

## **Title: Calibration of CB91Ultrasonic Calibration Block**

### **1 Scope**

Work Instruction for the visual inspection of ultrasonic calibration blocks. To be used in the absence of a manufacturers calibration instruction.

### **2 Preparation**

The calibration shall be carried out using the minimum of Category 'A' Master instruments.

Equipment required:

- 150mm vernier caliper
- 0 – 100mm micrometer (optional)

The Vernier Calliper and micrometer shall have the appropriate certificate of calibration traceable through United Kingdom Accreditation Service and shall be rechecked at intervals of no more than 1 year.

### **3 Method**

3.1 Check that the identification number is clearly visible.

3.2 Check there is no surface corrosion. However, it is not expected to have highly polished surfaces, but a clean metal surface free from contaminates and corrosion pitting. Where corrosion exists and it is not possible to remove with a **brass** wire brush, the block shall be repaired. The calibration block must be stored in a lightly oil impregnated rag to minimise surface corrosion.

3.3 Check for surface damage to the calibration blocks, paying particular attention to areas where "corner reflectors" are used to set sensitivity and where the transducer makes contact with the block. Indentations/bruises greater than 2mm in diameter shall be rejected and repaired.

3.4 Check the top 50.0mm dimension (non serial number surface) the maximum deviation shall be  $\pm 0.1\text{mm}$ .

3.5 Check the side 50.0mm dimension (serial number surface) the maximum deviation shall be  $\pm 1.0\text{mm}$ .

3.6 Check the top 91.0mm dimension, the maximum deviation shall be  $\pm 0.1\text{mm}$ .

3.7 Check the engraved stand off line is 42.0mm from the end, deviation shall be  $\pm 1.0\text{mm}$ .

3.8 Results shall be recorded on the calibration form (see Appendix A) and retained for audit purposes.

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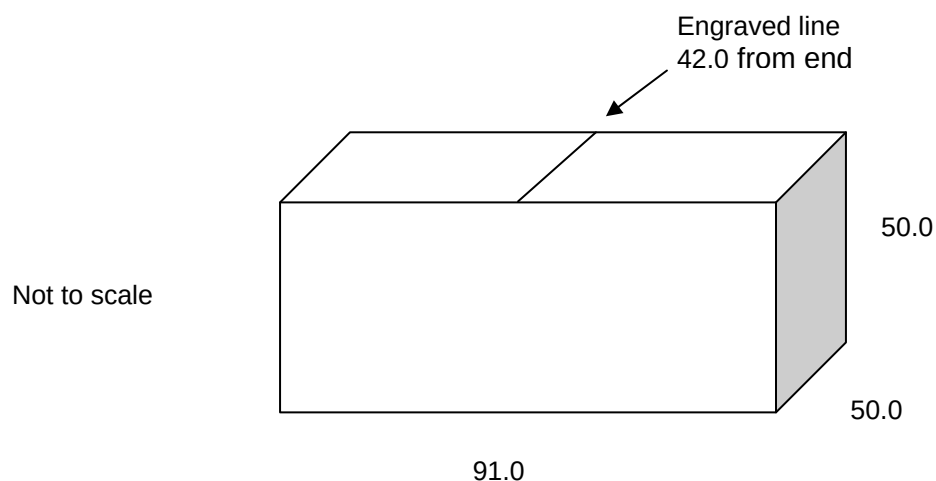


**Figure 1 showing dimensions of the CB91**

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