AERONAUTICAL
MATERIAL SPECIFICATIONS

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

AMS 4951

Issued 3-1-58
Revised

TITANIUM WIRE

1. ACKNOWLEDGMENT: A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.

2. APPLICATION: Primarily for inert gas shielded arc welding.

3. COMPOSITION: The product shall conform to the following:

		Check Analysis Over Max
Iron	0.30 max	0.15
Manganese	0.20 max	--
Oxygen, if determined	0.15 max	--
Carbon	0.10 max	0.04
Nitrogen	0.07 max	0.02
Hydrogen	0.015 max	0.002
Titanium	remainder	

4. CONDITION: Annealed and descaled.

5. TECHNICAL REQUIREMENTS:

5.1 Tensile Properties:

Tensile Strength, psi	50,000 - 80,000

5.2 Weldability: Melted wire shall flow smoothly and evenly during welding and shall be capable of producing acceptable welds.

6. QUALITY: Material shall be multiple melted under vacuum using consumable electrode practice, unless otherwise permitted, and shall be uniform in quality and condition, clean, sound, and free from foreign materials and from internal and external imperfections detrimental to its use for welding purposes.

7. TOLERANCES:

7.1 Unless otherwise specified, straight lengths shall not vary more than ±1/4 in. from the length ordered.

7.2 Unless otherwise specified, diameter of the wire shall not vary more than ±0.002 in. from the size ordered.