

INCH-POUND

MIL-F-13926B(AR)  
 AMENDMENT 5  
 8 July 1991  
 SUPERSEDING  
 AMENDMENT 4  
 03 April 1991

## MILITARY SPECIFICATION

FIRE CONTROL MATERIEL  
 MANUFACTURE AND INSPECTION,  
 GENERAL SPECIFICATION FOR

This amendment forms a part of Military Specification MIL-F-13926B(AR), dated 26 March 1984, and is approved for use by the U.S. Army Armament Munitions and Chemical Command, and is available for use by all Departments and Agencies of the Department of Defense.

## PAGE 1

2.1.1, Specifications, Military, delete entry for MIL-C-6021.

DD Form 1426 note, third through fifth lines, delete address and substitute:  
 "Commander, U.S. Army ARDEC, ATTN: SMCAR-ESC-S, Picatinny Arsenal, New Jersey 07806-5000".

## PAGE 2

2.1.1, Specifications, Military, delete entry for MIL-W-13773, MIL-S-45743, and MIL-S-46844.

2.1.1, Standards, Military, delete entries for MIL-STD-34, MIL-STD-109, MIL-STD-171, MIL-STD-194, MIL-STD-275 and MIL-STD-1460.

2.1.1, Standards, Military, add the following new entries:

"DOD-STD-100	-	Engineering Drawing Practices
MIL-STD-1261	-	Arc Welding Procedures for Constructural Steels
MIL-STD-1943	-	Welding, Repair of Steel Castings (other than Armor), Metal Arc, Manual
MIL-STD-2000	-	Standard Requirements for Soldered Electrical and Electronic Assemblies.
MIL-STD-2175	-	Castings, Classification and Inspection of"

## PAGE 3

2.2, American Gear Manufacturer's Association, delete address and substitute:  
 "1500 King Street, Suite 201, Alexandria, VA 22314".

2.2 American National Standards Institute, delete entry for ANSI Y14.36.

AMSC N/A

1 OF 8

FSC 12GP

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

MIL-F-13926B (AR)  
AMENDMENT 5

PAGE 3

2.2, American National Standards Institute, add the following new entry:

"ANSI B94.11M - Twist Drills, Straight Shank Combined  
Drills and Countersinks".

PAGE 4

2.2, American Society for Testing and Materials, add the following new entry:

"ASTM D3951 - Commercial Packaging, Practice for".

3.1.3, following this paragraph, add new 3.1.4 to read:

"3.1.4 Drawing requirements. Drawing types and requirements pertaining thereto, including but not limited to source and specification control drawings, shall be in accordance with DOD-STD-100 and the contract."

PAGE 5

3.2.1, following this paragraph, add new 3.2.1.1 to read:

"3.2.1.1 Effect of protective coating on dimensions. Unless otherwise specified, dimensional limits and surface roughness apply after the application of inorganic type coatings, such as electro-plated or chemically displaced metals, ceramic, anodized, chromated or oxide conversion type finishes, etc. Unless otherwise specified, dimensional limits and surface roughness apply before the application of organic type coatings, such as paints, lacquer, epoxy urethane, enamels, phosphate coating, dry film lubrication, or other non-integral barrier-type coatings. When both types (inorganic and organic) are specified, such as when an inorganic type is complimented by an enamel or other top coating, it is understood that part tolerances apply after initial surface treatment."

PAGE 6

3.2.3, first line, following "The provisions of", delete "3.2.3" and substitute "3.2.2".

3.2.4, third line, delete "3.2.3" and substitute "3.2.2".

PAGE 9

3.2.12, following this paragraph, add new 3.2.12.1 to read:

"3.2.12.1 Threads. Unless otherwise specified, threads shall conform to the requirements of FED-STD-H28 and the applicable drawing."

MIL-F-13926B(AR)  
AMENDMENT 5

PAGE 11

3.2.12.7, add a last sentence to read:

"When used for any purpose other than manufacture, centers shall conform to the requirements of ANSI B94.11M."

3.2.12.7, following this paragraph, add new 3.2.12.8 through 3.2.12.10 to read:

"3.2.12.8 Cast and machined finishes. Unless otherwise specified, cast finish shall be 250 and machined finish shall be 125 .

"3.2.12.9 Blind holes for tap drills. Tap drills for threaded holes shall not break through unless specifically permitted on drawing or tolerances accumulate causing minimum material thickness less than .030 inch. The requirement to hold pressure shall take precedence over the .030 inch minimum thickness requirement.

"3.2.12.10 Worms. Unless otherwise specified on the drawing, break the sharp corner .005 to .015 inch radius or bevel .005 to .015 inch x 45°. Worms shall not bottom in the mating gear or segment."

