


# Supplier Quality

## Manual

(GI-SQM)

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**Revision History**

<u>Revision</u>	<u>Date</u>	<u>Detail</u>
1	July 2017	First Issue Document
2	June 2019	Updates to supplier references to Numeric (from Alpha). Typo corrections
3	31/07/2019	Para 1.1 – Added statement re: product safety

**Prepared By**  
Craig Longworth

**Approved By**  
Matthew Byrne

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## 1. Purpose, Scope and Applicability

### 1.1. Introduction

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

Goodwin International would like to take the opportunity to thank its supply chain for their hard work and dedication towards helping Goodwin and our clients realise their ambitions in a variety of demanding applications throughout the most demanding market sectors available.

This document aims to clarify the purchasing process to our suppliers and effectively communicate the requirements we have to satisfy on our current and future products. You will see each section has a table for the Supplier Type and QA Grade. [\(Section 1.3\)](#)

Suppliers are reminded that they are responsible for adhering to the requirements of the contract/purchase order to fully mitigate any potential risk to product safety.

### 1.2. Nuclear Safety Culture

Supplier Type	1	2	3	4
QA Grade	1			

Goodwin International takes our responsibility for Nuclear Safety extremely seriously and as a supplier to Goodwin International it is important that you understand your role in the supply of components for the Nuclear Industry, both Civil and in the Military market sectors.

Conformance to requirements, honesty, trust and integrity are fundamental parts of the relationships we encourage with our suppliers and customers. Not identifying mistakes or performing unplanned processes can lead to disastrous consequences on a global scale for the industry leaders we are working with. Parts without traceability or from counterfeit material shall be prevented from entering the supply chain and reported inline with company policy [\(Section 5.15\)](#)

### 1.3. Quality Grading System

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The Goodwin International Quality Grading System for Purchasing explains the implications of the sections of this document, applicable to you (the supplier).

#### Supplier type

1	Safety Critical Supplier	Foundry's, Forging and Billet Suppliers
2	Raw Material	Raw Material Stockists
3	Manufacturers	Machining and Manufacturing Suppliers (Build to Print)
4	Special Processes	Special Process and Testing (inc special consumables)
5	Consumables	Not in this scope

#### QA Grading

1	Very High Risk	High Integrity Application with Nuclear Cleanliness
2	High Risk	High Integrity Application
3	Medium Risk	Demanding Process or Geometry / Tolerances
4	Low Risk	Basic Processes / COTS / Relaxed Tolerances

The supplier is required to comply with different levels of commodity grading on different projects. This is designed to reduce costs and levels of quality assurance, where necessary to meet less demanding requirements. **Quality Control requirements do not waiver.** You will see that commodity grading turns on and

off different requirements of this document. Only work to paragraphs marked to the appropriate commodity level, per order.

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**1.4. Forms and Templates**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

Unless otherwise stated in the purchase order or this document Goodwin International does not prescribe that the supplier must use Goodwin forms or templates, or those of our clients.

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**1.5. Order of Precedence**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

Where conflict arises between contract specifications, governance and legislative requirements, the supplier shall adopt the following order of precedence.

1. Legal and Regulatory Requirements and Law
2. The Purchase Order
3. The Request For Services (Named on the PO if applicable)
4. Component Definition (Drawing / Specifications)
5. National / International Standards
6. This document

Where doubt exists, please contact your Goodwin Point of Contact for clarification ([Section 3.3](#))

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## 2. Management System Requirements

### 2.1. Management System Certification

Supplier Type	1	2	3	4
QA Grade	1	2	3	

The supplier shall:

a) Have a documented management system that is compliant with:

- ISO 9001 standard (or equivalent) for quality management systems
- ISO17025 standard for testing and calibration laboratories [1]

b) Ensure that the documented management system is traceable to the United Kingdom Accreditation Service (UKAS) or an international/national equivalent

c) Work only within the scope of their management system certification.

**NOTE 1: ISO9001 certification is an acceptable alternative to ISO 17025 when the scope of approval of an ISO9001 certified organisation specifies testing and/or calibration that is conducted as an in-house laboratory activity to support in-house production activities.**

### 2.2. Goodwin International Approval

Supplier Type	1	2	3	4
QA Grade	1	2	3	

Prior to any contract being awarded to a supplier, the supplier is required to hold approval by Goodwin International. This is the responsibility of your Goodwin Purchasing Contact.

