KELCH

Tool Presetters

When the highest degree of manufacturing precision and the maximum efficiency of production resources are required, the high-performance, precision setting of tools is of prime importance.

We are convinced that you will find the the most appropriate solution for you within our extensive range of presetters in the **KENVOA set line** product family. Customized for every usage and budget.

Kelch can offer you the widest range of vertical presetters available worldwide. The portfolio ranges from the simplest entry-level models through to machines with multiple CNC axes.

Are you looking for special applications? KELCH can provide them. After all, it is precisely these special solutions for those out of the ordinary measuring tasks which differentiate a supplier of expertise.

For example, our patented module monitoring system MoDetec automatically monitors whether the fitted insert module is the correct one for the adapter chosen in the controls. This means that it is impossible to use an incorrect insert module. And since reference values are immediately available, there is association with adapters, machines and tools.

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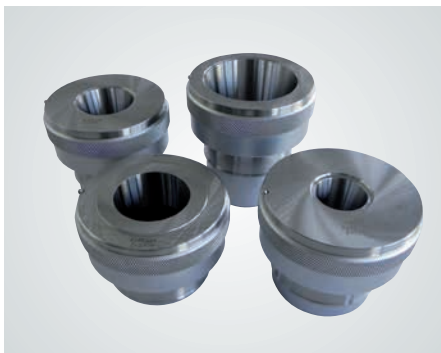
KENOVA set line V123

The handy desktop device for quick and easy measuring.

V123 is the flexible presetter with many benefits. The device is perfect for quick tool presetting directly at the machine or in the workshop.
It is also an ideal additional device for a central setting room.
The V123-device is the correct choice for determining quick and reliable measurements.

V123 stands for:
Testing, checking, measuring, presetting and adjusting

Fine adjustment for longitudinal axis

Counterbalance

Digital display for longitudinal axis

Clamp for longitudinal axis

Clamp for lateral axis

Calliper for tool radius and length

Rotatable tool holders, hardened and ground with a gauge for zero point adoption.

Fine adjustment for lateral axis

Digital display for lateral axis

Available as an optional extras: Adaptor sleeve for tool tapers SK 30 / 40 / 50 and HSK-A / C / E 50 / 63
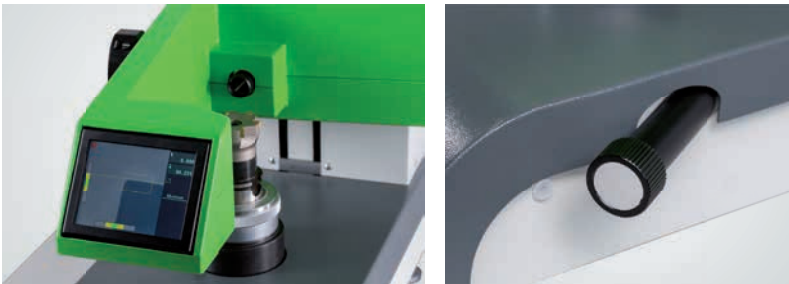
KELCH

Technical data

- Measuring range:
  Longitudinal axis: 300 mm, diameter: 200 mm
- Digital measured value display: 0.01 mm
  Repeat accuracy: 0.01 mm
- Mechanical cutting edge scanning
  Precision dial gage display: 0.01 mm
- Base with hardened and ground
  basic adaptor Ø 75 mm

- Stable measuring support column,
  precision-guided measuring slide
- Quick adjustment for measurement slides
- Fine adjustment using trapezoidal thread
- Rotating precision tool holder hardened and
  ground with gages X and Z for zero point
  adoption / exchangeable adaptor sleeves in
  different taper sizes

- Any zero point selection
- Colour: Measuring support column RAL 7035 light grey
  Base   RAL 7011 iron grey
- Required space: L × W × H = 300 × 190 × 640 mm
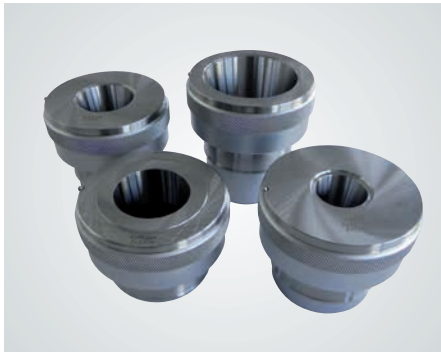- Weight: 36 kg

KENOVA set line V224

The handy desktop device with intelligent and intuitive software.

The KENOVA set line V224 represents the latest development within our Basic Line of entry level models. Compact and unimposing, it can undertake a range of measuring tasks and includes a CMOS camera and a printer interface. This device is the perfect introduction to non-contact tool measurement. The 5.7" touch screen guides you intuitively through the measuring tasks and leads you quickly to the requested measuring result. The fine adjustment for both axes enables you to position the tool in the camera image securely and precisely. A wide range of adaptor sleeves means that most tool holders can be set in the spindle.

Clamp for longitudinal and lateral axes

Clamp for lateral axis

Touch screen

Rotatable tool holders, hardened and ground with a gage for the longitudinal and transverse axes to zero point adoption.

Cmos camera

Available as an optional extras:
Adaptor sleeve for tool tapers SK 30 / 40 / 50 and HSK-A / C / E 50 / 63

Technical data

- Measuring range:
  Longitudinal axis: 400 mm, diameter: 250 mm
- Digital measured value display: 0.001 mm
  Repeat accuracy: 0,005 mm
- Contactless optical slide recognition
- Base with hardened and ground
  basic adaptor Ø 75 mm

- Stable measuring support column,
  precision-guided measuring slide
- Quick adjustment for measurement slides
- Fine adjustment using trapezoidal thread
- Rotating precision tool holder hardened and
  ground with gages X and Z for zero point
  adoption / exchangeable adaptor sleeves in
  different taper sizes

- Any zero point selection
- Colour: Measuring support column RAL 6018 yellow-green
  Base   RAL 7011 iron grey
  Tower   RAL 7035 light grey
- Required space: L × W × H = 500 × 700 × 900 mm
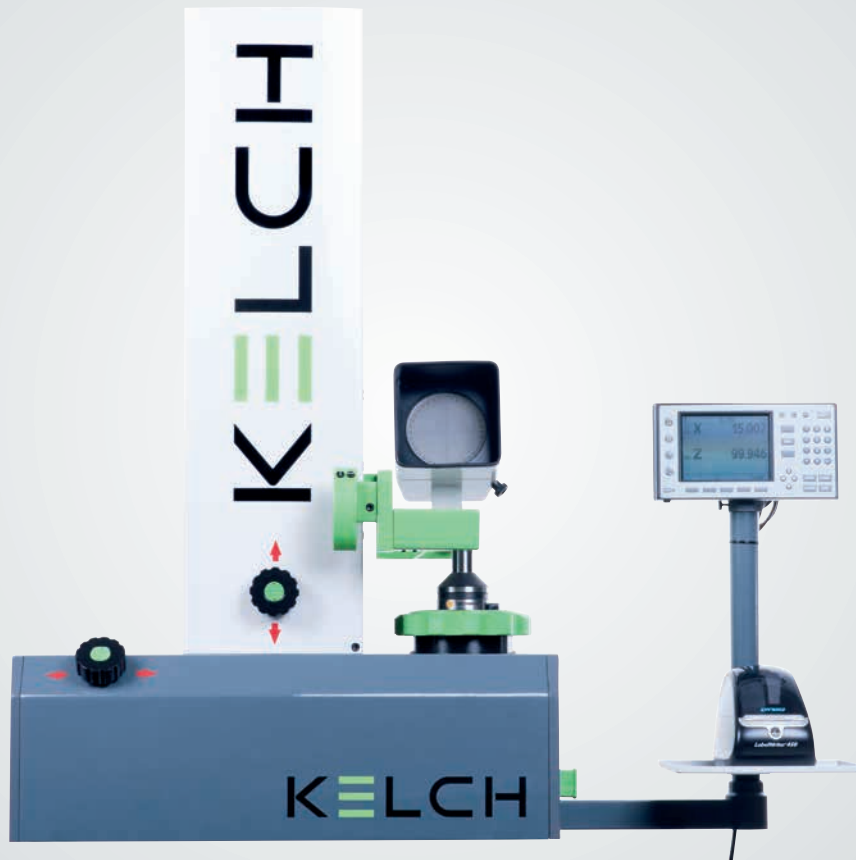- Weight: approx. 70 kg

