



NEWPORT NEWS SHIPBUILDING
NEWPORT NEWS, VIRGINIA
APPENDIX Q – DoD CONTRACTS
(Revision **2-16**)

Quality Requirements

Table of Contents

1 SCOPE 2

 1.1 Purpose 2

 1.2 Background 2

 1.3 Roles and Responsibilities..... 2

2 REFERENCES 2

3 DEFINITIONS..... 3

4 REQUIREMENTS 3

 4.1 Communications 3

 4.2 Purchase Order Requirements..... 4

 4.3 Quality Program/System Specifications..... 5

 4.4 Quality System Flowdown 7

 4.5 Distributors and Primary Suppliers Control Over Sub-Tier Suppliers 8

 4.6 Inspections at the Supplier Plant 9

 4.7 Non-Conforming Material Control..... 9

 4.8 Corrective Action System..... 11

 4.9 Purchaser Furnished Materials 12

 4.10 Objective Quality Evidence (OQE)..... 12

 4.11 Traceability..... 13

 4.12 Traceability Marking 14

 4.13 Loss of Traceability Marking 14

 4.14 Records..... 14

4.15	Supplier Evaluation Rating.....	15
4.16	NNS Approved Suppliers Link.....	16

1 SCOPE

1.1 Purpose

- 1.1.1 The purpose of this appendix is to outline the Quality requirements with which Suppliers must comply when providing materials and services covered by Purchase Orders issued by Newport News Shipbuilding, a division of Huntington Ingalls Industries (Newport News).

1.2 Background

- 1.2.1 N/A

1.3 Roles and Responsibilities

1.3.1 Newport News Shipbuilding (NNS)

- 1.3.1.1 Certify that the Supplier is executing the quality system required by this purchase order.
- 1.3.1.2 Notify the Supplier when material or software is found to be non-conforming with the requirements of this purchase order.
- 1.3.1.3 Coordinate with the Supplier to resolve non-conforming material and software.

1.3.2 Supplier

- 1.3.2.1 Establish, maintain, and execute the processes and procedures necessary to satisfy the quality system required by this purchase order.
- 1.3.2.2 Resolve non-conforming material and software.

2 REFERENCES

- 2.1 None

3 DEFINITIONS

- 3.1 Supplier – The manufacturing or distributing company that is awarded this purchase order.
- 3.2 Software – The procedures, reports, certifications, or other documentation that is required as a deliverable to NNS.
- 3.3 Quality system – The organizational structure, policies, procedures, processes and resources needed to implement quality management. Referenced documents that refer to “quality program” shall be considered synonymous with “quality system.”
- 3.4 Upper management – A person or group of people who direct and control an organization at the highest level.
- 3.5 Government – The United States Government.

4 REQUIREMENTS

4.1 Communications

- 4.1.1 The supplier shall provide to the Purchaser (personnel are listed below) immediate verbal notice and subsequent written documentation of all communications relative to Quality, including
 - a) Significant system or policy changes,
 - b) Changes in Company ownership,
 - c) Changes in plant location,
 - d) Changes in upper management,
 - e) Non-conformities or latent defects discovered after delivery and acceptance by the purchaser.

4.1.2 Methods of communication shall be the following:

- a) Verbal notice by telephone.
- b) Supplier Information Questionnaire (SIQ)
- c) Letter of Advisement for non-conformities or latent defects

The following link provides contact info for Supplier Quality personnel at Newport News:
[Contact Link](#)

NNS SUPPLIER QUALITY:

MANAGER OF SUPPLIER QUALITY
DEPARTMENT 005
Building 872-2 (Room 214)
4101 WASHINGTON AVENUE
NEWPORT NEWS VA 23607

NNS SUPPLY CHAIN PROCUREMENT:

