AERONAUTICAL MATERIAL SPECIFICATION

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

AMS 5530B

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ALLOY SHEET, CORROSION AND HEAT RESISTANT
Nickel Base - 17Mo - 16.5Cr - 6Fe - 5W

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

2. APPLICATION: Primarily for parts such as welded nozzle diaphragm assemblies, burner liner parts, tail pipes, exhaust cone assemblies and other parts requiring high strength up to approximately 1500 F, and oxidation resistance up to 2000 F.

3. COMPOSITION:

			Check Analysis Under Min	Check Analysis Over Max
ø	Carbon	0.15 max	--	0.01
	Manganese	1.00 max	--	0.03
	Silicon	1.00 max	--	0.05
	Phosphorus	0.040 max	--	0.005
	Sulfur	0.030 max	--	0.005
	Molybdenum	16.00 - 18.00	0.15	0.15
	Chromium	15.50 - 17.50	0.20	0.20
	Iron	4.50 - 7.00	0.15	0.15
	Tungsten	3.75 - 5.25	0.15	0.15
	Vanadium	0.20 - 0.60	0.04	0.04
	Nickel	Remainder		

4. CONDITION: Unless otherwise specified, sheet shall be hot rolled, annealed and pickled, having a surface appearance as close as possible to a commercial corrosion resistant steel No. 2D finish; actual acceptance and rejection standards shall be as agreed upon by purchaser and vendor.

5. TECHNICAL REQUIREMENTS:

5.1 Tensile Properties:

Tensile Strength, psi	100,000 - 145,000
Elongation, % in 2 in.	30 min

5.1.1 For widths 9 in. and over, tensile test specimens shall be taken with the axis perpendicular to the direction of rolling. For widths less than 9 in., tensile test specimens shall be taken with the axis parallel to the direction of rolling.