

# 3D Metal – Maraging Steel Material Information

MS1 or (Maraging Steel

Superior properties, such as high ductility, high yield stress, good hardenability, good weldability, simple heat treatment without deformations, have led to a widespread application of maraging steels,

Thermal Properties	
Properties	Metric / Imperial
Thermal expansion co-efficient (@21-480°C/69.8-896°F)	10.1 $\mu\text{m}/\text{m}^\circ\text{C}$ 5.61 $\mu\text{in}/\text{in}^\circ\text{F}$
Thermal conductivity (20°C)	15 $\pm 0.8$ W/mK 104 $\pm 0.6$ BTU in/hr.ft <sup>2</sup> .°F
Thermal conductivity (after age hardening)	813 J/kgK
Specific Heat capacity	450 $\pm 20$ J/kg°C 0.108 $\pm 0.005$ Btu/(lb °F)
Maximum Operating Temperature	400°C 750°F
Density	8.10 g/cm <sup>3</sup> 0.292 lb/in <sup>3</sup>