



## Raw Material Quality Clause Requirements

### **Quality Notes:**

The following Q clauses in this section is the responsibility of your organization to comply. At the discretion of Titanium Industries, our Quality Department may elect at any time to review compliance to the below Q clauses;

**Q001 Ethical Business Conduct**

**Q002 QMS Requirements.**

**Q005 Approved Supplier Listing**

**Q008 Copy Exact**

**Q009 Change Control**

**Q010 Record Retention**

**Q011 Right of Access**

**Q012 CI Confidential Information/IP Intellectual Property**

**Q013 DFARs/ACEA / ITAR ( International Traffic in Arms Regulations)**

**Q016 Control & Monitoring of Suppliers**

**Q017 Other Applicable Items**

### **Mandatory Section**

The below Q clauses are Mandatory to all suppliers where they shall adhere and supply with each shipment made to Titanium Industries.

**Q003 Purchase Order Instructions.**

**Q006 Chemical and Physical Analysis of Raw Materials**

**Q007 Certificate of Conformance**

**Q014 Nonconforming Product**

**Q015 Supplier Packaging Requirements**

Supplier Performance Measurement – Seller’s performance under the contract will be measured by buyer for delivery to contract schedule, quality acceptance, and general performance evaluation.

Annual Representations and Certifications – Seller shall establish and maintain Annual Representations and Certifications on at least an annual basis. Seller shall ensure its Annual Representation and Certifications are current, accurate and complete.

### **Q001 Ethical**

#### **Business Conduct**

Titanium Industries Inc. (T.I.) and its Suppliers will conduct its business fairly, impartially, in an ethical and proper manner, and in full compliance with all applicable laws and regulations. In conducting its business, integrity must underlie all company relationships, including those with customers, suppliers, communities and among employees. The highest standards of ethical business conduct are required of T.I. suppliers. T.I. and its Suppliers will not engage in conduct or activity that may raise



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questions as to the company's honesty, impartiality, reputation or otherwise cause embarrassment to T.I.

### **Q002 QMS Requirements**

Seller is expected to maintain certification to the most current revision of ISO 9001, AS9100 and/or NadCap registration or provide action plans with timing to acquire the same.

### **Q003 Purchase Order Instructions**

It is the seller's responsibility to comply with all purchase order instructions. Unless otherwise authorized the specified revision to the applicable drawings and instructions, as well as authorized changes there to, flowed down within the P.O., shall be used for fabrication, inspection and testing of Titanium Industries Inc. (T.I.) products/services. Deviations without written authorization will result in product rejection and non-payment. All suppliers are required to follow the same flow down protocol to their respective sub-tier suppliers and/or special processors, as noted on Titanium Industries Inc. (T.I.) purchase orders.

### **Q005 Approved Supplier Listing**

The two primary methods for ensuring materials conform to contract, or substitution requirements are the use of reputable suppliers and detailed examination of the certification documentation. Titanium Industries Inc. (T.I.) purchase contracts often require the use of T.I. or OEM approved sources of material and for subsequent processing operations. These sources have been shown to provide materials and processing in tight conformance to specifications and requirements, thus providing high confidence that the material provided is correct and that material specifications are accurate. If the use of T.I. or customer approved sources is not required, the supplier is still responsible to choose sources known to be reliable and dependable.

Beyond the confidence gained through the competence and trust in qualified suppliers, objective evidence of the integrity of the material is contained in the certifications provided by the supply chain. Suppliers are expected to understand that conformance to the material specification goes beyond chemistry and physical properties that are demonstrated through required testing. The specifications are effective only when the processing history, material form, and size are consistent with those required and/or assumed by the specification.

These other considerations, beyond composition and mechanical property tests, are very important. Statistically derived design allowances other than specification minimums, as well as secondary properties not routinely tested for in the material specifications, may



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vary for alternate product forms or sizes. The static mechanical properties tested in the material specs, namely ultimate tensile strength, yield strength and ductility, are merely a convenient set of easily performed tests, which when coupled with the product form, size and historical databases of secondary properties and statistically derived parameters may no longer be valid. Fracture toughness, stress rupture, fatigue resistance, and creep resistance are examples of significant design parameters that are generally not determined on each lot of raw material. Their values are based on the product form size, and standard industry practices used to make such product.

