

# THE L. S. STARRETT COMPANY WEBBER GAGE DIVISION 24500 Detroit Road Westlake, Ohio 44145 Telephone (440) 835-0001 FAX (440) 892-9555

## **Gage Block Calibration Services**

Each re-calibration order is examined upon arrival at our facility, and a receiving ticket is generated. The receiving ticket lists all the relevant information about the gages and is used as an internal routing / tracking document. The gages are then cleaned and transported to our Calibration lab to be readied for measurement. A copy of the receiving ticket is forwarded to the sales / service department and they contact the customer for any other instructions or clarifications about the calibration service.

Three types of order handling can be specified with our Calibration Service:

#### 1. Calibrate and Return:

We will measure the gages, issue a calibration certificate, and return everything to the customer. The customer can then make decisions about replacing any missing or out of tolerance gages.

#### 2. Calibrate, Automatic Replacements:

We will measure the gages and issue an 'As Found' calibration certificate. Next we will replace any gages that are missing or determined out of tolerance, record the measurement data, generate an 'As Left' calibration certificate, and return everything to the customer.

### 3. Calibrate, Quote and Hold:

We will measure the gages and contact the customer with a quote for the replacement of any missing or out of tolerance gages. After the customer responds with instructions indicating which gages they want replaced, we will replace the gages, record the measurement data and generate an 'As Left' certificate of calibration. If desired at this time we can generate an 'As Found' certificate of calibration (at an extra charge).

#### Decisions on tolerance expansion for <u>used</u> gage blocks:

All of our gage block calibration certificates report the size deviation at the reference point and at four auxiliary points for each gage measured. Additionally, we report the uncertainty of measurement for each gage measured. Every calibration certificate specifies the grade of gage blocks being calibrated. Each grade of gage blocks has a tolerance range for all the sizes. A table of tolerances is provided at the end of each calibration certificate. The customer may specify how we report conformance to tolerance. We can use the gage tolerances from the table, as is done for new gages, or, we can expand the tolerance range by adding the uncertainty of measurement (both plus and minus) to the new gage tolerances.