NATIONAL PHYSICAL LABORATORY

METROLOGY CENTRE

Ref: MOY/SCMI/2C (Issue 3) **SPECIFICATION OF ACCURACY**

for

A BORE MEASURING 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**		
1.1	The clamping of the attachment to the associated Toolmaker's Microscope shall function satisfactorily.	
1.2	The focusing nut shall operate positively and smoothly.	
1.3	The reversing bias shall function satisfactorily and the operative force in both directions shall lie between	2N and 3N (¾ozf and 1¼ozf)
1.4	The attachment shall be marked with an identification number and with the maker's name or trade mark.	
2. **ACCURACY**		
2.1	It shall be possible to obtain repeat readings for both directions of bias.	0,001 mm (0.000 04 in)
2.2	It shall be possible, by employment of the Bore Measuring Attachment on the associated Toolmaker's Microscope, to measure the diameter of a known plain ring gauge nominally 12 mm (½ in) in diameter to an accuracy	±0.0025 mm (±0.0001 in)
2.3	The constant for the attachment shall be determined and marked on the stylus to the nearest	0.001 mm (0.000 05 in)

(Signed) F.W. Nichols

for Director

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