Aurotek®

A Complete Solution from One Source

PCB Separator *Series*

The Best Solution for PCB Depaneling

HIGH PRECISION

PCB Separator *Series*

The Best Solution for PCB Depaneling



HIGH PRECISION





PCB Separator *Series*

The Best Solution for PCB Depaneling



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Desktop PCB Separator

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Twin Table PCB Separator

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In-Line PCB Separator

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r-S330 DT

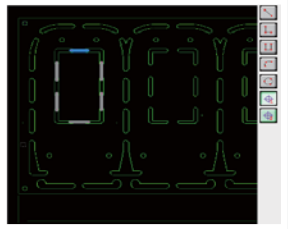
Desktop PCB Separator

Setting Fixture	1 station
Working Area	X:330mm Y:330mm Z:70mm
Component Height	Top side:15mm, Bottom side:45mm
PCB Thickness	0.5 ~ 2mm (It's necessary to contact Aurotek in advance for over 2mm)
Routing Bit Diameter	Ø1 ~ Ø2 mm(Option: over Ø 2mm)
Precision of Cutting	±0.1mm
Positioning Accuracy	±0.02mm
Positioning Repeatability	±0.02mm
Number of Axes in use	3 (X,Y,Z)
Driving Speed (Max.)	X,Y: 500mm/sec Z:100mm/sec
Cutting Speed (Max.)	X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)
Spindle	High speed variable frequency motor, 150W(Max. 58,000rpm)
Cutting Possibilities	Linear, Arc, Circular, U-curve, L-curve
Motor of Axes	3 axes (AC Servo motor)
Routing Bit Sectioning	Max.2 sections
Route Planning	Manual guiding with 10X CCD camera
Safety Area Sensor	
Tool Break Detection	
Operating System	Dedicated Board Computer
Program Storage	EEPROM
Program Backup	USB
Man-Machine Interface	TP-104E
Conveyor Adjustment	
PCB Loading/Unloading	Manual
Power Supply	Single phase AC220V±5%(vacuum excluded) 1.5kw, 6A
Air	Dry air 0.5Mpa
Dimensions(W x D x H)	670x840x840mm
Weight(approx.)	118kg
Working Height	120cm±5cm

Option

1.Specific Jig sensor
2.Teaching/Create/Edit program besed on DXF data

Off-line Edited Program



In terms of AUTO CAD DXF file, screen would show the editing program. Following the moves of mouse easily to result a cutting pattern which reduces cutting edited time.

對應AUTO CAD DXF檔案，電腦顯示待編輯圖像，依照需切割路徑，輕鬆滑動滑鼠作出切割程式，減少切割程式編輯時間。

オフライン編集プログラム
AutoCADのDXFファイルの編集を対応しております。ユーザーはパソコンで簡単にプログラムの作成／編集への対応しています。オフライン編集プログラムの指示に従って、ユーザーはマウスを数回クリックするだけで、大幅にプログラムの作成/編集時間を減らすことができます。

No.	Cmd	Start Point		Pass1 Point		Pass2 Point		End Point	
		X	Y	X	Y	X	Y	X	Y
1	LINE	101.17	121.36					101.17	129.88
2	LINE	101.24	136.30					101.24	144.57
3	LINE	106.59	150.14					114.00	150.14
4	LINE	119.20	144.27					119.20	136.42
5	LINE	119.22	129.43					119.22	121.34
6	LINE	113.62	115.60					106.88	115.60
7									
8									
9									
10									

Teaching Pad Introduction



Teaching Pad Introduction Help starter to operate the separator easily. Feel free to program and edit routing path by teaching pad.

TP-104E操控器，操作介面簡單，方便使用，能快速執行基板切割路徑之程式製作以及編輯。

TP-104Eティーチングペンダントにより操作が簡易化。基盤分割パターンのセッテイングや編集が自由自在。





γ-S330 DT Desktop PCB Separator

Suitable for Small Lot Production

Routing Device



The routing device equipped high speed precision spindle motor to reduce the reaction pressure from work piece. Aurotek own designed PC-Based motion control board provides linear, circular motions to meet different kind of shape of PCB.

使用高轉速精密主軸馬達，對於PC板的切割壓力小，搭配自行開發之PC-Based控制器，具備直線、弧、圓弧、U 型切割功能，可適合各種形狀PC板。

高速スピンドルモータを使用している為、基盤切断時による切断応力が減少(約プレスの1/10)。また自社開発のコントローラにより、直線や曲線などの自在な切断が可能。多種類の基盤形状に対応。

Routing Bit Sectioning



Routing bit automatically lift and shift to next programmed point then cutting to extend the life time of routing bit.

銑刀切割一定距離後自動上升/下降至另一段未切割之刀刃位置，以延長銑刀壽命。

ビットは基板切断後カットポジションを自動シフトし、ビットの消耗をビットの寿命を最大に活かします。

γ-S330 M

Twin Table PCB Separator

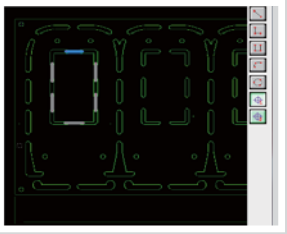


Setting Fixture	2 stations
Working Area	X:330mm Y:330mm Z:15mm
Component Height	Top side:15mm, Bottom side:45mm
PCB Thickness	0.5 ~ 2mm (It's necessary to contactAurotek in advance for over 2mm)
Routing Bit Diameter	Ø1 ~ Ø2 mm (Option: over Ø 2mm)
Precision of Cutting	±0.1mm
Positioning Accuracy	±0.01mm
Positioning Repeatability	±0.02mm
Number of Axes in use	4 (X,Y1,Y2,Z)
Driving Speed (Max.)	X, Y1,Y2: 1,000mm/sec Z: 750mm/sec
Cutting Speed (Max.)	X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)
Spindle	High speed variable frequency motor,150W(Max. 58,000rpm)
Cutting Possibilities	Linear, Arc, Circular, U-curve, L-curve
Motor of Axes	4 axes (AC Servo motor)
Routing Bit Sectioning	Max.2 sections
Route Planning	Direct coordinate input or manual guiding with 10X CCD camera
Safety Area Sensor	Standard
Tool Break Detection	Standard
Operating System	Windows XP
Program Storage	HDD
Program Backup	USB
Man-Machine Interface	TFT monitor + keyboard + mouse
Conveyor Adjustment	
PCB Loading/Unloading	Manual
Power Supply	3 Phase AC220V±5% 50/60Hz [3HP Vacuum included]3kw,11A
Air	Dry air 0.5Mpa
Dimensions(W x D x H)	1190x1039x1401 ±535 mm (signal tower)
Weight(approx.)	390kg

Option

1.CE Certification Standard
2.Auto loading&unloading by Robot ...etc
3.Teaching/Create/Edit program besed on DXF data
4.Read 2D code or JIG BIT auto select cutting program

Off-line Edited Program



In terms of AUTO CAD DXF file, screen would show the editing program. Following the moves of mouse easily to result a cutting pattern which reduces cutting edited time.

