

Aurocor[®] HS hard gold

A product family for hard gold deposits from cobalt to iron with highest speed



Electronics

Functional electronic coatings

atotech.com



Aurocor[®] HSC

Cobalt

Cobalt hardened
0.2 % of co-deposited Co. The automotive solution for connectors, contacts and switches

Aurocor[®] HSN

Nickel

Nickel hardened
0.2 % co-deposited Ni. Alternative to cobalt mainly for connectors. Highest speed

Aurocor[®] HSF

Iron

Iron hardened
0.2 % of co-deposited Fe. High wear resistance and temperature stability

Aurocor[®] HS hard gold

- Fine grain deposition of gold layers according to ASTM B 488 Type I/II, C & D with small amounts of Co, Ni or Fe co-deposits
- Bright hard gold deposits with a vickers hardness of more than 130-190 HV₂₅
- Very low and stable contact resistance
- Qualified by major automotive customers
- High speed deposition with deposition rates of 18µm/min or up to 75 A/dm²
- Perfect selectivity
- Highest stability and lifetime
- Applied for connectors, sliding contacts and many more
- Ideally combined with our Betatec[®] products to preserve excellent corrosion protection

Aurocor® HS – hard and fast

Product	Aurocor® HSC	Aurocor® HSN	Aurocor® HSF
Alloying material	Cobalt	Nickel	Iron
Co-deposition % w/w	0.15 - 0.30	0.15 - 0.40	0.15 - 0.30
Purity %	99.4 - 99.6	99.3. - 99.7	99.4 - 99.8
Density of deposit g/cm ³	17.5	16.5	17.5
ASTM B488-95/MIL-G-45204C	2,3CD/I,IIC,D	3C/IIC	2,3CD/I,IIC,D
Current Density Range ASD	2.5 - 60	5 - 100	2.5 - 60
Deposition speed µm/min	12 @ 30 ASD	18 @ 75 ASD	12 @ 30 ASD
Hardness HV ₂₅	170 - 190	130 - 180	170 - 190
Contact resistance mOhm @5cN	2	2	2
pH	4.2 - 4.7	4.3 - 4.8	4.2 - 4.7
Cutting edge	The hard gold product for automotive applications Highest stability	Alternative for Co in connector industry	Exceptional wear off capabilities for sliding contacts Thermal stability Easy supply