3.2.13.1, following this paragraph, add new 3.2.13.1.1 to read:

"3.2.13.1.1 Insulation resistance. Unless otherwise specified, the insulation resistance between ungrounded electrical circuits and the body or frame of individual units and between isolated circuits shall not be less than 10 megohms at a DC potential of 500 volts."

PAGE 12

3.2.13.5, delete and substitute:

"3.2.13.5 Soldering of Electrical Connections. Unless otherwise specified by drawing, specification or procuring document, soldering of electrical connections shall be accomplished in accordance with the visual illustrations, procedures and standards outlined in MIL-STD-2000 Task G. Soldering of printed wiring assemblies shall be in accordance with MIL-STD-2000 Task G."

3.2.16, fifth line, delete "MIL-W-13773" and substitute: "MIL-STD-1943".

PAGE 13

3.2.19, add new 3.2.19 to read:

"3.2.19 Optical components. Unless otherwise specified on the applicable drawing, all optical components shall meet the requirements of MIL-O-13830 and the applicable drawing."

Redesignate former 3.2.19 to 3.2.19.1.

3.2.19.1, second line, following "with", add: "MIL-B-48611 and".

MIL-F-13926B(AR)  
AMENDMENT 5

PAGE 13

3.2.21.2, delete and substitute:

"3.2.21.2 Identification application. Methods of identification application shall be as specified on the drawing. If the method of application is not specified on the drawing, the application shall be applied by stamping, etching, engraving, cast, or molded. All other methods of application shall require the approval of the Government Technical Agency."

PAGE 14

3.2.23, second and fifth lines, delete "MIL-C-6021" and substitute:  
"MIL-STD-2175".

PAGE 15

3.2.28, second line, delete the period and add: "and to the workmanship provisions of applicable specifications."

Add new paragraph 4.1.1:

"4.1.1 Responsibility for compliance. All items shall meet all requirements of Sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material."

4.2.2.1, fourth line, delete the period and add: "for conformance or interchangeability."

PAGE 16

4.2.2.1 Delete top paragraph in its entirety: which was part of 4.2.2.1

MIL-F-13926B(AR)  
AMENDMENT 5

Add the following paragraphs:

"4.2.2.1.1 First article inspection for components and subassemblies covered by QAPs/QARs. When required by contract, a first article sample consisting of 3 items (unless otherwise specified) shall be submitted for inspection and approval in accordance with the terms of the contract. As determined by the Government, the sample items shall be subjected to all of the examinations and tests specified in the applicable QAP/QAR and be inspected for compliance with all of the requirements of the applicable drawings.

4.2.2.1.2 First article rejection. If any sample item fails to comply with any of the applicable requirements, the first article sample shall be rejected. The Government reserves the right to terminate inspection upon any failure to comply with any of the requirements."

4.2.2.2.1, first line, delete "Major defects." and substitute: "Major characteristics."

4.2.2.2.1, fourth and fifth lines, delete "listing of types of defect characteristics" and substitute: "drawing characteristics,".

4.2.2.2.1, fifth line, last word, delete "defects" and substitute: "characteristics".

4.2.2.2.1.g., delete "Class 3" and substitute: "Class 2".

PAGE 17

4.2.2.2.2, first line, delete "Minor defects." and substitute: "Minor characteristics." After "specified," delete "defect".

4.2.2.2.2, second line, delete "defects" and substitute: "characteristics".

4.2.2.2, (incorrectly numbered) delete and substitute 4.2.2.3 to read:

"4.2.2.3 Test methods and procedures. Test methods and procedures applicable to Critical and Major Characteristics shall be established by the contractor and included in his written inspection plan. The contractor's written inspection plan for each characteristic shall be carefully analyzed, and a determination made as to the methods, procedures, equipment, sequence of inspection, and tests for that characteristic that will best insure the acceptance of those products which meet the requirement, and the rejection of those which do not conform."

MIL-F-13926B(AR)  
AMENDMENT 5

4.2.2.4.1, second line, delete "defects" and substitute: "characteristics".

4.2.2.4.1, fourth line, delete "defects" and substitute: "characteristics".

4.2.2.4.1, sixth line, delete "defects" and substitute: "characteristics".  
(2 places).

4.2.2.4.1, add a last sentence to read: "AQL's apply to each characteristic".

\* Add the following new paragraphs 4.2.2.4.1.1, 4.2.2.4.1.2, and 4.2.2.4.1.3.

