## NATIONAL PHYSICAL LABORATORY

# **METROLOGY CENTRE**

Ref: MOY/SCMI/2B (Issue 2)

# SPECIFICATION OF ACCURACY

for

#### A COINCIDENCE OCULAR

Designed by: Optical Measuring Tools Ltd. for use on the OMT Toolmaker's Microscope.

(see MOY/SCMI/2)

LIMITING VALUE OR MAXIMUM PERMISSIBLE ERROR

#### 1. **GENERAL**

- 1.1 The ocular shall fit the instrument satisfactorily.
- 1.2 When the images are coincident they shall be placed approximately in the centre of the field of view.
- 1.3 The attachment shall be marked with an identification number and with the maker's name or trade mark.

## 2. ACCURACY

2.1 When the ocular is set to view a straightedge the two images shall be mutually parallel.

0.008 mm (0.0003 in) as measured on the micrometers of the associated Toolmaker's Microscope.

2.2 It shall be possible by employment of the ocular on the associated Toolmaker's Microscope to measure the known separation between the centres of two holes, nominally approximately 3 mm (1/8 in) in dia. with a centre separation of about 12mm (½ in) to an accuracy

 $\pm 0.005$  mm ( $\pm 0.0002$  in)

(Signed) L.w. Nichols

for Director

June 1967 MOY/SCMI/2B Issue 2