

# CARBO ALBRO 300

<b>International standards</b>	AWS A 5.6 / 13	ECuAl-B
	DIN 1733	E31-UM-300-CN

**Typical applications and characteristics** CARBO ALBRO 300 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 300 is applied on pressing dies and wear-parts, bearings, guide-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 2.0928 G- CuAl 9  
2.0920 CuAl 8 3.0460 CuZn 20 A2

<b>Mechanical properties of all-weld metal</b> ( typical values )	<b>Tensile strength</b> $R_m$ N/mm <sup>2</sup>	<b>Yield strength</b> $R_{p0,2}$ N/mm <sup>2</sup>	<b>Elongation</b> $A_5$ %	<b>Hardness</b> HB
	660	1180	5-10	ca.300
	<b>Electrical conductivity</b>	<b>Thermal conductivity</b>	<b>Melting temperature</b>	<b>Density</b>
	8 m / Ω* mm <sup>2</sup>	0.16 cal /cm* sec* °C	1030° C	7.7 g /mm <sup>2</sup>

<b>Weld metal analysis</b> (typical, wt. %)	<b>Al</b>	<b>Mn</b>	<b>Fe</b>	<b>Cu</b>
	14	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	71	284	84,5	6,0	24,0

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