

Supplier Quality Assurance Requirements

Table of Contents

Table of Contents	2
1. CHANGE RECORD	4
2. PURPOSE	5
3. DEFINITIONS	5
4. SUB-TIER CONTROL	5
5. RIGHT OF FACILITY ACCESS	5
6. REWORKED/REPLACED MATERIAL	6
7. PRODUCTION FIRST ARTICLE REPORT	6
8. METALLURGICAL FIRST ARTICLE	6
9. SUPPLIER SURVEILLANCE	6
10. SUPPLIER NON-CONFORMANCE APPROVAL REQUESTS (SNAR's)	6
11. NON-CONFORMING MATERIALS CORRECTIVE ACTION (REJECTION NOTICES)	7
12. NOTIFICATION OF ESCAPED DEFECTS	7
13. REPAIR	7
14. CORROSION PROTECTION	7
15. CERTIFICATION TRACEABILITY, GENERAL	7
16. RECORDS RETENTION	7
17. DRAWINGS SPECIFICATIONS AND QUALITY REQUIREMENTS	8
18. PACKAGING, HANDLING AND MARKING	8
19. SHELF-LIFE MATERIAL	8
20. MERCURY FREE	8
21. INSPECTION SAMPLING - IN ACCORDANCE WITH ONTIC REQUIREMENTS	8
22. HAZARDOUS MATERIAL	9
23. CRITICAL SAFETY ITEM (CSI)	9
24. TOOLING REQUIREMENTS	10
25. CALIBRATION SYSTEM	10
26. FOREIGN OBJECT PREVENTION, DETECTION AND REMOVAL	10
27. SUPPLIER CHANGE NOTIFICATION	11
28. ELECTROSTATIC DISCHARGE (ESD) SENSITIVE PRODUCTS	11
29. COUNTERFEIT ARTICLES	11
30. PROCESS APPROVALS	12
31. QUALITY ASSURANCE SYSTEM REQUIREMENTS	12
32. SOURCE INSPECTION	12
33. CAST TEST BARS	12

34. FORGING TEST BARS.....13

35. CERTIFICATE OF CONFORMANCE13

36. PHYSICAL AND CHEMICAL TEST REPORTS14

37. FUNCTIONAL TEST CERTIFICATIONS.....14

38. STATISTICAL PROCESS CONTROL14

39. PROCESS CERTIFICATION14

40. FROZEN PROCESS.....14

41. NON-DESTRUCTIVE TEST REPORTS.....14

42. HEAT TREAT REPORT15

43. RUBBER COMPONENTS/RAW MATERIAL & ASSEMBLY CURE DATE15

44. RAW MATERIAL CERTIFICATION15

45. MILL HEAT CONTROL/MILL CERTIFICATION15

46. SYNTHETIC RUBBER COMPONENTS HARDNESS READINGS16

47. ELECTRICAL/ELECTRONIC ASSEMBLY & SOLDERING REQUIREMENTS16

48. WELDING/BRAZING REQUIREMENTS16



49. CUSTOMS TRADE PARTNERSHIP AGAINST TERRORISM (C-TPAT)16

50. REACH STATUS REGULATIONS AND SUBSTANCES OF VERY HIGH CONCERN16

1. CHANGE RECORD

Rev	DATE	DESCRIPTION	BY
A	30 th Jun 2009	Issued for Company Use	JH
B	10 th Oct 2011	Paragraph 25 Added	CP
C	15 th Jan 2013	Standard, revision and address updated	LP
D	20 th May 2014	Critical Safety Item added and various changes to the procedure	LP
E	4 th June 2014	Update to Introduction and Section 2, Paragraph 2	LP
F	10 th February 2015	Various changes – Section1, Item 5, 18, 20 & 22, Section 2 Item, 2 & 21	LP
G	12 th March 2015	BOA requirements added	LP
H	27 th November 2015	Section 1, item 6 - Supplier Non-Conformance Approval Requests (SNAR's) Section 2, Item 24 - 24. REACH STATUS REGULATIONS AND SUBSTANCES OF VERY HIGH CONCERN (SVHC'S)	LP
I	31 st March 2016	Item 28 Electrostatic Discharge (ESD) Sensitive Products added Item 29 Counterfeit Articles added Section 2 removed and new layout to document	LP
J	7 th October 2016	Item 07, 16, 26, 33 & 34 updated	LP
K	6 th December 2016	Item 23 updated with new text Item 26 updated with new part number	LP

This procedure has been approved by the following:

Name	Signature	Date
Owner: Lee Price Senior Supply Quality Engineer		06/12/16.
Quality Approval: Paul James Head of Quality		06 DEC 2016

2. PURPOSE

The purpose of this document is to define the Quality requirements for suppliers of Ontic Engineering and Manufacturing UK Limited.

