

INCH-POUND

MIL-DTL-26521K
 AMENDMENT 3
7 APRIL 2003
 SUPERSEDING
 AMENDMENT 2
 8 January 2003

DETAIL SPECIFICATION

HOSE ASSEMBLY, NONMETALLIC, FUEL, COLLAPSIBLE, LOW TEMPERATURE
 WITH NON-REUSABLE COUPLINGS

This amendment forms a part of MIL-DTL-26521K, dated 15 February 1999, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 8

3.5.5: Delete and Substitute:

“3.5.5 Low temperature flexibility. The hose shall be flexible at temperatures ranging down to $-40\pm 2^{\circ}\text{F}$ and shall not break, crack, or have layer separation when tested in accordance with 4.6.6.”

3.5.11: Delete.

* 3.5.11: Reinstate in its entirety.

PAGE 10

4.3.1c: Delete “and durability test (see 4.6.10)”.

* 4.3.1c: Reinstate in its entirety.

PAGE 13

4.6.6: Delete and Substitute:

“4.6.6 Low temperature flexibility test. Test samples shall be preconditioned at -40°F for at least 24 hours prior to testing. The flexibility tests shall be carried out with an empty length of hose, the length of which is calculated as follows:

$$\text{Hose Length} = 3.142D + 4d$$

Where: D = Test drum diameter
 d = Hose diameter

Determine the external test drum diameter based on the hose diameter using table V.

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FSC 4720

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TABLE V. Test drum external diameter in relation to hose diameter.

Hose I.D. (d) \pm .06 (inches)	Test Drum External Diameter (D) (inches)
2.00	20
2.50	25
3.00	30
4.00	40

a. Determine the hose length and the external test drum diameter from table V and the equation above.

b. Attach the hose to the test drum with the clamp as shown in figure 3.

c. Place the test drum and hose specimen in a cold box/bath to keep their temperature at -40°F.

Note: The test drum and specimen for hoses with inside diameters of 3 inches and smaller shall be kept in the cold box/bath during the test to ensure the test temperature is maintained. For the hose with inside diameter of 4 inches, the test drum and specimen must be at the test temperature but may be removed from the cold box/bath for the test procedure. In this case the test must be initiated within 30 seconds of removal from the cold box/bath.

d. Rotate the test drum using a torque wrench with a dial indicator. The drum must be rotated 180° within 10 seconds.

e. Record the maximum registered torque required to bend the hose around the test drum. Report the test result in foot-pounds (lb-ft). Results shall be submitted to the preparing activity in first article test results.

f. Verify that the hose is flexible.

g. Proof test, in accordance with 4.6.4, after completing this test. Then split hose lengthwise and inspect for cracks, breaks and layers separation. Failure of this test shall be cause for rejection of the production lot.

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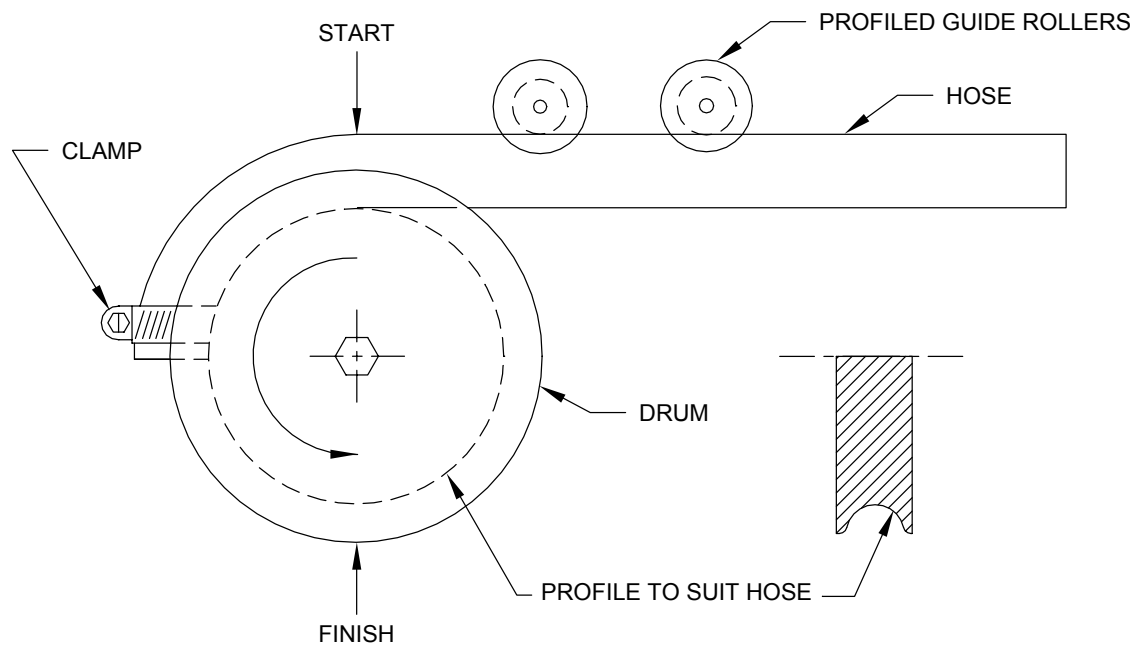


FIGURE 3. Test fixture for cold flexibility evaluation.

PAGE 14

4.6.10: Delete.

* 4.6.10: Reinstate in its entirety.

PAGE 17

6.2: Add the following: "f. Torque data from low temperature flexibility test, if required (4.6.6e)."

NOTE: The margins of this amendment are marked with asterisks to indicate where changes 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.

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Custodians:

Air Force - 99
Army - AR
Navy - SH
DLA - CC

Preparing activity:
DLA - CC

(Project 4720-0383)

Review activities:

Air Force - 71
Army - AV