SQAR
001

Supplier Quality Assurance Requirements

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OTM Servo Mechanism Limited
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Contents

1. AMENDMENTS

Issue №	Page №	Date	Change Details
10	All	28/11/24	Document format updated and content updated to align with parent company, Ipeco Holdings Ltd, Supplier Quality Requirements SQR-1

2. SCOPE

This document details the minimum Supplier quality management & system requirements which are required by OTM Servo Mechanism Limited (hereafter referred to as OTM) of its Suppliers.

3. DEFINITIONS / ABBREVIATIONS

- NADCAP = National Aerospace and Defence Contractors Accreditation Program
- OTM = OTM Servo Mechanism Ltd

4. ASSOCIATED DOCUMENTS

4.1 AS/EN 9100
Society of Automotive Engineers: Quality Management Systems - Requirements for Aviation, Space and Defense Organizations

4.2 BS EN ISO 9001
Model for Quality Assurance in Design, Development, Production, Installation and Servicing.

4.3 AS5553
Counterfeit Electrical, Electronic, and Electromechanical (EEE) Parts: Avoidance, Detection, Mitigation, and Disposition

5. INTRODUCTION

OTM policy requires assurance at all times of satisfactory product quality. Customer contractual requirements necessitate a positive and continued implementation of stringent quality disciplines. This document therefore establishes requirements designed to ensure that each Supplier working on behalf of OTM operates a Quality System that effectively controls all aspects of product quality. Suppliers who demonstrate and continue to maintain compliance with these requirements will be eligible to receive OTM orders.

6. PROCEDURAL COMPLIANCE

This document defines the procedures for obtaining and maintaining OTM approval and specifies the requirements for an acceptable Quality System and adequate product/process control. ***Any deviations to these requirements shall be submitted to OTM via the SQAR Checklist in section 20 which will be reviewed to assess any effect on Supplier status before customer approval is confirmed. It is the responsibility of the Supplier to ensure the latest revision of SQAR-001 is in their possession.***

If any inconsistencies exist between the contract/order or its general provisions and the requirements specified herein, the contract/order and general provisions shall prevail.

All communication in relation to OTM's Supply Chain shall be communicated in the English Language including but not limited to, Contractual documents, correspondence, invoices, notices and other documents.

7. APPROVAL PROCEDURE

OTM Compliance Department may conduct an on-site assessment to evaluate a Suppliers ability to comply with the requirements defined in this document. When satisfied that the Supplier satisfies OTM requirements, approval will be granted.

8. SUPPLIER QUALITY MANAGEMENT SYSTEM REQUIREMENTS

The Supplier will provide and maintain an effective Quality Management System.

It is the Suppliers responsibility to inform OTM of any changes to their accreditation.

OTM accepts national and international standards for Quality Management Organisation and System Requirements as meeting requirements for Approved Supplier Status. ISO9001, AS9100, NADCAP, UKAS, ISO17025 & OTM Approval.

The Supplier shall carry out inspection of all products and services before submitting them and will certify that all such products and services conform to the full requirements of the purchase order.

9. MAINTENANCE AND AMENDMENT OF APPROVALS

OTM reserves the right to withdraw its approval at any time.

Continued approval is dependent upon evidence of continued compliance with these requirements and satisfactory product quality performance.

OTM must be advised immediately in writing of any proposed changes, either to personnel named in the letter of approval and/or the approved scope of work.

OTM reserves the right to review continuance of approval as a result of any changes.

10. RIGHT OF ENTRY

OTM, its customers and Regulatory Agencies shall be entitled to assess the Suppliers Quality System and processes, and the quality of supplied products or services at the Supplier’s premises.

11. QUALITY MANAGEMENT SYSTEM

In addition to the requirements of the recognised international and regulatory standards that are applicable to individual Suppliers the following are mandatory OTM specific requirements.

11.1 General Requirements

Compliance with this document is an integral part of maintaining OTM Supplier Approval. It forms part of the OTM procedurally documented Quality Management System associated with Supplier Control.

11.2 Documentation Requirements

Records shall be available for scrutiny by OTM representatives, customers or relevant authorities.

