



# AEROSPACE MATERIAL SPECIFICATION

## AMS 7879

Society of Automotive Engineers, Inc.  
TWO PENNSYLVANIA PLAZA, NEW YORK, N. Y. 10001

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Revised

### TUNGSTEN CARBIDE - COBALT POWDER Cast and Crushed

- 1. ACKNOWLEDGMENT:** A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
- 2. APPLICATION:** Primarily for producing plasma spray coatings to provide wear and fretting resistant surfaces.
- 3. COMPOSITION:**

	min	max
Carbon	3.90	4.30
Cobalt	10.00	12.00
Iron	--	2.00
Tungsten	remainder	

- 4. TECHNICAL REQUIREMENTS:** When ASTM methods are specified for determining conformance to the following requirements, tests shall be conducted in accordance with the issue of the ASTM method listed in the latest issue of AMS 2350.
  - 4.1 Particle Size Distribution:** Powder shall be supplied with the following particle size distribution. Sieve analysis shall be conducted in accordance with ASTM B214; subsieve (micron) analysis shall be conducted in accordance with ASTM B293 or by an approved optical method.

Mesh or Micron Size*	% By Weight	
	min	max
-270 mesh	100	--
+325 mesh	--	0.5
-20 microns	70	--
-5 microns	--	10

\* + indicates retained on sieve  
- indicates passing through sieve

- 4.2 Plasma Spraying:** Powder shall be capable of producing acceptable plasma spray coatings to standards agreed upon by purchaser and vendor.
- 5. QUALITY:** Material shall be thoroughly blended, uniform in color and quality, dry, and free from foreign materials and from imperfections detrimental to its spraying qualities.
- 6. REPORTS:**
  - 6.1** Unless otherwise specified, the vendor of the product shall furnish with each shipment three copies of a report stating that the product conforms to the requirements specified. This report shall include the purchase order number, material specification number, and quantity.

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