The supplier has some obligations which they must maintain in order to remain approved by Goodwin International.

The Supplier Shall:

Maintain their management system certification for the duration of all placed contract AND notify Goodwin via their approved contact if this is in doubt or has been removed.

Have an effective Business Continuity Plan. ([Section 2.5](#))

### 2.3. Deliverable Quality Plan

Supplier Type	1		3	
QA Grade	1			

Suppliers entering into a partnership / collaboration with Goodwin International, or those suppliers working with Goodwin on Nuclear / Defence Applications shall create and maintain a business level Deliverable Quality Plan which complies with requirements of AQAP2015.

The DQP shall evidence that the supplier understands the requirements of this document, their obligations and demonstrates to the Goodwin point of contact that their QMS interface with the GI requirements have been understood and clarified.

**2.4. Supplier Code of Conduct**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The supplier shall:

Demonstrate compliance with the Goodwin International Supplier code of conduct which is available to view and download from the Goodwin International website. [www.goodwininternational.co.uk](http://www.goodwininternational.co.uk)

**2.5. Business Continuity Planning**

Supplier Type	1		3	
QA Grade	1	2		

The supplier shall:

Maintain an effective Business Continuity (Management) Plan to highlight and mitigate risks to the suppliers business which may impact business activities, operations and the Goodwin forward order book. This may be requested by and reviewed by Goodwin at anytime and should remain a live document with regular review cycles.

**2.6. Design and Development**

Supplier Type	1		3	4
QA Grade	1	2	3	

Where a supplier is contracted to perform product Design and Development on behalf of Goodwin International or our clients then this must be completed in accordance to a defined, documented process which is to include the management of changes. This shall be approved by Goodwin international prior to the commencement of works.

**2.7. Pre-Contract Review**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The Supplier shall:

- a) Upon receipt of a RFQ from Goodwin international, the supplier shall review the requirements of the enquiry and ensure that all gaps in understanding are clarified in writing via the point of contact (Purchasing).
- b) Assess production feasibility to ensure that the product can be produced in accordance with the standards, specifications and tolerances specified by Goodwin International.

It is extremely important that the information is communicated effectively to provide the supplier with the best opportunity to be accurate in their quotation in terms of cost, technical understanding and lead-time.

The accuracy of this information directly impacts project performance, the supplier’s scorecard metrics and the reputation of you, the supplier, Goodwin International and our client.



**2.8. Contract Review**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The supplier shall:

- a) Review the purchase order/contract, prior to committing to supply the product or service and acceptance of purchase orders/contracts
- b) Maintain records of the contract review for 6 years. *(Section 3.1)*

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**2.9. Lines of Communication**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

As a supplier to Goodwin International you should always maintain effective lines of communication to ensure clarity of approach and to ensure that your concerns and communications are directed and managed in the most efficient manner.

Points of contact will be defined within the Purchase Order or accompanying Request for Services.

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**2.10. Technical Query**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

Should the supplier have a query of a technical nature, regarding their scope of works during the contract acceptance or delivery, they shall document their concerns on a Goodwin International Technical Query form. This form is available from your purchasing contact or the Goodwin International Ltd. website, and should be completed in its entirety and supplied to your purchasing contact and relevant QA personnel for the business sector in question *(Section 2.9)*

The supplier shall:

- a) Submit a Technical Query (TQ) form where clarification of drawings, specifications or other technical definition documents is required
  - b) Maintain a register of technical queries
  - c) Maintain records of technical queries permanently. *(Section 3.1)*
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### 3. Planning, Production & Inspection of Product or Service

#### 3.1. Control of Goodwin / Customer Documents and Records

Supplier Type	1		3	4
QA Grade	1	2	3	

To deliver the contract/order requirements, it may be necessary for the supplier to receive controlled documentation from Goodwin International. This documentation forms part of the contract documentation and where required, forms the standard which the supplier is to work towards achieving. This will be clear from the RFS/Purchase Order

The supplier shall:

- a) Establish a documented procedure to control documents & records
- b) Comply with the current revision of documents/specifications from the date of Goodwin International purchase order acknowledgement (or purchase order amendment acknowledgement)
- c) Ensure that documents & records requiring authorisation by Goodwin International are written in English
- d) Where applicable, handle and Control documentation in accordance with its security classification. Secure documentation should be transmitted only after an agreed Security Aspects Letter has been agreed. The SAL shall define any special handling requirements.
- e) Maintain a log of project documents used on the contract; this shall include any documentation created by the supplier to meet their contract obligations. Including approvals and document revisions
- f) Control records related to Goodwin International purchase orders/contracts in a manner that will allow the recovery of a readable version of any records (including electronic records) by ensuring that:
  - Records are retrievable on request within 24 hours
  - Records created by subcontractors/sub-tier suppliers are appropriately controlled and retained in accordance with these requirements
  - Hand-written amendments to records are annotated by striking through the error (leaving the original information readable) and then signing and dating (in ink) the handwritten change
  - The storage, usage and disposal of records are performed in a manner appropriate to their security classification (when stated) and will prevent unauthorised or fraudulent use.

