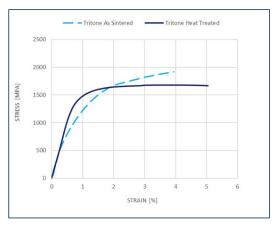


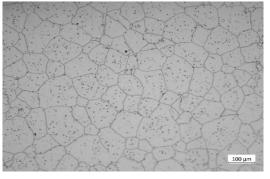
Material datasheet

H13 Tool Steel

Composition - According to ASTM A681

Composition	Amount		
Chromium	4.75-5.5%		
Molybdenum	1.1-1.75%		
Vanadium	0.8-1.2%		
Silicon	0.8-1.25%		
Carbon	0.32-0.45%		
Manganese	0.2-0.6%		
Phosphorous	0.03% max		
Sulfur	0.03% max		
Iron	Bal.		





Typical Mechanical Properties

	Standard	Tritone as sintered	Tritone heat treated*	Wrought Heat treated*
Ultimate Tensile Strength	ASTM E8	1921 MPa	1686 MPa	1580 MPa
0.2% Yield Strength	ASTM E8	923 MPa	1341 MPa	1360 MPa
Elongation at Break	ASTM E8	3.9%	4.4%	14%
Hardness	ASTM E18	49.5 HRC	50 HRC	46 HRC
Relative density	ASTM B962	95%	95%	100%

^{*} Properties of as sintered material are affected by the cooling rate of the sintering process.

^{*} Heat treated according to ASTM A681: Standard Specification for Tools Steel Alloy.



alphacam GmbH Erlenwiesen 16 D-73614 Schorndorf Tel.: +49 7181 9222-0 info@alphacam.de alphacam austria GmbH Handelskai 92, Gate1 / 2. OG / Top A A-1200 Wien Tel.: +43 1 3619 600-0 info@alphacam.at

alphacam swiss GmbH Zürcherstrasse 14 CH-8400 Winterthur Tel.: +41 52 26207-50 info@alphacam.ch