對應AUTO CAD DXF檔案，電腦顯示待編輯圖像，依照需切割路徑，輕鬆滑動滑鼠作出切割程式，減少切割程式編輯時間。

オフライン編集プログラム
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No.	Cmd	Start Point X	Start Point Y	Pass1 Point X	Pass1 Point Y	Pass2 Point X	Pass2 Point Y	End Point X	End Point Y
1	LINE	101.17	121.36					101.17	129.88
2	LINE	101.24	136.30					101.24	144.57
3	LINE	106.59	150.14					114.00	150.14
4	LINE	119.20	144.27					119.20	136.42
5	LINE	119.22	129.43					119.22	121.34
6	LINE	113.62	115.60					106.88	115.60
7									
8									
9									
10									

Windows



x 10 zoom-in image makes programming easier & increase the accuracy of point setting.

視窗程式介面，影像輔助路徑編輯，操作簡單易懂，定位精確，縮短程式製作時間。

Windowsシステムとグラフィカル・ユーザ・インタフェース（GUI）を採用している為、操作が分りやすく簡単。10倍ズームCCDカメラによる、切断ポイントの編集が画面にて確認する事が可能となり、操作ミスや加工損失を最小限に抑える事ができます。また、設定時間も大幅短縮され稼働率も上がります。



High Speed
High Reliability
Low Pollution

γ-S330 M Twin Table PCB Separator

CCD

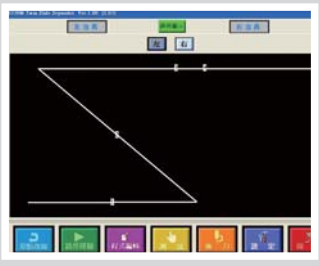


CCD image could check & simulate the path of routing to reduce unnecessary mistake before cutting.

程式編輯後，加工切割前，利用CCD影像模擬檢查預定切割位置，可避免因程式編輯錯誤時造成損失。

設定プログラム編集後、CCDカメラにて切断ポイントの最終確認が出来、編集ミスなどによる損失を事前に防ぐことができます。

PATHWAY SIMULATION



Pathway simulation function can easily accurate understanding of current cutting point or has been cut point at any time. In order to observe and modify, reduce duplication sure that each cut point time-consuming.

藉由路徑模擬功能可以隨時準確地了解目前未切割路徑及已切割路徑，以便觀察與修改，減少重覆確認每個切割點所耗費的時間。

パスシミュレーション機能を通し、ティーチングの確認時間を短縮することができ、カットされた、またはカット中のポイントの位置を確認できます。

γ-S330 IN-LINE-SL/SR

In-Line PCB Separator

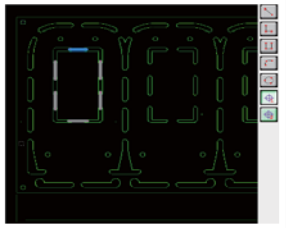


Setting Fixture	2 stations
Working Area	X:330mm Y:330mm Z:60mm
Component Height	Top side:15mm, Bottom side:45mm
PCB Thickness	0.5 ~ 2mm (It's necessary to contact Aurotek in advance for over 2mm)
Routing Bit Diameter	Ø1 ~ Ø2 mm (Option: over Ø 2mm)
Precision of Cutting	±0.1mm
Positioning Accuracy	±0.02mm
Positioning Repeatability	±0.02mm
Number of Axes in use	7(X,Y1,Y2,Z,P/P,Carry,Conv.)
Driving Speed (Max.)	X, Y: 1000mm/sec Z: 75mm/sec
Cutting Speed (Max.)	X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)
Spindle	High speed variable frequency motor, 150W(Max. 58,000rpm)
Cutting Possibilities	Linear, Arc, Circular, U-curve, L-curve
Motor of Axes	7 axes (AC Servo motor)
Routing Bit Sectioning	Max.2 sections
Route Planning	Direct coordinate input or manual guiding with 10X CCD camera
Safety Area Sensor	
Tool Break Detection	Standard
Operating System	Windows XP
Program Storage	HDD
Program Backup	USB
Man-Machine Interface	TFT Monitor + keyboard + mouse
Conveyor Adjustment	Automatic / Manual
PCB Loading/Unloading	Bridge convey/Robot arm
Power Supply	3 Phase AC220V±5% 50/60Hz [3HP Vacuum included]3kw,11A
Air	Dry air 0.5Mpa
Dimensions(W x D x H)	2881x1325x1814 ±556mm (signal tower)
Weight(approx.)	760kg
Working Height	90cm±5cm

Option

1.Teaching/Create/Edit program besed on DXF data
2.Read 2D code or JIG BIT auto select cutting program

Off-line Edited Program



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對應AUTO CAD DXF檔案，電腦顯示待編輯圖像，依照需切割路徑，輕鬆滑動滑鼠作出切割程式，減少切割程式編輯時間。

オフライン編集プログラム
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Routing Device



The routing device equipped high speed precision spindle motor to reduce the reaction pressure from work piece. Aurotek own designed PC-Based motion control board provides linear, circular motions to meet different kind of shape of PCB.

使用高轉速精密主軸馬達，對於PC板的切割壓力小，搭配自行開發之PC-Based控制器，具備直線、弧、圓弧、U 型切割功能，可適合各種形狀PC板。

高速スピンドルモータを使用している為、基盤切断時による切断応力が減少(約プレスの1/10)。また自社開発のコントローラにより、直線や曲線などの自在な切断が可能。多種類の基盤形状に対応。

Full Auto In-Line Production



γ-S330 IN-LINE-SL/SR In-Line PCB Separator

Twin table to reduce the tact time



Two sliding tables provide simultaneously in-and-out movement to reduce the tack time for better productivity.

利用兩組滑台更換加工物件，減少等待時間，增加產能。

2個の治具が交互に連動することにより、基板交換時の待機時間が短縮され、生産効率が上がります。

Loading / Unloading System



Automatically adjust the width of conveyer plus robot system make the loading / unloading system easier.

