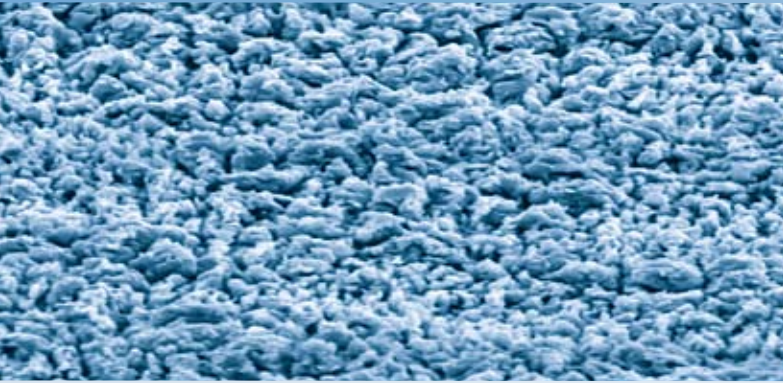


PCB / PCM

Höllmüller EVOLUTION
Cleaning

R | E | N | A | ●



Proper cleaning for ultimate production success

A wide range of choices on circuit board cleaning and metal cleaning machines are available for efficient surface preparation.

Areas of application

- Removal of oxides, films and stains from copper and other surfaces
- Aqueous, acid, alkaline, solvent-based, abrasive, ultrasonic and electrolytic cleaning processes

Features and benefits

- Staggered spray nozzle configuration
- Nozzles aligned to spray in conveyor gap
- Spray bars with bayonet connection
- Direct access to spray manifolds by front service window
- Operating elements clearly placed and easily accessible
- Module with sloped top covers out of glass
- Immersion pumps with integrated inline filtration
- Small sumps with sloped bottoms to drain





Nylon brush



Overlapping nozzles



Example of two stage chemical clean

Process	<ul style="list-style-type: none"> • Clean • Rinse • Micro Etch • Rinse with Anti Tarnish • Dry 																		
Dwell time	- 30 s for Clean and 45 s for Micro Etch																		
Temperature	- 50 °C (122 °F) for Clean and 35 °C (95 °F) for Micro Etch																		
Dimensions	<ul style="list-style-type: none"> • Typical applications • Transport Speed • Width • Length for inner layer 																		
	<table border="1"> <tr> <td></td> <td>0.5 (1.65)</td> <td>1.0 (3.3)</td> <td>1.5 (4.9)</td> <td>2.0 (6.6)</td> <td>m/min (feet/min)</td> </tr> <tr> <td></td> <td>1550 (61)</td> <td>1550 (61)</td> <td>1550 (61)</td> <td>1550 (61)</td> <td>mm (inch)</td> </tr> <tr> <td></td> <td>5175 (204)</td> <td>5775 (227)</td> <td>7175 (282)</td> <td>7875 (310)</td> <td>mm (inch)</td> </tr> </table>		0.5 (1.65)	1.0 (3.3)	1.5 (4.9)	2.0 (6.6)	m/min (feet/min)		1550 (61)	1550 (61)	1550 (61)	1550 (61)	mm (inch)		5175 (204)	5775 (227)	7175 (282)	7875 (310)	mm (inch)
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	5175 (204)	5775 (227)	7175 (282)	7875 (310)	mm (inch)														

Available processes:

- Pre-clean Resist
- Pre-clean Solder Mask
- Pre-Clean HAL
- Post-Clean HAL
- Final Clean
- Final Clean (Routing)
- Pumice Clean
- Nylon Brush
- Deburr