

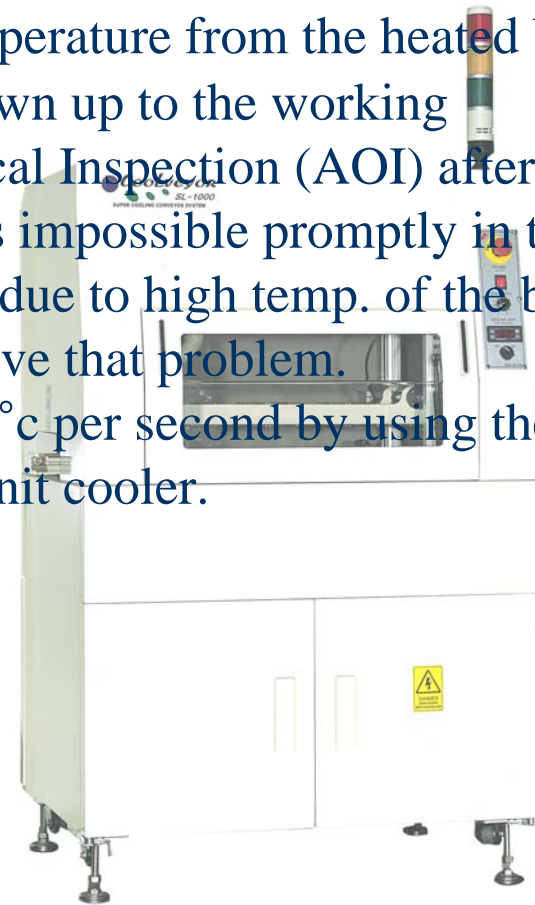
# Coolveyor : ECV-100



# 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  $2^{\circ}\text{C}$  per second by using the refrigeration system, cooling compressor and unit cooler.



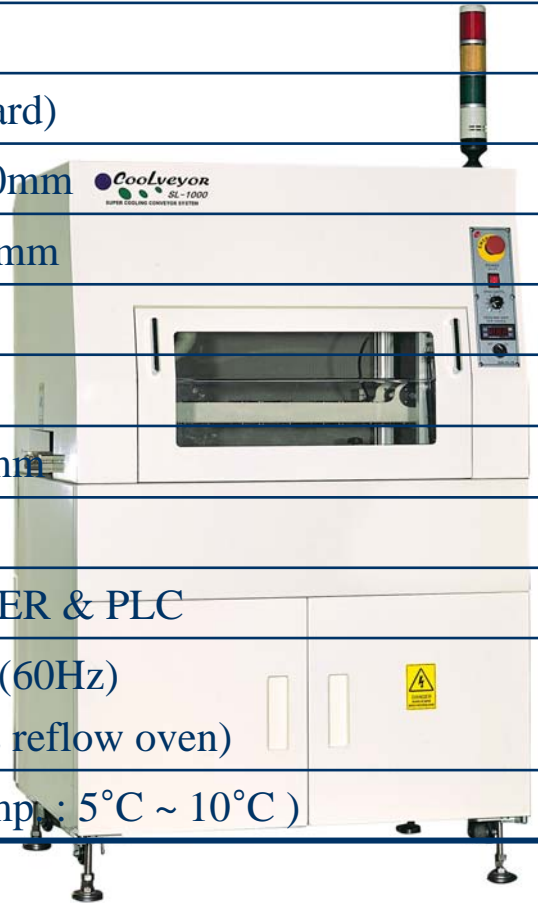
## 2. FEATURES OF COOLVEYOR

- ◆ Refrigeration system : Cooling compressor and Unit cooler
- ◆ Blower fan : Top 5 units and Bottom 5 units
- ◆ Refrigeration System and Cooling zone is unified
- ◆ Heat insulated structure
- ◆ Cooling zone temp. : 10° c to 5° c
- ◆ Temp. down rate : 2° c



