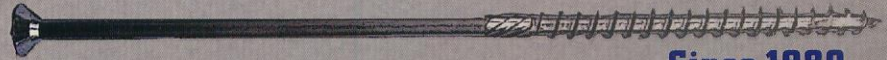


CHUM YUAN CO., LTD.



Since 1980

**The Complete Solution for Production
in Areas of Fasteners, Auto Parts,
and Forged Parts.**

Efficient

Professional

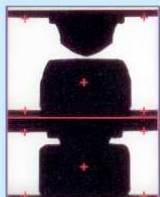
Reliable



CHUM YUAN CO., LTD.



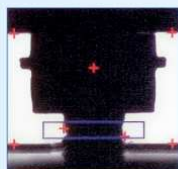
螺頭高度、寬度
Screw-head height, width



斷針、塞孔 (旋轉式)
Broken Pin & Recess Depth (Rotating)



頭部套筒 (旋轉式)
Head Socket Rotating



無效牙長 (頸下牙高)
Ineffective Thread Length



螺牙內外徑
Internal/External Thread Diameter



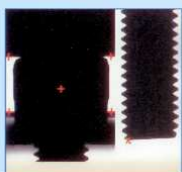
牙距
Pitch Distance



搓牙不良
Bevel Thread/ Deformed Thread



底部形狀
Bottom Shape



螺絲長度
Screw Length



針孔同心度
Pinhole Alignment



頭部文字、形狀
Head Mark



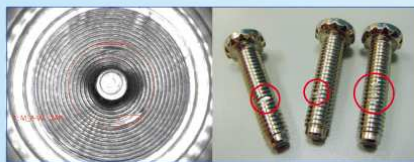
頭上裂痕
Head Crack



黑色輪裂螺絲
Black Screw of Wheel Crack



電鍍輪裂螺絲
Zinc Screw of Wheel Crack



螺牙360°檢測之照片
360 degree Thread Damage Inspection



有無割尾
Cutter: Yes or No



螺帽多段高度
Multi-Height



螺帽多段寬度
Multi-Width



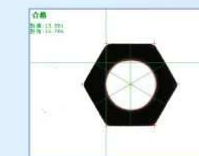
焊接螺帽三 & 四點獨立檢測
3 or 4 Welding Points



內外徑
Internal / External Thread Diameter



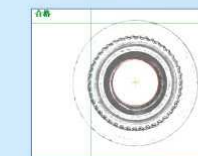
同心度
Concentricity



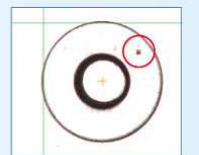
對邊對角尺寸
AF/AC



有無牙
Thread: Yes or No



有無滾花
Serration: Yes or No



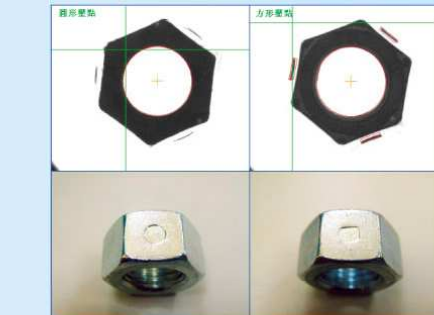
表面瑕疵
Surface Flaw



輪裂
Wheel Crack



凸緣螺帽輪裂
Wheel crack of Flange Nut



360°內螺牙牙傷
360° Internal Thread Damage

客製化篩選機 Customized Sorting Machine :

歡迎全球客戶提供需要高品質檢測的零件，我們將為您開發您所需要的客製化篩選機
Welcome customers from all over the world to provide the high quality parts, which need in section. We will develop the customized sorting machine to meet your needs.

其他零件應用 Applications to Other Parts



塑膠製品
Plastics Parts



鍊片、油封、鍊條
Chain, Bush, Oil Seals



鉸接點+銅螺帽
Brass Nut

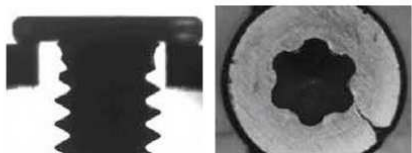


止付螺絲
Set Screw

精湛公司於2009年3月正式接手博磊科技篩選機事業
包括篩選機之製造、售服及行銷。另博磊科技正式為精湛公司東南亞唯一代理。

In March 2009, **CCM** officially takes over the entire manufacture and global sales' responsibilities including the sales, manufacture, and marketing for Sorting Machines from Zen Voce while Zen Voce becomes the **only agent of CCM in Southeast Asia.**

