

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
29 West 39th Street
New York City

AMS 5373

Issued 3-1-48

Revised

ALLOY CASTINGS, SAND, CORROSION AND HEAT RESISTANT Cobalt Base - 28Cr - 5W

1. ACKNOWLEDGMENT: A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. APPLICATION: Parts, such as nozzles, rubbing seals, guides and supports, requiring wear and/or erosion resistance coupled with a high degree of corrosion and heat resistance, for use at temperature up to 1600 F.
3. COMPOSITION:

Carbon	0.90 - 1.40
Manganese	1.00 max
Silicon	1.50 max
Chromium	27.00 - 31.00
Nickel	3.00 max
Tungsten	3.50 - 5.50
Molybdenum	1.50 max
Iron	3.00 max
Cobalt	remainder
4. CONDITION: As cast, unless otherwise specified.
5. TECHNICAL REQUIREMENT: Hardness.- Castings shall have hardness not lower than Rockwell C40 or equivalent.
6. QUALITY: (a) Castings shall be uniform in quality and condition, sound and free from foreign materials and from internal and external defects detrimental to fabrication or to performance of parts. Castings shall have smooth surfaces and shall be well cleaned.
(b) When castings are broken for fracture test, the fracture shall have uniform color and be substantially free from oxides and other defects.
(c) Unless otherwise specified, castings shall be produced under radiographic control.
(d) Inspection standards and procedures shall be as agreed upon by purchaser and vendor.
(e) Castings shall not be repaired by plugging, welding or other methods without written permission from the purchaser.
7. REPORTS: (a) Unless otherwise specified, the vendor of castings shall furnish with each shipment three copies of a notarized report of the results of tests for chemical composition of each heat represented and a statement that the castings conform to the requirements of this specification. This report shall include the purchase order number, heat number (and code symbol if used), material specification number, part number, and quantity from each heat.