

| 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 PWHT.

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 | Tensile strength | Elongation (L ₀ =5d ₀) | Impact energy ISO-V KV J | |
|----------------|---|------------------|---|--------------------------|--------|
| | R _{p0.2} | R _m | | +20 °C | -40 °C |
| u | 660 | 830 | 28 | 90 | ≥ 36 |
| u | untreated, shielding gas Ar + 20 % He + 2 % CO ₂ , DC+ | | | | |