

Gauge Blocks

Length Standards Brought to You by Mitutoyo

Maintenance Kit for Gauge Blocks SERIES 516

- Maintenance kit for gauge blocks includes all the necessary maintenance tools for removing burrs and contamination, and applying anti-corrosion treatment after use.



516-650E

Order No. 516-650E

Tools and accessories included:

- (1) Ceraston (**601645**)
(both sides finished by lapping)
(100×25×12 mm)
- (2) Optical flat (**158-117**)
(ø45, 12 mm thickness, Flatness 0.2 μm)
Used to check the wringing of thin gauge blocks and for the presence of burrs.
- (3) Tweezers (**600004**)
Used for handling thin gauge blocks.
- (4) Blower brush (**600005**)
Used for blowing dust from measuring surfaces.
- (5) Cleaning paper (**600006**)
(lens paper, 82×304 mm, 500 pcs)
Used for wiping off rust preventive oil and contamination. Lint free.
- (6) Artificial leather mat (B4 size) (**600007**)
Used as a gauge block mat in order to avoid scratches on the work table
- (7) Reagent bottle (**600008**)
(polyethylene container, 100 ml)
Bottle of wiping solution.
(Mitutoyo employs n-Heptane for solvent.)
- (8) Gloves (**600009**)
Used for handling large gauge blocks. Effective for the prevention of corrosion and thermal expansion.



Recommendation for Regular Calibration

Gauge blocks are often used to define a company's standard of length for manufacturing and as such must be reliable. This means that they need regular calibration to verify accuracy. (The problem of damage or corrosion should be addressed during use and blocks seriously affected must be discarded immediately.) The frequency of calibration depends on the tolerance requirements of the work, the amount of use and conditions under which the gauge blocks are used. The most economical cycle for any particular set of gauge blocks is best determined by studying the calibration history. The table below indicates timings for a typical initial calibration cycle for the various grades of block.

Application	Cycle (years)	Grade
Reference standard	1 - 2	K
Calibration	2	K or 0
Inspection	2	0 or 1
Shop floor	0.5 - 1	1 or 2

As an accredited calibration laboratory, Mitutoyo offers a traceable calibration service for customers' gauge blocks. Our regular calibration service features:

- Gauge blocks manufactured by any maker can be calibrated.
- Cleansing and removal of burrs.
- Central dimension and dimensional deviations of each block are measured.
- Calibration results are provided for immediate use and for building a calibration history of each block.