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# AEROSPACE MATERIAL SPECIFICATION

AMS 7899

Issued 6-30-60  
Revised 10-1-82

## TUNGSTEN SHEET AND STRIP

This specification has been declared "NONCURRENT" by the Aerospace Materials Division, SAE, as of 11-15-66. It is recommended, therefore, that this specification not be specified for new designs.

This cover sheet should be attached to the initial issue of the subject specification.

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This specification has been declared "CANCELLED" by the Aerospace Materials Division, SAE, as of 10-1-82. By this action, subject specification number and title will be deleted from the active specification index of Aerospace Material Specifications.

This specification is under the jurisdiction of AMS Committee "G".

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# AERONAUTICAL MATERIAL SPECIFICATIONS

AMS 7899

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York 17, N.Y.

Issued 6-30-60  
Revised

## TUNGSTEN SHEET AND STRIP

1. ACKNOWLEDGMENT: A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. FORM: Sheet, strip, plate, and foil.
3. APPLICATION: Primarily for parts and assemblies requiring exposures at ultra high temperatures. Applications in oxidizing atmospheres necessitate a protective coating.

4. COMPOSITION:

|            |           |
|------------|-----------|
| Molybdenum | 0.05 max  |
| Nickel     | 0.02 max  |
| Carbon     | 0.01 max  |
| Silicon    | 0.01 max  |
| Iron       | 0.01 max  |
| Oxygen     | 0.01 max  |
| Nitrogen   | 0.01 max  |
| Tungsten   | remainder |

5. CONDITION:

- 5.1 Sheet and Strip: Hot-cold rolled and descaled having a surface appearance comparable to a commercial corrosion resistant steel No. 2D Finish.
- 5.2 Plate: Hot rolled and descaled.
- 5.3 Foil: Hot-cold rolled, bright finish.

6. TECHNICAL REQUIREMENTS:

- 6.1 Tensile Properties at 900 F: Sheet, strip, and plate shall conform to the following requirements. Tensile test specimens taken with the axis parallel to the direction of rolling shall be heated to  $900\text{ F} + 5$  in inert atmosphere, held at  $900\text{ F} \pm 5$  for 10 min. before testing, and tested at a strain rate of 0.05 in. per in. per min. in accordance with ASTM E21-58T.

|                        |            |
|------------------------|------------|
| Tensile Strength, psi  | 80,000 min |
| Elongation, % in 2 in. | 20 min     |

- 6.1.1 Properties of specimens taken with the axis perpendicular to the direction of rolling and of specimens taken from foil shall be as agreed upon by purchaser and vendor.

6.2 Hardness:

- 6.2.1 Sheet and Strip: Shall be not lower than Vickers 400 or equivalent.

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