



Next Generation Tin Plating for Metal Resist Application

下一代 电镀锡技术

RONASTAN™ ECX Tin Electroplating Bath

Dow Electronic Materials offers RONASTAN™ ECX as the next generation Tin plating product with characteristic of high performance, environmental friendliness and cost competitiveness. This product is designed to solve existing technical issue of tin plating.


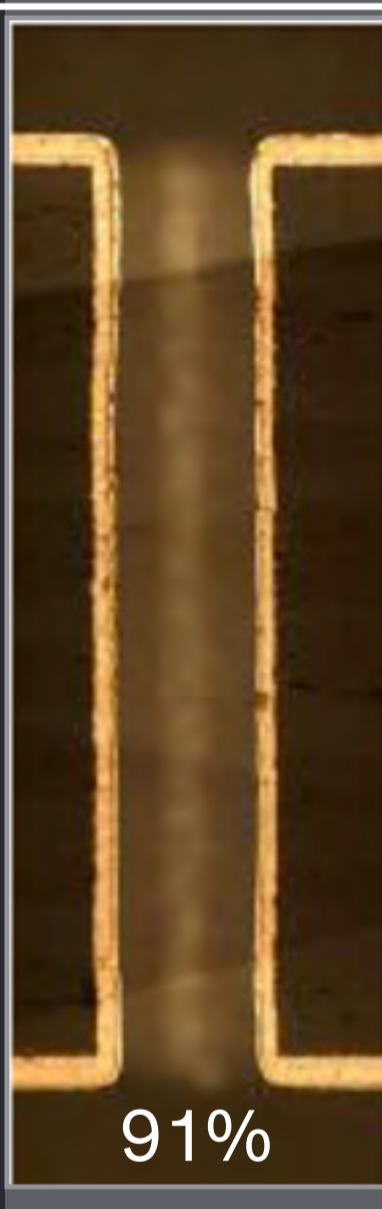

陶氏化学电子材料提供RONASTAN™ ECX做为兼具高性能, 环保与成本效益的下一代电镀锡产品, 能解决目前常见的电镀锡技术问题。

Advantages of New Tin Process



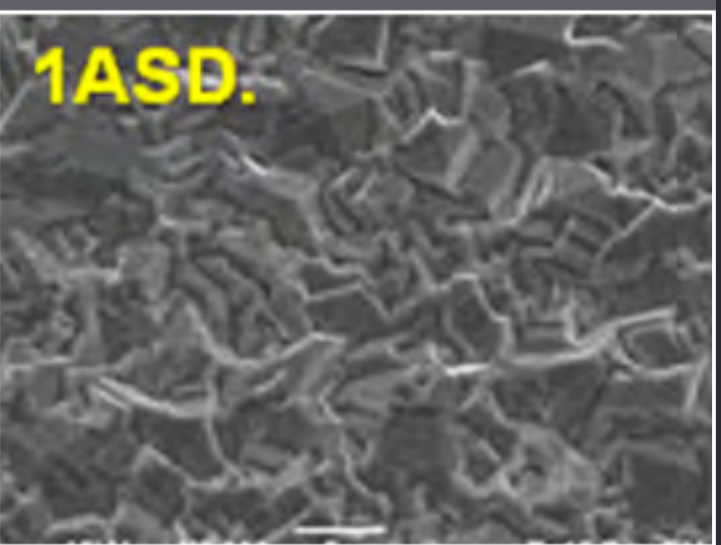
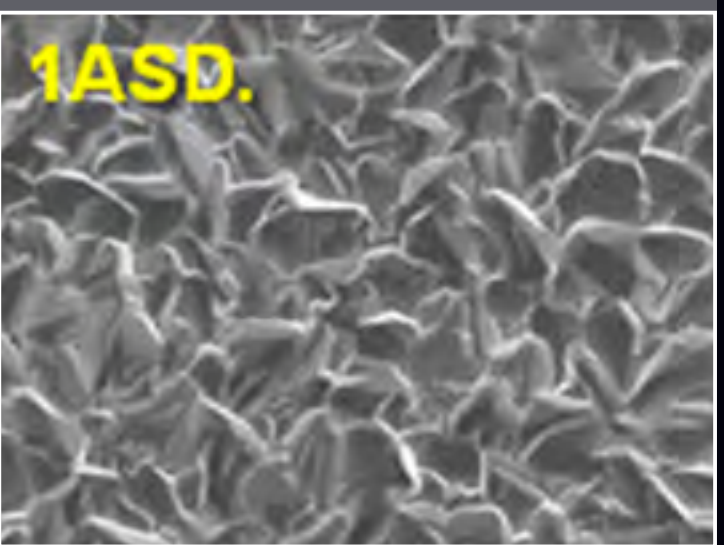

