

## Curano IR-curing unit

### CO-461/462

The DIMA CURANO IR in-line series of curing ovens are ideal to cure adhesives and conformal coatings for medium to high-volume production in a controlled heated environment. They are easy to integrate with both the Hybrid Coater as well as the Elite Coater systems.

The robust construction is available in two different lengths and four different models providing the flexibility to match your production requirements in a safe and controlled way.

The heated tunnel with at least 4 independent temperature-controlled curing zones achieves a thermally uniform atmosphere with IR heat panels and consequent convection by the induced exhaust draft and forced air from the optional pressurized bottom section. Not only does the Curano provide optimal process uniformity, it also ensures a safe working environment in case of solvent based flammable materials.



### Main Features

- Ideal for curing of conformal coatings
- 4 or 8 independent controlled top heated zones
- Optional up to 8 bottom heating zones
- Build-in temperature profiler with optional project management software
- Microprocessor controlled TFT touch screen
- Safety set for optimum VOC's removal of flammable solvent based coatings
- Pin chain conveyor with optional auto adjustment
- Optional with SMEMA communication interface
- Optional with humidity control

### Applications



Small PCB in Curano



Large PCB in Curano



Coated and cured PCB

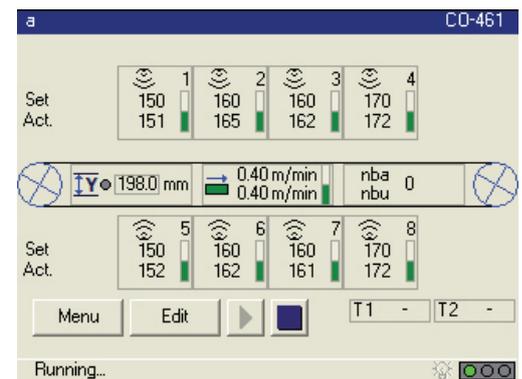
### Detailed information



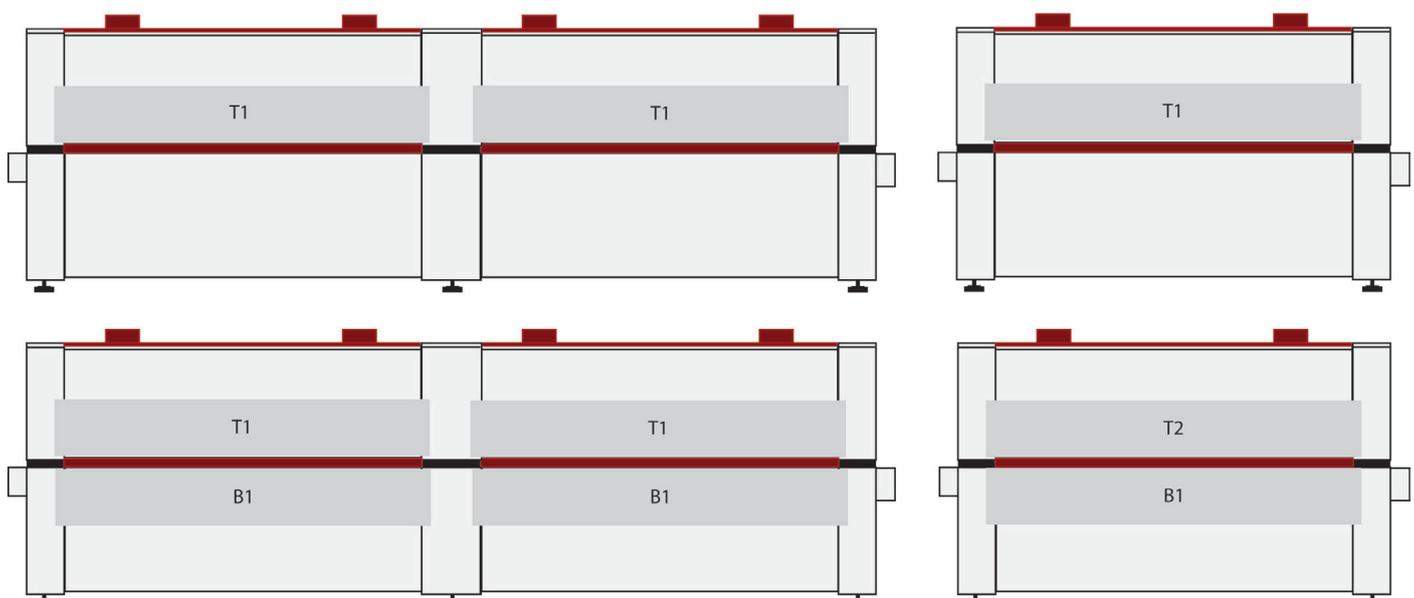
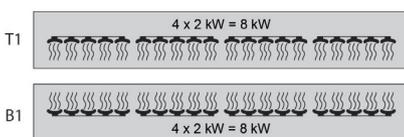
Curano CO-461 tunnel length: 217 cm

