



**Kince**  
Automation



**KINCE WORLDWIDE CO., LTD.**

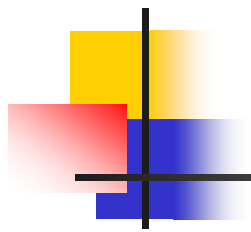
# **Wave Solder Super 350 EP Proposal**



# SUBJECTS

---

- STANDARD SPECIFICATIONS & FUNCTIONS
- SPECIAL FEATURE FOR LEAD FREE CSP、 BGA、 0201 ETC.
- POWER CONSUMPTION REPORT
- QUALITY TESTING REPORT FOR PRODUCTS BY KINCE' S OVENS
- MATERIAL LIST
- CUSTOMER REFERENCE



---

# **STANDARD SPECIFICATIONS & FUNCTIONS**





## KWA-350 SUPER EP Lead Free Wave Soldering M/C

<i>Model</i>	<i>KINCE KWA-350 SUPER EP</i>
<i>Items</i>	<i>Features &amp; Characteristics</i>
<b><i>PCB Requirement</i></b>	
<i>Board Width</i>	<i>Standard Machine W: 50~350mm</i>
<i>Component Height (Top &amp; Bot)</i>	<i>Bot 15mm, Top 80mm</i>
<i>Board Width Tolerance</i>	<i>±0.2mm</i>
<i>Conveyor Direction</i>	<i>Left &gt; Right ; Right &gt; Left (Selectable)</i>



## KWA-350 SUPER EP Lead Free Wave Soldering M/C

### *Fluxer*

<i>Spray Head</i>	<i>Japanese Nozzle, Spray Width 20~100mm adjustable, Spray Height 200mm~250mm, Self clean Feature</i>
<i>Pneumatic Components</i>	<i>SMC, Pressure Requirement : 0.34Mpar</i>
<i>Flux Refill</i>	<i>Automatic</i>
<i>Spray Head Transverse</i>	<i>Step Motor Driving Mechanism</i>
<i>Flux Amount Controls</i>	<i>Computer Controlled; Manual Adjust Available</i>
<i>Flux Fume Treatment</i>	<i>Flux Fume Collection Unit</i>



## KWA-350 SUPER EP Lead Free Wave Soldering M/C

### *Pre-heaters*

<i>Sectors &amp; Length</i>	<i>3 Zones For Infrared , 1800mm (600x3 ) Independent Control, 3 Zones For Hot Air (600x3 )</i>
<i>Temperature Control</i>	<i>PID Closed Loop Controlled</i>
<i>Heating Elements</i>	<i>Standard: Infrared , Option: : Radiant Heaters+Infrared</i>
<i>Temperature Deviation</i>	<i>Temperature Drops in <math>\leq 2^{\circ}\text{C}</math></i>
<i>Temp Control Accuracy</i>	<i><math>\pm 1.5^{\circ}\text{C}</math></i>
<i>Power Consumption</i>	<i>Standard : 13kw, Option Hot Air : 15.3kw</i>
<i>Temperature Compensation</i>	<i>1kw Philips Infrared in between Pre-heater &amp; Solder pot</i>



## KWA-350 SUPER EP Lead Free Wave Soldering M/C

### *Solder Pot*

<i>Pot Material</i>	<i>High Purity Titanium (99.405%)</i>
<i>Capacity</i>	<i>Standard : 480kg, Option : 600kg</i>
<i>Temperature Setpoint</i>	<i>Room Temp~350°C</i>
<i>Power Consumption</i>	<i>12kw</i>
<i>Pot Roll Out</i>	<i>Computer / Manual control selectable, limit swotch protected</i>
<i>Wave Displacement</i>	<i>Displacement of 60mm between 2 nozzles, temperature drops <math>\leq 30^{\circ}\text{C}</math></i>
<i>Nozzle Characteristic</i>	<i>User Friendly &amp; Hydrodynamic Design ; Lambda Nozzle width 40~80mm</i>
<i>Dross Amount</i>	<i>General : <math>\leq 3\text{kg}/8\text{h}</math> ; N2 Filled : <math>\leq 1.5\text{kg}/8\text{h}</math></i>
<i>Wave Motors</i>	<i>Italy Motor</i>
<i>Heating Elements</i>	<i>Imported Heating Element, 5 years warranty</i>



## KWA-350 SUPER EP Lead Free Wave Soldering M/C

### *Cooling*

<i>Cooling Method</i>	<i>External Cooling Machine</i>
<i>Compressor Power</i>	<i>1.5 HP</i>
<i>Flow Rate</i>	<i>2.5m<sup>3</sup>/min</i>
<i>Outlet Temperature</i>	<i>2-10°C</i>





