

Thermanit 14 K Si

Solid wire, high-alloyed, stainless

Classifications										
EN ISO 14343-A	A EN ISC		D 14343-B		AWS A5.9		Mat. N		No.	
G Z 13 SSZ41		0		ER410(mod.)		1.	1.4009			
Characteristics and typical fields of application										
Stainless; corrosion-resistant similar to matching 13 % Cr(Ni) steels / cast steel grades. For surfacing applications with matching or similar 13 % Cr steels/cast steel grades. For surfacing sealing faces of water, steam and gas valves and accessories made of unalloyed and low-alloy steels/cast steel grades for service temperatures up to 450 °C (842 °F).										
Base materials										
1.4006 – X10Cr13; 1.4000 – X6Cr13; AISI 410, 420										
Typical analysis of solid wire (wt%)										
	С		Si		Mn		Cr		Ni	
wt-%	0.08		0.9		0.65	14.0			0.4	
Structure: Martensite with part ferrite, suitable for quenching and tempering										
Mechanical properties of all-weld metal										
Heat- treatment		Yield strength R _{p0.2}		Ten R _m	Tensile strength R_m				act work -V KV J	
		MPa		MPa		%	, D	HB3		HRC
680 °C/8 h (1256 °F)		450		650		15 180		180		
aw									35	
Operating data										
Polarity: DC(+) (E			Shielding gas: N ISO 14175) M12, M13			ø (mm) 1.0 1.2			:	Spool: B300 B300
Welding instruc	ction									
Materials			Preheating			Postweld heat treatment				
Surfacing: martensitic Cr steels / cast steel grades			Acc. to wall thickness: 200 – 400 °C (392 – 752°F)			Cooling to around 120 °C (248 °F), then tempering or quenching and tempering				
Surfacing: unalloyed / low-alloy steels / cast steel grades			Larger wall thickness: 100 – 200 °C (212 – 392°F)			None; if necessary tempering to required hardness				
Surfacing: higher-strength steels / cast steel grades			100 – 200 °C (212 – 392 °F)			None; if necessary tempering to required hardness				