使用電動調整/記憶寬度之輸送帶，搭配自動取置機械手臂，使上下料件更為方便迅速。

対象加工基板毎のコンベア幅は、自動調節機能により、ローダ、アンローダが速やかで便利です。

r-5168 B5-SL

Single Table PCB Separator



Setting Fixture	1 station
Working Area	X:500mm Y:450mm Z:60mm
Component Height	Top side:15mm, Bottom side:45mm
PCB Thickness	0.5 ~ 2mm (It's necessary to contactAurotek in advance for over 2mm)
Routing Bit Diameter	Ø1 ~ Ø2 mm (Option: over Ø 2mm)
Precision of Cutting	±0.1mm
Positioning Accuracy	±0.01mm
Positioning Repeatability	±0.02mm
Number of Axes in use	3 (X,Y,Z)
Driving Speed (Max.)	X, Y: 1,000mm/sec Z: 750mm/sec
Cutting Speed (Max.)	X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)
Spindle	High speed variable frequency motor,150W(Max. 58,000rpm)
Cutting Possibilities	Linear, Arc, Circular, U-curve, L-curve
Motor of Axes	3 axes (AC Servo motor)
Routing Bit Sectioning	Max.2 sections
Route Planning	Direct coordinate input or manual guiding with 10X CCD camera
Safety Area Sensor	
Tool Break Detection	
Operating System	Windows XP
Program Storage	HDD
Program Backup	USB
Man-Machine Interface	TFT monitor + keyboard + mouse
Conveyor Adjustment	
PCB Loading/Unloading	Manual
Power Supply	3 Phase AC220V±5% 50/60Hz [3HP Vacuum included]3kw,11A
Air	Dry air 0.5 Mpa
Dimensions(W x D x H)	971(W) x 1172(D) x 1994(H)(Signal Tower)
Weight(approx.)	450kg
Working Height	90cm±5cm

Option

1.Cutting Bit Breaking Detection

Windows



x 10 zoom-in image makes programming easier & increase the accuracy of point setting.

視窗程式介面，影像輔助路徑編輯，操作簡單易懂，定位精確，縮短程式製作時間。

Windowsシステムとグラフィカル・ユーザ・インタフェース（GUI）を採用している為、操作が分りやすく簡単。10倍ズームCCDカメラによる、切断ポイントの編集が画面にて確認する事が可能となり、操作ミスや加工損失を最小限に抑える事ができます。また、設定時間も大幅短縮され稼働率も上がります。

CCD



CCD image could check & simulate the path of routing to reduce unnecessary mistake before cutting.

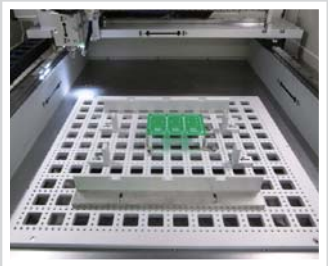
程式編輯後，加工切割前，利用CCD影像模擬檢查預定切割位置，可避免因程式編輯錯誤時造成損失。

設定プログラム編集後、CCDカメラにて切断ポイントの最終確認が出来、編集ミスなどによる損失を事前に防ぐことができます。



γ-S168 B5-SL Single Table PCB Separator

MAXIMUM CUTTING RANGE



We provide a total solution of maximum cutting range of X:500mm Y:450mm which fit all kinds of PCB.

X:500mm Y:450mm最大切割範圍可切割各式大小PCB，提供一貫完整之解決方案。

最大X:500mm Y:450mmまでのカッティング範囲により、様々なPCBにも対応でき、一貫した完全なソリューションを提供します。

ROUTING BIT SECTIONING



Routing bit automatically lift and shift to next programmed point then cutting to extend the life time of routing bit.

銑刀切割一定距離後自動上升/下降至另一段未切割之刀刃位置，以延長銑刀壽命。

ビットは基板切断後カットポジションを自動シフトし、ビットの寿命を最大に活かします。

r-5168 SW

Twin Table PCB Separator



Setting Fixture	2 stations
Working Area	x:330mm Y:330mm Z:60mm
Component Height	Top side:15mm, Bottom side:45mm
PCB Thickness	0.5 ~ 2mm (It's necessary to contact Aurotek in advance for over 2mm)
Routing Bit Diameter	Ø1 ~ Ø2 mm (Option: over Ø 2mm)
Precision of Cutting	±0.1mm
Positioning Accuracy	±0.02mm
Positioning Repeatability	±0.02mm
Number of Axes in use	3(X,Y,Z)
Driving Speed (Max.)	X, Y: 750mm/sec Z: 325mm/sec
Cutting Speed (Max.)	X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)
Spindle	High speed variable frequency motor, 150W(Max. 58,000rpm)
Cutting Possibilities	Linear, Arc, Circular, U-curve, L-curve
Motor of Axes	3 axes (AC Servo motor)
Routing Bit Sectioning	Max.2 sections
Route Planning	Direct coordinate input or manual guiding with 10X CCD camera
Safety Area Sensor	
Tool Break Detection	
Operating System	Windows XP
Program Storage	HDD
Program Backup	USB
Man-Machine Interface	TFT monitor + keyboard + mouse
Conveyor Adjustment	
PCB Loading/Unloading	Manual
Power Supply	3-Phase AC220V±5% 50/60Hz [3HP Vacuum included]3kw,11A
Air	Dry air 0.5Mpa
Dimensions(W x D x H)	1124x1332x1343 ±587mm (signal tower)
Weight(approx.)	525kg
Working Height	90cm±5cm

Option
1.Linear Rail Covers
2.Safety Area Sensor
3.CE Certification Standard
4.Cutting Bit Breaking Detection

WINDOWS



x 10 zoom-in image makes programming easier & increase the accuracy of point setting.

視窗程式介面，影像輔助路徑編輯，操作簡單易懂，定位精確，縮短程式製作時間。

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CCD



CCD image could check & simulate the path of routing to reduce unnecessary mistake before cutting.

程式編輯後，加工切割前，利用CCD影像模擬檢查預定切割位置，可避免因程式編輯錯誤時造成損失。

設定プログラム編集後、CCDカメラにて切断ポイントの最終確認が出来、編集ミスなどによる損失を事前に防ぐことができます。



High Cost-Performance

γ-S168 SW Twin Table PCB Separator

Twin table to reduce the tact time



Two sliding tables provide simultaneously in-and-out movement to reduce the tack time for better productivity.