They shall be retained indefinitely and in no case are they to be disposed of without the prior approval of OTM.

All records for manufacturing, purchasing, quality etc must remain legible and readily identifiable. Records must be collated together and fully identified to the appropriate purchase order and returned to OTM if the Supplier's business activity has come to an end and trading has ceased.

11.3 Customer-Related Processes

Contract Review shall particularly include specific scrutiny of all OTM requirements, (e.g. drawing instructions, process specifications, purchasing requirements etc.) to ensure that appropriate controls are flowed down and incorporated into the Supplier's own documented working procedures.

11.4 Change Requirements

Should there be any changes to the product realisation process OTM shall be informed in writing prior to any work commencing.

Written confirmation from both OTM Quality and Procurement is needed prior to any work commencing.

11.5 Excess Inventory

The Supplier shall control all inventory of OTM proprietary product that is in excess of contract quantity in order to prevent product from being sold or provided to any third party without prior written authorisation from OTM.

The Supplier shall not provide any products from excess inventory that was previously rejected or returned by OTM without prior written authorisation from OTM. The Supplier shall be able to demonstrate traceability to the original OTM purchase document that authorised manufacture of the product when requested.

11.6 Purchase Order Conditions

The following are OTM purchase order conditions that will be stipulated against specific parts / order requirements.

B. Batch segregation of items to ensure traceability to source

C. Certificate of Conformity required

E. EASA Form 1 required

F. First Article Inspection required consistent with aerospace standard EN 9102C

M. Material Certificate of Analysis / Full Test Certificate required

O. Original Manufacture Certificate or Copies required

S. Statistical Process Control Report required for KC features

T. Test / Calibration Certificate required

Any purchase order may contain more than one of the stated conditions.

These conditions are to be recognised by the Supplier and adhered to as part of acceptance of the OTM Purchase Order.

Failure to comply with the conditions assigned to any applicable Purchase Order will result in the associated parts being rejected.

11.7 Purchasing

When the Supplier has OTM approval and utilises further sub-contract facilities, such facilities must meet the requirements defined in this SQAR-001 document. Any deviation from this arrangement will only be accepted following written agreement with OTM and if required OTM's customer.

Suppliers will not sub-contract any part of an OTM Purchase Order without prior approval from OTM.

Sub-tier Purchase Orders raised by the Supplier shall instruct their Supplier to certify in accordance with the terms of their OTM Approval. For Purchase Orders stated whereby OTM are not the design authority, approval must be confirmed in writing for any sub-tier process to be undertaken prior to the commencement of work.

Unless otherwise stated in the main body of the Purchase Order, any reference to a national, international, military, defense, etc., specification or standard is intended to mean the latest revision of that standard.

12. PRODUCTION AND SERVICE PROVISION

12.1 OTM Free Issue

Materials and Supplies provided by OTM shall be used only in fulfilment of the contract/order for which they were supplied, unless otherwise formally authorised by OTM's Compliance Department.

It is the Supplier's responsibility to ensure that tooling supplied by OTM will produce parts that conform to drawing requirements.

12.2 Traceability

Raw materials procured by the Supplier to fulfil an OTM order shall have batch traceability to source. The Supplier will provide secure facilities, preferably a bonded area, to ensure that material is not used until inspected or otherwise verified as conforming to specification.

Individual parts and parts incorporated into assemblies supplied to OTM must be traceable to the manufacturing source and identifiable to the manufactured item, such as batch/lot traceability.

Batch and Serial Numbers and any other identification allocated by OTM to OTM supplied materials and parts shall be maintained.

Traceability must be maintained through all stages of the Suppliers manufacturing process, including the maintenance of inspection and test records.

12.3 Process Planning

The Supplier shall ensure that all appropriate personnel are familiar with OTM drawings and process specifications for work undertaken and that controlled copy drawings and specifications are made available at the place of operation.

On receipt of OTM orders and prior to planning the work, the Supplier shall verify that all processes are within their approved scope of work. Where required by the specification only qualified equipment and/or operators shall be designated to perform the process.

12.4 Process Critical Parts

Any parts that are identified as being 'process critical' via either the applicable OTM engineering data or notations on the OTM Purchase Orders are prohibited from any changes being made to a previously approved OTM process control plan without prior written approval from the OTM Compliance Department.

