



AEROSPACE MATERIAL SPECIFICATION

AMS6354™**REV. G**

Issued 1954-05
Revised 2016-09
Reaffirmed 2021-09

Superseding AMS6354F

Steel, Sheet, Strip, and Plate
0.75Si - 0.62Cr - 0.20Mo - 0.10Zr (0.10 - 0.17C)

(Composition similar to UNS K11914)

RATIONALE

AMS6354G is a Five-Year Review and update of this specification that revises average grain size determination (3.3.1), requires agreement on mechanical property values for material outside the specification size range (3.3.2.1) and revises reporting (4.4).

1. SCOPE

1.1 Form

This specification covers a low-alloy steel in the form of sheet, strip, and plate 4.00 inches (101.6 mm) and under in thickness.

1.2 Application

These products have been used typically for parts requiring strength up to 1000 °F (538 °C), but usage is not limited to such applications.

2. APPLICABLE DOCUMENTS

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AMS2252 Tolerances Low-Alloy Steel Sheet, Strip, and Plate

AMS2259 Chemical Check Analysis Limits Wrought Low-Alloy and Carbon Steels

AMS2370 Quality Assurance Sampling and Testing Carbon and Low-Alloy Steel Wrought Products and Forging Stock

ARP1917 Clarification of Terms Used in Aerospace Metals Specifications

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For more information on this standard, visit
<https://www.sae.org/standards/content/AMS6354G/>

Documents
Document Sharing Hub

2.2 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM A370 Mechanical Testing of Steel Products

ASTM E112 Determining Average Grain Size

ASTM E290 Bend Testing of Material for Ductility

ASTM E350 Chemical Analysis of Carbon Steel, Low-Alloy Steel, Silicon Electrical Steel, Ingot Iron, and Wrought Iron

3. TECHNICAL REQUIREMENTS

3.1 Composition

Shall conform to the percentages by weight shown in Table 1, determined by wet chemical methods in accordance with ASTM E350, by spectrochemical methods, or by other analytical methods acceptable to purchaser.

Table 1 - Composition

Element	min	max
Carbon	0.10	0.17
Manganese	0.50	0.80
Silicon	0.60	0.90
Phosphorus	--	0.025
Sulfur	--	0.035
Chromium	0.50	0.75
Molybdenum	0.15	0.25
Zirconium	0.05	0.10
Nickel	--	0.25
Copper	--	0.35

3.1.1 Aluminum, vanadium and columbium are optional grain refining elements and need not be determined or reported unless used to satisfy the average grain size requirements of 3.3.1.2.

3.1.2 Check Analysis

Composition variations shall meet the applicable requirements of AMS2259.

3.2 Condition

The product shall be supplied in the following condition:

3.2.1 Sheet and Strip

Hot rolled, or cold rolled and annealed, and descaled.

3.2.2 Plate

Hot rolled and descaled.