

Title: Calibration Of Magnetic Strength & Polarity Meter Co/Man/130

Scope

Work Instruction for the internal calibration of magnetic strength and polarity meter. To be used in the absence of a manufacturers calibration instruction.

Preparation

Calibration must be carried out using Category A Master instruments as required.

Equipment required;-

1. A.W.S. permanent magnet
2. A.W.S. electro-magnet
3. Gauss meter
4. 20mm thick Perspex sheet
5. 150mm wooden block

Method

1. All calibration results must be entered on the result sheets (See Appendices A and B).
 2. Note the lab temperature and R.H. and enter on the result sheets.
 3. Place the meter on the Perspex sheet and carry out the tests 1 – 6 as appropriate.
 4. Read the actual gauss at 150mm above the electro-magnet using item 3.
 5. Complete the results sheet header and enter pass or fail.
- Calibration result sheets must be retained for audit purposes

References

- Appendix A Calibration result sheet
Appendix B Calibration result sheet

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Appendix A

Calibration Results for Magnetic Strength & Polarity Meter

Model: _____ Serial No: _____

Manufacturer: _____

Date: _____ Result: _____

Lab Temp/RH: _____ Operator: _____

Use: _____ Certificate No: _____

Accuracies quoted are from the manufacturer's specifications or relevant British Standard

Polarity check

Test 1 Is 'P' shown when the meter is placed 20mm above the permanent magnet?
 Pass/Fail

Test 2 Is 'E' shown when the meter is placed 20mm above the electro-magnet?
 Pass/Fail

Standard Strength Indicator (Hammered Gold)

Test No.	Colour Band Division	True Reading (Gauss)	Allowed Limits (Gauss)	Actual Reading (Gauss)	Result
3	Yellow / Green	40	38 to 42		Pass / Fail
4	Red / Yellow	34	32.3 to 35.7		Pass / Fail

Extra Strength Indicator (Hammered Green)

Test No.	Colour Band Division	True Reading (Gauss)	Allowed Limits (Gauss)	Actual Reading (Gauss)	Result
5	Yellow / Green	75	71.25 to 78.75		Pass / Fail
6	Red / Yellow	67	63.65 to 70.35		Pass / Fail