

AEROSPACE MATERIAL SPECIFICATION

(R)

PYROMETRY

1. SCOPE:

- 1.1 This specification covers pyrometric requirements for thermal processing equipment used for heat treatment. It covers temperature sensors, instrumentation, thermal processing equipment, system accuracy tests, and temperature uniformity surveys. These are necessary to ensure that parts or raw materials are heat treated in accordance with the applicable specification(s).
- 1.2 This specification is not applicable to heating, or to intermediate thermal processing unless specifically referenced by a material or process specification.
- 1.3 This specification applies to laboratory furnaces to the extent specified in 3.6.

2. APPLICABLE DOCUMENTS:

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been canceled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 ASTM Publications:

Available from ASTM, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 or www.astm.org.

ASTM E 207	Thermal EMF Test of Single Thermoelement Materials by Comparison with a Reference Thermoelement of Similar EMF-Temperature Properties
ASTM E 220	Calibration of Thermocouples by Comparison Techniques
ASTM E 230	Standard Specification and Temperature-Electromotive Force (EF) Tables for Standardized Thermocouples
ASTM E 608	Mineral-Insulated, Metal-Sheathed Base Metal Thermocouples
ASTM E 1129	Standard Specification for Thermocouple Connectors
ASTM MNL 7	Presentation of Data and Control Chart Analysis
ASTM MNL 12	Use of Thermocouples in Temperature Measurement

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