 <b>NEOTech</b> Corporate Document	<b>Standard Operating Procedure</b> <b>Purchase Order Quality Clauses</b>	Document Number <b>NT104</b> Revision: <b>F</b>
Original Author: <b>Magdy Henry</b>	Process Owner: <b>Corporate Quality</b>	Page 1 of 16

# Quality Clauses

Rev	Change Description	Changed By	Release Date	Effective Date
A	Initial Release	J. Cahill	9/1/2016	9/1/2016
B	Updated Table 1-4, added 199x, updated 299x and 399x	J. Cahill	9/15/2016	9/15/2016
C	Added Quality Clause 1x, 1a, 1b, 1c Replaced 306 with new 306x and 306a, and created new 307x and 307a Updated 399a table	J. Cahill	10/27/2016	10/27/2016
D	Major overhaul of NT104	M. Henry	2/5/2018	2/6/2018
E	Added commodity table with Quality clause groupings and refined Quality Clauses	M. Henry	2/15/2019	2/15/2019
F	Added PCB Fabrication Specification, NT404 link to Clause 33	V. Yamauchi	2/21/2019	2/21/2019

## Approvals:

Signature on file

2/21/2019

Signature on file


2/21/2019

Magdy Henry  
Vice President, Supply Chain

Date

Victor Yamauchi  
VP of Quality Systems and Continuous Improvement

Date

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## 1.0 PURPOSE

- 1.1 To provide NEOTech suppliers with the standard quality clauses / requirements to follow.
- 1.2 To standardize NEOTech requirements/clauses across the entire company.

## 2.0 SCOPE

- 2.1 Includes standard quality requirements for all materials, parts and services used at NEO Tech sites for production and affects the final products shipped to our customer.
- 2.2 The Quality Clauses outlined in the Quality Clause Application Table and that are defined in the Quality Clauses apply to all parts, material and service at NEO Tech sites.
- 2.3 Any plant and / or customer requirements that vary from these standard quality clauses will be displayed in purchase orders. Site Quality Management and Corporate Supply Chain/Data Controller will manage adding any special requirements to the part master and will be printed in our purchase orders.

## 3.0 DEFINITIONS

BUYER	NEOTech companies and subsidiaries
SELLER	NEOTech supplier

## 4.0 METHODOLOGY

- 4.1 This document includes all standard Quality Clauses required by NEOTech that meets product quality and regulatory/compliance requirements.
- 4.2 The Quality Clause Application Table provides guidance on what clauses apply for each commodity groups.
- 4.3 All standard quality clauses will be posted on the NEOTech website.
- 4.4 NEOTech Purchase Orders will include a website link to the Quality Clauses.  
Any 'Part' Specific Quality Clauses requirements will be added by the Corporate Data Controller. This needs to be approved by Site Quality management and the Corporate Commodity Manager. These specific quality clauses (not standard) will appear in our purchase order print out underneath each part number in our order as applicable.

**5.0 QUALITY CLAUSE APPLICATION TABLE**

Quality Clause #	Quality Clauses	Commodity Groups											
		Electronic Components	Dies	Connectors	Hardware	Programmable Integrated Circuit	Computer Products	Make-To-Print Metal and Plastic	PCB, PWB	Cable Harness and Wires	Production Materials	Packaging	Service
1	Certificate of Conformance (C of C)	X	X	X	X	X	X	X	X	X	X		
2	Quality System	X	X	X	X	X	X	X	X	X	X		X
3	Inspection	X	X	X	X	X	X	X	X	X	X	X	
4	Drawings/Specifications & Change Control	X	X	X	X	X	X	X	X	X	X	X	
5	Non-Conforming Material	X	X	X	X	X	X	X	X	X	X		
6	Document/Data Retention	X	X	X	X	X	X	X	X	X	X	X	
7	ITAR Compliance	**	**	**	**	X	**	X	X	X	**		**
8	Electro-Static Discharge (ESD)	X	X	X		X	X	X	X	X			
9	Solderability & Testing								X				
10	Perishable/Shelf Life Materials										X		
11	Critical Characteristics Identification					X		X	X	X			
12	Element Evaluation (LAT)					X		X	X	X			
13	First Article Inspection (FAI) Report					X		X	X	X		X	
14	Single Lot Traceability	X	X	X	X	X	X	X	X	X	X		
15	Foreign Object Debris (FOD)							X	X				
16	Fraud or Falsification	X	X	X	X	X	X	X	X	X	X	X	
17	Pre-Cap Inspection	**	**	**	**	**	**	**	**	**	**		**
18	Final Source Inspection					**		**	**	**	**		
19	Customer Source Inspection					**		**	**	**	**		
20	Flow down to Sub-suppliers					X		X	X	X			
21	Marking & Identification	X	X	X	X	X	X	X	X	X	X	X	
22	Statement of Work (SOW)	**	**	**	**	**	**	**	**	**	**	**	**
23	DFARS	**	**	**	**	X	**	X	X	X	**		X
24	Corrective Action	X	X	X	X	X	X	X	X	X	X	X	X
25	Moisture Sensitive Devices	X	X			X	X	X	X				
26	X-Ray Fluorescence (XRF) Testing	**	**	**	**	**	**	**	**	**	**		**
27	Cable Harness and Terminated Wires									X			
28	Date Code	X	X	X		X	X				X		
29	Calibration System Requirements	X	X	X	X	X	X	X	X	X	X		
30	Conformal Coating								X				
31	J-STD-003 compliance								X				
32	Packaging Requirements	X	X	X	X	X	X	X		X	X	X	
33	PCB/PWB Fabrication Specification								X				
34	Prohibited Material	X	X	X	X	X	X	X	X	X	X		
35	Counterfeit Goods	X	X	X	X	X	X	X	X	X	X		
36	Conflict Minerals	**	**	**	**	**	**	**	**	**	**	**	**