These requirements are applicable in their entirety to services and products allocated to an Ontic UK supplier as well as to those attributed to the suppliers and sub-tier suppliers.

Acceptance of products is contingent upon compliance with these requirements. Any exceptions to the requirements must be coordinated with Ontic UK Supplier Quality supplier.quality@ontic.com. Ontic UK supplier oversight ensures purchased products conform to the specified requirements which include:

- Evaluation and authorization of the supplier
- Specification of the requirements applied to the supplier, introduced in contracts and/or contractually in the purchase order
- Product/process qualification, in particular, First Article Inspection monitoring
- Monitoring of the supplier (measurement of the level of quality, e.g. rejection rate, periodic follow up, quality audits, etc.)

3. DEFINITIONS

The use of SHALL, SHOULD, MUST, WILL and MAY within this document shall observe the following:

- The word **SHALL** denotes a mandatory requirement. Any departure is not permissible without formal agreement
- The word **SHOULD** denotes a recommendation or advice and is expected to be followed unless good reasons are stated for not doing so.
- The word **MUST** is used for legislative or regulatory requirements (e.g. Health & Safety) and shall be complied with
- The word **WILL** denotes provision, service or an intention in connection with a requirement of this document
- The word **MAY** denotes a permissible practice or action. It does not express a requirement of this document

4. SUB-TIER CONTROL

The supplier shall be responsible for flow down of all the requirements and provisions of the Ontic UK purchase order applicable to the supplier's sub-contractors. Additionally, the supplier shall comply with special process requirements when imposed.

5. RIGHT OF FACILITY ACCESS

The supplier shall grant Ontic UK, Civil and/or Military regulatory authorities and/or Customer representatives access to their facilities and documentation and provide them with necessary means, in accordance with the confidentiality rules, for performing the supervisory actions, including checking for conformity to a contract and/or to a product, and surveys on the functioning of the Quality Management System.

In cooperation with the supplier, this right of access is extended to the sub-tier suppliers.

6. REWORKED/REPLACED MATERIAL

When returning previously rejected material to Ontic UK, the supplier shall reference the Material Rejection Record (MRR) number on all shipping document(s), and shall state if the items have been replaced or reworked.

7. PRODUCTION FIRST ARTICLE REPORT

Compliance to requirements must be demonstrated by submitting a First Article Inspection Report (FAIR) with the first lot shipment of product and with the first lot shipment of each subsequent revision. Catalogue and commercial parts are excluded; a certificate of conformance to all purchase order requirements is required. First Article Inspection Reports (FAIR) must include serial numbers (when applicable), all dimensions, general notes, tolerance ranges, actual measurements and Ballooned drawings, sampling plan and where physical testing is required the results of the tests. First article parts must be identified as "First Article" by tagging, special packaging, or other suitable means of identification.

Ontic requires suppliers to use AS9102 latest revision format for First Article reporting.

Additional first article inspection shall be performed when:

- Either new manufacturing processes or new methods are used that could affect compliance to drawing requirements.
- New, reworked or transferred tooling is used
- A drawing revision effects the operation(s) performed by the supplier.
- A lapse in production exceeding 24 months.
- Introduction of new supplier or location of the supplier has changed.

8. METALLURGICAL FIRST ARTICLE

The supplier shall furnish evidence that all material qualification tests and inspections have been performed and results meet the applicable material specifications and drawings. Samples of physical properties test such as grain flow, case depth, EDM recast layer, inter granular attack, case depth; etc. shall be included in the shipment when applicable.

