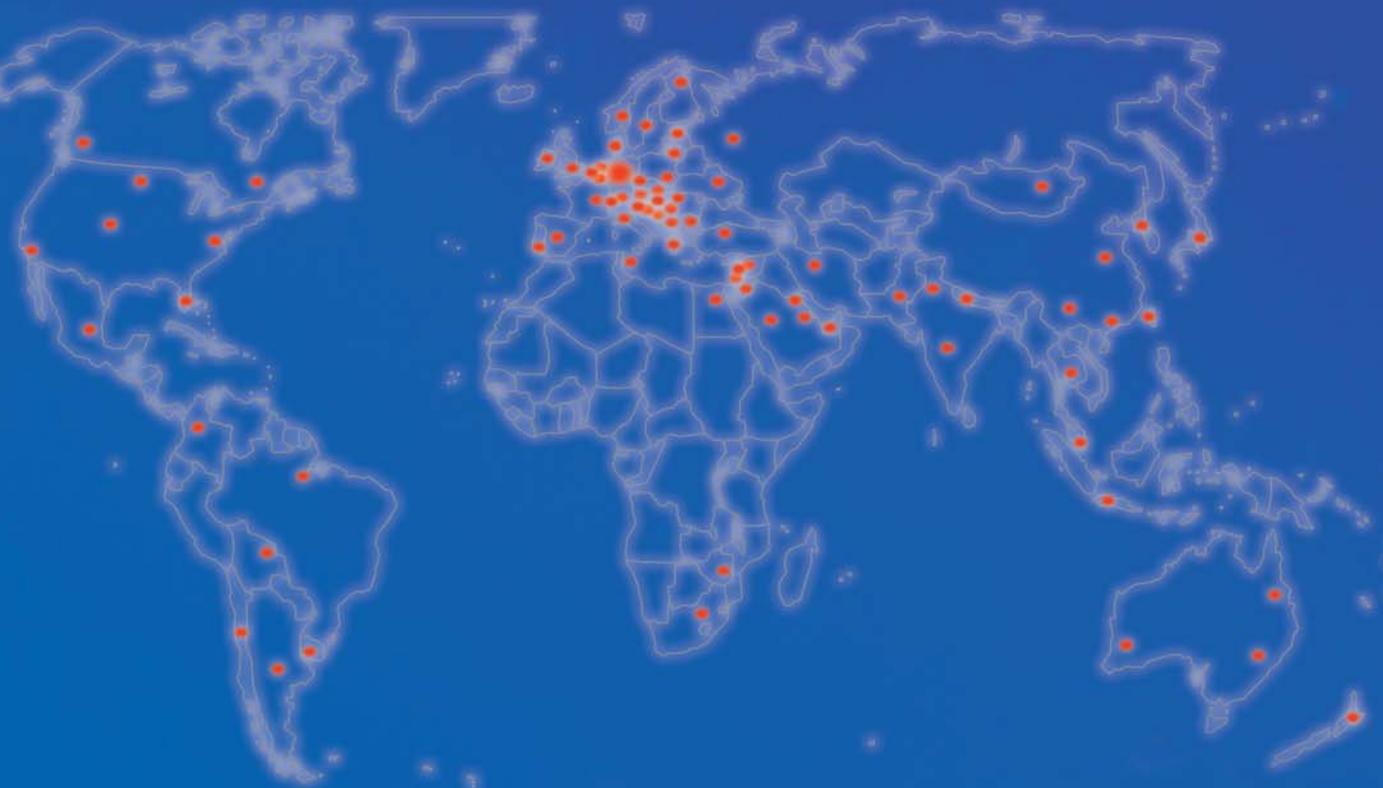




**Kolb +
Baumann**

High precision products



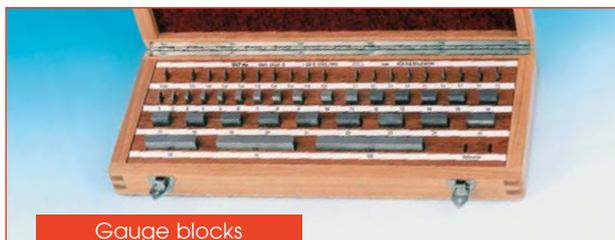
...to every place on earth

**Delivery program
& services**





Gauge blocks and Gauge block accessories



Gauge blocks

Gauge blocks up to 100 mm

German made gauge blocks out of steel, ceramic or carbide of all sizes and tolerance grades, are available as standard or special sizes, single gauge blocks or sets, standard or customer-specific composition of sets.



Gauge blocks over 100 mm

Gauge blocks between 100 mm and 1000 mm

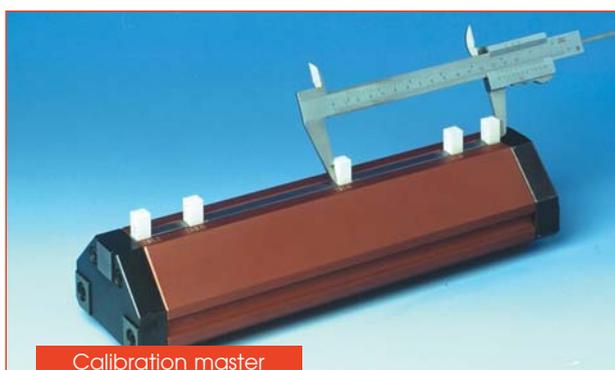
Steel gauge blocks up to 1000 mm are also of our own manufacture. We have supplies in all tolerance grades, made into sets or individual gauge blocks.



Gauge block accessories

Gauge block accessories

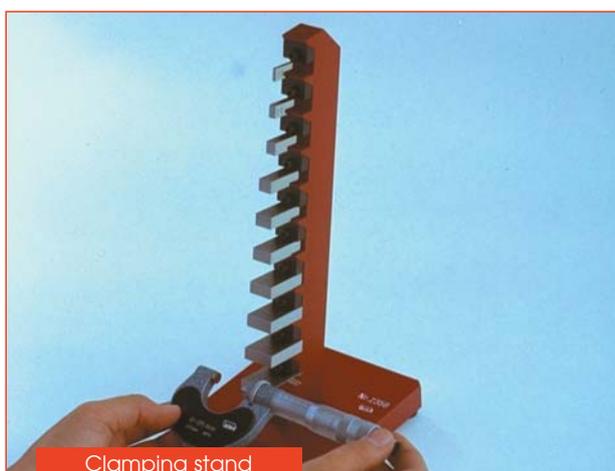
Extend the application of gauge blocks into multiple fields. Whether it is used as an internal cylindrical gauge (instead of plug gauge) as a spacing or external gauge (instead of ring gauge) or as a precision marking compass. Using these accessories will keep you flexible in your measuring work.



Calibration master

Calibration master

For the calibration of vernier calipers and marking gauges of nominal sizes up to 300, 500 or 1000 mm. The ceramic gauge blocks are highly wear resistant and make monitoring of these kind of measuring instruments easy.



Clamping stand

Checking of micrometer calipers

Clamping stand for simple and efficient handling of the gauge blocks while checking micrometer calipers. It optimizes the use during monitoring of these measuring instruments.



Ring and plug gauges

Various gauges

Ring gauges

German made ring gauges supplement our delivery program for your benefit. We also offer special sizes and tolerances.



Ring gauge

Feeler gauges

New construction form with gauge members that can be turned around for double lifespan. Go and NotGo ends in steel, carbide or ceramic depending on application and nominal size. Feeler gauges are also available for checking circumferential grooves in bores.



Feeler gauges

Limit snap gauges

Double-ended or Go and NotGo face on a single gap, in steel, carbide or with hard chromed measuring faces.



