

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 is nickel base electrode with a recovery of 140% and excellent weldability on AC even at low voltages.

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/mm ²	Yield strength $R_{p0,2}$ N/mm ²	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
0,04	0,8	0,6	22	Basis	9	3,5	< 6

Current = + / ~ 50 V

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

Rebaking 1 h, 330 °C + / - 10 °C (if required)

Dia./Length	Amperage (A)	Pcs./ packet	Pcs./ carton	kg / 1000	kg / packet	kg / carton
2,5 x 350	65 - 100	143	571	35,0	5,0	20,0
3,2 x 350	95 - 130	85	338	59,1	5,0	20,0
4,0 x 350	120 - 170	56	223	89,5	5,0	20,0
5,0 x 450	170 - 240	33	133	179,8	6,0	24,0

Rev. 000

Statements on composition and application are just for the applier's information. Statements on mechanical properties always refer to the all-weld-metal according to valid standards. Carbo-Weld may change the characteristics of its products without notice. We recommend the applier to check our products for their special application autonomously.