9. SUPPLIER SURVEILLANCE

When this SQAR is imposed, the Ontic Quality Representative shall perform evaluation/acceptance of product at the supplier's facility. This will include surveillance of the products and supplier's systems, procedures, and facilities. The supplier shall furnish, at no cost, the necessary facilities and equipment, supply data, and perform tests/inspections as required by applicable drawings, specifications, or Ontic directed Inspection Instructions under surveillance of Ontic Supplier Quality Representative. The supplier is to notify Ontic UK Buyer, requesting source surveillance at a minimum of 48 hours in advance of desired inspection date.

10. SUPPLIER NON-CONFORMANCE APPROVAL REQUESTS (SNAR's)

Requests for any departures from drawings, specifications, or other purchase order requirements must be recorded and submitted on a "SUPPLIER NON-CONFORMANCE APPROVAL REQUEST (SNAR)" for consideration by Ontic UK. Material shipped on an approved SNAR must reference the SNAR number on all relevant paperwork supplied to Ontic UK.

NOTE: All SNAR's must be submitted for approval prior of shipment of parts.

11. NON-CONFORMING MATERIALS CORRECTIVE ACTION (REJECTION NOTICES)

Upon notification from the buyer that material furnished by the supplier is found discrepant upon receipt at Ontic UK, the supplier shall promptly notify the buyer, in writing, of adequate and acceptable corrective action taken to eliminate the cause of the discrepancy. The Suppliers response shall include; (a) Root Cause of Defect, (b) Immediate Containment, (c) Corrective Action Taken, (d) Action to Prevent Recurrence, and (e) Effectivity Point of such Corrective Action. If MoD Government Source Inspection is a requirement on the purchase order, the supplier shall notify the cognizant MoD Government Representative, so that he/she may participate in the investigation and corrective action if they desire.

12. NOTIFICATION OF ESCAPED DEFECTS

When the supplier identifies or becomes aware of a suspect product/service that has escaped from the supplier's facility to Ontic UK, the supplier shall notify Ontic UK within 72 hours. The Notification shall be in writing, addressed to Ontic UK, on the supplier's own letterhead.

NOTE: For escapes that affect "Safety of Flight" (i.e. controls) the suppliers shall submit all available information **IMMEDIATELY**.

Notifications of escape shall be sent via e-mail to supplier.quality@ontic.com

13. REPAIR

Under no circumstances shall a Supplier or a Supplier's Sub-tier perform any repair procedures/operations without specific written authorisation and an approved repair procedure from Ontic UK.

14. CORROSION PROTECTION

Material subject to corrosion shall be packaged and or coated with an acceptable preservative to prevent corrosion while in transit and storage (contact your purchasing representative or Manufacturing Engineering at Ontic UK for appropriate preservatives).

15. CERTIFICATION TRACEABILITY, GENERAL

All certifications shall be traceable to the material submitted and shall contain the signature and title of the authorised representative of the seller. Serial numbers shall be listed if the components are serialized. Computer generated facsimile signatures will be accepted.

NOTE: Not required for Rail product.

16. RECORDS RETENTION

The Supplier shall maintain adequate records of all First Articles, In-Process, Final Inspections, Tests, and any other part data history as imposed by Purchase order. Inspection records shall indicate the nature and number of observations made the number and type of deficiencies found, the quantities approved and rejected, and the nature of corrective action taken, as appropriate. The First Article Inspection Reports (FAIR) shall be in accordance with paragraph 5 of Section 1 of this document. Additional clause specific detail is found within the applicable clause.

This information and all supporting documentation such as raw material certifications, special processing records and certifications, manufacturing records, i.e., route sheets and/or work orders travellers, shall be retained by the Supplier in accordance with the terms of the purchase order. When the Purchase Order is complete, such records shall be maintained and available to the buyer on request for a period of NOT LESS THAN TWELVE (12) YEARS from the closing of the purchase order unless stated otherwise on the purchase order.

NOTE: Records shall remain legible, readily identifiable, and retrievable.

17. DRAWINGS SPECIFICATIONS AND QUALITY REQUIREMENTS

The Suppliers Quality System shall assure that the latest applicable drawings, specifications, and quality requirements are compatible with current purchase order agreements and are available and in use by the Supplier's manufacturing and inspection areas. Military Standards and Specifications utilised shall be to the latest revision in effect on the date of the purchase order, unless otherwise specified.