### **Q006 Chemical and Physical Analysis of Raw Materials**

Each shipment of parts shall be accompanied by physical and chemical reports of analysis or tests conducted to insure that parts produced conform to the required specifications.

### **Q007 Certificate of Conformance**

- Reports (Full Pedigree From Melt to Final Product) – Raw material certifications shall show clear traceability to the manufacturer(s) of the raw material including ingot source, all thermo-mechanical processing (i.e. forging, rolling, drawing, etc), heat treatment, chemical processing and inspections as required by applicable raw material specification requirements.
- Chain of Custody (Disguising intermediate ownership) – Suppliers shall not disguise the pedigree of material or chain of ownership by removal of a previous supplier's name, nomenclature or identification.
- The substance of this Article shall be flowed in all subcontracts at every tier.

Material supplied on this purchase shall be accompanied by a C of C, which must include the following information, as a minimum:

1. Manufactures name and address.
2. Purchase order number.
3. Part number, revision and quantity.
4. Authorized agent's signature, title and date.
5. Statement of conformance to all requirements and specifications with latest revision.
6. Parts manufactured in a mercury free environment statement and is lead free.

### **Q008 Copy Exact**

- Seller agrees to advise Buyer's authorized procurement Representative of any change, initiated by Seller to the design, form, fit, or function of the goods furnished under this contract. Furthermore, any change involving a substitution of material, changes in Seller's manufacturing and/or acceptance processes, or changes in manufacturing



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locations will be submitted immediately in writing to Buyer's Authorized Procurement Representative for processing and review. Buyer will, within 15 days after receipt of the written notice:

- Notify Seller of acceptance, rejection, or other status of such changes.
- In no event will Seller incorporate such changes without Buyer's prior written approval. Nothing contained in this clause will excuse Seller from performing in strict compliance with the terms, conditions, delivery schedule, specifications, or any other provision of this contract. Noncompliance with this change notification requirement will result in subsequent rejection of delivered items and actual and/or consequential damage.

### **Q009 Change Control**

- Suppliers are not authorized to make any changes to the design, material, supply chain, performance, fit, form and function of any product without written approval from Titanium Industries Inc. (T.I.). If the supplier makes any changes based on a verbal direction from any T.I. personnel, the items will be subject to rejection and returned for rework/replacement to conformance with the requirements of purchase order.
- Process improvement changes that directly affect the material specification shall be the responsibility of the supplier to notify TI for approval prior to any shipment of product.
- Unauthorized material substitutions are not permitted on Buyer's Goods. Unauthorized material substitution includes any deviation from the engineering definition of a raw material. Engineering definition includes Buyer design drawing and applicable specifications, product specification, form, size, shape, chemistry, melt method, origin, temper/condition, product testing or surface finish.
- **Temper or Condition Conversion** – Unless specifically authorized by T.I. conversion of a raw material (i.e. heat treat to change the temper or condition of the material) constitutes material substitution of the condition provided by the manufacturer.
- Seller shall ensure that metallic materials covered by current or obsolete/superseded specifications are produced using the standard industry practices designed strictly for the production of stock to the specified thickness, diameter, width or cross sectional area.



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- Thermo-mechanical processing or casting process. Chemical electrochemical and mechanical methods used for the removal of surface scale or contamination, or the production of the required surface finish.
- In accordance with the material specification are acceptable.

Raw material must not be re-certified with respect to thickness, diameter, and width or cross sectional area or product form. Machining or cutting of thicker product or other product forms shall not be supplied in lieu of specified product unless specifically authorized by Buyer.

- Seller shall implement an appropriate strategy to ensure that Goods furnished to Buyer under this contract are not counterfeit Goods. Seller's strategy shall include, but is not limited to, the direct procurement of items from OEMs or authorized suppliers, conducting approved testing or inspection to ensure the authenticity of items.
- Counterfeit Goods delivered or furnished to Buyer under this contract are deemed nonconforming. If Seller becomes aware or suspects that it has furnished Counterfeit Goods to Buyer under this contract, Seller promptly shall notify Buyer and replace, at Seller's expense, such Counterfeit Goods with Buyer-approved goods that conform to the requirements of this contract. Seller shall be liable for all costs related to the replacement of counterfeit goods and any testing or validation necessitated by the installation of authentic goods after counterfeit goods have been replaced. The remedies contained in this article are in addition to any remedies Buyer may have at law, equity, or under other provisions of this contract.
- Seller bears responsibility for procuring authentic Goods or items for its subcontractors and shall ensure that all such subcontractors comply with the requirements of this article.

