

### Long Life Bullers Ring Gauge

For many years, throughout the worldwide ceramic industry, Bullers Rings and the Bullers Ring gauge has been used with great success. From the very earliest days, the Bullers Ring Gauge has been a precision instrument in terms of its measuring capabilities. However constant use in measuring fired Bullers Rings would cause contact point wear which required frequent calibration by the user, gauge reading corrections, and eventual return to Mantec Technical Ceramics Ltd., for re-conditioning. The inconveniences that the constant calibration and re-conditioning were causing, have been recognised and fully addressed by the company, with the introduction of the new 'Long Life' Bullers Ring Gauge.

The gauge still has the appearance so familiar to generations of ceramists and kiln personnel, but is now manufactured using up to the minute technology and wear resistant materials. The following manufacturing improvements provide an instrument which will last well into the new millenium.

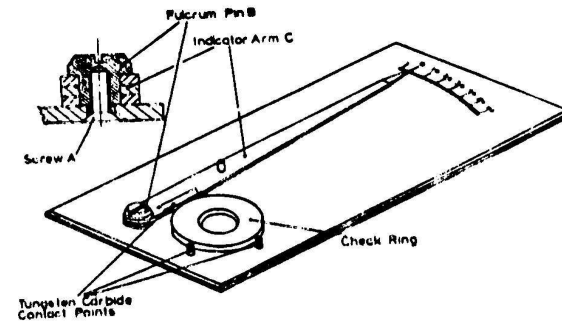
1. CNC machining now produces the brass baseplate and engraved scale, while the pointer is wire eroded from a sheet of pre-hardened material. With these two improvements, the fired ring size can be read to + or - ¼ of a division without difficulty.
2. Tungsten Carbide has been used for the ring location studs and as a contact strip on the pointer, thus reducing abrasive wear to an absolute minimum.
3. The 'Long Life' gauge is fitted with an eccentric fulcrum pin, which allows quick and simple adjustment to the pointer setting. With the aid of the calibrated '0' check ring supplied with the gauge, any slight wear or other cause of out of calibration can be rectified by the user, eliminating the need to return the gauge to Mantec Technical Ceramics Ltd.
4. Should any parts of the 'Long Life' gauge suffer damage, they can be purchased 'off the shelf' from Mantec Technical Ceramics Ltd, for easy self-fitting.

This new gauge, together with the ongoing improvements in Buller Rings, will continue to provide accurate and consistent cost effective kiln firing assessment using the unique number system that has been enjoyed by ceramic manufactures since its introduction at the turn of the century.

### Adjustment of Buller Ring Gauge

1. Loosen screw A which secures the fulcrum pin B
2. With the check ring in place turn the fulcrum pin B until the indicator arm C gives the correct reading on the scale.
3. Holding the fulcrum pin B in place with a screw driver tighten the screw A.
4. Check that the setting has been accurately maintained using the check ring. In the event that the gauge does not read correctly return to instruction 1. above.

Note : Mantec Technical Ceramics Ltd preferred sizes for check rings are No.0 and No.30.



### How to use the Bullers Ring Gauge

1. Move the indicator arm to the left of the scale
2. Place the fired ring flat on the gauge against the contact studs
3. Swing the indicator arm in so that the contact strip is firmly against the ring
4. Note the reading on the scale
5. Three readings should be taken at different positions and an average obtained
6. Kiln firings should be described in terms of ring readings.

Note:

These should not be converted to temperature using the approximate ring value/temperature chart since this chart is only true for Mantec Technical Ceramics test firing schedule.