DIRECTOR OF SUPPLY CHAIN PROCUREMENT
DEPARTMENT 051
Building 520-2
4101 WASHINGTON AVENUE
NEWPORT NEWS VA 23607

Electronic copies are to be forwarded to: LettersofAdvisement@HII-NNS.com

4.2 Purchase Order Requirements

- 4.2.1 Whether or not a quality management/inspection system specification is invoked in the body of a Newport News Purchase Order, the Supplier shall ensure that the material / services delivered conform to the requirements of the Purchase Order.
- 4.2.2 All materials and services, both those manufactured or processed by the Supplier and those procured from sub-tier suppliers, shall conform to all requirements of the Purchase Order, Purchase Order appendices, and documents invoked therein. All required inspections and tests necessary to assure that the material conforms to the Purchase Order, drawing and specification requirements shall be performed.
- 4.2.3 Government Material Review Board (MRB) authority is not granted unless specifically permitted in the Newport News Purchase Order and/or prior specific written Newport News delegation. Vendor Information Requests (VIR) are to be submitted for resolution of non-conformances (See Newport News Appendix A). The Supplier's system for dispositioning nonconforming or discrepant material shall differentiate between Supplier Material Review Procedures and Government Material Review Board criteria.
- 4.2.4 Measuring and Test Equipment (M & TE) used to verify product compliance shall be calibrated at established intervals against certified standards traceable to national standards. Records of calibration shall be maintained throughout the life of the Purchase Order.

- 4.2.5 The term "Government" when appearing in MIL-I-45208A, MIL-Q-9858A or other specifications shall be understood to mean "Newport News Shipbuilding" or "Government," or both.

4.3 **Quality Program/System Specifications**

- 4.3.1 The Supplier's Program/System shall be documented and available for Newport News review prior to initiation of production and throughout the life of the Purchase Order. All changes to the Quality Program/System shall be documented and copies furnished to Newport News.
- 4.3.2 When a Quality Management/Inspection System specification, such as MIL-Q-9858, MIL-I-45208, ISO 9001:2000, ANSI/ASME NQA-1, or other quality specification is invoked in the body of a Newport News Purchase Order, either directly or through a Military or Industry Specification, the Supplier's Quality Management/Inspection System must conform to all of the requirements of the invoked specification and all individual contract requirements. Additionally, when procurement specifications, drawings, or other documents referenced by the purchase order invoke an ISO 9001 (1994, 2000 or 2008 revision) quality system, the Supplier's Quality Management/Inspection System must also comply with these supplemental quality system requirements contained in paragraph 4.3.4 below. No increase in price will be allowed if a Supplier elects to use a Quality Program/System more stringent than required.
- 4.3.3 At the supplier's option, an ISO 9001 (1994, 2000 or 2008 revision) quality system may be utilized in lieu of Mil-Q-9858 or MIL-I-45208, subject to the supplemental quality system requirements contained in paragraph 4.3.4 below. The Supplier's Quality Management/Inspection System must still comply with any additional or supplemental quality system requirements invoked by a referenced document.
- 4.3.4 ISO 9001 supplemental quality system requirements follow. The terminology used to describe the supply chain in ISO 9001:2000/2008 has been incorporated herein. When the 1994 version is applied, replace "organization" with "supplier" and "supplier" with "subcontractor".

- 4.3.4.1 1994 – Add to Quality Policy, Paragraph 4.2.1:

2000, 2008 – Add to Quality management system – General Requirements:
Paragraph 4.1

The organization shall provide and maintain a quality assurance program that ensures that the product meets the contract requirements and that is acceptable to Customer and Government. The organization shall notify the customer in writing of any change, other than editorial, to the quality manual.

4.3.4.2 1994 – Add to Purchasing data: Paragraph 4.6.3:

2000, 2008 – Add to Purchasing information: Paragraph 7.4.2

When, under authorization of the Government Representative, copies of the purchasing document are to be furnished directly by the supplier or organization to the Government Representative at his facility rather than through Government channels, the organization shall add to his purchasing document a statement substantially as follows:

“On receipt of this order, promptly furnish a copy to the Government Representative who normally services your plant. In the event the representative or office cannot be located, our purchasing agent should be notified immediately.”

All documents and referenced data for purchases applying to a Government contract shall be available for review by the Government Representative to determine compliance with the requirements for control of such purchases. Copies of purchasing documents required for Government inspection purposes shall be furnished in accordance with the instructions of the Government Representative.

4.3.4.3 1994 - Add to Receiving Inspection and Testing, Paragraph 4.10.2.1:

2000, 2008 - Add to Verification of purchased product: Paragraph 7.4.3

The organization shall make available to the Government Representative reports of any nonconformance found on Government source inspected supplies and shall (when requested) require the supplier to coordinate with his Government Representative on corrective action.

