

<b>International standards</b>	Material No.	2.4653
	DIN 1736	EL-Ni Cr 28 Mo

**Approvals** --

**Typical applications and characteristics** CARBOWELD 135 is a nickel based cored wire electrode with an AC welding coating. It is well suited for joint welding and hardfacing on the same or similar stabilized or non-stabilized, fully austenitic steels and molybdenum and copper based cast steels. CARBOWELD 135 was developed to weld these materials in conjunction with low alloyed type steels as well as intermediate and top plating layers. The deposited overlay leaves a pierce and tension resistant deposit that is also resistant to intergranular corrosion, specifically from acids and non oxidizing materials, i.e. sulphurous-, phosphorous acids or ammonium-acetate.

**Operating temperature** -60° C up to +350 °C

<b>Base materials</b>	1.4465	X1CrNiMoN 25-25-2	1.4539	X1NiCrMoCu(N) 25-20-5
	1.4500	GX7NiCrMoCuNb 25-20	1.4563	X1NiCrMoCuN 31-27-4
	1.4505	X4NiCrMoCuNb 20-18-2	1.4577	X3CrNiMoTi 25-25
	1.4506	X5NiCrMoCuTi 20-18	1.4578	X3CrNiCuMo 17-11-3-2
	1.4536	GX2NiCrMoCuN 25-20	1.4583	(G)X10CrNiMoNb 18-12
	1.4538	X2NiCrMoCuN 22 18	2.4858	NiCr 21 Mo

<b>Mechanical properties of all-weld metal ( typical values )</b>	<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 –196° C
	550	350	30	50

<b>Weld metal analysis (typical, wt. %)</b>	<b>C</b>	<b>Si</b>	<b>Mn</b>	<b>Cr</b>	<b>Ni</b>	<b>Mo</b>	<b>Cu</b>
	0,02	0,7	1,4	28	36	3,8	1,8

**Current** = +/- ~ 50 V

**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 300	40 - 65	195	780	20,5	4,0	16,0
3,2 x 350	70 - 100	123	494	40,5	5,0	20,0
4,0 x 350	90 - 130	82	326	61,3	5,0	20,0
5,0 x 450	120 - 160	41	162	123,2	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.