

CARBO Cu B

Mechanical properties of all-weld metal	Tensile strength	Elongation A ₅ %	Hardness HB	Electrical Conductivity	1/1/7 (m · K)				
Recommendations for welding and heat treatment	Preheat and weld smoothly. Because of high thermal conductivity pre- heat copper at 300°C-600°C, copper alloys a little lower. Cooling rate should be controlled by insulating or lagging. Deformation by expansation and contraction is large and distortion cracks by ditortion may occur. In case of joining dissimilar materials such as copper alloys to mild steel, try to prevent penetration of iron as little as possible. Oxidation is remarkable so that prosity occurs easily.								
Base materials	2.0040 2.0	0070 2.0076	2.0090						
Characteristics and typical applications	joining and s The deposit and an exce Copper vess	CARBO Cu B is high purity copper electrode with a basic coating for joining and surfacing copper and copper alloys The deposit free of porosity and cracks. The alloy has a high strength and an excellent electrical conductivity. Copper vessels and tanks, commutator rigs, electrical connector and contactor parts							
Approvals									
	AWS A 5.6	E	Cu						
	DIN 1733		CuMn2						
International standards	Material No.	2.	1363						

of all-weld metal (typical values)	strength R _m N/mm ²		A ₅ %	HB	Conductivity [S · m / mm2]	[W / (m ·K)]	
	200		25	ca40	15-20	120-145	
Weld metal analysis	Cu	Mr	n Sn				
(typical, wt %)	Base	2,5	5 0,8				

Current

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

= +

Rebaking

1 h, 90° C + / - 10° C (if necessary)

Dia./Length	Amperage (A)	Pcs./ packet	Pcs./ carton	kg / 1000	kg / packet	kg / carton
2,5 x 300	80 - 110	287	1148	17,4	5,0	20,0
3,2 x 350	100 - 130	169	676	29,6	5,0	20,0
4,0 x 450	130 - 170	136	544	44,2	6,0	24,0
5,0 x 450	170 - 200	67	268	90,1	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.