

## Final Test Procedure of Cast Heaters

### 1. Dimensional

1.1 Attribute sample shall be checked for critical features against specifications and drawings.

1.2 100% Visual check for general standards of workmanship is to be conducted during electrical testing.

### 2. Electrical

The electrical tests shall be carried out on 100% of the elements

2.1 Resistance check. The cold resistance shall be measured across the element terminations. Resistance shall be nominal (refer to drawings) +10% / -15% of required values.

2.2 Insulation Resistance Check. The insulation resistance shall be measured between any element terminal and the element sheath / cast body using a 500V Megger meter. IR shall be greater than 50 Meg Ohms at point of packaging / shipping.

2.3 Flash Withstand Test. The appropriate test voltage specified shall be applied between any terminal or cable and the element sheath / cast body for 10 seconds unless a specific test voltage is identified on the drawing or the job sheet. No breakdown shall occur with a 5mA trip setting.

ALL REJECTED ITEMS SHALL BE IDENTIFIED AND RETURNED TO PRODUCTION FOR REPAIR OR REPLACEMENT.

### 3. Calibration of Test Equipment

All test equipment shall carry a current calibration certificate conforming to the requirements of BSEN ISO9001-2008. All electrical test equipment is traceable to accurate records.

### 4. Certificate of Conformity / Declaration of Conformity

A Certificate of Conformity shall be completed and issued for each batch of product tested if required. The verifying inspector or Quality Manager will sign this, and a copy of the Certificate / Declaration of Conformity shall accompany the goods when despatched. A duplicate copy is retained at our works.