#### Permanent

Retained permanently or until Goodwin has instructed the supplier to dispose of the records. Goodwin shall be the final disposal authority. These Include: Manufacturing Route Records (Completed), Test Results, Inspection Records, NDE Reports, Technical Query's, Training and Competence Records.

#### 6 years

Records are to be retained for six years minimum, commencing from the date that the product or service was delivered to Goodwin International. The supplier can dispose of these records at the end of the specified period.

**3.2. Nuclear Manufacturing, Cleanliness and Cross-Contamination Control**

Supplier Type	1	2	3	4
QA Grade	1			

Where applicable to the contract, the supplier shall ensure that metallic material is controlled during its storage, processing, handling and packaging.

- Metallic Material shall not contact another metal outside of its own material group without the use of an approved barrier medium (Stainless Steels, Low Alloy (Carbon) Steel, Nickel Alloys etc)
- Metallic Materials shall not contact metals from the group “Low Melting Point Alloys” (Copper, Tin, Cadmium, Zinc etc)
- Machines, Tooling and processing equipment shall be cleaned down prior to use to an approved procedure to control the exposure of product to cross contamination with undesirable contaminants. Machine coolant and filter shall be changed for fresh clean coolant of an approved variety. Speak to the Project Engineering QA contacts (See 4.3) for more information if required.
- Hand tools and lifting equipment shall be dedicated to their own material group.
- Whenever possible the supplier shall keep the component covered to prevent airborne contamination. The local area, to the component, shall be assessed for other activities which may compromise the materials risk of exposure to undesirable contamination. For example Grinding and fettling activity of ferrous material is not permitted in the work area where it may cause airborne contamination of Nickel Alloy or Stainless components.

**3.3. Foreign Object Debris – Management**

Supplier Type	1	2	3	4
QA Grade	1	2		

The finished product may be operating in the most extreme and demanding environments. All products supplied to our clients, from or via Goodwin International are classed as FOD sensitive and require management from both our trusted supply chain and our internal staff.

The supplier shall:

- Ensure that, at the stage where the component is ready for release, the component and packaging contains no Foreign Object Debris. This shall be achieved via product audit and inspection to aid FOD detection AND/OR preferably by in-process FOD control techniques and measure to significantly reduce the occurrence.

Examples of FOD (Not Exclusive)

- Process Waste: Swarf, Coolant, Oil, Cable Ties, Cut Wire, Wipes, Wood Splinters/Shavings
- Process Artefacts: Machine Tool Tips, Hand Tools, Pens, Gloves, Ear Defenders, Safety Glasses
- Un-approved packaging mediums
- Screws, Fixings, Nuts, Bolts and Washers

*FOD delivered to our customers can be responsible for the safety and lives of Operator and Staff, Members of the Public, Plant Equipment and the Reputation of Goodwin International and you the Supplier.*

*If you have any concerns about FOD or the implications please contact the Project Engineering QA Contacts ([Section 2.9](#))*

**3.4. Traceability**

Supplier Type	1	2	3	4
QA Grade	1	2	3	

**Metallic Material Traceability**

- All metallic material purchased by the supplier shall be provided with certification to evidence conformance to the requirements of BS EN 10204 3.1; unless otherwise stated on the Purchase Order or via a contract specific Request for Services.
- Where BS EN 10204 3.2 certification is stipulated in the purchase order this shall require the witness of BOTH Chemical and Mechanical product analysis results by an independent IACS approved authority\*.
- Where the supplier is provided with free-in-aid material from Goodwin international. Traceability shall be maintained to the part marking supplied and the purchase order requirements (Serial no etc)

\* Unless permission is given in writing by the Goodwin QA Authority, where the requirement to not witness repeat Chemical analysis could be granted depending upon the market sector and suitability of original result set.