4.3.4.4 1994 - Add to INSPECTION AND TESTING – General: Paragraph 4.10.1:

2000, 2008 – Add to Monitoring and measurement of product: Paragraph 8.2.4

When required, the organization’s measuring and testing equipment shall be made available for use by the Government Representative to determine conformance of product with contract requirements. In addition, if conditions warrant, organization’s personnel shall be made available for operation of such devices and for verification of their accuracy and condition.

4.3.4.5 1994 – Add to Quality planning: Paragraph 4.2.3

2000, 2008 – Add to Planning of product realization: Paragraph 7.1

Where not otherwise contractually invoked, all specified limits for machining services and for dimensional control of deliverable parts and assemblies shall be interpreted as absolute limits as defined by ASTM E29, Standard Practice for Using Significant Digits in Test Data to Determine Compliance with Specifications. Unless otherwise specified in the contract, for all other observed, measured or calculated product characteristics (e.g. for material suppliers, material distributors, services other than machining), specified limits shall be interpreted using round-off method as defined by ASTM E29.

4.3.4.6 1994 – Add to CONTROL OF QUALITY RECORDS: Paragraph 4.16

2000, 2008 – Add to Monitoring and measurement of product: Paragraph 8.2.4

When signatures are required by contract and will be provided electronically, protection from unauthorized changes of recorded data shall be provided.

4.3.4.7 1994 – Add to STATISTICAL CONTROL TECHNIQUES: Paragraph 4.20.2

2000, 2008 – Add to MEASUREMENT, ANALYSIS, AND IMPROVEMENT GENERAL, Paragraph 8.1

Statistical techniques or sampling inspection procedures used for product acceptance shall be subject to approval by the customer.

4.4 Quality System Flowdown

4.4.1 Suppliers of material shall have an effective quality system that complies with this specification and the requirements of the purchase order. Quality system requirements shall be established and maintained to assure that sub-tier Suppliers also have effective systems for controlling material including traceability to Objective Quality Evidence (OQE). The system must assure that OQE is established and controlled in accordance with the requirements of this document. Special quality provisions, along with the applicable specifications and/or drawing requirements, shall be included in the purchase order to the sub-tier Supplier.

4.5 **Distributors and Primary Suppliers Control Over Sub-Tier Suppliers**

- 4.5.1 The following information and clarifications are provided to assist Distributors and Primary Suppliers in complying with the requirements of this Appendix.
- 4.5.2 Distributors and Primary Suppliers shall pass on to their Suppliers all relevant Purchase Order requirements applicable to the product being procured. These requirements include, but are not limited to specifications, drawings, source inspection requirements, Federal Acquisition Requirement (FAR) clauses, and other clauses as stated in the Purchase Order. Re-delegation of DCMA Inspection is the prerogative of the Government Representative.
- 4.5.3 The Distributor or Primary Supplier shall ensure that its Supplier is fulfilling the requirements of this Appendix and other appendices and/or specifications invoked by the Purchase Order.
- 4.5.4 Before material is shipped from the Distributor or the Primary Supplier's facility or drop shipped from their Supplier, the Distributor or Primary Supplier shall review the Objective Quality Evidence (OQE) obtained from its Suppliers for adequacy and accuracy. Discrepant OQE shall be corrected prior to shipping material from either location. Acceptable OQE shall be forwarded to Newport News as required by the Purchase Order. Copies shall be maintained in an auditable fashion and available for Newport News review.
- 4.5.5 When a quality management/Inspection system specification is invoked in the body of a Newport News Purchase Order, either directly or through a Military or Industry Specification, Distributors and Primary Suppliers are responsible for implementing and maintaining compliance with the requirements set forth in the invoked quality management/inspection system specification as it applies to the scope of work they perform. Distributors and Primary Suppliers are also responsible for assuring that their Suppliers implement and maintain compliance with the requirements set forth in the invoked quality system specification as it applies to the scope of work their Suppliers perform.
- 4.5.6 Although Distributors and Primary Suppliers have the final responsibility for assuring product quality and maintaining adequate control of their Suppliers, the quality programs of said Suppliers are also subject to on-site survey by Newport News. Such surveys will be conducted with the knowledge of the Distributor or Primary Supplier.
- 4.5.7 The manufacturing or production company that the original purchase order is placed with is considered the "Primary Supplier."

