

### 1. SCOPE

1.1 The material covered in this contract/purchase order will be used in a crucial shipboard system. The use of incorrect or defective material would create a high probability of failure resulting in serious personnel injury, loss of life, loss of vital shipboard systems, or loss of the ship itself. Therefore, the material has been designated as SPECIAL EMPHASIS material (Level I, Scope of Certification, or Quality Assured) and special control procedures are invoked to ensure receipt of correct material.

### 2. APP DOCS

2.1 Order of Precedence - In the event of a conflict between the text of this contract/purchase order and the references and/or drawings cited herein, the text of this contract/purchase order must take precedence. Nothing in this contract/purchase order, however, must supersede applicable laws and regulations unless a specific exemption has been obtained.

2.2 Applicable Documents - The document(s) listed below form a part of this contract/purchase order including modifications or exclusions.

2.3 "Document References" listed below must be obtained by the Contractor. Ordering information is included as an attachment to this contract/purchase order.

2.4

#### DOCUMENT REFERENCES

SPEC NO.	SLASH NO.	PART NO.	REV	DATE	DISTR	CD	AMEND	CHD	NTC	SUPP
ANSI/ ASQ Z1.4	0	0		01/01/2008			A			
ANSI/NCSL Z540.3	0	0		03/26/2013			A			
ASTM B666/B666M	0	0		04/10/2001			A			
ISO/IEC 17025	0	0		05/15/2005			A			
ISO 10012	0	0		04/15/2003			A			
ISO 9001	0	0		11/15/2008			A			
MIL-I-45208	0	0	A	07/24/1981			A		1	
MIL-STD-45662	0	0	A	08/01/1988			A			
MIL-STD-792	0	0	F	05/19/2006			A			
MIL-T-16420	0	0	K	09/16/1988			A		1	
SAE AMS2806	0	0	C	03/01/2008			A			
SAE AMS2807	0	0	A	09/01/2000			A			
SAE AMS2809	0	0	A	08/01/2007			A			
SAE AMS-STD-185	0	0		09/01/2000			A			
T9074-AS-GIB-010/271	0	0	1	09/11/2014			A			

### 3. REQUIREMENTS

3.1 Manufacture and Design - The item furnished under this contract/purchase order must meet the requirements as specified in MIL-T-16420, except as amplified or modified herein. MIL-T-16420 ordering data information is provided below:

Copper-Nickel Tubing.

(a) Tube, copper-nickel alloy, seamless and welded (copper alloy numbers 715 and 706);

ITEM NAME: TUBE, METALLIC  
2022

December 16,

DOCUMENT NUMBER: 2336-1200

- MIL-T-16420 Rev. K, dated 04/14/1978, Amendment 1 dated 09/16/1988
- (b) Composition - 70/30 (copper alloy no. 715)  
Temper - Annealed  
Type - I (seamless)  
Class - 1650  
Grade - 2
  - (c) Hydrostatic pressure test is required. No less than 150 percent or greater than 165 percent of maximum working pressure.
  - (d) Alternate nondestructive testing is not required.
  - (e) Ultrasonic Test of Class 50 and 200 tubing is not applicable.
  - (f) Ultrasonic test for flat products is not applicable to this contract/purchase order.
  - (g) Magnetic permeability testing for alloy 706 tube is not applicable.
  - (h) Outside diameter of standard size tubing - 4.500 Inches  
Minimum wall thickness of standard size tubing - 0.340 Inches
  - (i) Outside diameter of nonstandard size tubing - N/A  
Minimum wall thickness of nonstandard size tubing - N/A
  - (j) Tubing must be supplied in mill lengths (12 ft. minimum /20 ft. maximum), unless specific lengths are specified elsewhere in the contract/purchase order.
  - (k) Tube marking is required as specified elsewhere in the contract/purchase order.
  - (l) Quality assurance requirements must be as specified elsewhere in the contract/purchase order.
  - (m) Hydrostatic test pressure for special class tubing - N/A minimum, N/A maximum.
  - (n) Level of shipment, preservation, packaging, and packing must be level C.
  - (o) Maximum gross weight of container - 5,000 pounds.

3.2 Bar, Pipe, and Tube Quantities - When this order results in supplying fewer than 5 pieces as defined in the "Length" paragraph above, all material must be from a single heat of material.

3.3 Testing Certification - Certifications are required for the following tests on the items listed below. Additional testing (if any) per applicable specifications is still required, but certifications are only required as listed below.

Test - Quality Conformance/Compliance Inspection is encompassing of all required testing for MIL-T-16420 (paragraph 4.5). Testing includes:

- Expansion/Flattening Test
- Visual & Dimensional Examination
- Alloy Identity
- Chemical Analysis
- Mechanical Properties Test
- Nondestructive Test
  - Ultrasonic
  - Hydrostatic Test Pressure. For a minimum of 5 minutes

Item - Tube  
Performance - MIL-T-16420 and T9074-AS-GIB-010/271  
Acceptance - MIL-T-16420

Attribute - Certificate of Compliance for seamless tubing/pipe.  
Item - Tube  
Performance - Material supplied must be in the seamless condition (Each Tube)  
Acceptance - MIL-T-16420

3.4 Dimensional Examination - All tubes must be dimensionally examined per MIL-T-16420. In lieu of examining both ends of a tube, only one end of each tube is required. Upon receipt inspection, rejection of any single piece must be cause for rejection of the entire lot.

3.5 Change to Table VII of MIL-T-16420:

The column headed "longer lengths (max)" in all classes of Table VII must be changed to read "longer lengths (min)". All rows in aforementioned column reading "25" must be changed to read "20". The maximum length must be 25 feet per paragraph 3.8.5.2 of MIL-T-16420. - Example: Class 700 tube having O.D. of .540 and wall thickness of

.065 must be supplied with a minimum length of 12 feet, with 80% (by weight) in lengths of 20 to 25 feet.