X = Applicable

\*\* = Applicable when required by purchase order or specific part drawing

<b>Commodity Groups</b>	<b>Detailed Commodity Descriptions</b>
<b>Electronic Components</b>	BATTERIES
	CAPACITORS
	CRYSTALS, OSCILLATORS, RESONATORS
	DISCRETES (DIODES, LEDS, TRANSISTORS)
	ELECTROMECHANICAL - COTS
	FILTERS
	FUSES AND CIRCUIT PROTECTION DEVICES
	INDUCTORS
	INTEGRATED CIRCUITS - SEMICONDUCTORS
	MAGNETIC-BEAD-FERRITE-TRANSFORMER
	MODULES
	OPTOELECTRONIC- Lamp- Motion Control- Infrared
	POWER SUPPLIES
	RELAYS
	RESISTORS, THERMISTORS, VARISTORS
SENSORS	
SWITCHES	
<b>DIES</b>	DIES
<b>Connectors</b>	CONNECTORS
<b>Hardware</b>	HARDWARE - BTP
	HARDWARE - COTS
<b>Programmed IC's</b>	INTEGRATED CIRCUITS - PROGRAMMED (DISTRIBUTION)
<b>Computer Products</b>	COMPUTER PRODUCTS
	DISPLAYS (NOT FOR LEDS)
<b>Make to Print</b>	ELECTROMECHANICAL - BTP
	MAGNETICS - BTP - NON
	METAL-BTP
	PLASTIC - BTP
	SUBSTRATES
<b>PCB, PWB</b>	PCB and PWB
<b>Cable, Harness and Wire</b>	CABLES AND WIRE - BTP
	CABLES AND WIRE - COTS
<b>Production Materials</b>	PRODUCTION MATERIALS Materials used in the manufacturing process and included in the final assembly. Epoxies, thinners, inks, adhesives, ribbons, solders, fluxes, pastes, preforms, compounds, primers, conformal coatings, getters, insulator and Silicones. Does not include wires (use Cable, Harness and Wire)
<b>Packaging and Printed Materials</b>	LABELS - BTP
	LABELS - COTS
	LITERATURE, BOOKLET, INSTRUCTION MANUAL, GUIDE-BTP
	PACKAGING
<b>Service</b>	Services and Consultants support medical products

**QUALITY CLAUSES**

Clause	Responsibilities
1	<p><b>CERTIFICATE OF CONFORMANCE (C of C)</b></p> <p>All of C of C's for build to print part numbers must contain as a minimum, a generic statement indicating that the material supplied meets the requirements stated within the applicable purchase order.</p> <p>SELLERs are required to retain C of C's and all relevant data supporting build on file for a minimum of 7 years after completion of the subject purchase agreement.</p> <p>SELLER shipping documentation shall include as a minimum:</p> <ul style="list-style-type: none"> <li>• BUYER Purchase Order number</li> <li>• BUYER Part Number and Revision</li> <li>• Serial number, or lot number, or date code</li> </ul> <p>Material supplied for this contract shall be accompanied by a Certificate of Conformance (C of C) or Certificate of Analysis as follows:</p> <p><b>A. C of C's for make to print orders.</b></p> <ol style="list-style-type: none"> <li>1. The OEM's name.</li> <li>2. Must include P/N, Revision, serial number (or lot number, or date code).</li> <li>3. Signed C of C from the OEM.</li> <li>4. The distributor packing slip and the OEM C of C must be linked to demonstrate traceability. (The packing slip from the Distributor may be used to link traceability).</li> </ol> <p><b>B. C of C's for Commercial Off The Shelf (COTS) parts</b></p> <ol style="list-style-type: none"> <li>1. OEM C of C (no signature required).</li> <li>2. OEM's name: A computer generated C of C is acceptable</li> <li>3. Must include Manufacturer name, Manufacturer part number, and lot number or date code.</li> <li>4. For Franchised Distributors, OEM C of C not required for shipments, however, supplier must retain on file for a minimum of seven (7) years.</li> </ol> <p><b>C. C of A (Certificate of Analysis) for Materials Chemical Composition</b></p> <p>Chemical materials purchased for production related purposes must be accompanied by C of A include:</p> <ul style="list-style-type: none"> <li>• Manufacturer P/N, Revision, serial number (or lot number, or date code, or batch number).</li> <li>• Date of expiration and/or Date of manufacture.</li> <li>• OEM's name.</li> </ul> <p><b>D. Customer Supplied C of C</b></p> <ol style="list-style-type: none"> <li>1. Must include P/N, Revision, and serial number (or lot number, or date code) OR Correspondence from the Customer directing BUYER to use the supplied material for the intended production purpose and alleviating BUYER from traceability responsibilities.</li> </ol>
2	<p><b>QUALITY SYSTEMS</b></p> <p>The material supplied on this contract must be controlled under a Quality System that is specific to the site QMS standard which can be one or more of the following: ISO 9001, AS 9100, MIL-PRF-38534, ISO 13485, ISO 14001. Use the following link for specific site QMS standards: <a href="http://www.neotech.com/locations/">http://www.neotech.com/locations/</a></p>
3	<p><b>INSPECTION</b></p> <ol style="list-style-type: none"> <li>1. All articles and materials will be subject to inspection and approval by BUYER after delivery not withstanding prior payment. It is agreed that payment shall not constitute final acceptance.</li> <li>2. Defective material or items not in accordance with BUYER's specifications will be held for Seller's instruction. If Seller directs, materials will be returned at Seller's expense.</li> <li>3. No goods returned as defective shall be replaced without authorization from Buyer.</li> </ol>

