

MIL-H-55053B  
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 SUPERSEDING  
 MIL-H-55053A  
 27 MARCH 1962

MILITARY SPECIFICATION  
 HARDWARE, POLE LINE  
 GENERAL SPECIFICATION FOR

This specification is mandatory for use by all  
 Departments and Agencies of the Department of  
 Defense.

1. SCOPE

1.1 This specification covers hardware as used in the construction of pole lines, towers, etc., including but not restricted to the following:

Bolt, Carriage	Clamp, Wire Rope
Bolt, Double Arming	Drive Ring
Bolt, Eye	Guy Attachment
Bolt, Hook	Hanger, Cable
Bolt, Lag	Hanger, Wire Strand
Bolt, Machine, Square Head	Hook, Guy
Bolt, Shoulder	Link, Reinforcing, Cable
Bolt, Thimble Eye	Nut, Eye
Brace, Crossarm	Pin, Insulator
Bracket, Insulator	Protector, Pole
Bridle Ring	Staple, Ground Wire
Clamp, Cable Suspension	Step, Pole
Clamp, Drop Wire	Strand, Connector
Clamp, Electrical	Strap, Support
Clamp, Guy	Washer, Saddle

2. APPLICABLE DOCUMENTS

2.1 The following documents of the issue in effect on date of invitation for bids, form a part of this specification to the extent specified herein.

SPECIFICATIONS

MILITARY

MIL-P-14527 - Pole Line Hardware; Preparation for Delivery of.

FSC 5975

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## STANDARDS

MIL-STD-105 - Sampling Procedure and Tables for Inspection  
by Attributes.

For applicable MS standards for items covered by this specification,  
see supplement.

(Copies of specifications and standards required by the contractors  
in connection with specific procurement functions should be obtained  
from the procuring agency or as directed by the contracting officer.)

2.2 Other publications. The following documents form a part of  
this specification to the extent specified herein. Unless otherwise  
indicated, the issue in effect on date of invitation for bids shall  
apply.

### NATIONAL BUREAU OF STANDARDS

Handbook H-28 - Screw-Thread Standards for Federal Services.

(Application for copies should be addressed to the Superintendent  
of Documents, Government Printing Office, Washington, D.C. 20402)

### AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

A153 - Zinc Coating (Hot Dip) on Iron and Steel Hardware.

(Application for copies should be addressed to the American Society  
for Testing and Materials, 1916 Race Street, Philadelphia, Pa. 19103.)

(Technical society and technical association specifications and  
standards are generally available for reference from libraries. They  
are also distributed among technical groups and using Federal agencies.)

## 3. REQUIREMENTS

3.1 Construction. Construction of each type of hardware shall be in  
accordance with the military standards listed herein and the paragraphs  
listed below.

3.2 Material. Material shall be as specified herein. Material not  
definitely specified shall be of the quality regularly used by the  
manufacturer in the product he sells on the commercial (as distinguished  
from the governmental supply) market. Material shall be free from all  
defects and imperfections that might affect the serviceability and  
appearance of the finished product.

3.3 Standard product. Except where modified herein, it is intended that the bolts and nuts shall be a regular commercial product of the manufacturer or his suppliers. The parts shall be new and unused.

3.4 Threads. Unless otherwise specified, bolts and nuts shall be threaded with right hand unified or American National Coarse thread series in accordance with handbook H-28. For coated threads, the specified dimensions shall apply after coating.

3.5 Dimensions. The dimensions of the product shall comply with the specified requirements of the applicable MS standard and the requirements of paragraph 3.9.

3.6 Tensile Strength. Where applicable, tensile strengths shall comply with the specified requirements of the applicable MS standard and the requirements of paragraph 3.9.

3.7 Coating. When coating is required, the coating shall be free from lumps, blisters, uncoated spots, or other defects which might affect the serviceability of the article or the protection afforded the base metal. Coating shall be by the hot-dipped process. Zinc coating (hot-dipped) shall be in accordance with ASTM-A153. Hot-dipped zinc-coated bolts having rolled threads may be rerolled after coating if removal of surplus zinc is necessary, but threads shall not be recut after coating. Hot-dipped zinc-coated nuts shall be threaded after coating.

3.8 Workmanship. Pole line hardware applicable to this specification shall be manufactured in a thoroughly workmanlike manner in accordance with the best commercial practice for this type of material and in accordance with the applicable portions of the following paragraphs:

- 3.1 Construction.
- 3.2 Materiel.
- 3.3 Standard product.
- 3.4 Threads.
- 3.5 Dimensions.
- 3.7 Coating
- 3.9 Military Standards for individual hardware items.

