

4501 Kb

CATEGORY SMAW Stick Electrodes

TYPE Basic core wire alloyed electrode for welding Super Duplex

APPLICATIONS 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.

PROPERTIES Ceweld 4501 Kb is a basic coated electrode with a fully alloyed core, the duplex weld deposit provides excellent resistance to pitting, chloride stress corrosion cracking and intercrystalline corrosion due to the high CrMo(N) content (Pitting index >40). Furthermore, the weld metal alloy is saltwater-proof and offers high tensile strength, as a result of nitrogen being added to the alloy.

CLASSIFICATION

AWS	A 5.4: E 2595-15
EN ISO	3581-A: E 25 9 4 N L N 2 2
DIN: W.Nr.	1.4501

SUITABLE FOR 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:



WELD DEPOSIT WEIGHT % (TYPICAL)

C	Mn	Si	Cr	Ni	Mo	Cu	N	Fe	W
<0.04	1.20	0.50	25.0	9.0	3.8	0.7	0.2	Rem	0.8

MECHANICAL PROPERTIES (TYPICAL)

Heat Treatment	R _{p0.2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HB
				-20°C	-40°C	-50°C	
AW	600	750	25			50	

AW: as welded

WELDING PARAMETERS PACKING

Welding Parameters			Packing		
D (mm)	Length (mm)	Current (A) DC+/AC	kg / can	kg / 6pack	kg / 1000 pcs
2.5	300	50-80	2.5	15	18.4
3.2	350	70-110	2.6	15.6	36.3
4.0	350	90-140	2.8	16.8	55.0

REDRYING TEMPERATURE 250°C/2hr