DCMA NSEO MANUFACTURING PROCESS REVIEW (MPR) CHECKLIST #05

INSPECTION AND TESTING

|  |  |
| --- | --- |
| **SUPPLIER & CAGE:** |  |
|  |  |
| **LOCATION:** |  |
|  |  |
| **PROCESS REVIEWED:** |  |

**Program Type:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Level I/SUSBAFE (LI/SS) |  | Navy Propulsion Program (NPP) |  | Deep Submergence Systems/Scope of Certification Program (DSS-SOC) |
|  | Nuclear Plant Material (NPM) |  | Naval Nuclear Propulsion Program (NNPP) |  | Aircraft Launch & Recovery Equipment (ALRE) |
|  | Fly By Wire Ships Control Systems (FBWSCS) |  | Ships Critical Safety Items (SCSIs) |  | Other: |

**Contractual Requirement(s) for this Process:**

|  |
| --- |
|  |

**Supplier Procedure Number(s), Title(s) & Revision Level(s)/Date(s):**

|  |
| --- |
|  |

|  |  |
| --- | --- |
| **Process Reviewed By:** |  |
|  |  |
| **Date(s) of Review:** |  |
|  |  |

**Process Concerns and Guidance:**

* Inspection and test results and accompanying documentation is incorrect, incomplete or missing.
* Inspections and tests not performed or performed incorrectly
* Dimensional inspection from incorrect drawing revision
* Incorrect dimensions specifically on pitch, major and minor diameters and also damage on internal and external screw threads, especially when MIL-DTL-1222J requirements are specified
* Visual inspection and cleanliness of items
* Lot sample sizes incorrect
* Contractor personnel may not be properly trained to take accurate measurements.
* Some contractors may rely on the QAR’s inspection records and results to ensure inspection and testing compliance and justification to deliver products to the Government.

**A**. **MANPOWER:**

1. Are the personnel performing the inspection, testing and quality assurance functions of the appropriate skill/experience level and/or properly trained/certified to inspect or test for conforming product? ***What are the requirements? (NAV05-C10)***

|  |
| --- |
|  |

1. Record all inspection and/or testing operations observed (include type and specification, where applicable) and the corresponding operators’ names. Are any personnel certifications expired (if required) and are they still working in the process?

|  |
| --- |
|  |

1. Verify QA/QC proficiency in measuring/test performance. Record names and tests or measurements witnessed, and equipment used.

|  |
| --- |
|  |

1. Are training records available (review sample) and are they accurate and complete?

|  |
| --- |
|  |

1. Are the credentials of the training/certification official in accordance with specification requirements? ***What are the requirements?***

|  |
| --- |
|  |

1. Is there a system in place for remedial training when errors occur?

|  |
| --- |
|  |

**B. MATERIALS**:

1. For Level I material, is the product controlled and traceable throughout the process?

|  |
| --- |
|  |

1. Are certifications for raw materials used in the process reviewed for acceptance and maintained on file for review?

|  |
| --- |
|  |

1. Do the raw materials comply with contract/specification and/or supplier-imposed technical requirements, including the prohibition of reclaimed material as may be required? ***What were the materials reviewed?***

|  |
| --- |
|  |

1. Are there controls to ensure conforming material is consistently used in the process?

|  |
| --- |
|  |

1. Was the material's integrity compromised by further processes and/or practices? ***If so, how?***

|  |
| --- |
|  |

**C. MACHINERY**:

1. Are the gauges, tools, instruments and measuring and testing equipment used by personnel of the required adequacy, accuracy, precision, and range to assure supplies examined comply with specifications and drawings? ***What items were sampled?***

|  |
| --- |
|  |

1. Are calibrated tools used in the inspection and test process current, adequate and traceable to certifications?

|  |
| --- |
|  |

1. Does equipment (to include fixtures and jigs) requiring qualification or certification approval have contractual approval for use? *For software, was the correct software in use? What program(s) and revision level(s)/date(s) was in use?*

|  |
| --- |
|  |

1. Does software requiring qualification or certification have the correct software in use? ***Record the program(s) and revision level(s)/date(s).***

|  |
| --- |
|  |

1. Is inspection and testing equipment “stickered” to indicate current calibration and next calibration due date?

|  |
| --- |
|  |

1. Is Government owned equipment adequately protected/maintained in accordance with a documented process?

|  |
| --- |
|  |

**D**. **METHODS**:

1. Does the supplier have a documented and established inspection system? Record QA/QC Manual Number and Date Approved. (NAV05-A1/B2A/B)

|  |
| --- |
|  |

1. Are inspection instructions readily available and utilized by personnel?

|  |
| --- |
|  |

1. Does the supplier inspect or verify that subcontracted inspection and testing processes are audited, documented and approved for use per contract requirements?

