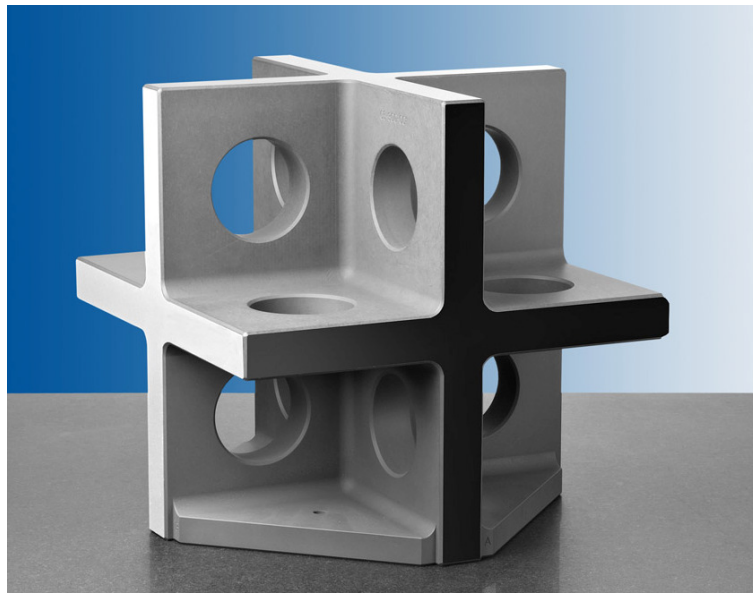


New

Precision-test-cube "SWISS-cube"

After we successfully have introduced the precision square with fixing possibility (type B5), which mainly is used for the calibration of CNC-machine tools, we can present now with the SWISS-cube a further measuring tool which enlarges the possibilities additionally.



SWISS-cube (Type C5)

Actually no big description is needed – the picture tells it all. SWISS-cube is a precision cube with one support- and five high precision measuring faces. The weight is reduced to its minimum such that for example at the calibration of swivelling axis the result will not be falsified by the weight.

Material

The test-cube is made of special aluminium free from distortion and with a deep hard coat. The advantages of this material are its homogeneous structure and its fast and equal temperature spreading. The measuring surfaces are lapped very fine and polished. The glassy surfaces have in contradiction to hard stone almost no pores – this allows measuring in the highest precision level.

Procedure

SWISS-cube is placed central on the machine table and adjusted parallel to one of the main machine axis, for example X or Y and then fixed. From now on following measurements can be carried out with high accuracy:

- straightness
- squareness
- parallelism
- 90° angle-position accuracy

Advantages

- efficient working at the assembling and calibration of machine tools
- perfect tool for the calibration of swivelling-axis; by the low weight the measuring result will not be falsified
- no risk of cracking; in contradiction to hard stone it can not break
- fixing possibility; the Swiss-cube can be fixed on the machine table
- most of the geometry measurements of a machine can be carried out in one single position
- the measuring lines are central and therefore represent a middle size work piece
- huge saving of time because no changing of position is needed
- easy handling and transportation
- fast adopting to the environment temperature



Conclusion

With the described precision-cube a big part of the geometry of 3-5 axis machine tools can be measured. For straightness measurements straight-edges in high precision are additionally available. With SWISS-cube a gap in the area of machine calibration has been filled up.

Technical data / scope of delivery

Type	C5-200	C5-250	C5-300	C5-350
Edge length (mm)	210	260	310	360
Weight approx. (kg)	8.1	14	21.5	33
Calibrated length (mm)	200	250	300	350
Precision * (μm)	0.5, 1.0, 1.5 and 2.0 (flatness and parallelism = double value)			

* The mentioned precision describes the value for straightness and squareness measured as a line in the middle of the measured plane and is defined according to ISO.

We reserve the right for technical changes.



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