CARBO WELD®
SCHWEISSMATERIALIEN GMBH

CARBO 4501 B

International Standards

Material No.	~1.4501
EN ISO 3581-A	E 25 9 4 N L B 2 2
AWS A 5.4	E2595-15

Approvals ---

Typical applications and characteristics

CARBO 4501 B is an basic coated electrode with an alloyed core, suitable for welding on Duplex- and Super-Duplex-steels of same or similar steels. The duplex weld deposit provides exellent resistant 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 performs high tensile strength, as a result of nitrogen being added to the alloy.

Operating temperature -50°C up to 250°C

Base materials

1.4410 X2 CrNiMoN25-7-4
1.4462 X2 CrNiMoN22-5-3
1.4468 GX2 CrNiMoN25-6-3
1.4469 GX2 CrNiMoN26-7-4
Zeron 100
FALC 100
1.4501 X2 CrNiMoCuWN25-7-4
1.4508 GX2 CrNiMoCuWN25-8-4
1.4515 GX2 CrNiMoCuN26-6-3
1.4517 GX2 CrNiMoCuN25-6-3-3
SAF 25/07

Mechanical properties of all-weld metal (typical values

Tensile strength Rm N/mm²	Yield strenght $R_{p0,2}$ N/mm²	Elongation A5 %	Impact strenght ISO-V at - 50°C
750	600	25	50

Weld metal analysis % (typical values)

C	Si	Mn	Cr	Ni	Mo	N	Cu	W
≤0,04	0,5	1,2	25,0	9,0	3,8	0,2	0,7	0,8

Current = +

Welding positions PA, PB, PC, PD, PE, PF

Rebaking 2 h, 250° C + / - 10° C (if nacessary)

Dia./Length	Amperage (A)	Pcs./packet	Pcs./carton	kg /1000 pcs.	kg / packet	kg / carton
2,5 x 300	50 - 80	217	870	18,4	4,0	16,0
3,2 x 350	70 - 110	138	551	36,3	5,0	20,0
4,0 x 350	90 - 140	91	364	55,0	5,0	20,0

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