Clause	Responsibilities
	4. BUYER, our customers or associated regulatory agencies reserve the right to access your facility, the processing of the products and associated records.
<b>4</b>	<p><b>DRAWINGS / SPECIFICATIONS &amp; CHANGE CONTROL</b></p> <p>1. BUYER shall supply Seller with current drawings / specification required to fulfill this order.</p> <p>2. BUYER reserves the right at any time to make changes in drawings and specifications as to any material and/or work covered by this order. SELLERs or their subcontractors are required to conform with all specifications included or referenced in this order.</p> <p>3. Any components and /or materials that are being procured by BUYER in which a change by the vendor is in process, the vendor is required to notify BUYER prior to the change.</p> <p style="padding-left: 20px;">a. This change notification requirement applies to any major changes that require customer or regulatory approval that may affect fit, form or function, design intent, materials, process and programming according to the applied quality standard.</p> <p>4. All requests for Deviations and/or waivers from the SELLER shall be forwarded to the applicable BUYER.</p> <p style="padding-left: 20px;">a. Notification of Facility Change: SELLER shall not use or relocate any production, manufacturing, and/or processing facilities to differ from previous approval by BUYER, during performance of work specified in the procurement document, without previously notifying BUYER.</p> <p style="padding-left: 20px;">b. Notification of change of product, process and/or sub-tier SELLER: SELLER shall not change any drawing, process, material (including sub-tier SELLER parts), without prior BUYER written approval, if such a drawing, process, material, or procedure was previously approved by BUYER as provided in the procurement document.</p> <p style="padding-left: 20px;">c. Verbal changes are not acceptable. All product changes must be completed by an engineering change order approved by BUYER. Changes within a purchase order/agreement, whether the change is quantity, price or specifications, must come from BUYER and be reflected on the purchase order.</p>
<b>5</b>	<p><b>NON-CONFORMING MATERIAL</b></p> <p>1. Any departure from drawings, specifications or other Purchase Order requirements must be presented to BUYER for disposition. BUYER's customers must approve deviations from drawings or specifications prior to shipment of materials/product from SELLER's facility.</p> <p>2. Nonconforming material will not be accepted by BUYER unless approved in advance in writing by BUYER and with concurrence from BUYER's Quality Assurance Management Designee.</p> <p>3. Requests for authorization to ship nonconforming material will be addressed in writing to the appropriate BUYER Quality Assurance Department with full explanation of the nonconformance per SELLER's nonconformance reporting system.</p> <p>4. SELLER shall notify BUYER upon the discovery of a material discrepancy which was made from a material lot that has already been shipped to BUYER.</p>
<b>6</b>	<p><b>DOCUMENTS / DATA RETENTION</b></p> <p>1. Unless otherwise specified in purchase order, The SELLER shall retain objective written evidence of hardware conformance to the Purchase Order requirements for each shipment for a period of 7 years. This shall include as applicable: Manufacturing Traveler, Manufacturing's Documentation, Tests, Engineering Change Orders and Inspection Documentation.</p> <p style="padding-left: 20px;">a. Recorded data shall include not only the results of all routine inspections and Dimensional Data Reports, along with all required tests results such as Conditioning, Burn-In, Lot Acceptance, Sampling and Inspection documents or any other test used to determine item conformance.</p> <p>Note: The SELLER upon request of BUYER shall provide requested reports as part of the make to print order parts Documentation Data Package supplied with shipped product.</p> <p style="padding-left: 20px;">b. If the SELLER is a jobber or distributor of the item(s) in this Purchase Order, the Seller shall require the same performance documentation from the original manufacturer of the item(s). Additionally, SELLER</p>

Clause	Responsibilities
	<p>shall secure from that manufacturer a right for BUYER to acquire or inspect (at BUYER's option) all pertinent data in that manufacturer's possession showing the items' compliance to specification.</p> <p>c. The exact format of the submitted data may vary from Seller to Seller, but shall contain the following minimum information:</p> <ol style="list-style-type: none"> <li>i. SELLER 's name</li> <li>ii. SELLER 's Purchase Order number and revision</li> <li>iii. BUYER Buyer's part number and Purchase Order number and revision</li> <li>iv. BUYER Drawing/specification/SELLER planning revision level</li> <li>v. Number of items in a lot</li> <li>vi. Number of items inspected</li> <li>vii. Acceptable Quality Level (AQL) used</li> <li>viii. Lot number and date code (if applicable)</li> </ol> <p>d. The SELLER may obtain attributes data or variable data at Seller's discretion unless the variables data is specifically requested by the Buyer. The Seller's format is acceptable as a minimum attributes.</p>
7	<p><b>ITAR COMPLIANCE</b></p> <p>In case of the information contained in this purchase order is subject to International Traffic Arms Regulations (ITAR) or Export Administration Regulations (EAR) Controls and may not be disclosed to any foreign person(s) or firm, including persons employed by or associated with your firm.</p> <p>SELLERS Are Hereby Notified of the following International Traffic in Arms Regulations (ITAR) Compliance Requirements:</p> <ol style="list-style-type: none"> <li>1. In accordance with 22 CFR §122.1 (a), persons who engage in the United States in the business of either manufacturing or exporting defense articles or furnishing defense services are required to register with the U.S. Department of State, Office of Defense Trade Controls and apply for export authorization prior to exports of controlled hardware, technical data, software and services.</li> <li>2. Manufacturers of defense articles who do not engage in exporting must also register.</li> <li>3. A Defense article is a commodity, including software, that is specifically designed, developed configured adapted or modified for a military application.</li> <li>4. SELLERS are notified that as they are manufacturing articles for BUYER, they are manufacturing defense articles and must be registered with the U.S. State Department. SELLERS NAME must also maintain that registration for the duration of their business relationship with BUYER. Information regarding registration may be found at <a href="http://www.pmdtc.org">www.pmdtc.org</a>.</li> <li>5. SELLERS are also notified that any technical data (i.e. specification, drawings, etc.) provided by BUYER is considered to be export controlled and may not be provided to any foreign person* in the SELLERS NAME employ without specific prior export authorization from the Department of State, Office of Defense Trade Controls Licensing (ODTCL).</li> <li>6. Foreign persons are persons who are not: <ol style="list-style-type: none"> <li>a. U.S. Citizens,</li> <li>b. U.S. Permanent Resident Aliens (Green Card Holders), or</li> <li>c. Protected Persons (Refugees).</li> </ol> </li> <li>7. SELLERS may not provide any of the export controlled technical data provided by BUYER to foreign SELLERS or affiliates, regardless of the nature of the relationship to the U.S. SELLER, for any reason, without prior specific export authorization secured from the ODTCL.</li> <li>8. SELLER also notified that it may not transfer any export controlled technical data provided by BUYER to any U.S. sub-contractor/vendor without first notifying the sub-contractor/vendor of the export compliance requirements as stated above.</li> <li>9. By this notification, you as a BUYER SELLER have been so advised of its compliance obligations under the ITAR.</li> </ol>
8	<b>ELECTROSTATIC DISCHARGE (ESD)</b>

