



KELCH

Tool presetters
INDUSTRIAL line

High-performance, precise tool setting is essential when the highest degree of manufacturing precision and maximum efficiency of production resources are required.

We are convinced that you will find the most appropriate solution within our extensive range of **KENOVA set line** tool presetters. Tailored to every use and every budget.

KELCH can offer you the widest range of vertical tool presetters. The portfolio ranges from the simplest entry-level models through to machines with several CNC axes.

Are you looking for special applications? KELCH has them all. After all, it is precisely special solutions for out of the ordinary measuring tasks that 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 control. It is now impossible to use an incorrect insert module! And as reference values are immediately available, there is instant assignment to adapters, machines and tools.





KENOVA set line

V3xx

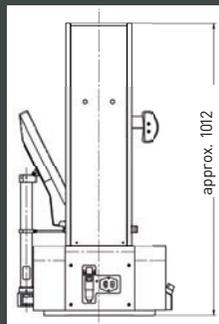
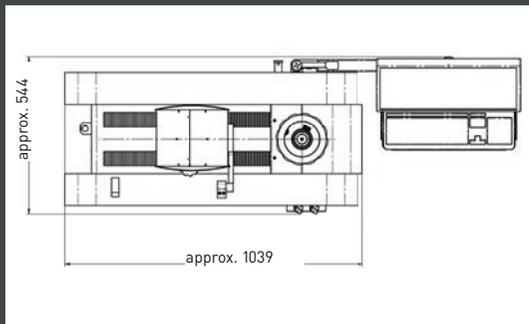
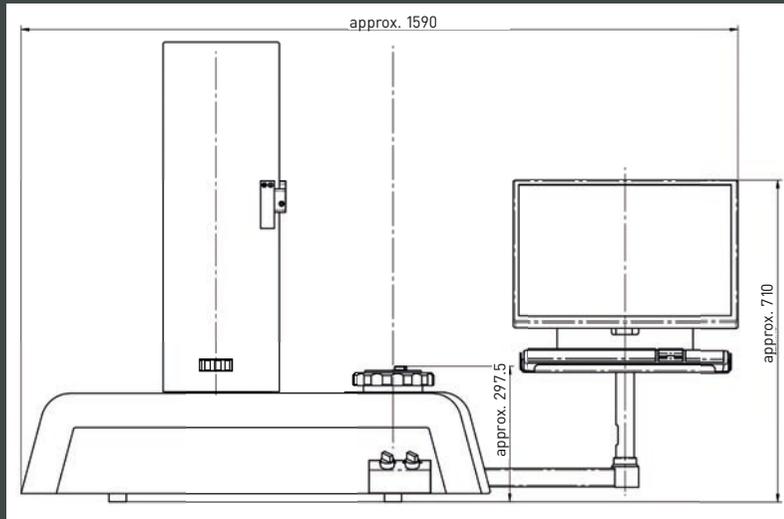
KELCH offers the perfect solution to meet the growing requirements from industry with its tool presetters from the INDUSTRIAL line. High quality coupled with the option of digital networking in the factory.

- A stable unit made of torsion-resistant steel profiles and two linear guides with linear ball bearing form the basis of both axes
- Rigid, highly-precise construction of the X and Z axis
- The endless fine adjustment on both axes enables micrometre-fine setting of the axes
- 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 on both axes

	Measuring range \emptyset	Measuring range length	Measuring system
V364 P	-50 to 600 mm	400 mm	Projector
V366 P	-50 to 600 mm	600 mm	Projector
V364 C	-50 to 600 mm	400 mm	Camera
V366 C	-50 to 600 mm	600 mm	Camera

KENOVA set line V3xx

Erection dimensions and components



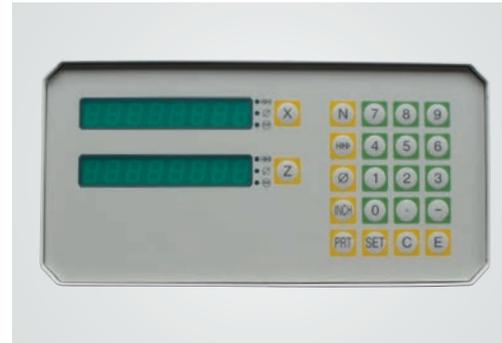
Precision spindle

Anti-friction bearing precision spindle SK 50 with 0.002 mm concentricity including 4 x 90° indexing, vacuum clamping and spindle brake.