FIH-3000系列 螺絲檢測機 FIH-3000 Series Screw Sorting Machine



微調式分度盤 (免換分度盤)
Adjustable Rotary Disc



NIH-2500系列 螺帽篩選機 NIH-2500 Series Nuts Sorting Machine



內部特寫
A Close-Up for Internal Parts



技術規格 Specifications

型號 Model	ZV-FIH-3300	ZV-FIH-3500	ZV-FIH-3700	ZV-FIH-3900
功能 Functions	百分之百的視像檢測，能夠檢測螺絲的幾何特徵和螺絲頭的上表面缺陷 Vision Based 100% Inspection of Critical Geometry Features and Head Tip Surface Defects			
螺絲尺寸 Fastener Sizes	(公制 metric) M0.8~M2 (英制 inches) #000~#2	M2~M5 #2~#10	M4~M10 #8~3/8	M8~M12 5/16~1/2
機器速度-每分鐘螺絲數 Machine Speed - parts per min	(ppm) 200~500	400~800	200~400	200~400
螺絲長度 Length of Fastener	(公制 metric) 2~10mm (英制 inches) 0.08"~0.40"	4~20mm 0.20"~0.80"	20~60mm 0.80"~2.40"	30~100mm 1.20"~3.95"
螺絲頭徑 Head Dia. Of Fastener	(公制 metric) 1.5~3.5mm (英制 inches) 0.06"~0.15"	3.5~10mm 0.15"~0.40"	6.0~20mm 0.25"~0.80"	12~25mm 0.50"~0.98"
** 交流電源 AC Power	單相交流電，電壓115伏/230伏交流，頻率50/60赫茲，電流20安培 Single Phase, 115/230 VAC, 50/60Hz, 20 Amps			
壓縮空氣 Compressed Air	4~6 (巴 Bar)			
機器總體尺寸 (長×寬×高) Machine Overall Size (L x W x H)	(公制 metric) 1.5m×1.0m×1.6m (英制 inches) 59"×39"×63"	1.7m×1.0m×1.6m 67"×39"×63"	2.5m×1.4m×2.2m 98"×55"×87"	2.5m×1.4m×2.2m 98"×55"×87"
機器重量 Machine Weight	(約 est) 600kg/1320 lb	650kg/1430 lb	1,500kg/331 lb	1,800kg/3970 lb

技術規格 Specifications

功能 Function	100%螺帽外觀尺寸圖像檢測 100% Nut Image Display Inspection
螺帽種類 Nuts types	六邊形螺帽、圓形螺帽、方形螺帽、六邊形的自緊螺帽 Hexagon Nuts, Round Nuts, Square Nuts, Hexagon Lock Nuts
機器速度 Speed	250~400個/每分鐘 250 ~ 400 ppm
電源 Power	單相 Single Phase, 115/230 VAC, 50/60 Hz, 13A
壓縮空氣 Compressed Air	4~6 (巴 Bar)
機器尺寸 (長×寬×高) Machine Overall Size (L x W x H)	1600×1000×2300mm/63"×39.5"×90.5" inches
機器重量 Machine Weight (est)	650kg/1430 lb



PSD-1500 加長型篩選機

Professional Manufacturer of High Quality Sorting Machines

PSD-1500系列 加長型篩選機

PSD-1500 Series

For 250 mm Length Screw Sorting Machine



機器特色:

- 可加裝2~6支鏡頭。
- 可加裝輪裂檢測系統。
- 可檢測彎曲。
- 可檢測長度100~250 mm。

Machine's Character:

- Can assemble the 2~6 Cameras.
- Can assemble the Wheel Crack Sorting System (LS-1501).
- Can inspect Screw Bending.
- Can inspect Screw length 100~250 mm.

