

Classifications						
EN ISO 14343-A			Mat. No.			
G Z 21 33 Mn Nb			≈1.4850			
Characteristics and typical fields of application						
Resistant to scaling up to 1050 °C (1922 °F). Good resistance to carburizing atmospheres. For joining and surfacing applications with matching/similar heat resistant steels / cast steel grades.						
Atmosphere		max. application temperature in °C (°F)				
Air and oxidizing combustion gases		sulphur-free		max. 2 g S/Nm ³		
Reducing combustion gases		1050 (1922)		1000 (1832)		
		1000 (1832)		950 (1742)		
Base materials						
1.4876 – Alloy 800 – UNS N08800 – X10NiCrAlTi32-20						
1.4958 – Alloy 800 H – UNS N08810 – X5NiCrAlTi31-20						
1.4859 – UNS N08151 – GX10NiCrSiNb32-20						
Typical analysis of solid wire (wt.-%)						
	C	Si	Mn	Cr	Ni	Nb
wt-%	0.16	0.25	4.70	21.7	32.3	1.2
Structure: Austenite						
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	380	400	600	25	50	
Operating data						
Polarity: DC (+)	Shielding gas: (EN ISO 14175) M12, M13			ø (mm) 0.8 1.0 1.2	Spool: BS300 B300 B300	
Welding instruction						
Materials		Preheating		Postweld heat treatment		
Matching / similar steels / cast steel grades		None		None. If necessary stabilize-heating 875 °C (1607 °F) / 3 h / air		