Projector

Optical high-quality, high-contrast projector for back light. 20x enlargement. 100 mm diameter, 15° division (With V36x P)



KELCH Orion

Digital display with LCD display. (With V36x P)



Camera

CCD camera with LED lighting and additional LED top light. (With V36x C)



KELCH CoVis

High-performance measurement electronics with graphical user interface and touch screen operation. CoVis measurement control permits data communication with the machine control unit. This also enables measuring values to be transmitted directly to the machine control unit, preventing input errors. (With V36x C)



KELCH CoVis

The simplest way to get a precise result.

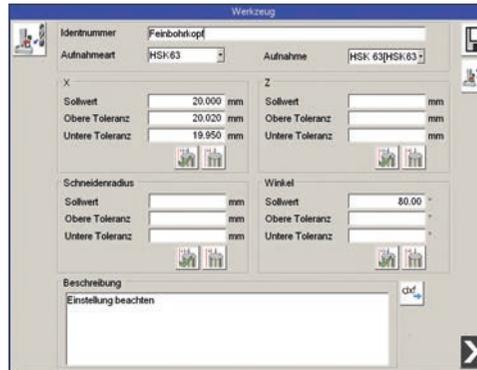
Fast, reliable and easy to use without the need of extensive training – these are the requirements that users place today on small control units in order to master the everyday measuring and presetting tasks. The display and operator dialog are shown on a clearly designed touch screen. Logical measuring 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 x 5 mm measuring window
- Enlargement of the camera image: 28 x
- Cutting-edge inspection with LED illumination and zoom function
- Total image function for fast measuring
- Database for adapter, zero point, tool and tooling sheets
- Additional measurements: radius / circle sections, cutting angles, general angles and centre of radius / circles sections
- Data output via printer or network



Measurement screen



Tool data screen



Cutting edge inspection



Data communication

KENOVA set line V5xx

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

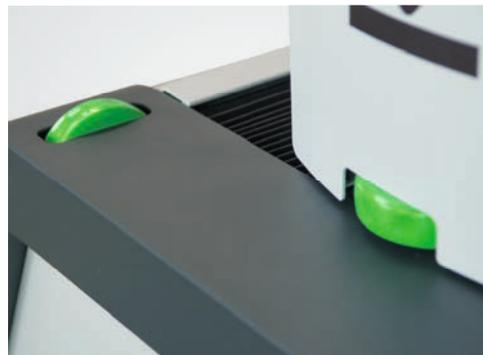
The new KENOVA set line V5 range is ideal for modular expansion and, at the same time, the tool presetter takes up very little space. Both the main body as well as the tower are made of tried-and-tested grey cast iron. The hand wheels are easy to reach and simple to operate when space is tight. They provide for comfortable fine adjustment across the entire measuring range.

The KENOVA set line V5 range has easy, pneumatic one-hand operation, which can be controlled as required on one axis or on both axes. 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.



Ergonomic handle



Fine adjustment in both axes





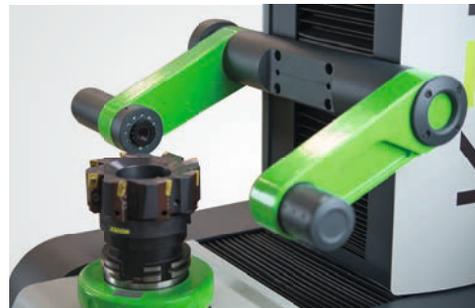
Spindle with integrated calibration edge



Control panel



kOne Business software



Optics carrier with camera and illumination

KENOVA set line V5xx

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.

Technical Data

- | | |
|-----------------------------------|---|
| Construction: | <ul style="list-style-type: none">· Grey cast iron base· Grey cast iron tower |
| Drive: | <ul style="list-style-type: none">· Manual linear axes· Spindle manual or CNC (optional) |
| Cutting edge scanning: | <ul style="list-style-type: none">· CCD camera with telecentric lens and ring light· Additional top light for inspection of the cutting edge |
| Electronic measurement equipment: | <ul style="list-style-type: none">· PC electronics with intelligent kOne Business image processing |
| Measuring ranges: | <ul style="list-style-type: none">· X = -50 mm to 350 mm (∅)· Z = 400 / 600 mm |

k0ne Business

The new KELCH software for maximum operating convenience with the KENOVA set line V5xx tool presetter

KELCH has supremely met the need for simple and intuitive operation of the measuring software with its new k0ne 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-based functionality are the key features of this new software from KELCH. See for yourself!