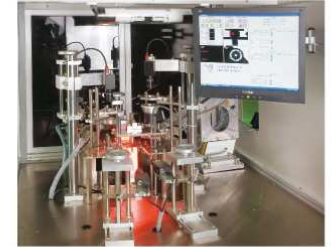
新型標準型篩選機 | PS-1700

Professional Manufacturer of High Quality Sorting Machines



PS-1700系列 新型標準型篩選機

PS-1700 Series Screw Sorting Machine



螺牙360°牙傷全檢
Customized Sorting Machine for 360°
inspecting thread damage



機器特色:

- 全新機構設計，取像更完整。
- 頭部裂痕及輪裂可獨立篩選，準確度更高。
- 升級數位相機及全新操作軟體，速度更快更人性化。
- 機台體積變小，使用不佔空間。

Machine's Character:

- New design of mechanism. More complete image - catching.
- Separate function for Head Crack Inspection and Wheel Crack Inspection. Higher accuracy.
- Upgraded to digital camera and new inspection software. Higher speed and more friendly-using.
- Smaller machine size which saves more room.

PSE-2500系列 渦電流篩選機+PS影像篩選機

PSE-2500 Series

Eddy Current Sorting Machine with Image-Display Screw Sorting Machine

可檢測：

- 不同材質混料
- 不同硬度±2°

Available Sorting Items:

- Material Mixed
- Hardness ±2°



機器特色：

- 可獨立渦電流使用或連線影像篩選機。
- 硬度檢測，可達±2°。
- 渦電流+影像檢測，可達0ppm之目標。
- 渦電流可檢測螺帽或圓棒之類緊固件。

Machine's Character:

- Can use the sole Eddy Current or can be linked with the optical Sorting Machine.
- Hardness: ±2°.
- Can be achieved 0 PPM if linked with the optical Sorting Machine.
- Eddy current can inspect nuts or cylinder as fastener.

本公司成立17年設計製造超過10,000台送料機銷售全世界，客戶超過500家，產品遍及各螺絲、螺帽工廠。

During the past 17 years, we have already produced more than 10,000 sets vibration feeder to more than 500 customers all over the world. These products are available in screw & nuts factories.

螺絲送料機樣式
Screw Vibration Feeder Sample



螺帽送料機樣式
Nut Vibration Feeder Sample



單位 Unit: mm

項目 型式 Type	盤面直徑 Face diameter A	盤面高度 Face height B	出口高度 Exit height C	本體寬度 Nounemon width D	電壓 Voltage	周波數 Electric current	電流 Electric cycle	機器重量 Machine weight	適用螺絲長度 Apply screw length
KS-200	Ø 200	80	200	200	220/380	50/60	0.5A	22	5-20
KS-300	Ø 300	100	300	270	220/380	50/60	1A	48	5-30
KS-400	Ø 400	120	370	330	220/380	50/60	2A	75	5-40
KS-520	Ø 520	140	430	370	220/380	50/60	3A	105	10-50
KS-620	Ø 620	140	430	450	220/380	50/60	4A	136	16-100
KS-720	Ø 720	160	460	560	220/380	50/60	6A	265	30-150
KS-850	Ø 850	160	460	560	220/380	50/60	8A	300	30-200
KS-1000	Ø 1000	200	480	670	220/380	50/60	10A	450	50-240

微電腦速度控制器 Micro-Computer Speed Controller

PS-666 控制器
Micro-Computer Controller



- 功能：
- 送料機速度調整

Function :

- Feeding Speed Adjustment.

PS-777 微電腦控制器
Micro-Computer Controller



- 功能：
- 送料機速度調整
 - 可加裝警示燈
 - 滿料停機，消料起動
 - 滿料、消料時間可調整

Function:

- Feeding Speed Adjustment. • Warning Signs.
- Full Feeding Stop & Re-feeding start.
- Adjustable Timing for Full Feeding & Re-feeding.

電壓 Electric Voltage: 220V/380V.

PS-888 微電腦控制器
Micro-Computer Controller



- 功能：
- 振動馬達、儲料斗控制器
 - 滿料停機、消料起動
 - 滿料、消料時間可調整

Function:

- Vibrating Moter & Storing Funnel Controller.
- Full Feeding Stop & Re-feeding start.
- Can adjust time while full/ shortage of material.

電壓 Electric Voltage: 220V/380V.