|  |
| --- |
|  |

1. Do the supplier’s procedures state inspection frequencies, inspection methods and accept/reject criteria, and are they clearly documented and understood by personnel? (NAV05-A5)

|  |
| --- |
|  |

1. Review and identify a sample of inspections or tests being performed by supplier personnel in accordance with procedures, and record number of samples and the result of the review. (NAV05-A14)

|  |
| --- |
|  |

1. Is there an over check program in effect to confirm worker's or inspector's results on a sampling basis, and is it known to exist by the workers/inspectors? (NAV05-C8/C9)

|  |
| --- |
|  |

1. Are work instructions, drawings/specifications, etc. readily available to personnel during inspection and testing, are they of the correct revisions for their intended function/purpose, and are they being used where applicable? (NAV05-A7)

|  |
| --- |
|  |

1. Do inspection records clearly identify the results of the inspections and tests performed and include traceability back to the procedure, lot/heat numbers, instruments used, personnel who performed each inspection and test and the finished product inspected? (NAV05-A6/A11)

|  |
| --- |
|  |

1. Does a procedure exist for the rework of any inspected or tested product requiring rework?

|  |
| --- |
|  |

1. Are records documented satisfactorily? In ink utilizing "line thru", initial and date procedures? (NAV05-B12)

|  |
| --- |
|  |

1. For fastener manufacturers and suppliers that manufacture their own fasteners per MIL-S-1222H (Now MIL-DTL-1222J), do procedures comply with System 22 inspection methods, when required? (NAV05-B15)

|  |
| --- |
|  |

1. Is material/product, which has been through the inspection and testing process, positively controlled, traceable, and have the inspections/tests performed been documented to provide a positive indication of the inspection status of the material (e.g. individual inspected, operation sign-off, inspection stamped/initialed/signed accepted or rejected)? (NAV05-A11)

|  |
| --- |
|  |

1. Is the product adequately identified with the proper documentation and certifications to provide clear material traceability throughout the products’ processing and does the product match the documentation?

|  |
| --- |
|  |

1. Are changes to methods (instructions) controlled and distributed adequately and timely to affected personnel?

|  |
| --- |
|  |

1. Are there adequate methods of segregating accepted and rejected material in use (e.g. materials awaiting inspection)? **Describe.**

|  |
| --- |
|  |

1. Is there supplier data available for analysis that can substantiate the effectiveness or ineffectiveness of the inspection and testing processes? ***If available, what data was reviewed, and what does the data indicate?***

|  |
| --- |
|  |

1. Are precautions in place to prevent damage and/or contamination to product during and in between inspection and testing processes?

|  |
| --- |
|  |

1. Are inspection and testing procedures, travelers, etc. being used current, adequate, clear, concise and up to date (latest revision) to allow only contractually conforming supplies to be delivered to the Government? ***What documents (identifying number & rev) were reviewed?***

|  |
| --- |
|  |

**E.** **ENVIRONMENT**:

1. Is the process conducted under controlled environmental conditions (clean room, humidity/temperature, etc.) as required by contractual and/or supplier-imposed technical requirements? ***What are the environmental conditions and are they monitored (charts, gages, etc., within calibration)? (NAV05-C13)***

|  |
| --- |
|  |

1. Does the supplier observe ESD practices, if applicable?

|  |
| --- |
|  |

1. Is safety equipment available and in use, if needed? ***What are the safety requirements for this process?***

|  |
| --- |
|  |

**F. PRODUCT EXAMINATION:**

***The QAR must perform a product examination in order to verify the output of the process being reviewed and document the results below.***

|  |  |
| --- | --- |
| Date(s) Conducted: |  |
|  |  |
| Product Examination Performed By: |  |
|  |  |
| Contract Number(s): |  |
|  |  |
| Part Number(s)/Serial number(s): |  |
|  |  |
| Part Nomenclature(s): |  |
|  |  |
| Supplier Personnel Contacted and Titles: |  |
|  |  |
| Drawing Number & Revision: |  |
|  |  |
| Lot Size and Sample Size: |  |

|  |  |
| --- | --- |
| Characteristics Examined: | # Observations |
|  |  |

1. Identify the inspection methods (W, I, T, V) used to verify conformance with procedures and standards:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **W** |  |  | **I** |  |  | **T** |  |  | **V** |  |

**PE Comments/Concerns**

|  |
| --- |
|  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Overall MPR Results:** | **SATISFACTORY** |  | **UNSATISFACTORY** |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Corrective Action Generated?** | **No** |  |  | **Yes** |  |  | **CAR#** |  |

FOLLOW-UP ACTION REQUIRED?

|  |
| --- |
|  |

**SUMMARY/NOTES/COMMENTS/CONCERNS**:

|  |
| --- |
|  |