

PROCUREMENT QUALITY REQUIREMENTS

LAMSCO WEST, INC.

SCOPE

This document establishes requirements for supplier's quality control systems. These requirements are in addition to those set forth in specific P.O.s or any other contractual documents.

QUALITY SYSTEM REQUIREMENTS

The supplier shall implement an inspection system which conforms, as a minimum, to the requirements of MIL-I-45208, MIL-Q-9858, ISO9001, D6-82479, or AS9100 and to the extent further imposed by the provisions of applicable drawings, specifications and Purchase Orders.

QUALITY AUDITS

The supplier's Quality System may be subject to initial and/or periodic audits, at a frequency determined by Lamsco West or its customers, to determine compliance to these or any other contractually imposed requirement.

RIGHT OF ACCESS

Lamsco West, its customers and applicable regulatory authorities shall be granted access to applicable areas of all facilities, at any level of the supply chain, involved in a specific Purchase Order (P.O.) and all applicable records pertaining to that order.

FLOWDOWN

The supplier shall flow down all applicable quality requirements to any subcontractors (throughout the supply chain) used in the performance of any contract received from Lamsco West. This includes key characteristic(s) where required.

SUPPLIER RESPONSIBILITY

The supplier shall maintain a system for the control of quality that complies with the standards as listed above. This system shall be subject to Lamsco West approval and shall include, but not be limited to, the following:

- The Quality Manager at Lamsco West shall be notified, in writing, when any changes are made to the quality system that may affect product conformance. Notification shall also be sent when changes occur to product, processes, suppliers and/or manufacturing facility location. And when required, the supplier will obtain Lamsco West approval prior to submitting product after these changes.
- The quality system shall assure that all services and product offered for acceptance has been subject to all examinations and tests required proving conformance to contract or P.O. requirements.

DOCUMENTATION

RECORDS of manufacturing planning, certifications and test reports required to assure product conformity to contractual and technical requirements of the P.O. shall be retained for a minimum of ten (10) years unless stated otherwise on the P.O.

Unless otherwise specified on the P.O., the supplier's quality system shall provide for procedures which will assure that the latest applicable drawing, specification and instructions required by contract or PO, as well as authorized changes thereto, are used for fabrication, inspection and testing.

Copies of drawings, specifications and/or procedures supplied by Lamsco West shall not be reproduced except for internal use. Such proprietary items shall be controlled to preclude their use for other than contract work with Lamsco West.

CORRECTIVE ACTION

Requests for Corrective Action shall be answered and returned by the due date given on the Corrective Action Request (CAR). The supplier is responsible for determining and implementing corrective action and for performing follow-up actions to verify the effectiveness of corrective action.

MEASURING AND TEST EQUIPMENT

The supplier shall provide and maintain sufficient gauges and other measuring and test devices that are accurate enough to assure product conformance. The devices shall be calibrated at established intervals against certified standards, which have known valid relationships to national standards. Calibration of inspection equipment shall be in accordance with ANSI (NCSL) Z540-1, ISO10012, or other ISO/industry recognized calibration system standards.

LAMSCO WEST SUPPLIED MATERIAL

When Lamsco West furnishes material, the supplier's procedures shall include, as a minimum,

- Examination upon receipt to detect damage in transit,
- Periodic inspection and precautions to assure adequate conditions and to guard against damage from handling and deterioration during storage,
- Functional testing, either prior to or after processing, or both, as required by contract or specification to determine satisfactory operation.
- Identification and protection from improper use or disposition.
- Verification of quality.
- Notification/Reporting of any discrepancies/concerns to the Lamsco West Quality department.

RECEIVING INSPECTION

Unless otherwise stated within the P.O., purchased material, product and processes will be subject to inspection at Lamsco West, as necessary to assure conformance to contract or P.O. requirements. Initial acceptance of the order at Lamsco West does not relieve the supplier of any responsibility to produce acceptable product for which they are contracted.

