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LOAD TEST IDENTIFICATION AND DATA MARKING STANDARD FOR

ENGINEERING DEVELOPMENT DIRECTORATE

National Aeronautics and
Space Administration

John F. Kennedy Space Center

NASA

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LOAD TEST IDENTIFICATION AND DATA MARKING STANDARD FOR

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JOHN F. KENNEDY SPACE CENTER, NASA

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LOAD TEST IDENTIFICATION AND DATA MARKING STANDARD FOR

This standard has been approved by the Engineering Development Directorate of the John F. Kennedy Space Center (KSC) and is mandatory for use by KSC and associated contractors.

1. SCOPE

This standard establishes requirements for load test identification, identification data, and the method for affixing load test data to lifting devices or other ground support equipment. This standard is applicable to all lifting hardware or equipment at the John F. Kennedy Space Center, NASA.

2. APPLICABLE DOCUMENTS

The following documents form a part of this document to the extent specified herein. When this document is used for procurement, including solicitations, or is added to an existing contract, the specific revision levels, amendments, and approval dates of said documents shall be specified in an attachment to the Solicitation/Statement of Work/Contract.

Governmental

Specifications

Military

MIL-A-46106	Silicone Adhesive Type 1

General Services Administration (GSA)

FSN 8465-00-242-4804	Tag Identification Personnel

Standards

National Aeronautics and Space Administration (NASA)

NSS/G0-1740.9	NASA Safety Standard for Lifting Devices and Equipment

Drawings

John F. Kennedy Space Center (KSC), NASA

75M04185	Identification Tag

"(Copies of specifications, standards, drawings, and publications required by suppliers in connection with specified procurement functions should be obtained from the procuring activity or as directed by the Contracting Officer.)"

3. REQUIREMENTS

3.1 General. - All hardware which is load tested shall be permanently marked with an identification band or tag in accordance with this standard. The type of load test, the test load, critical marking, and the period between load tests shall be in accordance with NSS/GO-1740.9 and the design drawings.

3.2 Identification Markers. - Identification markers utilized for a load-tested hardware item shall be either one of two types: (1) identification band and (2) identification tags.

3.2.1 Identification Band. - Identification bands shall be the preferred method for wire rope slings and other lifting hardware which is circular in cross section. Identification bands shall be in accordance with 75M04185. The bands shall be permanently installed as shown in figure 1, at the end of the wire rope assembly. The band shall not slip when the wire rope is supported in a vertical position.

3.2.2 Identification Tag. - Identification tags shall be used for spreader bars, cranes, hoists, winches, and other hardware items where banding is not appropriate. Identification tags shall be in accordance with FSN 8465-00-242-4804 or approved equal. Identification tags shall be permanently attached, using an adhesive equivalent to MIL-A-46106, or securely tethered to the hardware.

