TIG CUA9

Old reference: TIG CuAl9

Classification

AWS A5.7 : ERCuAl-A2 ISO 24373 : S Cu 6180 (CuAl10Fe)

Description & Applications

Solid rod for GTAW of cupro-aluminium alloys with similar chemical composition. Deposits are harder than those of TIG CUA8, and are often used for hardfacing of ferritic/perlitic steels. High resistance against wear and abrasion.

Main applications: Assemblies for welding and hardfacing of aluminium-bronze, of aluminium covered steels, of cast iron in machining tools industry and in naval construction.

Typical Chemical Composition (%)

	Al	Fe	Pb	Si	Zn	O/T	Cu
Min	8.5						
Max	11.0	1.5	0.02	0.10	0.02	0.50	Rem.
Type	9.5	1.2	0.005	0.03	0.005	<0.50	Rem.

All Weld Metal Mechanical Properties

	$R_{p0.2}$ (MPa)	R_m (MPa)	A_5 (%)
Min	-	-	-
Max			
Type	300	550	20

Welding Current & Instructions

Welding mode	Shielding Gas
GTAW = -	ISO 14175: I1 (100% Ar) / I2 (100% He) / I3 (Ar+ 5-30%He) 5-10 L/min

Preheating of massive parts between 200°C (>6mm) up to 500°C (>15mm).