

December 16, 2015

To our Valued Suppliers:

This is to notify you of revisions to the BAE Systems Platforms & Services Contract Deliverables Requirements (CDR's).

Please see the change below, making this Revision 06:

Rev 05:

034 Ballistic Requirements- Metal and Composite Materials

A. Ballistic Firing Records for Plate and Composites- The Supplier shall provide a copy of the:

- a. Physical and Chemical Test Reports
- b. Government Ballistic Test Certification

Including firing number, for each heat/lot of ballistic material in accordance with the Data Submission Instructions for this item.

B. Ballistic Firing Records for Casting - For armor castings and extrusions, the Supplier shall maintain a listing of Government approved firing numbers for all material recipes supplied to BAE Systems.

C. Aluminum Forgings - Require ballistic test for each lot, including longitudinal and transverse tensile tests per MIL-DTL-45225. Results shall be provided in accordance with the Data Submission Instructions for this item.

D. Thermally cut edges of MIL-DTL-46100, or MIL-DTL-12560 steel armor shall meet the following requirements:

- a. The heat affected zone shall not exceed 1.2 times the plate thickness or .625 inches maximum as determined by Rockwell C hardness testing to meet or exceed the minimum allowable hardness per the applicable specification. This shall be verified for each thermal cutting procedure (heat input, travel speed, laser wattage, plate thickness range, etc.) to be used for the order. A report with actual test results shall be submitted.
- b. Each steel armor part shall be non-destructively tested on thermally cut edges (water jet, machining or other non-thermal process do not require NDT testing) using either magnetic particle or dye penetrant inspection.
- c. Magnetic particle inspect in accordance with ASTM E709 or dye penetrant inspect in accordance with ASTM E165.

- d. In any four inches of edge length, linear indication length shall not exceed twice the plate thickness. Multiple linear indications shall not exceed twice the plate thickness when their lengths are summed. No more than ten indications in any four inch length are permitted.
- e. Linear indications may be reworked by grinding or machining within the feature limits of size, and reinspected.
- f. Reduced inspection may be permitted upon demonstration of no rejectable defects for a continuous period of time with approval of BAE Supplier Quality to AQL 1.0 to the C=0 sampling plan

E. Non Destructive Inspection (NDI) documentation shall be provided in accordance with the Data Submission Instructions for this item.

Rev 06:

034 Ballistic Requirements- Metal and Composite Materials

FIRING RECORDS (Plate and Composite):

The Supplier shall provide a copy of the:

- Physical and Chemical Test Reports
- Government Ballistic Test Certification, including firing number for each heat/lot of ballistic material. Results shall be submitted in accordance with the Data Submission Instructions for this item.

FIRING RECORDS (CASTING):

- For armor castings and extrusions, the Supplier shall maintain a listing of Government approved firing numbers for all material recipes supplied to BAE Systems. Results shall be submitted in accordance with the Data Submission Instructions for this item.

FIRING RECORDS (ALUMINIM FORGINGS):

- Require ballistic test for each log, including longitudinal and transverse tensile tests per MIL-DTL-45225. Results shall be submitted in accordance with the Data Submission Instructions for this item.

MIL-DTL-46100/12560 STEEL ARMOR THERMALLY CUT EDGES:

Shall meet the following:

PROCEDURE:

- Supplier shall have a written and controlled Procedure for cutting steel armor.

- The Procedure shall be a range of cutting parameters (similar to a Weld Procedure) including:
 - Thickness range, energy level (laser wattage, plasma parameters, etc.), and travel speed.
 - Samples shall be made from each range to qualify the Procedure and test for:
 - Heat affected zone (hardness traverse)
 - Edge cracking (Magnetic Particle or Liquid Penetrant Inspection)

PROCESS INSPECTION:

- Visual Inspection Per ASNT Level I (minimum) Frequency = 100%
- Non-destructive test frequency (based on 12369234)
- ANSI/ASQ Z 1.4 Inspection Level II, AQL 2.5%
 - i.e. For Lot = 50, Inspection Level D = 5 samples inspected
 - If rejectable indication is found, institute 100% inspection of subject lot.
- Inspection SHALL be performed in accordance with ASTM E1417 (Liquid Penetrant) or ASTM E1444 (Magnetic Particle).
- Inspection Personnel shall be a minimum of ASNT Level I or II.

DEFINITION:

Lot – Shall mean “inspection lot” or “inspection batch” of parts of the same material, the same thickness and processed continuously under one Procedure.
 Example – Supplier A cuts 10 Part Numbers, with different quantities, all from the same thickness of high hardness armor. If they are processed (cut) in a constant continuous process, then the collection of parts can be inspected as one Lot.

RESULTS:

Non-Destructive Inspection documentation shall be provided in accordance with the Data Submission instructions for this item.

Rev 05:

006 Government Source Surveillance/Inspection (GSS/GSI)

Government surveillance/inspection is required prior to shipment from your plant and **cannot be waived** by BAE Systems. Unauthorized shipment of product without Government Source Surveillance may result in rejection and subsequent return at the Supplier’s cost, and withholding of your invoice payment. GSS shall not replace Supplier inspection nor relieve the Supplier of its responsibility to meet all requirements of the purchasing agreement.

Supplier must notify BAE Systems prior to, or in conjunction with, notification to DCMA so that BAE Systems has the opportunity to perform any reviews/inspections prior to submission to DCMA.

Supplier shall notify the local Government DCMA representative of pending inspections in accordance with FAR 52.246-2(i) (2), which can be found at https://www.acquisition.gov/far/current/html/52_246.html.

Rev 06:

006 Government Source Surveillance/Inspection (GSS/GSI)

Government surveillance/inspection is required prior to shipment from your plant and **cannot be waived** by BAE Systems.

Upon receipt of the Purchasing Agreement, promptly notify the Government representative who normally services your facility so that appropriate planning for Government inspection can be accomplished. If the local Government Representative directs that surveillance/inspection should take place at a sub tier supplier facility, the full wording of this requirement shall be incorporated into the Purchasing Agreement with that sub tier supplier. The text of this requirement may be incorporated by reference. At no time shall the supplier flow any Government surveillance/inspection requirements to their sub tier suppliers without the direction of their local Government Representative.

Unauthorized shipment of product without Government Source Surveillance may result in rejection and subsequent return at the Supplier's cost, and withholding of your invoice payment. GSS shall not replace Supplier inspection nor relieve the Supplier of its responsibility to meet all requirements of the purchasing agreement.

Supplier must notify BAE Systems prior to, or in conjunction with, notification to DCMA so that BAE Systems has the opportunity to schedule and perform any reviews/inspections prior to submission to DCMA.

Supplier shall notify the local Government DCMA representative of pending inspections in accordance with FAR 52.246-2(i) (2), which can be found at https://www.acquisition.gov/far/current/html/52_246.html.

Respectfully,

BAE Systems Supplier Quality Management