KENOVA set line V345/466

With the Industrial Line of tool presetters, Kelch offers the perfect solution to meet the growing demands of the industry. High quality coupled with the option of digital networking in the factory.

- A stable unit made from torsion-resistant steel profiles and two linear guides with linear ball bearing form the basis of both axes.
- Rigid, highly-precise design of the X and Z axes.
- The endless fine adjustment on both axes enables a micrometer-fine setting of the axes.
- The pneumatic one-hand operation enables both axes to be quickly adjusted, individually or together if desired.
- Highest level of measurement precision through precise brand-name glass scales in both axes.

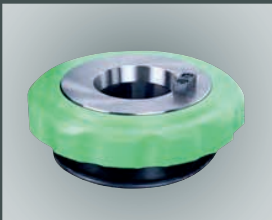|	Measuring range Ø	Measuring range length	Measuring system
V345 P	400 mm	500 mm	Projector
V345 C	400 mm	500 mm	Camera
V466	600 mm	600 mm	Camera

KENOVA set line V345 P

Equipped with a high-contrast profile projector for optical cutting edge scanning.

- 110 mm focus screen diameter, 20× magnification and 15° incline
- Precise, problem-free measuring
- 100 % workshop-compatible
- Resistant to dirt and other external influences
- Flexible, rotatable template to check angles and radii

Measuring values are evaluated using KELCH Micro digital measurement electronics.

Precision spindle
Anti-friction bearing precision spindle SK 50 with 0.002 mm Run-out accuracy including 4 × 90° indexing, vacuum clamping and spindle brake.

Projector
Optical high-quality, high-conprojector for transmitted light.
20× magnification

KELCH Micro
Digital LCD display.

KENOVA set line V345 C/466

Data communication

Camera
Digital camera with LED transmitted light and reflected light illumination for precise measurements and high-contrast cutting inspections.
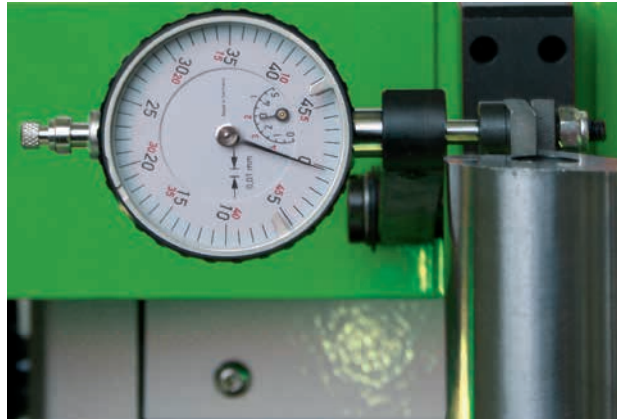
Accessories for Industrial line

KELCH-CoVis

VariTUL rack
- Table for KENOVA set line V345/V466 presetters
- Required space: L × W × H = 1020 × 620 × 800 mm
- Load-bearing capacity: 250 kg

Mechanical turning centre measuring equipment
Swivel in/out quality dial gage to measure the rotation centre, measuring range ± 2,5 mm, resolution 1 / 100 mm.

KELCH-CoVis
High-performance measurement electronics with graphical user interface and touch screen operation. CoVis measurement control enables data communications with the machine control unit. This also enables measuring values to be submitted directly to the machine control unit which prevents any input errors.

Reducers
Adapters to hold different tool tapers or cylinders in the SK 50 tool holding spindle.
Available for all common interfaces such as SK / HSK / PSK / VDI.

Label printer
Thermo-label printer with or without dispenser.

KENOVA set line V5..

The new compact presetter for maximum precision in the smallest of spaces.

The new KENOVA set line V5 range is ideal for modular expansion and, at the same time, the tool presetter takes up very little space. Both the main body as well as the tower are made of tried-and-tested grey cast iron. The system's compact dimensions make the hand wheels easily accessible and simple to operate, enabling convenient fine adjustment over the entire measuring range. The KENOVA set line V5 range provides for easy, pneumatic one-hand operation, which can be controlled on one axis or both axes, as required.
By mechanically clamping the tools, the high-precision spindle guarantees maximum repeatability. The machine's versatility is reflected by the different spindle inserts, which are available in SK, HSK, Capto and VDI designs. With its optional CNC spindle, the unit provides for automatic focusing of the tooling edge. Automatic checking of the radial and axial run-out is also possible at the press of a button.

The new user-friendly kOne Business software delivers maximum operating convenience and guides users intuitively to the right result.

KENOVA set line V5..

fitted with an SK 50 precision basic spindle with mechanical clamping and brake ensuring that it can be fixed in any position.

Furthermore, the tool presetter provides for convenient positioning of the axes by means of a pneumatically released quick adjustment mechanism and infinite fine adjustment.

KENOVA set line V5.. in detail:

1 Ergonomic handle

2 Fine adjustment in both axes

3 Spindle with integrated calibration edge

4 Control panel

5 kOne Business software

6 Optics carrier with camera and illumination

Construction:
- On a closed TUL rack
- Grey cast iron main body
- Grey cast iron tower

Drive:
- Manual linear axes
- Manual or CNC spindle (optional)

Cutting edge scanning:
- CCD camera with telecentric lens and ring light
- Additional top light for inspection of the cutting edge

Electronic measurement equipment:
- PC electronics with intelligent kOne Business image processing

Measuring ranges:
- X = -50 mm bis 350 mm (ø)
- Z = 400 / 500 / 600 mm

KENOVA set line V9..

The revolution in tool presetting.

Ease of use coupled with the highest precision. The KENOVA set line V9 range is modern and ergonomically designed with a unique type of structure. With its With its minercal cast base which is cast from one piece from the guideway to the floor, KELCH is setting new benchmarks in the design of tool presetters. This structure promises a durable and consistent mechanical KELCH quality.
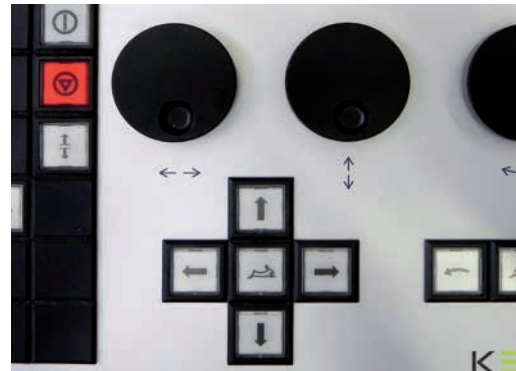
Product features of the mineral cast:

- Environmentally-friendly manufacture due to cold casting
- Sustainable reuse is possible, e.g. for road building
- Vibration-reducing
- Less sensitive to temperature fluctuations due to thermal inertia
- Precise measuring due to robust structure

One-hand operation
The selective quick adjustment of the axes has always been the standard at KELCH. The slide clamp is loosened easily and quickly and the cutting edge comes into focus.

