Introduction of Coolveyor

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1. Concept of ECV-100 Coolveyor

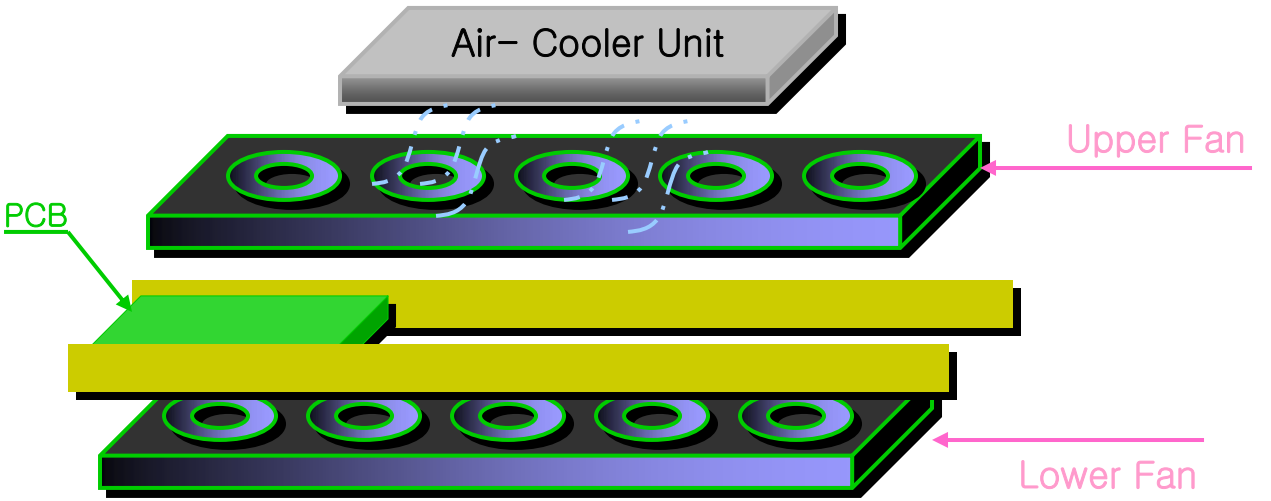
1) Introduction

The Coolveyor is designed to fall down a temperature from the heated board after the reflow soldering process. It will go down up to the working temperature. Especially, at the Automatic Optical Inspection (AOI) after reflow soldering process, the inspection of the board is impossible promptly in the production line or it will have the wrong result due to high temp. of the board. That's why the Coolveyor to be designed to solve that problem.

The Coolveyor will fall down a temperature 2°c per second by using the refrigeration system, cooling compressor and unit cooler.

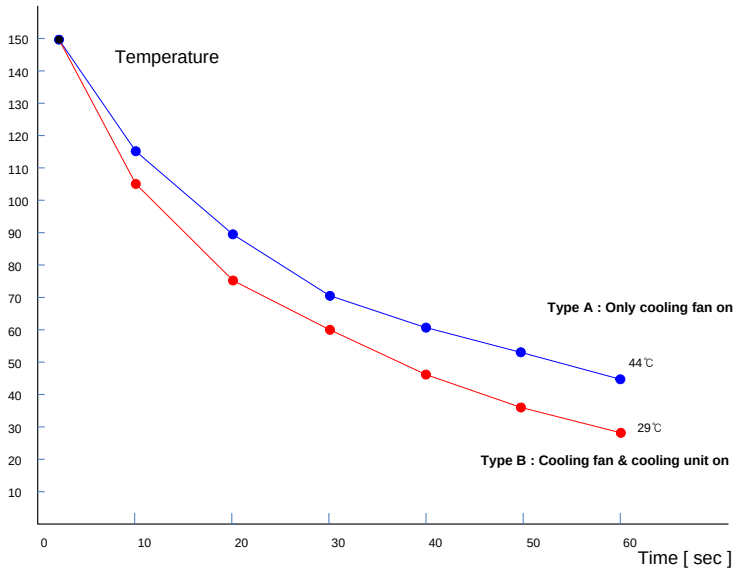
2) Cooling Procedure

< Inside View >



2. Features of ECV-100 Coolveyor

1) Refrigeration system : Cooling compressor and Unit cooler
(Refrigerant : Freon Gas R22)
2) Control of Flowing Cool Air : Blower Fan (Upper 5pcs / Lower 5pcs)
3) Unified Refrigeration System and cooling zone
- Room Type Structure
- Propriety Cooling zone temperature : 5 ~10 ℃
4) Heat-insulating Structure (Insulator Polyester)
5) PCB Temperature Down Rate : 2 ℃/sec.
6) Certified by CE



< Graph. 1 > Comparison Type A & Type B

3. Specification of ECV-100 Coolveyor

Standard Specification

Description		Details
Machine Spec.	Dimension	SL : 800(W) X 1,000(L) X 1,500(H)mm YL : 900(W) X 1,000(L) X 1,500(H)mm
	Pass Line	900mm (+/- 30mm) / 950 (+/-30mm)
	Weight	Approx 310kg
	Power	AC220/110, 50/60Hz,1phase
	P. Consumption	Maximum 400W
Conveyor Spec.	Width Adjust	Manual
	Speed Control	60Hz: 200mm/sec. 50Hz: 150mm/sec.
	Work	1~1.7m/min
Applicable PCB Spec.	Size	50 X 50mm ~ 350(W) X 430(L)mm
	Thickness	1 to 3mm
Cooling Device	Unit Cooler & Cooling compressor	Air-Cooling Type (Refrigerant : Freon Gas R22)
	Blower Fan	Upper : 5 pcs / Lower : 5 pcs
Room Type	Insulator	Polyester
	Temp. adjust	Max.-10 °c (Recommend : 5~10 °c)
Component Clearance	Upper	40mm from PCB Bottom surface
	Lower	30mm from PCB Bottom surface
Control Device	Operating Switch	Emergency, On/Off, Speed controller, Temp. controller, Cooler On/Off
	PLC	NAIS PLC (Matsushita)

Options

Auto With Adjustment	Width Touch Screen Panel