12.5 Special Processes

Definition: *"A special process is any production or service delivery process that generates outputs that cannot be measured, monitored, or verified until after the resulting products have been used or services have been delivered."*

To prevent output deficiencies, these special processes must be validated to prove that they can generate planned results. Suppliers must therefore only use NADCAP or OTM approved special process sources as detailed below.

- Aalberts Surface Technologies (Letchworth, Birmingham & Telford)
- Ascot Finishers Limited (Berkshire)
- Capital Inspection Services (Berkshire)
- Hard Anodising Limited (Worcestershire)
- Jackson Plating Limited (Middlesex)
- Metro Engineering & Plating Works Limited (Middlesex)
- MSL Heat Treatment Limited (Surrey)
- Technical Lapping Co. Limited (Hampshire)
- Walton Plating Limited (Surrey)

12.6 Identification

The Supplier shall ensure identification of product inspection status during production by suitable means, such as inspection stamp at each inspection stage.

The Supplier shall, within its organisation and its supply chain, ensure that the use of Acceptance Authority Media (AAM) is clearly defined within its Quality Management System (QMS).

The Supplier shall, upon OTM request, be able to demonstrate evidence of communication to its employees and to its supply chain; use of AAM must be considered as a personal warranty of compliance and conformity. The Supplier shall maintain compliance to the AAM requirements by assessing its process and supply chain as part of its internal audit activities. It is recognised that the extent to which inspection and test status are identified during manufacture will vary depending upon the size of the organisation and/or the nature of the product.

If the supplier uses an Operator Self-Verification (OSV) program, the supplier shall comply with the requirements set forth in SAE industry standard AS9162 - Aerospace Operator Self Verification programs, as may be amended from time to time. OTM reserves the right to conduct surveillance at the supplier's facility to determine that the supplier is compliant to the requirements of AS9162.

12.7 Shelf Life

The supplier will ensure that if an item has a limited shelf life, it should have at least 75% remaining of the manufacturer's recommended life when supplied. The delivery note and release note must include expiry and storage conditions.

12.8 Certification

All supplies and services must be accompanied by a Release Note and/or Certificate of Conformity (CofC) which is duly signed by an authorised signatory. The Release Note / Certificate of Conformity must contain the following information:

- Unique Document Identity Number
- Document Issue Date
- OTM Purchase Order Number
- Description of Product/Service supplied
- Part Number and/or Drawing Number and issue Number if applicable
- Material Specification, and Batch Identity if applicable
- Inspection Report, if applicable
- Concession / Permit Number, if applicable
- Reject Note number, for replacements, if applicable
- Shelf life, if applicable, See note 18.1
- Signed Authorisation Certifying Statement of Conformance
- Any applicable supporting documents
- Quality Management System applied, e.g. BS EN AS9100 or BS EN ISO9001
- Country of Origin (COO)

12.9 Handling and Storage

The supplier shall use methods of product handling that prevents damage and deterioration. Materials, Tools or any other items supplied by OTM must be handled and stored in safe, secure, dry conditions, where there is no risk of contamination or damage.

All supplied tooling, gauges, measuring equipment, etc becomes the responsibility of the Suppliers whilst in their possession and therefore must be maintained to the condition it was received. Supplied equipment must be returned for re-calibration where applicable and must be returned upon request of OTM.

12.10 Packaging, Preservation and Delivery

Packaging and preservation of product delivered to OTM must have sufficient protection from adverse atmospheric conditions, accidental damage as a result of handling and Electro Static Discharge (ESD).

All deliveries to OTM must go directly to Goods Inwards Inspection. On time delivery is essential. If at any stage a job in progress is affected in a manner that may result in a delay, then OTM must be informed immediately.

All materials and supplies must be clearly identified as required by the drawing and/or Purchase Order and released under cover of the correct form of Release Document, e.g. a Certificate of Conformity, Approved Certificate or Release Certificate as appropriate (refer to section 20. CERTIFICATION for further details).

12.11 Nonconforming Product

The supplier shall have a system for the control of non-conforming items as detailed in their QMS.