3.6 MIL-T-16420 UT Changes:

Delete paragraph 3.4.3.4 and substitute: "3.4.3.4 Laminations. Tube required to meet the ultrasonic requirements specified in 3.4.3 must be examined for laminar discontinuities that present indications exceeding exploration threshold levels (20 percent for the contact method at +6 db; 30 percent for the immersion method at calibration) must be rejected."

3.6.1 In the second sentence of paragraph 4.4.7; delete "18 inch" and substitute "1 inch". In the last sentence, insert "3.4.3.4 and" before "3.8.2".

3.7 Changes to MIL-T-16420 Mechanical Properties (Table II):

Copper Alloy No. and Temper.	Outside diameter. Inches	Tensile strength, lb./in <sup>2</sup> (min.)	Yield Strength (.5% under load)	Elongation in 2" or 4x dia.
715 (70/30) Fully Annealed	4-1/2"	50,000	18,000	30% min.

3.8 Certificate of Compliance - (SPECIAL EMPHASIS MATERIAL) The Contractor must prepare and submit a certificate of compliance certifying that the items/components furnished under this contract comply with the requirements of the procurement document, including any/all invoked specifications and drawings.

3.9 Configuration Control - The Contractor must maintain the total equipment baseline configuration. For items of proprietary design, Contractor drawings showing the latest assembly configuration must be provided to the Government in electronic (C4) format. Definitions are provided elsewhere in the Contract/Purchase Order.

3.9.1 Waivers/Deviations - All waivers and deviations, regardless of significance or classification require review and approval by the Contracting Officer. Waivers and Deviations must be designated as Critical, Major, or Minor. Requests must include the information listed below.

- A complete description of the contract requirement affected and the nature of the waiver/deviation (non-conformance), including a classification of Critical, Major, or Minor.
- Number of units (and serial/lot numbers) to be delivered in this configuration.
- Any impacts to logistics support elements (such as software, manuals, spares, tools, and similar) being utilized by Government personnel or impacts to the operational use of the product.
- Information about remedial action being taken to prevent reoccurrence of the non-conformance.

3.9.2 Requests for Waivers/Deviations for Puget Sound Naval Shipyard and Intermediate Maintenance Facility (PSNS&IMF) Contracts must be submitted via email to the Procurement Contracting Officer. (PCO).

3.9.3 ECPs - The Government will maintain configuration control and change authority for all modifications or changes affecting form, fit, function, or interface parameters of the Equipment and its sub-assemblies. The Contractor must submit an Engineering Change Proposal (ECP) for any Class I or II changes that impact the Equipment covered by this contract. ECPs must be prepared in Contractor format, and must include the following information:

- The change priority, change classification (Class I or Class II), and change justification.

ITEM NAME: TUBE, METALLIC  
2022

December 16,

DOCUMENT NUMBER: 2336-1200

- b. A complete description of the change to be made and the need for that change.
- c. A complete listing of other Configuration Items impacted by the proposed change and a description of the impact on those CIs.
- d. Proposed changes to documents controlled by the Government.
- e. Proposed serial/lot number effectivities of units to be produced in, or retrofitted to, the proposed configuration.
- f. Recommendations about the way a retrofit should be accomplished.
- g. Impacts to any logistics support elements (such as software, manuals, spares, tools, and similar) being utilized by Government personnel in support of the product.
- h. Impacts to the operational use of the product.
- i. Complete estimated life-cycle cost impact of the proposed change.
- j. Milestones relating to the processing and implementation of the engineering change.

3.10 Mercury Free - Mercury and mercury containing compounds must not be intentionally added or come in direct contact with hardware or supplies furnished under this contract. Mercury contamination of the material will be cause for rejection.

3.11 NAVSEA 0948-LP-045-7010 - Any applicable requirements of NAVSHIPS 4410.17, NAVSEA 0948-LP-0457010, or 0948-045-7010 which the contractor must meet are included in this contract/purchase order. The above documents are for Government Use Only. Further application of the above documents is prohibited.

3.11.1 Marking of material with a Material Designator per the Drawing is also prohibited, with the exception of Fasteners. Fasteners must be marked with a Material Symbol/Designator as specified elsewhere in this contract.

\* \*  
\* QUALITY ASSURANCE REQUIREMENTS \*  
\* \*

3.12 See Contract Data Requirements List (CDRL) DI-MISC-81356A (Seamless Certificate of Compliance) - A statement of tests performed, listing the pieces tested, must be furnished along with a copy of the test results. Certification must include the contractor's name, address, and date, quantity inspected, identified to the contract/purchase order and item number, and the Contractor's or authorized personnel's signature. Test certifications must reference the standard/specification, including the revision, to which the testing was performed and the acceptance criteria used. Test procedure numbers may also be referenced on test reports. Test reports on weldments must be identified to weld joint and layer.

3.13 Quality System Requirements - The Contractor furnishing items under this contract/purchase order must provide and maintain a quality system in accordance with ISO 9001 as amplified or modified herein, with the calibration system requirements of ISO 10012 or ANSI/NCSS Z540.3 with ISO/IEC 17025. A Quality System in accordance with MIL-I-45208, with the calibration system requirements of MIL-STD-45662, is acceptable as an alternate.

3.13.1 The Contractor's quality system and products supplied under the system are subject to evaluation, verification inspection, and acceptance/non-acceptance by the Government to determine the system's effectiveness in meeting the quality requirements established in the Contract/Purchase Order.

3.13.2 The Contractor's quality system must be documented and must be available for review by the Contracting Officer prior to initiation of production and throughout the life of the contract. The Prime Contractor must, upon notification, make his facilities available for audit by the Contracting Officer or his authorized representative.

3.13.3 See CDRL DI-QCIC-81110 (Quality Management Systems) - All suppliers of Level I/SUBSAFE (LI/SS) material are required to submit a copy of their current documented quality system procedures to the Procurement Contracting Officer (PCO) prior to award of any contract/purchase order. Suppliers that have a copy of their current quality system procedures on file at the Procuring Activity may request the PCO waive this requirement.

3.13.4 This contract provides for the performance of Government Quality Assurance at destination. The place or places of performance may not be changed without the authorization of the Procurement Contracting Officer.

