

# CARBOWELD 625

Material No.: 2.4621  
EN ISO 14172: E Ni 6625 (NiCr22Mo9Nb)  
AWS A 5.11: ~E NiCrMo-3



## Approvals

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## Typical application and characteristics

CARBOWELD 625 is nickel base electrode with a recovery of 140% and excellent weldability on AC even at low voltages. Previously suitable for claddings, where the characteristics of the deposits alloy are required. The austenitic deposit is insensitive to hot-cracking and free of embrittlement at high as well as at low temperatures, non-scaling up to 1100° C, and cold tough down to -196°C. No diffusion of carbon into the weld metal at high temperatures. Used for service-temperatures of more than 300°C in Chemical Industry, Petrochemical Industry, glassworks, civil engineering, repairing and maintenance workshops.

## Weld metal analysis (typical)

|       |      |     |     |     |      |       |     |      |  |  |
|-------|------|-----|-----|-----|------|-------|-----|------|--|--|
| wt.-% | C    | Si  | Mn  | Mo  | Cr   | Ni    | Nb  | Fe   |  |  |
|       | 0,04 | 1,0 | 0,6 | 9,0 | 22,0 | Basis | 3,5 | <6,0 |  |  |

## Base materials

|        |                 |        |             |        |              |        |                  |
|--------|-----------------|--------|-------------|--------|--------------|--------|------------------|
| 1.4558 | X2NiCrAlTi32-20 | 2.4641 | NiCr21Mo6Cu | 2.4856 | NiCr22Mo9Nb  | 1.6967 | X3CrNiMoN18-4    |
| 2.4631 | NiCr 20 TiAl    | 2.4660 | NiCr20CuMo  | 2.4858 | NiCr21Mo     | 1.4876 | X10NiCrAlTi32-20 |
| 2.4605 | NiCr23Mo16Al    | 2.4951 | NiCr20Ti    | 1.5662 | X8Ni9        |        | Alloy 800        |
| 2.4618 | NiCr22Mo6Cu     | 2.4816 | NiCr15Fe    | 1.5680 | X12Ni5       | 1.4958 | X5NiCrAlTi31 20  |
| 2.4619 | NiCr22Mo7Cu     | 2.4817 | LC-NiCu15Fe | 1.5681 | GX10Ni5      |        | Alloy 800H       |
| 2.4630 | NiCr20Ti        | 2.4851 | NiCr23Fe    | 1.6907 | X3CrNiN18-10 |        |                  |

## Operating data

Current: =+

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

Rebaking: 2 h, 300°C +/- 10°C (if necessary)

| Dia./Length | Amperage (A) | Pcs. / packet | Pcs./ carton | kg / 1000 | kg / packet | kg / carton |
|-------------|--------------|---------------|--------------|-----------|-------------|-------------|
| 2,5 x 350   | 65 - 100     | 143           | 874          | 18,3      | 4,0         | 16,0        |
| 3,2 x 350   | 95 - 130     | 85            | 559          | 35,8      | 5,0         | 20,0        |
| 4,0 x 450   | 120 - 170    | 56            | 380          | 52,5      | 5,0         | 20,0        |
| 5,0 x 450   | 170 - 240    | 33            | 133          | 179,8     | 6,0         | 24,0        |