4.6 Inspections at the Supplier Plant

- 4.6.1 The Purchaser or Government reserves the right to audit processes and systems and to verify the conformance of the item(s) and services to the purchase order at any location including sub-tier suppliers at any stage of development or manufacture.
- 4.6.2 Source inspections are authorized by the "Inspection and Test" section of the applicable Newport News Purchase Order Appendix A. Newport News and its customers reserve the right to perform such inspections at any time. Newport News source inspection is generally not required unless specifically identified in the Purchase Order.
- 4.6.3 Government Procurement Quality Assurance (GPQA) - GPQA actions (frequently referred to as "DCAS inspection" or "DCMA inspection") if invoked by the Purchase Order, normally will be performed in accordance with the Department of Defense Logistics Agency Manual 8200. Supplier responsibilities regarding GPQA are outlined in the Purchase Order. Source inspections performed by Newport News, the Government, or other parties do not constitute acceptance by Newport News and do not relieve the Supplier of the responsibility for furnishing acceptable material.
- 4.6.4 The Supplier shall provide assistance to the Purchaser's or Government's representative during source inspection, audits, or other activities as may be specified by contract. This will include, but not be limited to, the following:
 - a) Cooperation in establishing dates and times of visits to the plant facilities.
 - b) Providing requested information, documents, and escorts during audits, surveys, and shop inspections or tours.
 - c) Providing calibrated M&TE to the Purchaser and/or Government representatives to check product compliance.

4.7 Non-Conforming Material Control

- 4.7.1 If, in the Supplier's opinion, nonconforming material cannot be reworked to conform to purchase order requirements, but is thought to be usable, the Supplier may submit a VIR for Purchaser approval. The VIR shall include a complete description of the nonconformance, quantity affected, proposed repair (as applicable), technical justification for acceptance, and the overriding benefit to the Purchaser for acceptance of the nonconformance. The cause and corrective action shall also be addressed, including action taken to prevent recurrence.

- 4.7.2 The acceptance of nonconforming materials by the Purchaser for a specific order or prior orders does not relieve Suppliers of their obligation to furnish all remaining items or material on the order, in strict conformance to all requirements. Any acceptance of a nonconformance will not serve as a waiver of requirements or establish a precedence for performance, regarding subsequent deliveries under current or future orders.
- 4.7.3 The Supplier shall inform the Purchaser during source inspection and prior to shipment of material of any and all nonconforming conditions and provide evidence of Purchaser acceptance (VIR) of such conditions prior to offering material for delivery.
- 4.7.4 Where the Supplier has design authority for the item with the nonconformance, and the nonconformance is a departure from a Supplier's shop or detail drawing, and this drawing is not subject to Purchaser approval, the Supplier may conduct internal material review action to determine product adequacy, provided all of the conditions below are met. In these instances, Purchaser approval of the material review decision is not required.
 - 4.7.4.1 The internal material review process is conducted by duly appointed representatives of the Supplier's Quality and Engineering organizations and other Supplier personnel necessary to determine product adequacy.
 - 4.7.4.2 The nonconformance does not constitute a design change.
 - 4.7.4.3 Records of the nonconformance and the corrective action(s) assigned are retained.
 - 4.7.4.4 The nonconformance does not impact provisioning parts procured as onboard repair parts, shore based spare parts, or parts procured as a construction spare part

- 4.7.5 Newport News reserves the right to reject any nonconforming materials or services offered by the Supplier. When it becomes obvious that rejection of items or materials on this order will occur, either as a result of 100 percent inspection or statistical sampling inspection, inspection may be discontinued and Newport News Receiving Inspection or Source Inspection will issue a Quality Notification (QN) or similar notice of nonconformance. Suppliers shall not only correct the cited discrepancies, but also shall perform such additional inspections and tests as may be necessary to preclude further rejections for other causes. A Newport News representative will inform the Supplier of the nonconformance and shall coordinate resolution of the QN with the Supplier and other Newport News departments, if necessary. Once contacted by a Newport News representative, the Supplier is requested to resolve the nonconformance within twenty- four (24) hours for software issues and forty-eight (48) hours for hardware issues. A delay in responding within the 24/48 hour timeframe may result in a lower quality score for that shipment. Nonconforming material may be returned to the Supplier for rework/replacement or repaired by Newport News or by separate contract at the Supplier's expense.
- 4.7.6 Material that has been reworked or repaired by a Supplier after having been rejected by Newport News shall be identified as "Resubmitted". The Supplier shall annotate his packing slip with the words "Resubmitted Material", the reason for the previous rejection, and the Newport News Inspection Report, Discrepancy Report or Quality Notification Number if known. If the material was Source Inspected and rejected such information should be annotated on the packing slip.

