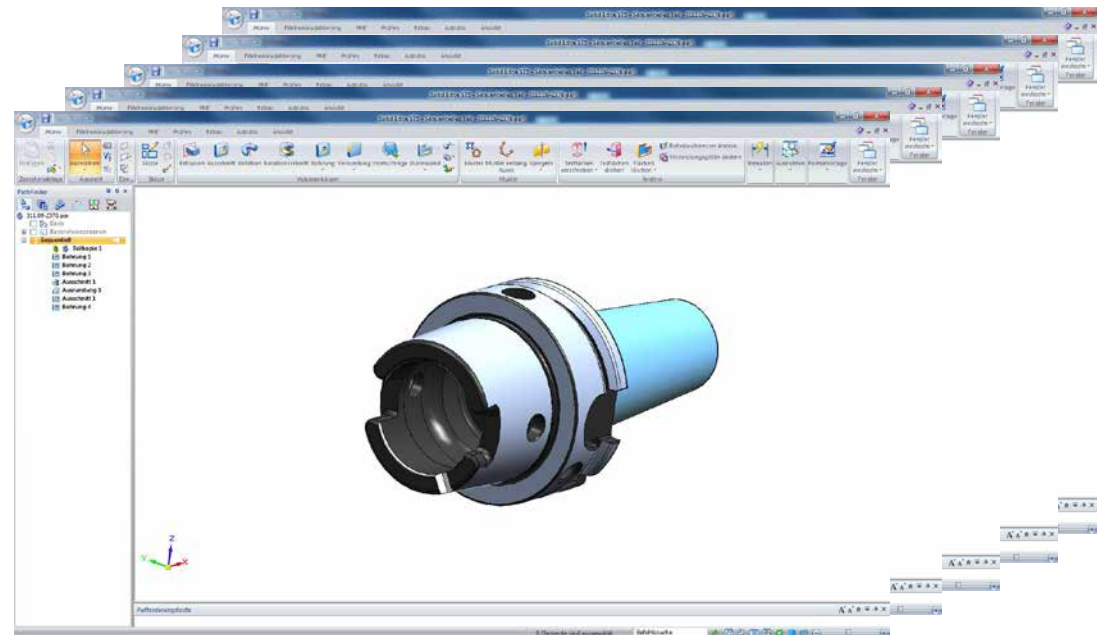


# Development means moving forward.

In our company we combine our pooled know-how for the entire product range and our highly-qualified employees develop everything in-house including the electronics, mechanical systems and software.

Do you need any assistance or do you have any questions about development subjects or have any individual product requirements or applications which do not fall within the standard range?

In that case our experienced and highly-skilled design team will be delighted to help you further to achieve your product and application objectives. Ask us!



# KELCH tool presetters



# It's all a question of (pre) setting!

When it is a question of workpiece measurement and presetting, Kelch should be the first name you contact. For after all, Kelch has accumulated more than 70 years of experience in this sector. You will benefit from this experience, whether it is for the selection of materials or the correct combination of individual components. Our reliable and professional advice will ensure that you find the correct and appropriate device for your needs. Kelch offers the widest range of presetters, in both vertical and horizontal designs. You can be sure that with Kelch you will find the right product for your requirements so that you will increase the quality of your production and therefore save money.

Product features of mineral cast:

- Environmentally-friendly manufacture due using cold casting
- Sustainable reuse is possible, e.g. for road building
- Anti-vibration
- More resistant to temperature fluctuations
- Precise measurement due to robust structure



## TOOL PRESETTING





# Reliability pays off.

We place the highest possible value on high-grade components and high-precision mechanical machining. The overriding premise at Kelch is: "Accuracy comes from precise mechanics".

Where other companies rely on software corrections, we offer mechanical stability.

Due to the stable grey cast iron, the base and the tower are considerably more resistant to temperature changes and machine vibrations. Furthermore, tools with a weight of up to 150 Kg can be measured on our devices without any problems.

If heavier weights ever need to be measured, then we can also facilitate this using an additional mechanical support. A spindle of unsurpassed quality forms the first interface to the tool. An ergonomic one-hand operation of the optical carrier enables the fast placement of the tool in the cutting picture.

Easy to use and clearly-structured software that delivers the results you need rounds off the package.



„Form follows function“  
– reinterpreted by KELCH.

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Workpiece  
measurement  
made easy.

Find out about the  
KENOVA measure  
line from Kelch.

