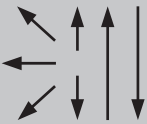


# ROWAC 310

Solid wire, high-alloyed



Classifications					
EN ISO 14343-A		AWS A5.9		Mat. No.	
G 25 20 Mn		ER310(mod.)		1.4842	
Characteristics and typical fields of application					
Resistant to scaling up to 1150 °C (2102 °F). For surfacing and joining on matching / similar heat resistant steels / cast steel grades. For tough fill layers beneath cap passes made with Thermanit L when welding thicker cross-sections of Cr steels / cast steel grades to permit use of such steels in sulphureous atmospheres.					
<b>Atmosphere</b>		<b>max. application temperature in °C (°F)</b>			
		sulphur-free		max. 2 g S/Nm <sup>3</sup>	
Air and oxidizing combustion gases		1150 (2102)		1100 (2012)	
Reducing combustion gases		1080 (1976)		1040 (1904)	
Base materials					
1.4837 –GX40CrNiSi25-12; AISI 305, 310, 314; ASTM A297 HF, A297HJ		1.4840 – GX15CrNi25-20;		1.4841 – X15CrNiSi25-20	
Typical analysis of solid wire (wt.-%)					
C	Mn	Si	Cr	Ni	
0.13	3.2	1.0	25.0	20.5	
Structure: Austenite					
Mechanical properties of all-weld metal					
Heat-treatment	Yield strength R <sub>p0.2</sub>	Yield strength R <sub>p1.0</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J
	MPa	MPa	MPa	%	20°C
aw	350	380	550	25	80
Creep rupture properties: In the range of matching heat resistant parent metals					
Operating data					
	Ø (mm)	Polarity:		Shielding gas:	Spool:
	0.8	DC ( + )		(EN ISO 14175)	BS300
	1.0			M13, M12	B300
	1.2				B300
Welding instruction					
Materials		Preheating		Postweld heat treatment	
Heat resistant Cr steels / cast steel grades		According to parent metal		According to parent metal	
Heat resistant matching/ similar steels / cast steel grades		None		None	
Approvals					
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