Niveostan® A product family for semibright, pure and large grained tin deposits

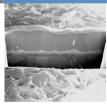


Electronics

Functional electronic coatings

atotech.com

Niveostan[®] SL (Plus)

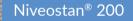


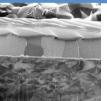
High and low speed Universal solution for reel-to-reel and rack/barrel plating. Deposition speed: 0.2 – 12 μm/min

Niveostan[®] A1



Best uniformity For the most demanding designs in rack plating. Deposition speed: 0.5 - 2.5 μm/min





Highest speed version For the fastest deposition technolog

position technology. Deposition speed: 2 - 30 μm/min

Niveostan[®] product family

- Semibright deposits
- Large crystals with a brick like structure and a flatter surface morphology than standard matt deposits
- Qualified by major automotive customers
- Extremely low whisker propensity passing JESD201 etc.
- Available as low speed version for rack/barrel applications (about 0.2 μm/min) or high-speed versions that can deposit up to 30 μm/min tin
- Ideally combined with our Protectostan[©] and SuperDip SN products to preserve excellent solderability
- Free of Fluroroborate and NPEs



Niveostan[®] – Pure and reliable tin deposits

Product	Niveostan [®] SL	Niveostan® SL Plus	Niveostan [®] A1	Niveostan [®] A200
Appearance	Semibright	Semibright	Semibright	Semibright
Application	Rack/Barrel	Reel to Reel	Rack/Barrel	Reel to Reel
Current density range ASD	0.5 - 3.0	5 - 25	1 - 5	5 - 60
Deposition speed µm/min	0.2 - 1.2	2.5 - 12.5	0.5 - 2.5	2.5 - 30
Grain size μm	3 - 10	3 - 10	3 - 10	3 - 10
Roughness RSAI %*	15 - 20	15 - 20	15 - 20	15 - 20
Carbon content ppm	< 25	< 25	< 25	< 25
Sulfur content	< 5	< 5	< 5	< 5
Solderability	Excellent	Excellent	Excellent	Excellent
Cutting edge	Qualified for automotive applications	Medium speed version qualified for automotive	Exceptional uniformity for all designs-even the most difficult ones	Highest deposition speed, qualified for automotive

* RSAI = Relative surface area increase compared to a totally flat surface, measured by interferometer microscope on connectors with 3 μm Sn

