

1. Gage block is a high-precision measuring tool which working length is determined by the distance between two parallel measuring surfaces. It's length is the length standard of measuring instruments and is used for the adjustment and correction of measuring instruments, measuring tools and precision parts.
2. It is necessary to make the gage block and gage or workpiece be isothermal before use, so as to eliminate the measurement error caused by the expansion coefficient.
3. Measurement:

When measuring, the gage block can be used in a single block or in combination. However, in order to reduce the measurement error, it is generally not more than 4 gage blocks.

Combination of a required length:

---Multiple combinations of gage blocks can be used to make a required length. Select gage blocks according to the following requirements:

- ① Use as few gage blocks as possible to obtain the required length.
- ② Select thicker gauge block as much as possible.
- ③ Select gage blocks starting with the one that has the least significant digit required, and then work up to ones with more significant digits.

---Clean the gage block with gasoline or a suitable cleaning agent.

---Make sure there is no burr on the measuring surface. Check the burr with flat crystal in the following order:

- ① Wipe the measuring surface clean.
- ② Make the flat crystal slightly contact with the measuring surface of gage block.
- ③ Slide the flat crystal slowly on the measuring surface to display the interference fringes.

Test 1: if no interference fringes can be seen at this time, it can be considered that there is a large burr or dirt on the measuring surface.

- ④ Pressed the flat crystal lightly on the measuring surface, the interference fringes will disappear.

Test 2: if the interference fringe disappears, there is no burr.

Test 3: if there are local residual stripes, there are burrs. At this time, move the flat crystal slowly, if the interference fringes are always in the same position of the measuring surface, there is burr on the measuring surface; if the interference fringes also move together, there is burr on the flat crystal.



fig.1

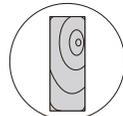


fig.2

Attention: if there is burr on measuring surface of gage block, please replace the gage block or send it to professional personnel for treatment.

---Drop a small amount of oil on the measuring surface, apply it evenly on the surface, and then wipe off the oil stains.

The oil can be lubricating oil, measuring shaft oil, Vaseline, etc.

---According to the required size, contact the two measuring surfaces, and combined into one.