The supplier shall ensure with the manufacturer where necessary that similar supplies are not similarly affected by a non-conformance and shall inform the Buyer of any nonconformities effecting products already delivered within 24 hours of findings.

The supplier will also be responsible for the withdrawal of products from stocks that are suspected as non-complaint.

12.12 Application for Production Permit / Concession

Requests for permission to deviate from the purchase order, drawing or specification requirements in advance of manufacture (Production Permit) and requests to use or release items which do not conform to order (Concession), are to be made in writing. Authority will be given by the Quality representative prior to manufacture or delivery. The Production Permit / Concession Application Form is to be used (see Appendix 1).

The concession number must be quoted on the release documentation, and the item concerned clearly labelled.

12.13 Corrective and Preventative Action

Products that do not conform to the requirements of the purchase order, or of this document, are liable for rejection. The supplier will be notified by the means of a formal reject note.

The supplier will investigate the cause of non-conformance and instigate corrective action to prevent a reoccurrence.

Non-conforming products will be reworked or replaced as supplier's liability (unless otherwise agreed), recertified and resubmitted.

When returning materials previously rejected the supplier will, (a) Quote the relevant reject note number on the release document, (b) Complete an investigation report indicating the cause of non-conformance and the corrective action that has been taken.

The investigation report must be completed within 28 days of receipt. Failure to do so may result in the supplier being removed from the Approved Suppliers Register.

13. RISK MANAGEMENT

The Supplier shall take actions to identify and manage risks to avoid any impact on the quality and delivery of products supplied to OTM.

Such actions will apply to risk identification, assessment, likelihood, consequences, mitigation and acceptance.

14. CONFIGURATION MANAGEMENT

The Supplier will maintain a Configuration Management process that includes as appropriate to the product being supplied the following:

- Configuration Management Plan
- Configuration Identification
- Change Control Processes
- Configuration Status Accounting
- Configuration Auditing

15. OBSOLESCENCE MANAGEMENT

As part of the Risk Management process, the Supplier shall assess whether any of the products it supplies to OTM are in danger of becoming obsolete.

It is inappropriate to apply obsolescence management to all products supplied to OTM for use in OTM equipment. e.g. AGS, standard parts, raw materials and OTM designed parts are unlikely to become obsolete. However, there are numerous specialised products currently available which are supplied for use in OTM equipment. It is these products that should be identified and monitored for the risk of becoming obsolete.

Any products which are about to become obsolete, or which are likely to become obsolete in the future, must be reported to an OTM purchasing representative as soon as possible after being identified.

16. FOREIGN OBJECT DEBRIS/DAMAGE (FOD) PREVENTION

The Supplier shall take actions to prevent foreign objects from being present in products supplied to OTM. Such actions will apply to all aspects of product realisation including design considerations, manufacturing, handling, storage, packaging, preservation and delivery. The Supplier shall comply with the requirements of NAS 412 and/or AS9146.

17. CONTROL OF MONITORING AND MEASURING DEVICES

The Supplier shall control, calibrate and maintain, inspection, measuring and test equipment which demonstrates traceability to national standards (including test software).

18. MEASUREMENT, ANALYSIS AND IMPROVEMENT

Monitoring and Measurement of Processes & Monitoring and Measurement of Product. The Supplier shall maintain inspection and testing activities to verify that OTM purchase order requirements are met.

19. FIRST ARTICLE INSPECTION

First Article Inspection - AS/EN 9102 Definition

"A complete independent and documented physical and functional inspection to verify that prescribed production methods have produced an acceptable item as specified by engineering drawings, planning, purchase order, engineering specifications, and/or other applicable design documents."

First Production Article Requirement - First Article Inspection Report (FAIR)

Objective evidence that the first production article conforms to the OTM purchase order specification must be provided with the first delivery of the product. This will be achieved via the completion of a First Article Inspection Report in accordance with AS/EN 9102 requirements. The FAIR must be completed in a format that is compliant with AS/EN 9102 requirements. The report may be on the Supplier's format or on the OTM approved format (OTM FAIR Form shall be available upon request).

NOTE 1: First Article Inspection is to be carried out on a representative sample of the first production batch of a part or assembly.

