

Classifications								
EN ISO 21952-A				AWS A5.28				
WZ CrMoWVNb 9 1 1				ER90S-G [ER90S-B9(mod.)]				
Characteristics and typical fields of application								
High temperature resistant. Suited for joining and surfacing applications with high temperature resistant martensitic steels particularly for matching X11CrMoWVNb9-1-1(E911) parent metal.								
Base materials								
1.4905 – X11CrMoWVNb9-1-1; ASTM A 335 Gr. P911; A 213 Gr. T911								
Typical analysis of the TIG rods (wt.-%)								
	C	Si	Mn	Cr	Mo	Ni	W	V
wt-%	0.1	0.3	0.5	9.0	1.0	0.5	1.0	0.2
Structure: Martensite, suitable for quenching and tempering								
Mechanical properties of all-weld metal								
Heat-treatment	Yield strength R _{p0.2}		Tensile strength R _m		Elongation A (L ₀ =5d ₀)		Impact work ISO-V KV J	
	MPa		MPa		%		+20 °C	
760 °C / ≥ 2 h	560		720		15		41	
Creep rupture properties: According to matching high temperature resistant parent metal								
Operating data								
Polarity: DC (–)		Shielding gas: (EN ISO 14175) I1		Marks: ✦ E911		ø mm 2.0 2.4		L mm 1000 1000
Welding instruction								
Materials		Preheating / Interpass temperature			Cool down before PWHT		PWHT	
Matching steels/ cast steel grades		200 – 250 °C (392 - 482 °F) / 200 – 300 °C (392 - 572 °F)			≤ 100 °C (≤ 212 °F)		760 °C (1400 °F) – at least 2 h / air	
Approvals								
TÜV (07992), CE								