## **Opto-tactile Calibration Standards**

Standards for the monitoring of optical and tactile coordinate measuring instruments ROBA



# Delivery Programme and Services:

- Gauge Blocks
- Gauge Block accessories
- Step Gauge KOBA-step
- Sphere Plate KOBA-check
- Ball Bar
- KOBA-optima
- Thread Gauges
- Cylindrical Gauges
- Feeler Gauges
- Sline Gauges
- Precision Parts
- KOBA-calibration service KKS
- DKD-laboratory for gauge blocks

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#### **Stepped standards**

Calibration standards on the basis of gauge blocks with diffuse reflecting or highly shining measuring faces. Manufactured completely in carbide thus corrosion resistant.

Customized designs are possible within wide limits.

Range of application:

Optical length- and coordinate measuring-systems, such as:

- Triangulation laser scanner
- Laser-focus-measuring systems
- Fringe projection systems



2-Stepped standard with diffuse reflecting measuring faces



#### Sphere standards

Measuring spheres with diffuse reflecting surface in various designs. Sphere in carbide with scratch resistant surface that also allows tactile probing.

Range of application:

Optical form- and coordinate measuring-systems, such as:

- Triangulation-laser scanner
- Video measuring systems
- Fringe projection systems

Sphere standard with diffuse reflecting surface

#### **3D-Calibration standards**

Test pieces according to VDI/VDE 2634 in optically-cooperative ceramic materials. These specially selected materials permit optical and tactile measurements and are therefore the direct link between the two measuring principles.

Range of application:

3D-coordinate measuring systems, such as:

- Multi-Sensor-measuring instruments
- 3D-coordinate measuring instruments with optical probing systems



Opto-tactile standards in special ceramics