Operating panel
Ergonomically designed full-function touch screen interface, such as axis control at several speeds and spindle functions (e.g. clamping/ releasing).

KENOVA set line V9.. the integrated CNC-measuring station for demanding on measuring tasks and measuring results.

Unique performance features:

- Solid measuring device on a single block mineral cast base. Can also be constructed as a seat or accessible workstation.
- CNC-control in up to 4 axes, can also be used manually if desired for quick measuring, even without reference data.
- Automatic axis process by powerful servo motors for high-precision positioning of the axes.
- Flexible placement of space-optimized peripheral stand with height-adjustable monitor plate for a user-friendly working environment.

- Compact storage of all accessories such as monitor, keyboard, printer and adaptor makes work easier.
- The computer and electronics are properly accommodated and easy to access in the spacious cabinet
- Workshop-compatible and resistant with an industry PC for measurement control.
- Individually adaptable to all measuring tasks and data flows.
- Drawer for storage of tools and other ancillary materials.

BLU**eco**MPETENCE
Alliance Member

Model:
- Integrated measuring station
- Thermally stable and vibration-dampening mineral cast main body
- High load-bearing capacity and stability

Drive:
- 3 axes, CNC
- Optional: 4th axis for automatic length adjustment
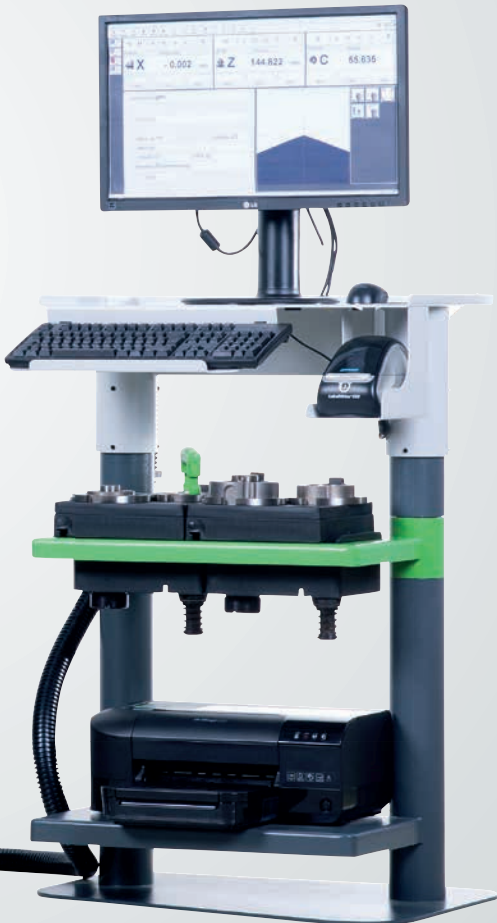
Cutting edge scanning:
- CCD camera with telecentric lens and reflected light
- Optional: optical turning centre measuring equipment
- S-camera for tool grinders
- Probe for difficult to access cutting edges

Electronic measurement equipment:
- PC electronics with intelligent image processing
- 24" TFT monitor
- 8" TFT monitor on camera carrier (optional)

Measuring ranges:
- X = -50 to 530 / 830 / 1030 mm (Ø)
  Z = 400 / 600 / 800 / 1000 mm

KENOVA set line V9...-S

Perfect shrinking and setting in one device.

Shrinking and unshrinking, measuring and setting, the KENOVA set line V9..-S offers you everything in one device.

A presetter combined with an inductive shrink fit device, with no limitations in technology, functionality is guaranteed.
The V9xx-S has the unique capability of precision length setting and measuring during the shrinking process.

Dynamics and flexibility in one.

KENOVA set line V9..-S is the combination of the presetter KENOVA set line V9.. and the shrink fit device i-tec XL into an automatic station. With the KENOVA set line V9..-S tools can be perfectly measured and preset and simultaneously shrunk on one device. Unique here is that the user has two tool presetting processes available to him at the same time.

Dynamic presetting
In the phase in which the chuck is opened by warming, the tool is set exactly to its target length fully-automatically. The benefits of this procedure are the short cycle times and the option of tool

changing in only one cycle. Of course chucks from different "quality manufacturers" can also be used here.

Presetting
If measurements are required which do not permit setting during the expansion phase of the chuck, the length of the shank tool is determined using settings adaptors prior to heating. The tool is finally shrunk to its target length using intelligent calculation and pre-positioning of the setting pins. This process is mainly designed for complex measuring tasks or for HSS tools.

Fully-functional presetter with integrated induction coil for automatic shrinking with length setting.

Drive:
• 5 automatic axes

Cutting edge scanning:
• CCD camera with telecentric lens and ring light

Electronic measurement equipment:
• PC electronics with intelligent image processing
• 24" TFT colour monitor

Tool holder:
• Modular precision spindle CNC
• Inserts for all common tool holders

Measuring ranges:
• X = -50 to 530 / 830 / 1030 mm (Ø)
  Z = 400 / 600 / 800 / 1000 mm
• Shrink length: 600 mm

Shrinking
• Automatic induction coil
• With and without length setting
• for HSS and hard metal
• Optional: Vacuum for smoke removal

Cooling:
• Separate cooling station, completely decoupled from the temperature critical presetting parts, simultaneous cooling of 3 shrink chucks
• Contact with cooling adapters that allow water flow with modular inserts.
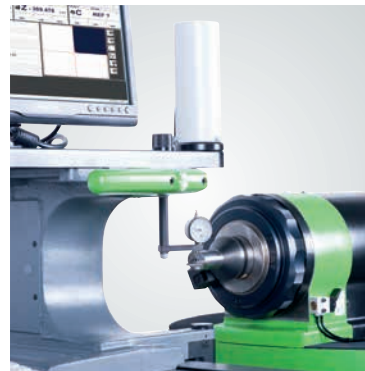• Cooling time about 60 seconds

KENOVA set line H6..

The flexible solution for turning, drilling and milling tools.

Versatile use with outstanding results. The KENOVA set line H6 covers a broad, diverse range of tasks thanks to its stable rotary table and extensive measuring range.
The numerous variations offered provide the device with a high level of flexibility. The KENOVA set line H6 is easy to use and produces excellent measurement results due to its robust mechanics and precise measuring technology and also has the advantage of low maintenance costs.
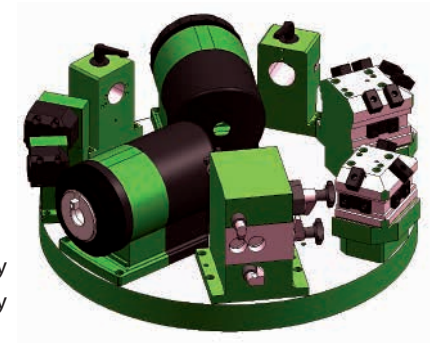
KENOVA set line H6 –
perfectly designed and robust.

