

Cu48ZnNi10

Copper-zinc brazing alloy

Product name	IABCO Cu48ZnNi10
Classification EN	1044: CU 305 (obsolete specification)
Classification EN ISO	17672: Cu 773
Material No.	2.0711
Classification AWS	A5.8: RBCuZn-D
Approvals	-
Applications	IABCO Cu48ZnNi10, sometimes called nickel silver because of its colour, is a high strength, corrosion resistant, brass brazing alloy. The addition of nickel helps increase the tensile strength of the joint. IABCO Cu48ZnNi10 finds applications joining a range of materials particularly steel, and is also used for attaching carbides eg. in the repair of drill bits and mill cutters.
Base materials	Carbon steel and stainless steel. Carbides to steel. Nickel and nickel alloys. Some copper alloys eg. brasses.
Typical analysis of wire, weight %	Cu: 48 Zn: Bal Ni: 10 Si: <0.3
Typical procedure ⁽¹⁾	A slightly oxidising (neutral) flame is recommended. For bare rods a suitable flux should be selected. Owing to the high Zn content it is recommended to keep the heating cycle to a minimum to prevent Zn vaporisation.
Properties ⁽²⁾	Tensile strength, Rm: 530MPa. Melting range: 890-920°C
Other products	Brazing: Cu59ZnSn Cu59ZnSnMn

Notes (1) Application codes and project specifications should always be referred to for specific requirements.

(2) Actual mechanical properties will be dependent on specific welding procedure (including shielding gas, flux, PWHT etc) and should always be confirmed by approval of an appropriate welding procedure.