



AEROSPACE MATERIAL SPECIFICATION

AMS-QQ-W-428™**REV. B**

Issued 1998-12
Noncurrent 2003-10
Reaf. Nonc. 2013-04
Stabilized 2017-08

Superseding AMS-QQ-W-428A

Wire, Steel, Carbon, (High Carbon, Round,
For Mechanical Springs, General Purpose)

RATIONALE

AMSQQ428B has been declared Stabilized as it is no longer being used by industry.

STABILIZED NOTICE

AMSQQW428B has been declared "STABILIZED" by SAE AMS Carbon and Low Alloy Steels Committee E. This document will no longer be updated and may no longer represent standard industry practice. This document was stabilized because this document is no longer state of the art and other documents contain similar but not necessarily equivalent requirements. Previously this document was reaffirmed non-current. The last technical update of this document occurred in December 1998. Users of this document should refer to the cognizant engineering organization for disposition of any issues with reports/certifications to this specification; including exceptions listed on the certification.

NOTE: In many cases, the purchaser may represent a sub tier supplier and not the cognizant engineering organization.

AMS Committee E recommends that the following similar but not identical specifications may be considered for future procurement. This listing does not constitute authority to substitute these specifications for the "STABILIZED" specification.

AMSQQW428 Type I	ASTM A229/A229M	Standard Specification for Steel Wire, Quenched and Tempered for Mechanical Springs
AMSQQW428 Type II	ASTM A227/A227M	Standard Specification for Steel Wire, Cold-Drawn for Mechanical Springs
AMSQQW428 Type III	No similar specifications were identified for Type III.	

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NOTICE

This document has been taken directly from Federal Specification QQ-W-428B, Amendment 1 and contains only minor editorial and format changes required to bring it into conformance with the publishing requirements of SAE technical standards. The initial release of this document is intended to replace MIL-QQ-W-428B, Amendment 1. Any part numbers established by the original specification remain unchanged.

The original Military Specification was adopted as an SAE standard under the provisions of the SAE Technical Standards Board (TSB) Rules and Regulations (TSB 001) pertaining to accelerated adoption of government specifications and standards. TSB rules provide for (a) the publication of portions of unrevised government specifications and standards without consensus voting at the SAE Committee level, and (b) the use of the existing government specification or standard format.

Under Department of Defense policies and procedures, any qualification requirements and associated qualified products lists are mandatory for DOD contracts. Any requirement relating to qualified products lists (QPL's) has not been adopted by SAE and is not part of this SAE technical document.

1. SCOPE AND CLASSIFICATION:

1.1 Scope:

This specification covers uncoated, round, high carbon steel wire for the fabrication of mechanical springs and wire forms for general purpose use.

1.2 Classification:

1.2.1 Types and class: Spring wire shall be of the following types and classes, as specified (see 6.2):

Type I - Oil-tempered spring wire.

- Class 1 - Wire with tensile properties shown in table II.
- 2 - Wire with tensile properties shown in table II.

Type II - Hard-drawn spring wire.

- Class 1 - Wire with tensile properties shown in table II.
- 2 - Wire with tensile properties shown in table II.

Type III - Soft spring wire.

- Class 1 - Spheroidize-annealed at finish size.
- 2 - Spheroidize-annealed and lightly drawn.
- 3 - Patented or equivalent thermal treatment and lightly drawn.

2. APPLICABLE DOCUMENTS:

The following publications, of the issues in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

2.1 ASTM Publications:

Available from ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM E 8 Methods of Tension Testing of Metallic Materials