



ASM Aerospace Specification Metals Inc.

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Vasco® 17-4 Precipitation Hardening Steel, Heat Treatment: 1038°C (1900°F) + Age

Subcategory: Ferrous Metal; Metal; Precipitation Hardening Stainless; Stainless Steel

Key Words: Allvac, an Allegheny Teledyne Company, 17-4PH, 17/4PH, 17-4 PH, AMS 5604, ASTM 240-QQS 766, DIN 1.4542, UNS S17400; PWA 1091. PDS 10705 GD-GF

Component	Wt. %	Component	Wt. %	Component	Wt. %
C	0.035	Mn	0.5	P	0.02
Cr	16.3	Nb	0.3	S	0.015
Cu	4	Ni	4	Si	0.5
Fe	74				

Material Notes:

Iron content calculated as remainder. Data provided by Allvac.

Applications: Aircraft and missile fittings, fasteners, gears. Turbine and pump blades, shafts.

Physical Properties	Metric	English	Comments
Density	<u>7.78 g/cc</u>	0.281 lb/in ³	

Mechanical Properties

Hardness, Brinell	351	351	Estimated from Rockwell C value for Brinell test with 3000 kg load/10 mm diameter ball
Hardness, Knoop	382	382	Estimated from Rockwell C value.
Hardness, Rockwell C	38	38	
Hardness, Vickers	367	367	Estimated from Rockwell C value.
Tensile Strength, Ultimate	<u>1172 MPa</u>	170000 psi	
Tensile Strength, Yield	<u>1069 MPa</u>	155000 psi	0.2% Offset
Elongation at Break	<u>Min 10 %</u>	Min 10 %	
Reduction of Area	<u>Min 40 %</u>	Min 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.