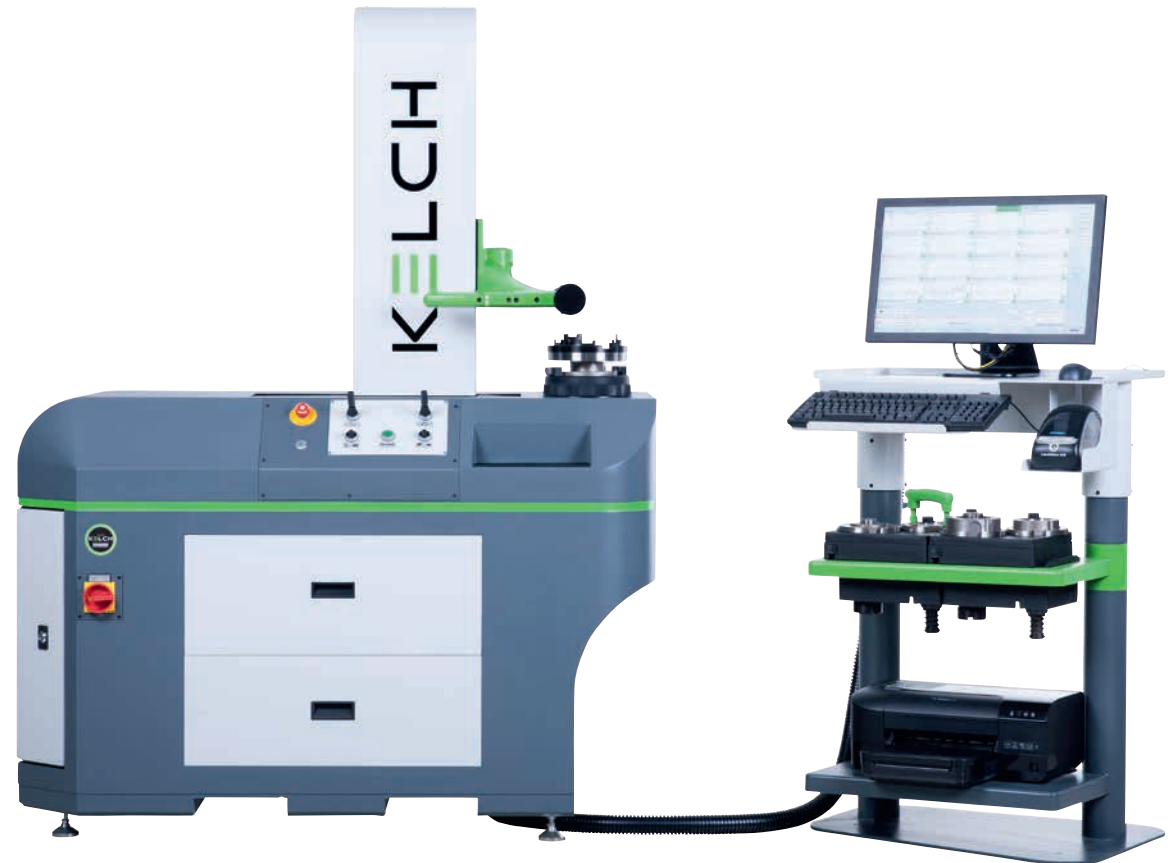
# Do you measure your tools? Then why not measure your workpieces too?

When it is a question of the highest quality requirements it is essential that the tools to be used in the manufacturing are measured.

