PROCUREMENT QUALITY REQUIREMENTS

This document specifies the requirements to be imposed upon NHBB suppliers to assure the quality of purchased raw materials, fabricated parts and services.

Specific paragraphs, noted by number on purchase orders, constitute a condition thereto, and must be satisfied by suppliers.

Requirements noted are additions to the purchase order and do not supersede any terms or conditions of that document or other contractual or specification requirements.

GOVERNMENT SOURCE INSPECTION

1. All work on this order is subject to inspection and test by the government (to the extent practical) at all times (including the period of performance) and places, and in any event, prior to shipment. The government representative who normally services your plant should be notified seven (7) working days in advance of the time articles are to be verified. Immediately upon receipt of this order, furnish a copy to your government inspector or to the nearest Department of Defense Inspection office. If they cannot be located immediately, notify the NHBB buyer at once.

CUSTOMER SOURCE INSPECTION

2. All work on this order is subject to inspection and test by NHBB customers prior to shipment from supplier facilities. Such verifications shall not absolve suppliers of the responsibility to provide acceptable product. Nor shall it preclude subsequent rejection by NHBB. Notify the NHBB buyer to schedule source inspection by the NHBB customer.

GOVERNMENT/CUSTOMER QUALITY REVIEW

3. During performance on this order, your Quality Assurance and Inspection system and manufacturing processes are subject to review, verification, and analysis by authorized Government and Customer representatives. Government/Customer inspection or release of product prior to shipment is not required unless you are otherwise notified. As applicable, you shall provide a copy of this order to your Government representative upon his/her request.

4. Quality Control System shall comply with MIL-Q-9858 (Latest Revision).

5. Inspection system shall comply with MIL-I-45208 (Latest Revision).

6. Quality Control System shall comply with ISO 9001 (Latest Revision)

7. Quality Control System shall comply with AS9100 (Latest Revision)

8. A. Detail test reports verifying the physical and chemical properties of materials furnished on this order must accompany each lot of materials shipped.
   B. Pre-admission samples shall be submitted to and approved by NHBB prior to shipment of each lot of material.

9. Only materials and parts supplied by NHBB shall be used.

10. OBSOLET
11. All non-conformances are to be referred to NHBB for written disposition.

12. Notification of Escapes: It is the responsibility of the supplier to notify NHBB immediately of any product/processes that were provided and later discovered to be defective. The notification shall be made by telephone, e-mail or fax within 24 hours.

13. NHBB source inspection is required prior to shipment.

14. Final acceptance is subject to NHBB inspection and NHBB customer acceptance.

15. Acceptance of this order constitutes certification by the supplier that he will:
   A. Maintain files subject to NHBB examination of objective evidence of compliance with all materials specification requirements applicable to this order.
   B. Comply fully with all requirements of applicable drawing specifications and the purchase order.

16. Certificate of compliance, must be furnished and be at NHBB before shipment can be accepted. At a minimum, the following must be included on the C of C:
   Supplier Name / Address
   PO Number
   Part Number
   Quantity
   Statement of Compliance
   DFARS 252.225-7009 (as applicable)

17. The distributor is to flow down all purchase order requirements to the sub tier supplier / subcontractor. The OEM supplier is required to notify NHBB of any changes in ownership, significant management, location, sub tier supplier / subcontractor and proposed changes to frozen process. The distributor must notify NHBB of the above changes in sub tier supplier / subcontractor. NHBB shall be notified of changes effecting form, fit or function as well as frozen processes prior to the change taking place. The notification shall include a detailed description and justification for the change. If the proposed changes are approved, the changes shall be incorporated into the purchase order.

18. DFARS 252.225-7009 Restriction on Acquisition of Certain Articles Containing Specialty Metals Applies:

19. Metal balls shall meet the latest revision requirements of ANSI/ABMA Std. 10 and NHBB specifications, SB-2, SB-3, SB-4, or SB-5.

20. Calibration suppliers shall comply fully with the requirements of the latest revisions of ANSI/NCSL Z540 or ISO 10012, and shall so certify upon completion of any calibration activity conducted.

21. A. Ball suppliers are to maintain detailed records of all inspection and applicable material certifications.
   B. Certify that production processes were in statistical control during the manufacture of product delivered to NHBB, Precision Division.
   C. Submit inspection/statistical data representative of the lot(s) shipped, for the following characteristics:
(i.) Ball Diameter Variation.
(ii.) Deviation from Spherical Form (roundness charts).
(iii.) Surface Roughness (surface roughness charts).
(iv.) Lot Diameter Variation.
(v.) Ball Hardness.

