



MECHANICAL CHARACTERIZATION OF 316L SPECIMENS

The tensile tests were carried out with an MTS Criterion Model 43 testing machine, using a 5 kN load cell, and a 25 mm resistive contact strain gauge.

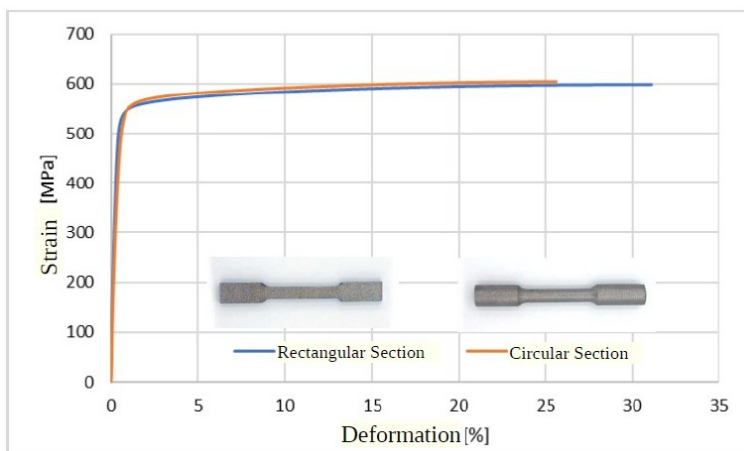


Fig 1. Stress-deformation curves of rectangular and circular section specimens

Table I shows the values of tensile strength, deformation at maximum load and the elastic modulus. It is determined by drawing a straight line passing through the points of the curve in correspondence with a deformation equal to 0.05% and 0.25%.

Specimen	Properties		
	Elastic module [GPa]	Resistance to traction [MPa]	Deformation [%]
Square Section	190,8	598,8	31,4
Circular Section	189,8	604,4	25,6

Table I. Mechanical properties of 316L specimens