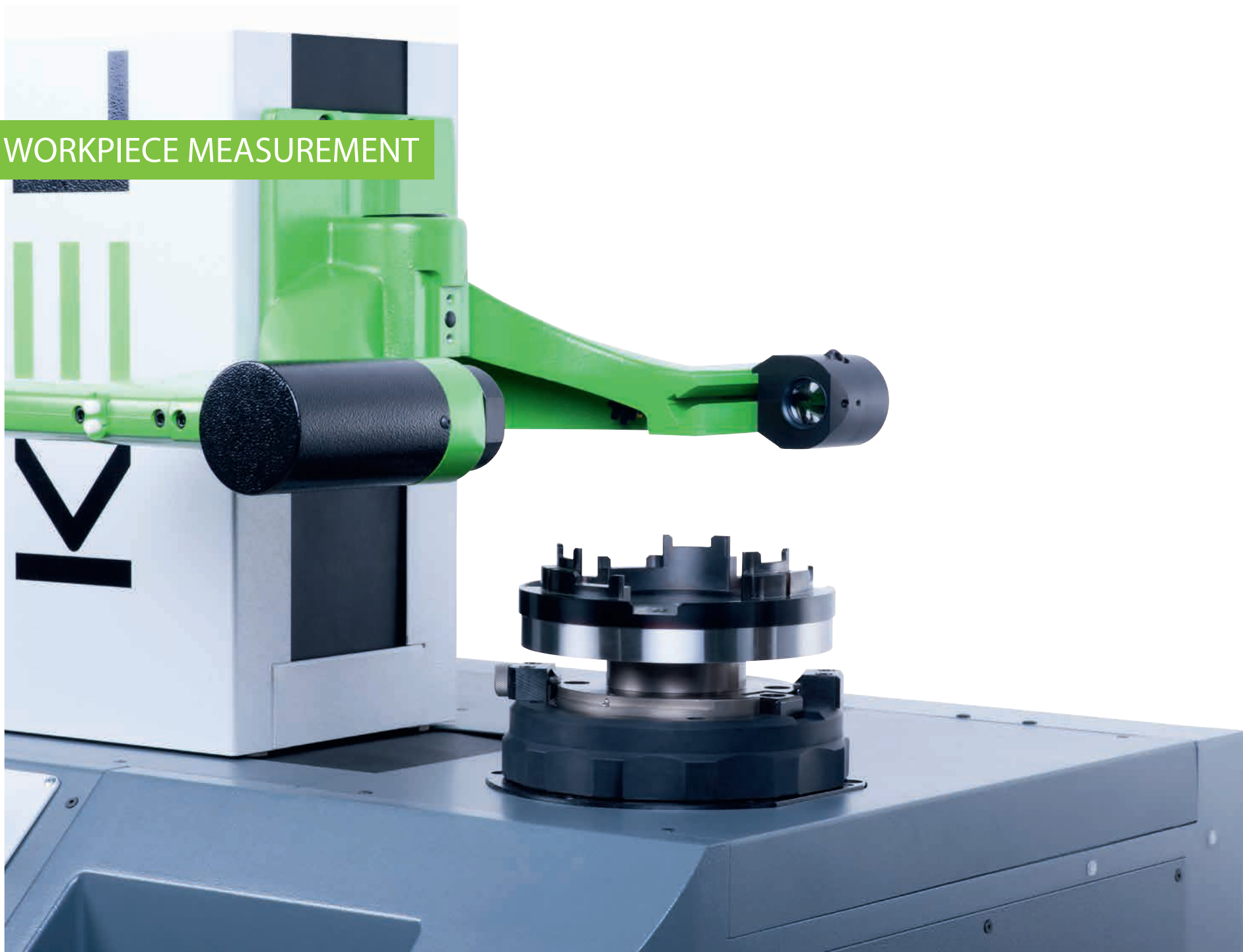
However, it is equally important to examine the manufactured workpieces for quality and dimensional accuracy during the actual manufacturing process.

We set ourselves this task and we can now offer you the perfect solution with our new product line.

With the new KENOVA measure line product range your workpieces can be measured automatically in the production line. This saves time, increases and safeguards the quality of your manufacturing and contributes to your business success.



## WORKPIECE MEASUREMENT







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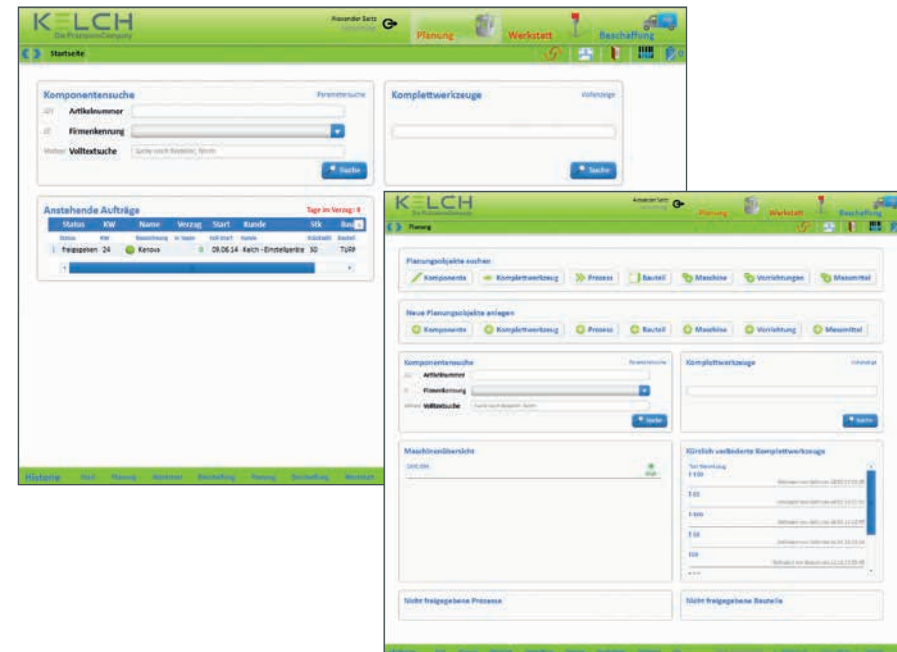
Tool Management  
made by Kelch.