3.13.5 Any changes made by the Contractor to a qualified quality system will require re-submittal to the PCO.

3.14 Contractor Inspection Requirements - The Contractor must maintain adequate records of all inspections and tests. The records must indicate the nature and number of observations made, the number and type of deficiencies found, the quantities approved and rejected and the nature of corrective action taken as appropriate. Inspection records must be traceable to the material inspected.

3.14.1 The supplier's gauges, measuring and test equipment must be made available for use by the Government when required to determine conformance with Contract requirements. When conditions warrant, the supplier's personnel must be made available for operations of such devices and for verification of their accuracy and condition.

3.14.2 All documents and reference data applicable to this contract must be available for review by the Government. Copies of documents required for Government inspection purposes must be furnished in accordance with the instructions provided by the Government.

3.15 Subcontractor Inspection Requirements - The Government has the right to inspect at source, any supplies or services that were not manufactured or performed within the contractor's facility. Any purchasing documents to a subcontractor must cite the applicable portions of the contractually invoked quality system (e.g. calibration requirements), plus any product requirements that apply to the supplies being purchased. When the Government elects to perform source inspection at the subcontractor's facility, applicable purchase documents must be annotated with the following statement: "A Government inspection is required prior to shipment from your plant. Upon receipt of this order, promptly notify the Prime Contractor who will notify the PCO so that appropriate planning for Government inspection can be accomplished.

3.15.1 The prime contractor's program must include procedures to assess the capability of the prospective suppliers to produce the products or supply the services in accordance with the contract, prior to the issuance of any purchase document.

3.15.2 Each sub-tier supplier of material or services for items in Section 3 of this contract must be subjected to a periodic review or audit by the Prime to determine the continued capability of the supplier to control the quality of the products or services specified in the purchase order or contract.

3.15.3 The prime contractor must ensure that the purchased product conforms to specified purchase requirements and this contract. The type and extent of control applied to the supplier and the purchased product must be dependent upon the effect of the purchased product on the end item represented by this contract.

3.15.4 The prime contractor must evaluate the requirements of the contract and select suppliers based on their ability to supply the product in accordance with the prime contractor's requirements and the contract. Criteria for selection and evaluation must be established. Records of this effort must be available for review by the government.

3.15.5 The prime contractor's supplier quality assurance program must provide for a review of purchase documents to assure applicable quality requirements are included or referenced in the documentation for compliance by the supplier.

3.16 Government Furnished Material and/or Equipment (GFM/GFE) - When material or equipment is furnished by the Government, the Contractor must develop documented control procedures that require at least the following:

3.16.1 Visual examination upon receipt to detect damage during transit.

3.16.2 Inspection for completeness and proper type.

3.16.3 Verification of material quality received.

ITEM NAME: TUBE, METALLIC  
2022

December 16,

DOCUMENT NUMBER: 2336-1200

3.16.4 Periodic inspection and precautions to assure adequate storage conditions and to guard against damage from handling and deterioration during storage.

3.16.5 Functional testing, either prior to or after installation, or both, as required by the Contract to determine satisfactory operation.

3.16.6 Identification and protection from improper use or disposition.

3.16.7 Reporting to the Government, any GFM or GFE property found damaged, malfunctioning, or otherwise unsuitable for use. In the event of damage or malfunction during or after installation, the supplier must determine and record probable cause and necessity for withholding the material from use.

3.16.8 For GFE material, and as required by the terms of the bailment agreement, the supplier must establish procedures for adequate storage, maintenance, and inspection of bailed Government material. Records of all inspection and maintenance performed on bailed property must be maintained.

3.16.9 Material returned to the contractor must be handled as GFM.

3.17 Traceability and Certification Requirements - To assure that correct materials are installed in Level I/SUBSAFE systems, it is imperative that traceability be maintained from the material to the material certification test report and other required Objective Quality Evidence (OQE). The material certification report must completely and accurately reflect that the material supplied meets the specified requirements. Materials requiring Traceability and Certification Data are identified within Paragraph 3, Section C of this contract/purchase order.

3.17.1 The following provides the minimum requirements for maintaining material traceability and supplements the requirements specified in DI-MISC-81020A and elsewhere in the contract/purchase order. The Contractor must develop written procedures that implement the material control requirements stated herein.

3.18 Material Traceability - The certification data report must be identified through a unique traceability number, heat-lot number, or heat-treat number, as applicable, which must also be marked on the material. This traceability marking on the material must provide direct traceability to the material's chemical composition and mechanical properties certification data. For material produced by batch, continuous cast, or continuous pour processes, samples must be taken no less than once in every eight hours of operation for the purpose of validating proper chemical composition and mechanical properties. Traceability must be maintained through all process operations including any subcontracted operations, to the finished component.

3.19 Material Marking for Traceability and Identification - The following are the minimum marking requirements. Additional/alternate marking requirements, if applicable, will be specified elsewhere in the contract/purchase order. In addition to the marking requirements on applicable drawings and/or specifications, marking for traceability is required. All traceability markings must be permanently applied in accordance with MIL-STD-792 (except as specified below). An alternate marking method is permissible provided it is an available option in the contractually invoked specification or drawing, except in instances where the material has been modified by this contract/purchase order and differs from that specified in the specification or drawing.

3.19.1 Permanent marking - Permanent traceability marking must be marked on each end of each pipe, tube, and metal bar. (MONEL and K-MONEL bar: 3/4 inch to 1 inch rods, and 7/8 inch hex bar may be marked on the surface near the end of bar/rod, and rod less than 3/4 inch and hex bar less than 7/8 inch may be bundled and tagged or boxed with the traceability marking on the tag or box.) All traceability marking must be permanently applied in accordance with MIL-STD-792. An alternate marking method is permissible provided it is an available option in the contractually invoked specification, except in instances where the material has been modified by this contract/purchase order, and differs from that specified in the

ITEM NAME: TUBE, METALLIC  
2022

December 16,

DOCUMENT NUMBER: 2336-1200

specification. Electric arc marking or impression marking is strictly prohibited on thin wall tubing. (wall thickness of less than 0.125 inch).

