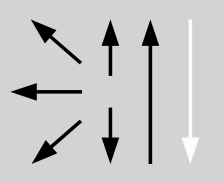


Classifications							
EN ISO 3581-A			Mat. No.				
E Z 21 33 Mn Nb B 2 2			≈1.4850				
Characteristics and typical fields of application							
Heat resistant up to 1050 °C (1922 °F). Good resistance to carburizing atmospheres. For joining and surfacing applications with matching / similar heat resistant steels/cast steel grades.							
<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		1050 (1922)		1000 (1832)			
reducing combustion gases		1000 (1832)		950 (1742)			
Base materials							
1.4859 – GX10NiCrNb32-20; 1.4876 – X10NiCrAlTi32-20; X10NiCrAlTi32-20 – Alloy 800 H							
Typical analysis of all-weld metal (wt.-%)							
	C	Si	Mn	Cr	Ni	Nb	
wt-%	0.12	0.5	4.5	21.0	32.0	1.2	
<b>Structure:</b> 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	400	600	25	45		
<b>Creep rupture properties:</b> According to matching heat resistant parent metals.							
Operating data							
	<b>Polarity:</b> DC ( + )	<b>∅ (mm)</b>	<b>L mm</b>	<b>Amps A</b>			
				2.5	300	55 – 80	
				3.2	350	80 – 105	
Welding instruction							
Materials	Preheating			Postweld heat treatment			
Matching / similar steels / cast steel grades	None; welding with stringer beads or limited weaving motion advisable. Interpass temperature: 150 °C (302 °F) max.			Keine			
Approvals							
TÜV (07255), CE							