

Horizon[®] Stannatech

Immersion tin equipment



Electronics

Equipment technology

atotech.com



Perfectly controlled immersion tin system



Lower process costs

Excellent performance for highest demands

The MKS' Atotech Stannatech's[®] 1.0 μm pure tin deposit prevents growth of the intermetallic through the tin layer. This ensures perfect performance for multiple soldering even after 12 months storage.

Our system is ideally suited for surface mounted technology (SMT) and press fit technology where planar and robust surfaces are required. We reduce whisker growth well below IPC's specification with our 'anti-whisker additive' (AWA), meeting the demands of the automotive industry. By using a special process step – Ionix SF – you can dramatically minimize surface contamination which is critical for immersion tin baths. Ionix SF belongs to the standard process sequence for Stannatech[®] Horizon. Use the optional step 'PostDip 270' to avoid yellowing of the tin surface that would otherwise occur due to the harsh conditions during Pb-free soldering in an air environment.

Most used immersion tin process worldwide

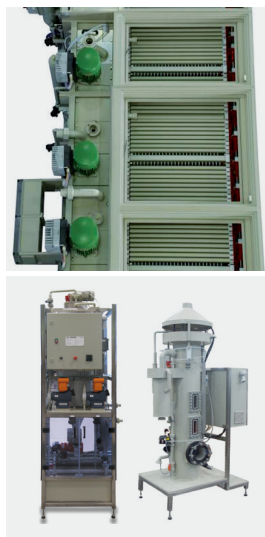


Figure 1:
Horizon® Stannatech

Figure 2:
Crystallizer® and ConStannic®

Leading-edge equipment

We re-design and review our systems continuously. That way we can constantly optimize the cost, environmental and technical performance of plating systems for you. In response to your needs, we improved the design and enhanced the material inventory while maintaining the production line and process quality standards of the world's most popular immersion-tin equipment.

Sustainable approach

The ConStannic® and Crystallizer® are patented immersion tin regeneration units that guarantee highest productivity while keeping the environmental impact at a minimum. They are composed of two individual elements. The ConStannic® reduces electrolytic Sn⁴⁺ to the beneficial Sn²⁺. Simultaneously the Crystallizer® removes dissolved copper from the panels. Both parts combined eliminate the severe sludge formation that normally occurs in the process and replaces extensive feed and bleed dosing or frequent new make-ups.

Benefits	Features	Package
Lower energy consumption compared to HASL process	Low temperature process requires less heating	Standard
Performance consistency	Computer controlled line with recipe system for defined process settings	Standard
Higher yield	Throughput optimized design	Standard
Long life time of the equipment	Solid construction with all necessary reinforcements, more than 15 years experience in the Stannatech® process	Standard
<ul style="list-style-type: none"> • 90% less chemistry consumption • 50% less downtime • 30% reduced process costs • 25% higher productivity 	Immersion tin regeneration with ConStannic® and Crystallizer® – closed loop regeneration system	Optional

