

InfinityLine C+ is a touch-free, double-sided vertical spin processing cluster tool. Each cluster can be configured with up to 8 individal process chambers with various process steps from R&D purpose to high volume manufacturing. Each chamber is equipped with a frame rotation unit and a movabel process arm which can reach all positions on the panel surface. The chamber can be configurated with two compatible process chemistries in combined or separated process steps. In each configuration the arm will be equipped with rinsing and drying nozzles to finalize the processing.

The rinsing is based on cascade principle for an optimized water consumption on ambitious cleanliness level. In the rear of the chamber all relevant parts are placed in a closed compartment.

InfinityLine C+ will be completed by a compact chemical cabinet for the make up of up to 4 different chemistry solutions.





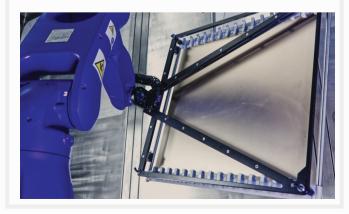


Details

The InfinityLine C⁺ is a modular vertical touch free spin cluster. The clamping frame to hold the substrate at the edge is the same as used in other SCHMID touch free lines like InfinityLine V⁺. This makes it easy to combine different SCHMID touch free machines in one production.

The vertical rotation of the substrate together with the servo driven spray arm allows to run precisely defined processes concerning process time, pressure and chemistry distribution. This allows product structures down to $2 \, \mu \text{m}$. If required optional in an ISO6 clean room environment.

An additional benefit of the InfinityLine C⁺ is the possibility to run different processes in one chamber. This lowers handling movements and increases yield. The InfinityLine C⁺ supports all requirements for Industry 4.0. Different interfaces to customer MES are available. The web-based HMI allows to run and control the system from different devices.



Technical Data

General information:

■ Substrate dimensions: 0,025 mm – 2,4 mm

Minimum: 18" x 18" (457 x 457 mm)

Maximum: 24,5" x 24,5" (623 x 623 mm)

SCHMID clamping frame required

Max. throughput 1,3 panels/min

Process chamber:

- Each chamber is programmable with different processes and different multiple process procedures
- Chemical supply via overpressure system
- Rotation speed up to 150 rpm
- Pressure up to 4 bar
- Process temperature up to 50°C
- Cleanroom ISO6 optional

Automation:

 Different loading systems available together with SCHMID InfinityLine A+

Processes:

- Flash Etching
- Developing
- Ti-Etching
- Stripping
- Rinsing
- Drying
- Pi-Developing

Advantages

- Solution for high end HDI+ and IC substrates (structures down to $2 \mu m$)
- Touch-free processing
- Green fab solution with lowest consumption in energy, chemistry and exhaust
- Different process sequences in one chamber possible
- Allows 100 % defined process times
- Cleanroom ISO6 (optional)