The KENOVA set line H6 is a self-supporting presetter with a high degree of intrinsic rigidity. This provides extensive resistance to interference factors such as oscillations and vibrations. When assembling the various tool holders and spindles, the spacious rotary table is very flexible so there is no need to change any inserts or adaptors. The axes are set quickly and precisely with the easy-to-reach hand wheels along with one-hand operation and adjustment free of play.

The KENOVA set line H6 can be equipped in different ways, depending on the application area and task. Either with a digital display or workshop PC and profile projector or with high-resolution image processing.

Example of a rotary table assembly

Model:
- Self-supporting structure with integrated switch cabinet
- Travelling command centre for a high level of operator comfort
- High load-bearing capacity and stability

Drive:
- 2 axes, manual
- 3rd axis manual or automatic

Cutting edge scanning:
- CCD camera with telecentric lens and reflected light

- Optional: optical turning centre measuring equipment, projector

Electronic measurement equipment:
- PC electronics with intelligent image processing
- 24" TFT colour monitor
- Projector with digital, high-capacity KELCH Pico or EASY electronic measuring equipment

Measuring ranges:
- X = 520 mm (∅); Z = 500 mm
- X = 520 mm (∅); Z = 800 mm

KENOVA set line H7..

The leader in tool presetting

The KENOVA set line H7 stands out due to its long-term stability, excellent repeatability and unrivalled precision. KENOVA set line H7 is predominantly used in setting rooms. The measuring and presetting of various tools for turning, drilling and cutting work determine its range of operation. The device completes these tasks with the highest level of precision.
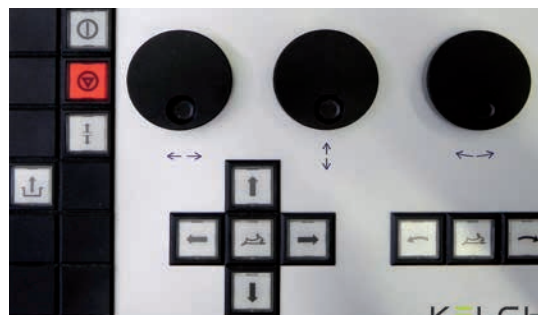
Its stable design makes the KENOVA set line H7 an ideal device for workshops. It can be used optimally and has low maintenance requirements, so there are almost no follow-up costs.

The guideways are covered with metal plates which prevents soiling from oil, chips and dust while guaranteeing protection for the glass scales and drive shafts. This means the measurement-relevant components are optimally screened and there is virtually no possibility of damage.

Modular precision spindles for the highest degree of reproducibility when changing different insert modules.

Motor-driven axis positioning directly at the accompanying command centre

Facts at a glance

- The measuring and presetting device is self-supporting with a high degree of intrinsic rigidity
- Resistance to interference factors such as oscillations and vibrations.
- The large rotary table can be extended by a position monitoring system and guarantees a high level of flexibility with a wide variety of working processes.
- The motor-driven axis control is equipped with three speeds and additional one-hand operation.
- Manual or partially automated working is possible with or without target data.
- CNC drives are available on all levels and ensure ease-of-use.
- A travelling command centre ensures operator comfort and reduces improper operation and saves time.
- Workshop compatible design with integrated measurement control and industry PC.

Model:
- Self-supporting structure with integrated switch cabinet
- Travelling command centre for a high level of operator comfort
- High load-bearing capacity and stability

Drive:
- 2 axes, CNC
- 3rd axis manual or automatic

Cutting edge scanning:
- CCD camera with telecentric lens and reflected light
- Optional: optical turning centre measuring equipment

Electronic measurement equipment:
- PC electronics with intelligent image processing
- 24" TFT colour monitor

Measuring ranges:
- X = 520 mm (∅); Z = 500 mm
- X = 520 mm (∅); Z = 800 mm
- Turntable 800 mm

Micro/Smart Pro

Micro/Smart Pro from KELCH are high-capacity electronic measurement devices that have been specifically designed for use with presetters.

Micro

Smart Pro

KELCH Micro / Pico LCD

The equipment is fitted with a soft keyboard and workshop compatible digital displays with zero-point memory that were designed for use in workshops (dirt, particles, etc.). The system is also equipped with an acoustic feedback feature which indicates measurement designations and measurement results.

The dialog control is shown via a menu-controlled 6" LCD display. The tool memory stores 300 / 500 tools. The switcha-ble display from diameter to radius enables a certain level of flexibility in the measurement results. The special functions for circle and angle calculations increase the ease of use.

The devices also include an interface for external PCs and label printer. The intelligent digital electronics offer the possibility of evaluating presetting and measurement values easily. All program functions can be easily recalled with a push of a button. The workshop compatible equipment features practical short-cut key switches for control.

Smart Pro

The Smart Pro control offers outstanding convenience for entry-level tool presetter.
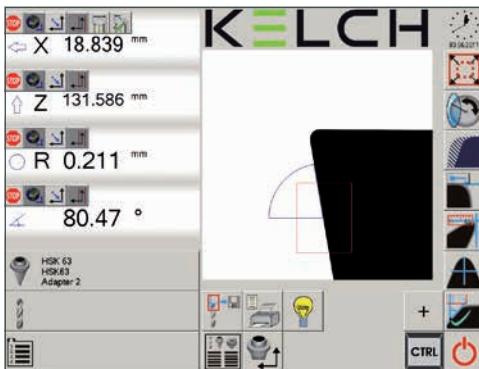
Thanks to the 5.7" touch monitor, operators are faced with a clear intuitively operated user interface, with which they can quickly and accurately measure tools. Informative functional modules and descriptions are available on the user interface, enabling users to perform all key tool measurements, such as diameters, radii, angles, lengths and all chain dimensions. The measured values can be printed out on the label printer. Additional display functions aid operators in setting up image processing, such as camera and light settings.

CoVis

The simplest way to get a precise result.

Fast, reliable and easy to use without the need of extensive training – these are the requirements that users place today on small control units in order to master the everyday measuring and presetting tasks.

The display and operator dialog are shown on a clearly designed touch screen. Logical measuring tasks, such as angle calculations, circle diameter and theoretical points can be activated easily by using your finger tip on self-explanatory module icons. The easy management of the adaptors, holders, tools and tooling sheets enables permanent access to the results in terms of the workflow.
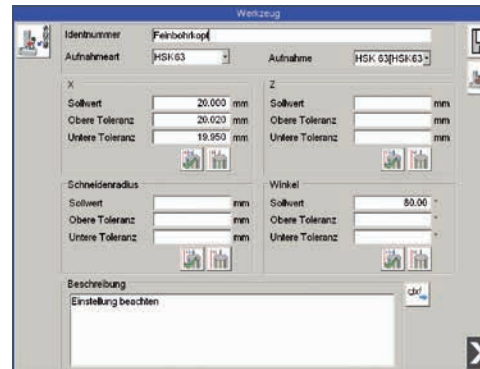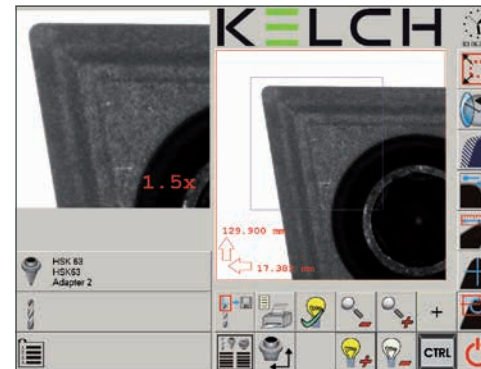
KELCH CoVis

