Society of Automotive Engineers, Inc.
485 LEXINGTON AVENUE, NEW YORK, N.Y. 10017

AEROSPACE MATERIAL SPECIFICATION

AMS 4156E
Superseding AMS 4156D
Issued 11-1-49
Revised 5-1-68

ALUMINUM ALLOY EXTRUSIONS
0.68Mg - 0.40Si (6063-T6)

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

2. FORM: Bars, rods, wire, shapes, and tubing.

3. APPLICATION: Primarily for hinges, trim strips, window frames, sills, and moldings where good surface finish is required. Also may be used to advantage for hollow, partially enclosed, and intricate shapes for which an alloy having good extruding characteristics is required.

4. COMPOSITION:

	min	max
Magnesium	0.45	0.9
Silicon	0.20	0.6
Iron	--	0.35
Chromium	--	0.10
Manganese	--	0.10
Titanium	--	0.10
Copper	--	0.10
Zinc	--	0.10
Other Impurities, each	--	0.05
Other Impurities, total	--	0.15
Aluminum	remainder	

5. CONDITION: Solution and precipitation heat treated.

5.1 Unless otherwise specified, extrusions shall be supplied with an as-extruded surface finish; light polishing to remove minor surface imperfections is permissible provided such imperfections can be removed within the dimensional tolerances.

6. TECHNICAL REQUIREMENTS: The product shall conform to the following requirements; tensile properties shall be determined in accordance with the latest issue of AMS 2355.

6.1 Tensile Properties:

Nominal Diameter or Least Thickness (rods, bars, wire, shapes) or Nominal Wall Thickness (tubing) inch	Tensile Strength psi, min	Yield Strength at 0.2% Offset or at Extension Indicated (E = 9,900,000) psi, min	Extension Under Load in. in 2 in.	Elongation % in 2 in. or 4D, min
Up to 0.125, excl	30,000	25,000	0.0091	8
0.125 to 1.000, incl	30,000	25,000	0.0091	10