CARBO ALBRO B

International standards

Material No.	2.0926
DIN 1733	EL-CuAl9
AWS A 5.6	E CuAl-A2
AWS A 5.13	E CuAl-A2
DIN 8555	E 31-UM-150-CN

Typical applications and characteristics

Carbo Albro B is a basic coated electrode for joining aluminium bronzes (up to 10 % Al) as well as wear-resisting and corrosion-proof surfacing on steel, cast steel, and cast iron, especially on work-pieces which are subject to erosive wear.
The electrode is also suitable for filling up casting defects on aluminium bronze castings, for buffer layers between copper and nickel alloys and can also be used as bearing material for high-pressure load. The mechanical properties of the weld deposit are very good; it is acid-, seawater- and erosion resistant.
This electrode can be used on shaped components and wearing parts as well as slide bearings and slide tracks.

Welding instructions

Exempt weld zones from impurities like grease, oil or oxides. The seam flanks should shine metallic bright. An included angle of 90° should be welded on thick sheets. Weld preferably in horizontal position (PA) driving the electrode in vertical direction. Weld with a short arc, low heat input and at high speed.
Heavy work-pieces require preheating to ca. 200° C.

Operating temperature

Base materials

2.0916 CuAl 5
2.0920 CuAl 8
2.0928 G- CuAl 9
3.0460 CuZn 20 A2

Mechanical properties of all-weld metal

(typical values **)**

Tensile strength R_m N/mm²	**Yield strength $R_{p0,2}$ N/mm²**	**Elongation A_5 %**	**Hardness HB**
660	400	15	ca.150
Electrical conductivity	**Thermal conductivity**	**Melting temperature**	**Density**
8 m / Ω* mm²	0.16 cal /cm* sec* °C	1030° C	7.7 g /mm²

Weld metal analysis (typical, wt. %)

Al	Mn	Fe	Cu
8	0,5	< 0,5	Bal.

Current = +

Welding positions PA, PB, PF

Rebaking 1 h, 130 °C + / - 10 °C (if required)

Dia./Length	Amperage (A)	Pcs./packet	Pcs./carton	kg/1000	kg/packet	kg/carton
2,5 x 350	50 - 70	305	1220	16,4	5,0	20,0
3,2 x 350	90 - 110	181	722	27,7	5,0	20,0
4,0 x 350	130 - 150	119	476	42,0	5,0	20,0
5,0 x 450	150 – 200	70	280	85,6	6,0	24,0