AERONAUTICAL MATERIAL SPECIFICATION

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STEEL, CORROSION AND HEAT RESISTNAT
25Cr - 20Ni

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

2. FORM: Bars, billets, and forgings.

3. APPLICATION: Parts, such as turbine nozzle ring assemblies, and assemblies requiring both corrosion and heat resistance, and where such parts may require welding during fabrication. Parts and assemblies requiring oxidation resistance up to approximately 2000 F but useful at the higher temperatures only when stresses are very low.

4. COMPOSITION:

		Check Analysis Under Min	Check Analysis Over Max
Carbon	0.08 max	--	0.01
Manganese	2.00 max	--	0.04
Silicon	0.30 - 0.80	0.05	0.05
Phosphorus	0.040 max	--	0.005
Sulfur	0.030 max	--	0.005
Chromium	24.00 - 26.00	0.25	0.25
Nickel	19.00 - 22.00	0.20	0.20
Molybdenum	0.50 max	--	0.03
Copper	0.50 max	--	0.03

5. CONDITION:

5.1 Unless otherwise specified, bars shall be hot rolled and solution heat treated free from continuous carbide network, having hardness not higher than Brinell 187 or equivalent.

5.2 Forgings shall be solution heat treated free from continuous carbide network, having hardness not higher than Brinell 187 or equivalent.

5.3 Forging stock shall be supplied as ordered by the forging manufacturer.

6. QUALITY: The product shall be uniform in quality and condition, clean, sound, and free from foreign materials and from internal and external defects detrimental to fabrication or to performance of parts.

7. TOLERANCES: Unless otherwise specified, tolerances for bars shall conform to the latest issue of AMS 2241 as applicable.

8. REPORTS: