NATIONAL PHYSICAL LABORATORY

METROLOGY CENTRE

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

SPECIFICATION OF ACCURACY

for

A TABLE CENTRING AND WORK LOCATING ATTACHMENT

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**

- The vee groove of the attachment shall be a good fit in the 1.1 corresponding vee groove of the work-table as revealed by a blueing test.
- 1.2 When the attachment is assembled on the work-table it shall be free from rock.
- 1.3 The attachment shall have an identification number which shall be the same as the Toolmaker's Microscope with which it is associated.

2. **ALIGNMENTS**

2.1	The	datum	faces	shall	be:	-

	(i)	Flat	0.0025 mm (0.0001 in)
	(ii)	Mutually square	0.0025 mm per 25 mm (0.0001 in per in)
	(iii)	Square to the upper surface of the work-table	0.0025 mm per 25 mm (0.0001 in per in)
2.2	The datum face adjacent to the locating vee of the attachment shall be parallel to the axis of the vee.		0.0025 mm per 50 mm (0.0001 in per 2 in)
2.3	The g	raticule lines shall be parallel to the appropriate datum face.	0.0015 mm (0.000 06 in) over the length of the graticule lines
2.4	axis o	raticule lines shall be symmetrically disposed with respect to the f rotation of the work-table of the associated Toolmaker's scope.	0.0025 mm (0.0001 in)
		~~·r·.	·····

LIMITING VALUE OR MAXIMUM PERMISSIBLE ERROR

2.5 The distance from the appropriate datum face to the centre of the graticule lines shall be measured and quoted to the nearest

0.0025 mm (0.0001 in)

(Signed) f.w. Auhals

for Director

October 1971 MOY/SCMI/2A Issue 2

JPP/