利用兩組滑台更換加工物件，減少等待時間，增加產能。

2個の治具が交互に連動することにより、基板交換時の待機時間が短縮され、生産効率が上がります。

Routing Bit Sectioning



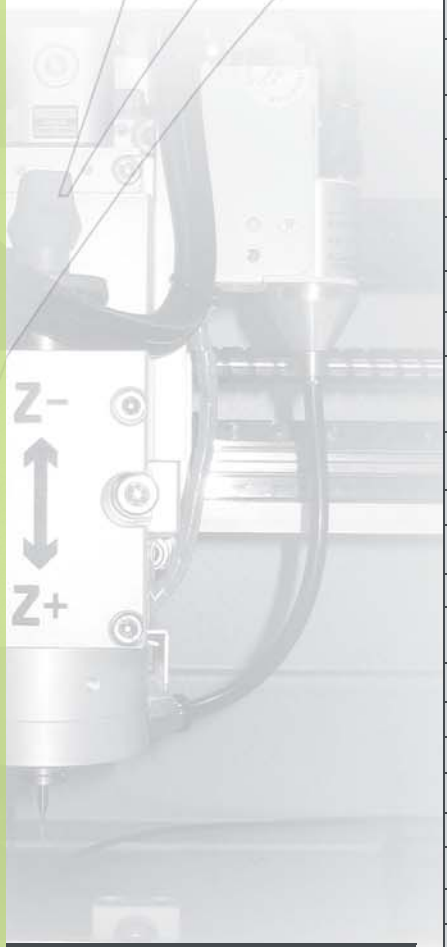
Routing bit automatically lift and shift to next programmed point then cutting to extend the life time of routing bit.

銑刀切割一定距離後自動上升/下降至另一段未切割之刀刃位置，以延長銑刀壽命。

ビットは基板切断後カットポジションを自動シフトし、ビットの寿命を最大に活かします。

r-5168 SA

Twin Table PCB Separator



Option
1.Linear Rail Covers
2.Safety Area Sensor
3.CE Certification Standard
4.Cutting Bit Breaking Detection

Setting Fixture	2 stations
Working Area	X:430mm Y:510mm Z:60mm
Component Height	Top side:15mm, Bottom side:45mm
PCB Thickness	0.5 ~ 2mm (It's necessary to contact Aurotek in advance for over 2mm)
Routing Bit Diameter	Ø1 ~ Ø2 mm (Option: over Ø 2mm)
Precision of Cutting	±0.1mm
Positioning Accuracy	±0.02mm
Positioning Repeatability	±0.02mm
Number of Axes in use	3 (X,Y,Z)
Driving Speed (Max.)	X, Y: 750mm/sec Z: 325mm/sec
Cutting Speed (Max.)	X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)
Spindle	High speed variable frequency motor, 150W(Max. 58,000rpm)
Cutting Possibilities	Linear, Arc, Circular, U-curve, L-curve
Motor of Axes	3 axes (AC Servo motor)
Routing Bit Sectioning	Max.2 sections
Route Planning	Direct coordinate input or manual guiding with 10X CCD camera
Safety Area Sensor	
Tool Break Detection	
Operating System	Windows XP
Program Storage	HDD
Program Backup	USB
Man-Machine Interface	TFT monitor + keyboard + mouse
Conveyor Adjustment	
PCB Loading/Unloading	Manual
Power Supply	3 Phase AC220V±5% 50/60Hz [5HP Vacuum included]4kw,15A
Air	Dry air 0.5Mpa
Dimensions(W x D x H)	1341x1682x1343 ±587mm (signal tower)
Weight(approx.)	670kg
Working Height	90cm±5cm

Windows



x 10 zoom-in image makes programming easier & increase the accuracy of point setting.

視窗程式介面，影像輔助路徑編輯，操作簡單易懂，定位精確，縮短程式製作時間。

Windowsシステムとグラフィカル・ユーザ・インタフェース（GUI）を採用している為、操作が分りやすく簡単。10倍ズームCCDカメラによる、切断ポイントの編集が画面にて確認する事が可能となり、操作ミスや加工損失を最小限に抑える事ができます。また、設定時間も大幅短縮され稼働率も上がります。

CCD



CCD image could check & simulate the path of routing to reduce unnecessary mistake before cutting.

程式編輯後，加工切割前，利用CCD影像模擬檢查預定切割位置，可避免因程式編輯錯誤時造成損失。

設定プログラム編集後、CCDカメラにて切断ポイントの最終確認が出来、編集ミスなどによる損失を事前に防ぐことができます。

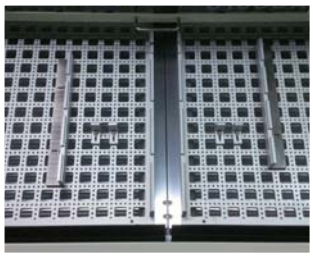


* Area Sensor (Option)

Large Size PCB Application

γ-S168 SA Twin Table PCB Separator

Twin table to reduce the tact time

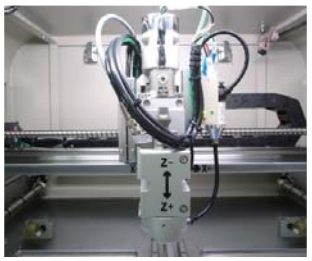


Two sliding tables provide simultaneously in-and-out movement to reduce the tack time for better productivity.

利用兩組滑台更換加工物件，減少等待時間，增加產能。

2個の治具が交互に連動することにより、基板交換時の待機時間が短縮され、生産効率が上がります。

Routing Bit Sectioning



Routing bit automatically lift and shift to next programmed point then cutting to extend the life time of routing bit.

銑刀切割一定距離後自動上升/下降至另一段未切割之刀刃位置，以延長銑刀壽命。

ビットは基板切断後カットポジションを自動シフトし、ビットの寿命を最大に活かします。

r-5168 SI ST

Single Table PCB Separator



Setting Fixture	1 station
Working Area	X:600mm Y:600mm Z:60mm
Component Height	Top side:15mm, Bottom side:45mm
PCB Thickness	0.5 ~ 2mm (It's necessary to contact Aurotek in advance for over 2mm)
Routing Bit Diameter	Ø1 ~ Ø2 mm (Option: over Ø 2mm)
Precision of Cutting	±0.1mm
Positioning Accuracy	±0.02mm
Positioning Repeatability	±0.02mm
Number of Axes in use	3 (X,Y,Z)
Driving Speed (Max.)	X, Y: 750mm/sec Z: 325mm/sec
Cutting Speed (Max.)	X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)
Spindle	High speed variable frequency motor, 150W(Max. 58,000rpm)
Cutting Possibilities	Linear, Arc, Circular, U-curve, L-curve
Motor of Axes	3 axes (AC Servo motor)
Routing Bit Sectioning	Max.2 sections
Route Planning	Direct coordinate input or manual guiding with 10X CCD camera
Safety Area Sensor	
Tool Break Detection	
Operating System	Windows XP
Program Storage	HDD
Program Backup	USB
Man-Machine Interface	TFT monitor + keyboard + mouse
Conveyor Adjustment	
PCB Loading/Unloading	Manual
Power Supply	3 Phase AC220V±5% 50/60Hz [5HP Vacuum included]4kw,15A
Air	Dry air 0.5Mpa
Dimensions(W x D x H)	1124x1939x1343 ±587mm (signal tower)
Weight(approx.)	794kg

Option
1.Linear Rail Covers
2. Safety Area Sensor
3.Cutting Bit Breaking Detection

Windows



x 10 zoom-in image makes programming easier & increase the accuracy of point setting.