18. PACKAGING, HANDLING AND MARKING

The Supplier shall assure that all articles are packaged in a manner and with materials necessary to prevent deterioration, corrosion, or damage. Requirements for packaging shall consider conditions affecting the article while at the supplier's plant, transportation to destination and the expected or specified conditions at the destination. During fabrication and processing, special carts, boxes, containers and transportation vehicles shall be used as necessary to prevent damage due to handling. When packaging small parts, the use of staples is prohibited due to the potential for FOD.

Marking shall be applied as specified by the engineering drawing or specification; if the engineering drawing or specification does not define marking method, marking shall be applied as instructed by specific purchase order notation.

19. SHELF-LIFE MATERIAL

Unless otherwise specified on the Purchase Order, all shelf-life materials shall be delivered to Ontic UK with a minimum of 90% shelf life remaining. The date of manufacture and expiration dates are required to be on the certification and the packaging.

20. MERCURY FREE

The use of mercury containing materials is prohibited during the fabrication assembly, testing or any phase of manufacture of any material furnished to Ontic.

NOTE: Not required for **Rail** product.

21. INSPECTION SAMPLING - IN ACCORDANCE WITH ONTIC REQUIREMENTS

Unless otherwise specified in the Purchase Order and SQARs, the Supplier may use sampling procedures when tests are destructive or when quality history, inherent characteristics, statistically controlled processes or operation repeatability due to numerically controlled machines justify less than 100% inspection.

Sampling plans shall be in accordance with BS6001/ISO 18414, with the exception that lot acceptance will always be: "accept on zero, reject on one". Suppliers shall submit their sampling

plan as part of the First Article Inspection package for the product delivered. Sampling plans other than the above must be approved in writing by Ontic for usage on Ontic products. Ontic will not approve any sampling plan which permits lot acceptance with defectives in the population sample.

NOTE: Not required for **Rail** product.

22. HAZARDOUS MATERIAL

Hazardous material must be supplied with a Material Safety Data Sheet (MSDS) for each shipment.

23. CRITICAL SAFETY ITEM (CSI)

AEROSPACE

A CSI, sometimes referred as a Flight Safety Part, is any part, assembly, or installation containing a critical characteristic whose failure, malfunction, or absence could cause loss of or serious damage to the aircraft, and/or serious injury or death to the occupants. The engineering drawing and associated technical data will clearly identify that the item is CSI and will identify the critical characteristics, critical processes, and inspections and other quality assurance requirements.

The supplier and its sub-tier(s) that perform work on a CSI shall provide with each shipment Inspection Records which include the Supplier's Name, Ontic Purchase Order Number, Part Number, Part Revision, Lot Number, Serial Numbers (if applicable), Lot Size, and Inspection Sample Size for the part or assembly. The inspection records shall list all Critical Characteristics/Dimensions included on each drawing or as identified on the Purchase Order.

- Critical Characteristics shall be inspected 100% and documented for the full unit population. Acceptance on inspection records shall be denoted by inspection stamps.
- If any Non-Destructive Testing is conducted on the part or assembly of parts that includes 'Critical Parts' a result summary for the evaluation shall be supplied and the approval certificate of the person conducting the evaluation shall be provided to Ontic.
- Any deviation from design data shall be clearly accounted for on the release paperwork, this shall include an Ontic SNAR number (See SNAR Process) and Design Authority reference number). Any product delivered without both of these reference numbers shall be rejected.

Ontic UK and/or Regulatory Authority, Government or Customer representative may opt to perform on-site audits of the supplier and applicable sub-tier(s) prior to issuance of a PO, and periodically thereafter to verify their compliance with the drawings, manufacturing planning.

FOR 'NEW' GLG SPARES BOA SPRPA1-14-G-003X

Latest version of document 'DOC1004BC' applies. This document will be obtained from Ontic.

RAIL

GMRT/2450 is any part, assembly, or installation containing a critical characteristic whose failure, malfunction, or absence could cause loss of or serious damage to a product in Rail, and/or serious injury or death to the occupants. The engineering drawing and associated technical data will clearly identify that the item is CSI and will identify the critical characteristics, critical processes, and inspections and other quality assurance requirements.

