

Title: Calibration of Electrode Drying Oven

1 Scope

Work Instruction for the calibration of Electrode Drying Ovens. To be used in the absence of a manufacturers calibration instruction.

2 Preparation

Calibration shall be carried out using Category 'A' master instruments as required.

Equipment required:

- Digital Thermometer (able to measure temperatures in excess of 400 degrees Celsius)

3 Method

3.1 Equipment Condition Checks

3.1.1 Check that the oven identification number is clearly visible and that the electrical safety tag is in date.

3.1.2 Check the oven for visible signs of damage, that the controls operate correctly and that the temperature graduations are clearly visible.

3.2 Calibration of temperature adjustable electrode ovens

3.2.1 Connect the oven to an appropriate power source and set the temperature control to maximum temperature.

3.2.2 Allow the temperature of the oven to stabilise and record the temperature using a master digital thermometer.

3.2.3 Compliant temperature readings shall be between -10% and +20% of the preset maximum value. Electrode ovens that do not achieve this are to be removed from operation.

3.2.4 Results shall be recorded on the calibration form (see Appendix A) and retained for audit purposes.

3.3 Calibration of electrode quivers

3.3.1 Connect the electrode quiver to an appropriate power source and allow to heat up to their maximum deliverable temperature, which shall be after approximately 15 minutes.

3.3.2 The temperature shall be measured using a master digital thermometer. The minimum acceptable temperature for electrode quivers is 250°C.

3.3.3 Electrode quivers that do not achieve this are to be removed from operation.

3.3.4 Results shall be recorded on the calibration form (see Appendix A) and retained for audit purposes.

4 References

Appendix A. Electrode Drying Oven Calibration Result Sheet.

Title: Calibration of Electrode Drying Oven

Appendix A. Electrode Drying Oven Calibration Result Sheet

Oven Number:		Date last checked:		Frequency:	
Master Equipment Used:					
Digital Thermometer					

Visual Checks (Identify Pass or Fail as appropriate)			Comments
Check ID number is clearly visible	Pass	Fail	
Check that the electrical safety tag is in date	Pass	Fail	
Check for visible signs of damage	Pass	Fail	
Check that the controls operate correctly	Pass	Fail	
Check that the temperature graduations are clearly visible	Pass	Fail	

Temperature Checks (Identify Pass or Fail as appropriate)			Readings / Comments			
Check that the required temperature is achieved	Pass	Fail	Temp Setting	Achieved Temp	Req'd Min	Req'd Max
			Max		-10%	+20%

Examined by:	Signed:	Date:
--------------	---------	-------

NOTE Failed equipment is to be labelled 'Do Not Use' and quarantined until rectified or scrapped.