## KWA-350 SUPER EP Lead Free Wave Soldering M/C

### *Conveyor*

<i>High Scratch Resistance</i>	<i>Special Treatment Aluminum Alloy</i>
<i>Parallelism</i>	<i>±0.2mm, Totally 3 toothed bar mechanism</i>
<i>Width Adjustment</i>	<i>Computer/ Manual controlled, accuracy ±0.20mm</i>
<i>Center Rail Support</i>	<i>From Inload to Outload, location adjustable</i>
<i>Finger Type</i>	<i>Standard : V grove Titanium finger ; Option : Flat Type</i>
<i>Conveyor Speed</i>	<i>0~1800mm/min</i>
<i>Speed Accuracy</i>	<i>Computer Closed Loop Control ± 8mm/min</i>
<i>Tensioning System</i>	<i>Tensioner</i>
<i>Motor Brandname</i>	<i>90W Panasonic Motor</i>
<i>Conveyor Inclination</i>	<i>With Inclination Indicator</i>



## KWA-350 SUPER EP Lead Free Wave Soldering M/C

### *Body Structure*

<i>Frame Structure</i>	<i>Welded structure, Dynamic design</i>
<i>Rear Covers</i>	<i>Removeable</i>
<i>Front Windows</i>	<i>Glass Type with Hydraulic suspension</i>
<i>Dimension</i>	<i>N2 M/C : L4200mm×W1250mm×H1700mm ; Standard : L3800mm×W1250mm×H1500mm</i>
<i>Weight</i>	<i>Approx.1580kg</i>



## KWA-350 SUPER EP Lead Free Wave Soldering M/C

### *Controls*

<i>Main Controls</i>	<i>Yan Xiang Industrial Computer With LCD Display</i>
<i>Receipe</i>	<i>Windows2000, English &amp; Chinese platform selectable</i>
<i>Pot Overtemp Protection</i>	<i>Overtemp Sensor</i>
<i>Overtemp Alert</i>	<i>Automatic Alert System</i>
<i>Overall Overtemp Protection</i>	<i>Overtemp Sensor with Thermal contactor</i>
<i>Operation Mode</i>	<i>2 operation mode.</i>
<i>Realtime Log File</i>	<i>Realtime record with printout feature</i>



## KWA-350 SUPER EP Lead Free Wave Soldering M/C

---

<i>Machine Status Log</i>	<i>Machine status record</i>
<i>Profiling</i>	<i>Profiling system with analysis feature</i>
<i>SPC Database</i>	<i>Capable to generate PCB report</i>
<i>Fault &amp; Alarm Log File</i>	<i>All fault &amp; alarm Log data</i>
<i>Emergency Cool Down</i>	<i>Auto cool down when emergency</i>
<i>Profiling Channels</i>	<i>3 Ch</i>
<i>Alarm Type</i>	<i>Overtemp, Board drop, Jam, Liquid low level alert,</i>
<i>Power Requirement</i>	<i>3 phase 5 cables 380V</i>
<i>Consumption</i>	<i>Infrared 26KW, Steady 6KW, Hot Air 29KW</i>



## KWA-350 SUPER EP Lead Free Wave Soldering M/C

### ***N2 System***

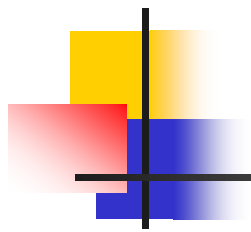
<i>N2 Consumption</i>	<i>N2 consumption, 500PPM for 15-25M<sup>3</sup>/H</i>
<i>Flux Filtration</i>	<i>Equipped together with N2 system, Enclosed structure, no contamination to PCB</i>
<i>Cooling</i>	<i>Dehydrated Cooling</i>

### ***Service Commitment***

<i>Warranty Period</i>	<i>2 Years Free warranty</i>
<i>Service Charges</i>	<i>None but Breakdown Caused by Human Mistakes Excluded, Charged As in-coming price When expired.</i>
<i>Response</i>	<i>Within 3 hrs</i>
<i>Training</i>	<i>Free Software upgrade and technical training</i>

### ***Others***

<i>User Reference</i>	<i>Shanghai Panasonic/Tian Bao Group/Power-one Philips/Calcom/O Li &amp; etc....</i>
-----------------------	--



---

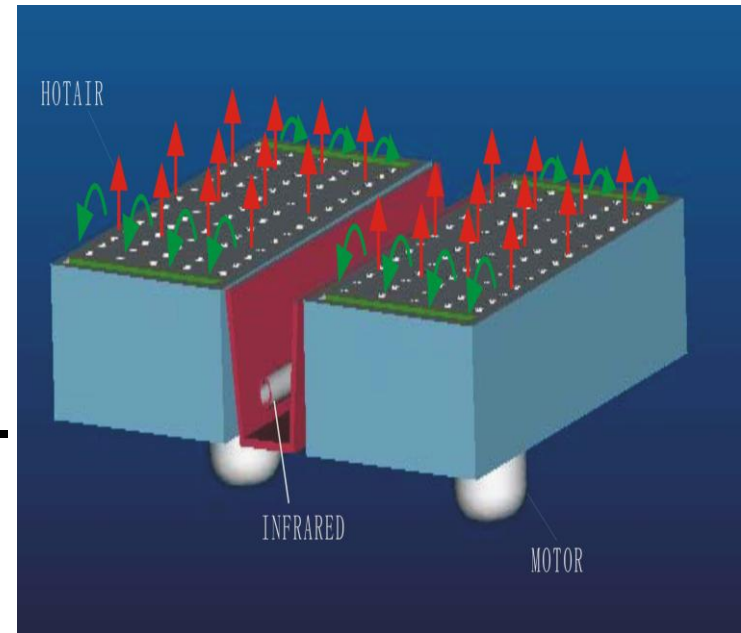
**SPECIAL FEATURE FOR LEAD FREE CSP、BGA、  
0201 ETC.**