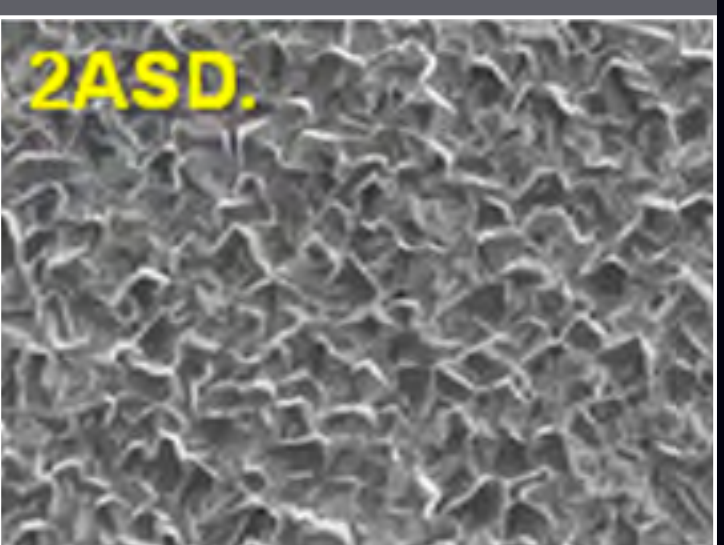

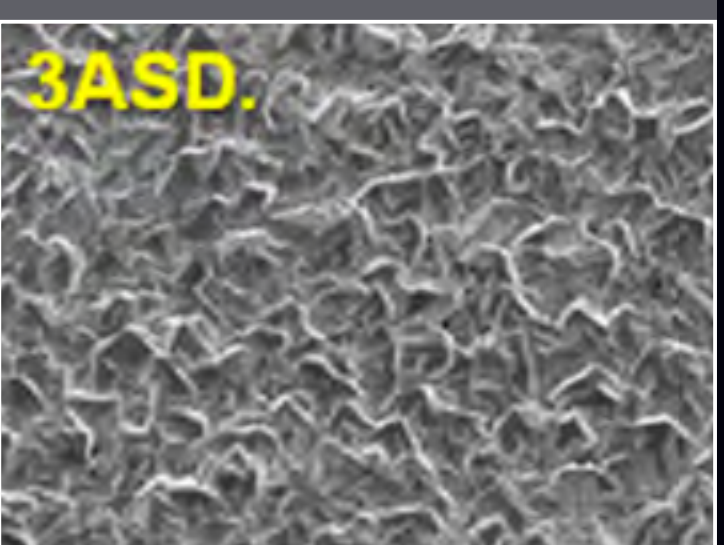
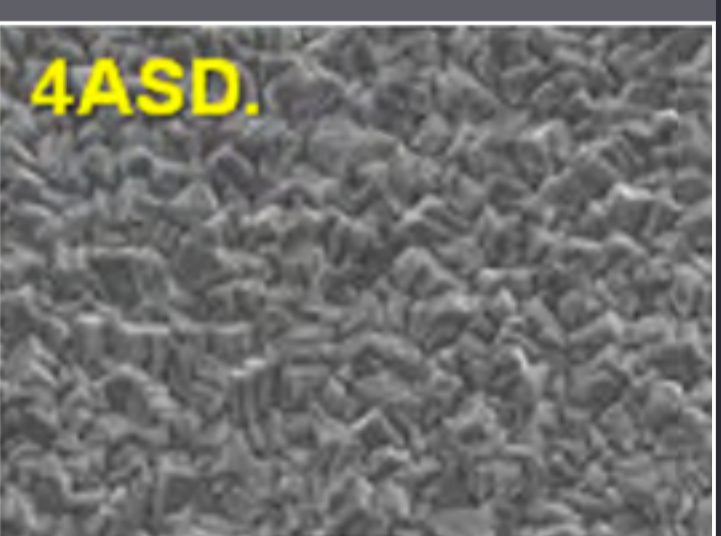
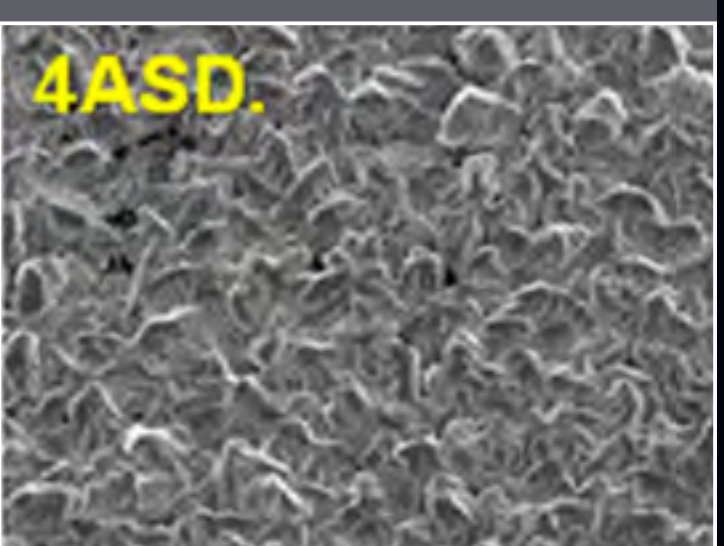
新电镀锡制程具备以下优越的特性

- Cost effective 成本效益优势
 - Thinner plating thickness 更薄的电镀厚度
 - Acid sulfate bath 硫酸系统之槽液, 成本较低
- Eco-friendly formulation 环保导向
 - NP/NPE-free 不使用壬基苯酚类成份之界面活性剂
 - Low COD/BOD 低化学需氧量/生化需氧量

- Higher alkaline etching resistance 高抗碱能力
 - Smoother tin deposit over wide range of current densities 在不同电流密度下, 均能得到较平滑的镀锡层结构
 - Better thickness distribution 较佳的电镀均匀度
- Robust to organic contamination 对有机污染能具有高容忍度

Current Density	0.5 ASD	1.5 ASD	3.0 ASD
TP %	 110%	 91%	 98%
Plating Thickness	Surface: 6.93 μm Hole: 7.66 μm	Surface: 6.70 μm Hole: 6.14 μm	Surface: 7.09 μm Hole: 6.96 μm

TP performance at different current densities
(Thickness: 1.6 mm, Diameter: 0.3mm)
不同电流密度下之深镀能力表现
(板厚: 1.6 mm, 孔径: 0.3 mm)

	RONASTAN™ ECX	Conventional Product
Appearance (Hull Cell)		
Tin Morphologies on Hull Cell Panel	 1ASD.	 1ASD.
	 2ASD.	 2ASD.
	 3ASD.	 3ASD.
	 4ASD.	 4ASD.

Plating appearance and morphology (Hull cell)
镀层外观及表面结构 (哈氏槽)