**3.5. Method of Manufacture**

Supplier Type	1	2	3	4
QA Grade	1	2	3	

Unless providing a 'COTS' product or 'product of IP/Design' owned by the supplier, the supplier shall create an MITP / Route Card which clearly demonstrates the route of manufacture in a logical sequence to meet to the design intent

Shall include

- Special process data
- Sub-Contracted activities
- Inspection Points
- Acceptance Criteria / Documents
- Record Documents
- The Operators Signature/Stamp and Date for each operation

Records of completed Manufacturing Routes / MITPs shall be retained permanently. *(Section 3.1)*

**3.6. Special Processes**

Supplier Type	1	2	3	4
QA Grade	1	2		

The supplier shall:

- a) Use sources agreed by Goodwin International for the provision of special processes.
- b) Establish documented procedures and data cards for any special processes that are carried out by the supplier (or their subcontract/sub-tier suppliers) and submit to their Goodwin QA Contact prior to use for initial approval] and approval of any changes. *(Section 2.9)*

- c) Maintain a traceable reference to the person authorised to approve documented procedures and data cards
- d) Maintain records of special process procedures/data cards and results permanently. *(Section 3.1)*

*NOTE 1: Where the supplier owns the design rights for the product or service, these documented procedures and/or data cards do not need to be approved by Goodwin.*

*Note 2: For a definition of special processes, please refer to the 'definitions' section of this document*

### 3.7. Process Risk Management

Supplier Type	1	3		
QA Grade	1			

#### Risk Identification

The supplier shall:

- a) Review the method of manufacture and highlight key risks to the process. The risks shall be identified and scored for their potential Severity, their likelihood of Occurrence and the present method of Detection within the current process operations. The multiplication of these three factors will give a Risk Priority Number.
- b) Mitigated High Risks with appropriate actions to prevent the risk from Occurring or to improve the Detection opportunity.
- c) Identify and document which processes hold the highest risk of potential failure and the effects of that failure related to the product, process or service
- d) Review/update the risks when changes are made to product definition, process operating conditions or when non-conformance has been identified
- e) Provide feedback to the Goodwin International QA department *(Section 2.9)* when appropriate risk mitigation cannot be provided
- f) Maintain records of Risk Management for 6 years commencing from the date that the final product was delivered to Goodwin International. *(Section 3.1)*.

#### Risk Management

The supplier shall:

- a) Develop process controls for the identified Risk outputs for each product or service in advance of producing the product or service
- b) Review and update process controls when any change occurs affecting product, service, production process, measurement, logistics, supply sources or PFMEA
- c) Maintain a process to review the effectiveness of these process controls
- d) Maintain records of process controls for 6 years commencing from the date that the final product or service was delivered to Goodwin International *(Section 3.1)*.

**3.8. Training and Competence**

Supplier Type	1		3	4
QA Grade	1	2	3	

The Supplier shall

- a) Ensure that personnel are competent on the basis of appropriate education, training, or experience
- b) Identify training needs and succession planning
- c) Maintain records of training and competence permanently *(Section 3.1)*.

**3.9. Calibration of Measuring and Test Equipment**

Supplier Type	1	2	3	4
QA Grade	1	2	3	

The Supplier shall:

- a) Ensure that the monitoring/measuring equipment used to perform product verification (see 6.1) activities is calibrated and traceable to international or national measurement standards
- b) Ensure that the measurement and calibration systems applied are in accordance with BS EN ISO 10012 (Measurement Management Systems)
- c) Maintain records of calibration permanently. *(Section 3.1)*

**3.10. Measurement Systems Analysis (MSA)**

Supplier Type			3	
QA Grade	1			

The supplier shall:

- a) Perform suitable measurement systems analysis to prove measurement capability and record results.
- b) Have personnel available who are trained and competent in measurement systems analysis techniques and statistical studies
- c) Ensure that the monitoring/measuring equipment is calibrated *(Section 3.9)*.
- d) Ensure participants in the study are representative of those using the measurement systems in production
- e) Perform a review of measurement capability where tolerances, personnel or environmental conditions have changed
- f) Maintain records of MSA for 6 years *(Section 3.1)*.

NOTE 1: Measurement system analysis techniques and statistical studies refer to Gauge Repeatability & Reproducibility and/or Attribute Agreement Analysis.

