



Class I

VARIABLE TEMPERATURE HOT AIR GUN VALIDATION

ELE-3COP-711

Code of Practice - TE Connectivity's Hot Air Gun

ELECTRONIC APPROVAL, NO SIGNATURES WILL APPEAR.

IF PRINTED THIS DOCUMENT BECOMES UNCONTROLLED

Before starting work please read this document carefully and note the guidance given.



1. PURPOSE AND SCOPE

This COP describes the procedure to be used when carrying out the validation and maintenance of a hot air gun. The instructions in this document take preference over IPC/WHMA requirements, as do the drawing and any customer documentation.

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2. PERFORMANCE OBJECTIVE

This code of practice is produced to support operators already trained in the installation of heat shrinkable and harnessing products. It identifies the procedure to be used when carrying out the validation and maintenance of a hot air gun.

3. MATERIALS AND EQUIPMENT

Hot air gun to be validated

PR-25 reflector

Clock timer or Stopwatch

Retort stand and clamp

Calibrated thermocouple (See note)

Calibrated electronic thermometer (See note)

Note

Items shown in this COP are:

Handheld digital thermometer (example RS 206-3738)

General purpose temperature probe (example RS 343-145)

4. HEALTH AND SAFETY

Adhere to local Codes and Regulations relating to Safe Working practices. For the UK, adhere to requirements of the Health and Safety at Work Act 1974 and subsequent amendments.

Always wear heat resistant safety gloves when handling hot objects.

Always ensure all equipment is calibrated before use.

5. PROCEDURE

Position the end of the thermocouple in the middle of the PR-25 reflector (see Figures 1 & 2).



Figure 1 Hot air gun validation test setup

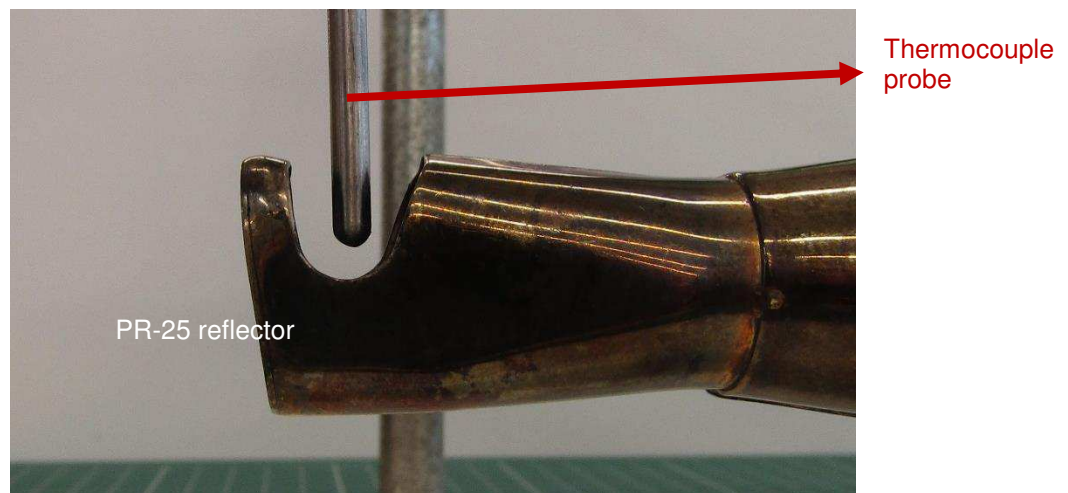


Figure 2 Thermocouple positioning in relation to PR-25 reflector

Ensure any vent mesh on the hot air gun is clear and unobstructed.

Switch on hot air gun with vent open and setting number 0 selected.

Allow **two minutes** for the temperature to stabilise.

Record the reading on the electronic thermometer display.

Repeat above steps with hot air gun setting numbers 1 to 9.

This method may also be used to set specific temperatures required in other procedures.

6. INSPECTION REQUIREMENTS

Ensure all equipment is current and calibrated.

It is recommended that hot air gun settings are checked for calibration on a regular basis (e.g. Daily / Weekly / Monthly depending on usage).

Record all values against each hot air gun for each dial setting number as shown in Table 1, with a tolerance of $\pm 30^{\circ}\text{C}$.

Table 1 Dial setting temperatures ($^{\circ}\text{C}$)

Dial Setting No.	Temperature ($^{\circ}\text{C}$)
0	37
1	72
2	112
3	155
4	190
5	257
6	313
7	396
8	492
9	570

7. REVISION HISTORY

Table 2 Revision history

Author	Approved	Date	Rev	Comments
J. Cronin	K. Wallington	04APR2006	2	CR06-DM-071
P. Newman	N. Dorricott	23DEC2008	3	CR09-DM-018
P. Newman	N. Dorricott	07JUN2011	4	Visual Identity
P. Vu	H. Smith	10MAY2018	5	Removed AD1999 reflector validation method. New standardised validation procedure and adjusted temperature values for dial settings in Table 1. RTS-1380388.

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