

FED. SUPPLY CLASS

4730

1. SCOPE

1.1 Purpose. This specification establishes the requirements for a tangential worm drive clamp.

2. APPLICABLE DOCUMENTS

2.1 Government Documents

2.1.1 Specifications

Military Specifications

MIL-DTL-6000 Hose, Rubber, Fuel, Oil, Coolant, Water and Alcohol

Copies can be obtained from the Department of Defense Single Stock Point (DODSSP). <http://dodssp.daps.dla.mil>

2.2 Other Publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of the documents which are DOD adopted shall be those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation. The issues of documents which have not been adopted shall be those in effect on the date of the cited DoDISS.

American Society for Quality

ANSI/ASQ Z1.4 Sampling Procedures and Tables for Inspections by Attributes

Copies can be obtained from the American Society for Quality, 600 North Plankinton Ave., Milwaukee, WI 53203. www.asq.org

ASTM International

ASTM D3951 Standard Practice for Commercial Packaging

Copies can be obtained from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. www.astm.org

Aerospace Industries Association

NAS1924 Clamp, Hose

Copies can be obtained from the Aerospace Industries Association, 1000 Wilson Blvd., Suite 1700, Arlington, VA 22209. www.aia-aerospace.org

SAE International

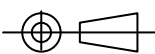
AS1506 Hose, Air Duct, Semiflexible, Sleeve Section, Unreinforced, Self Extinguishing

AS1543 Hose, Air Duct, Semiflexible, Sleeve Section, Unreinforced, Self Extinguishing, Nomex

Copies can be obtained from SAE International, 400 Commonwealth Dr., Warrendale, PA 15096-0001. www.sae.org

2.3 Order of Precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

② COMPLETELY REVISED

THIRD ANGLE PROJECTION	CUSTODIAN	REVISION
	NATIONAL AEROSPACE STANDARDS COMMITTEE	2
PROCUREMENT SPECIFICATION	TITLE	CLASSIFICATION SPECIFICATION
NONE	CLAMP, HOSE	NAS1925
		SHEET 1 OF 5



Documents

Document Sharing Hub

2.4 Definitions

- 2.4.1 **Durability Torque.** The maximum torque value applied to a clamp without evidence of deformation or excessive wear when tightened once over a steel mandrel.
- 2.4.2 **Free Torque.** The torque value expressed in pound inches when the clamp is tightened four complete revolutions of the screw or nut, while in the free state. This value does not include any break-away effects due to taking or passage of the band ends beyond the screw head.
- 2.4.3 **Installation Torque.** The recommended torque for installation of the clamp. This is generally expressed in terms of 50% to 75% of the rated "Durability Torque" for specific clamps. Installation Torque is sometimes referred to as Application Torque.
- 2.4.4 **Ultimate Torque.** The torque value at which the clamp develops deformation to a degree that it cannot be reused or no longer achieves its intended use. Ultimate Torque is sometimes referred to as Deformation Torque.

3. REQUIREMENTS

- 3.1 **Qualification.** The clamps furnished under this specification shall be products which have been tested and passed the qualification tests specified herein (see 4.3).
- 3.2 **Components.** The clamp assembly shall consist of a clamping band, a housing, a worm type adjusting screw and a liner. The housing may be of a one or two piece design. The liner may be a separate piece or integral to the clamping band. All components shall be attached to the clamp band in such a manner to assure a satisfactory clamp assembly.
- 3.3 **Material.** Unless otherwise specified the clamp shall be made of stainless steel conforming to the requirements as specified in NAS1924. The adjusting screw will be made of Type 304/305 austenitic stainless steel.

TABLE I – ADJUSTABLE RANGES

CLAMP DASH NO.	MAXIMUM BAR SIZE (INCHES)	MINIMUM BAR SIZE (INCHES)	INSIDE DIAMETER OF CLAMP MUST OPEN TO (INCHES)
22	.625	.438	.688
24	.688	.500	.750
26	.750	.563	.813
30	.875	.688	.938
34	1.000	.813	1.062
38	1.125	.938	1.188
44	1.328	.953	1.375
46	1.375	1.000	1.438
48	1.453	1.078	1.500
56	1.703	1.328	1.750
58	1.750	1.375	1.813
66	2.000	1.625	2.062
74	2.250	1.875	2.312
82	2.500	2.125	2.563
91	2.781	2.406	2.844
98	3.000	2.625	3.062
107	3.281	2.906	3.344
114	3.500	3.125	3.563

- 3.4 **Configuration.** Clamps shall have strap ends in accordance with NAS1924 and shall be suitable for use with hose conforming to MIL-DTL-6000. Clamps with liner shall be suitable for use on hose or cuff of these soft durometer materials.

② COMPLETELY REVISED

REVISION
2



NAS1925
SHEET 2

Document Sharing Hub