

WAAM solid wire, low-alloyed, structural steel

Material Type	
S500	10NiMnSi5-5

Characteristics
WAAM solid wire designed for 3Dprinting of cryogenic fine grained steel structures.
The printed deposit is characterised by good low temperature properties.

Typical analysis of the solid wire (wt.-%)				
	C	Si	Mn	Ni
wt.-%	0.1	0.65	1.4	1,35

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 of all-weld-metal 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	%	-50 °C
u	480	590	26	50
u untreated, shielding gas Ar + 18 % CO ₂ , DC+				

Classification as welding consumable:

EN ISO 14341-A	AWS A5.28
G 50 5 M21 3Ni1	ER80S-G