

## **GMS QUALITY REQUIREMENTS**

3/22/22

REV. E

### 1. QUALITY SYSTEM REQUIREMENTS:

The Seller shall provide and maintain a Quality system in conformance with Specification ISO-9001, AS9100, or other Quality System approved by GMS Metal Works.

#### 2. CONTROL OF CHANGES:

Seller agrees not to make any change in materials or design details or other products which would affect the part or any component part thereof without prior written Buyer approval. The Seller will identify, on the Statement of Conformance and/or packing sheet, the as built revision level of the end item product being delivered.

#### 3. SUPPLIER CORRECTIVE ACTION:

Seller shall, on request, on forms designated by Buyer, provide statements of corrective action on failures of seller's hardware or quality system. Corrective action statements, at Buyer's option may require approval signature by Buyer and Government Quality representative. All rejected articles resubmitted by seller to Buyer shall bear adequate identification including reference to Buyer's rejection document.

#### 4. RIGHT OF ENTRY:

The Buyer, their customer and regulatory authorities shall be granted the right of access to all sellers' facilities involved in the order and all applicable quality records. The right to verify at the seller's premises that subcontracted product conforms to specified requirements. Such verification shall not be used by the seller as evidence of effective control of quality by the supplier.

#### 5. SHELF LIFE AND TEMPERATURE SENSITIVE MATERIALS:

The Seller shall identify all materials and articles which have definite characteristics of quality degradation with age or environment. The Seller shall affix this information directly on the material container or article. This identification shall indicate the date useful life was initiated and the date or cycle at which the useful life will be expended. When environment is a factor in determining useful life, the identification shall include the storage condition (i.e., temperature, humidity, etc.) required to achieve the stated life. A minimum of 75% of the applicable material/article shelf life shall remain upon receipt of the material by Buyer or the material is subject to rejection and returned to the seller.

## 6. PACKAGING:

Unless otherwise specified by the item drawing, specification or purchase order, the seller is responsible for assuring that all items are delivered without damage or deterioration and are efficiently and economically packed for the method of transportation and type of handling involved.

## 7. SAFETY DATA SHEETS:

Materials(s) noted on this purchase order must be supplied in accordance with OSHA's hazard communication standard 29CFR1910-1200, OSHA instruction CPL2-2.38 dated August 5, 1985 and Washington State codes 296-62-05413 a "Materials Safety Data Sheets". Materials not received in compliance with aforementioned OSHA requirements and Washington State codes will be subject to immediate rejection and return at supplier's expense. In addition, if Seller is aware of any additional precautions and/or handling techniques instituted with regard to other customers, you are requested to submit those safeguards with MSDS. Send a Toxic Substances Control Act (TSCA) certification letter to the Buyer for the product(s) purchased on this purchase order with the statement that every chemical component of the product(s) is listed by the Toxic Substances Control Act Inventory (P.L. 94-94-969).

#### 8. IDENTIFICATION:

Parts, assemblies and components shall be identified as specified on the engineering drawing. When identification is not specified on the engineering drawing, the product shall be identified with the part number specified on the purchase order. When items are too small to easily identify, they may be bagged and tagged. Raw material procured to Federal, Military, Aerospace or other specification shall be marked and identified per the requirements of the identification specification which is referenced in the controlling (i.e. Federal, Military, Aerospace, etc.) specification.

### 9. CALIBRATION SYSTEM REQUIREMENTS:

Seller shall have a calibration system that assures compliance with ISO/IEC 17025:P2017 and ANSI / NCSL Z540-1-1994 "American National Standard for Calibration". Any deviation or waiver to this requirement must be approved by GMS or 1st tier buyer Material and Quality Assurance Representatives.

#### 10. STATEMENT OF CONFORMANCE:

Each shipment will be accompanied by a legible and reproducible copy of a Certificate of Conformance with the signature of responsible representative stating material, process, or article being shipped meets requirements of applicable drawings or specification cited in Purchase Order. Supplier will include date of manufacture on Certificate of Conformance. If an Outsource Procurement Specification is called out on the Purchase Order, include the revision level.