3.19.2 Marking must be legible and must be located so as to not affect the form, fit, and function of the material.

3.19.3 Temporary Marking - Temporary Marking must consist of:

Name or Trademark of Manufacturer, specification and grade (as applicable), size, contract number, and the traceability marking. Pipe and tube marking must also include SML (for seamless). Marking must be in accordance with the material specification and SAE AMS2806, SAE AMS2807, SAE AMS2809, Table I of SAE AMS-STD-185, or ASTM-B666/B666M as applicable. Application must be in accordance with MIL-STD-792, Type-A (temporary ink stenciling). An alternate method is permissible for MONEL and K-MONEL bar provided it is an available option (temporary marking only) in the applicable material specification, except that hot finished rod with rough ground surface 3/4 inch and under may be bundled and tagged or boxed with the traceability marking on the bag or box. Contamination levels for ink stenciling must be as outlined in paragraph 5.2 of MIL-STD-792.

3.20 See CDRL DI-MISC-81020A (Chemical and Mechanical) In addition to the certification data requirements specified in DI-MISC-81020A, the following material certification requirements apply:

3.20.1 Quantitative chemical and mechanical analysis of material traceable to traceability markings is required. Material certification test reports must include the class, form, condition, grade, type, finish, and/or composition, as applicable, of the material supplied.

3.20.2 Re-identification and re-certification of material is required when the material is subjected to a process which alters it's properties. If the starting material or raw stock is processed in a manner that will not affect its chemical composition or mechanical properties, the original certifications for the chemical composition and mechanical properties, as required by the material specification, are acceptable. Re-certification of the chemical or mechanical properties is required if a process is used during fabrication that alters the original properties of the material (e.g. alloying, heat treating, or forming). In these instances, the properties of the material must be redetermined and documented to reflect the altered condition. The altered material must be uniquely re-identified. The properties thus determined and documented, are required for final certification and must conform to the material specification or the contract/purchase order requirements. When only the mechanical properties are altered, the original certification for chemical composition must be over stamped and/or annotated with the unique traceability marking used with the altered material and at a minimum contain the information below.

TRACEABILITY MARKING \_\_\_\_\_

(marking on finished item)

IS FABRICATED FROM RAW MATERIAL IDENTIFIED TO

HEAT/LOT NUMBER \_\_\_\_\_ AND HEAT TREAT NUMBER \_\_\_\_\_  
(when applicable)

\_\_\_\_\_  
DATE \_\_\_\_\_

(name and signature of auth. co. rep.)

3.20.3 Material certification data forwarded by the manufacturer must contain a signed certification that the report results represent the actual attributes of the material furnished and indicate full compliance with all applicable specification and contract requirements. Transcription of certification data is prohibited.

3.20.4 Statements on material certification documents must be positive and unqualified. Disclaimers such as "to the best of our knowledge" or "we believe the information contained herein is true" are not acceptable.

ITEM NAME: TUBE, METALLIC  
2022

December 16,

DOCUMENT NUMBER: 2336-1200

**3.20.5 If material is received without the required certification papers or with incorrect/missing data on the certification papers, the material will be rejected.**

3.21 Material Handling - The written material control process must include the following:

3.21.1 All raw materials must have traceability markings (except as specified below).

3.21.2 Stored raw materials requiring traceability must be segregated to preclude intermingling with materials not requiring traceability.

3.21.3 When traceability markings will be removed by a manufacturing or fabrication process, the marking must be recorded prior to removal and be immediately restored upon completion of the process. If this cannot be done or is impractical, an appropriate material control procedure (such as a bag and tag, tagging, and/or tote box control) must be employed. The material control procedure must provide a method of positive control to preclude commingling of heats/lots or loss of traceability. The traceability marking must be reapplied upon completion of the final manufacturing process.

3.21.4 Purchase orders for raw material must specify that the material be traceable to material certification test reports by traceability markings on the material and identified on the test reports. The certification data requirements contained in DI-MISC-81020 must be invoked by the prime contractor on all subcontractors supplying Level I material.

3.21.5 The material control process must include requirements for the maintenance of traceability for items sent out for subcontracted operations. If such operations would remove traceability markings, purchase or work orders must specify a method and marking location for remarking. The contractor must also ensure that subcontractor production controls are adequate to preclude commingling of materials during processing.

3.22 Receiving inspection -

3.22.1 Products and services produced by sub-tier suppliers for incorporation in the contract end item must be subject to inspection or audit at the time of receipt by the prime prior to further processing within the prime contractor's plant or shipment to another location.

3.22.2 Receiving Inspection must include as a minimum -

Verification that the traceability marking on the material agrees with that on the certification test reports.

Verification that certification test reports are legible and complete.

Verification that the contents of the certification test reports are in compliance with the contractually invoked specifications and requirements.

3.23 Discrepancy reporting -

3.23.1 Nonconforming products from sub-tier suppliers must be identified and processed in accordance with the prime contractor's procedures for controlling nonconforming products. The prime contractor must report the receipt of any nonconforming products to the responsible sub-tier supplier in accordance with established procedures. Nonconforming material records must be maintained and available for review by the Government.

3.24 Final Inspection - The following inspections must be performed prior to Government inspection and acceptance.

3.24.1 Material Sampling - Material must be inspected for form, fit, and function. Lot acceptance must be based on zero defects and lot rejection based on one defect. The sample size must be in accordance with the sampling plan(s) in the applicable military specification or standard, federal specification or standard, or drawing to which the material was manufactured. In the absence of such sampling plans, sampling inspection must

ITEM NAME: TUBE, METALLIC  
2022

December 16,

DOCUMENT NUMBER: 2336-1200

be per ANSI/ASQ Z1.4, general inspection level II (for sample size selection code), table IIA (for sample size).

SMALL LOT SIZES - For lot sizes of fifty or less, the minimum sample size must be eight units. For lot sizes of eight or less, the sample size must be one hundred percent of the lot.