3.2.3 Identification Data. - The following information shall appear on the identification tag or band.

a. Drawing or part number and serial number

b. Safe working load in pounds

c. Test load in pounds

d. Date of load test

e. Date of required retest

f. Critical lift device marking, if required

g. Load test organization

h. Quality acceptance

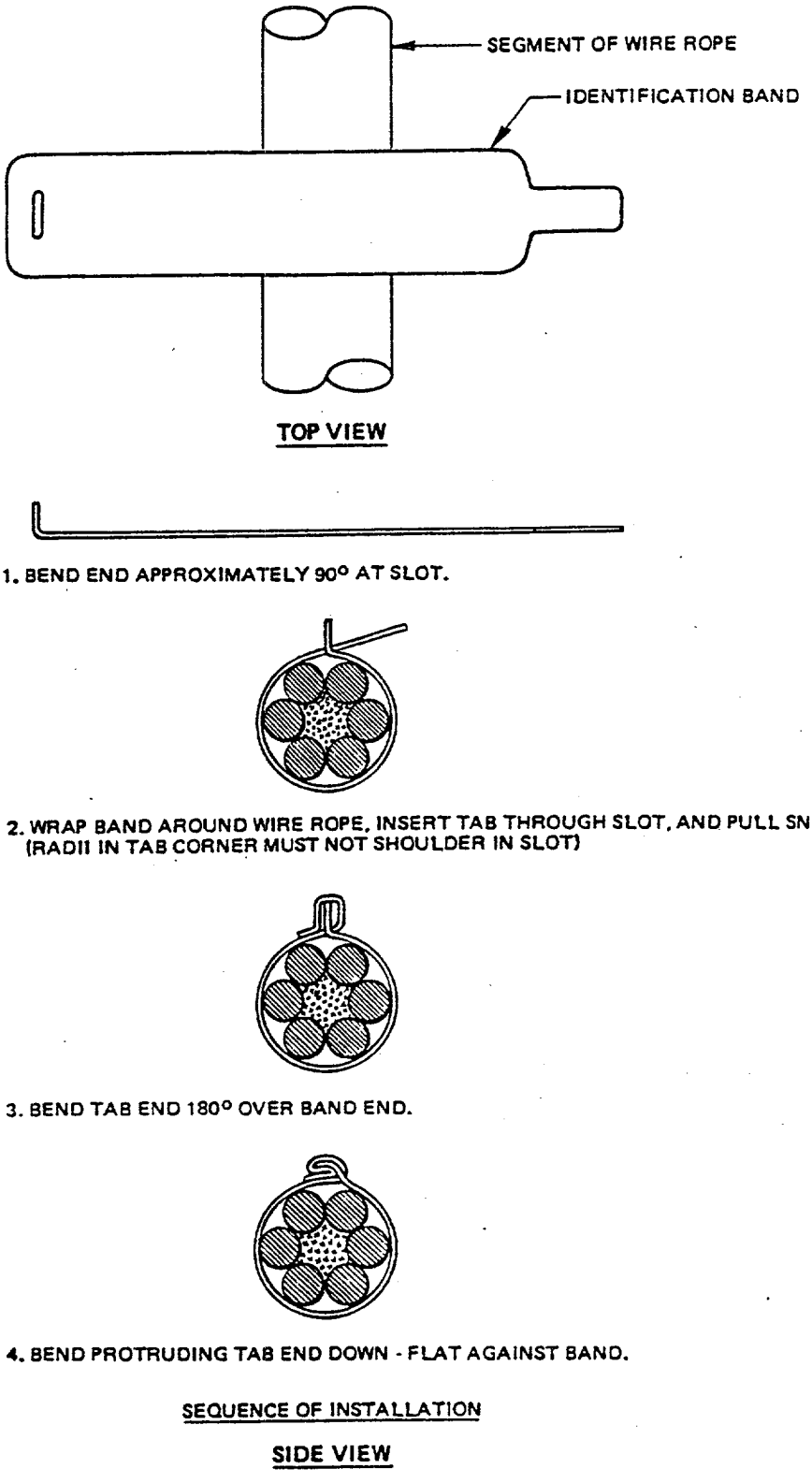

Figure 1. Identification Band Installation

3.2.4 Marking. - Data shall be permanently marked onto the band or tag using an electro-etching process or die stamping. The marking shall be clear and legible. Letters shall be English capitals and numerals shall be Arabic. A character size of 3/32 inch is recommended.

3.2.5 Missing Tags. - Lifting devices which have missing or out of date identification tags shall be retested prior to use if satisfactory proof of load test cannot be provided. If satisfactory proof of load test can be provided, the device may be reidentified without retest.

3.2.6 Nonconforming Tags. - Existing load test identification marking which does not meet the requirements of this standard shall be reidentified in accordance with this standard during the next scheduled load test.

4. QUALITY ASSURANCE PROVISIONS

Quality assurance provisions shall be in accordance with the provisions of NSS/GO-1740.9.

5. PREPARATION FOR DELIVERY

Not applicable.

6. NOTES

6.1 Intended Use. - This standard is intended to establish uniform engineering practices and methods for identification of hardware that has been satisfactorily load tested for or at the John F. Kennedy Space Center, NASA.

6.2 Definitions. - For the purpose of this standard, the following definitions shall apply.

Critical Lift Device: A device (crane, hoist, etc.) whose potential failure or malfunction (loss of control, dropping a load, etc.) could cause loss of life, damage to flight or space hardware, damage to major facility or mission support equipment, or seriously delay the objectives of a program.

Load Test: The test performed prior to first use, after major modification of the load path or at other prescribed times. This test verifies material strength, construction, and workmanship and uses a load greater than the rated load.

Safe working Load or Rated Load or Rated Capacity: An assigned weight which is the maximum load the device or equipment shall operationally handle and maintain. This value is marked on the device indicating maximum working capacity. This is also the load referred to as "Safe Working Load." If the device has never been downrated or uprated, this is also the "Manufacturer's Rated Load."

Wire Rope Slings: Wire ropes made into forms, with or without fittings, for handling loads and so made as to permit the attachment of an operating rope.

NOTICE. When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any right or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

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