3Dprint AM 316L

WAAM solid wire, stainless steel

Material Type		
AISI 316L	1.4404	X2CrNiMo17-12-2

Characteristics

Solid wire designed for 3Dprinting of 316L type austenitic stainless steel structures. Austenitic structure with approx. 10 % ferrite. In comparison to 304L steels improved corrosion resistance due to its Mo addition. Resistant against low chloride or salt bearing media. Resistant against inter crystalline corrosion. Good impact energy down to -196 °C. For service temperatures up to 400 °C

Typical analysis of the solid wire (wt.-%)

	C	Si	Mn	Cr	Ni	Mo	N
wt.-%	0.015	0.45	1.6	18.5	12.0	2.6	0.04

Available products

Diameter: 1,0 mm – 1,2 mm

Package: BS300 15 kg – ECOdrum 100 – ECOdrum 250 – S760 300

Other diameters and packages on request.

Typical mechanical properties acc. to EN ISO 15792-1

Heat treatment	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation (L_0=5d_0)	Impact energy ISO-V KV J
	MPa	MPa	%	–196 °C
u	**430** (≥ 320)	**580** (≥ 510)	**38** (≥ 25)	≥ 32

u untreated, shielding gas Ar + 2,5% CO_2

Classification as welding consumable:

EN ISO 14343-A	AWS A5.9
G 19 12 3 L	ER316L