

CONTENTS

Introduction	v
Experiments	
13. To measure a plug gauge on a comparator	9
14. To measure the angle of a taper plug gauge with a sine bar	13
15. To check a form gauge by projection including the construction of the projection drawing	19
16. To measure the radius and accuracy of a plate gauge of large radius	25
17. To check a sine bar	29
18. The measurement of a spur gear to determine its base circle diameter and tooth thickness at a given pitch circle diameter	35
19. To measure the simple effective diameter of a plug screw gauge using a floating micrometer measuring machine	40
20. To measure the pitch error of a screw gauge (Plug or ring)	44
21. To measure the form and angle of a plug screw gauge by optical methods	51
22. To measure the form and angle of a plug screw gauge using a floating micrometer measuring machine	56
23. To measure the major , minor and effective diameters of a ring screw gauge optically by means of a cast	58
24. To take a cast of a small ring screw gauge or similar shape	62
Appendix	65
Bibliography	71