MERCURY FREE REQUIREMENT

In all cases where components, materials, equipments and instruments supplied to this order are contaminated or contain functional mercury, regardless of NAVSEA approval, the Buyer shall be notified

TO DETERMINE THOSE REQUIREMENTS, WHICH ARE INVOKED ON THIS PURCHASE ORDER, REFER TO THE APPLICABLE PARAGRAPHS NOTED ON THE PURCHASE ORDER.

QUALITY SYSTEMS

# MIL-Q-9858A(1), QUALITY PROGRAM

MIL-Q-9858A(1) is applicable. The Seller shall maintain a Quality Program in accordance with MIL-Q-9858A(1). The Buyer reserves the right to audit or have audited by an authorized representative, the Sellers Quality Program.

# MIL-I-45208A(1), INSPECTION SYSTEM

MIL-I-45208A(1) is applicable. The Seller shall maintain a Quality System in accordance with MIL-I-45208A(1). The Buyer reserves the right to audit or have audited by an authorized representative, the Sellers Inspection System.

# BEST COMMERCIAL PRACTICE/QUALITY MANAGEMENT SYSTEM

## A Quality System as outlined in the Seller’s Quality Plan (Manual) and written Quality Procedures, which is based on industry wide standards for the product supplied. The Seller should have, as a minimum, procedures that control and describe the manufacture of the product supplied to assure a product of high quality in accordance with the purchase order. The Buyer reserves the right to audit or have audited by an authorized representative, the Seller’s Quality Program.

## ISO ANSI/ASQC Q9001 is applicable. The seller shall maintain a Quality system that, as a minimum adheres to the requirements of ISO Q9001, a system that includes as applicable, a Quality Program in design, development, production, installation and servicing. The Buyer reserves the right to audit or have audited by an authorized representative, the Seller’s Quality Program. Any exceptions, deviations or proposal for the utilization of an alternative quality system shall be submitted to the Buyer for approval.

SOURCE REQUIREMENTS

# GOVERNMENT SOURCE INSPECTION ACCESS

The government reserves the right to inspect at source, supplies, and services not manufactured or performed at the Buyer’s facility. In the event this right is to be exercised, you will be notified and paragraph 5 (below) will become applicable.

# GOVERNMENT SOURCE INSPECTION

Government inspection is required prior to shipment from your plant. Upon receipt of this order, promptly notify the Government Representative who normally services your plant so that appropriate planning for Government inspection can be accomplished. You are required to provide an acceptable inspection area for the Government Representative. A copy of the OQE signifying that Government source inspection was performed shall accompany the shipment of material.

# BUYER’S SOURCE INSPECTION ACCESS

The Buyer reserves the right to inspect at source, or have inspected by an authorized representative, supplies and services not manufactured or performed at the Buyer’s facility. In addition, the Seller is required to inform the Buyer of the tentative dates of the conductance of all production tests applicable to this item at least twenty-one (21) days in advance of such tests. As a minimum this information shall consist of the following:

1. Purchase order number, hull number
2. Line item and part description, quantity
3. Type of test or inspection
4. Location and point of contact.

The Seller is further required to inform the Buyer of any changes in the above schedule. Should the Buyer not be present when the test/inspection/operation is scheduled, testing shall proceed unless otherwise notified by the Buyer. Witness of manufacturing processes and/or tests by the Buyer’s Quality representative shall not be construed to indicate acceptance of the product. Evidence of Source Inspection shall normally accompany each shipment.

# PRESERVATION, PACKAGING AND PACKING

If there are no other requirements in the purchase order, the following shall be invoked.

All material excluding spare parts shall be preserved, packaged and packed to afford adequate protection against dust, moisture, rust, corrosion, deterioration and physical damage during shipment from the supply source to the user and

for storage in a temperate climate for a minimum period of six months. Inlet and outlet connections on material and/or components shall be sealed to prevent the entrance of foreign matter.