The supplier and its sub-tier(s) that perform work to GMRT/2450 shall comply with manufacturing planning, audits, critical characteristics, records, certification of personnel, tolerance of measuring and test equipment and serialization. Ontic UK and/or Regulatory Authority, Government or Customer representative may opt to perform on-site audits of the supplier and applicable sub-tier(s) prior to issuance of a PO, and periodically thereafter to verify their compliance with the drawings, manufacturing planning.

24. TOOLING REQUIREMENTS

Tooling furnished by Ontic UK or Ontic UK Customer's does not relieve the supplier of responsibility of proving the adequacy of all tooling. Any anomalies found in such tooling must be immediately reported to Ontic UK Procurement. If Ontic UK furnishes tooling to supplier requiring a Tool Prove, Ontic UK acceptance will be based on verification of the supplier's FAIR part/or assembly documentation.

The supplier is responsible for periodic calibration of all Ontic UK tooling.

The supplier must maintain a Preventative Planned Maintenance for the equipment and tooling owned by Ontic UK which is used on the supplier's site, the supplier must supply a list yearly of the condition of Ontic UK's equipment.

NOTE: Not required for Rail product.

25. CALIBRATION SYSTEM

Supplier shall maintain a calibration system in accordance to AS9100 / ISO9001 / ASA 100 as a minimum requirement.

26. FOREIGN OBJECT PREVENTION, DETECTION AND REMOVAL

The supplier shall maintain a FOD (Foreign Object Damage/Debris) control programme assuring work is accomplished in a manner preventing foreign objects or material from entering and remaining in deliverable items. Maintenance of the work area and control of tools, parts, and material shall preclude the risk of FOD incidents. The supplier shall document and investigate all FOD incidents assuring elimination of the root cause. The Company shall have the right to perform inspection and/or audits as a method of verification that the supplier's FOD control programme is functional, documented, and effective. The supplier shall identify a FOD control person responsible for implementing FOD prevention awareness and training.

Prior to closing inaccessible or obscured areas or compartments during assembly the supplier shall inspect for foreign objects/materials. Tooling, jigs, fixtures, test equipment, and handling devices shall be maintained in a state of cleanliness and repair to prevent FOD. Supplier shall provide a statement of certification that deliverable products are free of any foreign materials that could cause damage to the product or to the components/systems of which the product is a part or to which the product is attached.

Seller is required to establish and maintain a FOD prevention programme in accordance with PU101-3A, "Foreign Object Debris/Foreign Object Damage (FOD) Prevention Requirements for Ontic Suppliers."

Seller shall implement processes and procedures for ""Foreign Object Debris/Foreign Object Damage (FOD) Prevention Requirements for Boeing Suppliers".

Note: FOD prevention programme other than the above must be approved in writing by Ontic for usage.

27. SUPPLIER CHANGE NOTIFICATION

The supplier shall notify Ontic UK of all Organizational and Manufacturing operational changes.

Those changes may include, but not limited to the following:

- Change in Manufacturing Location
- Change in Organizational Leadership
- Change in Sub-Tier Supplier (to include special Processes)
- Change in AS9100 / ISO9001 / ASA 100 or NADCAP certification status (including renewal of certification from certifying body)
- Change in Manufacturing Capability
- Change in Ontic UK Owned tooling status (Serviceability)

28. ELECTROSTATIC DISCHARGE (ESD) SENSITIVE PRODUCTS

ESD sensitive delivered products, including replacements assemblies, shall be physically identified by label or permanent marking. The delivered items shall be packaged for ESD protection and appropriately marked. Individual packages and shipping containers shall be identified as containing ESD sensitive material.

29. COUNTERFEIT ARTICLES

The supplier shall implement an appropriate strategy to ensure that articles delivered to Ontic UK are not counterfeit. The supplier's strategy shall include, but is not limited to, the direct procurement of articles from OEMs or authorized suppliers, conducting approved testing or inspection to ensure their authenticity, and, when articles are to be procured from non-authorized suppliers, obtaining from such non-authorized suppliers appropriate certificates of conformance that provide one or more of the following:

- The OEM's original certificate of conformance of the article;
- Sufficient records providing unbroken supply chain traceability to the OEM; or
- Tests and inspection records demonstrating the article's authenticity

Counterfeit articles delivered or furnished to Ontic UK are deemed nonconforming. If the supplier becomes aware or suspects that it has furnished counterfeit articles to Ontic UK, the supplier shall promptly notify Ontic UK and replace at the supplier's expense, such counterfeit articles with OEM or buyer-approved articles and any testing or validation necessitated by the installation of authentic articles after counterfeit articles have been replaced. The remedies contained in this section are in addition to any remedies Ontic UK may have at law, equity, or under other provisions.

