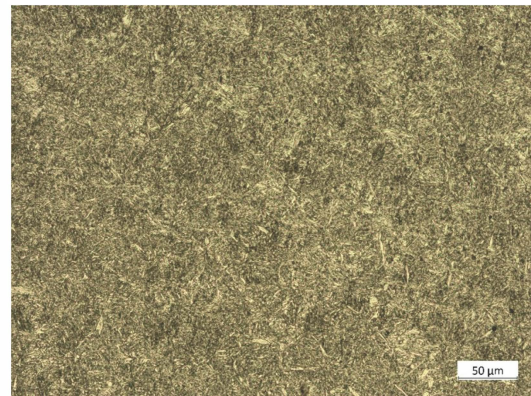
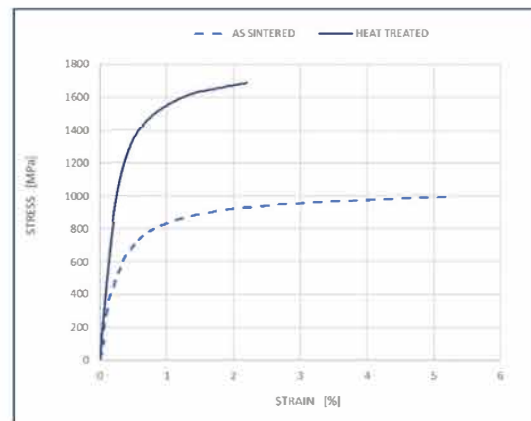


Material datasheet

4340 Low Alloy Steel

Composition – According to ASTM A322

Composition	Amount
Carbon	0.38-0.43%
Manganese	0.60-0.80%
Phosphorus	0.035% max
Sulfur	0.040% max
Silicon	0.15-0.35%
Nickel	1.65-2.00%
Chromium	0.70-0.90%
Molybdenum	0.20-0.30%
Iron	Bal.



Typical Mechanical Properties

	Standard	Tritone as sintered	Tritone heat treated	ISO 22068 as sintered	ISO 22068 H1300
Ultimate Tensile Strength, MPa	ASTM E8	994	1689	700	1600
0.2% Yield Strength, MPa	ASTM E8	560	1282	500	1300
Elongation at Break, %	ASTM E8	5.3	2.4	4	2
Hardness, HRC	ASTM E18	25	48.8	24	48
Relative density, %	ASTM B962	94.5	94.5	94.3	94.3

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

* AISI 4340 alloy steel is heat treated at 840°C (1544°F) followed by quenching in Nitrogen