視窗程式介面，影像輔助路徑編輯，操作簡單易懂，定位精確，縮短程式製作時間。

Windowsシステムとグラフィカル・ユーザ・インタフェース（GUI）を採用している為、操作が分りやすく簡単。10倍ズームCCDカメラによる、切断ポイントの編集が画面にて確認する事が可能となり、操作ミスや加工損失を最小限に抑える事ができます。また、設定時間も大幅短縮され稼働率も上がります。

CCD



CCD image could check & simulate the path of routing to reduce unnecessary mistake before cutting.

程式編輯後，加工切割前，利用CCD影像模擬檢查預定切割位置，可避免因程式編輯錯誤時造成損失。

設定プログラム編集後、CCDカメラにて切断ポイントの最終確認が出来、編集ミスなどによる損失を事前に防ぐことができます。



γ-S168 SI ST Single Table PCB Separator

MAXIMUM CUTTING RANGE

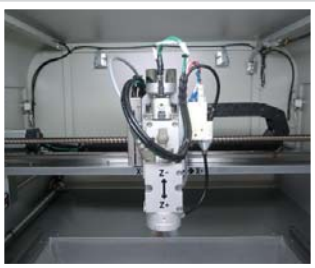


We provide a total solution of maximum cutting range of X:600mm Y:600mm which fit all kinds of PCB.

X:600mm Y:600mm最大切割範圍可切割各式大小PCB，提供一貫完整之解決方案。

最大X:600mm Y:600mmまでのカッティング範囲により、様々なPCBにも対応でき、一貫した完全なソリューションを提供します。

ROUTING BIT SECTIONING



Routing bit automatically lift and shift to next programmed point then cutting to extend the life time of routing bit.

銑刀切割一定距離後自動上升/下降至另一段未切割之刀刃位置，以延長銑刀壽命。

ビットは基板切断後カットポジションを自動シフトし、ビットの寿命を最大に活かします。

γ-5168 IN-LINE

In-Line PCB Separator

Setting Fixture	2 stations
Working Area	X:330mm Y:250mm Z:60mm
Component Height	Top side:15mm, Bottom side:45mm
PCB Thickness	0.5 ~ 2mm (It's necessary to contact Aurotek in advance for over 2mm)
Routing Bit Diameter	Ø1 ~ Ø2 mm (Option: over Ø 2mm)
Precision of Cutting	±0.1mm
Positioning Accuracy	±0.02mm
Positioning Repeatability	±0.02mm
Number of Axes in use	8 axes
Driving Speed (Max.)	X, Y: 750mm/sec Z: 325mm/sec
Cutting Speed (Max.)	X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)
Spindle	High speed variable frequency motor, 150W(Max. 58,000rpm)
Cutting Possibilities	Linear, Arc, Circular, U-curve, L-curve
Motor of Axes	8 axes (AC Servo motor)
Routing Bit Sectioning	Max.2 sections
Route Planning	Direct coordinate input or manual guiding with 10X CCD camera
Safety Area Sensor	
Tool Break Detection	Standard
Operating System	Windows XP
Program Storage	HDD
Program Backup	USB
Man-Machine Interface	Touch Panel + keyboard + mouse
Conveyor Adjustment	Automatic / Manual
PCB Loading/Unloading	Bridge convey/Robot arm
Power Supply	3 Phase AC220V±5% 50/60Hz [3HP Vacuum included]3kw,11A
Air	Dry air 0.5Mpa
Dimensions(W x D x H)	2337x1325x1659 ±591mm (signal tower)
Weight(approx.)	760kg
Working Height	90cm±5cm

Option
1.CE Certification Standard
2.Read 2D code or JIG BIT auto select cutting program.

Touch Panel



Touch Panel (GUI) Graphical User Interface plus touch panel make the operation easier.

視覺化的圖形介面，配合觸控螢幕使操作更為簡便。

タッチパネル操作により視覚的に見られ、なおかつ簡単に操作できます。

Routing Device



The routing device equipped high speed precision spindle motor to reduce the reaction pressure from work piece. Aurotek own designed PC-Based motion control board provides linear, circular motions to meet different kind of shape of PCB.

使用高轉速精密主軸馬達，對於PC板的切割壓力小，搭配自行開發之PC-Based控制器，具備直線、弧、圓弧、U 型切割功能，可適合各種形狀PC板。

高速スピンドルモータを使用している為、基盤切断時による切断応力が減少(約プレスの1/10)。また自社開発のコントローラにより、直線や曲線などの自在な切断が可能。多種類の基盤形状に対応。



γ-S168 IN-LINE In-Line PCB Separator

Full Auto In-Line Production

Twin table to reduce the tact time



Two sliding tables provide simultaneously in-and-out movement to reduce the tack time for better productivity.

利用兩組滑台更換加工物件，減少等待時間，增加產能。

2個の治具が交互に連動することにより、基板交換時の待機時間が短縮され、生産効率が上がります。

Loading / Unloading System

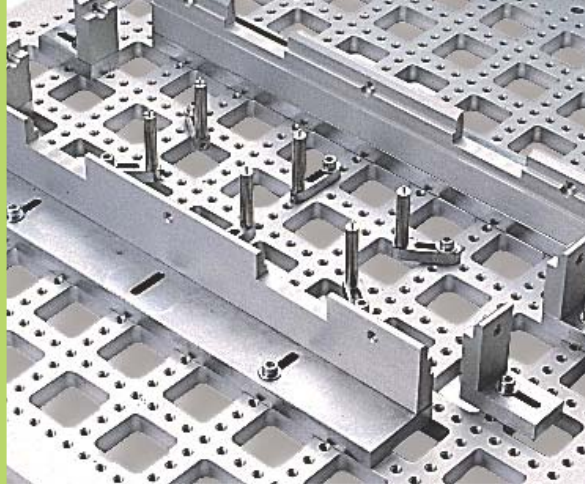


Automatically adjust the width of conveyer plus robot system make the loading / unloading system easier.