影像篩選機週邊選擇配備
Optional Equipment for the Screw Sorting Machine

Professional Manufacturer of High Quality Sorting Machines

LS-500 直立式包裝系統

LS-500 Upright Packing System



LS-600 自動進出箱輸送系統

LS-600 Automatic Packing System



LS-700 儲料斗+拉高輸送帶
LS-700 Hopper with Pull-up Conveyor



LS-800 自動補料儲料斗
LS-800 Automatic Hopper

LS-900 自動補料儲料斗+升降機倒料

LS-900 Automatic Hopper with Elevator



LS-1000 直立式自動補料儲料斗

LS-1000 Upright Automatic Hopper



影像篩選機週邊選擇配備
Optional Equipment for the Screw Sorting Machine

Professional Manufacturer of High Quality Sorting Machines



輪裂檢測系統 (專利申請中)
LS-1501 Wheel Crack Sorting System
Applying for the Patent



輪裂檢測不同尺寸錐形鏡組 (專利申請中)
LS-1502 Cone Mirrors
Applying for the Patent



螺絲底部檢測系統 (專利申請中)
LS-1503 Screw Bottom Sorting System
Applying for the Patent



吸塵機 + 開門停機控制
LS-1504 Cleaner +
Disconnection of Power Supply



分度盤
LS-200 Rotary Disk



分度盤
LS-285 Rotary Disk

規格表 Specifications

項目 ITEM	機型 TYPE	LS-500	LS-600	LS-700	LS-800	LS-900	LS-1000
機器尺寸 Machine Size		長(L):2,850 mm 寬(W):720 mm 高(H):1,700 mm	長(L):1,420 mm 寬(W):960 mm 高(H):360 mm	長(L):2,500 mm 寬(W):700 mm 高(H):2,200 mm	長(L):1,700 mm 寬(W):1,600 mm 高(H):2,700 mm	長(L):2,300 mm 寬(W):1,600 mm 高(H):3,500 mm	長(L):1,700 mm 寬(W):850 mm 高(H):1,900 mm
重量 Weight		260 kg	88 kg	465 kg	226+樓梯 (Staircase)52 kg	677+樓梯 (Staircase)52 kg	285 kg
振動馬達 Vibrating Motor				1/3 HP	1/3 HP		
馬達 Motor		60Wx2 + 90Wx1	輸送帶(Conveyor) 90Wx2台	輸送帶(Conveyor) 1HP, 750W		升降機(Elevator) 1HP, 750W	1/2 HP



機械尺寸規格表 Specifications:

機型 Type	PS-1500	PSL-1500	PSD-1500	PS-1700	PSC-2500	PSG-2500	PSE-2500	
項目 Item								
螺絲線徑 Wire Diameter	mm Ø3.0-Ø8.0	Ø8.0-Ø16.0	Ø8.0-Ø16.0	Ø3.0-Ø8.0			Ø3.0-Ø16.0	
頭部外徑 Head Width	mm Ø5-Ø15	Ø10-Ø25	Ø10-Ø35	Ø5-Ø15	Ø10-Ø35	Ø2-Ø35	Ø5-Ø25	
頭部厚度 Head Height	mm Ø1-Ø10	Ø2-Ø25	Ø5-Ø30	Ø1-Ø10	Ø2-Ø25	Ø2-Ø25	Ø3-Ø25	
頸下長度 Length Under Head	mm 5-80	15-115	20-250	6-150			15-115	
篩選精度 Sorting Precision	±0.03	±0.03	±0.03	±0.03	±0.03	±0.03	±0.03	
篩選速度 Sorting Speed	PPM Max. 100-600	100-400	60-300	100-600	100-450	100-900	100-300	
使用氣壓 Atmosphere	kg/cm ²	5						
電腦主機 Computer	工業用電腦 Industrial Computer							
類比攝影機 Camera	SONY	SONY						
數位攝影機 Digital Camera			AVT	AVT	AVT	AVT	AVT	
淨重 Net Weight	kgs 800	950	1360	1045	725	685	1030	
機器尺寸 Machine Dimension	L:	2000	2200	1500	2250	1900	1400	2000
	W:	2000	2200	1650	1600	1450	1850	1450
	H:	2100	2100	2200	2100	2000	2130	2100

打○表示有此功能，打✓表示可追加此功能
○ : Means the machine has this function
可篩選項目表 Sorting Items: ✓ : Means the machine can superadd this function

