



## Uniform and reproducible fine line Developing

To achieve well defined edge shapes even for ultra fine lines we use specific fluid dynamics and oscillation

### Areas of application

- Developing of dry film and liquid photo resists
- Developing of solder masks
- For carbonate and all commercial developers
- For flexible material or reel to reel

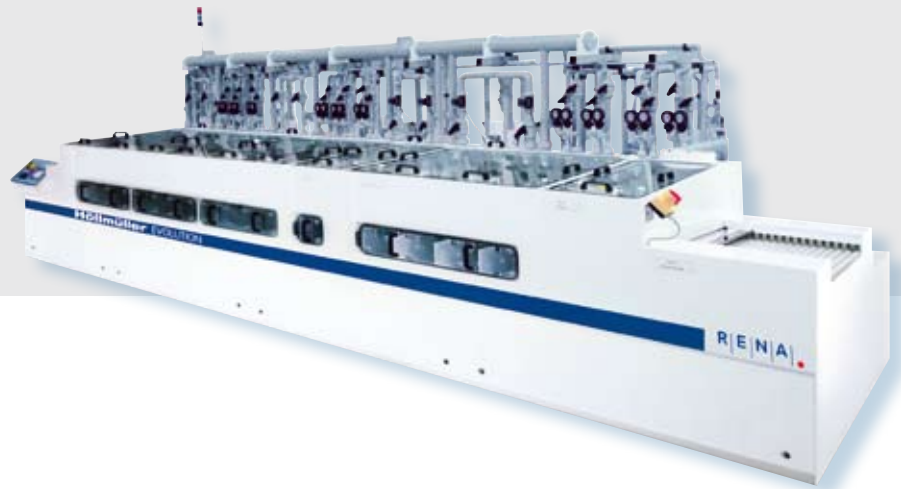
### Features and benefits

- Optimised fluid dynamics with high flow rates
- Fan nozzles with slim spray angles
- Staggered spray nozzle configuration
- Nozzles aligned to spray in conveyor gap
- Oscillation perpendicular to working direction
- Enhanced pumps for solder mask developing
- Optional: closed loop process control
- Uniform line developing
- Inline quick release mesh filters with safety switch
- Integrated post developer for enhanced uniformity
- Compact cascade rinsing
- Suitable for developing 15/15 µm structures
- Uniformity 5 - 10%
- > 600 developing machines installed worldwide





PCM structure



## Technical Data Höllmüller EVOLUTION - Developing

Process	• Resist Developing of different resists and solder masks					
	• Rinsing					
	• Drying					
	• Dwell time	60 sec dry film				
		45 sec liquid resist				
		90 sec solder mask				
	• Process Temperature	25 - 35°C (77 - 95 °F)				
Dimensions	• Typical applications					
	• Transport Speed	0.5 (1.65)	1.0 (3.3)	1.5 (4.9)	2.0 (6.6)	m/min (feet/min)
	• Width	1550 (61)	1550 (61)	1550 (61)	1550 (61)	mm (inch)
	• Length					
	Dry Film	3875 (153)	4650 (183)	5525 (218)	6475 (255)	mm (inch)
	Liquid Film	3700 (146)	4475 (176)	5000 (197)	5950 (234)	mm (inch)
Solder Mask	4575 (180)	5525 (218)	6475 (255)	8125 (320)	mm (inch)	