3Dprint AM 2209

WAAM solid wire, duplex stainless steel

Material Type		
~1.4462	ER2209	X2CrNiMoN22-9-3

Characteristics

WAAM solid wire of 22 9 3 N L / ER2209 type designed for 3Dprinting of bigger structures enabling three dimensional, faster cooling conditions.

Provides a ferritic-austenitic weld metal. The resulting microstructure is austenite with 45 – 55% ferrite. The printed structures have very good resistance to pitting and stress corrosion cracking in chloride containing environments without post heat treatment.

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

	C	Si	Mn	Cr	Ni	Mo	N
wt.-%	0.025	0.5	1.6	23.0	9.0	3.0	0.14

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.

EN ISO 14343-A	AWS A5.9
G 22 9 3 N L	ER2209

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	%	+20 °C	–40 °C
u	660	830	28	90	≥ 36

u untreated, shielding gas Ar + 20 % He + 2 % CO_2