### 3. SPECIFICATIONS (GENERAL)

Dimension	1,000(L)x 800(W) x 1,500(H)
Weight	310kg
Color	Ivory (EUNIL Standard)
PCB Size	Length : 50mm ~ 330mm
	Width : 50mm ~ 250mm
Flow direction	Left to right
Reference edge	Front
Pass Line	900mm +30mm/-15mm
Conveyor width adjust	Manual
Control Type	TEMP. CONTROLLER & PLC
Speed adjust	1M/min ~ 1.7M/min (60Hz) (Rec. speed : same as reflow oven)
Temp. adjust (Cooling zone)	Max. -10°C (Rec. temp. : 5°C ~ 10°C)



## 4. SPECIFICATIONS (UTILITY)

Power	AC 220V, 50/60Hz, 1 PHASE
Power Consumption	110KVA (Maximum)
Cooling Rate	2°C/sec
Cooling Capacity	279Kcal/hr
Cooling Compressor	1 Hp

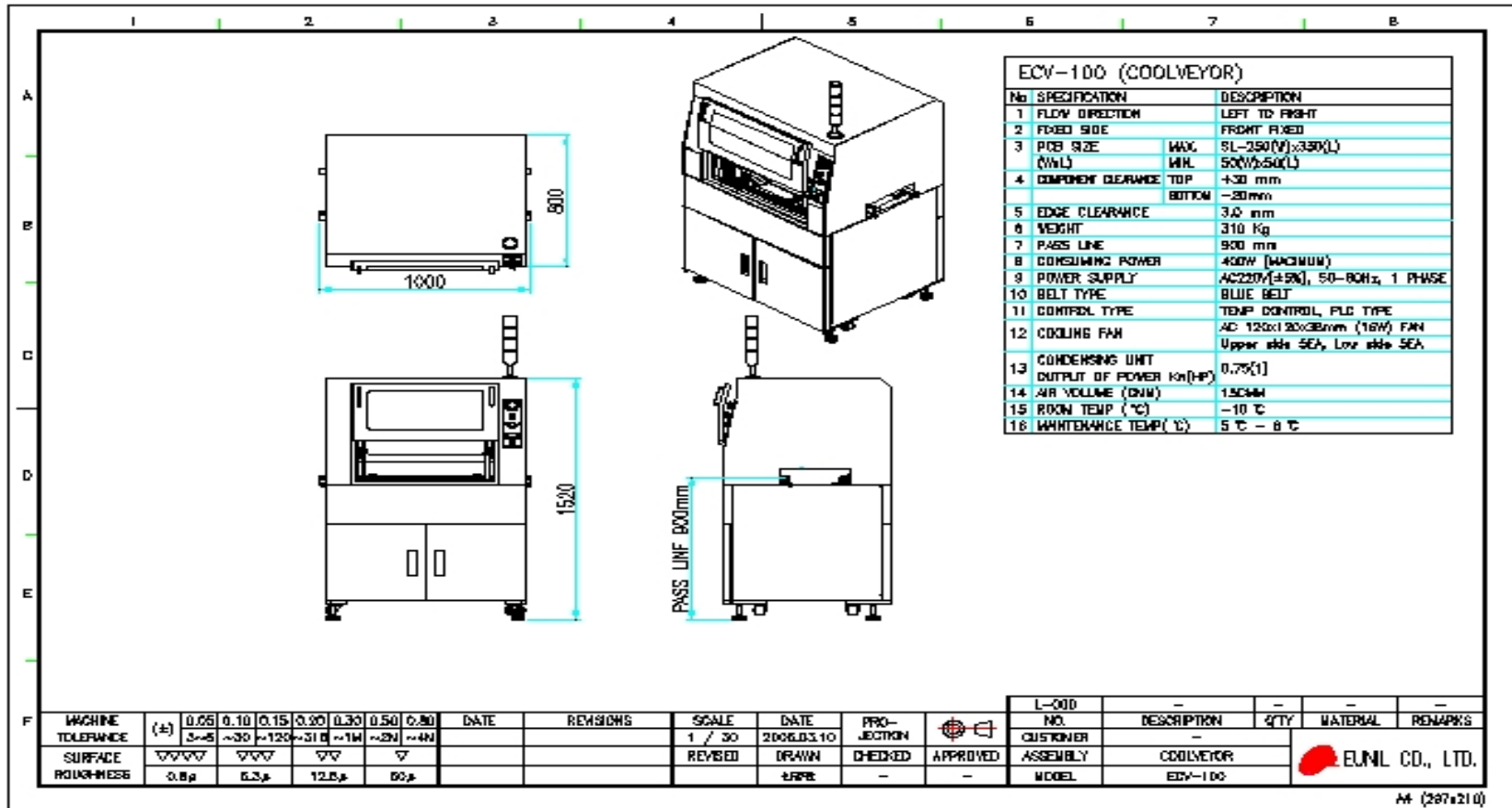


## 5. SPECIFICATIONS (Option)

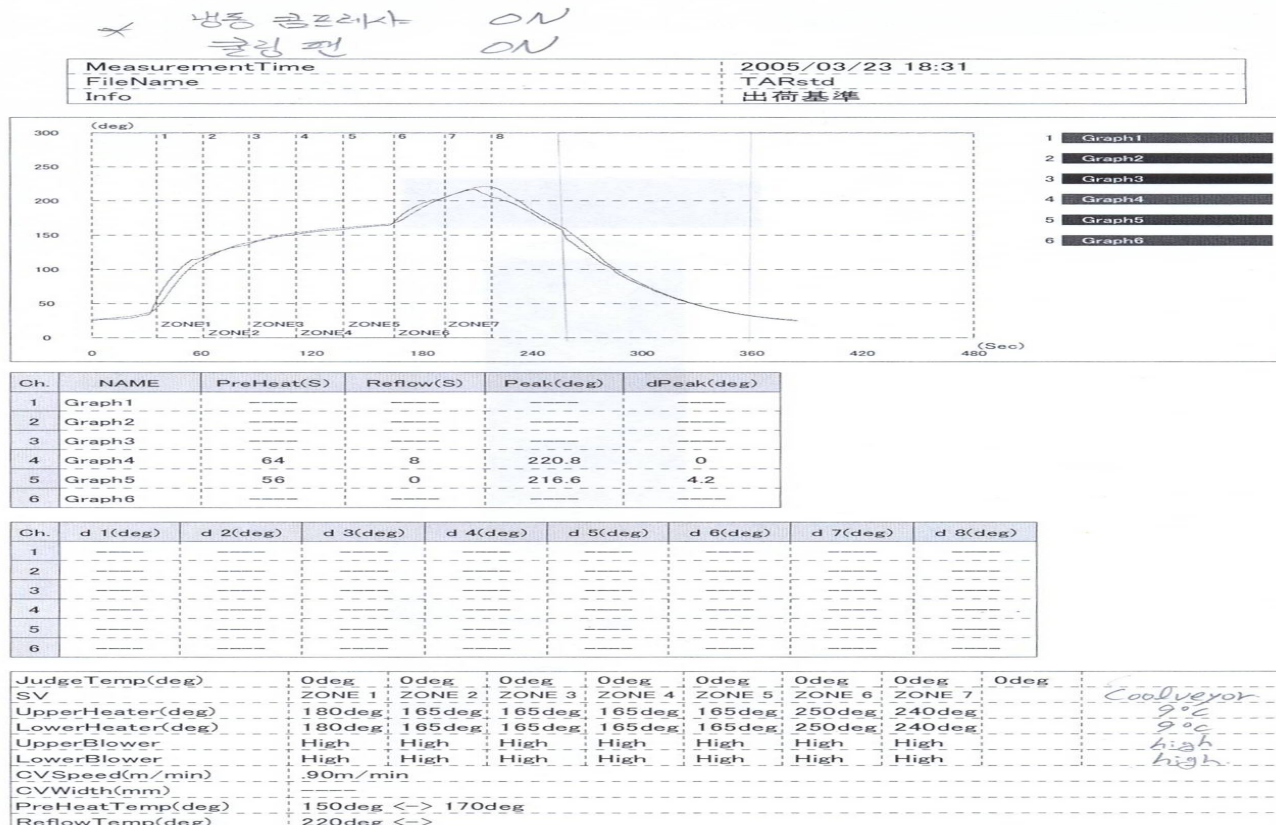
Flow direction	Right to left
Reference edge	Rear
Conveyor width adjust	Automatic
Operating panel	Touch Screen
Buffering	12 PCBs



