

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%)								
	С	Si	Mn	Cr	Мо	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 mmPackage:BS300 15 kg - ECOdrum 100 - ECOdrum 250 - S760 300Other 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

Classification as welding consumable:

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