

316L Stainless Steel

1.4404 (AISI 316L)

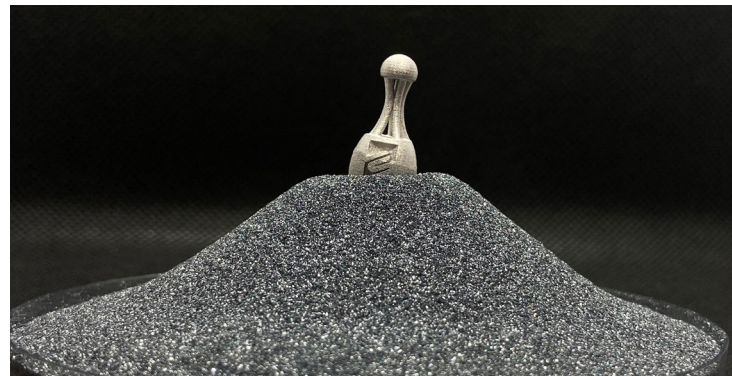
1.4404 is a stainless austenitic chromium-nickel-molybdenum stainless steel with low carbon content. This versatile stainless steel is used in numerous industries. These include:

- medical devices and tools
- food and chemical industry
- jewellery and lifestyle industries
- automotive industry
- aerospace

316L is one of the standard materials in almost all metallic additive manufacturing processes and can be processed and machined particularly well. In contrast to welding AM processes (e.g. LPBF), components produced by LMM have a stress-free, annealed microstructure due to the sintering process.

Properties

- high corrosion resistance
- high strength
- food grade
- weldability



Chemical composition

Abbreviated name	Material no.	C	Cr	Mo	Ni	others
X2CrNiMo17-12-2	1.4404	≤ 0.03	16.5 - 18.5	2.00 - 2.50	10.0 - 13.0	N ≤ 0.10

Technical data

General data

achievable surface quality

- „as sintered“
- after micro-rays

Ra 5 ± 1 µm

Ra 3 ± 2 µm

Physical characteristics

sensity

7.95 g/cm³

achievable relative density with standard parameters

96 - 99.5 %