4.8 Corrective Action System

- 4.8.1 The Supplier must establish and maintain a Corrective Action Reporting System in accordance with the invoked quality requirements. In addition to non-conformances that have an assignable cause, a Corrective Action Report must be issued to internal activities or external Suppliers when the following non-conformances are found:
- a) Loss of material traceability or incorrect material.
 - b) Loss of test records or failure to perform tests.
 - c) Any nonconformance that becomes repetitive and demonstrates a trend.
- 4.8.2 The Corrective Action Reporting System must describe the nonconformance, establish the root cause, describe the immediate corrective action and the permanent preventive actions taken to preclude recurrence in the future, and assign individual responsibility to correct the root cause. Pertinent documentation shall be maintained by the Supplier and made available for review by the Purchaser upon request.

4.9 Purchaser – Furnished Materials

- 4.9.1 Materials furnished by Newport News or the Government shall be used for the purpose specified. Whenever discrepancies are discovered in Purchaser – furnished materials, Newport News shall be notified and no further work shall be performed until so authorized by Newport News. Material identification markings must be maintained throughout the manufacturing process.

4.10 Objective Quality Evidence (OQE)

- 4.10.1 The Purchase Order may require the Supplier to furnish OQE to substantiate material quality for receipt/source inspection. OQE may consist of mill test reports, certifications, inspection or test reports and/or certificates of compliance. All test reports supplied in fulfillment of this order shall be in the form of reports issued by the organization performing the tests or exact copies thereof; data transcribed to another organization's forms are not acceptable. All OQE shall be reviewed for completion and accuracy by the Supplier. Special attention should be given to the following attributes which are frequently cause for rejection:
- a) Illegible documents (or portions thereof)
 - b) Failure to identify applicable specifications, revisions, material grade, type, class, etc.
 - c) Failure to report results of all required tests/inspections
 - d) Failure to correlate documentation to the applicable hardware
- 4.10.2 All software submitted to Newport News shall be annotated or correlated to Newport News Purchase Order number, Purchase Order item number, drawing number and drawing piece number. The container or box that the software is in shall be clearly identified, for example, by a special sticker or container labeled "SOFTWARE ENCLOSED."
- 4.10.3 Corrections and additions to software (when required) shall be made as follows:
- a) Draw a line through an incorrect entry.
 - b) Initial and date each entry or correction.
 - c) Erasure, "whiteout" and/or obliteration of data are not acceptable.
 - d) Data cannot be altered by one organization on another organization's document.

4.10.4 Only the OQE requested by Newport News' Purchase Order line items or elsewhere in the body of the Purchase Order shall be sent to Newport News. OQE not required to be submitted to Newport News may be reviewed by Newport News at the Supplier's facility, or may be required to be submitted to Newport News for review at a later date. The Supplier shall maintain OQE which substantiates compliance with the Purchase Order or specification requirements for a minimum of seven years from date of shipment to Newport News, unless longer periods are specified by the Purchase Order or specification invoked therein.

4.11 Traceability

4.11.1 The Supplier shall establish a material traceability system for items or material requiring traceability to Objective Quality Evidence (OQE) that provides positive identity of the item or its parts throughout the manufacturing process including heat treatment, storage, and assembly operations. Each piece shall be physically marked or identified (i.e. bag and/or tagged) with the traceability code. The method of marking used shall be at the discretion of the Supplier, provided it does not violate the requirements of the purchase order or MIL-STD-792. The marking shall be legible throughout the manufacturing process, including outsourced operations. Unless otherwise specified male fasteners are to be marked on the top of the head.

4.11.2 Where the mechanical properties of the material have been altered by heat treatment or metal working processes, the material shall be uniquely re-identified, and the mechanical properties re-determined. The mill certification shall be accompanied by a supplemental certification from the heat treatment or metal working facility. This supplemental certification shall contain quantitative data for the process performed.

4.11.3 When the raw material mechanical properties are altered, the original certification data report shall be over-stamped and (or) annotated to contain the following information:

a) Traceability Number _____,
(marking on the finished item)

b) Is fabricated from raw material
Heat No. _____ and
Heat-Treat No _____,
when applicable

c) _____ and Date _____
(Name and Signature of Authorized Co. Rep)

4.11.4 NOTE: When applying the Over-stamp or Annotation to the Certification Data Report, no pertinent data shall be obliterated or rendered illegible.

