



SRO i-Line

HIGH VOLUME PRODUCTION



**THERMAL
PROCESSING**

TECHNOLOGY.
INNOVATION.
MADE WITH PASSION.

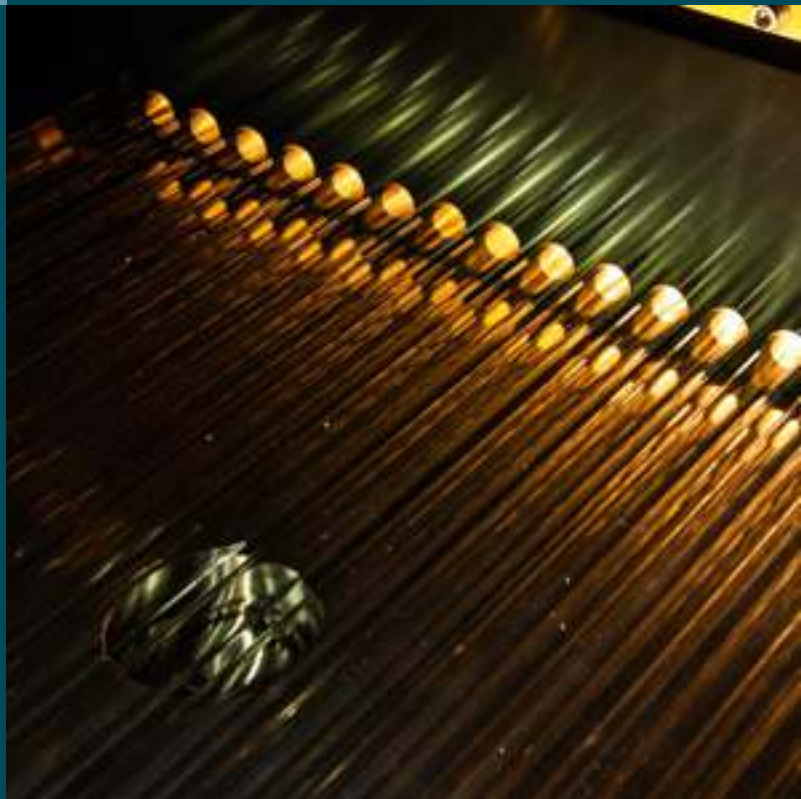
SRO i-Line

Our all-new and groundbreaking *SRO i-Line* is a high volume production tool used for vacuum reflow soldering. Implementing this tool within the ATV single chamber approach will help to fulfil all your current and future demands. Since 1982 ATV's single chamber approach has proven equally successful in the R&D and pilot line production market.

With more than 550 devices in use worldwide ATV is ready to step into high volume production with its brand-new *SRO i-Line*. This system can easily be upgraded from the basic one process chamber version to three process chambers all within the same footprint. Each chamber is individually programmable to perform its own process. This allows for the most flexible solution within your production.

The *SRO i-Line* comes standard with formic acid bubblers and auto refill assembly. This in combination with the standard equipped vacuum pump guarantees the best reflow soldering results compared to any other standard equipment in the market. Formic acid together with vacuum results in significant void reduction over the full reflow soldering area as well as the entire product load.

With the new generation of flux based solder pastes requiring a very low oxygen content to be present during the process run, the *SRO i-Line* has embedded this capability as a standard application to achieve a process environment in the sub-ppm range with minimal nitrogen consumption. Thanks to its flexible design the *SRO i-Line* can be tailored to your specific requirements – Manual Loading (ML), Cassette to Cassette (CTC) or directly placed into your automated production line (CB). With the single chamber process approach as its core competence ATV is determined to achieve the best reflow soldering results – for the past 30 years and many years to come!





FEATURES

- HIGH THROUGHPUT
- SHORT CYCLE TIMES
- VACUUM LEVEL 10^{-2} MBAR
- FORMIC ACID
- PROCESS TEMPERATURE UP TO 450°C
- TEMPERATURE RAMP-UP RATE 3K/SEC.
- TEMPERATURE COOL-DOWN RATE 2K/SEC.
- EXCELLENT TEMPERATURE UNIFORMITY
- IR HEATING
- SMALL FOOTPRINT (NO FOOTPRINT CHANGE UP TO 3 PROCESS CHAMBERS)

Technical Data

- ▷ Footprint: 1.600 x 1.800 x 2.050
(Up to 3 individual Process Chambers)
- ▷ Weight: 1.000kg (1 Process Chamber)
up to 1.500kg (3 Process Chambers)
- ▷ Hot Plate: 410 x 440mm
(1 Hot Plate/Process Chamber)
- ▷ IR Heating: Assy of 18 IR lamps (1KVA each)
- ▷ Power connection: 3Ph-N-PE 230/400V, 50/60Hz
- ▷ Peak Power: 20KW (1 Process Chamber)
58KW (3 Process Chambers)

Common Applications

- ▷ IGBT/DBC
- ▷ Power Semiconductors
- ▷ Sensors
- ▷ MEMS Devices
- ▷ DIE Attachment
- ▷ High Power LED
- ▷ Hybrid Assembly
- ▷ Flip Chip
- ▷ Package Sealing

Options

- ▷ Additional Process Chamber
- ▷ Hot Plate Return System
- ▷ Integrated Camera for process control
- ▷ Flux Management Assembly
- ▷ Spring Pin Array
- ▷ Substrate Fixture



ATV Headquarter Europe

Germany, Vaterstetten/Munich

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**THERMAL
PROCESSING**

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