Snap gauges

Plug-, Ring- and Thread gauges

For checking the limiting sizes of male and female threads with Plug and Ring Gauges. Thread Gauges for fine threads as well as special threads or tapered threads can also be obtained from us. Plug gauges - like limit plug gauges, rings and measuring pins are available in every requested design. These gauges and measuring pins are available in steel or ceramic.



Various gauges

Spline gauges

Are supplied as Limit plug gauges or Go resp. NotGo ring gauges. Same as setting gauges, master gauges as well as spur or helical gears.



Spline gauges



Precision parts and calibration standards



Precision parts

Precision parts

Are made according to customer's drawings in KOBA's high quality and precision. Tightest tolerances on flatness and parallelism are our strength.



Step gauge KOBA-step

Step gauge KOBA-step

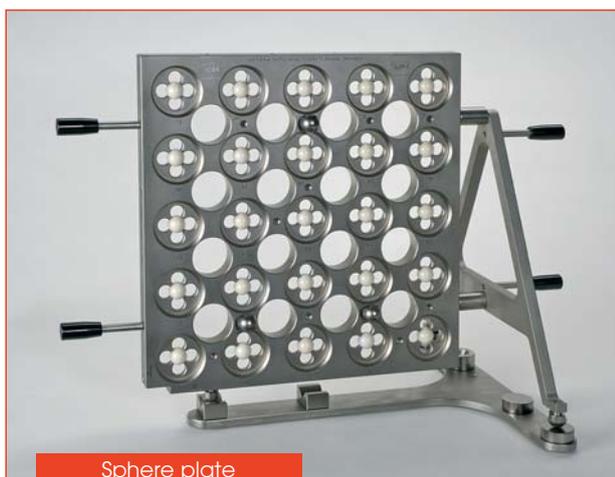
A one-dimensional test body for calibration, monitoring and traceability of coordinate measuring instruments. The test piece fulfills all demands of the ISO 10360 and VDI/VDE guideline 2617 of a calibration standard for the monitoring of CMM's. The step-gauge KOBA-step is successfully in use for years. This is the reason why this calibration standard is recommended by national and international standards for the calibration of coordinate measuring instruments. The evaluation of the calibration data can be done by using the universal GUK-S software.



KOBA-Ball bar

KOBA-Ball bar

Is a one-dimensional test body for monitoring large CMM's. The construction meets the special demands for a test piece of such a size (nominal length up to 8 m). The supporting frame is a carrying body for the real material measure. It is made of rigid CFK/GFK aluminium composite construction that absorbs vibrations. The material measure is realized by a combination of ceramic spheres with a distance rod in between. With this standard artefact we introduce a transportable and dismountable calibration master according to the special demands of large volume column and bridge-type measuring machines. A further field of applications for the ball bar are the new optic-tactile measuring systems such as laser trackers. The evaluation of the calibration data can be done by using the universal GUK-KS software.



Sphere plate

Sphere plate KOBA-check

Represents a two-dimensional material measure for the calibration monitoring and traceability of coordinate measuring machines. The test body fulfills all demands of the ISO 10360 and VDE/VDE guideline 2617 of a calibration standard for the monitoring of CMM's. Reliable statements are possible about accuracies of measurements which can be achieved for the CMM, by applying special evaluation of the measurements. Therefore the sphere plate plays a very important role for the implementation of the "virtual CMM". The evaluation of the calibration data can be done by using the universal GUK-K software.



Calibration standards and calibration service

Ball cube KOBA-Q3

Is a three-dimensional test piece for quick monitoring of coordinate measuring instruments at regular intervals. The test piece is made of high modular carbon fibre and results in a test piece insensitive to temperature and of highest stability in form and size. The test piece is characterized by specially short measuring cycles. The use of the ball cube for monitoring CMM's in production lines avoids long production downtimes. The evaluation of the calibration data can be done by using the universal GUK-Q software.



