

Classifications

Characteristics and typical fields of application

TIG rod of W Z 22 17 8 4 N L type. The fully austenitic weld metal is paramagnetic, seawater resistant and guarantees high ductility at low temperatures. For joining and cladding of non-magnetic CrNiMo(Mn,N) steel and cast grades like for seawater desalination plants, centrifuges, bleaching plants and in special shipbuilding.

Rel. magnetic permeability $\mu_r = 1,01$ (at 8000 A/m). Service temperature max. 350°C.

Base materials

1.3948 X4CrNiMnMoN19-13-8, 1.3951 X2CrNiMoN22-15, 1.3952 X2CrNiMoN18-14-3, 1.3957 X2CrNiMoNbN21-15, 1.3964 X2CrNiMn-MoNbN21-16-5-3, 1.4569 GX2CrNiMoNbN21-15-4-3, 1.5662 X8X9

UNS S20910

Typical analysis


	C	Si	Mn	Cr	Ni	Mo	N
wt.-%	0.03	0.7	7.5	22	17.5	3.6	0.24

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact energy ISO-V KV J	
	MPa	MPa	%	-196°C	20°C
u	480 (≥ 430)	690 (≥ 640)	35 (≥ 30)	(≥ 32)	130 (≥ 70)

u untreated, as-welded – shielding gas Ar

Operating data

	Polarity	DC-	Dimension mm
	Shielding gas (EN ISO 14175)	I1	2.0 × 1000
	Rod marking	+ WZ 22 17 8 4 NL 1.3954	2.4 × 1000

Suggested heat input is max. 1.5 kJ/mm and interpass temperature max. 100°C. Preheating and post-weld heat treatment generally not needed. Keep the arc short and grind out root pass end craters.

Approvals

DNV, WlWEB, CE