

# Uniplate® PLBCu6

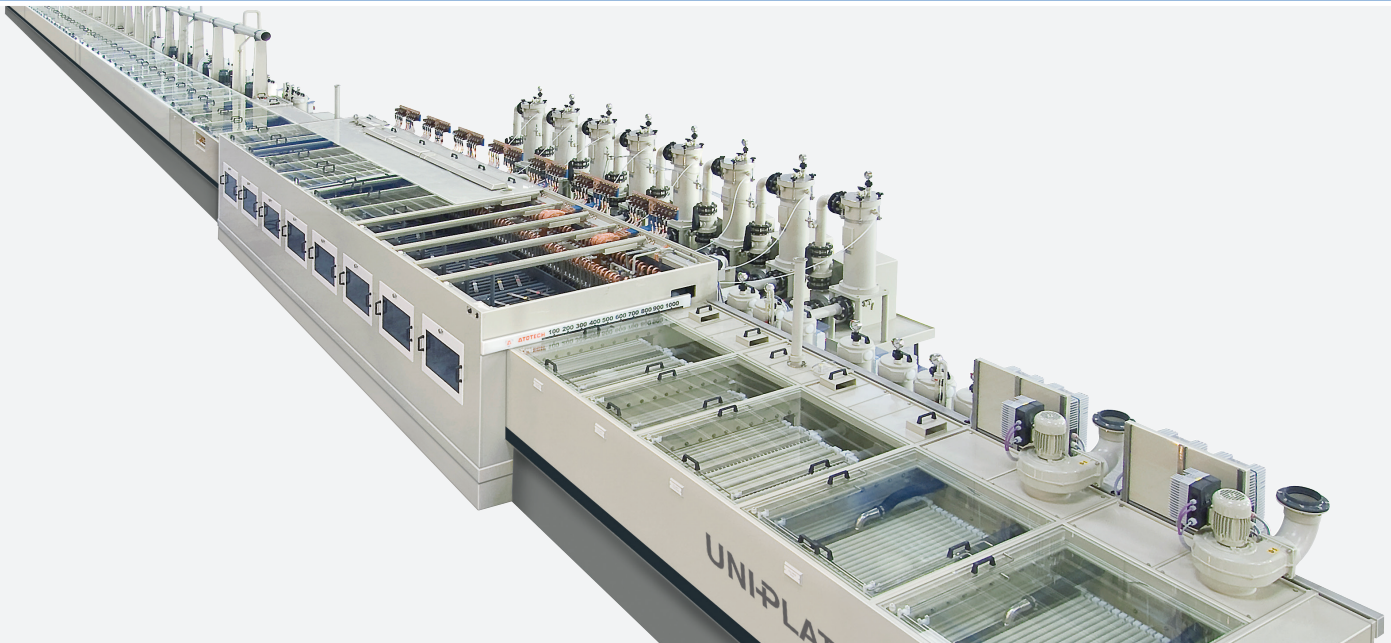
System solutions for mSAP technology



Electronics

Equipment technology

atotech.com



## Inline process from desmear, PTH to flash plating for mSAP for high end HDI boards



Sophisticated equipment solutions for mSAP technology in HDI boards

### Uniplate® PLBCu6 for mSAP

MKS' Atotech horizontal equipment is the solution of choice for modified Semi-Additive Process (mSAP) technology. This wet-to-wet solution is designed to produce outstanding reliable interconnects at a very high throughput while minimizing handling and operating needs in the process from desmear and electroless copper to flash plating.

MKS' Atotech system incorporates innovations that allow significant savings of water and energy and at the same extend the life time of chemistry. MKS' Atotech system utilizes Securiganth® E series for desmear, Printoganth® U Plus for PTH and Inpulse® 2HFU for electrolytic copper plating to achieve superior throwing power and uniformity.

For finer line and space requirements our Uniplate® platform provides several universal transport system solutions for lines and space down to  $40\ \mu\text{m} + 2 \times 3\ \mu\text{m}$  copper clad\*. In addition, we are able to offer solutions for the avoidance of particles and a sophisticated filtration package for fineline structures.

# Uniplate® PLBCu6 for mSAP technology



Figure 1:  
Saving water

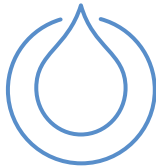


Figure 2:  
Extending lifetime of chemistry

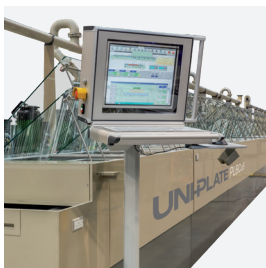


Figure 3:  
Reducing handling needs



## Features and benefits

- Entirely inline process with no handling needs and optimized footprint
- Significantly reduced water and energy consumption
- Seeking to optimize and extend lifetime of chemistry
- Process fully controlled via VCS
- Real time copper control in electroless copper bath for leading process stability
- Optional slim roller design in desmear and PTH for minimized touch
- Automatic cleaning cycles reducing operator capacities
- Transport system UTS-xs down to  $40\ \mu\text{m} + 2 \times 3\ \mu\text{m}\ \text{Cu}^*$
- Sophisticated particle reduction and filtration packages available
- High throughput
- Highly reliable metallization of through-holes and BMVs
- Excellent throwing power and uniformity
- Inert and segmented anodes avoiding oxygen and sludge formation with automatic copper replenishment

\*Calculated minimum thickness for 20" wide boards