# Fulfill Lead Free Requirement

## Product Highlight

1) Hot Air Convection Type Pre-heaters, High Consistency Of Temperature Ramp-Up, Capable To Activate VOC Free Liquid Flux, Besides, Having benefit Of No Over-Temp Condition Occurs.  $\pm 2^{\circ}\text{C}$  Temperature Deviation In Across Direction.



# Fulfill Lead Free Requirement



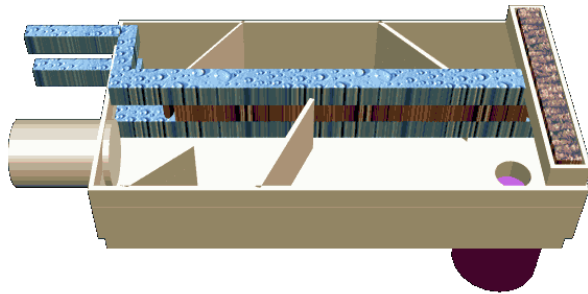
**2) Infrared Compensation System Installed In Between Pre-heaters, Pre-heaters & Solder Pot. Enhance Consistence Of Heat up Process, Avoid Thermal Shock To Components & Board.**





# Fulfill Lead Free Requirement

---

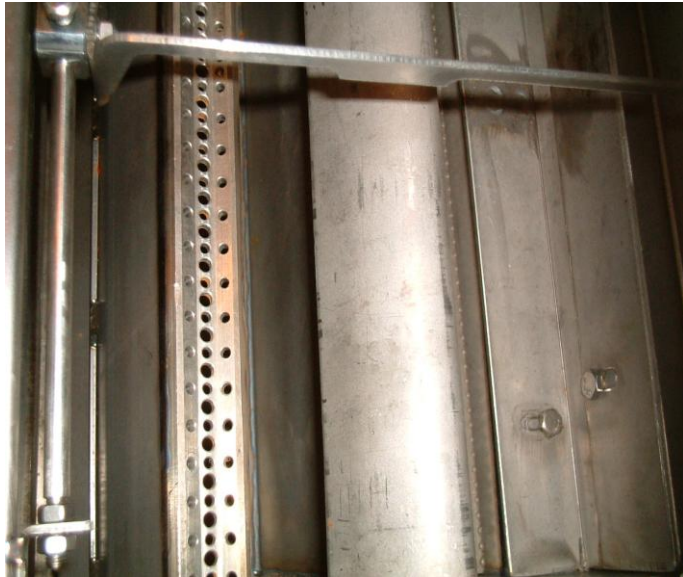


**3)Cooling type Flux  
filtration unit can be more  
efficient than using water  
cooling type, fulfill  
requirement of ISO 14000**



# Fulfill Lead Free Requirement

---



**4) Hydrodynamic Designed Solder Nozzles, Efficiently Reduce Surface Tension Of Liquidus Metal For Soldering Of High Density & Fine Pitch Components. Solder Dross Amount Just  $\leq 3\text{Kg}/8\text{hrs}$**

# Fulfill Lead Free Requirement



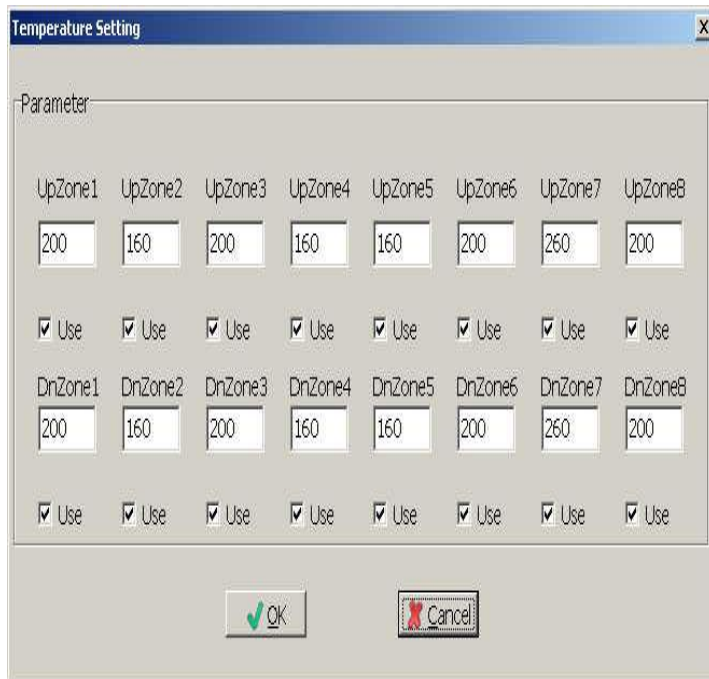
**5) Industrial cooling machine with dehydration feature, it is not required to install heat exchanger inside cooling zone, no condensed water drop and eliminate the disadvantage of flux condensed on surface of exchanger, which lower down cooling efficiency. Highly reduced possibility of re-oxidation. Outlet temp in between 2°~10° C, which offer cooling gradient in 4°~6° C, solution for Fillet Lifting & Lead Pockets.**

