Thermanit 20/16 SM

Solid wire, high-alloyed, stainless, non magnetic

Classifications

EN ISO 14343-A	Mat. No.
G Z 22 17 8 4 N L	1.3954

Characteristics and typical fields of application

Non magnetic; stainless; resistant to intercrystalline corrosion and wet corrosion up to 350 °C (662 °F). Seawater-resistant. Cold toughness at subzero temperatures. Specially for joining and surfacing work on matching / similar non magnetic CrNiMo(Mn,N) steels/cast steel grades.

Base materials

1.3948 – X4CrNiMnMoN19-13-8
1.3951 – X2CrNiMoN22-15
1.3952 – X2CrNiMoN18-14-3
1.3953 – X2CrNiMo18-15
1.3964 – X2CrNiMnMoNNb21-16-5-3
1.4439 – X2CrNiMoN17-13-5

Typical analysis of solid wire (wt.-%)

	C	Si	Mn	Cr	Mo	Ni	N
wt-%	0.03	0.70	7.3	22.2	3.6	18.0	0.24

Structure: Austenite, no ferrite

Mechanical properties of all-weld metal

Heat-treatment	Yield strength $R_{p0.2}$	Yield strength $R_{p1.0}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J
	MPa	MPa	MPa	%	+20 °C
aw	430	460	640	30	70

Operating data

Polarity:	Shielding gas:	ø (mm)	Spool:
DC (+)	(EN ISO 14175) M12, (z.B. ArHeC-15/2)	1.0 1.2	B300 B300

Welding instruction

Materials	Preheating	Postweld heat treatment
Matching / similar non magnetic steels/cast steel grades	None	None

Approvals

GL, WIWEB