### **Q010 Record Retention**

The contractor shall maintain adequate records of all inspections and tests. The records shall be traceable to shipped lots. During the performance of this contract and for a period of fifteen (15) years after acceptance of all goods to be delivered under this contract, Seller shall keep and maintain all inspection and test records, and all other technical data generated under or related to this contract including, but not limited to, drawings, designs, specifications, and manufacturing and process control records. Upon Buyer's request, Seller shall make available for inspection, and shall allow Buyer to make copies of, and take excerpts from, all such records and data

### **Q011 Right of Access**

The contractor shall provide Titanium Industries Inc. (T.I.), our customers, and regulatory authority access to all facilities involved in the order and to all applicable records.



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### **Q012 CI Confidential/IP Intellectual Property**

Intellectual Property (IP) is a customer's requirements extended to any sub-tier supplier being utilized to perform any procedure and/or process and information must be included within the Titanium Industries Inc. (T.I.) traveler.

### **Q013 ACEA/ITAR (Arms Export Control Act & International Traffic in Arms Regulations)**

Information and material pertaining to defense and military related technologies may only be shared with U.S. persons unless authorization from the Department of State is received, or a special exemption is used. U.S. Persons (including organizations) can face heavy fines if they have, without authorization or use of an exemption, provide foreign (Non – U.S.) persons with access to DFARs/ACEA/ITAR.

### **Q014 Nonconforming Product and Disposition**

The Seller is obligated to provide to the Titanium Industries Inc. (T.I.) Goods and Services that meet the requirements of the Purchase Contract. If the Seller is notified, discovers or suspects that Goods or Services delivered are not compliant to the terms of the Purchase Contract, Seller shall, within 24 hours provide the Procurement Agent and the Recipient/(s) with the following disclosure information on Corporate letterhead containing the following:

- a. Date
- b. Clear description of discrepancy (i.e.: should be and as is condition)
- c. Part numbers, quantities, purchase orders, ship dates, serial numbers, lot numbers, time frame of discrepancy etc.
- d. Root cause, root cause correction, follow-up (if available at the time of the Disclosure) If not available at time of disclosure a corrective action plan is required.
- e. Signatures shall include a representative of the Quality Assurance department or designee.

Nothing herein or in other parts of the contract shall be construed as granting the Seller the authority to make repairs, or accept without repair any nonconformance condition which adversely affects fit, form, function, safety, weight, maintainability or appearance (where a factor), of products to be applied to the contract.

It shall be Seller's continuing obligation to advise Buyer's Purchasing Representative in the event Seller discovers potential or actual non conformances prior to or during manufacture, and/or subsequent to delivery of goods under this Contract. Seller must provide written notice within twenty-four (24) hours of discovery.

In the event that any goods delivered under this contract are defective or non conforming, Seller shall promptly perform a failure verification or analysis and determine the



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appropriate corrective action at no additional cost to Buyer. Seller shall take the appropriate measures to correct all defects, determined to be Seller's responsibility, in all applicable documentation, undelivered goods, and delivered goods, as required by Buyer.

Seller shall immediately provide Buyer with full visibility of all programmatic aspects of failures and problems relevant to the goods being delivered by Seller under this contract; however, Seller is not required to provide Buyer information that would violate the confidentiality and commercial sensitivity of Seller's relationship with its other customers. Non-conforming shipments are subject to rejection, repacking and return costs at Seller's expense.

### **Q015 Supplier Packaging Requirements**

Seller shall package product to protect using wood or other protective barriers to prevent transit damage, deterioration, or corrosion of product.

### **Q016 Control & Monitoring of Suppliers**

Suppliers shall be initially evaluated through a survey and or onsite auditing based upon level of business. Suppliers will be raccessed as seen fit by Titanium Industries.

### **Q017 Other applicable items**

Suppliers and their personnel must be aware of their contributions to product or service conformity for the material they are providing to Titanium Industries.

Suppliers must be aware of their contributions for product safety as it interacts with processing our orders and supplying material to Titanium Industries.

In addition to **Q001**, Suppliers personnel are also required to understand the importance of ethical behavior as it applies to the product and services they provide Titanium Industries.