3.24.2 The Manufacturer may elect to use Statistical Process Control (SPC) to assure product quality in lieu of the above attribute sampling plan, provided that the SPC methodology/system used provides acceptable products to the Government. However, the Government/Navy Receipt Inspection Activity may perform their acceptance inspection of the material using the attribute sampling plan outlined above.

3.24.3 All data concerning material verification (chemical, mechanical or physical properties), traceability (material certifications to material marking), and nondestructive test (NDT) certifications for material must be 100% inspected. The certification test reports must also be 100% inspected for completeness and legibility.

3.24.4 All material requiring traceability must be 100% inspected for traceability marking and that the marking is legible.

3.25 See CDRL DI-NDTI-80809B (Ultrasonic Test Report) A statement of tests performed, listing the pieces tested, shall be furnished along with a copy of the test results. Certification shall include the contractor's name, address, and date, quantity inspected, identified to the contract/purchase order and item number, and the Contractor's or authorized personnel's signature. Test certifications must reference the standard/specification, including the revision, to which the testing was performed and the acceptance criteria used. Test procedure numbers may also be referenced on test reports. Test reports on weldments shall be identified to weld joint and layer.

3.26 See CDRL DI-QCIC-82089 (Hydrostatic Test Report) A statement of tests performed, listing the pieces tested, shall be furnished along with a copy of the test results. Certification shall include the contractor's name, address, and date, quantity inspected, identified to the contract/purchase order and item number, and the Contractor's or authorized personnel's signature. Test certifications must reference the standard/specification, including the revision, to which the testing was performed and the acceptance criteria used. Test procedure numbers may also be referenced on test reports. Test reports on weldments shall be identified to weld joint and layer.

3.27 See CDRL DI-MISC-82386 (Special Emphasis C of C) - The certificate of compliance must show traceability to the marking applied on each individual item, and must contain the following information:

1. Contractor's name, address, phone number and e-mail address.
2. Authorized personnel's signature including printed name and title.
3. Date.
4. The contract/purchase order number (example: SPMYM2-10-P-K899) including the Contract Line Item Number and Government contracting agencies name (example: DLA Maritime Puget Sound).
5. A statement certifying that all items furnished on the contract are in full compliance with all specification and contract requirements. Statements on material certification documents must be positive and unqualified. Disclaimers such as "to the best of our knowledge" or "we believe the information contained herein is true" are not acceptable.

And when applicable:

6. Heat number and lot number.
7. Lubricants, sealants, anti-seize, and/or thread locking compounds.
8. Certification that O-rings, packing, gaskets, or other elastomeric products were installed in a compressed state within an assembly or sub-assembly, prior to expiration of the shelf life.
9. When weld procedure submittal is required by the contract, a statement that the approval date of the qualification data precedes any production or repair welding performed on this Contract.

## 4. QA PROV

### 4.1 Notes to the Contractor -

4.1.1 The Contractor for proprietary designs - Departures from Contractor imposed requirements, not specifically covered by the contract, must be judged individually on the basis of the effect, if any, on contractual requirements. The departure must be considered a nonconformance and be submitted to the PCO for disposition.

4.1.2 The Contractor for proprietary designs - All records of departures from Contractor imposed requirements must be maintained and available for review at the Contractor's facility. A record of these departures, traceable to the applicable part number and contract number must be submitted to the PCO.

4.1.3 The Contractor for proprietary designs - For proprietary designs, the contractor's part numbers are acceptable for reference only. The delivered material must conform to all drawings, specifications, and other contractual requirements.

4.1.4 The Contractor - The ECDS (Electronic Contractor Data Submission) system is available for certain data submissions, and to submit questions and clarifications, and waiver requests on Contracts and Solicitations. ECDS can be found at:  
<https://register.nslc.navy.mil/>

## 5. PACKAGING

5.1 Preservation, Packaging, Packing and Marking - Preservation, Packaging, Packing and Marking must be in accordance with the Contract/Purchase Order Schedule.

## 6. NOTES

6.1 Several definitions of terms that apply to LI/SOC items are listed below. All terms may not apply to every item.

6.1.1 The ECDS (Electronic Contractor Data Submission) system is at:  
<https://register.nslc.navy.mil/> This application will require advance registration using a PKI Digital Certificate. Information on initiating a PKI can be found at:  
<http://iase.disa.mil/pki/eca/Pages/index.aspx> A Vendor User Guide is available as CSD001 in the CSD (Contract Support Document) Library within ECDS.

6.1.2 Critical Safety Item (CSI) - Any ship part, assembly, or support equipment containing a critical characteristic whose failure, malfunction, or absence of which could cause a catastrophic or critical failure resulting in loss of, or serious damage to the ship, or unacceptable risk of personal injury or loss of life.

6.1.3 Critical Process - As determined by the TWH, any process, operation or action performed on a Ship CSI that serves to establish a critical characteristic (such as welding, soldering, machining, polishing, cleaning, or assembling) or confirm that a critical characteristic is within drawing or specification compliance (such as, testing, measurement, or non-destructive evaluation).

ITEM NAME: TUBE, METALLIC  
2022

December 16,

DOCUMENT NUMBER: 2336-1200

6.1.4 First Article - Pre-production models, initial product samples, test samples produced to ensure a manufacturer's capability to meet full specification requirements.

6.1.5 First Article Test (FAT) - Contractually required testing and inspection of a supplier's preproduction, production, or "production representative" specimens to evaluate a manufacturer's ability to produce conforming product prior to the Government's commitment to receive subsequent production items. First Article Testing is product specific and does not assess manufacturing process controls nor does it assure the effectiveness of the manufacturer's quality program.

6.1.6 Objective Quality Evidence (OQE) - The quantitative and qualitative data of all mechanical, chemical, and performance tests performed (as required by the applicable specification, drawing, or purchase document) to prove that the material supplied conforms to the specified requirements.