Ball cube

Optical scale KOBA-optima

The basic body of the 2700 mm long scale, which can be separated in the center for transport, consists of carbon fibre composite material (CFC). The joining faces are lapped in order to achieve best reproduction. There are six targets in the neutral fibre along the entire length and which can be viewed within a range of 130°. The scale system KOBA-optima is the first artefact for the calibration of optical CMM's and marks the starting point of a new product line. Optical coordinate measuring machines are increasingly used in the field of large measuring volumes and in the detection of free-form surfaces.



KOBA optima

Opto-tactile Calibration Standards

Calibration Standards with diffuse reflecting or highly shining measuring faces. The bases are gauge blocks or measuring spheres in carbide with scratch resistant surface that also allows tactile probing. Also available are classical test pieces like sphere plate with spheres that can be probed optically or tactile. Coordinate measuring instruments with optical or tactile measuring probes can be calibrated with a single standard.



Opto-tactile Calibration Standards

DAkS-Kalibrierung (formerly DKD)

Since 1979 Kolb & Baumann GmbH & Co. KG has been running a calibration laboratory accredited to DIN ISO/IEC 17025. From 1979 to March 2011 the calibration laboratory had been accredited by the German Calibration Service (DKD) under No. DKD-K-01301. As from 29.03.2011 the calibration laboratory will continue as a DAkS-laboratory under No. D-K-15077-01-00.



German calibration service



Kolb & Baumann Precision of the fourth generation

1941 - foundation of the company Kolb & Baumann by Mr. Adolf Kolb and his son-in-law August Baumann. With the procurement of lapping machines the hard work of manufacturing of gauge blocks gets easier. The company's own constructions are put into practice. The development of angle gauge blocks and gauge block accessories is added and the Koba-gauge block holder gets a patent.

1962 - Dipl.-Ing. Adolf Baumann, son of August Baumann, joins the company. The manufacture of precision parts to customer's drawing steadily increases in addition to the strongly expanding regular products.

1964 - the production area is enlarged by putting up a new building.

1979 - Kolb & Baumann are accredited by the Physikalisch-Technische Bundesanstalt as the 8th DKD-Calibration Laboratory in Germany. In the course of the years the accreditation has been extended for gauge blocks up to 1000 mm and supplemented by cylindrical material measures and measurement equipment.

1984 - the site Daimlerstrasse is the new home of Kolb & Baumann.

1987 - the range of products is extended. Development and manufacture of calibration standards for the coordinate metrology is added. Today Kolb & Baumann as the only world-wide manufacturer offers one, two and three-dimensional test pieces in a wide variety.

1992 - the production site in the Daimlerstrasse has an addition built on.

1998 - Dipl.-Bw. Alexander Baumann, son of Dipl.-Ing. Adolf Baumann, joins the management of the company as the fourth generation of the founding family and assures the long tradition of high-quality measurement equipments. Opto-tactile calibration standards are developed and produced in order to keep pace with the technical progress in metrology.

KOBA supplies high precision products into
70 countries around the world.





Delivery Programme & Services

KOBA-Gauge Blocks - a quality product, backed by 60 years of experience and research.

Gauge Blocks
Gauge Block Accessories
Step-gauge "KOBA-step"
Sphere Plate "KOBA-check"
Ball Bar
Ball Cube
KOBA-optima
Opto-tactile Calibration standards
Thread Gauges
Plug Gauges
Snap Gauges
Taper Gauges
Ring Gauges
Feeler Gauges

Kolb & Baumann Customer Service

The standards for quality assurance call for the quality-relevant calibration of measurement equipment. DKD-calibration for many of these measurement equipments are too cost-intensive or there is no DKD-accredited calibration procedure. This is where the KOBA-Calibration Service starts. It offers competent and traceable calibrations at moderate charges. Hence the KOBA Calibration Service KKS offers calibration services on highest level for a variety of measurement equipments.

Angle Gauge Blocks
Spline Gauges

Precision Parts

DAkks Calibration
KOBA - Calibration Service





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