



AEROSPACE MATERIAL SPECIFICATIONS

AMS 4102B

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc.

485 Lexington Ave., New York, N. Y. 10017

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ALUMINUM BARS AND RODS, ROLLED OR COLD FINISHED (1100-F)

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. **APPLICATION:** Primarily for parts requiring good formability and weldability in fabrication and where strength is unimportant.
3. **COMPOSITION:**

	min	max
Aluminum (by difference)	99.00	--
Iron + Silicon	--	1.0
Copper	--	0.20
Zinc	--	0.10
Manganese	--	0.05
Other Impurities, each	--	0.05
Other Impurities, total	--	0.15

4. **CONDITION:** Rolled or cold finished, as ordered, in the as-fabricated condition.
5. **QUALITY:** Material shall be uniform in quality and condition, clean, sound, and free from foreign materials and from internal and external imperfections detrimental to fabrication or to performance of parts.
6. **TOLERANCES:** Unless otherwise specified, tolerances shall conform to all applicable requirements of the latest issue of AMS 2201.
7. **REPORTS:**
 - 7.1 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 chemical composition requirements of this specification. This report shall include the purchase order number, material specification number, size, and quantity.
 - 7.2 Unless otherwise specified, the vendor of finished or semi-finished parts shall furnish with each shipment three copies of a report showing the purchase order number, material specification number, contractor or other direct supplier of material, part number, and quantity. When material for making parts is produced or purchased by the parts vendor, that vendor shall inspect each lot of material to determine conformance to the requirements of this specification, and shall include in the report a statement that the material conforms, or shall include copies of laboratory reports showing the results of tests to determine conformance.
8. **IDENTIFICATION:** Unless otherwise specified, the product shall be identified as follows:
 - 8.1 Each straight bar and rod 0.500 in. and over in diameter or distance between parallel sides shall be marked with the alloy number and temper, or AMS 4102, and manufacturer's identification. The characters shall be of such size as to be clearly legible, shall be applied recurring at intervals not greater than 3 ft using a suitable marking fluid, and shall be sufficiently stable to withstand normal handling.

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