# Fulfill Lead Free Requirement



**6) Stand Alone Fluxer Offer Higher Safety Pre-caution Throughout Manufacturing Process, Motor Driving Spray Head Mechanism Guaranteed Higher Accuracy Of Spray Amount And Coverage. Convenient Treatment For Flux Fume Based On Environmental Process Control**

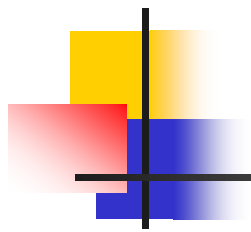
# Fulfill Lead Free Requirement



The image shows a 'Temperature Setting' dialog box with a title bar containing a close button (X). The dialog is divided into two main sections: 'UpZone' and 'DnZone'. Each section contains eight columns representing different zones. Each column has a temperature input field and a 'Use' checkbox. The 'UpZone' section has temperature values of 200, 160, 200, 160, 160, 200, 260, and 200. The 'DnZone' section has temperature values of 200, 160, 200, 160, 160, 200, 260, and 200. All 'Use' checkboxes are checked. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

UpZone1	UpZone2	UpZone3	UpZone4	UpZone5	UpZone6	UpZone7	UpZone8
200	160	200	160	160	200	260	200
<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use
DnZone1	DnZone2	DnZone3	DnZone4	DnZone5	DnZone6	DnZone7	DnZone8
200	160	200	160	160	200	260	200
<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/> Use

**7) Intelligent power reduction system, when not in production for a short period of time, zone temperature will maintain in 100°C and air flow to 30% efficiency, if required to fall in production again, temperature and air flow will back to setpoint within 10 min.**



---

# POWER CONSUMPTION REPORT





**Kince**  
Automation

## Power Consumption Reference Chart

KWA-350 SUPER EP Overall Consumption 26KW (Remarks: Intelligent Power Reduction Start-up: 12KW)

Requirement: 5 cables 3 Phase AC380V

R S T

Current Meter

Setpoint	Solder Pot	270°C
	Pre- Heatep #1	270°C
	Pre- Heatep #2	270°C
	Pre- Heatep #3	270°C

Remarks:

1. Current Meter: VICTOR Model—DM6266
2. Voltmeter: HOUEY Model--DT 862
- 3\*. Temperature goes steady in 3.5hrs,
4. Shaded Portion indicated that temperature goes steady



Startup consumption:

Actual Value (Advance Heat Up)	Time (Min)	* Time (Min)																														
		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	
R Ph (Amp)	0	0	0	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
S Ph (Amp)	0	0	0	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	50	50	50	27	27	27	27	27	27	27	27	27	27
T Ph (Amp)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	37	37	37	27	27	27	27	27	27	27	27	27	27	27
Consumption (KWH)	0.27	0.72	1.1	2.1	4.1	5.6	7.1	8.6	10	11.5	13	14.5	16	17.5	19	20.5	22	23.5	26	28.5	31	32	33	34	35	36	37	38	39	40	40	

Consumption  
After Temp  
Steady

Approx: 6KW.

Steady: R Ph in average of 8A, Consumption  $220 \times 8 = 1.8KW$

S Ph in average of: 11A, consumption  $220 \times 11 = 2.4KW$

T Ph in average of 8A, consumption  $220 \times 8 = 1.8KW$

R Ph+S Ph+T Ph Total Consumption =  $U_r \cdot I_r + U_s \cdot I_s + U_t \cdot I_t = 220 \times 8 + 220 \times 11 + 220 \times 8 \approx 6KW$

24 Hours  
operation

Approx: 154KWH

Startup: 31KW/h

Steady:  $20.5 \times 6 \approx 123KWH$

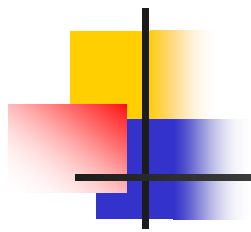
24hours = startup + steady =  $31 + 20.5 \times 6 \approx 154KWH$

25 working  
days  
(Industrial  
charge in  
RMB 1/unit)

Approx: 3850RMB

25 working days (24 hours) current expenses =  $25 \times 154 \times 1 \approx 3850RMB$