The supplier bears responsibility for procuring authentic articles or items from its subcontractors and shall ensure that such subcontractors comply with these requirements.

30. PROCESS APPROVALS

Special process sub-tiers such as welding, heat treating, plating, coating, non-destructive testing, etc. must be performed by Ontic UK, Ontic Customer, or NADCAP approved suppliers. The current approval status of processing sub-tiers must be confirmed with Ontic UK prior to performing the process. Contact your Ontic UK buyer to determine current approval status.

Sub-contract processing of product, that the suppliers were contracted to perform is prohibited by Ontic UK. Suppliers shall perform all processes, with the exception of those mentioned above. All deviations to this requirement require the written approval of Ontic UK Supplier Quality Department.

31. QUALITY ASSURANCE SYSTEM REQUIREMENTS

Supplier shall maintain a Quality Programme in compliance with ISO9001 / AS9100 / ASA 100 requirements based on processes performed by the supplier. Ontic Quality will detail specific element compliance based on Engineering and Quality requirements imposed for awarded product.

32. SOURCE INSPECTION

Source Inspection at a supplier's site will be imposed by a letter issued from the Senior Supplier Quality Engineer to the supplier; as well as being noted on the applicable purchase order. Only the Supplier Quality department can remove or waive source inspection.

Source inspection may be imposed, but not limited to:

- Product Audit / Inspection
- Process Audit / Inspection
- Corrective action review / follow up

The buyer must be notified at least forty-eight (48) hours in advance of the time product is to be inspected. Suppliers shall supply the purchase order or contract including amendments, drawings, specifications, and applicable records, certifications and all necessary measuring equipment to the individual performing the source inspection.

Evidence of a completed source inspection must be indicated on the inspection or ATP record and the shipping paperwork.

When a purchase order specifies "Government Source Inspection required," or "Customer Source Inspection required" the supplier shall immediately furnish a copy of the purchase order to the government representative who has delegation for their facility. If the supplier does not have such a representative, they shall notify the government inspection service fourteen (14) days in advance, when possible, of the time when such inspection will be required.

33. CAST TEST BARS

The supplier shall furnish two test bars representative of each heat treat lot, poured from the same melt as the castings supplied. Test bars shall be permanently identified with the supplier's name or trademark, melt, heat treat lot number, and alloy type. The supplier shall retain the test bars for a period of not less than twelve (12) years, and must be made available to Ontic UK upon request. Test bars stored at the supplier's facility shall not be destroyed without prior written approval from Ontic UK purchasing.

34. FORGING TEST BARS

- The supplier shall furnish with each shipment of forging: two test bars produced from the same heat of material as the forging supplied. Test bars must have the same percentage of reduction as parts supplied, and shall be permanently identified with the supplier's name or trademark, material heat number, heat treat lot number and alloy identification.
- The supplier shall comply with (a) above except that the test bars shall be retained by the forging facility for a minimum of 12 years and be made available to Ontic UK upon request.

Test bars stored at the supplier's facility shall not be destroyed during the storage period without prior written approval from Ontic UK purchasing.

35. CERTIFICATE OF CONFORMANCE

A legible and reproducible copy of a Certificate of Conformance must accompany each shipment. The certificate must include the following:

- Supplier Name and Address
- Ontic UK Purchase Order Number, Quantity Shipped, Purchase Order Line.
- Ontic UK Part Number
- Drawing Revision
- Serial Number (when applicable)
- Manufacturing Plan Revision (when applicable)
- Operation Number (when applicable)
- Signature and title of authorised representative
- Processes performed, required by engineering drawing, specification or purchase order, to include:
 - Process
 - Specification
 - Process Certification Number and Ontic UK Approved Supplier(s) used for processing (when applicable)
 - Sub-Assembly Part Number(s) with latest revision (when applicable)
 - Sub-Assembly Process, Specification, Certification Number and Ontic UK Approved Supplier used (when applicable)
 - Lot number, if not serialized
 - Indication that products were manufactured from materials on which the seller has records of material conformance

The certificate of conformance must contain a statement that all inspection and tests have been performed as required by drawing, specification and/or purchase order. The certificate must list each special process that appears on the drawing such as: heat treat, non-destructive examination, and plating or coating, etc. Perishable products controlled by batch number or cure date and products controlled by heat number will have applicable controlling number on the individual certificate. Blanket statements of conformance are unacceptable, as are statements of belief rather than fact.