Clause	Responsibilities
	<ol style="list-style-type: none"> <li>SELLER shall take proper precautions to ensure that static susceptible devices are not degraded, damaged or destroyed by electro-static discharge (ESD), and are adequately protected from electrostatic discharge (ESD) damage during manufacturing, test, inspection, packaging and shipping.</li> <li>Subject materials shall be compliant with ANSI / ESDS 20.20 or MIL-STD-1686 or an equivalent specification.</li> <li>The ESD sensitive product shall be packaged per the 'Packaging Requirements'.</li> <li>Devices not suitably protected when inspected by BUYER shall be subject to rejection and replacement.</li> </ol>
<b>9</b>	<p><b>SOLDERABILITY &amp; TESTING</b> <b>PROHIBITED MATERIALS (TIN WHISKERS)</b></p> <ol style="list-style-type: none"> <li>Unless otherwise specified in the product specification, material supplied on this purchase order shall meet the requirements of ANSI/J-STD-002, Category 3 Test Method A, B, or C as applicable.</li> <li>All products must have a date code within specified Surface Finish Shelf-Life from the receipt at BUYER.</li> <li>All constructions and finishes containing pure cadmium, or pure zinc is prohibited. In addition, constructions and finishes containing pure tin are prohibited unless they contain a minimum of 3 weight percent alloying element) s) (i.e. lead, silver, etc.).</li> <li>NOTE: All solder coated components shall be shipped with A Certificate of compliance.</li> <li>NOTE: The SELLER is required to perform 100% electrical testing and solderability test in accordance with specification If material older than the specified Surface Finish Shelf-Life and is going to be shipped, specific written approval is needed by BUYER/Quality Assurance Department for acceptance.</li> </ol>
<b>10</b>	<p><b>PERISHABLE / SHELF LIFE MATERIALS</b></p> <ol style="list-style-type: none"> <li>Any product, substance or material that has a limited life shall have a minimum of 50% of its certified shelf life remaining upon delivery to BUYER Engineering.</li> <li>The limited life period shall be identified on the product or support documentation. An MSDS Sheet is to be provided with each shipment of product. The SELLER shall include the date of manufacture.</li> <li>For Polymeric Materials: The SELLER shall meet the requirements of MIL-STD-883, Method 5011.5. The Certificate of Compliance shall indicate the results of meeting this requirement.</li> <li>The SELLER is responsible for maintaining the actual test data for a minimum of 7 years.</li> <li>Test data shall be made available upon request. A signed copy of the original material manufactures Certificate of Compliance must be provided with each receipt.</li> </ol>
<b>11</b>	<p><b>CRITICAL CHARACTERISTICS IDENTIFICATION</b></p> <ol style="list-style-type: none"> <li>When applicable, BUYER Engineering drawings and specifications will annotate critical characteristics exhibited by a symbol noted within the drawing legend or notes.</li> <li>The SELLER must make provisions within their processes to assure that all requirements identified as a critical characteristic are in compliance and must provide documentation in the form of variable data unless specified otherwise.</li> </ol>
<b>12</b>	<p><b>ELEMENT EVALUATION (LAT) - CLASS K</b></p> <ol style="list-style-type: none"> <li>The SELLER must verify that all product on this purchase order meets the requirements of element evaluation per MIL-PRF-38534, Class K. Test reports and certifications must accompany each shipment. The SELLER shall retain this data on file for seven (7) years after completion of this purchase order.</li> <li>Conventional Element Evaluation is not required when elements are purchased as QML QPL certified parts.</li> <li>Passive Elements - element evaluation is not required when the elements are acquired from the Established Reliability series of military specifications and is listed on the QPL.</li> <li>Microcircuits &amp; Semiconductor Devices — element evaluation is not required for JANKC discrete semiconductors MIL-PRF-19500 qualified die or for MIL-PRF-38535 Class V qualified die.</li> </ol>