NOTE 2: Guidance for MSA is available upon request from Goodwin International

**3.11. Process Audit**

Supplier Type	1		3	
QA Grade	1	2		

The supplier shall:

- a) Establish a documented procedure for an audit programme that includes an audit of a process operational sequence related to the production activities to determine that the process is fit for purpose and to verify compliance to planned arrangements related to Goodwin International purchase orders/contracts. The audit programme shall be prioritised based on risk and include purchased/subcontracted activities
- b) Establish specific checklists to be used for each audit
- c) Take immediate action when an audit result identifies a product nonconformity
- d) Take appropriate corrective action within 90 days or prior to shipment of product (whichever is the soonest) *(Section 4.4)*
- e) Maintain records of process audits for 6 years. *(Section 3.1)*

NOTE 1: The operational sequence refers to how the required production/manufacturing will be carried out as specified in the MoM (see 5.4).

**3.12. Purchasing and Sub-Contractor Management**

Supplier Type	1	2	3	4
QA Grade	1	2		

**Purchasing Requirements**

Where Goodwin International owns the design for the product, process or service the supplier may select, approve and maintain a sub-tier supplier network when authorised/approved by Goodwin International to control sub-tier suppliers.

Where the supplier (purchaser) owns the design for the product, process or service then the supplier may select, approve and maintain a sub-tier supplier network without authorisation/approval by Goodwin International.

The supplier shall:

- a) Only purchase from a source holding ISO9001 and/or ISO17025 as appropriate. *(Section 2.1)*
- b) Flow down the applicable requirements and expectations of the supplier (purchaser) and Goodwin International to their sub-tier/subcontract suppliers
- c) Ensure that international/national standard metallic material specifications are purchased from a source holding ISO9001 certification and are tested to specification (chemical analysis and mechanical test) by an ISO17025 certified inspection and testing laboratory. *(Section 2.1)*
- d) Ensure material stockist/distributors provide traceability to the raw material manufacturer



- e) Maintain records of purchase orders for 6 years. *(Section 3.1)*

NOTE 1: Goodwin International agreement is required to re-certify material produced to an international/national standard to BS EN 10204.

### Supply-Chain Management

The supplier shall:

- f) Establish and maintain a supply chain map listing all levels of sub-contract/sub-tier suppliers in support of Goodwin International purchase orders/contracts, the approval/accreditation/certification held and the scope of operations performed
- g) Monitor key subcontractor/sub-tier supplier performance through the following indicators:
- h) Delivered product or service quality
- i) Customer disruptions/customer returns
- j) Take appropriate corrective action with poorly performing subcontractor/sub-tier suppliers *(Section 4.4)*
- k) Maintain records of subcontractor/sub-tier supplier monitoring for 6 years. *(Section 3.1)*

#### 3.13. Goods Inwards

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The supplier shall:

- a) Have a goods inward process to check that purchased raw material, product or service meets the purchaser's requirements
- b) Perform inspection and test activities to verify purchased product when required *(Section 4.1)*
- c) Ensure that the required supporting documentation has been provided with the purchased product or service that states that the product or service meets specified purchase requirements
- d) Maintain records of goods inward for 6 years *(Section 3.1)*

NOTE 1: The supplier may accept the release documentation from Goodwin International as sufficient evidence of product traceability, where the product is provided by free-in-aid.

#### 3.14. Counterfeit, Fraudulent and Suspect Items (CFSI)

Supplier Type	1	2	3	
QA Grade	1	2		

The supplier shall:

Demonstrate arrangements have been established to actively plan and manage the risk of Counterfeit, Fraudulent and Suspect Items (CFSI) in accordance with Def Stan 05-135 – Avoidance of Counterfeit Materiel which is available to view and download from <https://sts.defencegateway.mod.uk/>

#### 3.15. Tooling Control

Supplier Type	1		3	
QA Grade	1	2		

The supplier shall:



- a) Establish a system for the management of production tooling that includes (but is not limited to) the following:
- Unique tool identification
  - Validation of tooling prior to release for production
  - Tooling set-up
  - Tooling life control/tool-change programmes
  - Tooling modification and revision
- b) Ensure that tooling owned by Goodwin International and/or Goodwin International customers/Government Furnished Equipment (GFE) are controlled as shown above, plus the following:
- Identified as Goodwin International owned
  - Tooling register established
  - Used only for Goodwin International applications
  - Audited annually (stock take) and periodic preservation/condition checks for tooling held in storage
  - Modifications only after written authorisation by Goodwin International **(Section 3.3)**
  - Disposal only after written authorisation by Goodwin International
- c) Maintain records of tooling control for 'b' above for 6 years. **(Section 3.1)**

*NOTE 1: Tooling also includes jigs and fixtures*

**3.16. Part Marking**

Supplier Type	1	2	3	4
QA Grade	1	2	3	

The supplier shall ensure that EACH component is suitably identified at all stages of manufacture to maintain traceability **(Section 3.4)**

Parts shall be marked using a Label, fixed to the components by means of string to provide final marking details. Unless otherwise stated in the contract.

