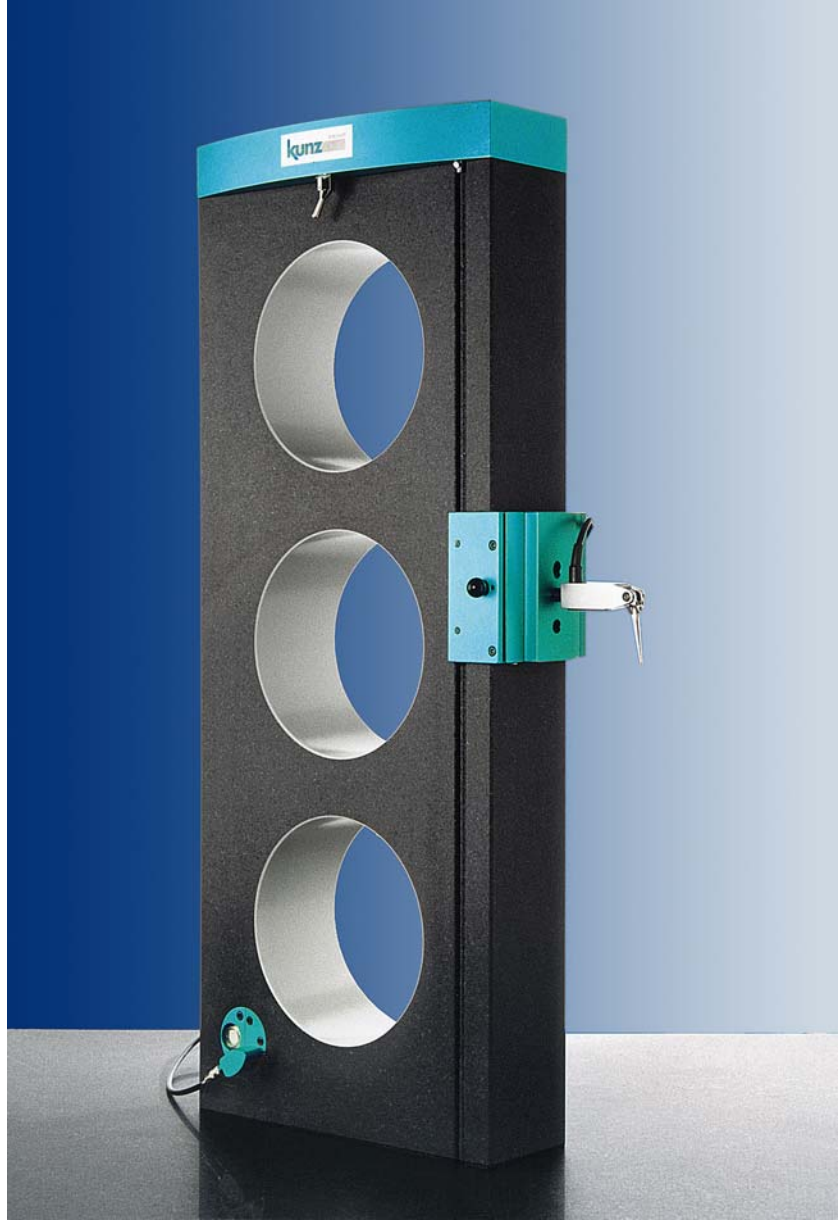


SQUARE-plus



SQUARE-plus – the new squareness measuring system for laboratory and workshop

■ **SQUARE-plus** – the new mobile squareness measuring system for manual use in laboratories and workshops. SQUARE-plus consists of a hard stone column and a vacuum-operated measuring saddle. Thanks to its high accuracy, even measurements below the micron range present no problems.



Lieferung mit
Prüfzertifikat SCS
(Swiss Calibration
Service).

■ **The basic unit** is a column of fine-grained hard stone fabricated with maximum precision. Temperature effects are minimised thanks to its symmetrical, homogeneous shape. The generously dimensioned base surface ensures highly accurate measurements.

■ **The measuring saddle:** The patented measuring saddle is held to the guideway of the column by a vacuum and is thus slightly pre-tensioned. A flow control valve modulates the pre-tension force to allow optimal adjustment of the saddle displacement. The material properties of the saddle and the guides are ideally matched, thus assuring high accuracy over

many years. A security groove in the column prevents the saddle from tilting forwards and getting damaged.

■ **Vacuum generation:** The SQUARE-plus is supplied with air from the in-house compressed-air system. The vacuum unit is integrated in the upper terminal plate. The SQUARE-tool/alignment bracket or other vacuum-operated accessories can be connected directly to the instrument.

■ **Pneumatic bearings:** The pneumatic bearings incorporated in the pedestal allow SQUARE-plus to be shifted and positioned easily and gently on the test plate.



■ **The high precision** of SQUARE-plus is ensured by the optimal guiding accuracy and rectangularity of the hard stone column as well as the high repetition accuracy of the vacuum saddle. SQUARE-plus is manufactured in air-conditioned workshops of the *Kunz precision* company and is subject to rigorous quality assurance. The scope of delivery includes a test certificate from the Swiss Calibration Service SCS.

Scope of supply

■ SQUARE-plus squareness measurement system, 3-metre air tube, operating instructions and SCS test certificate (without dial gauge).

Technical modifications reserved

SQUARE-plus advantages

- Compact, mobile and high-precision squareness measuring system.
- Simple operation.
- Basic unit of homogeneous fine-grained hard stone largely insensitive to temperature effects.
- Large basic surface on the basic unit.
- High repetition accuracy of the vacuum saddle.
- Adjustable displacement force of the saddle.
- Integrated vacuum unit.
- Gentle shifting and positioning on the test plate via air cushioned bearings.
- Vacuum-operated accessories can be connected directly to the instrument.
- Extensive system accessories.

Optional accessories

- STRAIGHT-soft measurement and evaluation software
- SQUARE-tool vacuum alignment bracket
- L-1000 air filter (for compressed air containing moisture or significant traces of oil)
- C-200 sensor mounting
- Storage box of wood

Technical data

SQUARE-plus	Type 300	Type 500	Type 700
Travel (mm)	300	500	700
Dimensions (mm)	80/200/484	80/250/634	80/250/884
Weight (kg)	17	26	37
Required supply air pressure	> 5 bar	> 5 bar	> 5 bar
Air consumption < l/min	20	20	20

Precision:

Squareness to ISO (µm/L)	1	1.2	1.5
Straightness (µm/L)	1	1.2	1.5
Lateral squareness (µm/L)	3	5	7
Repeatability, excl. sensor tolerance (µm)	0.2	0.2	0.2

L = travel; precision figures are under stable temperature conditions < 0.1°K.

Straightness and squareness figures are based on a theoretical centerline approx. 60 mm in front of the guideway surface.



■ «Measuring and calibration to the highest precision is our daily challenge. The fascination of measuring technology motivates us to meet the most demanding requirements of our customers both now and in the future.»

Ernst Kunz



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