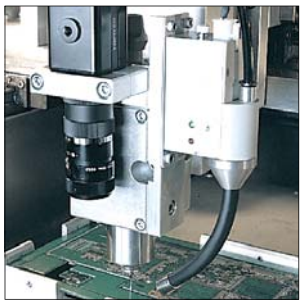
使用電動調整/記憶寬度之輸送帶，搭配自動取置機械手臂，使上下料件更為方便迅速。

対象加工基板毎のコンベア幅は、自動調節機能により、ローダ、アンローダが速やかで便利です。

OPTIONAL ITEMS



- Easy operation & programming.
- Twin table to reduce the tact time.
- Available in linear and circular cutting to diminish restrictions of PCB design.
- Auto on/off function to save the power of vacuum cleaner. (except for r-S168 DT)
- Low cutting stress to avoid the PCB from cracking.



Pin-Point Ionizer

Cutting the static electricity of the dust generated by PCB during routing to reduce the dust to attach to PCB and increase the efficiency of Vacuum Cleaner.

可消除粉塵所帶之靜電，有效減少附著及增加集塵效果。

粉塵の静電気を除去し、PCBへの付着を減少させ、集塵効率を向上させます。



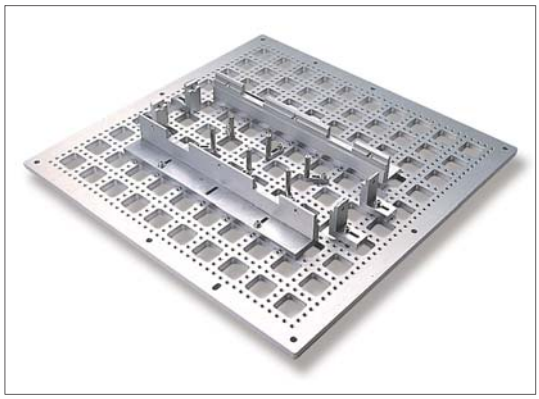
YSF Series Vacuum Cleaner

YSF vacuum cleaner is designed for r-S168 & r-S330 Series to collect the dust & scrap generated by router. High horse power motor & high efficiency fan to ensure the suction with excellent efficiency.

YSF系列集塵器是專門用來收集 r-S168 & r-S330系列切割過程中的粉塵、碎片。內部使用高馬力馬達及高效率風扇，集塵效率高，並可使切割中之粉塵附著產品情況減少到最低。

YSFシリーズ集塵機は、r-S168 & r-S330シリーズ機種の切断粉塵や破片を集塵する清掃機。ハイパワモータと高性能ファンを使用しており、より確実な吸引清掃が可能。

Type	YSF-V553	YSF-V553 ZETA	YSF-V605
Dimensions (WxDxH)	665x635x1610mm	930x855x1000mm	780x665x1900mm
Weight	180 kg	174 kg	242 kg
Power supply	3 phase 50Hz / 60Hz 220V		
	2.2 kw		3.7 kw
Motor power	3 HP		5HP
Inlet wind speed	26 m/sec	32 m/sec	28 m/sec
Inlet wind capacity	28 m³/min	28m³/min	35 m³/min
Inlet wind pressure	300 mm-Ag	1800 mm-Ag	380 mm-Ag
Inlet Diameter	150mm	127mm	150mm
Outlet Diameter	203mm	150mm	203mm



Universal Fixture

Fit majority PCB sizes and shapes which reducing the species of specific jig to save the expense of tooling.

萬用治具可以調整搭配大部分PC板使用，如此可以減少治具的開發費用及時間。

多様な基板サイズ、形状に対応可能。専用治具の数を減らし、経費削減になります。

TYPE	S330M / S168SW	S168SA
Weight	4 kg	7 kg
Accessory	Support wall 2 pcs	
	Support pin 30 pcs	
Size	346(W) x 365mm(D)	465(W)x 540mm(D)

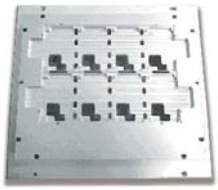
Customized Jig (Option)

The customized jig could meet kinds of requirement from customer to provide precision and efficiency routing.

可依照客戶要求，製作客製化專用治具，並能提高切割精度及效率。

お客様の要望に応じて、カスタマイズ治具を製作可能。









Support Pin
支柱
AV AILABLE SIZE:
Ø 1.0 Ø1.2 Ø1.6 Ø2.0



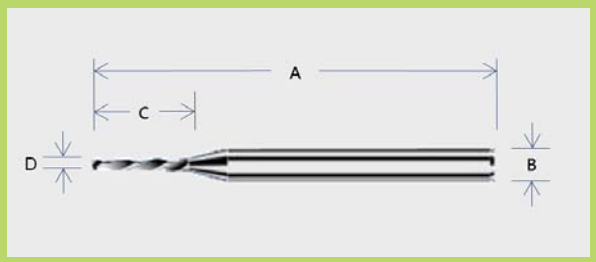
Router Bit
銑刀
SIZE:
Ø 1 ~ Ø2 mm

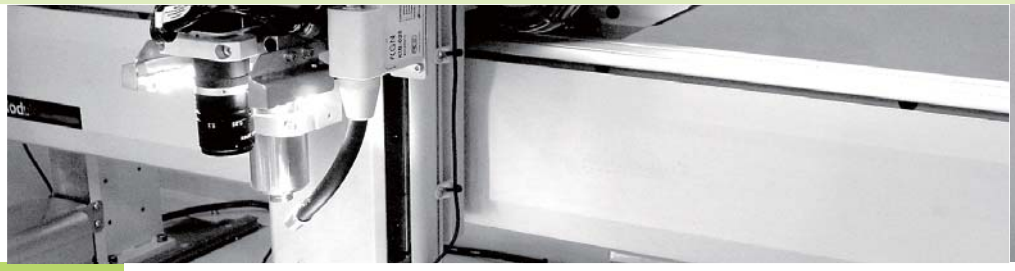


Pin Supporter
活動支撐座

Router Bit

LCF; Down Cut; Carbide end mills
Overall Length (A): 38.2 ±0.30 mm
Shank Diameter (B): 3.175 mm
Cutting Length (C): 6 ±0.50 mm
Cutting Diameter (D): 1.00 1.20 1.50 1.60 2.00 mm