Minimum marking as follows, unless otherwise specified in the contract Purchase Order or Request for Services:

- Goodwin Purchase Order Number
- Part Number and Revision
- Quantity (where individual marking is not possible, clarify with Goodwin QA)
- Cast/Heat Number (as appropriate)
- Serial Number (as appropriate)
- Cure Date / Shelf Life (as appropriate)

**3.17. Product Preservation**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The supplier shall

- a) Take all necessary steps to ensure that the product shall be received at Goodwin International in a condition suitable for use without the effects of deterioration and corrosion.

- b) Ferrous materials may be coated in a rust inhibiting substance, for example: Swarfega Duck-Oil. This should be approved in writing by the Project QA authority in advance.
- c) Stainless and High Alloy steel shall be protected from cross contamination with Ferrous and other materials during packaging and transit.
- d) There may be restrictions on the types (and brand) of products that can contact finished components. You should understand these from the contract or clarify with Goodwin QA in advance.
- e) Rubber goods should be stored to prevent deterioration from UV light

**3.18. Cleaning**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

Unless otherwise stated in the Purchase Order / RFS. The **minimum** requirements are as follows:

- The supplier shall ensure that the components supplied are cleaned to a good commercial standard to removed Grease, Debris and Swarf and to remove all traces of manufacturing residue.

There is no minimum requirement for COTS components

**3.19. Labelling**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The component / packaging should have a label applied to ALL Layers of packaging which clearly identifies the following information as a minimum unless stated elsewhere in the PO or RFS.

- The Goodwin Purchase Order Number and Line Item
- Part Number and Revision

**3.20. Storage of Goods / Material**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The supplier shall ensure that:

- Material received “Free-In-Aid” from Goodwin International shall be stored in accordance to its material group (Stainless Control)
- Material shall be protected from unauthorised use
- Material shall be protected from damage and deterioration
- Finished Goods prepared for shipment to Goodwin shall be stored in condition appropriate to their packaging specification to ensure they are not provided in a deteriorated or contaminated condition

## 4. Verification of Product or Service

### 4.1. Product Inspection and Verification

Supplier Type	1	2	3	4
QA Grade	1	2	3	

The supplier shall:

- a) Perform inspection and test activities on all product/process characteristics on all products to verify that requirements have been met in accordance with the contract requirements.
- b) Ensure that monitoring/measuring equipment used for the final verification/inspection of product is independent to those used for product measurement during production activities or will be re-calibrated/verified prior to use where independence cannot be achieved.
- c) Record the actual measurement results.
- d) Maintain records of product verification permanently. *(Section 3.1)*

### 4.2. Hold Points / Witness and Rights of Access

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The supplier shall:

- a) Allow the Goodwin International representative, their customer and third party inspection personnel the right of access to the applicable areas of all facilities, at any level of the supply chain involved in the purchase order/contract and to all applicable records to perform surveillance activities and the review of hold/witness points
- b) Provide the Goodwin International Purchasing Contact with a minimum of 2 working days' notice in writing prior to reaching a Goodwin hold/witness point. Or 15 Days where a customer or third party witness is required.

NOTE: Goodwin International will advise the supplier of the hold/witness points required for both customers and Goodwin International to be applied during manufacture via the MoM. *(Section 5.4).*

### 4.3. Control of Non-Conforming Product or Service

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The supplier shall:

- a) Establish a documented procedure for the control of nonconforming product or service
- b) Contain nonconformities by segregating (or identifying and controlling) the product or process to prevent its unintended use or delivery

- c) Take necessary actions to contain the effect of the nonconformity on other processes or products for work in progress, stores stock, shipping area, in transit, sub-tier/subcontract activities, similar products, despatched/delivered to customer (within 48 hours)
- d) Immediately notify their Goodwin of any delivered nonconforming product or service [\(Section 3.3\)](#)
- e) Clearly and permanently mark (or establish alternative controls to prevent use) product dispositioned as scrap until physically rendered unusable in accordance with the component definition security classification
- f) Take appropriate corrective action. [\(Section 4.4\)](#)
- g) Maintain records related to the control of nonconforming product or service permanently [\(Section 3.1\)](#).

