

SILVER 5

PHOSPHOR COPPER ALLOY WITH 5% SILVER. FOR CAPILLARY JOINTS IN COPPER, BRASS AND BRONZE.

CLASSIFICATION A.W.S: RBCuP-3

IDENTIFICATION: RED TIP

APPLICATIONS: It is a high quality phosphor copper alloy because of its 5% silver content which lowers its fusion temperature and increases its ductility. Its main characteristics are: high mechanical resistance, capillary flow, good electric and heat conductivity as well as a satisfactory degree of corrosion resistance, except when the joint is exposed to high temperature sulphur fumes. It is mainly used in joints where great capillarity and very little heat are required. It is also used to weld copper nickel alloys as long as the nickel content is under 30%. Silver 5 is used in oxyfuel, CO₂ and inert gas shield and TIG welding processes. It is used to weld copper, copper and brass, worn electric contacts, thin-wall pipes, refrigeration equipment, air conditioning equipment, sanitary facilities, gas pipelines, copper radiators, in the manufacture of cooking stoves, etc.

CHARACTERISTICS: SILVER-5 is a phosphor copper alloy with a medium silver content. Filler metal is quite fluid and it is possible to lay a weld seam at a lower temperature. Joints have a good mechanical resistance, good elasticity and a very good electric conductivity.

PROCEDURE: Clean the surfaces to be welded. If thin brass or bronze sections are to be welded, you should use S-200 flux. There is no need to use flux when welding copper to copper. All the joints should be fitted tight. Gaps should not exceed 0.0762 mm (0.003"). By using a large nozzle, greater heat will be applied and it will take less time for application. Once the flux turns a lighter colour, a small amount of SILVER-5 should be melted into the joint. Keep on heating until the joint is finished. This operation should be done fast so as to avert overheating or melting down the filler metal anew. To remove the flux, dip the part in hot water and brush it away. To restore the copper colour in the welded areas, dip the part in a solution of 10% sulphuric acid and rinse with hot water.

TENSILE RESISTANCE:	2,800 KG./CM ² (40,000 PSI)
WORKING TEMPERATURE:	650°C
BRINELL HARDNESS:	130 BHN
ELONGATION:	12 %

FILLER METAL CHEMICAL ANALYSIS %			AVAILABLE SIZES
Cu	P	Ag	1.5 mm (1/16")
Resto	6.0	5.0	2.4 mm (3/32")
			3.2 mm (1/8")