# Do you have your tools under control?

With ever more complex parts and an increasing number of different tools, it is easy to lose the overview:

- Which tools are used?
- Where are these tools being used?
- Are the tools in the inventory still needed?
- Can several tools be replaced by a single tool?
- What is the status of the production cycle and the use of production resources?
- How to maintain the overview?

The solution to all of these questions:  
the Toolmanagement Service  
from KELCH!



# TOOL MANAGEMENT

The central tool database for your company.

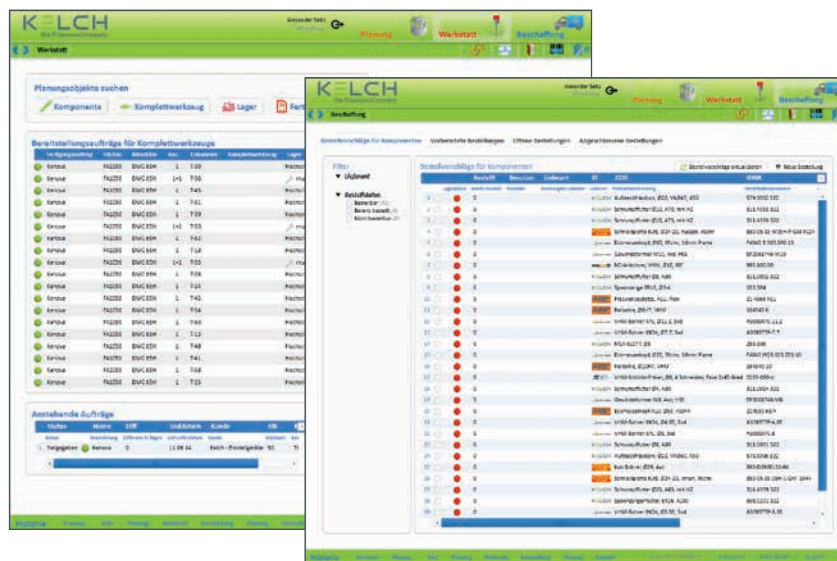


# Easy management of your tools.

The tool management packages offered by Kelch stand out due to their comprehensive range of functions and their ease of use. By deploying integrated DIN 4000 logic, complete tools can easily be created from components and managed. A central database with extensive memory safeguards all tool data such as geometry, cutting and average values. This makes management easy and the data is always to hand. At the touch of a button complete setup plans can be sent to the EASY measuring software of the KELCH presetter and can be measured there in full.

## Features:

- 2D and 3D graphics generator
- Order planning
- Tool search based on DIN 4000 features
- Design complete tools
- Tool data import
- Ordering
- Inventory and supplier management
- Proof of component usage
- Interface to Kelch EASY
- Search by list filters
- Reporting and print output



## The Toolmanagement System in the cloud!

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The KENOVA soft line Toolmanager from Kelch is an online provided Service.  
The registration is done by login via browser.

Through a cloud-based conceptual design, the KENOVA soft line Toolmanager offers constant prices each year, the customer is always working with the most current version, it is a license-independent software and has no expensive maintenance contracts for innovations such as updates or upgrades.



### Features:

- Available online
- No installation
- No hardware
- Modular configuration
- Implemented 3D graphic generator
- Intuitive interface (ease of use)
- Full tool management functionality
- No user restriction



# The complete range of services from a single source.

With Kelch you don't just receive the software, but a complete solution for your production. From the initial idea through to networked manufacturing, KELCH supports you in the following points:

- Project planning
- Integration into your production
- Customized software package
- Optimization of your production process flows
- Cost-savings through optimized use of your tools



SERVICE



# Service without limits

Service is not just service. It is delivered with precision and always with our relentless determination to meet our customers' requests and requirements. It all starts with the recording of the request and clear, good advice. KELCH looks after its customers from the very outset and this encompasses the purchase itself, technical support and maintenance.

To us service means:  
We have understood you.



KELCH







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