MATERIALS

# MARKING (VALVE/PIPING FABRICATION WELDMENTS)

## The Seller shall comply with the Level I Requirements in Form SSF Q1648.

## Manufacturers shall provide mapping, a diagrammatic drawing that can be verified by an actual installation which will identify and specify the location of each element requiring certification.

Manufacturer shall provide a joint record card that contains the elements specified in paragraph 4.1.3 of MIL-STD-278F or S9074-AR-GIB-010/278.

## Level I component material which form the pressure boundaries of piping systems shall be controlled by Level I requirements

## Mechanical take down joints shall be assembled with Level I fasteners. Manufacturers shall provide mechanical joint assembly records which provide certifications for each joint and fastening components. Male threads on threaded fasteners, after being installed and tightened, shall protrude at least one and where practicable not more than 5 threads beyond the top of the nut or plastic locking element. In no case shall the thread protrusion exceed 10 threads.

# NONCONFORMANCES

The Seller shall request approval from the Buyer, in writing, for all nonconformances which affect fit, form or function, or otherwise affect the terms of the order when it is believed that “use as is” or “use after repair” dispositions would be appropriate. Request for acceptance of nonconforming material shall be as specified in DOD-STD-480A or MIL-STD-480B and shall contain the information necessary to permit Buyer analysis and disposition. As a minimum this information shall consist of the following:

1. Purchase order number, hull number, if applicable
2. Assembly, subassembly or part name and number
3. End item drawing revisions and serial number or lot number, as applicable
4. Quantity of discrepant items
5. Description of the nonconformance and/or proposed method of repair as applicable

Nonconformances which do not affect fit, form or function, as defined in MIL-STD480B, or otherwise affect the terms of this order shall be dispositioned by the Supplier through his standard Quality Procedures. All nonconformance dispositions by the Seller shall be retained for the duration of the contract and shall be made available to the Buyer’s representative, at the Seller’s facility, for the duration of the contract.

Definitions (MIL-STD-480B):

Fit The ability of an item to physically interface or interconnect with or become an integral part of another item.

Form The defined configuration of an item including the geometrically measured configuration, density and weight or other design parameters which uniquely characterize an item, component, or assembly. For software, form denotes the language, language level and media

Function The action or actions which an item is designed to perform.

# CERTIFICATE OF COMPLIANCE

The Seller shall submit a certificate of compliance with each shipment.

As a minimum, the certificate should state the following:

This is to certify that the item(s) furnished on Ingalls Shipbuilding purchase order

|  |  |  |  |
| --- | --- | --- | --- |
|  | , Ingalls Shipbuilding Item No. |  | is/are in |

full compliance with all purchase order and specification requirements of the order. Compliance for quality assurance has been determined by testing and/or inspection in accordance with the purchase order and specification requirements. Records are on file to verify compliance and are available to the Buyer for review upon request.

PROCESSES

# WELDING AND ALLIED PROCESSES

## Hull Structures: Fabrication, welding and inspection of hull structure materials, subassemblies and assemblies shall be performed in accordance with MIL-STD-1689 or MIL STD 1689A or as specified by the procurement document.

## Piping: Machinery, pressure vessels, castings, fabrication processes, welding allied processes and inspection of piping, machinery, pressure vessels and castings, including weld repairs to castings shall be in accordance with MIL-STD-278F or S9074-AR-GIB-010/278 or as specified by the procurement document.

## Brazing: When required by the contract, brazing shall be performed in accordance with NAVSEA 0900-LP-001-7000.

## Procedure and Performance Qualification: All welding and brazing procedure and performance qualification shall be in accordance with MIL-STD-248 or S9074-AR-GIB-010/248 or as specified by the procurement document, and shall be submitted to Ingalls Shipbuilding for review and approval prior to starting production. This shall be a onetime submittal for the duration of a specific contract. If the manufacturing processes are modified, Ingalls Shipbuilding has the option to request a new submittal (see specific contract for applicable revision).