6.1.7 Surface Discontinuity - Any surface irregularity, marking, or localized change in physical character of the surface, other than dimensional, that exists infrequently at one or several places. (Examples: burrs, dents, nicks, scratches, gouges, pits, center-punches, scribes, and tool marks) Surface discontinuities less than 0.005-inch in depth are acceptable provided they do not violate any other design requirements specified in this Contract/Purchase Order.

6.1.8 Traceability Code - A code or number providing traceability to the actual chemical and mechanical properties of the specified heat, batch, or form from which the material originated.

6.1.9 Verification - An examination performed to determine compliance with a specific requirement.

6.1.10 Nonconformance - Defined as affecting or violating the following:

- The requirements of this contract/purchase order.
- Contractually invoked drawings (i.e. envelope dimensions, interface dimensions with mating parts/equipment, center of gravity, weights, piece part identification, material, etc.).
- Contractually invoked federal, military, or commercial specifications and/or standards.
- Form, fit, function, performance to contract requirements, reliability, maintainability, interchangeability, safety of personnel or equipment, or additional cost to the Government.

6.1.11 Waiver - A written authorization to accept an item, which during manufacture, or after having been submitted for Government inspection or acceptance, is found to depart from specified requirements, but nevertheless is considered suitable for use as is or after repair by an approved method.

6.1.12 Deviation - A specific written authorization (granted prior to the manufacture of an item) to depart from a particular requirement(s) of an item's current approved configuration documentation for a specific number of units or a specified period of time, and to accept an item which is found to depart from specified requirements, but nevertheless is considered suitable for use "as is" or after repair by an approved method.

6.1.13 Critical Waiver/Deviation - This waiver/deviation consists of a departure involving safety.

6.1.14 Major Waiver/Deviation - This waiver/deviation consists of a departure involving:

- Performance - Interchangeability, Reliability, Survivability, Maintainability, or Durability of the item or its repair parts
- Health or Safety
- Effective Use or Operation
- Weight, Stability, or Structural Integrity
- System design parameters as schematics, flows, pressures or temperatures

ITEM NAME: TUBE, METALLIC  
2022

December 16,

DOCUMENT NUMBER: 2336-1200

- Compartment arrangements or assigned function

6.1.15 Minor Waiver/Deviation - This waiver/deviation consists of a departure which does not involve any of the factors listed as critical or major

6.1.16 Engineering Change (EC) - A change to the current approved configuration documentation of a configuration item at any point in the life cycle of the item.

6.1.17 Engineering Change Proposal (ECP) - A proposed Engineering Change and the documentation by which the change is described, justified, and submitted to the Government for approval or disapproval.

6.2 In accordance with OPNAVINST 5510.1 all documents and drawings provided by the U.S. Navy to perspective Contractors must include a "Distribution Statement" to inform the contractor of the limits of distribution, and the safeguarding of the information contained on those documents and drawings.

6.2.1 There are 7 (seven) separate distribution statement codes used for non-classified documents and drawings. The definition for each is as follows:

- A... approved for public release; distribution is unlimited.
- B... distribution authorized to US Governments agencies only.
- C... distribution authorized to US Government agencies and their contractors.
- D... distribution authorized to DoD and DoD contractors only.
- E... distribution authorized to DoD Components only.
- F... further distribution only as directed by Commander, Naval Sea Systems Command, code 09T.
- X... distribution is authorized to US Government agencies and private individuals or enterprises eligible to obtain export controlled technical data in accordance with OPNAVINST 5510.161.

6.3 Ordering Information for Document References - The Department of Defense Single Stock Point (DODSSP), Website <http://www.dsp.dla.mil/>, provides product information for the Department Of Defense Index Of Specifications and Standards (DODISS) (i.e. Military/Federal Specifications and Standards), Data Item Descriptions (DIDs), and other DODSSP Products. Most Specifications can obtained directly from <http://quicksearch.dla.mil/>

A. Availability of Cancelled Documents - The DODSSP offers cancelled documents that are required by private industry in fulfillment of contractual obligations in paper format. Documents can be requested by phoning the Subscription Services Desk.

B. Commercial Specifications, Standards, and Descriptions - These specifications, standards and descriptions are not available from Government sources. They may be obtained from the publishers of the applicable societies.

C. Ordnance Standards (OS), Weapons Specifications (WS), and NAVORD OSTD 600 Pages - These type publications may be obtained by submitting a request to:

Commander, Indian Head Division, Naval Surface Warfare Center  
Code 8410P, 101 Strauss Avenue  
Indian Head, MD 20640-5035

D. On post-award actions, requests for "Official Use Only" and "NOFORN" (Not Releasable to Foreign Nationals) documents must identify the Government Contract Number, and must be submitted via the cognizant Defense Contract Management Command (DCMC) for certification of need for the document. On pre-award actions such requests must be submitted to the PCO for certification of need for the document.

E. NOFORN Military Specifications and Standards (including Amendments, Change Notices and Supplements, but NOT interim Changes) to be ordered from:

Contracting Officer  
NAVSUP-WSS  
Code 87321

NIIN: PS-TDP-0063

PAGE 13

ITEM NAME: TUBE, METALLIC  
2022

December 16,

DOCUMENT NUMBER: 2336-1200

5450 Carlisle Pike  
P.O. Box 2020 Mechanicsburg, Pa. 17055-0788

F. Nuclear Reactor Publications Assigned NAVSEA Documents and Identification Numbers (i.e. NAVSEA Welding Standard, NAVSEA 250-1500-1) are to be ordered from:

Commanding Officer  
NAVSUP-WSS  
Code 009  
5450 Carlisle Pike  
P.O. Box 2020  
Mechanicsburg, Pa.  
17055-0788

G. Technical Manuals Assigned NAVSEA Identification Numbers (i.e. NAVSEA Welding and Brazing Procedure, NAVSEA S9074-AQ-GIB-010/248) are to be ordered from:

Commanding Officer  
NAVSUP-WSS  
Code 1 Support Branch  
700 Robbins Avenue  
Philadelphia, Pa. 19111-5094

