



## Stainless Steel

# 316L

316L stainless steel is a good metal material for functional parts and spare parts. The parts printed are easy to maintain as it attracts little dirt and the presence of chrome gives it the added benefit of never rusting.



## Advantage

- > High hardness and toughness
- > High corrosion resistance
- > Good machine-ability
- > Can be highly polished

## Ideal Applications

- > Plastic injection and pressure die-casting moulds
- > Medical implants
- > Surgical tools
- > Cutlery and kitchenware
- > Maritime components
- > Spindles and screws
- > General engineering

## Powder composition / percent by mass

C	Mn	S	Ni	Cu	Si	P	Cr	Mo	Fe
<0.03	<2.00	<0.01	12.5-13.0	<0.50	<0.75	<0.025	17.5-18.0	2.25-2.50	Balance

## Technical Datasheet

<b>General Properties</b>	Density ISO3369	≥7.90 g/cm <sup>3</sup>
<b>Mechanical Properties (As built)</b>	Tensile Strength ISO6892-1	≥650 MPa
	Yield Strength ISO6892-1	≥650 MPa
	Elongation after Fracture ISO6892-1	≥35 %
	Vickers hardness ISO6507-1	≥205 HV5/15
	Hardness (HRC) ISO6507-1	22
	Thermal conductivity at 20 °C	10.4W/mK-19.8 W/mK
	Surface roughness Ra Z	6 μm-8 μm
<b>Mechanical Properties (Heat treated)</b>	Tensile Strength ISO6892-1	≥600 MPa
	Yield Strength ISO6892-1	≥400 MPa
	Elongation after Fracture ISO6892-1	≥40 %
	Vickers hardness ISO6507-1	≥180 HV5/15

Shenzhen KINGS 3D Printing Technology Co., Ltd.

📍 Floor 14, Building 3A, Yunzhi Science Park, Shuangming Road South, Guangming Street, Guangming District, Shenzhen, Guangdong Province, CHINA, 518107



www.kings3dprinter.com



info@kings3dprinter.com