

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 6300

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Revised

S T E E L
.25 Mo (.35-.40C)

1. ACKNOWLEDGMENT: A vendor must mention this specification number in all quotations and when acknowledging purchase orders.
2. FORM: Bars, billets, forgings, or as ordered.
3. COMPOSITION:

		Individual Bar Check Analysis Over or Under
Carbon	0.35-0.40	0.02
Manganese	0.75-1.00	0.04
Phosphorus	0.040 max	0.005
Sulphur	0.040 max	0.005
Silicon	0.20-0.35	0.02
Molybdenum	0.20-0.30	0.03

4. GRAIN SIZE: 5 or finer ASTM E19-39T, method a, unless otherwise ordered. A heat of steel predominately 5 or finer with grains as large as 3 is permissible.
5. CONDITION:
 - (a) Bar stock must be supplied in a machinable condition with a hardness of not more than Brinell 229, unless otherwise ordered.
 - (b) Stock ordered for forgings must be supplied in the condition and finish ordered by the forging manufacturer.
 - (c) Forgings are to be supplied as ordered.
6. QUALITY:
 - (a) This material must be aircraft quality. It shall be sound, clean, commercially straight and must not reveal defects during forging, heat treating, or machining.
 - (b) Visual examination of deep acid etched bars in the as furnished condition shall show no evidence of abnormal segregation, pipes, cracks, seams, or abnormal change in structure from the surface to the center.
 - (c) Unless otherwise stated, finished parts are subject to magnetic inspection.