Clause	Responsibilities
	<ol style="list-style-type: none"> <li>5. The full LAT data package confirming successful LAT completion must accompany the shipment. The original manufacturers C of C must be provided with each shipment of die.</li> <li>6. ELEMENT EVALUATION (LAT) - CLASS H The SELLER must verify that all product on this purchase order meets the requirements of element evaluation per MIL-PRF-38534, Class H. Test reports and certifications must accompany each shipment. The SELLER shall retain this data on file for seven (7) years after completion of this purchase order.</li> <li>7. Conventional Element Evaluation is not required when elements are purchased as QML QPL certified parts.</li> <li>8. Passive Elements - element evaluation is not required when the elements are acquired from the Established Reliability series of military specifications and is listed on the QPL.</li> <li>9. Microcircuits &amp; Semiconductor Devices — element evaluation is not required for JANHC or JANKC discrete semiconductors MIL-PRF-19500 qualified die or for MIL-PRF-38535 Class V qualified die.</li> <li>10. The originals manufacturers C of C must be provided with each shipment of die.</li> </ol>
13	<p><b>FIRST ARTICLE INSPECTION (FAI) REPORT</b></p> <ol style="list-style-type: none"> <li>1. SELLER shall perform a First Article Inspection that is applicable to all parts and assemblies with the exception to Commercial Off Shelf (COTS) parts.</li> <li>2. SELLER shall perform a full FAI or a partial FAI for affected characteristics, when any of the following occurs:             <ol style="list-style-type: none"> <li>a. First time delivery of the product.</li> <li>b. A change in the design characteristics affecting fit, form, or function of the part.</li> <li>c. A change in manufacturing source(s), process(es), inspection method(s), location of manufacture, tooling, or materials that can potentially affect fit, form, or function.</li> <li>d. A change in numerical control program or translation to another media that can potentially affect fit, form, or function (revision change).</li> <li>e. A natural or man-made event, which may adversely affect the manufacturing process.</li> <li>f. An implementation of corrective action required to complete a previous FAI.</li> <li>g. A lapse in production for two years shall require an update for any characteristics that may be impacted by the inactivity. This lapse is from the completion of last production operation to the actual restart of production.</li> </ol> </li> <li>3. FAI reports shall be provided to the BUYER retained by the SELLER for a minimum of 7 years.</li> <li>4. Dimensional reports and drawing bubble diagrams are required when applicable.</li> </ol>
14	<p><b>SINGLE LOT TRACEABILITY</b></p> <p>Items provided in accordance with this purchase order are under Single Lot Traceability Control at BUYER.</p> <ol style="list-style-type: none"> <li>1. Each shipment shall be from only one OEM.</li> <li>2. Each shipment shall only be from one Lot per reel or waffle pack.</li> <li>3. Components that are too small to have the Lot Code marked on them are to have their packaging identified with the appropriate Lot Code marking / serial number.</li> <li>4. When the SELLER combines multiple lots of material in one container, this material shall be segregated and identified such that all material lot numbers are segregated and identifiable.</li> <li>5. Root Traceability shall be to the base wafer lot number (class K only).</li> </ol>
15	<p><b>FOREIGN OBJECT DEBRIS (FOD)</b></p> <ol style="list-style-type: none"> <li>1. Material supplied shall be free of foreign objects.</li> <li>2. The material supplied on this purchase order shall be manufactured in an environment that is free of foreign objects.</li> </ol>

Clause	Responsibilities
	<ol style="list-style-type: none"> <li>3. The seller shall establish and maintain an effective Foreign Object Damage (FOD) Prevention Program to reduce FOD using NAS412 as a guideline.</li> <li>4. The seller's program shall utilize effective FOD prevention practices.               <ol style="list-style-type: none"> <li>a. The program shall be proportional to the sensitivity of the design of the product(s) to FOD, as well as, to the FOD generating potential of the manufacturing methods.</li> </ol> </li> <li>5. The SELLER must be able to provide objectives evidence of FOD inspections when requested by the BUYER.               <ol style="list-style-type: none"> <li>a. The written procedures or policies developed by the seller shall be subject to review upon request by the BUYER Procurement Agent and/or government representative, and disapproval when the seller's procedures or policies do not accomplish their objectives.</li> </ol> </li> </ol>
<b>16</b>	<p><b>FRAUD OR FALSIFICATION</b></p> <p>Any knowing and willful act to falsify, conceal, or alter a material fact, or any false, fraudulent or fictitious statement or representation in connection with the performance of work under this purchase order may be punishable in accordance with applicable Federal Statutes.</p>
<b>17</b>	<p><b>PRE-CAP INSPECTION</b></p> <ol style="list-style-type: none"> <li>1. If Pre-cap inspection by BUYER is required prior to closure of the assemblies or containers procured on this contract, the SELLER shall notify the BUYER whose name is on the purchase order, a minimum of five (5) working days prior to assembly or container closure.</li> <li>2. BUYER reserves the right to waive, on an individual lot/shipment basis, this inspection.</li> <li>3. Authorization to continue processing of material, less this inspection, will be accomplished by written notification from BUYER Quality Management. In this case, a copy of the written authorization must accompany the shipment. Failure to include the authorization document is cause for rejection.</li> <li>4. Pre-cap inspection will be noted as a line item within the purchase order as applicable.</li> </ol>
<b>18</b>	<p><b>FINAL SOURCE INSPECTION</b></p> <ol style="list-style-type: none"> <li>1. If BUYER Source Inspection (NSI) is required at the SELLER's facility prior to shipment of this order. Test and inspection data demonstrating conformance to the lot acceptance requirements as specified in the drawing or specification shall be generated and be ready for review. In addition, the SELLER shall furnish the necessary facilities, equipment, documentation and personnel in support of this inspection.</li> <li>2. The SELLER shall notify BUYER a minimum of ten ( 5) working days prior to the material being ready for any identified inspection points. Final acceptance shall be at final destination.</li> <li>3. BUYER reserves the right to waive the requirement for NSI. If NSI is waived, a copy of the waiver must accompany the shipment. Failure to include the waiver is cause for rejection. The quantity of pieces shipped must match exactly the quantity on the waiver.</li> <li>4. BUYER Source Inspection shall be noted as a line item on the purchase order as applicable.</li> <li>5. Acceptance of products at BUYER source inspection does not relieve SELLER of full specification compliance and purchase order requirements.</li> </ol>
<b>19</b>	<p><b>CUSTOMER SOURCE INSPECTION</b></p> <ol style="list-style-type: none"> <li>1. BUYER customers reserve the right to waive this inspection.</li> <li>2. Authorization to continue processing of material, less this inspection, will be to the SELLER from BUYER/ Quality Management provided in writing.</li> <li>3. Documented evidence of source inspection/s or direction to waive agreed upon inspection(s) is to be provided with each shipment of associated product.</li> <li>4. When applicable, BUYER may require Source Inspection from BUYER Customers. In such cases BUYER will coordinate with the SELLER in advance as to what Customer Source Inspection requirements are applicable.</li> </ol>


