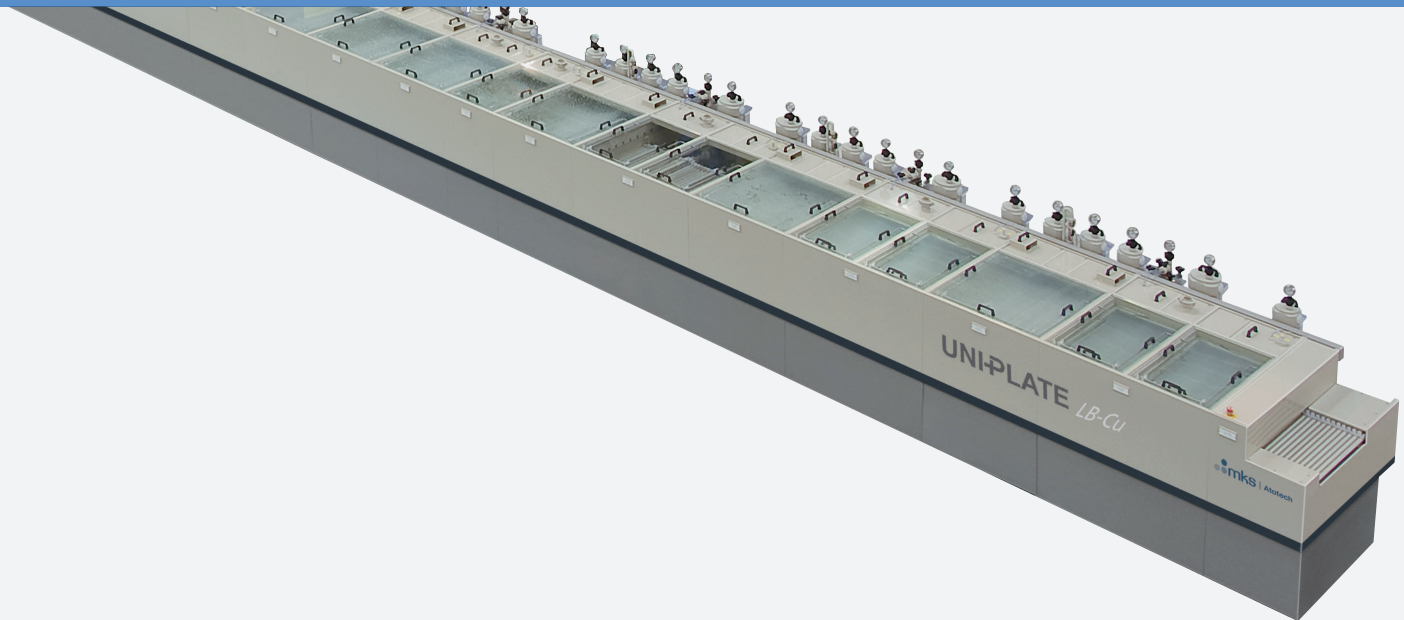
Uniplate® P/LB for amSAP*

Enabling technology for fine L/S

Electronics | Equipment technology & desmear and metallization | atotech.com



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

over
700
Uniplate® P and LB lines delivered worldwide

MKS' Atotech integrated solution for high-end HDI and IC substrates

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 technologies such as the advanced modified semi-additive process (amSAP*) in order to reduce the differential etch depth during the pattern formation. Furthermore, thinner materials need to be processed in a reliable manner and particle reduction is highly important for the overall yield of the manufacturing process.
MKS' Atotech integrated solution consisting of the mass production Uniplate® P/LB equipment and the reliable Printoganth® U Plus electroless copper process enables manufacturers to master these demanding challenges.

*amSAP = advanced modified semi-additive process

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Highest process safety and excellent yield performance

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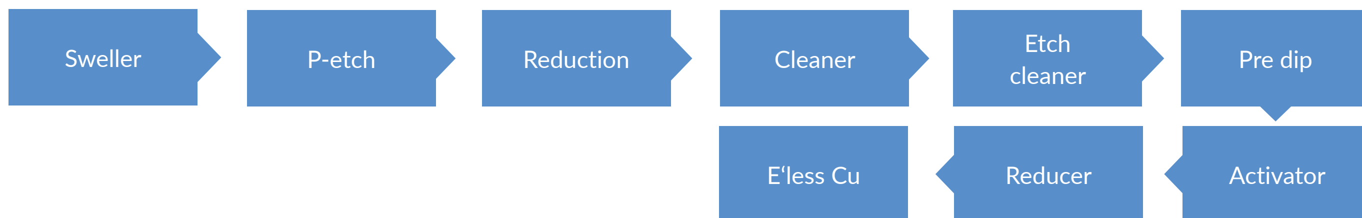
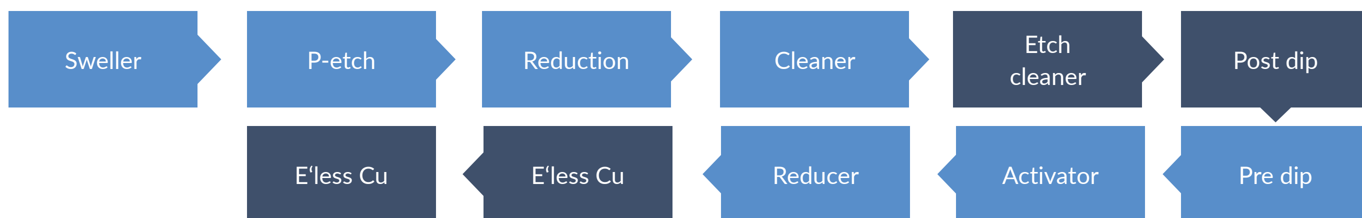
Standard set-up of a Uniplate® P/LB



Set-up of a Uniplate® P/LB for amSAP*



Uniplate® P/LB for amSAP* – equipment

- 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
    - All modules in the LB line: Fi5K filter with a fineness of 10 µm
- Additional etch cleaner module for increased copper roughening and excellent dry film adhesion
- Additional electroless copper module for increased dwell time and process safety

Printoganth® U Plus – electroless copper process

- Versatile horizontal electroless copper process with excellent adhesion on challenging base materials such as high Tg FR4, BT, PI
- Adjustable deposition rate of 1.0 µm in 8 min dwell time
- Good throwing power in through holes and blind micro vias
- Highest reliability performance

Securiganth® RE – advanced etch cleaner

- Enables enhanced dry film adhesion on the electroless copper deposit by defined roughening of the copper clad
- Uniform copper etching results

Atotech an MKS Brand

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