

# Stainless Steel (inc. High Performance) - 1.4509 / 441

## Box Section - Dull Polished

## Properties

Stock		Chemical Properties	
Size (mm)	Weight/m (Kg)	Element	Chemical Composition %
25 x 25 x 1.2	0.92	Carbon (C)	0.02 max
30 x 30 x 1.2	1.11	Chromium (Cr)	17.50 - 18.50
30 x 30 x 1.5	1.37	Titanium + Niobium (Ti + Nb)	0.60 max
40 x 40 x 1.5	1.85	Iron (Fe)	Balance

  

Mechanical Properties	
Property	Value
Proof Stress	250 min MPa
Tensile Strength	430 - 630 MPa
Elongation A50 mm	18% min

  

Physical Properties	
Property	Value
Density	7.70 g/cm <sup>3</sup>
Melting Point	1505°C
Thermal Expansion	11.0 x 10 <sup>-6</sup> /K
Modulus of Elasticity	220 GPa
Thermal Conductivity	25.0 W/m.k
Electrical Resistivity	0.060 x 10 <sup>-6</sup> Ω.m

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