Clause	Responsibilities
	5. The SELLER shall notify BUYER a minimum 5 days in advance of when material will be ready for Customer Source Inspection.
20	<p><b>FLOWDOWN TO SUB-SUPPLIERS</b></p> <ol style="list-style-type: none"> <li>SELLER shall flow-down to Sub-Tier Suppliers the applicable requirements as required by the purchase order either specifically or by reference.</li> <li>This also includes any special provisions noted on the purchase order (including Quality Clauses) or other procurement documents, drawings, specifications, quality system requirements, regulations, public laws and other requirements as may be specified on the purchase order.</li> </ol>
21	<p><b>MARKING &amp; IDENTIFICATION</b></p> <ol style="list-style-type: none"> <li>The vendor is required to reference BUYER part number, revision, purchase order number, lot number or date code on all labels and documents.</li> <li>Buyer part number shall be clearly identified as a part of the unit marking and/or stick-on-labels for on bags, waffle pack, intermediate and shipping boxes / containers.</li> </ol>
22	<p><b>STATEMENT OF WORK (SOW)</b></p> <p><b>When specified on NEOTech purchase order. Items / material shall be subject to additional requirements per the SOW. Items that do not comply with stated SOW requirements shall be rejected by NEOTech.</b></p>
23	<p><b>DFARS 252.225-7014 - Preference for Domestic Specialty Metals</b></p> <p>If compliance required, DFARS 252.225-7014, Preference for Domestic Specialty Metals, Alternate / Pursuant to DFARS 252.225-7014, specialty metals incorporated in articles delivered to BUYER must be:</p> <ol style="list-style-type: none"> <li>melted in the United States, its possessions or Puerto Rico;</li> <li>melted in a "qualifying country" as defined in DFARS 225.872-1; or,</li> <li>incorporated in an article manufactured in a "qualifying country."</li> </ol> <p>Briefly, this clause requires that any specialty metals (as defined in the clause) incorporated in hardware deliverable under DoD contracts must be melted in the United States or a qualifying country.</p> <p>As BUYER is flowing this requirement down to all of our SELLERS, it is incumbent upon the SELLER to flow the clause down to any of their sub tier SELLERS for this product.</p> <p>The DFARS clause can be found at the following websites:  <a href="https://www.acq.osd.mil/dpap/dars/dfarspgi/current/index.html">https://www.acq.osd.mil/dpap/dars/dfarspgi/current/index.html</a> and <a href="http://farsite.hill.af.mil/vmdfara.htm">http://farsite.hill.af.mil/vmdfara.htm</a>.</p> <p>DFARS 252.225-7014, Preference for Domestic Specialty Metals, Alt I</p> <p>Basic requirements:</p> <ul style="list-style-type: none"> <li>Specialty metals must be melted in the United States or a qualifying country, or they can be melted anywhere but must be "incorporated in an article manufactured in a qualifying country: The clause allows a qualifying country to manufacture parts from metal that was melted anywhere, provided it meets specifications, but a United States company can only use metal that was melted in the United States or a qualifying country.</li> <li><b>WARNING!</b> – Procurement of raw material from a casting or rolling mill in the United States or qualifying country does not necessarily mean the raw material was melted in the United States or a qualifying country. All applicable certifications must be scrutinized to determine the country where the metal was melted.</li> </ul> <p>As of the date of this bulletin, the qualifying countries are: Australia, Belgium, Canada, Denmark, Egypt, Federal Republic of Germany, France, Greece, Israel, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom of Great Britain and Northern Ireland.</p> <p>This document is an integral part of the contract (purchase order) which calls it out. This revision in effect at the time the purchase order was placed applies.</p>

Clause	Responsibilities
	<p>“Specialty Metals” means:</p> <ol style="list-style-type: none"> <li>a. Steel with a maximum alloy content exceeding one or more of the following limits: manganese, 1.65%; Silicon, 0.60%; or copper, 0.60%; or ii) containing more than 0.25% of any of the following elements: aluminum, chromium, cobalt, columbium, molybdenum, nickel, titanium, tungsten, or vanadium.               <ul style="list-style-type: none"> <li>• Example 1: Steel containing 1.15% chromium melted in Japan and used in the United States in the manufacture of any item to be delivered pursuant to a contract with the US Government is not compliant with DFARS 252.225-7014, Alt I. Explanation – Steel containing more than .25% chromium is defined as a specialty metal and, therefore, must either be melted in the United States or a qualifying country, or be melted anywhere and incorporated into a deliverable item in a qualifying country. Japan is not on the list of qualifying countries.</li> <li>• Example 2: Steel melted in Japan containing .20% chromium and not having alloy or element contents in excess of the thresholds set forth in DFARS 252.225-7014, Alt I is compliant with that DFARS clause. Explanation – Steel containing more than .25% chromium is defined as a specialty metal. However, in this case, the steel contains only .20%, so it is not a specialty metal. It does not have to be produced in the United States or a qualifying country. This material from Japan would be acceptable.</li> </ul> </li> <li>b. Metal allow consisting of nickel, iron-nickel, and cobalt base alloys containing a total of other alloying metals (except iron) in excess of 10 percent;</li> <li>c. Titanium and titanium allow; and</li> <li>d. Zirconium and zirconium base alloys.</li> </ol> <p>Should the product you are supplying to BUYER contain such metals as described above and in the referenced DFARS clause BUYER will assume that the SELLERs Certification of Conformance delivered with the product will include certification of compliance to this requirement.</p> <p><b>Cyber Security Controls</b> - Due to the possibility of Federal Contract Information (FCI) and/or Covered Defense Information (CDI) being transmitted to the supplier or generated by the supplier, by accepting and performing under this Purchase Order unless the Purchase Order is solely for COTS items, the supplier affirms, for all U.S. Government procurements, that it complies with the following Federal Regulations, in effect on the date of this procurement award: FAR 52.204-21 and DFARS 252.204-7012.</p>
24	<p><b>CORRECTIVE ACTION</b></p> <ol style="list-style-type: none"> <li>1. When applicable, corrective action may be required for any non-conforming/failure mechanisms.</li> <li>2. A corrective action plan detailing the proposed permanent corrective actions shall be submitted and implemented within the specified time given in BUYER's SELLER Corrective Action Request (SCAR).               <ol style="list-style-type: none"> <li>a. The BUYER can provide their corrective action request form as well.</li> </ol> </li> <li>3. Consequences may be imposed due to the SELLER's repeated lack of timely response which may include downgrading the Approved Vendor Listing (AVL) status and/or removal from the AVL.</li> </ol>
25	<p><b>Moisture Sensitive Devices</b></p> <p>Material which required Moisture Sensitive Controls per the part drawing and or SCD shall be:</p> <ol style="list-style-type: none"> <li>1. Positively identified as Moisture Sensitive per J-STD-033</li> <li>2. Packaged per J-STD-033</li> </ol>
26	<p><b>X-RAY FLUORESCENCE (XRF) TESTING</b></p> <ol style="list-style-type: none"> <li>1. If required, shipment must include a certificate of conformance and a copy of the XRF testing report which needs to include:               <ol style="list-style-type: none"> <li>a. Seller Name</li> <li>b. NEO Tech Part Number</li> <li>c. NEO Tech Purchase Order</li> <li>d. Quantity Tested</li> </ol> </li> </ol>
27	<p><b>CABLE HARNESS AND TERMINATED WIRES:</b></p>

