5ME4-23: PRODUCTION ENGINEERING LAB.

1 Study of various measuring tools like dial gauge, micrometer, vernier caliper and telescopic gauges. - https://youtu.be/F2boLvmtKBE

2 Measurement of angle and width of a V-groove by using bevel protector.. - https://youtu.be/UE9e7r1T9AA

3 (a) To measure a gap by using slip gauges- https://youtu.be/Qx6EIxT0lLg

(b) To compare & access the method of small-bore measurement with the aid of spheres. - https://youtu.be/UE9e7r1T9AA

4 Measurement of angle by using sine bar. - https://youtu.be/R_UDBhVPskw

5 (a) Measurement of gear tooth thickness by using gear tooth vernier caliper.- https://youtu.be/eaoP1fdUVyY

(b) To check accuracy of gear profile with the help of profile projector.- https://youtu.be/hgyDvICQLE0

6 To determine the effective diameter of external thread by using three- wire method. - https://youtu.be/QGBRwXwxnuU

7 To measure flatness and surface defects in the given test piece with the help of monochromatic check light and optical flat. - https://youtu.be/ZJLTVuo9FJo

8 To check the accuracy of a ground, machined and lapped surface –

(a) Flat surface- https://youtu.be/lIOr-aZ_ZHk

(b) Cylindrical surface. - https://youtu.be/lIOr-aZ_ZHk

9 Find out Chip reduction co-efficient (reciprocal of chip thickness ratio) during single point turning. - https://youtu.be/dVGrNfZBsf0

10 Forces measurements during orthogonal turning. - https://youtu.be/r7tvsqUIf2U

11 Torque and Thrust measurement during drilling. - https://youtu.be/eBOtXD_UQSo

12 Forces measurement during plain milling operation. - https://youtu.be/2jc3HkrHh9s

13 Measurement of Chip tool Interface temperature during turning using thermocouple technique- https://youtu.be/zHNGWdNaQyQ