AERONAUTICAL
MATERIAL SPECIFICATIONS

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York 17, N.Y.

AMS 5755

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Revised

ALLOY, CORROSION AND HEAT RESISTANT
Nickel Base - 5Cr - 24.5Mo - 5.5Fe

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

2. FORM: Bars, forgings, and forging stock.

3. APPLICATION: Primarily for parts and assemblies, such as turbine shrouds and seals, requiring oxidation resistance up to 1600 F, good strength up to 1200 F, and low coefficient of expansion.

4. COMPOSITION:

		Check Analysis	
		Under Min or	Over Max
Carbon	0.12 max	--	0.01
Manganese	1.00 max	--	0.03
Silicon	1.00 max	--	0.05
Phosphorus	0.050 max	--	0.005
Sulfur	0.050 max	--	0.005
Chromium	4.00 - 6.00	0.10	0.10
Molybdenum	23.00 - 26.00	0.10	0.10
Iron	4.00 - 7.00	--	--
Vanadium	0.60 max	--	0.01
Nickel + Cobalt	remainder		
Cobalt, if determined	2.50 max	--	--

5. CONDITION:

5.1 Bars: Hot rolled, solution heat treated, and descaled. Rounds 0.75 in. and over in diameter shall be centerless ground.

5.2 Forgings: Solution heat treated and descaled.

5.3 Forging Stock: As ordered by the forging manufacturer.

6. TECHNICAL REQUIREMENTS:

6.1 Heat Treatment: Material shall be solution heat treated by heating to 2150 F ± 25, holding at heat for not less than the time indicated below, and quenching in water or rapid air cooling.