NON-CONFORMING MATERIAL

The supplier shall establish and maintain an effective and positive system for controlling non-conforming material, product and processes, including procedures for the identification, segregation, presentation and disposition of reworked product. All non-conforming product shall be positively identified to prevent use, shipment and intermingling with conforming product. Nonconforming product shall not be submitted without prior notification and authorization from Lamsco West. Nonconforming product submitted without prior authorization may be returned to the supplier.

Should it be determined that nonconforming product has been submitted to Lamsco, the supplier shall notify Lamsco's Quality Management in writing within 2 working days following the determination of the escape. Notification shall include the extent of the escape and its potential impact on any addition product supplied.

CERTIFICATION

Each shipment of material, product and/or processed parts shall be accompanied by a legible and reproducible copy of a Certificate of Conformance with the signature of an authorized company representative stating that the material, process or product being shipped meets the requirements of applicable drawings or specifications cited in the P.O. The supplier shall include the date of manufacture and the Lamsco West PO number on the C of C with a statement of conformity of the product shipped. Evidence / records substantiating the C of C must be on file and available upon request.

CHEMICAL AND/OR PHYSICAL TEST REPORTS

When required, legible and reproducible copies of all chemical and / or physical test reports, identifiable with the furnished materials, must accompany each shipment. These reports must contain the signature and title of the authorized representative of the agency performing the test. The reports shall be identified with the specification number, revision and lot identification (heat, run, batch, and/or cure lot number as applicable to the product). Chemical and Physical test reports shall include the actual numerical values for each property testing in accordance with the applicable specification. When more than one specimen is required, a test result of each is required on the report.

PROCUREMENT QUALITY REQUIREMENTS

LAMSCO WEST, INC.

PROCESS CERTIFICATION REQUIREMENTS

A legible and reproducible copy of special process certifications (i.e. testing, heat treating, nondestructive testing, chemical conversion coating, etc.) shall accompany each shipment of material or parts for which such processing has been accomplished. Special processes shall be performed by customer (process specification owner) approved sources. Certifications are to include all specifications listed in the order of sequence and date performed.

When a supplier wishes to subcontract all or part of the work contracted with Lamsco West, the use of Lamsco West approved processors is required. These may be verified by calling the Lamsco West Quality Department at 661-295-8620. Unless otherwise stated in the P.O. or Outside Processing Work Order, the supplier may use special processors approved per Boeing's D1-4426 listing which can be found on the internet at <http://www.boeing.com/companyoffices/doingbiz/d14426/>.

DOMESTIC MATERIALS

Specialty metals, such as Titanium and Stainless Steel, must be of a domestic origin as defined by DFARS Clause 252.225-7014, Preference for Domestic Specialty Metals.

AGE SENSITIVE MATERIALS

The supplier shall identify all materials that are age controlled or life limited with the date of manufacture and the date at which the useful life is expended (shelf life or cycle life). A signed statement regarding the commodity on company letterhead stating the shelf life conditions of the particular product is acceptable. When environment is a factor in determining useful life, the identification shall include the storage conditions required to achieve the stated life. Unless otherwise stated in the body of the P.O., product supplied to Lamsco West shall have a minimum of 70% of its life expectancy remaining at time of delivery

PACKAGING

Unless otherwise specified by the P.O., the supplier is responsible for assuring that all items are delivered without damage or deterioration. Packaging and verification of the packaging will cover the prevention, detection and removal of foreign objects. Unit and intermediate packaging shall be employed as necessary to prevent damage or deterioration.

ADDITIONAL REQUIREMENTS BY COMMODITY

(Unless otherwise stated within the P.O.)

RAW MATERIALS – (METALLIC) SHEETS

Material shall be free from surface defects and flat per specification.

Original Mill certifications with actual chemical and physical values are required.