- Operated via a 15" touch screen
- Camera with a 5 × 5 mm measuring window
- Enlargement of the camera image: 28 ×
- Cutting-edge inspection with LED illumination and zoom function
- Total image function for fast measuring

- Adaptor, zero point, tool and tooling sheets memory
- Additional measurements: radius / circle sections, cutting angles, general angles and centre of radius / circles sections
- Data output via printer or network
- Can be used with the following devices: KENOVA set line V345 and V466

Measurement image

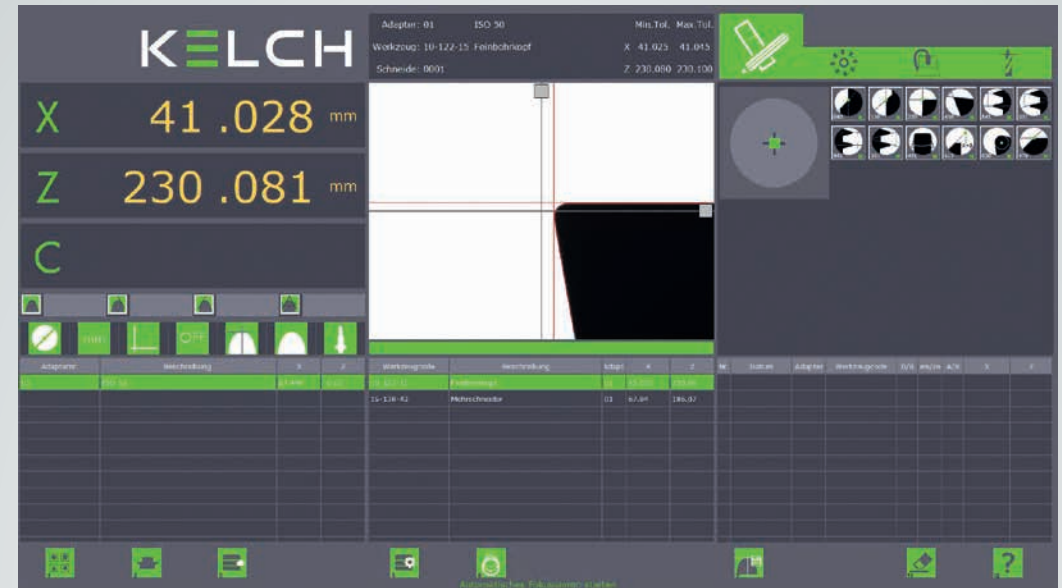
Tool data mask

Cutting inspection

kOne Business

The new KELCH software for maximum operating convenience with the PREMIUM line KENOVA set line V5.. tool presetter.

KELCH has supremely met the need for simple and intuitive operation of the measuring software with its new kOne Business software.

The software informs users in a structured manner about the tool, adapter, measuring function and values measured on the tool – all on a single screen.

Its structure and functions mean that even inexperienced operators can obtain the measuring results they require within a very short time. Simplicity coupled with broad functionality are the key features of this new software from KELCH. See for yourself!

Everything included!

A host of useful features, such as the checking of radial and axial run-out, total image function with live image for monitoring purposes and an additional top light for tool inspection, are all included as standard. The permanent active focusing aid enables users to immediately measure tools correctly, without a single click of the mouse.

Simple and yet extensive!

Regardless of whether you simply want to measure maximum geometries (maximum point in X and Z) for simple drills and cutters, step measurements on step drills or gauge thread cutters: the extensive range of measuring functions enables operators to quickly obtain the results they require.

The dynamic cross-hair, which automatically finds the cutting edge provides for quick and easy measuring of the maximum dimensions.

Full integration!

It is now possible to eliminate errors, for example caused by incorrect input due to transposed numbers, thanks to the option of sending the measuring results by post-processor via the network directly to the machine, and in turn improving operating convenience and process safety.
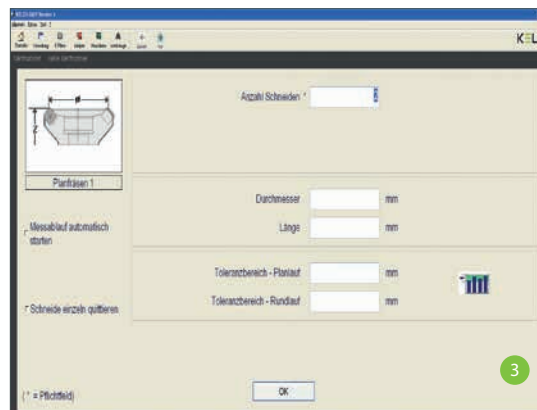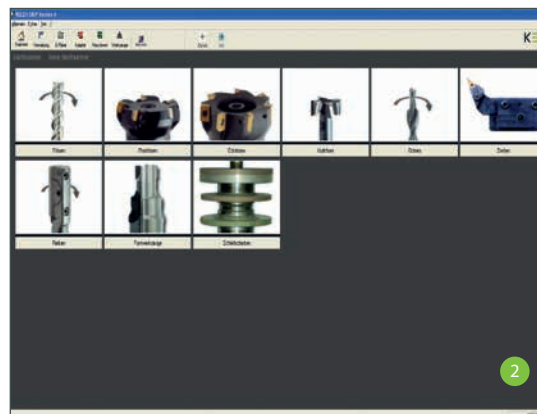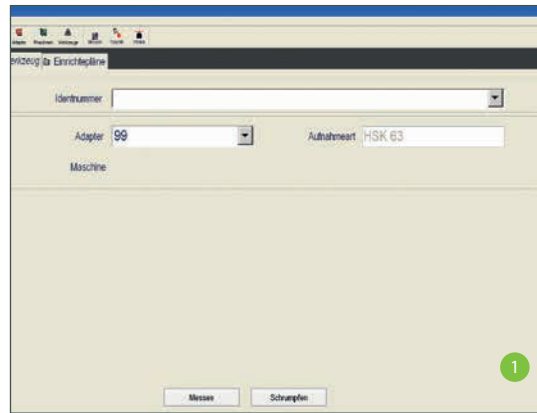
The information to be sent can be conveniently checked for correctness and completeness, by displaying the data in a format appropriate for the control.

EASY

Measuring made easy.