#### SHIPMENT DOCUMENTATION:

Each shipment by the Seller shall be accompanied by a Statement of Conformance in accordance with the above. When the items or the items contained within an assembly, sub-assembly or detail part on this Purchase Order are supplied by a distributor, a copy of the Statement of Conformance from the true manufacturer must accompany each shipment.

## 11. MATERIAL TEST REPORTS:

A material test report for raw material(s) is required and shall contain the following:

- Name/ Number of the specification with which the material is in compliance.
- The lot, batch, heat lot or other traceable destination (i.e. purchase order number, invoice number etc.).
- The reports shall contain the actual test results and or indicate the percentage of each element that makes up the chemical and or physical properties of the raw materials(s).
- A statement of conformance to the applicable specification.

  SHIPMENT DOCUMENTATION:

Each shipment must be accompanied by a legible unaltered copy of the test report, unless verified and validated by the buyer Quality Assurance Representative at the Sellers facility.

#### 12. CERTIFIED TEST DATA:

Certified Test Data is required and shall contain quantitative test results versus quantitative requirements and permissible tolerance(s) for values measured and shall indicate factual information necessary to demonstrate conformance to the requirements reflected on the engineering drawing governing specification or purchase order.

#### SHIPMENT DOCUMENTATION:

Each shipment must be accompanied by a legible unaltered copy of the test report, unless verified and validated by the buyer Quality Assurance Representative at the Sellers facility.



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#### 13. APPROVED PROCESS REQUIREMENTS:

Special processes (i.e. testing, heat treat, nondestructive testing, etc.). When required by the process specification must be performed by sources approved by the customer (process document owner). The Seller is responsible for assuring that the processing source has in their possession a current customer approval of their process capability for the processes to be performed, prior to their performing the process.

SHIPMENT DOCUMENTATION:

Each shipment must be accompanied by a legible unaltered copy of the certification from the processing source demonstrating compliance with the specification for the processes performed and that the processor is/was approved by the customer to perform the processes at the time he product was processed. If this certification is verified and validated by

the product was processed. If this certification is verified and validated by a Buyer Quality Assurance Representative at the Sellers facility, it may be retained by the Seller.

### 14. FIRST ARTICLE INSPECTION:

The Seller shall perform a First Article Inspection (FAI) compliant with AS9102 latest revision on the initial part or lot (as applicable) at the detail, subassembly and/or assembly level. The results of the FAI shall indicate 100% conformance to engineering drawing characteristics, special processes, and functional test as well as laboratory requirements. Subsequent FAI's shall be performed under the conditions:

- Engineering changes (configuration changes affecting form, fit and/or function) require a Delta FAI for those characteristics affected by the change.
- If major changes are made in the Sellers method of manufacturing, a Delta FAI shall be performed for those characteristics affected by the change.
   SHIPMENT DOCUMENTATION:

A legible copy of the Sellers FAI report shall be sent with each initial shipment of a part number configuration to Buyer.

#### 15. REPORT OF DISCREPANCY:

Any departure from drawing specifications or other purchase order requirements must be documented by the Seller and submitted to the Buyer for consideration and disposition. A copy of this disposition document must accompany each affected shipment.

### REPORT OF ESCAPE:

The seller upon discovery of a shipment/delivery of nonconforming product must provide a notice of disclosure to the Buyer within 48 hours of discovery.

#### • NOTIFICATION OF NON-COMPLIANCE

When an out-of-tolerance condition is discovered on a measuring device being calibrated by an approved Calibration Lab used by GMS, that facility will contact GMS immediately.

#### SHIPMENT DOCUMENTATION

A copy of the disposition document must accompany each affected shipment to Buyer.

#### 16. TRACEABILITY AND BATCH CONTROL:

Seller must maintain lot and batch control of raw materials to purchased items. Seller must provide positive traceability of manufactured parts and assemblies to raw materials through the use of lot/batch or serial numbers.

