

WISDOM Thermal Spray Consumables

Copper base alloy



CuSn6P

DATA SHEET

November 2015

Introduction

CuSn6P is useful for thermal spray copper tin bronzes (Cu-Sn 6-8 %) and some brasses (Cu-Zn). Also suitable for joining wrought copper-tin bronzes and brasses to cast iron and carbon steel. This is recommended for repairing wrought bronzes (Cu-Sn); for surfacing on brasses, steels and cast iron.

SURFACE PREPARATION

Surface should be clean, white metal, with no oxides (rust), dirt, grease, or oil on the surface to be coated. Note: It is best not to handle surfaces after cleaning.

Recommended method of preparation is, to grit blast with 24 mesh aluminum oxide, rough grind, or rough machine in a lathe.

Application

- Useful for Joining base metals of similar composition.
- Construction of equipment for the chemical industry and petrochemical industry.
- Naval constructions and installations for sea water desalination, repair works.

Chemical composition(%)

AWS Code	Alloy	Cu	P	Sn
Cu5180	CuSn6p	Rest	0.2	5.5

Typical Physical Properties

Solids-Temperature	Density	Elongation	Liquids-Temperature	Tensile Strength	Brinell Hardness
950°C	8.86kg/dm ³	20%	1050°C	260N/mm ²	80HB

Standard Sizes & Packing

Diameter	Dimension Tolerance	Packing	Wire Weight
1/16"(1.6mm)	+0/-0.05	D 300 Spool	15kgs(33 lbs)/spool
2.0mm	+0/-0.05	D 300 Spool	15kgs(33 lbs)/spool
1/8"(3.17mm)	+0/-0.05	Coil Form	20-400kgs/coil

Other sizes can be produced by customers' requirement.