Measuring simply could not be easier with this software – and no special knowledge is needed. The clearly arranged user interface enables users to immediately navigate around the system using familiar forward/backward movements.
A simple clear homepage is the direct entry to each measuring task. Other input screens, such as Picture Start, guide users step by step to the correct measuring result and also to the automatic measuring program. Adapters, machines, original tool forms, tooling plans and measuring processes are saved in the integrated database. The standard configuration includes bidirectional data communication (DNC) via a network card or serial interfaces in the KELCH data standard.
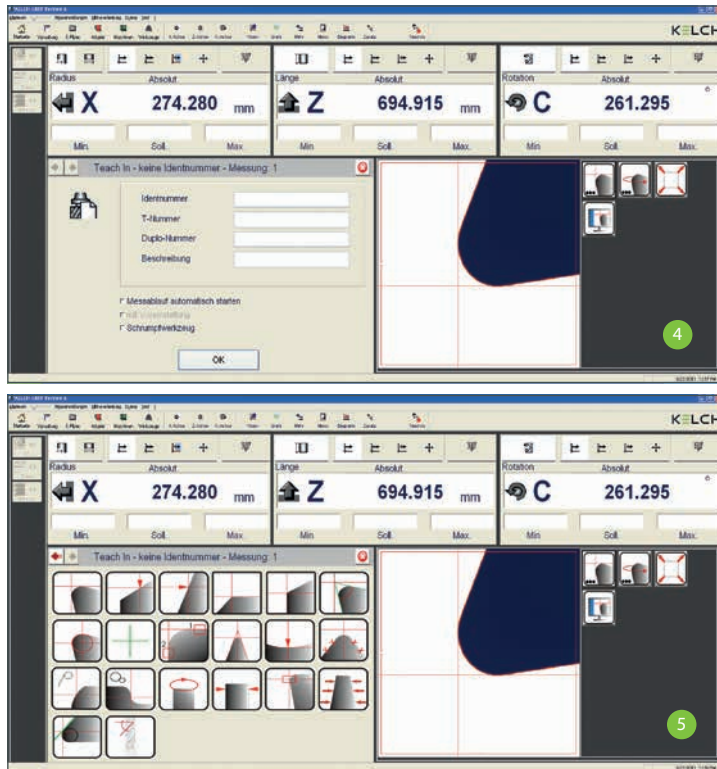

EASY leads each user securely through the program with Picture Start using concise, easily understandable input dialogs. Practical pictures and graphics help in orientation.

Step 1: Input the measurement of individual tools or entire tooling sheets on the homepage. Then select the appropriate adaptor on the presetting device. If one of the tools entered has already been saved, the system calls it up by the identification number and immediately begins the measuring process.

Step 2: Select a tool using Picture Start. The selected tool then performs the measurement. Picture Start is KELCH's own in-house developed selection menu. Define the tool group you require using the different graphics. Simply click on the right graphic depending on the tool type and cutting geometry.

Step 3: Use ParaDirect (PaD) for inputting data. This is a concise, easy-to-understand input dialog into which you enter the target dimensions and tolerances. Simply complete the mandatory fields for the measuring process. The corresponding measuring process begins when you have confirm by pressing Enter. The data is entered from the PaD and the required measurement results are instantly available. Any actions required are clearly visible on the monitor.

Performance features at a glance

Operator guidance	Simple input masks lead the user step-by-step to the right measuring result
Automax®	Automatic, time-saving measuring of cutting edges without focusing
Full-screen view	Tool cutting edge possible in full-screen view
Explorer	Simple navigation in data management – similar to Windows use
Graphics protocol	Graphical print output to record measured tools
Online help	Integrated online help in Windows format
Picture Start	Simple retrieval of automatic measuring processes via easy-to-understand tool pictures
ParaDirect	Direct parameter input for the automatic measurement of new or unknown tools
Contour measurement	Every form of cutting tools are simply scanned in
Module recognition	Patented solution for maximum security
Tool Tips	Context-sensitive help when starting up elements shows the user what activity is being called up
Data Manager	Tool management with the functionality of market leader TDM – scalable from a single-user to group-wide solution
Teach-in	Software option for individual setting and programming of measurement processes - easy, interactive and supported graphically
Total image	Patented procedure to generate the envelope and measure the cut created
DXF comparison	The target/actual contour alignment of tools by filing a template
Reports	The relevant measuring results can be output in different protocol formats.
RFID	Tool identification by means of the RFID chip, which can be read and written
Inspection	Tool inspection in the top light process to monitor the cutting process
Tool management	Connection to external systems, such as TDM, Coscom, Fastems etc.
3D module	Creation of precise 3D models of the rotationaland symmetrical tool

Measuring made easy.
The Teach-in software option now enables you to measure complex tools fully automatically for the first time. Fully automatic measurement guarantees precise measuring results and enables the setting equipment to be operated regardless of the operator's knowledge and expertise. All measuring steps are retained and can be saved as a complete measuring program with the tool.

Steps 4 and 5: The measuring process begins as soon as the identification number has been inputted on the homepage (step 1). It starts automatically if a measuring run has already been entered.

It couldn't be EASIER.
The new user interface for the presetter's software delivers the most precise measuring results and is easy to use and understand.
The familiar Home-Forward-Back navigation is similar to the method used in most browser fields,
meaning that you can return to the starting point by pressing just a single button.
EASY software also comes with online Help, which is also easy to understand and structured in a similar way to Windows.
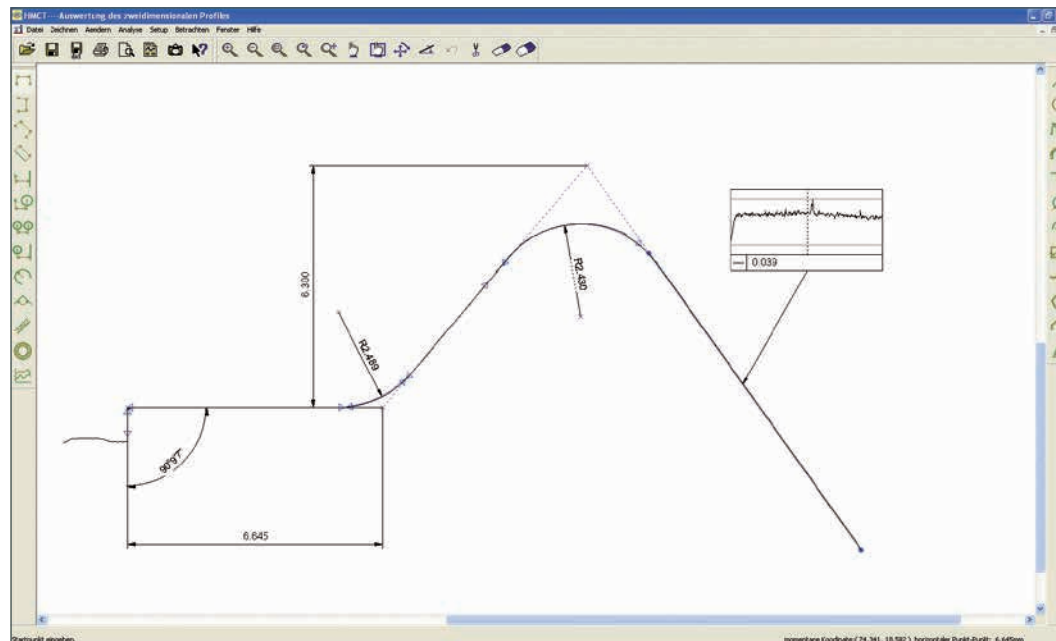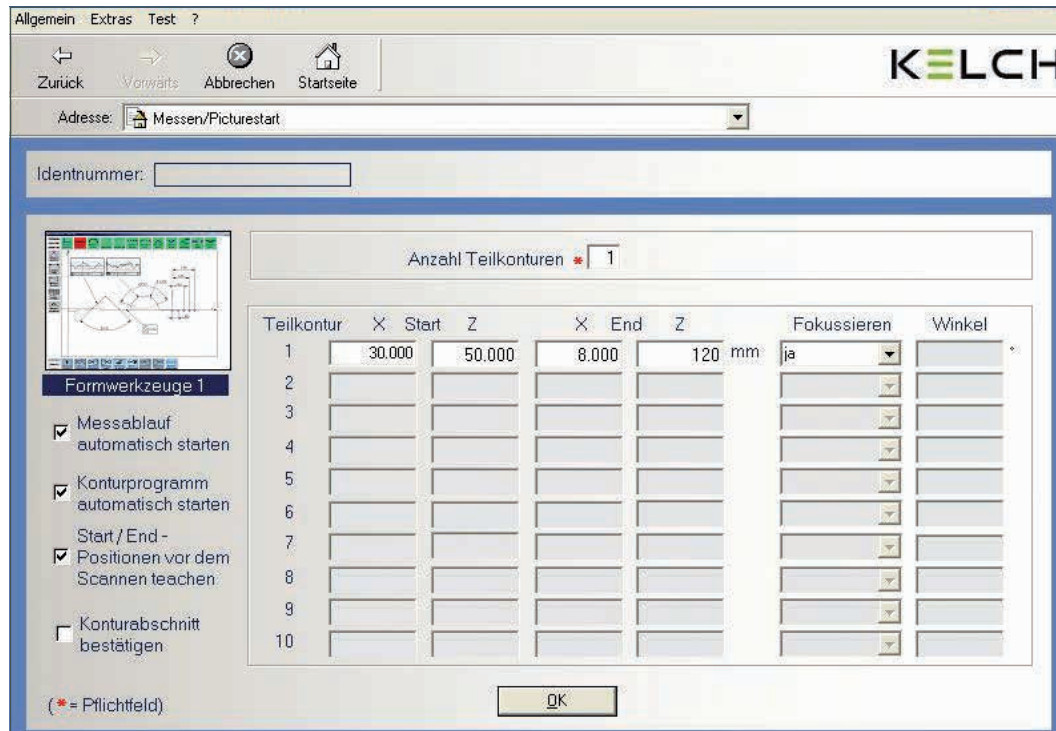
Contour Software