INSPECTION AND TEST

# OBJECTIVE EVIDENCE

Subparagraphs below are applicable only when invoked. Related to the requirements of the subparagraph, traceability of specific objective quality evidence to actual piece of hardware is imperative. The evidence may consist of heat numbers, serial numbers or other appropriate means.

Four (4) copies of the objective quality evidence (OQE) shall accompany the shipment unless otherwise specified.

## Actual Mill chemical and physical test report which indicate conformance with purchase order requirements.

## Nondestructive Test: (Radiography, Magnetic Particle Inspection, Dye Penetrant Inspection, Ultrasonic Inspection and Visual Inspection) shall be performed as required by MIL-STD-271F or T9074-AS-GIB-010/271 and MIL-STD 2035A or as specified by the procurement document. Actual NDT test reports must be available at manufacturers/suppliers facility for review and submittal upon request. The Seller shall complete and submit a certification or Form SSF P5326 attesting that required NDT was accomplished and meets all specified requirements. NDT procedures shall be submitted to Ingalls Shipbuilding for review and approval prior to starting production (VT, MT, UT, RT, PT, and NDT certification and Qualification of personnel. When invoked by the procurement specification, Radiographic Shooting Sketches shall be accomplished and the data submitted to HII for approval/acceptance. Film shall be submitted for review and approval. Radiographic Inspection Data approval must be obtained prior to shipment of material to HII and a copy of the approval must accompany the shipment of material to HII.

## Certificate of hydraulic or lubricate testing per Purchase Order requirement.

## Functional acceptance testing data per purchase order.

## Inspection Results – This data is normally generated during final inspection by the Seller’s Inspection Personnel and consists of inspection such as measures, alignment check, visual checks, etc., (one copy).

## Certification of Fuel Oil to MIL-F-16884, Paragraph 3.3, shall be performed and Test Reports shall be forwarded to the Buyer’s Quality Engineering department prior to delivery of the fuel oil.

ADDITIONAL BUYER/SELLER INFORMATION

# RECEIPT INSPECTION (Buyer Information Only)

## Warehouse Receiving Inspection shall be performed.

## Quality Receipt Inspection (QRI) shall be performed.

## Verify SDRL requirements of DID PAV are submitted.

## All items procured under this purchase order are subject to Receipt Inspection at the Buyer’s facility or designated drop point.

# LIMITED SHELF PRODUCTS

## The following data will be provided by the Supplier with each shipment. **Note: Failure to comply will be cause for rejection**. QRI shall verify upon receipt inspection of the product that limited shelf life information is provided with the product. This includes one (1) set:

1. Manufacturer’s code.
2. Cure Date (Elastomers), lot or batch date or date of manufacture.
3. Lot or batch number, when appropriate, e.g., paints, adhesives, etc.
4. Special storage conditions, e.g., refrigeration.
5. Shelf life limitation. Recommended shelf life in months, years or expiration date by “Quarter Year”.
6. A minimum of 75% of the product shelf life shall remain at time of receipt of product at Ingalls Shipbuilding or as directed by Ingalls Shipbuilding.
7. The date of manufacturer (cure date), batch number, lot number, and shelf life expiration date of the material shall be marked on each individual container.
8. For material provided in standard packaging by the manufacturer (e.g. gallon containers or smaller provided in standard packages of 4,6,12 etc.) the date of manufacturer (cure date), batch or lot number and the shelf life expiration date of the material shall be marked on the top and/or side of each standard package.

# HYDRAULIC CLEANLINESS STANDARDS

## This equipment has been identified as system critical hydraulic equipment and, therefore, hydraulic cleanliness standards shall be submitted to Ingalls Shipbuilding for review and approval.

# FASTENER THREAD PROTRUSION

## Male threads on threaded fasteners, after being installed and tightened, shall protrude at least one thread beyond the top of the nut or plastic locking element. Where practicable, the number of threads protruding shall not exceed five, however, in no case shall thread protrusion exceed ten threads. Washers shall not be used for the sole purpose of lessening thread protrusion.

