

### Typical application



### Recommendation for Regular Calibration

As is widely known, gauge blocks are end measures based on distance measurements traceable to the wavelength of the iodine stabilized He-Ne laser. Because they serve as the standard based on which measurement devices are adjusted, even the smallest of errors can be critical; nevertheless, users often neglect to periodically calibrate them because they are so rarely used. Please calibrate your gauge blocks as described in the table below (best practices may vary according to frequency of use and grade).

Application	Cycle (years)	Grade
Reference standard	1 to 2	K
Calibration	2	K or 0
Inspection	2	0 or 1
Shop floor	0.5 to 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.
- Cleaning 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. For detailed information, contact the nearest Mitutoyo sales office.

## 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

### Code 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-preventative oil and contamination. Lint free.
- (6) Artificial leather mat (B4 size, Artificial buckskin) (**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.