

Alloys & Properties



High-Temperature Shape Memory Ni:Ti Alloy

Chemistry, %/wt.			
Ni	55.5±0.5	O	0.05 max.
Ti	Remainder	Fe	0.05 max.
C	0.05 max.	Other trace elements	< 0.01
H	0.005 max.		
Density		Melting Point	
0.235 lb/in³ (6.5 g/cm³)		1300 °C (2372 °F)	

Typical tensile properties of cold-drawn and tempered material

Ultimate tensile strength, 180 ksi (1237 MPa) min.

Elongation to failure, 12% min.

Maximum strain recovery, 8%

A_s (austenite start temperature), fully annealed, measured by DSC= 95 °C ± 5 °C (3 σ).

A_f (austenite finish temperature), fully annealed, measured by DSC= 115 °C ± 5 °C (3 σ).

