

Vertical processing with clamping frames

The vertical processing of printed circuit boards and substrates using transport clamping frames opens up new possibilities. Not only the contactless transport, but also the absolutely homogeneous treatment characterizes this machine type. Most different wet-chemical processes can be implemented and easily integrated.



🔀 INFINITYLINE V+

Details

Our new InfinityLine V⁺ product series provides the answer to future-oriented technologies such as SAP and mSAP for serial production in the Advanced HDI and IC substrate markets. The InfinityLine V⁺ is characterized by a vertical contact-less transport with innovative clamping frames.

The design allows to transport the thinnest substrates safely. The newly designed drive system, below the production level, enables cleanroom capabilities in circuit board production unrivaled to this day. The basis for this is the unique modular concept that SCHMID has continously developed over decades. The InfinityLine V⁺ provides maximum flexibility and investment security for all innovative processes.

The InfinityLine V+ already supports all Industry 4.0 requirements by providing the vertical communication interface OPC UA Server as standard. Furthermore other interfaces are available f.e. SECS/GEM. Various adaptations to the customer's individual Manufacturing Execution System (MES) are possible.

The web-enabled server interface offers the possibility to monitor and control the system by means of various mobile terminals.

Technical Data

Panel sizes/dimensions:

- Thickness: 0.025 mm 2.4 mm
- Minimum size: 18" x 18" (457 x 457 mm)
- Maximum size: 24,5" x 24,5" (623 x 623 mm)
- Use of transport clamping frames

Transport:

- Throughput: 4 panels per minute
- Transport speed: 0.2 6 m/min

Automation:

- Possibility for integration into an intra-logistic system (SCHMID single panel / frame automation)
- Separate availability for most different loader and unloader concepts
- User-oriented interfaces are configurable

Processes:

- Developing (Litho & SR)
- Flash-Etching
- Stripping (i.a. amines)
- Pre-Treating
- Ti-Etching



Advantages

- Maximized yield through contactless frame transport
- Most homogeneous process results by vertical transport: no "puddle effect"
- Cleanroom compatibility (depending on equipment)
- Individually configurable due to modular design
- Minimized footprint
- Ready for Industry 4.0