4.2.2.4.1.1 Certification Provisions - Where a QAP or component specification requires test data or certification for a specific characteristic, reports of certifications of objectives tests performed on the material shall be properly authenticated by a responsible company official to attest to compliance with the requirements of the applicable specification. Reports of certifications shall include positive identification of the material and part, the applicable requirements, the specific test performed and the quantitative and qualitative results obtained. Results of each specimen or sample tested/inspected shall be included in the report or certification. Test reports/certifications shall support the First Article preproduction sample and production samples. Prior to inspection, the contractor shall determine from the test reports/certification as to material compliance with requirements. Components/material not complying shall be rejected. The information to be included in a Certified test Report (CTR) and a certificate of conformance (COC) is detailed in the following paragraphs. Unless otherwise specified, the Certified Test Report applies.

4.2.2.4.1.2 Certified test reports (CTR). When specified in the contract or in documents referenced therein, the contractor shall make available to the Government a CTR for each lot of parts, assemblies, subsystems and systems by lot number prior to acceptance. Certified test reports are not required for Military Standard and commercial items (see 3.2.5 and 4.2.2.4.1.3). This test report is in addition to, and not in lieu of, any rights of the Government under this contract or law. A CTR may be used as an element incident to, but shall not be used as the sole basis for, Government acceptance of the contract item(s) unless so indicated in the technical documentation or contract. As a minimum, the report shall contain the following:

- a. Name of company and date.
- b. Contract number or purchase order number, national stock number and drawing number.
- c. Complete nomenclature of supplies together with lot number or other identification. The quantity in each lot or shipment shall be given.
- d. All inspections and test required by contract (i.e., material, processes, performance, functional, etc.) shall be recorded in test reports. These reports shall identify each lot submitted for acceptance by lot number, the specification or drawing, revision and date, grade or type as applicable, number of specimens tested, specified characteristics and requirements, and actual results obtained.

MIL-F-13926B (AR)  
AMENDMENT 5

- e. Reports of the raw material producer's chemical, mechanical, and physical analyses
- f. A statement, as follows, certifying that material meets all requirements of the contract:  
"The undersigned, individually, and as the authorized representative of the contractor, warrants and represents that: All the information supplied above is true and accurate; the material covered by this certificate conforms to all contract requirements (including but not limited to the drawings and specifications); the inspection and test results, and the analyses appearing herein are true and accurate; and this certificate is made for the purpose of inducing payment and with knowledge that the information and certification may be used as a basis for such payment."
- g. Signature and title of certifying official.

4.2.2.4.1.3 Certificate of conformance (COC). A certificate of conformance is required for Military Standard and commercial items. When a certified Test Report (see 4.2.2.4.1.2) is not required for material and process specification requirements, a COC, supported by inspection and test data, material analyses, or certification from the raw material producer or processor, shall be made available to the Government for specifications covering raw material, processed material, and processes. The contractor shall make the COC available to the Government prior to or with the request to perform acceptance inspection approval by the Government. This is in addition to, and not in lieu of, any rights of the Government under this contract or law. A COC may be used as an element incident to, but shall not be used as the sole basis for, Government acceptance of contract item(s) unless so indicated in the technical documentation or contract. As a minimum, the COC shall contain the following:

- a. Name of company and date.
- b. Contract number or purchase order number, national stock number and drawing number.
- c. Complete nomenclature of supplies together with lot number or other identification. The quantity in each lot or shipment shall be given.
- d. A statement, as follows, certifying that material meets all requirements of the contract:  
"The undersigned, individually, and as the authorized representative of the contractor, warrants and represents that: All the information supplied above is true and accurate; the material covered by this certificate conforms to all contract requirements (including but not limited to the drawings and specifications); the inspection and test results, and the analyses appearing herein are true and accurate; and this certificate is made for the purpose of inducing payment and with knowledge that the information and certification may be used as a basis for such payment."
- e. Signature and title of certifying official.



MIL-F-13926B (AR)  
AMENDMENT 5

PAGE 18

4.3, delete first sentence and substitute: "Environmental tests shall apply only to the extent specified on the drawing or product specification."

PAGE 30

Add the following paragraphs:

"4.5.5 Acceptance inspection and test equipment.

4.5.5.1 Acceptance inspection and test equipment. Inspection equipment used shall be capable of repeatable measurements, by various experienced inspection/test personnel, to an accuracy of 10% of the total tolerance of the characteristic being inspected."

PAGE 32

6.6, redesignate to 6.7 and add new 6.6 to read:

"6.6 Submission of test equipment designs. When the submission of test equipment designs by the contractor to the Government for approval is required by the contract, the contractor is referred to MIL-HDBK-204 for the design of inspection equipment."

\*The margins of this amendment are marked with an asterisk or vertical lines to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment."

Custodian:  
Army-AR

Preparing activity  
Army-AR

(Project 12GP-A011)