

CARBOWELD A

International standards	Material No.	2.4807
	DIN 1736	EL-Ni Cr 15 Fe Mn
	AWS A5.11	ENiCrFe-3

Approvals ---

Typical applications and characteristics

CARBOWELD A is a basic-coated electrode with a recovery of 140% and excellent weldability. Applications are joining and cladding stainless-, heat resistant- and cold tenacious steels, as well as welding of dissimilar materials for example low alloyed steels with Ni-base or with copper alloys.

The austenitic deposits are free of embrittlement at high as well as at low temperatures. The alloy is resistant to corrosion and thermal shocks and cold ductile down to -196°C and prevents carbon diffusion from ferritic to austenitic material.

Operating temperature - 196° C up to 550° C

Base materials

2.4630 NiCr20Ti	2.4867 NiCr60-15	1.5680 X12Ni5
2.4631 NiCr 20TiAl	2.4869 NiCr80-20	1.6900 X 12 CrNi 18 9
2.4669 NiCr15Fe7TiAl	2.4870 NiCr 10	1.6901 G-X 8 CrNi 18 10
2.4816 NiCr15Fe	2.4951 NiCr20Ti	1.6903 X 10 CrNiTi 18 10
2.4817 LC-NiCr15Fe	1.5637 12Ni14	1.6906 X 5 CrNi 18 10
2.4851 NiCr23Fe	1.5662 X8Ni9	

Dissimilar joints:

Ni-base alloys to austenitic steels/ Ni-base alloys to ferritic steels/
austenitic to ferritic steels up to 550° C

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
650	370	35	82

Weld metal analysis
(typical, wt. %)

C	Mn	Mo	Cr	Ni	Fe	Nb
0,04	0,4	7,0	16	Bal.	8	1,8

Current = + / ~ , 65 V

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

Rebaking 1 h, 200 °C + / - 10 °C (if required)

Dia./Length	Amperage (A)	Pcs./ packet	Pcs./ carton	kg / 1000	kg / packet	kg / carton
2,5 x 350	60 - 90	178	712	28,1	5,0	20,0
3,2 x 350	90 - 120	105	421	47,5	5,0	20,0
4,0 x 350	110 - 150	70	278	71,9	5,0	20,0
5,0 x 450	130 - 180	42	166	144,5	6,0	24,0