D. Certification must include the passivation specification and method that the balls were passivated per AMS-QQ-P-35, AMS 2700, ASTM A967, and ASTM A380, latest revision.
E. Certification must include that the balls were heat treated per AMS 2759, latest revision.

22. A. Silicon Nitride Balls shall meet the requirements of Coorstek Cerbec Ceramic Balls. Material Specification NBD-200, latest revision.
B. Silicon Nitride Balls shall meet the requirements of Coorstek Cerbec Ceramic Balls. Material Specification SN-101C, latest revision.

23. Bar stock supplied by distributors must originate from the OEM’s authorized distributors and NHBB approved source. This ensures no counterfeit material is purchased.

24. Lubricant suppliers are required to:
A. Certify that the test reports covering material as specified in the shipment are on file subject to examination and indicate conformance with requirements of specification
B. Supply a copy of the Material Safety Data Sheet
C. Mark the NHBB Lubricant Code on the Container, Labels and Paperwork
D. Certification must include the lubrication manufacturing date and shelf life.
E. Lubricant supplied by distributors must originate from the OEM’s authorized distributors and NHBB approved source. This ensures no counterfeit material is purchased.

25. First Article Inspection Report is required and shall be sent to NHBB with the shipment. The report shall verify all drawing specifications and dimensions. Dimensional measurements shall be variable data performed on one piece unless otherwise stated on the contract. Material chemical / physical certifications, shall also be verified and accompany the report. A First Article Inspection Report shall be required on the initial shipment, (or if not previously supplied), after a drawing change, or if the product has not been manufactured for an 18-month period.

26. Record Retention – The supplier shall maintain quality records for a minimum of 30 years, unless otherwise specified by contract. The supplier shall be able to provide legible reproducible copies of any requested Quality document within 24 hours of request.

27. The supplier shall allow the right of entry of NHBB, NHBB customers and government regulatory agencies to determine and verify the quality of work, records and materials.

28. The supplier shall certify that processes used during the manufacture or processing of product delivered to NHBB were in statistical control. Data shall be submitted with product showing that process(es) maintained a minimum 1.33 CPK.

29. Calibration: Suppliers utilizing gages to inspect product supplied to NHBB must have a calibration system that meets the requirements of the latest revisions of ANSI/NCSL Z540 or ISO 10012.

30. NADCAP Certification required for suppliers performing Special Processes: Plating, Heat Treat, Passivation, NDT, etc.

31. All PO requirements must be flowed as requirements to any sub-tier suppliers utilized.
32. Supplier must report to NHBB in writing within 5 days when use of a non-US sub-tier is used to procure product.

33. Supplier (OEM or Distributor) must have a counterfeit parts plan that complies with Q.P 5.4.2.7 (NHBB’s Counterfeit Parts Program).

34. Eye Examinations:
   General Vision Requirements: Individuals that inspect product for final acceptance must have:
   o Color Vision Examination every 12 months
   o Near-Vision Examination every 12 months

   The individual(s) must meet the following standards in at least one eye, corrected with glasses or uncorrected:
   • Color Vision Eye Examination: Examples of acceptable testing methods include: Pseudochromatic plates, Dvorine, Ishihara, Farnsworth lantern, Keyscope Orthoscope, Titmus Vision Tester, Titmus II Vision Tester, Titmus 2 Vision Tester. There are standard definitions of what is pass/fail on these tests that should be followed.
   • Near Vision Eye Examination: Examples of acceptable testing methods include: Snellen 14/8 or better, Jaeger Type 1 – 20/25, Ortho-Rated 8 or equivalent method.

   A medical professional must perform the eye examination (eye clinic, occupational health clinic, onsite health clinic or medical department).

35. Design Process Freeze: After acceptance by NHBB of the first article, the supplier shall make no changes to the method of manufacture, equipment used, materials which may affect interchangeability, function, dimensions, performance. All intended changes shall be approved by NHBB Engineering and Purchasing.

36. Government Rated Contracts: Rated orders are identified in the purchase order by either a DX or DO. Rated orders take precedence over all other orders to meet required delivery dates. DX rated orders take precedence over DO rated orders.

37. Foreign Object Debris (FOD) / Foreign Damage Program: The supplier shall establish and maintain a Foreign Object Debris/Damage Program (FOD). Guidelines for the program are found in NAS 412.

38. Product Obsolescence: As soon as a Supplier becomes aware of product obsolescence, the supplier shall inform NHBB Purchasing department who will co-ordinate an engineering change request. No engineering change can be implemented without approval by NHBB. Stability of ongoing supply based on minimum two years future supply is required.

39. Identification and Traceability: Product shall be identified and traceable to the raw material. A “lot” or “batch” may not contain more than one lot of raw material.