Dynamic cross-hair for automatic and quick measurement.



Checking of the radial and axial run-out of multiple cutting-edge tools with graphic bar graph display.



Wide range of different cutting forms for precise measurement.



Data transmission screen with preview option.

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 comprehensive!

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 to 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!

Errors, possibly caused by incorrect input due to transposed digits, can be ruled out by optionally sending the measured results directly to the machine by post-processor via the network, thereby further enhancing operating convenience and process reliability. The information to be sent can be conveniently checked for correctness and completeness, by displaying the data in a format appropriate for the control.



Suggested example

A4 printer

- List printer for protocols

**Turning centre measuring equipment**

- Quality dial gauge, which can be swivelled in and out for measuring the turning centre, measuring range ± 2.5 mm, resolution 1/100 mm.

**TUL workbench with beech plywood worktop**

- Complete with a sheet steel shelf (250 mm deep)
- Colour RAL 7035 light-grey
- Required space: L x W x H = 1500 x 700 x 840 mm
- Load-bearing capacity: 1000 kg

**Reducers**

- Adapter to hold different tool tapers or cylinders in the SK 50 tool holder spindle. Available for all common interfaces such as: SK/HSK/PSC/VDI.*

**Label printer**

- Thermo-label printer

**Protective cover for V5 units**

- Protects from dust and dirt

**Calibration bars**

- For reliable zero point monitoring and calibration.
- PSC, SK, HSK and VDI

**TUL Rack IV, closed**

- Stable base with 3 compartments
- For the storage of PC electronics, adapters and other accessories, like printer, tools etc.
- Required space: L x W x H = 1730 x 1158 x 1158 mm

* Also available with automatic tool clamping for SK / HSK / PSC.

Basics

We keep all common spare parts of the current series in stock at fairly calculated prices exclusively for our customers and authorised representatives. In most cases we are able to quickly deliver spare parts or offer suitable alternatives even for systems up to 15 years old.

Maintenance contract

One-off cost for the maintenance of an initial system including travel costs.

Repair service

We offer you the option of having your units or components (e.g. your PC) repaired quickly in-house by KELCH. You save on travel costs or dual journeys, if the fault cannot be resolved at the first attempt. We can also organise the collection and also the return delivery.

Lease and rental devices

We would be pleased to supply you out of our pool of lease and rental units (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 rates.

Extended warranty

If you conclude a maintenance contract and if the first service is carried out within twelve months after the purchase of a new unit, then the warranty is automatically extended to 24 months.

Data recovery

It can happen quickly. Following a power failure or other unforeseeable events, the database has become unstable and the last backup is already too old to restore – important data is lost. We offer our maintenance contract 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. Support is invoiced for every half-hour started.

24-hour service

We offer our maintenance contract customers a guaranteed response time of 24 hours (Monday to Friday from 8:00 to 17:00, except on public holidays).

Retrofit upgrade

Only we offer you the opportunity to update your unit to the state-of-the-art. It is crucial to stay up to date especially with fast-moving control technology. The progressive discount rate based on spare parts service and the benefits of a maintenance contract naturally also apply here.

Calibration and certification of KELCH measuring equipment

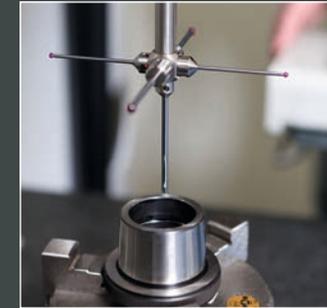
We calibrate and certify your KELCH measuring equipment in-house, such as measuring gauges, test arbors and force sensing bars. Optional: If you do not want to deal with this yourself, we can take responsibility for it with a calibration contract.



KELCH Service

Good service begins prior to the sale and not just after the sale. 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 its service is in no way inferior to this. The only slight 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 service and maintenance. For our customers this means that they are in good hands at all times because we know how important good service is.



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

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