

## **MICROSURF Electro-Formed Surface Roughness Comparison Scales**

This Microsurf scale consists of a number of specimens of surfaces machined by a particular type of process identified on the top label, whilst the roughness values of each patch are given on the middle label in terms of the parameters Ra and Rz-DIN, together with N-classes, in both microinches and micrometers. The actual values of the patches are within the tolerances allowed by the standards BS 2634, ISO 2632 and ANSI B46.1. The parameters and procedures for measuring them are defined in BS 1134 and BS ISO 4287

Please note that the terms "CLA" and "AA" mean exactly the same thing as "Ra".

### **INSTRUCTIONS FOR USE**

1. Ensure that the workpiece you are checking is machined by the same method as this Microsurf plate.
2. With a soft cloth wipe clean both workpiece surface and Microsurf plate. Wipe them along the lay. not across the lay (of the machining marks).
3. By running your clean fingernail across the lay of the surfaces in each case, establish which 2 patches on the plate are closest in feel to the workpiece, one just rougher and the other just smoother than the workpiece. The rougher of these 2 values is then taken as the roughness value of the workpiece.
4. For some very smooth or very rough surfaces, visual comparison maybe more effective than fingernail comparison. But bear in mind that since Ra is a measure of roughness height rather than spacing, you may be misled if you pay too much attention to the spacing of peaks instead of their height, in the case of very rough turned, milled or planed surfaces.