

	<u>LIMITING VALUE OR MAXIMUM PERMISSIBLE ERROR</u>
3.2 The tube shall be a good sliding fit in its bracket.	
3.3 The action of the clamp for the fine adjustment shall not appreciably alter the scale setting.	0.000 5 mm (0.000 02 in)
4. <u>MEASURING CONTACTS</u>	
4.1 All the faces of the contact tips shall be hard and well finished.	800 HV minimum
4.2 All the faces of the plane contact tips shall be lapped flat.	0.000 5 mm (0.000 02 in)
4.3 The contact plunger for the measuring head shall be straight.	0.001 mm (0.000 04 in)
4.4 It shall be possible, with the adjustments provided, to set the plane measuring faces parallel.	0.001 mm (0.000 04 in)
5. <u>WORKING FORCES</u>	
5.1 The operating force between the contacts for external measurement shall be	approx. 4 N (“ 12 ozf).
5.2 For internal measurement the operating force shall be adjustable between	Approx 2 to 5 N (“ 8 to 16 ozf).
6. <u>FEELER POINTS</u>	
6.1 The diameter of the “Best-Size” feeler points for the measurement of the effective diameter of internal screws shall be within the limits laid down by NPL.	NPL Sketch No. 672A attached
6.2 All feeler points shall be hard and well finished.	850 HV minimum
6.3 The effective diameter feeler points shall be identified with their appropriate tpi.	
7. <u>WORK-TABLES AND PLUG CRADLE</u>	
7.1 The upper surface of the work-tables shall be flat.	0.010 mm (0.000 4 in)
7.2 When the main work-table is in the centre of its travel, the twin positioning lines shall be symmetrically spaced with reference to the fixed line.	
7.3 The centre points of the plug cradle shall be hard.	700 HV minimum
8. <u>PLANE PARALLEL JAW-BLADES</u>	
8.1 The blades shall be hard and have a good lapped finish.	800 HV minimum
8.2 The working faces of the blades shall be flat.	0.000 3 mm (0.000 01 in)
8.3 The opposite working faces of each blade shall be parallel.	0.002 5 mm (0.000 1 in)

9. **GROOVED JAW-BLADES**

- 9.1 Each jaw-blade shall conform to the specification laid down by NPL. See NPL Specification of Accuracy for Built up Grooved Jaw-Blades MOY/SCMI/33.
- 9.2 A Certificate or a Test Report for this machine shall include values of E_0 for the jaw-blades supplied. These values shall be given to the nearest 0.001 mm or 0.000 05 in and shall cover every pitch for which a stylus is provided.

10. **JAW-BLADE HOLDER**

- 10.1 The jaw-blade holder shall stand on the upper surface of the work-table without any perceptible "rock".
- 10.2 The fixed slip abutment face shall be square to the backing plate. 0.025 mm (0.001 in) over the length of the abutment face.

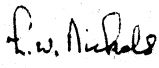
11. **POSITIONING GAUGE**

- 11.1 The gauge shall be sealed after it has been set.

12. **ACCURACY OF PERFORMANCE**

- 12.1 The performance of the instrument shall be checked by using it to measure a series of gauges of known size and inaccuracies of performance shall not exceed the following amounts: -

For External plain measurement	0.001 mm or 0.000 05 in
For Internal plain measurement	0.001 mm or 0.000 05 in
For Internal screw thread measurement	0.004 mm or 0.000 15 in

(Signed) 
for Director