Remarks: All value may have deviation of 5%



---

# **QUALITY TESTING REPORT FOR PRODUCTS BY KINCE'S OVENS**





深圳 国际电子器件有限公司作业指导书

产品名称:	CD150P1(23"&26")	客户名称:	PHI
产品工艺:	功能测试	客户产品文件编号:	
		文件编号:	02003
			备注

目的:规定了PHILIPS IIPS 23"及26"产品的功能测试所需的仪器设备及其设定,以及测试步骤。  
 适用范围:对所有 CD150P1的产品功能测试有效。

一.测试仪器设备:

测试夹具及连接线;可调交流电源;两路示波器(TEK 224);功率分析仪(PM100);  
 负载器(Quad Electronic Load);数字万用表(GW-8145\*六台)。

二.仪器设定:

- 1.将电源输入插头插入夹具后面的电源插座;
- 2.将万用表分别与测试夹具后的香蕉插头对应插接好;
- 3.将测试夹具前面板的所有开关置于"OFF"端,打开外接仪器设备的电源;
- 4.将万用表设定为直流电压档;

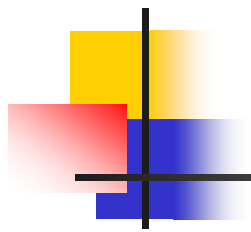
三.测试步骤:

- 1.将产品放于夹具上,使夹具上的四个卡扣卡住PCB板;
- 2.打开电源开关,将输入电压调整为90VAC,观察万用表"400V"上显示电压应该在126~132V之间.此时3.3V电压应有输出,其电压应在3.135~3.465之间.
- 3.打开ON/STB开关,将连接到负载器上的24V及3.3V负载调整均调整为0.7A.同时观察所有电压均应有输出.各组电压输出范围为:
  - 400V-----390~410V
  - 3.3V-----3.135~3.465V
  - 24VL-----22.8~25.2V
  - 12VL,12VDVD,12VAL-----114.~12.6V
- 4.将输入电压调整为265VAC,各组电压输出应同样符合上述要求;
- 5.将,"ON/STB"开关置"OFF",将3.3V负载调整为0A,再将"OVP FLYBACK"开关置"ON"观察3.3V输入电压应小于4.2V;再把该开关置"OFF".
- 6.将"ON/STB"开关置"ON",将3.3V负载调整为0.7A,将24VL负载调整为0A,再将"OVP LLC"开关置"ON",观察除3.3V之外各组输出电压应关闭输出.
- 7.将"ON/STB"开关关闭再打开,将"OCP FLYBACK"开关置"ON",观察3.3V输出电压应不断跳变,但不会关闭;将开关复位为"OFF";
- 8.将24VL负载调整为4.7A,观察24VL电压应不断跳变,但不会关闭.最后将负载调整为0.7A.
- 9.关闭输入电压,观察PWR\_DN信号与3.3V电压下降时间差(关机时间)应大于15mS.同时"400V"电压应降至20V以下.
- 10.将所有开关置"OFF",取下产品,于指定位置做上记号,完成一台产品的测试.
- 11.重复步骤1~10,继续下一台产品的测试.

起草人:	检查人:	批准人:	Yan Wu	号:	02003
部	工程部	部门:	工程部	版本:	A1
时	2004-3-18	时间:	2004-3-18	时间:	2004-3-18

东莞市建时达自动化设备厂





---

## **MATERIAL LIST**



# Reference Only

## Wave Soldering Electrical BOM

Items	Description	Circuit Code	Brand Name	Origin
1	Emergency Switch	ES	Schneider	France
2	Push Button	PB	Schneider	France
3	Main Switch	CBO	FUJI	Japan
4	Light Beam Sensor	PS	OMRON	Japan
5	Light Beam Sensor	PS	Yangming	Taiwan
6	Limit Switch	LS	OMRON	Japan
7	Limit Switch	LS	OMRON	Japan
8	Proximity Switch	PS	Autonics	Korea
9	Time Delay Fuse	FU	Minguang	Taiwan
10	Invertor	INV	AELTA	Taiwan
11	Temp Controller	TC	LAIYIN	Japan
12	Standby Power Supply	UPS	CHAMPION	USA



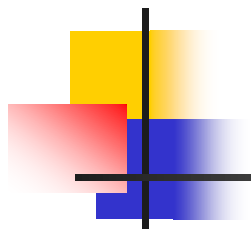
## Wave Soldering Electrical BOM

Item	Description	Circuit Code	Brand Name	Origin
13	Thermalcouple	TC	LAIYIN	Korea
14	Power Supply	PWR	Heng Fu	Shenzhen
15	Pot Up/DownMotor	WTR	B&M	Italy
16	Conveyor Motor	WTR	Panasonic	Japan
17	Width Motor	WTR	Panasonic	Japan
18	Spray Motor	WTR	Panasonic	Japan
19	Wave Motor	WTR	B&M	Italy
20	Pot In/Out Motor	WTR	Panasonic	Japan
21	SSR	SSR	CARLO	Swiss
22	Dryer (Option)	LG	Jia Sheng	China (Joint Venture)
23	Industrial Computer	PC	Yan Xiang	China
24	LCD Display	LCD	Imported	Korea
25	U Type Heating Element	HT	FANREN	Korea (Joint Venture)