# ELECTROSTATIC DISCHARGE CONTROL

## Seller/Distributor: The Seller shall maintain a documented electrostatic discharge control program in accordance with MIL-STD-1686 or as specified by the procurement document. The program shall provide continuous protection for ESDS items from receipt through inspection/test, stocking, packaging, storage and shipment. These requirements must also be passed down to the Seller’s sub-contractors for ESD parts. The Buyer reserves the right to audit or have audited by an authorized representative, the Seller’s ESD program.

The Seller shall submit with each shipment one (1) copy of a Certificate of Conformance containing the following information:

1. Seller’s name and address
2. Buyer’s name, address and Purchase Order number
3. Quantity of devices in shipment
4. A statement certifying that items were handled, marked, packaged and shipped in accordance with MIL-STD-1686.
5. Signature of authorized representative and date.

NOTE: Seller must mark the packing slip;

“ATTENTION – OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES”

# ABS TYPE APPROVAL PROGRAM

## An ABS Certificate of Product Evaluation / Product Type Approval or Product Quality Assurance Certification is required per the Naval Vessel Rules (NVR) Part 0, Chapter 2, Sections 7 and 8. The Seller is required to contact ABS upon contract award to arrange for ABS assessments and implementation of the Type Approval Program (ABS web site [www.eagle.org](http://www.eagle.org)).

# ADDITIONAL MARKING REQUIREMENTS

These requirements are in addition to any marking requirements specified by the Purchase Order. These requirements apply to parts/components (as listed below) individually procured and do not apply to parts within the systems, assemblies, subassemblies, components, groups, or sets, to include loose parts, as those parts will be marked in accordance with the applicable specifications and drawings.

Pipe and Tubing

All pipe and tubing shall be marked with the manufacturer’s name or trademark, pressure rating, and schedule (as applicable) of material, the heat/lot number, the size and the grade (i.e., 304, 316L, 70/30, etc.). The markings shall be stamped, stenciled or otherwise marked on each item so as to permanently identify the material.

Valves, Fitting, Flanges, and Unions

All valves, fitting, flanges, and unions (including, but not limited to, tees, couplings, elbows, sleeves, tallpieces, hose fittings, union nuts, etc.) used in piping connections (including, but not limited to, flanged, soldered, brazed, threaded, or welded) shall be marked with the manufacturer’s name or trademark, pressure rating, and schedule (as applicable) of material, the size and the grade (i.e., 304, 316L, 70/30, etc.). The markings shall be stamped, stenciled or otherwise marked on each item so as to permanently identify the material. Cast bronze fittings only in accordance with MIL-F-1183 are excluded from this additional marking requirement and shall be marked as required by that specification.

Pipe/Cable Hangers

All pipe/cable hangers shall be marked with the manufacturer’s name or trademark, the size and the grade (i.e., 304, 316L, 70/30, etc.). The markings shall be stamped, stenciled or otherwise marked on each item so as to permanently identify the material.

Cable

All cable surfaces shall be marked permanently and legibly through its length, at intervals not exceeding one (1) foot, with the manufacturer’s name, date code, and specification control drawing number, with dash number when applicable. In addition to the jacket marking there shall be a manufacturer’s identification tape in accordance with the requirements of paragraph 3.4.10 of MIL-C-915E. All cable ends shall be accessible and shall be end sealed.

Structural Plates, Shapes, and Bars

All structural plates, shapes, and bars shall be marked with the Heat/Lot number and the grade (i.e., 304, 316L, DH36, etc.) of material. The markings shall be stamped, stenciled or otherwise marked on each item so as to permanently identify the material. ABS material shall also be marked in accordance with ABS requirements.

Omission of Markings

Where size and shape do not permit inclusion of all the required markings, they may be omitted in the order as specified on MSS SP-25.