# 6. SPECIFICATIONS (Drawing)



# 7. Temp. Profile ECV-100 : Cooling Compressor on & Cooling fan on

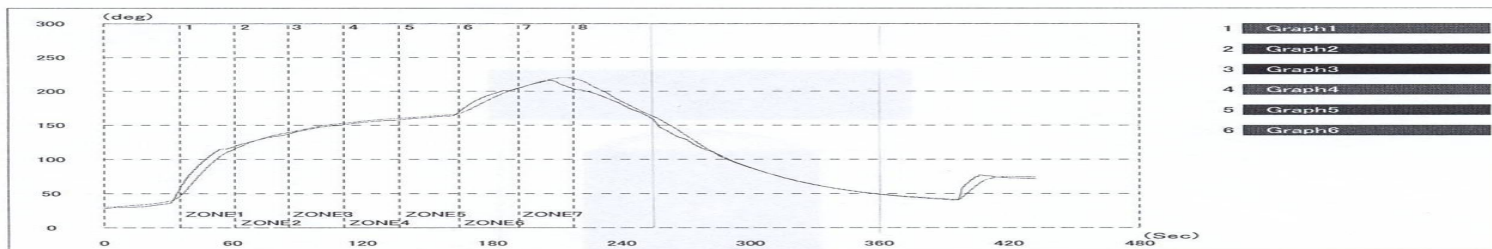




# 8. Temp. Profile ECV-100 : Cooling Compressor off & Cooling fan on

\* 냉동 콤프레사 OFF.  
출력 팬 ON

MeasurementTime 2005/03/23 17:40  
 FileName TARstd  
 Info 出荷基準

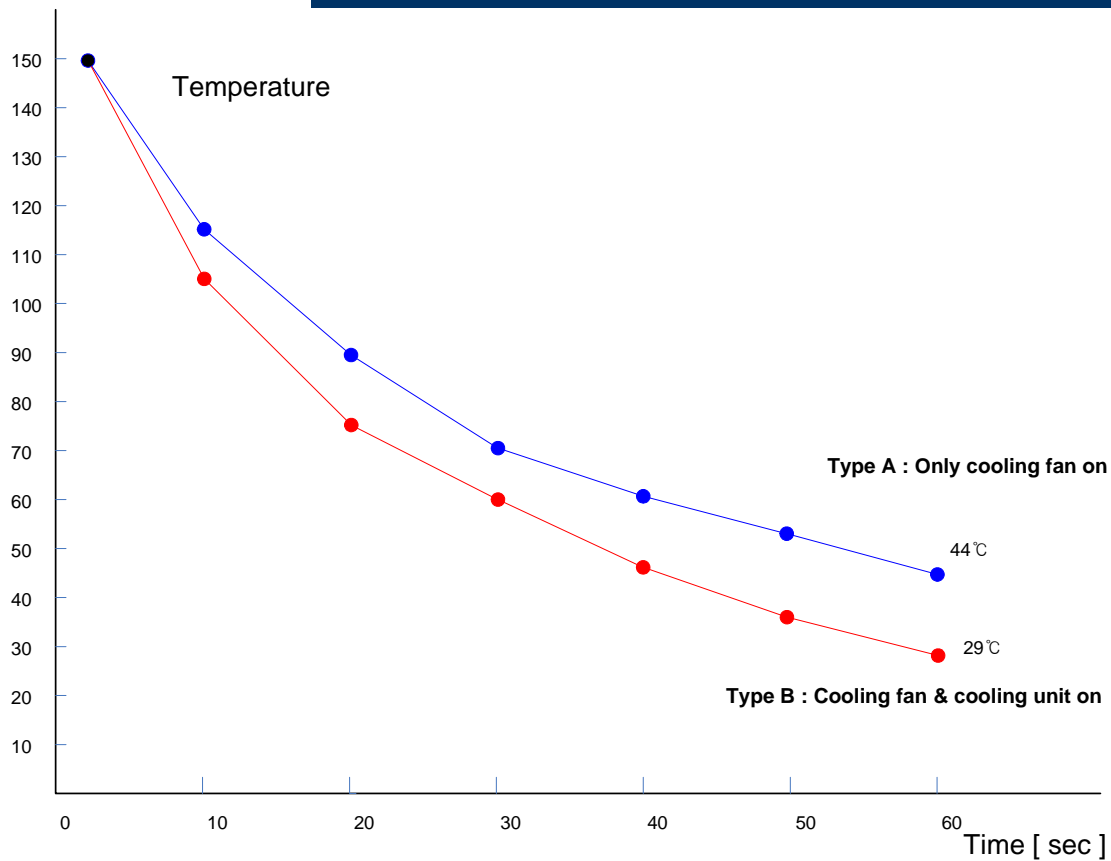


Ch.	NAME	PreHeat(S)	Reflow(S)	Peak(deg)	dPeak(deg)
1	Graph1	---	---	---	---
2	Graph2	---	---	---	---
3	Graph3	---	---	---	---
4	Graph4	0	0	0	---
5	Graph5	0	0	0	---
6	Graph6	---	---	---	---

Ch.	d 1(deg)	d 2(deg)	d 3(deg)	d 4(deg)	d 5(deg)	d 6(deg)	d 7(deg)	d 8(deg)
1	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---

JudgeTemp(deg)	Odeg	Odeg	Odeg	Odeg	Odeg	Odeg	Odeg	Odeg	Odeg	
SV	ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5	ZONE 6	ZONE 7	ZONE 7	---	
UpperHeater(deg)	180deg	165deg	165deg	165deg	165deg	250deg	240deg	240deg	---	Cooling Fan
LowerHeater(deg)	180deg	165deg	165deg	165deg	165deg	250deg	240deg	240deg	---	30°C → 7번ES
UpperBlower	High	High	High	High	High	High	High	High	---	29°C
LowerBlower	High	High	High	High	High	High	High	High	---	29°C
CVSpeed(m/min)	.90m/min	---	---	---	---	---	---	---	---	---
CVWidth(mm)	---	---	---	---	---	---	---	---	---	---
PreHeatTemp(deg)	150deg	<->	170deg	---	---	---	---	---	---	---
ReflowTemp(deg)	220deg	<->	---	---	---	---	---	---	---	---