## Wave Soldering Electrical BOM

26	Infrared Element	HT	FANREN	Korea (Joint Venture)
27	Relay	R	OMRON	Japan
28	Thermalcouple	TE	LAIYIN	Korea
29	Contactora	CT	FUJI	Japan
30	Levelling Switch	DDT	SYNTEX	Taiwan
31	Solvent Pump	SSR	CARLO	Hong Kong
32	Solenoid	CB	Schneider	China (Joint Venture)
33	PLC	PLC	Panasonic	Japan
34	Infrared Element	HT	PHILIPS	Holand
35	O2 Analyser (Option)	GS	ENCEL	UK (Joint Venture)



















---

## **CUSTOMER REFERENCE**



## 排名不分先后

	<p>富士胶片（中国）有限公司 FujiFilm China.Inc.</p>		<p>西门子德马泰克生产（中国）有限公司 Siemens Ltd., China</p>
	<p>三洋电机有限公司 Sanyo Electric Co.,LTD.</p>		<p>松下电工（上海）有限公司 ShangHai Panasonal Electrician Co.,LTD.</p>
	<p>广东现代摩比斯机电有限公司 GUANGDONG HYUNDAI MOBIS CO.,LTD.</p>		<p>桑达飞利浦国际电子器件有限公司 POWER-ONE SED CHINA JV</p>
	<p>珠海格力电器股份有限公司 Gree Electric Appliances,Inc.of Zhuhai</p>		<p>康佳电子有限公司 Konka Electronics co.,ltd.</p>
	<p>广州南方高科有限公司 Guangzhou Soutec (Group) Technology Co.,LTD</p>		<p>德昌电机工业制造厂有限公司 Johnson Electric Industrial Manufactory Limited</p>
	<p>德赛电子（惠州）有限公司马Desay Electronics (Huizhou) Co.,Ltd.</p>		<p>日本京滨汽车装置有限公司 Japan Keihin Engine Management System Co.,LTD.</p>
	<p>天祥电子有限公司 Sky Fortune Electronics Co.,LTD.</p>		<p>胜美达集团 Samida Gorporation</p>
	<p>赛尔康（深圳）有限公司 Salcomp (Shenzhen) Co., Ltd.</p>		<p>精电有限公司 VARITRONIX LIMITED</p>



排名不分先后

	<p>金宝电子（中国）有限公司 KINPO INTERNATIONAL LIMITED</p>		<p>罗技电子（上海）有限公司 LOGITECH ELECTRONIC CO.,LTD.</p>
	<p>华阳通用电子有限公司 FORYOU MULTIMEDIA ELECTRONICS CO.,LTD.</p>		<p>系统（台湾）电子有限公司 Sysgration Taiwan Electronic Co.,LTD.</p>
	<p>银溢（日本）电子实业有限公司 SILVER (Japan) Electronic Co.,LTD.</p>		<p>深圳市航盛电子股份有限公司 Shenzhen Hangsheng Electronic Co., Ltd.</p>
	<p>新加坡斯比泰集团 Singapore Speedy-Tech Group</p>		<p>国光电器股份有限公司 Guoguang Electric Co.,LTD.</p>
	<p>澳利电器制品有限公司 ARLEC ELECTRICAL PRODUCTS CO.,LTD.</p>		<p>泛邦电子厂 Sinobond Electric Co.,LTD.</p>

# 通过CE认证



**ISTITUTO GIORDANO S.p.A.**  
SINCE 1959 RESEARCHES AND CERTIFICATIONS EXPERTS

**Headquarters**  
Via Risani, 2  
47148 BELLARIA (RN) Italy  
Tel: 0539-0541-343030  
Fax: 0539-0541-343040  
istgi@giordano.it giordano.it

**Shanghai representative office**  
Rm.2107, Yuyuan Rd., No.172,  
Shanghai, China 200040  
Tel: 0086-21-5371-60388  
Fax: 0086-21-5348-7398  
info@igchina.com

