REASON FOR UPDATE: Change of temperature source equipment

ASSOCIATED DOCUMENTS: F193

1. PURPOSE

1.1 To provide a procedure for the Thermocouple /or RTD to computer process.

2. SCOPE

2.1 This document applies to all those involved with the calibration of a Thermocouple or RTD temperature probe that is wired into a computer input via an amplifier or digital display.

3. RESPONSIBILITY

3.1 The Product Testing Team Leader is responsible for updating and communicating the details within this procedure.

4. PROCEDURE

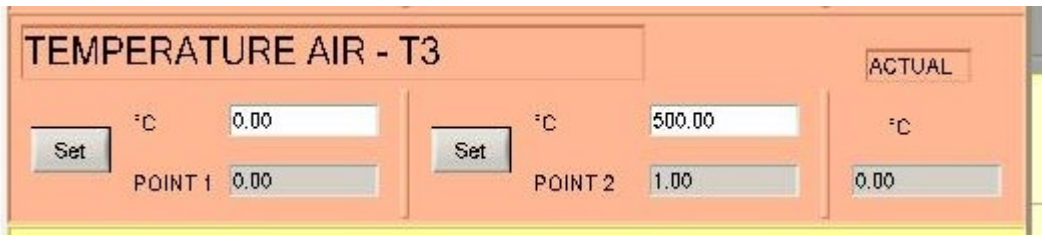
A. Transfer Standard: Master temperature calibrator:- 06001205

B. Display Accuracy: The reading is accurate to 1.0°C for each recorded value.

C. Computer Accuracy: The reading is accurate to 1.0°C for each recorded value.

D. **Temperature Calibration Process:**

1. Make sure the computer program is in calibration mode.
2. Make sure there is no damage etc to any part of the system.
3. Using a suitable cold temperature source, insert the temperature probe and the thermometer.
4. Allow the readings to stabilise until 10 seconds have elapsed with no change (to the nearest tenth) (V1 Below).
5. Record the thermometer value on the form.
6. Record the actual temperature reading on the screen on the form (V1 Below).
7. Input the actual temperature from the thermometer in to the correct box on the screen (V2 Below).
8. Press the Set button to capture the current voltage value (V3 Below).
9. Record the actual temperature reading on the screen on the form (V1 Below).
10. If there is a digital display reading then record on the form



11. Using a suitable high temperature source, insert the temperature probe and the thermometer.

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12. Allow the readings to stabilise until 10 seconds have elapsed with no change (to the nearest tenth) (V1 Above).

13. Record the thermometer value on the form.

14. Record the actual temperature reading on the screen on the form (V1 Above).

15. Input the actual temperature from the thermometer in to the correct box on the screen (V4 Above).

16. Press the Set button to capture the current voltage value (V5 Above).

17. Record the actual temperature reading on the screen on the form (V1 Above).

18. If there is a digital display reading then record on the form.

19. If either actual value is incorrect by more than 1°C at stage 9) or 16) then redo the above until in range values are obtained.

20. Document these items on calibration sheet number F193
    - **i.** Test rig
    - **ii.** Thermocouple number TTxxxxx
    - **iii.** Display / Amplifier number
    - **iv.** Computer Input number
    - **v.** Thermometer number / cal date
    - **vi.** Above values
    - **vii.** Calibration Interval
    - **viii.** Next calibration due
    - **ix.** Accept / Reject decision box
    - **x.** Employee's name and signature

21. Check the current thermocouple number is clear (Same number on display / amplifier)

22. Place a new calibration sticker on the display / amplifier and thermocouple.

23. If there is a digital display add an offset label to the display if required.

24. Update the calibration record and store the written calibration sheet.

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