3.9 Military standards for individual hardware items. All requirements specified herein are applicable to all hardware items covered by applicable military standards. Detail requirements or exceptions applicable to individual hardware items will be specified on the individual military standards. In the event of any conflict

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between requirements of this specification and requirements of the military standard, the latter shall govern.

#### 4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the supplier may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.

#### 4.2 Sampling for lot acceptance.

4.2.1 Inspection lot. An inspection lot shall consist of all like items produced under essentially the same manufacturing conditions and offered for delivery at one time.

4.2.2 Sampling for examination. Statistical sampling and inspection shall be in accordance with MIL-STD-105 for general inspection level I. The acceptable quality level (AQL) shall be 2.5% defective.

4.2.3 Sampling for test. Statistical sampling and inspection shall be in accordance with MIL-STD-105 for special inspection level S-3. The acceptable quality level (AQL) shall be 2.5% defective.

4.3 Examination. Each of the sample hardware selected in accordance with paragraph 4.2.2 shall be examined to verify compliance with this specification. Examination shall be conducted as specified in table 1.

TABLE 1

Categories	Defects
Critical	Non defined
Major  1A1..... 1A2..... 1A3..... 1A4..... 1A5.....  1A6..... 1A7.....  Minor  1B1..... 1B2..... 1B3..... 1B4.....	Item incomplete, component parts missing. Type of finish, not as specified. Materials not as specified. Dimensions not within specified limits. Threaded parts do not comply with specified requirements. Damaged component, affecting use of part Burrs, lumps, and blisters, affecting use of part.  Scratches, abrasions, cuts. Difficulty in operation of threaded parts Poor adhesions of finish. Burrs, lumps, and blisters not affecting use of part.

4.4 Test. Each sample of hardware selected in accordance with paragraph 4.2.3 shall be tested to assure conformance with military standards and the following requirements of this specification.

4.4.1 Tensile test. The test sample shall be subjected to tensile tests, (test procedure or method to be specified by originator) to assure conformance with strength requirements of applicable military standards.

4.4.2 Coating test. The test sample shall be subjected to coating test in accordance with ASTM-A153 to assure conformance with coating requirements of this specification.

4.4.3 Dimensions. The test specimen shall be measured by means of suitable gages and measuring instruments and shall meet the dimensions specified. Thread dimensions shall be measured by means of suitable

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gages or measuring instruments and shall be as specified within the limits of variation establishing the closest and loosest condition of fit permissible for the class of fit specified.

4.5 Examination of preparation for delivery. Packaging, packing, and marking shall be examined to assure conformance with the requirements of section 5.

4.6 Visual examination. The item shall be subjected to visual examination to determine compliance with paragraph 3.8 of this specification.

## 5. PREPARATION FOR DELIVERY

5.1 Preservation, packaging, packing and marking shall be in accordance with Specification MIL-P-14527.

## 6. NOTES

6.1 Ordering data. Procurement documents should specify the following:

Type of preservation, packaging and packing required (immediate use, storage, or overseas shipment), title, number, and date of this specification and any amendment thereto.

### Custodians:

Army - EL  
Navy - YD  
Air Force - 80

### Preparing Activity:

Army - EL  
Project Number 5975-0413

### Review Activities:

Army - EL  
Navy - YD  
Air Force - 80

### User Activity:

Army -  
Navy - MC  
Air Force -

## SPECIFICATION ANALYSIS SHEET

Form Approved  
Budget Bureau No. 22-R255

**INSTRUCTIONS:** This sheet is to be filled out by personnel, either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments and suggestions submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or serve to amend contractual requirements.

SPECIFICATION

ORGANIZATION

CITY AND STATE

CONTRACT NUMBER

MATERIAL PROCURED UNDER A

 DIRECT GOVERNMENT CONTRACT     SUBCONTRACT

1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

A. GIVE PARAGRAPH NUMBER AND WORDING.

B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES

2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID

3. IS THE SPECIFICATION RESTRICTIVE?

YES     NO (If "yes", in what way?)

4. REMARKS (Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)

SUBMITTED BY (Printed or typed name and activity - Optional)

DATE

DD FORM 1426  
1 JAN 66

REPLACES EDITION OF 1 OCT 54 WHICH MAY BE USED.

ESC-FM 1068-68

To detach this form, cut along this line