

KST-2594

Super duplex stainless steel (25%Cr-9% Ni-Mo)

Classifications

EN ISO 3581-A:2012	: E 25 9 4 N L R 12
EN ISO 3581-B:2012	: ES2594-16
AWS A5.4-06	: E2594-16

Description

- Covering is lime titania type for welding of 25%Cr-9%Ni-4%Mo-02%N super duplex stainless steel
- The principal applications are chemical plant and shipbuilding as well as nuclear plant industries (UNS S32750)
- Excellent pitting corrosion resistance and stress corrosion cracking resistance
- Please perform welding with selecting proper heat input according to the required mechanical properties
- Redry the electrode at 250 - 350 °C for 30 – 60 minutes prior to use

Welding positions



Typical chemical composition of all-weld metal (%)

C	Si	Mn	P	S	Ni	Cr	Mo	N	PREN
0.03	0.54	0.75	0.025	0.011	9.59	25.11	3.90	0.25	42.0

Typical mechanical properties of all-weld metal

	Yield Strength (0.2%OS)	Tensile Strength	Elongation	Remarks
	(MPa)	(MPa)	(%)	
AWS A5.4		Min. 760	Min. 15	
EN ISO 3581-A	Min. 550	Min. 620	Min. 18	
Example	810	930	28	AW

*AW: As-welded

Sizes available and recommended currents (AC or DC +)

Diameter	(mm)	2.6	3.2	4.0	5.0
Length	(mm)	300	350	350	350
Amperage	F	50-80	80-110	110-150	140-180
	V . OH	40-60	70-100	90-130	-