

Stainless Steel 316L

Material properties

- High corrosion resistance
- Excellent ductility at low temperatures
- nonmagnetic
- Welding properties

Applications

- Chemical industries : acids, transport of chemicals, heat exchangers
- Marine and Oil industries : pumps, valves, fittings
- Medical : screws and orthopedic implants

Physical properties

Density	8000	kg.m ⁻³
Young modulus	120	GPa

Chemical composition

Elements	Fe	Cr	Ni	Mo	Mn	Si	N	P	C	S	Others
%	Bal.	16,5-18,5	10-13	2-2,5	<2,0	<1,0	0,11	<0,045	<0,03	<0,015	<0,11

Mechanical properties

Proprerties	Notation	Direction	As built	units
Yield strength	Rp _{0,2}	Z	485 ± 10	MPa
Tensile strength	R _m	Z	600 ± 10	MPa
Elongation at break	A%	Z	45 ± 5	%