- OFFICIAL ACKNOWLEDGEMENTS:**  
"Notified Body" no. 0407 for the following European Directives:
- European Directive 94/56/EC concerning recreational craft
  - European Directive 86/702/EEC relating to machines
  - European Directive 89/763/EEC concerning the safety of toys
  - European Directive 92/42/EEC on efficiency requirements of hot water boilers heated by combustion of gaseous fuels
  - European Directive 90/269/EEC relating to appliances bearing pressure
  - European Directive 87/404/EEC relating to simple pressure vessels
  - European Directive 92/32/EEC concerning pressure equipment
  - European Directive 1999/46/EC on transportable pressure equipment
  - European Directive 89/391/EEC relating to occupational products
  - European Directive 2001/48/EC on automatic admission in the environment for machinery and equipment
  - European Directives 80/686/EEC and 80/685/EEC on the evaluation of machine equipment
- MEMBERSHIP OF INTERNATIONAL SOCIETIES:**
- ALP - Association of Independent Test Laboratories
  - ASHRAE - American Society of Heating, Refrigeration and Air Conditioning Engineers Inc.
  - ASTM - American Society for Testing and Materials
  - EA - European co-operation for Accreditation
  - EASIM - Research Association for Managers and Administrators
  - EASQ - European Association of Quality Assurance and Testing Organisations
  - ESCO - European Group of Official Laboratories for the Testing
  - IAF - International Accreditation Forum
  - IFT (Institut für Fernstudien e.V.) Laboratory testing and surveillance as company on product certification procedures for the release of the "IFT-Gütesiegel" on longer-reaction-time devices
  - IIR - International Institute of Industrial Certification: Testing of product quality, safety systems and release the "ICM Mark"
  - IAS - International Laboratory Accreditation Cooperation
  - IMQ (Institute of Quality Marking): Testing of distribution systems for the product and release the "IMQ-GIS Quality Mark" on food
  - ICTM/AVK by thermal insulation (over top mark only) - Authorisation issued 02/07/02 controlled by SGS for measurement of thermal conductivity within voluntary product certification programme CEM 82/00/02 for insulation materials

ISTITUTO GIORDANO S.p.A.  
Cod. Fisc. P.IVA: 00 549 2540 420  
R.E.A. nr. C.I.A.B. 0783 105786  
Registro Imprese Roma n. 026490434039  
Cap. Soc. € 400.000 i.v.

**CLASSES:**  
This document only refers to the specifications stated in the text. This document cannot partially be reproduced, approval written excepted of the laboratory.

## TYPE-EXAMINATION CERTIFICATE

No. 28545/477/C  
Contract No. CHIG6503309

This is to certify that the products identified below are in compliance with the essential requirements of the following standards, according to European Directive 98/37/EC (MD).

Description:  
**LEAD FREE SOLDERING MACHINE**

Modeli/Types\*:  
**KWA-1225 Super EP, KWA-1225 Super Pro, KWA-350 Super EP, KWA-350 Super Pro**

Standards:  
**EN 292-1:1991, EN 292-2:1991 + A1:1995, EN 60204-1:1997**

Applicant:  
**KINCE WORLDWIDE CO., LTD.**

Address:  
**Kinco Industrial Bldg, You Yi Road Chong Tou Management Zone, Chang An, Dongguan, Guangdong Prov., China**

According to the procedures established by European Directive 98/37/EC (MD) the Applicant can proceed with the CE marking of the above mentioned products signing the declaration of conformity and affixing the following symbol



Place and date of issue  
Bellaria Igea Marina, 28 July 2005

Chief Executive Officer  
Dott. Arch. William Giorgetti  
*William Giorgetti*

This certificate refers to the conformity to the above Directives.  
It does not exclude the products having to be in compliance with other applicable Directives.  
(\*): Refer to Annex for products specifications. Sheet No. 1 of 2



## Annex to TYPE-EXAMINATION CERTIFICATE No. 28545/477/C

Product: **LEAD FREE SOLDERING MACHINE**

### Technical specifications

Models	KWA - 1225 Super EP	KWA - 1225 Super Pro	KWA - 350 Super EP	KWA - 350 Super Pro
<b>1. Specifications</b>				
Process Width [mm]	500	500	350	350
Selpoint Max [°C]	310	310	350	350
Profiling Channels	3	6	3	6
Operation Platform	Windows 2000	Windows 2000	Windows 2000	Windows 2000
No. Of Cooling Zones	2	2	2	2
Temp Accuracy [°C]	+/- 1.5	+/- 1.5	+/- 1.5	+/- 1.5
Temp Deviation Across [°C]	+/- 2	+/- 2	+/- 2	+/- 2
Fluxer Type	N/A	N/A	Spray type	Spray type
Solder Pot Capacity [kg]	N/A	N/A	420	420
<b>2. Dimensions (L * W * H) [mm]</b>				
Width	4830	4830	4870	4870
Length	1440	1500	1250	1450
Height	1680	1650	1800	1820
Weight [kg]	2330	2500	2100	2250
4. Power [kW]	< 73	< 73	< 28	< 28

Place and date of issue  
Bellaria Igea Marina, 28 July 2005



Chief Executive Officer  
Dott. Arch. William Giorgetti  
*William Giorgetti*

Sheet No. 2 of 2

# 通过CE认证



**ISTITUTO GIORDANO**  
S.p.A.

**ISTITUTO GIORDANO S.p.A.**  
SINCE 1959 RESEARCHES AND CERTIFICATIONS EXPERTS

**Headquarters**  
Via Rosini, 2  
47814 BELLARIA (RN) Italy  
Tel. 0584 0541-043020  
Fax 0584 0541-345540  
istitutojiordano@giordano.it

