

## CARBO ALBRO 200

International standards

AWS A 5.6 / 13	ECuAl-B
DIN 1733	E31-UM-200-CN

## Typical applications and characteristics

CARBO ALBRO 200 is a basic coated electrode for cladding and hardfacings on machine-parts subject to high compression load and against wear due to its high hardness of 300 HB 10.

The deposit has excellent mechanical properties, is erosion-resistant and is withstanding corrosion from acid and seawater.

CARBO ALBRO 200 is applied on pressing dies and wear-parts, bearings, quide-rails for precision-machinery, plungers, valves and gears.

## **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

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 2.0928 G- CuAl 9

 2.0920 CuAl 8
 3.0460 CuZn 20 A2

## Mechanical properties of all-weld metal

(typical values)

Tensile strength R <sub>m</sub> N/mm²	Yield strength R <sub>p0,2</sub> N/mm²	Elongation A <sub>5</sub> %	Hardness HB	
660	1010	10	ca.200	
Electrical conductivity	Thermal conductivity	Melting temperature	Density	
8 m / Ω* mm <sup>2</sup>	0.16 cal /cm* sec* °C	1030° C	7.7 g /mm <sup>2</sup>	

Weld metal analysis (typical, wt. %)

Al	Mn	Fe	Cu
12	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

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