NOTE 2: A First Article Inspection Report is not to be confused with any other type of pre-production report (dimensional or otherwise) that a Supplier may submit in support of a contract, e.g. prototyping, tool proving, etc.

NOTE 3: Any deviation to the First Article Inspection Report requirements stated above will only be accepted following written agreement with OTM Compliance department and OTM customer if required. **Any discrepancies detected by the Supplier shall be notified to OTM and a concession to be provided in advance of any parts being shipped (see Appendix 1).**

FAIR Maintenance (Delta FAI)

All FAIR's will be maintained in accordance with the following requirements:

- Engineering Change: FAIR will capture the differences from the current approved configuration to the previously approved configuration.
- Process Change: FAIR will capture all design features affected by the process change. Examples of process change are:
  - Changes in manufacturing process(es).
  - Changes in CNC Programs, including translation to another medium.
  - Changes in source(s).
  - Changes in Inspection method(s).
  - Changes in location of manufacture.
  - Changes in tooling and/or materials that could affect fit, form or function.
  - Production Lapse - Any parts that have not been manufactured for a period of two years will be subjected to a full F.A.I.R. following the completion of any new manufacturing requirements.

20. SQAR Compliance

Suppliers must complete the SQAR Checklist below and submit a copy to Quality@otmservo.com for review and approval. Failure to complete this form will be taken as a statement that the supplier is within full compliance to all the requirements. OTM may at its discretion, audit the supplier against this SQAR and if found to be non-compliant their approved supplier status will be subject for review/removal.

SQAR Checklist			
Section	**Requirement**	**Compliant (Yes / No)**	**Detail any deviation to the requirement and/or Corrective Action plans to comply to requirement.**
6.	PROCEDURAL COMPLIANCE		
7.	APPROVAL PROCEDURE		
8.	SUPPLIER QUALITY MANAGEMENT SYSTEM REQUIREMENTS		
9.	MAINTENANCE & AMENDMENT OF APPROVALS		
10.	RIGHT OF ENTRY		
11.	QUALITY MANAGEMENT SYSTEM		
11.1	General Requirements		
11.2	Documentation Requirements		
11.3	Customer-Related Processes		
11.4	Change Requirements		
11.5	Excess Inventory		

Section	Requirement	Compliant (Yes / No)	Detail any deviation to the requirement and/or Corrective Action plans to comply to requirement.
11.6	Purchase Order Conditions		
11.7	Purchasing		
12.	PRODUCTION, SERVICE PROVISION		
12.1	OTM Free Issue		
12.2	Traceability		
12.3	Process Planning		
12.4	Process Critical Parts		
12.5	Special Processes		
12.6	Identification		
12.7	Shelf Life		
12.8	Certification		
12.9	Handling and Storage		
12.10	Packaging, Preservation and Delivery		
12.11	Nonconforming Product		

Section	Requirement	Compliant (Yes / No)	Detail any deviation to the requirement and/or Corrective Action plans to comply to requirement.
12.12	Application for Production Permit / Concession		
12.13	Corrective and Preventative Action		
13.	RISK MANAGEMENT		
14.	CONFIGURATION MANAGEMENT		
15.	OBSOLESCENCE MANAGEMENT		
16.	FOREIGN OBJECT DEBRIS/DAMAGE PREVENTION		
17.	CONTROL OF MONITORING & MEASURING DEVICES		
18.	MEASUREMENT, ANALYSIS & IMPROVEMENT		
19.	FIRST ARTICLE INSPECTION		

Declaration:

I confirm on behalf of that all the details shown above are correct.

Name: **Position:**

Signature: **Date:**

21. APPENDIX 1

Application For Production Permit / Concession			
Order №		**OTM Ref.**	
Part №		**Description**	
Serial №		**Quantity**	

Grid Ref.	Drawing Requirement	Divergence

Reason for divergence to drawing

Applicant Signature		**Quality Signature**	
Name		**Name**	
Date		**Date**	

Please Sign and Return One Copy. Section below to be completed by OTM only

Design Authority Decision		**Quality Manager Decision**	
Signature		**Signature**	
Name		**Name**	
Date		**Date**	