

T-2594

For super duplex stainless steel (25%Cr-9%Ni-4%Mo STS)

Classifications

EN ISO 14343-A:2009	: W 25 9 4 N L
EN ISO 14343-B:2009	: SS 2594
AWS A5.9-2012	: ER2594

Approvals – I1 (100% Ar)

ABS	: ER2594
BV	: T-2594
DNV	: ER2594
LR	: S32750 m

Description

- TIG welding of 25%Cr-9%Ni-4%Mo duplex stainless steels (UNS S32750, STS 32760, S31260)
- Various applications of petrochemical offshore structure and distilling apparatuses

Polarity & shielding gas

- DCEN (DC-)
- Ar: 100% Ar (15 – 25 l/min)

Typical chemical composition of all-weld metal (%)

C	Si	Mn	Ni	Cr	Mo	PREN
0.02	0.42	0.66	9.18	25.06	3.88	41

Typical mechanical properties of all-weld metal

	Yield Strength	Tensile Strength	Elongation	Impact Value (J)	
	(MPa)	(MPa)	(%)	-20 °C	-50 °C
AWS A5.9		Min. 760	Min. 15		
EN ISO 14343	Min. 550	Min. 620	Min. 30		
Example	640	800	32	220	200