4.12 Traceability Marking

- 4.12.1 The traceability marking may consist of raw material heat number and a heat treat lot number (if applicable) or a unique trace code number that provides, through documentation, traceability back to the raw material heat number and heat treat lot number (when applicable). In all cases, the traceability marking utilized shall be unique in that given only the traceability marking, the Supplier shall be able to provide all Objective Quality Evidence associated with the processing of that item, including heat treat.
- 4.12.2 When the marking on a part or piece of material will be removed by the manufacturing process, the marking shall be transferred to another location on the piece. If marking cannot be transferred to another location, it shall be restored after the completion of the operation. Items too small to mark or items that continually have their marking removed by the various manufacturing operations making it impractical to maintain, can be controlled by the use of totes, bags, and/or boxes identified with the proper traceability information provided the identity is maintained at all times.
- 4.12.3 In all cases, the accompanying paperwork (route sheet, traveler, etc.) shall indicate the proper traceability code and shall provide accountability throughout the manufacturing process (i.e., number of pieces cut, rejected, scrapped, tested, etc.).
- 4.12.4 NOTE: The above requirements for traceability of material are also applicable to sub-tier suppliers.

4.13 Loss of Traceability Marking

- 4.13.1 Items where the traceability marking is lost shall be considered nonconforming material until appropriate tests have been performed that can absolutely identify the heat from which the item was produced. This requirement is not applicable to items that are uniquely identifiable by their size, configuration and uniqueness of material.
- 4.13.2 The method of re-establishing traceability shall be approved by the Purchaser for each incident where traceability is lost. This information shall be submitted on a VIR.

4.14 Records

- 4.14.1 Permanent records shall be maintained that provide a clear and concise documentation trail from the finished product to the starting material and all intermediate process operations.

- 4.14.2 Each record shall identify the traceability code for the specific item to which it applies. The records shall include, or refer to other permanent records, which document the actual processing the product received during manufacturing or inspection. The records shall also show the results of all material testing, the identity of all material samples selected for testing (including retest samples when required), and the parent material from which the selection was made.
- 4.14.3 Component assembly records shall include the material traceability code of each part for which traceability is required.

4.15 **Supplier Evaluation Rating**

- 4.15.1 Newport News is committed to developing a strong Supplier base through better communications and continuous improvement. The performance of our Suppliers is continuously evaluated and rated. The results of this evaluation are used in two ways: (1) to determine future awards, and (2) to help our Suppliers improve their performance. Suppliers are rated as follows:

- 4.15.1.1 Quality Systems

Purchase Orders for certain critical items require the Supplier to have a quality control or inspection system such as Mil-I-45208, Mil-Q-9858 or ISO 9001: **1994**, 2000 **or 2008**. Newport News evaluation of a Quality Program/System may consist of an on-site survey, review of the Supplier's quality manual, and/or having a Supplier complete a Newport News Supplier Information Questionnaire.

- 4.15.1.2 Overall Supplier Quality Score (OSQS)

Overall Supplier Quality Score is a calculated rating based on the results of: inspections performed on Supplier-furnished material, first-time quality of preproduction software submittals, unauthorized changes to final Vendor Drawings, deviations from contractual requirements prior to shipment of material to NNS, Corrective and Preventive Action Requests, and NNS confidence in supplier's Quality Competency, Responsiveness, and Technological Competency. Normally, Suppliers that fail to maintain an OSQS of at least 90 will not be solicited or considered for award.

4.15.1.3 Supplier Improvement

Newport News realizes that our Suppliers are important to our future and may offer improvement suggestions to Suppliers performing below expectations for a particular commodity. Further information on these rating programs as well as current ratings for your company can be obtained by contacting the Supplier Quality Department.

4.16 **NNS Approved Suppliers Link**

- 4.16.1 The Purchaser's current approved lists of Level I Suppliers, Copper-Nickel (CuNi) Casting Suppliers, Casting Foundries with In-House Machining Capability, Butt Weld and Socket Weld (BW/SW) Pipe Fittings Suppliers, Forging Suppliers, and Level I Fastener Suppliers are at this link:

[Link to Approved Lists](#)

- 4.16.2 Seller's use of approved manufacturers does not relieve the Seller of its responsibility to ensure that all technical, service, and Order requirements are met.