Material must be identified with an identifier (heat, lot, run or batch number), temper, thickness, alloy and specification. The preferable means is via stenciling. Tags or labels may also be used so long as the material can be positively tied to all certifications.

Each P.O. must be shipped on its own skid. This skid shall be of the same size as the material being shipped. When the shipment encompasses more than one heat (lot, run, batch), each heat must be segregated and positively identified.

All banding must be cardboard protected.

Sheets shall be paper interleaved. The paper may not be taped to the material.

RAW MATERIAL – PHENOLIC SHEETS

Material shall be free from surface defects.

Original Mill certifications with actual chemical and physical values are required.

Material must be identified within its package, positively traceable to all certifications.

Each P.O. must be shipped on its own skid. This skid shall be of the same size as the material being shipped. When the shipment encompasses more than one heat (lot, run, batch), each heat must be segregated and positively identified.

RAW MATERIAL – METALLIC FOIL

Material must be of laminating quality, free from oil and other contaminants.

Original Mill certifications with actual chemical and physical values are required.

Coils must be marked the PO number, weight, heat number and specification.

Coils shall be packaged one per skid.

RAW MATERIAL – POLYIMIDE FILM

Each coil must be identified with the weight and an identifier (Lot/heat number) traceable to the certifications.

Material certifications with actual test values are required.

RAW MATERIAL – EXTRUSIONS

Material shall be free from surface defects.

Original Mill certifications with actual chemical and physical values are required.

Material must be identified with an identifier (heat, lot, run or batch number), temper, part number, alloy and specification. The preferable means is via stenciling.

Each P.O. must be shipped in its own container. The container shall offer sufficient protection from damage during transit. When the shipment encompasses more than one heat (lot, run, batch), each heat must be segregated and positively identified.

COMPOSITE MATERIALS/SHEETS

Material must be certified to the current revision (or later) on all specifications expressed and/or implied within the order.

Sheet material shall be part marked per Lamsco designated part number. Identification shall be directly applied (or labeled) and located on the tool side of the material (if applicable). The identification must include the following – Lamsco part number, vendor identifier (lot number, trace number, serial number, etc.), fabrication specification, vendor company name and date of vendor quality department approval.

Supplier shall maintain a Foreign Object Damage/Debris Prevention program based on NAS 412 (or equivalent). Material found to be contaminated or damaged will be subject to rejection and return to the vendor for replacement.

PURCHASED PARTS

Original mill raw material certifications with actual chemical and physical values are required.

Test reports for all processes performed are required with the shipment. Approved suppliers, as outlined previously, shall be used for all special processes.

When designated in the purchase order notes, parts purchased under DPD requirements will be controlled in accordance with Lamsco SPB-ADM10.

CHEMICALS & GLUES

A Certificate of Analysis (C of A) or Certificate of Conformance (C of C) is required with each shipment. Documentation must include manufactured and expiration dates for each lot shipped.

Containers are to be shipped in a single-level bundle and packaged to prevent damage in transit.

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Lamsco West, its customers and applicable regulatory agencies shall be granted access to the facilities involved in a specific Purchase Order (P.O.) and all applicable records pertaining to that order.

FLOWDOWN

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- The Quality Manager at Lamsco West shall be notified, in writing, when any changes are made to the quality system that may affect product conformance. Notification shall also be sent when changes in product and/or process definition will affect product conformance or its intended use.
- The quality system shall assure that all services and product offered for acceptance has been subject to all examinations and tests required to prove conformance to contract or P.O. requirements.

DOCUMENTATION

RECORDS of manufacturing planning, certifications and test reports required to assure product conformity to contractual and technical requirements of the P.O. shall be retained for a minimum of seven (7) years unless stated otherwise on the P.O.

Unless otherwise specified on the P.O., the supplier's quality system shall provide for procedures which will assure that the latest applicable drawing, specification and instructions required by contract or PO, as well as authorized changes thereto, are used for fabrication, inspection and testing.

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