#### SHIPMENT DOCUMENTATION:

Shipping documents shall identify the lot/batch or serial number, as applicable, for all items in the shipment.

#### 17. SUPPLIER RECORDS:

The Seller shall maintain records of product(s) delivered to buyer for a period of (10) ten years.

#### 18. KEY CHARACTERISTICS:

The Seller shall maintain applicable statistical control charts for key characteristic's identified by the customer drawings.

#### SHIPMENT DOCUMENTATION:

A copy of the key characteristics statistical control charts must accompany all items in the shipment to Buyer.

## 19. SUPPLIER FLOW DOWN TO SUB-SUPPLIER

The Seller shall flow down to sub-tier suppliers the applicable requirements in the purchasing documents. In addition, Sub-tier suppliers are expected to conduct their business in an ethical manner, and with due regard to personal and product safety, and with a commitment to provide only genuine parts and materials. (Ref. definition **Counterfeit part** in AS9100D.)

## 20. <u>DOCUMENT SECURITY, AND ITAR REQUIREMENTS:</u>

The seller will not reproduce or disseminate engineering documents (drawings or other intellectual property) provided by GMS, without written permission. If indicated on the PO to the Supplier, ITAR flow down requirements are to be flowed down to the Supplier.



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# FPI Area - Outside Calibration Attachment A

Point of use or Location	Equipment	Measurement Range or Function 1	MFG.	Range of use or point of use 1	Accuracy (+/-) 1	Calibration Range or Points Low, Intermediate, High (3 places minimum)	Calibration Cycles
Developer	Air. Press Gauge	0-30 psi	Ashcroft	5 psi (MAX)	1 psi or 3% full range	3-6 psi	6 months
Wash Station	Temp. Gauge	0° to 250°	Ashcroft	50°-90°	10°	50°-110°	6 months
Wash Station	H2o Press Gauge	0-100 psi	Grainger	20-40 psi	5 psi	15 to 80 psi	6 months
Dryer	Temp. Control	75°-250°	Watlow	100°-140°	10°	100°-150°	3 months
Dryer	Temp. Gauge	75°-250°	Watlow	100°-140°	10°	100°-150°	3months
Reading Table	Black & White light meter	Black & White light	Spectroline	1000-5000 μW/c2 2-200 ft. candles	5% std. reading	800 to 6000 μW/c2 2-200 ft. candles	6 months
Pre Dryer	Air. Press Gauge	0-100 psi	Grainger	25 psi (MAX)	5 psi	15-30 psi	6 months

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All degree references are in Fahrenheit

## **APPENDIX "A"**

## **CL** ~ Calibration Labs

(Inspection Calibration Labs)

QR Notes for Purchase Orders: 1, 2, 3, 4, 6, 9, 10, 15, 16, 17, 19, & 20

### **OP ~ Outside Processor**

(Finish, Heat Treat, Boeing D1-4426 process suppliers)

QR Notes for Purchase Orders: 1, 2, 3, 4, 6, 9, 10, 13, 15, 16, 17, 19 & 20

## **OS ~ Outside Services**

(Outside Test Labs, etc.)

QR Notes for Purchase Orders: 1, 2, 3, 4, 6, 9, 10, 12, 15, 16, 17, 19, & 20

#### RM ~ Raw Material

(Raw materials used in fabrication of Customer Product)

QR Notes for Purchase Orders: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 15, 16, 17, 19, & 20

## SC ~ Subcontractors

(Customer parts built by GMS suppliers to customer drawing)

QR Notes for Purchase Orders: 1, 2, 3, 4, 6, 10, 13, 14, 15, 16, 17, 19, & 20

## SP ~ Standards, Parts & Hardware

(Fasteners, bushings, latches, catalogue parts, etc.)

QR Notes for Purchase Orders: 1, 3, 4, 5, 6, 7, 8, 9, 10, 15, 16, 17, 19, & 20