ALL TYPE

Specification

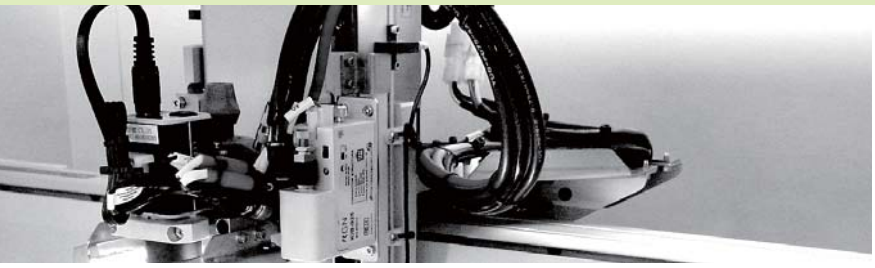


γ-S330 DT



γ-S330 M

	Desktop PCB Separator	Twin Table PCB Separator
Setting Fixture	1 station	2 stations
Working Area	X:330mm Y:330mm Z:70mm	X:330mm Y:330mm Z:15mm
Component Height	Top side:15mm, Bottom side:45mm	Top side:15mm, Bottom side:45mm
PCB Thickness	0.5 ~ 2mm (It's necessary to contact Aurotek in advance for over 2mm)	0.5 ~ 2mm (It's necessary to contact Aurotek in advance for over 2mm)
Routing Bit Diameter	Ø1 ~ Ø2 mm(Option: over Ø 2mm)	Ø1 ~ Ø2 mm (Option: over Ø 2mm)
Precision of Cutting	±0.1mm	±0.1mm
Positioning Accuracy	±0.02mm	±0.01mm
Positioning Repeatability	±0.02mm	±0.02mm
Number of Axes in use	3 (X,Y,Z)	4 (X,Y1,Y2,Z)
Driving Speed (Max.)	X, Y:500mm/sec Z: 100mm/sec	X, Y1,Y2: 1,000mm/sec Z: 750mm/sec
Cutting Speed (Max.)	X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)	X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)
Spindle	High speed variable frequency motor, 150W(Max. 58,000rpm)	High speed variable frequency motor, 150W(Max. 58,000rpm)
Cutting possibilities	Linear, Arc, Circular, U-curve, L-curve	Linear, Arc, Circular, U-curve, L-curve
Motor of Axes	3 axes (AC Servo motor)	4 axes (AC Servo motor)
Routing Bit Sectioning	Max.2 sections	Max.2 sections
Route Planning		Direct coordinate input or manual guiding with 10X CCD camera
Safety Area Sensor		Standard
Tool Break Detection		Standard
Operating System	Dedicated Board Computer	Windows XP
Program Storage	EEPROM	HDD
Program Backup	USB	USB
Man-Machine Interface	TP-104E	TFT monitor + keyboard + mouse
Conveyor Adjustment		
PCB Loading/Unloading	Manual	Manual
Power Supply	Single phase AC220V±5% 50/60Hz (vacuum excluded) 1.5kw, 6A	3 Phase AC220V±5% 50/60Hz [3HP Vacuum included]3kw,11A
Air	Dry air 0.5 Mpa	Dry air 0.5 Mpa
Dimensions (W x D x H)	670x840x840mm	1190x1039x1401 ±535 mm (Signal Tower)
Weight (approx.)	118kg	390kg
Working Hight	120cm±5cm	90cm±5cm



PCB Separator *Series*

The Best Solution for PCB Depaneling



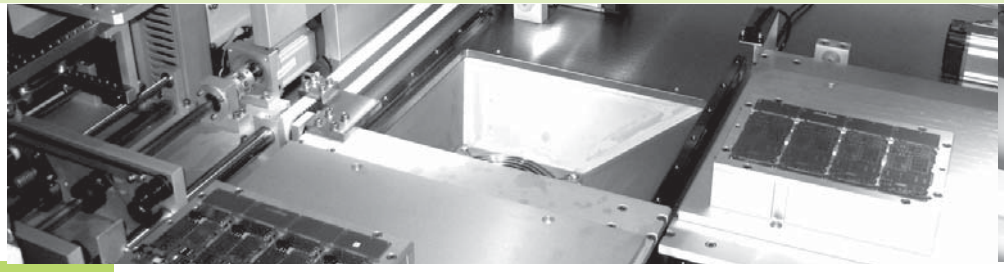
V-S330 IN-LINE-SL/SR

In-Line PCB Separator
2 stations
X:330mm Y:330mm Z:60mm
Top side:15mm, Bottom side:45mm
0.5 ~ 2mm (It's necessary to contact Aurotek in advance for over 2mm)
Ø1 ~ Ø2 mm (Option: over Ø 2mm)
±0.1mm
±0.02mm
±0.02mm
7 axes
X, Y: 750mm/sec Z: 325mm/sec
X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)
High speed variable frequency motor, 150W(Max. 58,000rpm)
Linear, Arc, Circular, U-curve, L-curve
7 axes (AC Servo motor)
Max.2 sections
Direct coordinate input or manual guiding with 10X CCD camera
Standard
Windows XP
HDD
USB
TFT Monitor + keyboard + mouse
Automatic / Manual
Bridge Convey/ Robot
3-Phase AC220V±5% 50/60Hz [3HP Vacuum included]3kw,11A
Dry air 0.5 Mpa
2881x1325x1814 ±556mm (signal tower)
760kg
90cm±5cm



V-S168 B5-SL

Single Table PCB Separator
1 station
X:500mm Y:450mm Z:60mm
Top side:15mm, Bottom side:45mm
0.5 ~ 2mm (It's necessary to contactAurotek in advance for over 2mm)
Ø1 ~ Ø2 mm (Option: over Ø 2mm)
±0.1mm
±0.01mm
±0.02mm
3 (X,Y,Z)
X, Y: 1,000mm/sec Z: 750mm/sec
X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)
High speed variable frequency motor,150W(Max. 58,000rpm)
Linear, Arc, Circular, U-curve, L-curve
3 axes (AC Servo motor)
Max.2 sections
Direct coordinate input or manual guiding with 10X CCD camera
Windows XP
HDD
USB
TFT monitor + keyboard + mouse
Manual
3 Phase AC220V±5% 50/60Hz [3HP Vacuum included]3kw,11A
Dry air 0.5 Mpa
971(W) x 1172(D) x 1994(H)(Signal Tower)
450kg
90cm±5cm



