

AA 2594

CATEGORY FCAW Flux-Cored

TYPE Rutile fluxcored wire for Super Duplex (Zeron 100)

PROPERTIES AA-2594 is a flux cored wire designed for welding 25Cr type duplex stainless steels especially for Super Duplex grade, PRE (Pitting Resistance Equivalent) is over 40. Ar-CO₂ mixed gas or 100%CO₂ is recommended as shielding gas for excellent weldability.

CLASSIFICATION

AWS	A5.22:E 2594T1-4, E2594T1-1 A5.22M:E 2594T1-4, E2594T1-1
EN ISO	17633-A: T 25 9 4 N L P C/M 1
DIN: W.Nr.	1.4501
DIN	8556:~25 9 4

SUITABLE FOR Welding wrought, forged or cast super duplex stainless steels for service in the as-welded Condition. Heterogeneous welding between super duplex stainless steels and dissimilar welds between other stainless and mild or low alloyed steels. UNS S32550 :UR 52 N, Ferralium 255, UNS S32520 :UR 52 N+, UNS S32750 :SAF 2507, UR 47 N+, UNS S32760 :ZERON 100, UNS 32760, UR 76 N, SM22Cr, SAF 2507, ASTM S32760 (ZERON 100), S32550 and S31260., It can also be used for welding duplex type 2205, 1.4460, 1.4462,1.4463,1.4515, 1.4517, 1.4507 URANUS 52N, SAF 25.07, GX 3 CrNiMoCuN 26-6-3, (1.4515), GX 3 CrNiMoCuN 26-6-3-3, (1.4517), 25% Cr Super Duplex steels SAF 25/07, S32750 1.4410 - 25Cr-7Ni-4Mo-0.28N SAF2507, NAS74N, S32760 1.4501 - 25Cr-7Ni-3.8Mo-0.7Cu-0.7W-0.25N, S32506 - SUS329J4L 25Cr-7Ni-3Mo-0.15N-0.2W NAS64 1.4507, S31803, S32205,

APPROVALS CE approved

WELDING POSITIONS:



TYPICAL ALL WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	Nb	W	N	Cu	PRE
0.026	1.18	0,5	25.7	9.6	3.79	0.016	<0.1	0.24	0.031	42.0

FNW: Ferrite Number (FN) by WRC1992 Diagram, >40

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				-20°C	-40°C	-85°C	
AW	700	900	27	48	39	23	

AW; as welded

WELDING PARAMETERS PACKING

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A)	spool type	kg / spool	kg / pallet
1.2	23-30	120-200	K-300	15 kg	1080