**4.4. Corrective Action**

Supplier Type	1	2	3	4
QA Grade	1	2	3	

The supplier shall:

- a) Establish a documented procedure for corrective action
- b) Take appropriate corrective action to eliminate the causes of nonconformities in order to prevent recurrence
- c) Verify that the corrective action has prevented any recurrence of further nonconformities
- d) Flow down corrective action requirements to subcontractors/sub-tier suppliers (when applicable)
- e) Review/update the risk and the Process Control when corrective action has been identified [\(Section 3.7\)](#)
- f) Maintain records of corrective action for 6 years. [\(Section 3.1\)](#)

**NOTE 1: Where corrective action has been defined as rework, the product or process will be reworked in accordance with the MoM (see 5.4) sequence of operations or to an agreed rework procedure authorised by Goodwin International.**

**4.5. Deviation Permit / Concession**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The supplier shall:

- a) Complete and submit the deviation permit/concession request to their Goodwin QA Contact.
- b) Ensure that written authorisation for the deviation permit or concession has been granted by Goodwin International prior to the shipment of a product or service which does not conform to specified requirements
- c) Take appropriate corrective action. [\(Section 4.4\)](#)
- d) Maintain records of deviation permits/concessions permanently [\(Section 3.1\)](#)

**4.6. Light Levels**

Supplier Type	1	2	3	4
QA Grade	1	2	3	

- Applicable to product verification/inspection activities requiring accurate visual verification when no other standard related to light levels has been specified in the Goodwin International product definition.

The supplier shall:

Ensure product verification/inspection activities are performed in local lighting conditions that provide a white light intensity at the point of inspection of not less than:

- 500 LUX for dimensional inspection.
- 1000 LUX for NDE

**4.7. Vision Standard**

Supplier Type	1		3	4
QA Grade	1	2	3	

- Applicable to personnel conducting product verification/inspection that requires visual acuity when no other standard related to visual acuity has been specified in the Goodwin International product definition.

The supplier shall:

- Perform a near vision assessment of visual acuity on commencement of employment and at two (2) yearly intervals for personnel engaged in product or service verification/inspection activities
- Ensure that the vision assessment is performed by a trained/qualified person
- Ensure that optical aids used during product verification/inspection activities are worn during the vision assessment
- Perform a colour perception test at five (5) yearly intervals to ensure that personnel are capable of distinguishing and differentiating colours only where colour perception is required for product or service verification/inspection activities
- Retain records of vision standards permanently. *(Section 3.1)*

**4.8. First Article Inspection Reporting (FAIR)  
/ Sample Approval Process**

Supplier Type	1		3	4
QA Grade	1	2		

- This requirement is applicable when the contract identifies the product as FAIR.
- FAIR is not applicable to elements of the process related to material or product provided by Goodwin International.
- Suppliers of castings shall conform to the requirements of the Goodwin International process for Sample Approval (Goodwin process Ref SA001. Liaise with your point of contact for details.

The supplier shall:

- Perform a FAI on the first production product to be delivered in accordance with AS/EN/SJAC 9102 specification and forms
- Submit the FAI report (FAIR) to the Goodwin International QA Contact for approval. *(Section 3.1)*
- Only release product against a FAIR authorised by Goodwin International
- Maintain records of FAIR permanently. *(Section 3.1)*

## 5. Release and Delivery of Product or Service

### 5.1. Certificate of Conformity (C-of-C)

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The supplier shall:

- a) Provide separate C of C with the delivery of each product, process or service
- b) Ensure that the C of C is written in English and contains the following information as a minimum:
  - Unique traceable document reference number
  - Supplier's name, address and telephone number
  - Delivery address
  - Goodwin International purchase order number (including purchase order item number)
  - Description of the product (as referenced in the Goodwin International purchase order)
  - Part number (as referenced in the Goodwin International purchase order)
  - Kit number (when applicable) – plus a list of part numbers, quantities, serial numbers
  - Traceable reference (serial, batch, lot, heat, cast numbers - as applicable)
  - Quantity
  - Date of despatch/completion
  - Conformance/compliance statement
  - Signature of person authorised to release the product to the customer ([Section 3.8](#))
- c) Provide additional information (when applicable):
  - First Article Inspection Report (FAIR) number
  - Goodwin International deviation permit/concession number
  - Hazardous substances/safety data sheet (safety data sheet to be provided)
  - Shelf life (cure date, batch, group) – no mixed cure dates/batches
  - Copy of lifting equipment certification
- d) Material certification: See Traceability
- e) Maintain records of C of C's permanently. ([Section 3.1](#))

