

Certificate of No-Calibration Required

Metcal Soldering/De-soldering Systems powered by Metcal Smartheat®, DO NOT require system calibration for temperature.

A Metcal Soldering System is comprised of a power supply with handle/cord assembly and a tip cartridge.

Each cartridge is equipped with a self-regulating heater, which senses its own temperature and tightly maintains its pre-set idle temperature for the life of the cartridge. The heater temperature is set by the atomic structure of the heater material. It cannot be adjusted, and does not require any adjustment.

The power supply with handle/cord assembly does not contain the heater or any tip temperature sensors, but simply provides the current to the heater. Any expected variability or drift in the power supply over its life does not adversely affect its ability to maintain the necessary current to the heater. There are no adjustments to be made.

The term calibration implies that because of inherent shift over time in a system, periodic adjustment must be made to maintain performance. Calibration schedules are normally based on anticipating when an out of tolerance condition will occur and calibrating or adjusting prior to this event. The concept is illustrated in Figures 1 and 2. Metcal's calibration schedule is, in effect, longer than the useful life of the system. There is nothing to adjust, so the system cannot be changed from its initial state. Therefore, NO CALIBRATION is required. Metcal tip cartridges control temperature inherently by the physical properties of their materials.

Those companies or individuals requiring periodic verification of system performance may do so in the following ways:

- By measuring the performance of the soldering system in 'time required in soldering a defined number of loads'. OR
- By measuring tip idle temperature as it equates to this performance. OR
- By observing start up power and idle power through the use of a Metcal Net Power Meter.

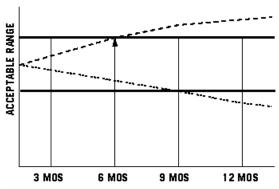
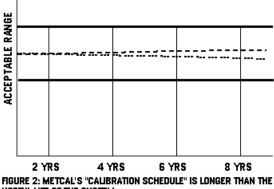


FIGURE 1: CALIBRATION SCHEDULE OF A CONVENTIONAL IRON Malik Smith (Quality Assurance Manager)



USEFUL LIFE OF THE SYSTEM

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