**Shanghai representative office**  
Rm. 2707, Yuwan Rd., No.172,  
Shanghai, China 200040  
Tel. 0086-21-52140386  
Fax 0086-21-52148708  
info@china.com

---

**TYPE-EXAMINATION CERTIFICATE**

No. 28546/478/C  
Contract No. CHIG0503310

*This is to certify that the product identified below is in compliance with the essential requirements of the following standards, according to European Directive 98/37/EC (MD).*

Description:  
**SEMI-AUTO SOLDER PASTE PRINTING MACHINE**

Model/Type\*:  
**KWA-1016**

Standards:  
**EN 292-1:1991, EN 292-2:1991 + A1:1995, EN 60204-1:1997**

Applicant:  
**KINCE WORLDWIDE CO., LTD.**

Address:  
**Kinco Industrial Bldg. You Yi Road Chong Tou Management Zone, Chang An, Dongguan, Guangdong Prov., China**

*According to the procedures established by European Directive 98/37/EC (MD) the Applicant can proceed with the CE marking of the above mentioned product signing the declaration of conformity and affixing the following symbol*




Place and date of issue  
Bellaria Igea Marina, 29 July 2005

Chief Executive Officer  
Dott. Arch. **Villem Giorgetti**  
*V. Giorgetti*

*This certificate refers to the conformity to the above Directive.  
It does not exclude the product having to be in compliance with other applicable Directives.*

Sheet No. 1 of 1

**OFFICIAL ACKNOWLEDGMENTS:**


- Notified Body n. 0427 for the following European Directives:
- European Directive 94/56/EC concerning recreational craft.
- European Directive 90/269/EEC relating to machinery.
- European Directive 90/270/EEC concerning the health of the worker.
- European Directive 92/55/EEC on safety lighting requirements of new hot water boilers fueled by combustible or gaseous fuels.
- European Directive 90/269/EEC relating to explosion-protective gas-fired equipment.
- European Directive 97/04/EEC relating to simple pressure vessels.
- European Directive 97/23/EEC concerning pressure equipment.
- European Directive 1989/39/EEC on electromagnetic compatibility.
- European Directive 90/269/EEC relating to machinery products.
- European Directive 2002/42/EC on acoustic emission in the environment for machinery and equipment.
- European Directives 90/269/EEC and 98/37/EC on the evaluation of machinery equipment.

**MEMBERSHIP OF INTERNATIONAL SOCIETIES:**

- ALP - Association of Independent Test Laboratories.
- ASIMEL - American Society of Heating, Refrigerating and Air Conditioning Engineers.
- ASTM - American Society for Testing and Materials.
- CA - European Co-operation for Accreditation.
- CEAS - Research Association for Managers and Administrators.
- CEAS - European Association of Research and Technology Organizations.
- ESG - European Group of Official Laboratories for Tensile Testing.
- IAP - International Accreditation Forum.
- IFT (Institut für Feststofftechnik e.V.) Laboratory testing and surveillance of company on product certification procedures for the release of the "IFT" Quality Mark on "burger-reinhalte" (beer).
- ICM (International Institute of Chemical Certification) Testing of product certification schemes and release of the "ICM" Mark.
- ILAC - International Laboratory Accreditation Cooperation.
- IMC (Institute of Quality Marking) Testing of certification schemes for fire and protection and release of the "IMC-CIG" Quality Mark on fire.
- IVT (Institut für Technische Versuchs- und Prüftechnik) Testing of product certification schemes and release of the "IVT" Quality Mark on fire.
- IVT (Institut für Technische Versuchs- und Prüftechnik) Testing of product certification schemes and release of the "IVT" Quality Mark on fire.
- IVT (Institut für Technische Versuchs- und Prüftechnik) Testing of product certification schemes and release of the "IVT" Quality Mark on fire.

**ISTITUTO GIORDANO S.p.A.**  
Via Rosini, 2  
47814 BELLARIA (RN) Italy  
Tel. 0584 0541-043020  
Fax 0584 0541-345540  
C.A.B. n. 0584040400  
C.A.B. n. 0584040400

**CLAUSES**  
This document only refers to the equipment or material submitted to me. The document cannot partially be reproduced, approval written excepted of.




Annex to  
**TYPE-EXAMINATION CERTIFICATE No. 28546/478/C**

*Product: SEMI-AUTO SOLDER PASTE PRINTING MACHINE*

*Technical specifications*

Models	KWA-1016
<b>1. Specifications</b>	
Printing Area [mm x mm]	300 x 400
Stencil Size [mm x mm]	550 x 650
Printability [mm pitch]	0.3
Controls	PLC
No. Of Squeegee	2
Repeatability [mm]	+/- 0.020
<b>2. Dimensions (L x W x H) [mm]</b>	
Width	650
Length	860
Height	1630
<b>3. Weight [kg]</b>	250
<b>4. Power [kW]</b>	100



Place and date of issue  
Bellaria Igea Marina, 29 July 2005

Chief Executive Officer  
Dott. Arch. **Villem Giorgetti**  
*V. Giorgetti*

Sheet No.