The intelligent solution

The KELCH Contour Software is ideal for automatically checking tool contours for straight or spiral grooved forming tools. After defining the start and end points, the contour is scanned in one or partial contours. The recorded point coordinates are interpreted in an analysis programme and transformed into a polygon. All geometrical elements can be extracted and dimensioned from the calculated, graphically displayed contour and also compared with the target contour. The geometrical comparison can be made using particular data such as target radius, angle or distance, or deviating from a predetermined optimum contour which is fed in e.g. DXF format. Irregularities in individual elements can be displayed particularly clearly. The measurements determined and learnt in this way are saved as a reference file and are then available for the next measurement. Therefore, the whole procedure runs automatically from scanning to logging.

The Contour Software package offers:

Technology:

- Simple contour comparison using DXF files
- Measurement of any geometry elements through to its finish and shape quality
- Straight and circular shapes can be formed from segments
- Extensive analysis also via help elements
- Measurement of straight-grooved or spiral-toothed forming tools
- Contour scanning with a 3-axis CNC device
- Synchronised switching
- Intuitive graphical interface
- Measuring of any distances, angles and radii
- Comparison with target contour
- Tolerance considerations
- Clear logging

✔ **Easy contour recording**

✔ **Clearly arranged reports**

✔ **Ease of use**

KELCH Accessories

For even more flexibility, precision and security.

Original accessories from KELCH always give you the security of working with tested and certified materials.
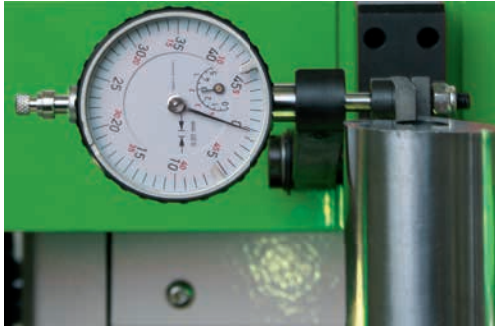

MoDetec: automatically more security
The patented module supervision prevents errors when exchanging insert modules for the various tool holders. Using the latest transponder technology, the calibrated data is directly transferred to the device control and compared fully automatically whenever the insert is changed, independent of the user. This ensures completely secure assignment of the chosen adaptor and the corresponding insert module.

Balluff
The properties of the tools are as different as the tools' appearance is similar. A secure process to prevent mistakes is to use data chips in the tool which can be read and written manually or automatically. This is how reliable tool identification works. The automatically movable read head offers even more flexibility and security to prevent mistakes.

Turning centre measuring equipment
- Quality dial gage which can be swivelled in and out for measuring the turning centre, measuring range ± 2.5 mm, resolution 1/100 mm.
- Camera which can be swivelled in and out to optically examine the location of the turning centre of the tool cutting edge measuring range

S camera
This camera can be used to check tool geometries which are no longer measurable in the in transmitted light. Among other things, angles, radii and distances can be measured in reflected light and displayed in 50× magnification.
The camera can be swivelled from –90° to +90°.
This enables you to determine additional cutting edge geometry parameters, particularly required for grinding tools on CNC machines.

Inserts for modular precision spindles
The contact face and the short taper ensure maximum repeatability when changing the insert modules that are available for all standard HSK, Capto, KM and SK tool holders. Clamping for all tools is similar to the machine tool, steep taper holders use retention knobs centrally from behind and HSK holders use original clamping units expanded from the inside.

KELCH Service

Good service begins prior to the sale and not only afterwards. KELCH provides service before, during and after the sale – without any ifs and buts.

KELCH is well-known in the industry for its excellent advice and service is in no way inferior to this. The only small difference is that we also like to call our service "support". This is due to the fact that we look after our customers from the very outset – from the purchase through to maintenance.

For our customers this means that they are in good hands at all times because we know how important good service is.

The new KELCH seal provides increased security for all KELCH devices. This seal assures that at all times you will receive the best, most professional service for all your KELCH equipment. We guarantee absolute quality and offer maintenance contracts in combination with interesting bonus programs and discounts. Benefit from KELCH service and only trust the original.

Basics
Exclusively for our customers and our authorized representations, we keep all common spare parts of the current series at fairly calculated prices in stock. Even for devices up 15 years old we are in most cases able to deliver spare parts short-term or to offer suitable alternatives.

Maintenance contract
One-off costs for the maintenance of the first device including travel costs.

Repair service
We offer you the option of having your devices or device components (e.g. your PC) repaired quickly in-house by KELCH. You save travelling costs or double journeys, if the error cannot be resolved at the first attempt. We can also organize the collection, if necessary also the return delivery for you.

Lease and rental devices
We will be pleased to supply you out of our pool of lease and rental devices (if available) for the duration of the repair of your components at KELCH. Our maintenance contract customers have privileged access to this service and of course at special conditions.

Extended warranty
When concluding a maintenance contract and if the first maintenance work is carried out within 12 months after the purchase of a new device, the warranty is extended automatically to 24 months.

	Basics	Individual maintenance	Maintenance contract	Calibration contract Precision tools
Spare parts service	✔			
Spare parts service at preferential prices		✔	✔	
Repair service	✔	✔	✔	✔
Lease and rental devices	✔	✔	✔	
Extended warranty for new devices			✔	
Data recovery (if possible)			✔	
Software support		✔	✔	
24h service		✔	✔	
Retrofit, Update, Upgrade	✔	✔	✔	
Retrofit, Update, Upgrade at preferential price			✔	
Calibration / certification of force sensing bars, measuring gages and test arbors	✔			
Calibration / certification of force sensing bars, measuring gages and test arbors at a preferential price				✔

Applies only to devices from the Industrial & Premium line

Data recovery
It can happen quickly. Due to a power failure or other unforeseeable events the database has become unstable and the last backup is already too old to restore – and important data is lost. We offer our maintenance customers a data recovery option at KELCH. Invoicing is on a cost-basis.