## 9. Comparison of Temp. profile : ECV-100 & ECC-600 with cooling fan



< Graph. 1 > Comparison Type A & Type B

# 10. CE Certificate : ECV-100

ZERTIFIKAT ◆ CERTIFICATE ◆ 證書 ◆ CERTIFICADO ◆ CERTIFICAT



## EC-Attestation of Conformity

No. M8 06 01 55131 002

**Holder of Certificate:** EUNIL Co., Ltd.  
100-150, Galsan-Dong, Dalseo-Gu  
704-900 Daegu,  
KOREA

**Product:** Industrial Chiller  
(COOLVEYOR)

**Model(s):** ECV-100C

**Parameters:**

Rated input voltage:	220-240 VAC, 1 Phase
Rated frequency:	50/60 Hz
Rated input current:	8.5 A(Max.)
Protection class:	I
Dimension(LxWxH):	1000x800x1500 mm
Weight:	310 kg

**Tested according to:**

- EN ISO 12100-1:2003
- EN ISO 12100-2:2003
- EN 349:1993
- EN 418:1992
- EN 1050:1996
- EN 60204-1:1997

This EC Attestation of Conformity is issued on a voluntary basis according to Council Directive 98/37/EC relating to machinery. It confirms that the listed equipment (not annex IV equipment) complies with the principal protection requirements of the directive. See also notes overleaf.

**Test report no.:** MAEB0100258

**Date,** 2006-01-25



After preparation of the necessary technical documentation as well as the conformity declaration the required CE marking can be affixed on the product. Other relevant directives have to be observed.

Page 1 of 1