NOTE: For products delivered from Germany covering the Rail product additional acceptance criteria is acceptable.

- Certificate of Compliance EN 10204-2.2
- Inspection Certificate EN 10204-3.1

36. PHYSICAL AND CHEMICAL TEST REPORTS

Each shipment must be accompanied by a physical/chemical test report as required by the applicable material specification. The report must contain the signature and title of the authorised representative of the facility performing the tests and shall assure specification conformance. Unless otherwise specified, material shall be procured from a domestic source.

37. FUNCTIONAL TEST CERTIFICATIONS

Each shipment must be accompanied by a legible and reproducible copy of the Suppliers Certification Identifiable with submitted material for which test reports are on file and available for examination. This certificate must contain the signature of the authorised representative and assure conformance to specified requirements.

- Actual tests results required.
- Test Certificate of Conformance required.

38. STATISTICAL PROCESS CONTROL

When imposed on the purchase order, supplier will submit (1) copy of required Statistical Process Control charts to verify control improvement and analysis of processes (i.e.; X Bar R charts, histograms, etc.). Capability analysis may be imposed by Purchase Order to demonstrate supplier's process performance.

39. PROCESS CERTIFICATION

Each shipment must be accompanied by legible and reproducible copy of a certificate containing the signature of an authorised representative for all processes used, such as heat treating, welding, surface preparation and treatment, etc. The certificate shall include the process used, the specification to which it conforms, results of any testing and the name of the sub-tier that performed them if other than the supplier. When parts are serialized, serial number must appear on the certification.

40. FROZEN PROCESS

When this SQAR is imposed by purchase order, any process utilised in the production of the supplier's, Ontic UK approved, First Article that Ontic UK identifies as critical must be adhered to. This includes all specified equipment, tooling, process steps and sequencing involved in the production of the completed article including any outside processing. The First Article production piece will be submitted with the critical process description and any associated method sheets, this will be the mandated process for continued production of the products.

Any changes to any aspect of the manufacturing processes designated as critical must be submitted to Ontic UK and approved prior to implementation of those changes in the frozen critical process. Failure to adhere to this requirement will subject the product to material rejection. Ontic UK will work expeditiously to support the supplier's request for change in processes identified as critical and will provide such approval in writing noting the nature of the changes and affectivity date or Serial Number.

41. NON-DESTRUCTIVE TEST REPORTS

A Non-Destructive Test is to be performed specified on the Purchase Order/Drawing. A legible and reproducible copy of actual non-destructive test results identifiable with acceptance requirements

and material submitted shall accompany each shipment. These reports must contain the signature and title of the authorised representative of the agency performing the inspection and must assure conformance to specified requirements.

- Fluorescent Penetrant - Magnetic Particle, Radiographic and other non-destructive evaluation processes as referenced on drawings and/or specifications shall be performed by an approved Ontic UK source in accordance with applicable standards.

Parts that have been accepted using FPI or Magnetic particle inspection shall be marked per the applicable non-destructive test specification. Otherwise specified, radiographic inspection of castings shall be performed after all heat-treat operations. Radiographic techniques shall be submitted to Ontic UK for prior approval if required by Purchase Order.

42. HEAT TREAT REPORT

Each shipment shall be accompanied by a legible and reproducible copy of the detailed heat treatment cycle used. Details to include: Drawing requirement, specification, date, time, and temperature and quench method as applicable. Inspection reports must accompany the heat treat report. The report must contain the signature and title of the authorised representative of the agency performing the tests and inspections.

43. RUBBER COMPONENTS/RAW MATERIAL & ASSEMBLY CURE DATE

Rubber products used in assemblies shall meet the age requirements of MIL-STD-1523, MIL-HDBK-695D, or SAE-AS1933, as applicable. In addition, all assemblies shall be marked with the cure date of the oldest rubber part in the assembly, as well as the date of assembly. Marking may be accomplished by decal, rubber stamp, or bag and tag.

