

# Electrical contacts for vacuum switching

## DESCRIPTION:

The products are obtained by powder metallurgy techniques (infiltrating, solid state sintering) in strictly determined conditions, which ensure the obtaining of adequate properties for contact operating in vacuum switching devices, namely high electrical and thermal conductivity, low contact erosion, high welding resistance, minimum gas content.

## TECHNICAL CHARACTERISTICS:

- Chemical composition W - 20% Cu Cr - 45% Cu Cr - 75% Cu;
- Density, g/cm<sup>3</sup> min. 15.4 min. 7.6 min. 7.8;
- Hardness, HB min. 200 min. 90 min. 60;
- Resistivity, μΩcm max. 5.5 max. 5 max. 3.7;
- Chopped current, A max. 4.5 max. 4 max. 5;

## SOCIO-ECONOMIC AND ENVIRONMENTAL EFFECTS:

- Increase of service life of switching devices;
- Replacement of precious metals in contact composition;
- Removing of environment pollution as a result of vacuum operating.

## APPLICATIONS RANGE:

Low and medium voltage vacuum contactors and circuit-breakers.

## RIVETS ELECTRICAL CONTACTS

DESCRIPTION: Electrical contacts are obtained on special automatic machine of high capacity, from drawing round wires with diameter near with rivet shank. Ratio l/d can be between 4.5 and 2.7.

Wires can be obtained by powders metallurgy techniques (components mixing, pressing, sintering, extrusion, wire drawing).

## TECHNICAL CHARACTERISTICS:

Material	Ag content %	Density g/cm <sup>3</sup>	Hardness HV	Resistivity Ωcm
Ag	99.9	10,5	60	1,62
Ag - Cu	970 - 720	10.3 - 10.0	110 - 130	1.92 - 2.00
Ag - Ni	900 - 800	10.2 - 10.0	110 - 120	2.00 - 2.17
Ag - Mn	950	9.8	100	1.85
Ag - C	995	10.4	100	1.64

## APPLICATIONS:

Car electric equipment, telecommunication electric appliances.

## DELIVERY SHAPES:

Pieces with different shapes and sizes, depending on customer' demand.