### Monitoring the curing process

The Curano's internal memory can store up to 99 different heating profiles. The integrated USB port allows for PC interface and storage of additional programs as well as remote control of operating procedures, quality control monitoring and generating of hard copies when needed. A standard built in TFT control touch panel permits continuous monitoring of the production run, with real time board temperatures through each heating zone shown in convenient graphical format. Windows® based oven manager software is optional available.



Graphic screen of software



### Detailed information



Curano CO-462 tunnel length: 443 cm

### Safety above all

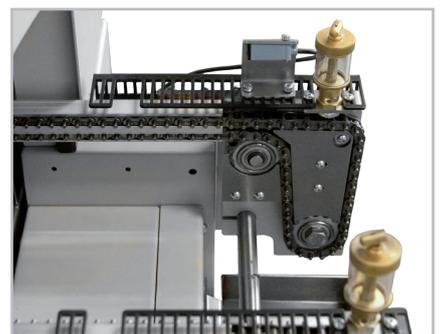
When connected to an external exhaust system with the appropriate air flow, the Curano has been ingeniously designed to avoid situations where Volatile Organic Compounds can pollute the production environment. For solvent based coatings, the oven can be equipped with a unique exhaust system that prevents the flammable solvents to reach the electronic section of the oven preventing ignition of the solvents that can cause serious damage and injuries. This is done by overpressurizing the bottom section of the oven, preventing solvent fumes to sink into the bottom section. The overpressure is constantly being monitored and in case it is out of tolerance the oven will immediately shut down. Since it is inevitable that solvents enter into the curing tunnel, the Curano has a mesh covering the IR panels. In the rare case of an ignition inside the curing tunnel the mesh provides an equal spread of solvent based fumes and with that an equal spread of a possible fire inside the tunnel and an even faster extinguishing of it. The top section of the oven is equipped with extra ventilation to force any solvent fumes out from this section of the oven. Also these ventilators are constantly being monitored.

### Designed for purpose

The Curano series curing ovens are designed for easy integration with DIMA's conformal coating systems and include operation friendly features like: motorized width adjustment of the pin chain conveyor, SMEMA compatibility, and enough top and bottom clearance for tall and complex PCB architectures.



Mesh covering IR panels



Sensors for SMEMA communication



Pressurized bottom chamber



Auto width adjustment

Curano IR-curing oven		
Type	UV-Curing unit	
DIMA article number	CO-461	CO-462
Dimension (L x W x H)	2750 x 1050 x 1500 mm	5000 x 1050 x 1500 mm
Tunnel length	2.17 meter heated length	4.43 meter heated length
Board size	Min. width: 50 mm (min. board: 25 x 50 mm). Max width: 455 mm	
Board clearance	100 mm top and 100 mm bottom	
Heating System	Infrared radiation	
Heating Power	Min. 8 kW per top or bottom heating section	
Zone Temperature	20 - 300°C top 20 - 250°C bottom	
Conveyor	Edge conveyor with 5mm pins (3 mm as option)	
Transport speed	Speed adjustable from 30 - 1000 mm / min.	
Safety	Pressurized bottom section with pressure monitoring; mesh on top of IR panels; ventilation with detection of top section.	
Controller	Microprocessor controller with USB interface. Speed and temperature profiling controlled via Touch-screen or by optional PC.	
User Interface	TFT-display with touch screen	
Communications	SMEMA available as an option	
Exhaust	External exhaust with airflow of 500-600 m <sup>3</sup> /h.	
Power	3 Phase 380/420 Volt	
Power consumption	2 kW per heating zone, max. power consumption can be limited by software	
Weight	600 kg	1200 kg

### Standard features

- 4 or 8 independent controlled heating zones
- Build-in temperature profiler
- Microprocessor controlled TFT touch screen
- 100mm top- and bottom clearance
- Light tower

### Optional features

- Bottom curing sections (set of 4 or 8 independent controlled heating zones)
- Safety set for solvent based coating materials
- SMEMA communication interface
- Humidity control
- Monitor with monitor stand and PC
- Oven Manager software (Windows® based)

For more detailed information, please contact our Sales Representatives. We are very willing to explain you the product application opportunities, all the available system configurations as well as our customized turn-key automation facilities. We are pleased to serve you with the best process technologies and going for the best system fit into your manufacturing processes. Your success is ours too!

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