一、The materials of Silver Contact:

Ag、AgNi、AgCu、AgZno、AgCdO(Silver Cadmium Oxide), AgSnO2(Silver Tin Oxide), AgWC(Silver Tungsten Carbide), and AgC(Silver Graphite) and so on.

二、Definition of Siliver Contact：

Silver contact refers to the electronic appliances when opening and closing, separation and mutual contact of intersections, because the metal conductor terminals at the instant of the contact prone to moments of fever and spark, prompting them to contact point in the process of using multiple frequency, prone to oxidation and electrolysis, so will increasing the thickness of the contact point, or manufactured polymer metal (copper and multiple) with different material, so will called silver contact

三、Characteristic:

There are mainly three kinds of Contact spring :

(1) Riveting Parts: contact is riveted on copper component

(2) Welding Parts: sheet contact is welded on copper component

(3) Stamping Parts: precious clad metal is stamped into contact bridge component

四、Feature of Siliver Contact:

(1) AgNi contact material contains 10% to 40% Ni

(2) Produced by powder metallurgical production, with low and stable contact resistance, high hardness and mechanical strength

(3) Material transfer in case of DC is very low

(4) High electrical and thermal conductivity

(5) With very low arc erosion. On making higher current, normally asymmetric pairs with Ag contact materials are applied

(6) Wire of solid and composite rivets produced by powder sintering-extruding methods

五、Application:

Silver contacts are mainly used in automobile appliances, household appliances, relays, contactors, temperature controllers, timers and electronic appliances.Silver contacts are applicable to the continuous automatic production of riveting processing, which does not require other processing techniques (such as electroplating, welding, etc.) after riveting, which not only simplifies the manufacturing process of the contact parts, improves production efficiency and reduces costs, but also improves the assembly accuracy and reliability of the components

六、The feature of different materials of Silver Contact

Pure silver sheet

(1) Pure silver has extremely high electrical conductivity

(2) Very low contact resistance rate

(3) Easy to solder

(4) It is easy to produce, so silver is an ideal contact material

(5) It is one of the most widely used materials in small capacity and voltage appliances

AgNi sheet

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(5) With very low arc erosion
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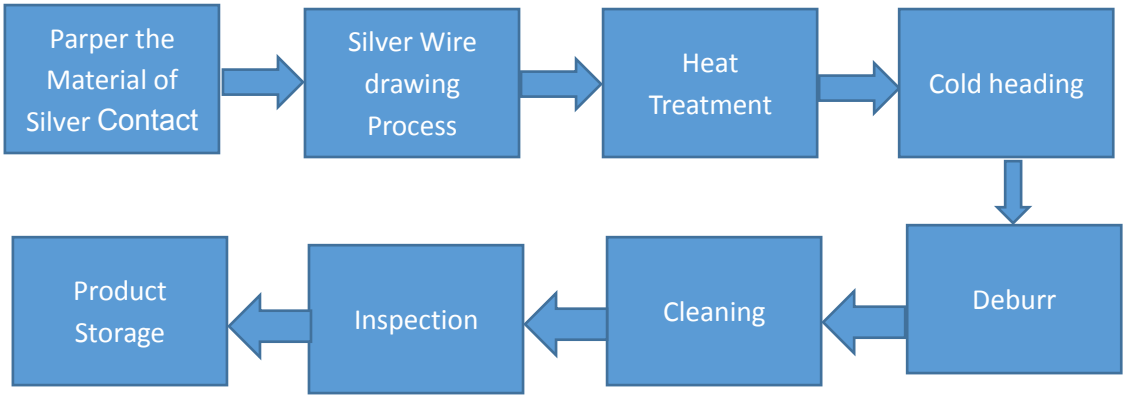
AgSnO2 sheet
(1) AgSnO2 is the ideal material of AgCdO and has excellent properties of contacts
(2) AgSnO2 has higher thermal stability
(3) AgSnO2 has higher resistance against welding and erosion than AgCdO material
(4) For AgSnO2 contact material, the contact resistance can be controlled within the limited range by putting in a small amount of additive of special metal-oxide
(5) In this aspect, contact materials produced by powder metallurgy processing method have higher resistance against arc erosion and less arc bumming than those produced by oxidation processing method

AgZnO sheet
(1) ZnO, one type of material in AgznO contact, has comparatively higher thermalstability
(2) The welding resistant and resistance against arc erosion of the contact is better
(3) The AgZnO contact material has higher welding resistance and low arc erosion with strong magnetic arc blowing under large switching capacity
(4) AgZnO contact material is innocuous and has no pollution to the environment
(5) AgZnO contact material is mostly suitable for contactors and circuit breakerswith large capacities

AgCdO sheet Features
(1) AgCdO is a kind of most important contact material among silver metal-oxide materials, and it is widely used for low-voltage devices
(2) When the temperature is higher than 900centigrade, CdO is sublimated and the contact surface is cooled down in order to reduce and even extinguish the arc energy. This method can increase the resistance against welding
(3) Contact materials produced by powder sintering-extruding methods have higher density and low resistance rate
(4) It also has higher welding resistance and uniform arc erosionInner

七、The Manufacturing Process of Silver Contact



八、How to improve the lifetime of Silver Contact:

1. Selecting the appropriate contact material based on load type and current size.
2. Properly increasing the contact pressure of the Silver Contacts.
3. Improving the surface finish of the Silver Contact.
4. The production process ensures that the Silver Contacts are not contaminated.
5. Ensuring Silver Contact reliability and reduce shaking.
6. Reasonable arc extinguishing structure.
7. Increasing Silver Contact opening speed and reduce arc burning speed.
8. Ensuring that the Silver Contacts have sufficient breaking force