

<b>International standards</b>	Material No.	2.4620
	DIN 1736	EL-NiCr 16 FeMn
	AWS A5.11	E NiCrFe-2 / modifiziert

**Approvals** -----

**Typical applications and characteristics**

CARBOWELD 182 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 or 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 1000° C, and cold tough down to -269° 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** - 269° C up to 550° C

<b>Base materials</b>	2.4630 NiCr20Ti	2.4867 NiCr60-15	1.5680 X12Ni5
	2.4631 NiCr20TiAl	2.4869 NiCr80-20	1.6900 X 12 CrNi 18 9
	2.4669 NiCr15Fe7Ti2Al	2.4870 NiCr 10	1.6901 G-X 8 CrNi 18 10
	2.4816 NiCr15Fe	2.4951 NiCr20Ti	10
	2.4817 LC-NiCr15Fe	1.5637 12Ni14	1.6903 X 10 CrNiTi 18 10
	2.4851 NiCr23Fe	1.5662 X8Ni9	10
			1.6906 X 5 CrNi 18 10

<b>Mechanical properties of all-weld metal</b> ( typical values)	<b>Tensile strength</b> R <sub>m</sub> N/mm <sup>2</sup>	<b>Yield strength</b> R <sub>p0,2</sub> N/mm <sup>2</sup>	<b>Elongation</b> A <sub>5</sub> %	<b>Impact strength</b> ISO – V J at -120 ° C
	650	380	35	80

**Weld metal analysis**  
(typical, wt. %)

C	Mn	Mo	Cr	Ni	Fe	Nb
0,04	3,5	1	16	Bal.	< 6	2

**Current** = + / ~ 50 V

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

**Rebaking** 1 h, 350 °C +/- 10 °C ( if required )

Dia./Length	Amperage (A)	Pcs./ packet	Pcs./ carton	kg / 1000	kg / packet	kg / carton
2,5 x 300	60 - 100	130	519	30,8	4,0	16,0
3,2 x 350	80 - 140	96	384	52,1	5,0	20,0
4,0 x 350	120 - 180	63	253	78,9	5,0	20,0
5,0 x 450	150 - 240	38	152	158,4	6,0	24,0