

Excellent BMV capability  
enabling HDI PCB production



PATENTED  
TECHNOLOGY

## NEW Desmear and Electroless Cu Line

The PLB Line<sup>®</sup> is a new desmear and electroless copper line for multilayer PCB customers to enter the HDI market segment with a high-reliable and excellent-performance equipment tool.

Based on decades of experience with Atotech's Uniplate<sup>®</sup> equipment line, the PLB Line<sup>®</sup> distills all production-critical characteristics and applies them to a reliable, high-volume, but cost-sensitive machine.

This new production equipment offers an advanced fluid delivery system and runs at lowest water and chemistry consumptions. It is operator friendly designed for best process control and maintenance.

## Features and benefits

- Technology enabling
- Excellent throwing power in BMV's and through holes
- Innovative equipment, reliable processing
- Design based on 30 years PCB equipment manufacturing
- Local sourcing and production
- German engineering

# Horizon<sup>®</sup> Stannatech



Leading immersion  
tin system



## Stable production system

Horizon<sup>®</sup> Stannatech combined with Stannatech<sup>®</sup> 2000 chemistry is the leading horizontal immersion tin solution approved and well known by OEMs from automotive to computing and communication industries.



Process control  
Yield  
Throughput  
Optimised operation and monitoring



Optimized water and reduced chemistry consumption  
Reduced energy consumption  
Reduced downtimes

> 100  
Installations

## Features

Full panel tracking and VCS

Quadruple and triple rinses and water reuse

Electrical features for automatic operation and control

Pumps controlled by frequency inverters

Universal transport system (UTS)

CE certificate included

## Benefits

Batch control and traceability

Water saving

Easy operation and monitoring, saving handling needs

Better process stability and energy saving

Processing of wide range of PCB

Safety

## ConStannic<sup>®</sup> and Crystallizer<sup>®</sup> for immersion tin stability

Proprietary auxiliary equipment for process control and resource saving

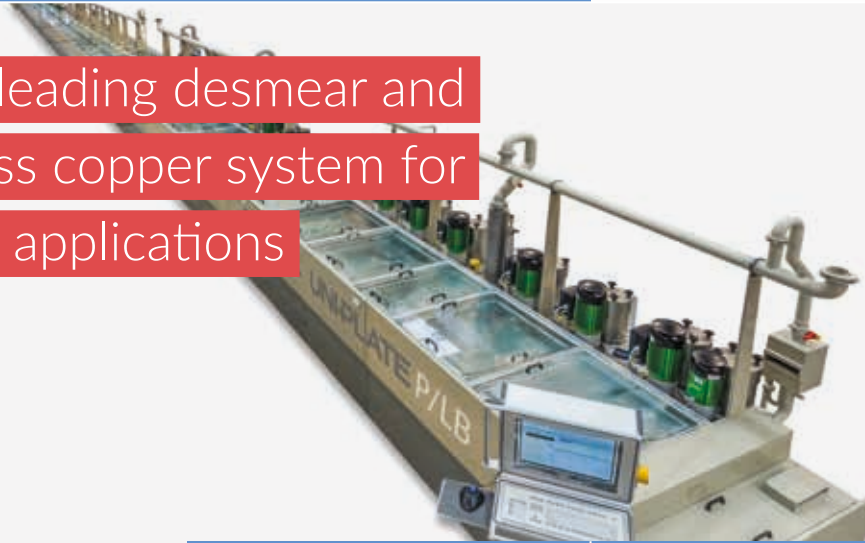
- Constant quality of tin layer
- Increases bath life time, which causes less waste water creation
- Continuous production quality and operation
- Easiest handling / line maintenance
- No feed & bleed

**Horizon<sup>®</sup> Stannatech combines quality materials, precision manufacturing capabilities, superior engineering and experience in immersion tin since 1998 into industry leading features!**

# Uniplate® P/LB for amSAP\*



Industry leading desmear and electroless copper system for high-end applications



Printoganth® U Plus – highly reliable e'less copper process

Printoganth® T1 – high throw e'less copper for amSAP applications

Over

# 700

Uniplate® P and LB lines delivered worldwide



## MKS' Atotech integrated solution for high-end applications

In the last years, the design of high-end printed circuit boards (PCB) has become increasingly challenging for manufacturers. In particular finer lines and spaces below 30 / 30 µm require new manufacturing technologies such as the advanced modified semi-additive process in order to reduce the differential etch depth during the pattern formation.

MKS' Atotech integrated solution consisting of the state-of-the-art Uniplate® P/LB equipment and the reliable electroless copper processes enables manufacturers to master these demanding challenges.

## Features and benefits

- Ultra thin material processing with unique UTS-xs+
  - Sophisticated concept of guiding devices ensures the safe transport of thin materials
  - Reliable transportation of materials down to 25 µm with 2x2 µm copper clad
- Particle reduction for high yield manufacturing
  - Permanganate etch: innovative edge split filter with a filter fineness of 25 µm
  - Other modules: available with F15K filter for Fine-Line-Filtration of 5 µm (absolute filtration)
- Additional etch cleaner module for increased copper roughening and excellent dry film adhesion
- Additional electroless copper modules for increased copper deposit and process safety

\*amSAP = advanced modified semi-additive process