3Dprint AM P22

WAAM solid wire, low-alloyed, creep resistant steel

Material Type		
P22	10CrMo9-10	1.7339

Characteristics

WAAM solid wire of 2.5 % Cr 1 % Mo type designed for 3Dprinting processes of 10CrMo9-10 (ASTM A335 Gr. P22) structures.

The printed deposit is noted for its good mechanical properties and cracking resistance and for its creep rupture strength after tempering at 700 – 750 °C for at least 1 h.

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

	C	Si	Mn	Cr	Mo
wt.-%	0.08	0.5	1.0	2.5	1.0

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	%	+20 °C
a	450	600	25	150

a annealed, 720 °C/1h / furnace, cooling to 300 °C – shielding gas Ar + 18 % CO_2

Classification as welding consumable:

AWS A5.28	EN ISO 21952-A
ER90S-G [ER90S-B3(mod.)]	G CrMo2Si