

Thermanit 35/45 Nb

TIG rods, high-alloyed

Classifications

EN ISO 18274

S Ni Z (NiCr36Fe15Nb0,8)

Characteristics and typical fields of application

Resistant to scaling up to 1180 $^\circ C$ (2156 $^\circ F). For joining and surfacing work on matching / similar heat resistant cast steel grades$

Base materials

GX45NiCrSiNbTi45-35

Typical analysis of the TIG rods (wt%)							
	С	Si	Mn	Cr	Ni	Nb	
wt-%	0.42	1.5	1.0	35.0	45.5	0.8	
Structure: Austenite							

Mechanical properties of all-weld metal

Heattreatment	Yield strength R _{p0.2}	Tensile strength R _m	
	MPa	MPa	
aw	450	550	

Creep rupture properties: In the range of matching cast steel grades

Operating	data

Polarity:	Shielding gas:		Marks:		ø (mm)	L mm	
DC (–)	(EN ISO 14175) I1	+	+ 35 45 Nb / Ni 6701 mod.		1.6	1000	
					2.0	1000	
					2.4	1000	
					3.2	1000	
Welding instruction							
Materials		Preheating	Postweld heat treatment		ment		
Matching / similar cast steel grades		None	None				