Clause	Responsibilities
	<ol style="list-style-type: none"> <li>1. All crimping needs to comply with the manufacturers published requirements (crimp height or pull tests).</li> <li>2. Results of tests must be provided with unique lot / date code produced.</li> <li>3. Quality Requirements:               <ol style="list-style-type: none"> <li>a. Cables &amp; terminated wires must comply with the requirements of IPCNVH MA-A-620 (latest revision).</li> </ol> </li> </ol>
28	<p><b>DATE CODE</b></p> <p>SELLER shall deliver to BUYER only those parts manufactured less than 5 years / 60 months prior to date, unless stated otherwise in the buyer purchase order. This shall be evident by date code marking on each individual part or on the manufacturer's labeling on the packaging. BUYER written approval is required for each shipment not meeting this condition</p>
29	<p><b>CALIBRATION SYSTEM REQUIREMENTS</b></p> <ol style="list-style-type: none"> <li>1. Test and measurement tools / equipment used to determine the acceptability of delivered items shall be maintained in accordance with ANSI/NCCL Z540-1, "Calibration System Requirements" or an equivalent specification.</li> <li>2. The SELLER shall maintain a calibration system that complies with MIL-STD-45662, ISO 10012 or ISO 17025 requirements.</li> </ol>
30	<p><b>CONFORMAL COATING</b></p> <ol style="list-style-type: none"> <li>1. Certificate of Conformance (C of C) is required.</li> <li>2. Conformal coating must comply with J-STD-001 &amp; IPC-A-610. Materials description and Coating thickness measurement shall be included on the Certificate of Conformance (C of C).</li> </ol>
31	<p><b>J-STD-001 COMPLIANCE</b></p> <p>All work performed must be in an area that meets J-STD-001 with regards to facilities, environmental control, temperature, humidity and lighting.</p>
32	<p><b>PACKAGING REQUIREMENTS</b></p> <ol style="list-style-type: none"> <li>1. SELLER shall have a system for controlling and monitoring proper handling, preservation, storage, packaging and shipping processes to protect the quality of deliverable materials and to prevent their damage, deterioration and degradation.</li> <li>2. Protection shall be provided to prevent physical damage, to prevent twisted and entangled leads and to maintain leads and terminals in the manufactured conditioned under handling and transportation environments.</li> <li>3. The packaging material shall not in any way affect the quality of the components.</li> <li>4. When multiple separate packages/containers/MBB bags are delivered as part of a shipment or an order fulfillment of a single fab PN, each bag shall be marked/labeled with the following content information:</li> <li>5. Part Number</li> <li>6. Quantity per bag/container Date code(s) in bag/container</li> <li>7. Bulk Pack: Appropriate material shall be inserted into the intermediate container to prevent damage during shipping / handling / storage, as required.</li> <li>8. Rail: Non-conductive rail with non-conductive or antistatic foam plugs at both ends of the rail to prevent movement.</li> <li>9. Lot Identification: Items furnished under this Purchase Order shall be identified by SELLER identification code (e.g. Cage Code, Logo etc.) and manufacturing lot or batch number on the package.</li> <li>10. SELLER shall take necessary precautions to ensure that static susceptible devices are adequately protected from electrostatic discharge (ESD) damage during manufacturing, test, inspection, packaging and shipping.</li> <li>11. Packaging shall be marked with an ESD cautionary note or symbol.</li> <li>12. Moisture Sensitive Devices:</li> </ol>

Clause	Responsibilities
	<p>13. All moisture sensitive devices as defined by J-STD-020 or J-STD-033 shall be:</p> <ul style="list-style-type: none"> <li>a. Positively identified as Moisture Sensitive Material per J-STD-020 or J-STD-033.</li> <li>b. Packaged per J-STD-020 or J-STD-033.</li> </ul> <p>14. SMD: Tape &amp; Reel or STD ESD Tray package are acceptable;</p> <p>15. Through hole component: Reel, Tube and Tray package are acceptable</p> <p>16. Others: in qualified package</p> <p>17. Special: SMD without pickup surface should have mylar on top surface.</p>
33	<p><b>PCB / PWB FABRICATION Specification</b></p> <p>1. Follow BUYER'S "PCB Fabrication Specification, NT404 - latest revision, BUYER purchase order, with a hyperlink to the document: <a href="https://www.neotech.com/wp-content/uploads/2019/01/NT404-C-PCB-Fabrication-Spec.pdf">https://www.neotech.com/wp-content/uploads/2019/01/NT404-C-PCB-Fabrication-Spec.pdf</a></p>
34	<p><b>PROHIBITED MATERIAL</b></p> <p><b>1. Titanium (Western Titanium)</b> In absent written approval of BUYER's customer, no products delivered under this purchase order shall contain rolled plate or forged bar titanium sourced from Western Titanium, Inc. or March 2 Metals at any sub-tier SELLER level.</p> <p><b>2. Pure Tin,</b> All construction and finishes for material and product shipped against this purchase order line item containing pure tin is prohibited, unless they contain a minimum of 3 weight percent alloying element(s), i.e., lead, silver, etc. If required, all solder coated components shall be shipped with a test report to document that the solder is not pure tin.</p> <p><b>3. Pure Cadmium, Zinc</b> All construction and finishes for material and product shipped against this purchase order line item containing pure cadmium or pure zinc is prohibited.</p> <p><b>4. Aluminum</b> Purchase of Aluminum material from either Alcoa facility in Belaya Kalitva or Samara Russia or from any Kaiser facility is prohibited.</p> <p><b>5. Westinghouse</b></p> <ul style="list-style-type: none"> <li>a. Material shipped against this purchase order item shall not contain any marking with the Westinghouse name or logo. Should any specification forming a part of this purchase order item contain a requirement for such marking, SELLER shall immediately contact BUYER for appropriate direction.</li> <li>b. If required by purchase order, SELLER MUST submit a certificate with each shipment stating the 'Prohibited Materials', and that they are not present in their deliverable product.</li> </ul>
35	<p><b>1. COUNTERFEIT GOODS</b></p> <p>SELLER represents and warrants that it will not knowingly or negligently use or procure counterfeit components in the Product or as replacement components.</p> <p>a. "Counterfeit Goods" as used in this Agreement means Product or components thereof that are or contain items misrepresented as having been designed and/or produced under an approved system or other acceptable method, including any of the following:</p> <ul style="list-style-type: none"> <li>(i) an unauthorized copy or substitute of an Original Equipment Manufacturer or Original Component Manufacturer (collectively, "OCM") item;</li> <li>(ii) not traceable to an OCM sufficient to ensure authenticity in OCM design and manufacture;</li> <li>(iii) do not contain proper external or internal materials or components required by the OCM or are not constructed in accordance with OCM design;</li> <li>(iv) have been re-worked, re-marked, re-labeled, repaired, refurbished, or otherwise modified from OCM design but are represented as OCM authentic or as new; or</li> </ul>