Software support
We offer our maintenance contract customers priority support for software issues. This support is invoiced per half hour started.

24h Service
We offer our maintenance contract customers a guaranteed response time of 24 hours. (Monday to Friday from 8 a.m. to 5 p.m., except on public holidays).

Retrofit Upgrade
Only we offer you the opportunity to update your device to the current status. Especially in the fast-paced control technology it is important to stay up to date. The progressive discount rate based on spare parts service and the benefits of a maintenance contract also apply here of course.

Calibration and certification of KELCH measuring equipment
We calibrate and certify in-house your KELCH measuring equipment such as measuring gauges, test arbors and force sensing bars. Optional: If you do not want to keep an eye on this yourself, we can relieve you from this task with a calibration contract.

Serviced by
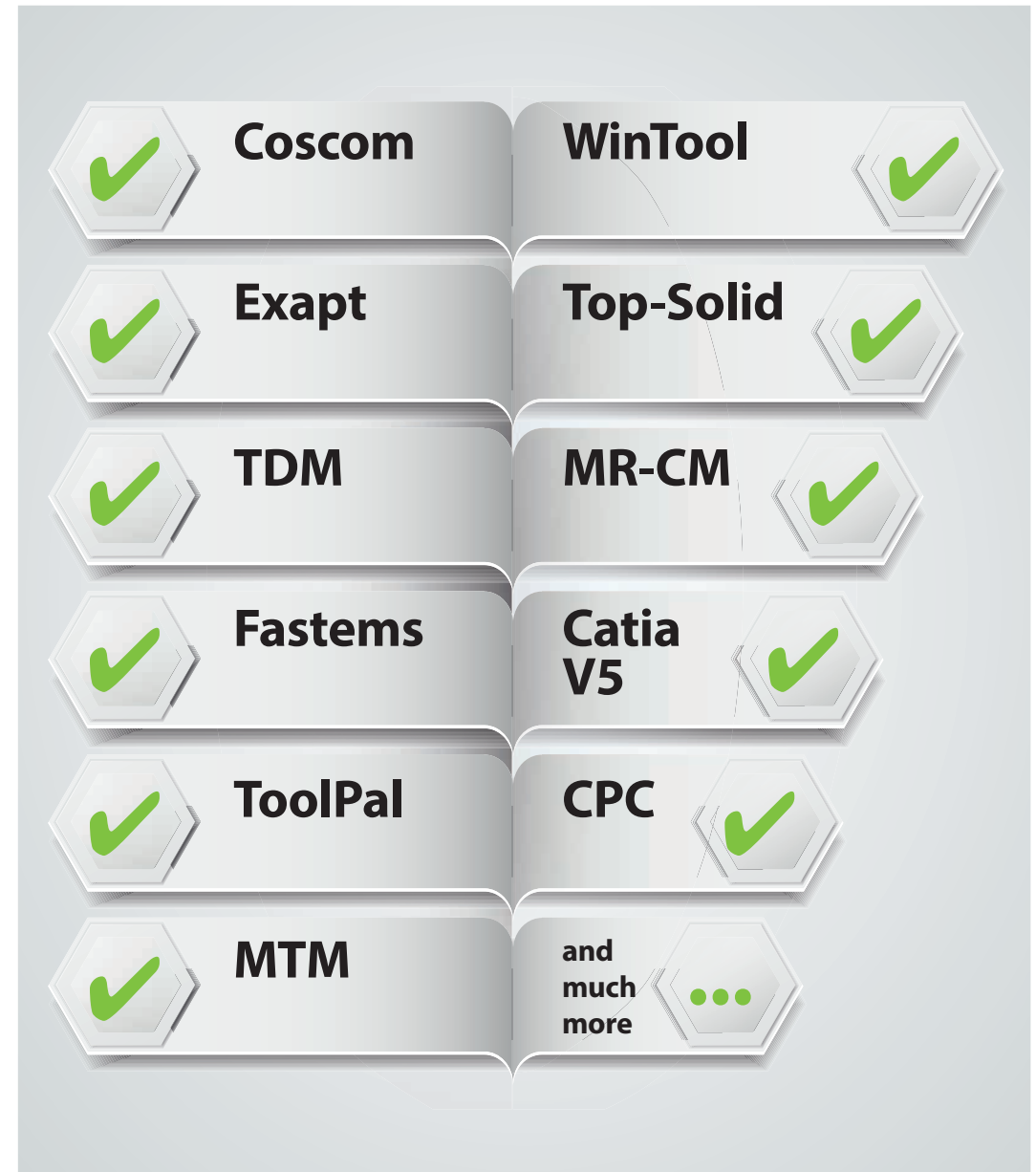
KELCH

KELCH software interfaces

Everything at a glance!

KELCH measuring software ensures that you can always save tool-based data and transmit it to the right place.
It does not matter whether the data comes from machine controls, tool management programs, CAD/CAM systems or other manufacturing systems.
Now you always have the same consistent data throughout the entire system –missing data is now a thing of the past. This also avoids simple errors, as can be caused by transposed figures, improving process reliability and also efficiency within your company.

Regardless of whether you opt to use CoVis, kOne Business or EASY, Kelch enables you to conveniently direct tool-based data by data transfer to the right place.

✔ Coscom	✔ WinTool
✔ Exapt	✔ Top-Solid
✔ TDM	✔ MR-CM
✔ Fastems	✔ Catia V5
✔ ToolPal	✔ CPC
✔ MTM	and much more

KENOVA soft line Toolmanager
The solution for effective Tool Management.

• Industrial (Engineering)
- Create entries and maintenance of tool components
- Direct access to tool configurations including the 3D graphics generator
- Display of processes and work pieces "waiting" to be released. The planner is immediately aware of what needs action.
- Configuration of tool assemblies, machines and data generation for nc-verification
- Generate fixtures, measuring gauges and other equipment – for all running processes and job steps

• Advanced (Workshop)
- Execute inventory bookings via Drag-and-Drop.
- Presetting overview – simple measuring of saved complete tools via interface to EASY and thereby also to the presetter
- Create and administer tool items (there may be several instances of a tool type) and tool layouts.
- Detailed information about my tool inventory (Where and in which status is a certain tool, how is it to be assembled and are all required tool components at hand?)
- Overview over the next manufacturing jobs and over machine status (running, idle, break down)
- Generate delivery orders for tool assemblies according to the tool list

• Premium (Supply)
- Releasing of purchase orders, monitoring of inventory levels, control of delivery status
- Supplier management – Maintenance of logistics parameters (safety stock, minimum order quantity)
- Create special orders
- Proposals for puchase orders (by material or supplier)
- Is a purchase order for a tool component already released and if yes, when will it be available?

KENOVA soft line Toolmanager

The Toolmanagement System in the cloud!

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.

KELCH
KENOVA SOFT LINE TOOLMANAGER

www.kelch-toolmanagement.de ENTER

INDUSTRIAL ADVANCED PREMIUM

Expansion for modularity!

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