*NOTE 1: Typical compliance statement: "Certified that the whole of supplies hereon have been inspected/tested and unless otherwise stated, conform in all respects to specification, drawing and purchase order requirements".*

*NOTE 2: Records of C of C's held electronically shall contain all of the information shown in the original document and a traceable reference to the person authorised to release the product to customer.*

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**5.2. Documentation Pack / Life Time Records Requirements**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The supplier shall:

Provide Goodwin International with a readable version of records (including electronic records) at point of release, comprising of the relevant documents specified in Table 1 of this document “Documentation Pack (DP) requirements”.

Table 1 identifies the documentation that will be delivered with the product related to the classification of the product.

NOTE: A copy of the documents stated above will be retained by the supplier in accordance with Control of customer documents and records. [\(Section 3.1\)](#)

**5.3. Release of Goods**

Supplier Type	1	2	3	4
QA Grade	1	2	3	4

The supplier shall release goods for delivery or collection by Goodwin (Refer to Contract for detail) once all contractual Quality Requirements have been met and/or the approval to ship has been received from the Goodwin Purchasing contact.

Where the goods are available for collection, the supplier shall notify the Goodwin International Purchasing Contact and Logistics Manager. [\(Section 3.3\)](#)



## 6. Supplier Performance

### 6.1. Key Performance Indicators

Supplier Type	1	2	3	4
QA Grade	1	2	3	

The supply chain, as a minimum, must have a set of Key Performance Indicators for:

- a) Quality Performance
  - b) Delivery Performance
-

**Table 1 - Documentation Approval / LQR Requirements**

Section	Record / Document	QA Grade			
		1	2	3	4
1	FAIR Forms <i>(Only where FAIR is stated in PO / RFS)</i>	SUB	NR	NR	NR
	Certificate of Conformity	SUB	SUB	SUB	SUB
	Photo / Evidence of Part Marking	SUB	NR	NR	NR
2	Deliverable Quality Plan (where applicable)	APP	NR	NR	NR
	Risk Management Methodology	RET	RET	NR	NR
3	Method of Manufacture - MITP/ Route Card (Activities to be signed and dated on completion)	APP SUB	APP SUB	SUB	NR
4	Concessions / Production Permits/ Technical Queries / Waivers	SUB	SUB	SUB	RET
5	Project Document Log	SUB	RET	RET	NR
6	Results of each performance test (Factory Acceptance Test - FAT)	SUB	SUB	SUB	SUB
7	Balloon Drawing <i>(Only where FAIR is applicable)</i>	SUB	NR	NR	NR
	Dimensional Inspection Report (where applicable)	SUB	SUB	SUB	SUB
8	Material Manufacturing Procedures (e.g. Forging, Casting, Heat Treatment procedures)	APP	APP	RET	NR
	Material Certification (including Quality Heat Treatment Records and Time/Temp trace charts)	SUB	SUB	SUB	SUB
9	NDT Procedures / Techniques	APP	APP	RET	NR
	Non Destructive Testing Report(s)	SUB	SUB	SUB	NR
	NDT Operator Qualifications	SUB	SUB	RET	NR
10	Weld Procedures (WPS) / Procedure Qualifications (PQR)	APP	APP	RET	NR
	Weld Map	APP	APP	RET	NR
	Welding Logs / Consumable Certification / Welder Qualifications	SUB	SUB	SUB	NR
11	Heat Treatment Procedure / Data Card	APP	APP	RET	NR
	Heat Treatment Records (Post Weld & Stress Relief)	SUB	SUB	SUB	NR
12	Coating / Painting Procedures	APP	APP	RET	NR
	Surface Coating (Painting/Plating) Reports	SUB	SUB	SUB	NR
13	Other Records specified by the Purchase Order / RFS	SUB	SUB	SUB	SUB

**Key**

APP	Submit for approval prior to manufacture
SUB	Provide as evidence as part of final doc pack/Lifetime Quality Records
RET	To be retained by the supplier
NR	Not Required