Some Properties of Ag Based Contact Materials

The following table lists just a few **Ag** based alloys that are obtained by a sintering process for specific contact uses

The melting point is always around 960 °C

Alloy	ρ [μΩ cm]	Brinell Hardness [kp/mm ²]	Uses
Ag (60 90) % Ni (40 10) %	2,82,0	50 130	Low Voltage circuit breakers
Ag 88% CdO 12%	2,4	60 70	Circuit breakers
Ag 95% SnO ₂ 5%	2,5	5060	High load relays
Ag 98 % C 2 %	2,5	35 45	Welding resistant contacts
Ag (10 30) % W (90 70) %	5,0 4,0	105 230	Low voltage high power switches

- The next table lists just a few Ag based alloys that are obtained by melting the constituents
 - The melting point varies from (800 1030) °C

Alloy	ρμΩ cm	Brinell Hardness (kp/mm²)	Uses
Ag 85 % Cd 15 %	4,8	4078	Welding resistant DC contacts
Ag (7297) % Cu (283) %	1,8 2,1	40140	Heavy duty relay contacts
Ag 95% Ni 5%	1,9	50	Contacts in communication technology
Ag (7050) % Pd (3050) %	15,632	70190	Contacts in communication technology
Ag 20 % Au 80 %	10	3790	Fine contacts
Cu ca. 95 % Co (2,5) % Be (13) %	3,510	100400	Brushes, pantographs

¹⁾ $S = Siemens = 1/\Omega$