CARBOWELD 625 B

International standards

Material No.	2.4621
DIN 1736	EL-NiCr 20 Mo 9 Nb
AWS A5.11	E NiCrMo-3

Typical applications and characteristics

CARBOWELD 625 B is lime coated nickel base electrode.
Suitable for joining and cladding stainless, heat resistant and cold tenacious steels as well as welding dissimilar materials for example low alloyed steels with Ni-base ore Cu-base alloys
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.

Operating temperature - 196° C up to 550° C

Base materials

1.4558	X2NiCrAlTi32-20	2.4856	NiCr22Mo9Nb
2.4631	NiCr 20 TiAl	2.4858	NiCr21Mo
2.4605	NiCr23Mo16Al	1.5662	X8Ni9
2.4618	NiCr22Mo6Cu	1.5680	X12Ni5
2.4619	NiCr22Mo7Cu	1.5681	GX10Ni5
2.4630	NiCr20Ti	1.6907	X3CrNiN18-10
2.4641	NiCr21Mo6Cu	1.6967	X3CrNiMoN18-4
2.4660	NiCr20CuMo	1.4876	X10NiCrAlTi32-20
2.4951	NiCr20Ti		Alloy 800
2.4816	NiCr15Fe	1.4959	X8NiCrAlTi32-21
2.4817	LC-NiCu15Fe		Alloy 800HT
2.4851	NiCr23Fe		

Mechanical properties of all-weld metal

(typical values**)**

Tensile strength R_m N/mm²	Yield strength $R_{p0,2}$ N/mm²	Elongation A_5 %	Impact strength ISO – V J at -196 ° C
750	500	30	40

Weld metal analysis (typical, wt. %)

C	Si	Mn	Cr	Ni	Mo	Nb	Fe
<0,03	0,6	1,2	22	Basis	9	2,7	< 5

Current = +

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

Rebaking 1 h, 300 °C + / - 10 °C (if required)

Dia./Length	Amperage (A)	Pcs./ packet	Pcs./ carton	kg / 1000	kg / packet	kg / carton
2,5 x 350	50 - 90	244	976	16,5	4,0	16,0
3,2 x 350	70 - 120	153	612	32,5	5,0	20,0
4,0 x 350	100 - 160	102	408	49,5	5,0	20,0
5,0 x 450	140 - 200	60	240	100,0	6,0	24,0