

CARBO 4410 AC

International Standards

| | |
|---------------|-------------------|
| Material No. | ~1.4410 |
| EN ISO 3581-A | E 25 9 4 N L R 32 |
| AWS A 5.4 | E2594-16 |

Approvals

Typical applications and characteristics

CARBO 4410 AC is an AC-weldable electrode with an alloyed core, suitable for welding on Duplex- and Super-Duplex-steels of same or similar steels. The duplex weld deposit provides excellent resistance to pitting, chloride stress corrosion cracking and intercrystalline corrosion due to the high CrMo(N) content (PREN - 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

-40°C up to 250°C

Base materials

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

Mechanical properties of all-weld metal (typical values)

| Tensile strength R _m N/mm ² | Yield strength R _{p0,2} N/mm ² | Elongation A5 % | Impact strength DVM J at - 40°C | Impact strength DVM J at - 46°C |
|--|---|--------------------|------------------------------------|------------------------------------|
| 850 | 700 | 30 | >40J | >27J |

Weld metal analysis (typical, wt %)

| C | Si | Mn | Cr | Ni | Mo | N |
|--------|-----|-----|------|-----|-----|------|
| ≤ 0,03 | 0,6 | 0,8 | 25,5 | 9,5 | 4,0 | 0,25 |

Current

= + / ~ , 42 V

Welding positions

PA, PB, PC, PD, PE, PF

Rebaking

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

| Dia./Length | Amperage (A) | Pcs./packet | Pcs./carton | kg /1000 pcs. | kg / packet | kg / carton |
|-------------|--------------|-------------|-------------|---------------|-------------|-------------|
| 2,5 x 300 | 50 - 80 | 221 | 884 | 18,1 | 4,0 | 16,0 |
| 3,2 x 350 | 70 - 110 | 140 | 559 | 35,8 | 5,0 | 20,0 |
| 4,0 x 350 | 90 - 140 | 92 | 369 | 54,2 | 5,0 | 20,0 |