

StannoPure[®] PF 10



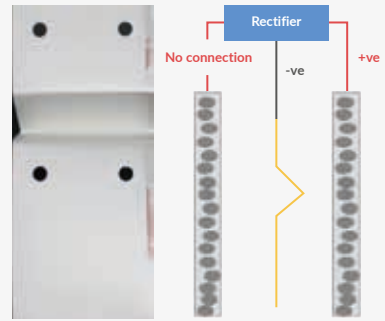
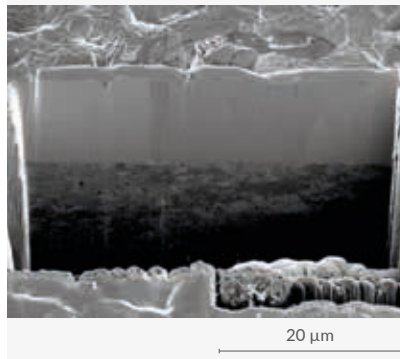
High speed green tin process
for lead frames and connectors

Grain structure

Coverage test at 20 ASD

100

percent coverage



StannoPure PF 10

StannoPure PF10 is a high speed MSA based tin plating process with exceptional surface distribution. With its perfect tin coverage over the entire current density it is designed to plate even the most difficult connector or lead frame types.

StannoPure PF 10 is built on a new electrolyte suite that is free of BPA, NPE, and other critical additives and is non-PFAS based.

Features and benefits

- Green process free of critical additives
- Low MSA
- No oil out
- Perfect solderability with all lead-free and lead containing solders
- Perfect coverage over entire CD range even at lowest CD
- Low whisker propensity
- Developed for all modern plating tools

Protectostan® LF-E



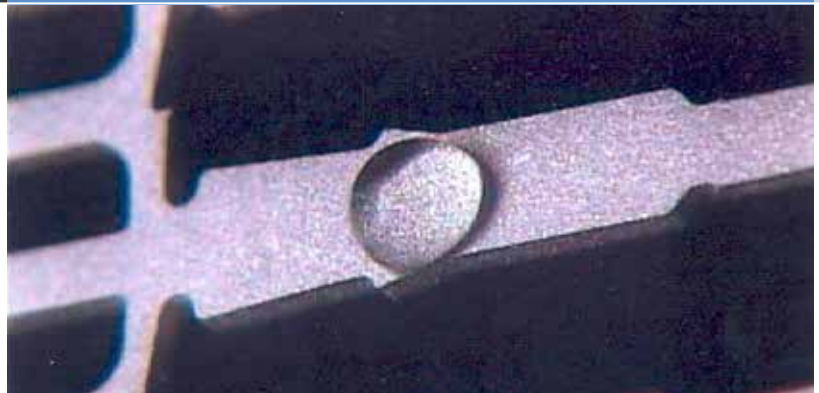
A sustainable post-treatment
to mitigate the corrosion
whisker formation



Protectostan® LF-E creates a hydrophobic surface



Free of BPA, NPE & PFAS



Highly solderable and highly effective

Protectostan® LF-E protects the plated tin and tin alloy surfaces of connectors and integrated circuits (ICs) from discoloration during heat and humidity storage conditions. Electronic components remain solderable even after long-term storage.

Protectostan® LF-E mitigates corrosion whisker formation. Its hydrophobic coating protects the plated tin surfaces from corrosion, thus reducing the excessive formation of corrosion whiskers. Protectostan® LF-E can easily replace alkaline tin post-treatments and be integrated into existing plating lines.

Protectostan® LF-E is the sustainable alternative to our established Protectostan® LF series and is free of any BPA, NPE & PFAS and other critical substances.

Features and benefits

- Sustainable alternative to our Protectostan® LF series
- Effective corrosion protection for plated tin and tin alloy surface finishes on IC outer leads
- Strongly mitigates the formation of whiskers during heat and humidity to comply with the iNEMI / Jedec storage condition (4,000 h at 55 °C / 85% RH)
- Prevents tarnishing during hot and humid storage conditions
- Excellent wettability and solderability after steam ageing and pressure cooker test conditions

Silvertech RBH



The ideal hard silver plating
for electric vehicles



Bus Bars

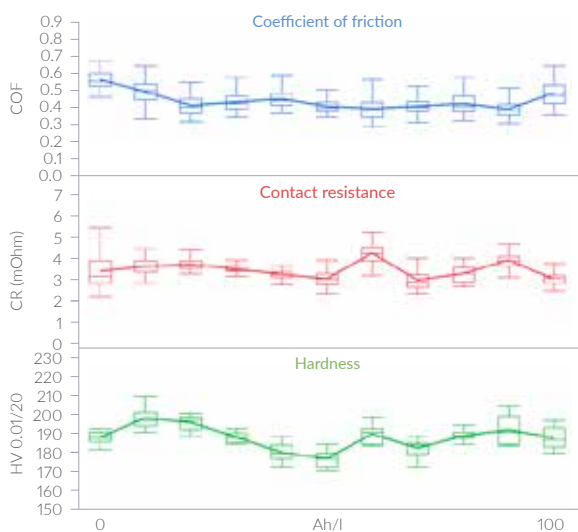


Charger



Connectors

Deposit characteristics



Deposit characteristics of a 35 μm Ag layer for fresh and aged electrolytes

Silvertech RBH

Silvertech RBH is a new plating process that deposits a hard silver layer on bus bars, connectors, and chargers. Its hardness of about 180 Hv and low contact resistance make it an ideal match for the needs of electrical vehicles. The process is designed to run in Rack and Barrel tools and exhibits an exceptional process stability. It can be combined with our Cr (VI) free anti-tarnishes to preserve its layer properties.

Features and benefits

- Current density: Up to 5 ASD
- Single additive system for simplified process control
- Hardness: 180 HV₂₀
- Contact resistance : 3-4 mOhm, heat stable
- Purity: ASTM B700-20 type 3, grade B, D
- Appearance: Technical brightness
- Good solderability