Each package of rubber components shall be marked with date of cure part number, Purchase Order number, quantity, compound number, and manufacturer's identification (if different than part number). Date of cure on "O" rings shipped to Ontic shall be defined on the Ontic UK purchase order, normally within 8 quarters and shall not exceed 25% of the shelf life from date of manufacture to ship date and acceptance at Ontic.

44. RAW MATERIAL CERTIFICATION

Each shipment shall be accompanied with legible copies of the material certification as furnished by the raw material supplier or an independent test laboratory. Material certifications must agree in all respects with the raw material requirements of their applicable specifications. Unless otherwise specified, all certifications shall state the latest revision of the Specification that the material is being certified to as a minimum. The certifications shall contain a statement "We certify the listed material was used to fulfil the requirements of Ontic UK Purchase Order _____", and shall be signed by your Quality Representative.

45. MILL HEAT CONTROL/MILL CERTIFICATION

Assigned serial numbers must be consecutive within a mill heat.

- All items covered by this Purchase Order must be from the same mill heat.
- Actual mills certification required.

46. SYNTHETIC RUBBER COMPONENTS HARDNESS READINGS

When required by drawing notes and/or purchase order requirements, certifications with the noted readings for Durometer or other applicable hardness reading pertaining to rubber/synthetic rubber products shall be provided for each lot of parts submitted to Ontic UK. Each lot shall be identified and packaged separately.

47. ELECTRICAL/ELECTRONIC ASSEMBLY & SOLDERING REQUIREMENTS

All electronic assembly and soldering shall conform to the criteria established in IPC-A-610, current revision.

Technicians performing work on and inspectors engaged in final acceptance of electrical/electronic products for purchase by Ontic UK shall be Certified Application Specialists per IPC-A-610 or J-STD-001, current revisions.

All electronic assembly and soldering shall conform to the criteria of IPC-A-610 Class 3 unless specified differently on Ontic UK Purchase Order.

All soldering must be done in accordance with the Engineering drawing, including the usage of tin/lead solders. No deviation from specified solder is permitted.

48. WELDING/BRAZING REQUIREMENTS

All welding/brazing shall conform to the criteria established in the specification or workmanship standard noted on the applicable engineering drawing or Ontic UK Purchase Order. Certification to the imposed specification shall be provided with each order supplied.

49. CUSTOMS TRADE PARTNERSHIP AGAINST TERRORISM (C-TPAT)

In support of Boeing's C-TPAT implementation programme, **these security requirements and guidelines** are provided to international shippers to institute effective security practices designed to ensure supply chain security to mitigate the risk of loss, theft and/or contraband smuggling that could be potentially introduce terrorists and implements of terrorism into the global supply chain.

Relevant Boeing product shippers must complete an Ontic UK **Security Questionnaire to enable the** above implementation programme within the global supply chain.

50. REACH STATUS REGULATIONS AND SUBSTANCES OF VERY HIGH CONCERN

Restriction, Evaluation and Authorisation of Chemicals (REACH).

Products purchased from your company and Products sold by Ontic **UK** are "Articles" as defined in the REACH (Article 3 Definitions). Moreover and under normal and reasonably foreseeable circumstances of application, the article(s) supplied shall not release any Substances of Very High Concern (SVHC).

Your obligation to Ontic **UK** is to declare the presence of an SVHC in the Article (Part) you supply.

All future orders will have the following statement:-

REACH Status regulations and Substances of Very High Concern (SVHC's)

All delivered articles (Parts) must have a clearly defined statement informing Ontic of the known REACH status of the article (Part) included on the C of C or on the delivery paperwork.

Eg: This article (part) does/does not contain SVHC's

(If the article does contain SVHC's then state the type and % weight SVHC/per article. I.e.:> or < 0.1% w/w of SVHC's present)

Ontic **UK** are obligated to declare to their customers any substance that is on the Substance of Very High Concern (SVHC) list, Ontic **UK** will follow information obligation as per Article 33 of REACH regulation (EC No: 1907/2006)

See www.echa.eu for guidance