H. Interim Changes and Classified Specifications must be obtained by submitting a request on DD Form 1425 to NAVSUP-WSS.

## 7. DD FORM 1423 COMMENTS



NIIN: PS-TDP-0063  
ITEM NAME: TUBE, METALLIC  
2022  
DOCUMENT NUMBER: 2336-1200

PAGE 15  
December 16,



NIIN: PS-TDP-0063

ITEM NAME: TUBE, METALLIC  
2022

DOCUMENT NUMBER: 2336-1200

PAGE 17

December 16,

CONTRACT DATA REQUIREMENTS LIST <i>(1 Data Item)</i>						Form Approved OMB No. 0704-0188		
<p>The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. <b>Please do not return your form to the above organization. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.</b></p>								
A. CONTRACT LINE ITEM NO.		B. EXHIBIT		C. CATEGORY:				
				TDP    X    TM    OTHER MISC				
D. SYSTEM ITEM			E. CONTRACT/PR NO.		F. CONTRACTOR			
1. DATA ITEM NO.	2. TITLE OF DATA ITEM				3. SUBTITLE			
	CERTIFICATE OF COMPLIANCE				QUALITY COMPLIANCE / REQD TESTS			
4. AUTHORITY <i>(Data Acquisition Document No.)</i>			5. CONTRACT REFERENCE		6. REQUIRING OFFICE			
DI-MISC-81356A			TDP: Section 3		PURCHASING ACTIVITY			
7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION		14. DISTRIBUTION			
SD		ONE/R	SEE BLOCK 16					
8. APP CODE	D	11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION		a. ADDRESSEE	b. COPIES		
N/A		N/A	N/A			DRAFT	FINAL	
						Reg	Repr o	
16. REMARKS					N4523A	0	1	0
<p><b>Block 9:</b> Distribution Statement D. Distribution authorized to DoD and DoD contractors only. Administration and operations only, effective 12/5/2022. Other U.S. requests must be referred to COMNAVSEASYSKOM.</p> <p><b>Block 12 -</b> Certification/Data Report documentation shall be attached in the Wide Area Workflow (WAWF) e-Business Suite. Acceptance/Rejection of Certification/Data Report documentation will be accomplished with the corresponding material and will not be accomplished prior to shipment of material.</p>								
G. PREPARED BY /s/ HAMILTON, DUSTIN			H. DATE 12/5/2022	I. APPROVED BY /s/ LEACH, WILLIE		J. DATE 12/5/2022		

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

NIIN: PS-TDP-0063  
ITEM NAME: TUBE, METALLIC  
2022  
DOCUMENT NUMBER: 2336-1200

PAGE 19  
December 16,



NIIN: PS-TDP-0063

ITEM NAME: TUBE, METALLIC  
2022

DOCUMENT NUMBER: 2336-1200

PAGE 21

December 16,

CONTRACT DATA REQUIREMENTS LIST <i>(1 Data Item)</i>						Form Approved OMB No. 0704-0188		
<p>The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. <b>Please do not return your form to the above organization. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.</b></p>								
A. CONTRACT LINE ITEM NO.		B. EXHIBIT		C. CATEGORY:				
				TDP    X    TM    OTHER MISC				
D. SYSTEM/ITEM			E. CONTRACT/PR NO.		F. CONTRACTOR			
1. DATA ITEM NO.	2. TITLE OF DATA ITEM				3. SUBTITLE			
	CERTIFICATE OF COMPLIANCE				SEAMLESS CERTIFICATE OF COMPLIANCE / TUBING			
4. AUTHORITY <i>(Data Acquisition Document No.)</i>			5. CONTRACT REFERENCE		6. REQUIRING OFFICE			
DI-MISC-81356A			TDP: Section 3		PURCHASING ACTIVITY			
7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION		14. DISTRIBUTION			
SD	D	ONE/R	SEE BLOCK 16		a. ADDRESSEE	b. COPIES		
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	DRAFT		FINAL		
N/A		N/A	N/A			Reg	Repr o	
16. REMARKS					N4523A	0	1	0
<p><b>Block 9:</b> Distribution Statement D. Distribution authorized to DoD and DoD contractors only. Administration and operations only, effective 12/5/2022. Other U.S. requests must be referred to COMNAVSEASYSKOM.</p> <p><b>Block 12 -</b> Certification/Data Report documentation shall be attached in the Wide Area Workflow (WAWF) e-Business Suite. Acceptance/Rejection of Certification/Data Report documentation will be accomplished with the corresponding material and will not be accomplished prior to shipment of material.</p>								
G. PREPARED BY /s/ HAMILTON, DUSTIN			H. DATE 12/5/2022		I. APPROVED BY /s/ LEACH, WILLIE		J. DATE 12/5/2022	

