



# Quality Requirements Applicable Heat Treat Processors

## 1.0 SUBJECT / PURPOSE

**Introduction:** This document details and establishes the quality system requirements for processors providing Heat Treat services to United Performance Metals (UPM). This document will be applicable when referenced in the UPM procurement document or by other written and documented means. Processors shall meet all requirements stipulated via the UPM Purchase Order.

The responsibility of the supplier meeting all requirements of the UPM Purchase Order is a requirement regardless of if UPM has approved the supplier's system, procedures, work instructions, or have conducted inspection of material/products at the supplier's facilities.

This specification has been established to provide a means for implementation of and adherence to UPM's requirements for processing product/ material via Heat Treating methods.

Should there be a conflict in the quality system requirements of UPM, the order of precedence shall be:

- 1) Procurement Document or Contractual agreement (excluding this document).
- 2) Applicable drawing(s).
- 3) Specification referenced on the applicable blueprint or drawing.
- 4) This specification document.
- 5) Any or all specifications that may be referenced in this document.

Note: If there are any conflicting or questionable requirements in the purchase order or procurement document, UPM purchasing, or quality department shall be consulted for clarification before the work is started.

This specification is in addition to and in no way limiting, superseding, or abrogating any contractual obligation as required by the applicable procurement document.

When a supplier accepts a contract stipulating that this document applies, this shall mean that the supplier has accepted this document's contents and requirements. Any deviations in the application of the specified requirements shall be the subject of a joint agreement by UPM and the supplier.

## 2.0 REFERENCED DOCUMENTS

AS6279 - Standard Practice for Production, Distribution, and Procurement of Metal Stock

GE SPEC-35 - CERTIFIED MATERIALS TEST LABORATORIES (CMTL): METALLIC MATERIALS

PW F17 Appendix 56 - Supplier Controls for Product and Product-Related Material



**3.0 PROCESSING REQUIRMENTS**

4.1 General

This document outlines and details the quality requirements to be complied with by the processor to assure the quality of products delivered to UPM.

The document currently only applies to End Users GE and Pratt Whitney.

4.2 Heat Treating

Heat-treatment processes shall be in accordance with the applicable final AMS material specification.

For Aerospace end users (defined on the purchase order), NADCAP approved processing is required.

4.3 Test Samples

Test samples shall be cut from the material processed; the sample size shall be 8 inch by 6 inch. If the material size does not allow for the prescribed sample size, notify UPM quality for clarification.

UPM will negotiate with the processor on testing responsibilities. If the processor user a sub tier laboratory all flow downs from the UPM purchase order and this specification are applicable to the sub tier.

If the processors accomplish testing, they shall be approved to the following based on end user listed on the purchase order:

- a) All end user – NADCAP approved lab
- b) GE End Use – S400 approved lab
- c) Pratt Whitney End Use – Must be on Appendix 56

All acceptance tests of the applicable material specification shall be performed in the final heat-treat condition, except that the following are not required to be retested: composition, macrostructure and ultrasonic inspection.

**4.0 QUALITY & SHIPMENT REQUIREMENTS**

4.1 Inspection, Test & Process Records

The processor shall maintain records of inspection, test & process data shall be available for purchaser's review for a minimum of 5 years from date of shipment.

4.2 Certification

A report shall document the processes performed and test results and shall certify compliance with the different AMS material specification.

The certificate of conformance shall list compliance to the specifications used to for heat treating and any customer specification listed with in this specification or on the purchase order.