

WAAM solid wire, high-alloyed, nickel-base

Material Type

Alloy 625

Characteristics

WAAM solid wire of Ni Cr 22 Mo 3 Nb type designed for 3Dprinting of 625 alloy structures. Heat resistant up to 900°C. Good toughness at sub-zero temperatures as low as -196°C. Excellent resistance to general, pitting and inter-crystalline corrosion in chloride containing environments.

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

	C	Si	Mn	Cr	Mo	Ni	Nb	Fe
wt.-%	<0.03	<0.25	<0.25	22.0	9.0	Bal.	3.5	<2.0

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	470	750	30	50

u untreated, shielding gas Ar + 30 % He + 0.5 % CO₂, DC+

Classification as welding consumable:

EN ISO 18274	AWS A5.14
S Ni 6625 (NiCr22Mo9Nb)	ERNiCrMo-3