Clause	Responsibilities
	<ul style="list-style-type: none"> <li>(v) have not passed successfully all OCM required testing, verification, screening, and quality control processes.</li> <li>(vi) SELLER will ensure Product furnished to BUYER is not Counterfeit Goods.</li> <li>(vii) SELLER will ensure that Counterfeit Goods are not delivered by ensuring the direct procurement of items from OCMs or authorized SELLERs, and, when items are to be procured from non-authorized SELLERs, obtaining from such non-authorized SELLERs appropriate certificates of conformance that provide one or more of the following:               <ul style="list-style-type: none"> <li>a. The OCM's original certificate of conformance for the item (per Quality Clause #1, herein);</li> <li>b. Sufficient records providing unbroken supply chain traceability to the OCM;</li> <li>c. OCM's test and inspection records demonstrating the item's authenticity. In all cases, prior to procurement from non-authorized Sellers, SELLER must contact BUYER for written approval, and the parts must be controlled such that BUYER will have unambiguous insight into the origination, control and where applicable serial number of all components.</li> </ul> </li> <li>b. Counterfeit Goods delivered or furnished to BUYER under this contract are deemed nonconforming.</li> <li>c. If SELLER becomes aware or suspects that it has furnished Counterfeit Goods to BUYER, SELLER will immediately notify BUYER.</li> <li>d. If SELLER has met the conditions of (a) and (b) noting the approval process for non-authorized SELLERs, then both parties will mutually share in the expense and replace such Counterfeit Goods with OCM or BUYER-approved Product that conforms to the requirements of this Agreement.</li> <li>e. If SELLER has not met the conditions of (a) and (b), then SELLER shall be liable for all reasonable costs related to the replacement of Counterfeit Goods and any testing or validation necessitated by the installation of authentic Product or components after Counterfeit Goods have been replaced.</li> <li>f. 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.</li> <li>g. BUYER becomes aware that counterfeit parts have been provided by SELLER, BUYER shall notify SELLER of the situation as soon as practical. In such case, SELLER shall be responsible as described in paragraph (a) above without right to offset by Section (b) and (c).</li> <li><b>2. SELLER of Electronic parts for Aerospace devices will follow and apply the Counterfeit Electronic Parts Avoidance, Detection, Mitigation and Disposition standards AS5553</b></li> <li><b>3. COUNTERFEIT AVOIDANCE TESTING (SAE AS6081)</b> <ul style="list-style-type: none"> <li>a. If required, SELLER is 100% responsible for the compliance of this testing requirement prior to delivery to BUYER.</li> <li>b. SELLER shall supply documentation demonstrating compliance and maintain the records per the Document / Data Retention quality clause defined herein (as applicable).</li> <li>c. Verification of procured product shall be performed per SAE AS6081 Table 1.</li> <li>d. In the event that the components are found to be defective and it cannot be demonstrated that SELLER was in conformance with the purchase order test requirements, BUYER shall have the right to reject them.</li> <li>e. The report provided after testing must itemize each item from the test requirements with reference to the number of samples tested and the results of these tests.</li> <li>f. Test facilities are required to report the discovery of Counterfeit Components per the SAE AS6081.</li> </ul> </li> </ul>
36	<p><b>CONFLICT MINERALS (Dodd-Frank Compliance)</b> The term "conflict minerals" is defined as columbite-tantalite (coltan), cassiterite, gold, wolframite, tantalum, tin, tungsten, and any other mineral or its derivatives.</p> <p>The rule requires tracing of conflict minerals through supply chains to determine and disclose whether the raw materials originate at mines in the Democratic Republic of the Congo (DRC) or its nine adjoining countries.</p>

 <b>NEOTech</b> Corporate Document	<b>Standard Operating Procedure</b> <b>Purchase Order Quality Clauses</b>	Document Number <b>NT104</b> Revision: <b>F</b>
Original Author: <b>Magdy Henry</b>	Process Owner: <b>Corporate Quality</b>	Page 16 of 16

Clause	Responsibilities
	<p>The law requires U.S. manufacturers and retailers to monitor their supply chains in an effort to curtail human rights abuses in Africa where the raw materials are mined.</p> <p>We require our suppliers to engage in due diligence of their supply chains to understand and report the content of their parts supplied to WCG.</p>

***END OF QUALITY CLAUSES***