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

NIIN: PS-TDP-0063  
ITEM NAME: TUBE, METALLIC  
2022  
DOCUMENT NUMBER: 2336-1200

PAGE 23  
December 16,

CONTRACT DATA REQUIREMENTS LIST <i>(1 Data Item)</i>						Form Approved OMB No. 0704-0188		
<p>The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. <b>Please do not return your form to the above organization. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.</b></p>								
A. CONTRACT LINE ITEM NO.		B. EXHIBIT		C. CATEGORY:				
				TDP		TM		
				OTHER NDTI				
D. SYSTEM/ITEM			E. CONTRACT/PR NO.		F. CONTRACTOR			
1. DATA ITEM NO.	2. TITLE OF DATA ITEM				3. SUBTITLE			
	TEST/INSPECTION REPORT				ULTRASONIC TEST REPORT / TUBING			
4. AUTHORITY (Data Acquisition Document No.)			5. CONTRACT REFERENCE		6. REQUIRING OFFICE			
DI-NDTI-80809B			TDP: Section 3		PURCHASING ACTIVITY			
7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION		14. DISTRIBUTION			
SD		ONE/R	SEE BLOCK 16					
8. APP CODE	D	11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION		a. ADDRESSEE	b. COPIES		
N/A		N/A	N/A			DRAFT	FINAL	
						Reg	Repr o	
16. REMARKS					N4523A	0	1	0
<p><b>Block 4: Tailored to allow the vendor to only provide 10.2.1c, d, f, and g (excluding the need for a separate cover sheet and title page). 10.2.3.2a, b (when applicable), and e. 10.2.3.3a and b. 10.2.5b. 10.2.6.1a, b, c, e, and g. 10.2.6.4.1. 10.2.6.4.2a. 10.2.7.1. 10.2.7.3</b></p> <p><b>Ensure certs provided are traceable to material via unique markings as specified in contract/purchase order.</b></p> <p><b>Block 9:</b> Distribution Statement D. Distribution authorized to DoD and DoD contractors only. Administration and operations only, effective 12/5/2022. Other U.S. requests must be referred to COMNAVSEASYSCOM.</p> <p><b>Block 12 -</b> Certification/Data Report documentation shall be attached in the Wide Area Workflow (WAWF) e-Business Suite. Acceptance/Rejection of Certification/Data Report documentation will be accomplished with the corresponding material and will not be accomplished prior to shipment of material.</p>								
Document No.: 2336-1200								
15. Total					0	1	0	
G. PREPARED BY /s/ HAMILTON, DUSTIN			H. DATE 12/5/2022		I. APPROVED BY /s/ LEACH, WILLIE		J. DATE 12/5/2022	

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

NIIN: PS-TDP-0063  
ITEM NAME: TUBE, METALLIC  
2022  
DOCUMENT NUMBER: 2336-1200

PAGE 25  
December 16,



<b>INSTRUCTIONS FOR COMPLETING DD FORM 1423</b> <i>(See DoD 5010.12-M for detailed instructions.)</i>	
<p style="text-align: center;"><b><u>FOR GOVERNMENT PERSONNEL</u></b></p> <p>Item A. Self-explanatory.</p> <p>Item B. Self-explanatory.</p> <p>Item C. Mark (X) appropriate category: TDP - Technical Data Package; TM - Technical Manual; Other - other category of data, such as "provisioning," "Configuration Management", etc.</p> <p>Item D. Enter name of system/item being acquired that data will support.</p> <p>Item E. Self-explanatory (to be filled in after contract award).</p> <p>Item F. Self-explanatory (to be filled in after contract award).</p> <p>Item G. Signature of preparer of CDRL.</p> <p>Item H. Date CDRL was prepared.</p> <p>Item I. Signature of CDRL approval authority.</p> <p>Item J. Date CDRL was approved.</p> <p>Item 1. See DoD FAR Supplement Subpart 4.71 for proper numbering.</p> <p>Item 2. Enter title as it appears on data acquisition document cited in item 4.</p> <p>Item 3. Enter subtitle of data item for further definition of data item (optional entry).</p> <p>Item 4. Enter Data Item Description (DID) number, military specification number, or military standard number listed on DoD 5010.12-L (AMS DL), or one-time DID number, that defines data content and format requirements.</p> <p>Item 5. Enter reference to tasking in contract that generates requirement for the data item (e.g., Statement of Work paragraph number).</p> <p>Item 6. Enter technical-office responsible for ensuring adequacy of the data item.</p> <p>Item 7. Specify requirement for inspection/acceptance of the data item by the Government.</p> <p>Item 8. Specify requirement for approval of a draft before preparation of the final data item.</p> <p>Item 9. For technical data, specify requirement for contractor to mark the appropriate distribution statement on the data (ref., DoDD 5230.24).</p> <p>Item 10. Specify number of times data items are to be delivered.</p> <p>Item 11. Specify as-of date of data item, when applicable.</p> <p>Item 12. Specify when first submittal is required.</p> <p>Item 13. Specify when subsequent submittals are required, when applicable.</p> <p>Item 14. Enter addressees and number of draft/final copies to be delivered to each addressee. Explain reproducible copies in Item 16.</p> <p>Item 15. Enter total number of draft/final copies to be delivered.</p> <p>Item 16. Use for additional/clarifying information for items 1 through 15. Examples are: Tailoring of documents cited in Item 4; Clarification of submittal dates in Items 12 and 13; Explanation of reproducible copies in item 14; Desired medium for delivery of the data item.</p>	<p style="text-align: center;"><b><u>FOR THE CONTRACTOR</u></b></p> <p>Item 17. Specify appropriate price group from one of the following groups of effort in developing estimated prices for each data item listed on the DD Form 1423.</p> <p>a. Group I. Definition - Data which is not otherwise essential to the contractor's performance of the primary contracted effort (production, development, testing, and administration) but which is required by DD Form 1423.</p> <p>Estimated Price - Costs to be included under Group I are those applicable to preparing and assembling the data item in conformance with Government requirements, and the administration and other expenses related to reproducing and delivering such data items to the Government.</p> <p>b. Group II. Definition - Data which is essential to the performance of the primary contracted effort but the contractor is required to perform additional work to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, or quality of the data item.</p> <p>Estimated Price - Costs to be included under Group II are those incurred over and above the cost of the essential data item without conforming to Government requirements, and the administrative and other expenses related to reproducing and delivering such data item to the Government.</p> <p>c. Group III. Definition - Data which the contractor must develop for his internal use in performance of the primary contracted effort and does not require any substantial change to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, and quality of the data item.</p> <p>Estimated Price - Costs to be included under Group III are the administrative and other expenses related to reproducing and delivering such data item to the Government.</p> <p>d. Group IV. Definition - Data which is developed by the contractor as part of his normal operating procedures and his effort in supplying these data to the Government is minimal.</p> <p>Estimated Price - Group IV items should normally be shown on the DD Form 1423 at no cost.</p> <p>Item 18. For each data item, enter an amount equal to that portion of the total price which is estimated to be attributable to the production or development for the Government of that item of data. These estimated data prices must be developed only from those costs which will be incurred as a direct result of the requirement to supply the data, over and above those costs which would otherwise be incurred in performance of the contract if no data were required. The estimated data prices must not include any amount for rights in data. The Government's right to use the data must be governed by the pertinent provisions of the contract.</p>