ALL TYPE

Specification

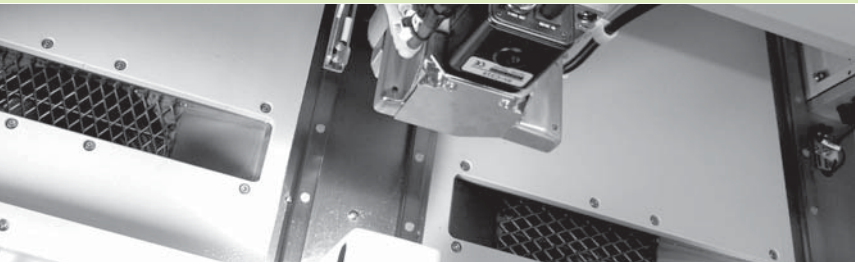


γ-S168 SW



γ-S168 SA

	γ-S168 SW	γ-S168 SA
	Twin Table PCB Separator	Twin Table PCB Separator
Setting Fixture	2 stations	2 stations
Working Area	X: 330mm Y: 330mm Z:60mm	X:430mm Y:510mm Z:60mm
Component Height	Top side:15mm, Bottom side:45mm	Top side:15mm, Bottom side:45mm
PCB Thickness	0.5 ~ 2mm (It's necessary to contact Aurotek in advance for over 2mm)	0.5 ~ 2mm (It's necessary to contact Aurotek in advance for over 2mm)
Routing Bit Diameter	Ø1 ~ Ø2 mm (Option: over Ø 2mm)	Ø1 ~ Ø2 mm (Option: over Ø 2mm)
Precision of Cutting	±0.1mm	±0.1mm
Positioning Accuracy	±0.02mm	±0.02mm
Positioning Repeatability	±0.02mm	±0.02mm
Number of Axes in use	3(X,Y,Z)	3 (X,Y,Z)
Driving Speed (Max.)	X, Y: 750mm/sec Z: 325mm/sec	X, Y: 750mm/sec Z: 325mm/sec
Cutting Speed (Max.)	X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)	X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)
Spindle	High speed variable frequency motor, 150W(Max. 58,000rpm)	High speed variable frequency motor, 150W(Max. 58,000rpm)
Cutting possibilities	Linear, Arc, Circular, U-curve, L-curve	Linear, Arc, Circular, U-curve, L-curve
Motor of Axes	3 axes (AC Servo motor)	3 axes (AC Servo motor)
Routing Bit Sectioning	Max.2 sections	Max.2 sections
Route Planning	Direct coordinate input or manual guiding with 10X CCD camera	Direct coordinate input or manual guiding with 10X CCD camera
Safety Area Sensor	Option	Option
Tool Break Detection	Option	Option
Operating System	Windows XP	Windows XP
Program Storage	HDD	HDD
Program Backup	USB	USB
Man-Machine Interface	TFT monitor + keyboard + mouse	TFT monitor + keyboard + mouse
Conveyor Adjustment		
PCB Loading/Unloading	Manual	Manual
Power Supply	3-Phase AC220V±5% 50/60Hz [3HP Vacuum included]3kw,11A	3-Phase AC220V±5% 50/60Hz [5HP Vacuum included]4kw,15A
Air	Dry air 0.5 Mpa	Dry air 0.5 Mpa
Dimensions (W x D x H)	1124x1332x1343 ±587mm (Signal Tower)	1341x1682x1343 ±587mm (Signal Tower)
Weight (approx.)	525kg	670kg
Working Hight	90cm±5cm	90cm±5cm



PCB Separator *Series*

The Best Solution for PCB Depaneling



Y-S168 SIST



Y-S168 In-Line

Single Table PCB Separator	In-Line PCB Separator
1 station	2 stations
X:600mm Y:600mm Z:60mm	X:330mm Y:250mm Z:60mm
Top side:15mm, Bottom side:45mm	Top side:15mm, Bottom side:45mm
0.5 ~ 2mm (It's necessary to contact Aurotek in advance for over 2mm)	0.5 ~ 2mm (It's necessary to contact Aurotek in advance for over 2mm)
Ø1 ~ Ø2 mm (Option: over Ø 2mm)	Ø1 ~ Ø2 mm (Option: over Ø 2mm)
±0.1mm	±0.1mm
±0.02mm	±0.02mm
±0.02mm	±0.02mm
3(X,Y,Z)	8 axes
X, Y: 750mm/sec Z: 325mm/sec	X, Y: 750mm/sec Z: 325mm/sec
X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)	X, Y, Z: 100mm/sec (it's according to the specification of Bit for the best speed setting)
High speed variable frequency motor, 150W(Max. 58,000rpm)	High speed variable frequency motor, 150W(Max. 58,000rpm)
Linear, Arc, Circular, U-curve, L-curve	Linear, Arc, Circular, U-curve, L-curve
3 axes (AC Servo motor)	8 axes (AC Servo motor)
Max.2 sections	Max.2 sections
Direct coordinate input or manual guiding with 10X CCD camera	Direct coordinate input or manual guiding with 10X CCD camera
Option	
Option	Standard
Windows XP	Windows XP
HDD	HDD
USB	USB
TFT monitor + keyboard + mouse	Touch Panel + keyboard + mouse
	Automatic / Manual
Manual	Bridge Convey/ Robot
3-Phase AC220V±5% 50/60Hz [3HP Vacuum included]3kw,11A	3-Phase AC220V±5% 50/60Hz [3HP Vacuum included]3kw,11A
Dry air 0.5 Mpa	Dry air 0.5 Mpa
1124x1939x1343 ±587mm (Signal Tower)	2337x1325x1659 ±591mm (Signal Tower)
794kg	760kg
90cm±5cm	90cm±5cm

Aurotek®
A Complete Solution from One Source

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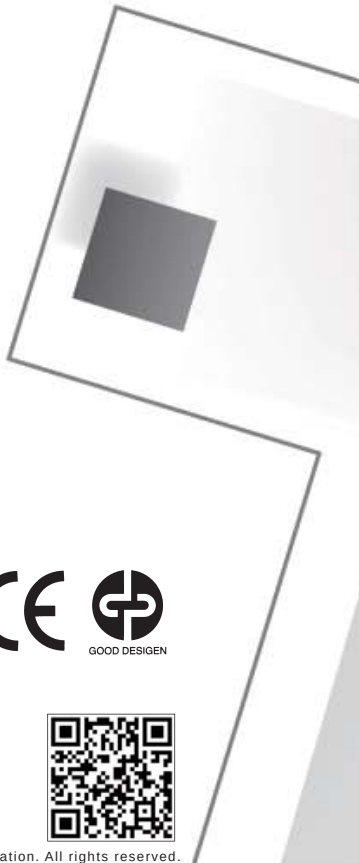
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