Buzzhive
The basics of basics

EXPERIMENT : 2

* **Aim** → To find the diameter of a wire using a micrometer screw gauge.

* **Apparatus required** → Screw gauge, a wire

* **Theory** → * Least count of screw gauge : 0.01 mm
  * Measured value : Main scale reading + (Circular scale reading x Least count)
  * Error = 100 - 70 = 30

S.N.	M.S.R (mm) x	C.S.R y	C.S.R + error	D = x + y (L.C) (mm)	Mean (d)
1.	0.0	26	56	0.56	
2.	0.0	24	54	0.54	= 2.73 / 5
3.	0.0	25	55	0.55	
4.	0.0	24	54	0.54	= 0.54 mm
5.	0.0	24	54	0.54	

Result: Thickness of wooden scale by using screw gauge is 0.54 mm.

Teacher's Signature .....

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Precautions :

* Do not overtight the screw. Use only the ratchet arrangement to move the screw.
* Apply zero correction.
* At each point measure the diameter of the wire in two perpendicular directions.
* There should be no kinks in the wire.
* Avoid the backlash error by moving the screw only in one direction.

Teacher's Signature