



ASM Aerospace Specification Metals Inc.

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Nickelvac® A-286 Specialty Steel, Heat Treatment: 982°C (1800°F) + Age

Subcategory: Ferrous Metal; Metal; Stainless Steel

Key Words: Allvac, an Allegheny Teledyne Company, UNS S66286; AMS 5731, 5732, 5734, 5737; MIL-S-24550. ASTM A 453

Component	Wt. %	Component	Wt. %	Component	Wt. %
Al	0.18	Mn	1	S	0.015
B	0.006	Mo	1.3	Si	0.5
C	0.04	Ni	25.5	Ti	2.13
Cr	14.8	P	0.02	V	0.3
Fe	54				

Material Notes:

Iron content calculated as remainder. Data provided by Allvac.

Applications: Jet engines, superchargers, missile components, fasteners, cryogenic equipment, nuclear, corrosive deep well hardware.

Physical Properties	Metric	English	Comments
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Density	<u>7.92 g/cc</u>	0.286 lb/in ³	
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Mechanical Properties

Hardness, Brinell	304	304	Estimated from Rockwell C value for Brinell test with 3000 kg load/10 mm diameter ball
Hardness, Knoop	330	330	Estimated from Rockwell C value.
Hardness, Rockwell C	32	32	
Hardness, Vickers	318	318	Estimated from Rockwell C value.
Tensile Strength, Ultimate	<u>1035 MPa</u>	150000 psi	
Tensile Strength, Yield	<u>759 MPa</u>	110000 psi	0.2% Offset

Elongation at Break	25 %	25 %
Reduction of Area	40 %	40 %

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error.