機型 Type	PSS-1500	PS-1500	PSL-1500	PS-1700	PSD-1500	機型 Type	PSC-2500	PSG-2500
項目 Item						項目 Item		
頭部高度、寬度 Head Height & Width	○	○	○	○	○	多段高度 Multi-Height	○	○
頭部套筒 Head Socket Rotating		○	○	○	○	多段厚度 Multi-Width	○	○
斷針、塞孔 Recess Depth		○	○	○	○	對邊尺寸 AF	○	○
無效牙長 (頸下牙高) Ineffective Thread	○	○	○	○	○	對角尺寸 AC	○	○
牙底徑 Thread Internal Dia.	○	○	○	○	○	內孔徑 Internal Dia.	○	○
牙外徑 Thread External Dia.	○	○	○	○	○	外徑 External Dia.	○	○
牙距檢測 Pitch Distance	○	○	○	○	○	有無牙 Thread: yes or no	○	○
斜牙、搓牙不良 Bevel Thread/Deformed Thread	○	○	○	○	○	表面瑕疵 Surface Flaw	○	○
螺絲長度 Screw Length	○	○	○	○	○	孔內牙屑 Chips in hole	○	○
尾部尖點 Cone Point	○	○	○	○	○	同心度 Concentricity	○	○
頭部有無電鍍 Zinc: Yes or No (Head Top View)	○	○	○	○	○	焊點品質 Welding Point Quality	○	○
螺絲彎曲 (多次取像) Screw Bending (Multi-Images)		○	○	○	○	正面裂痕 Head Crack	○	○
針孔同心度 Pinhole Alignment	○	○	○	○	○	倒角 Chamfer	○	○
頭上裂痕 Head Crack		○	○	○	○	有無壓點 Pressure Point: yes or no	✓	✓
頭部文字 Head Mark	○	○	○	○	○	獨立焊點高度 Welding Point Height	✓	✓
真圓度 Roundness	○	○	○	○	○	360°內螺牙牙傷 360° Internal Thread Damage	✓	✓
頭部輪裂 Head Wheel Crack	✓	✓	✓	✓	✓	360°內螺牙亂牙 360° Internal Thread Formation	✓	✓
底部檢測 Bottom Sorting	✓	✓	✓	✓	✓			
凸緣螺帽輪裂 Flange Nut Wheel Crack	✓	✓	✓	✓	✓			
凸緣螺帽有無牙 Flange Nut Thread: Yes or No	✓	✓	✓	✓	✓			
						機型 Type	PSE-2500	
						項目 Item		
						硬度 Hardness	○	
						材質 Material	○	



Patents & Certificates

專利 · CE及ISO證書

Professional Manufacturer of High Quality Sorting Machines

全球展覽及經銷代理

Global Machinery Exhibition & Agents / Distributors

Professional Manufacturer of High Quality Sorting Machines



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TEL: +49 2761 837378
E-mail: brune@brune-machinery.de

Germany





大陸分公司-東莞、昆山廠
China Branches: Dongguan & Kunshan

Professional Manufacturer of High Quality Sorting Machines

昆山精湛新自動化設備有限公司
KUN SHAN CHING CHAN
MACHINERY CO., LTD.

江蘇省昆山市張浦鎮花苑路625號 第5棟 郵編：215321
No. 625, Hua Yuan Rd., Zhangpu Town,
Kunshan City, Jiang Su, China
TEL: 86-512-5729 7027-28 FAX: 86-512-5729 7029



東莞市精湛機械有限公司
DONG GUAN CITY
CHING CHAN MACHINERY CO., LTD.

廣東省東莞市大朗鎮松木山村美景中路1808號
1808, Meijing Midst Rd., Song-Mu-Shan Industrial
Zone, Dalang, Dong Guan, Guang Dong, China
TEL: 86-769-8111 5067/5077 FAX: 86-769-8111 5087
Website: <http://www.dgccm.net>



篩選代工廠

Sorting Service Factory

Professional Manufacturer of High Quality Sorting Machines

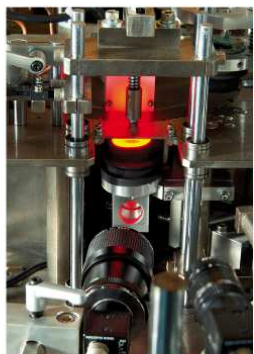


每一代的新機型都經由精湛的代工廠，長時間測試，確定機器的功能性、穩定性、耐用性，調整到最佳狀態。

For every generation of the CCD Image-Display Sorting Machines, the quality is reached through constant testing by our Inspection Service Department. And our final goal is to meet the best condition for the machines in Stability, Endurance, and Function.

PS-1500系列 標準型影像篩選機

PS-1500 Series Standard Screw
Sorting Machine



LS-1503底部檢測系統
LS-1503 Screw Bottom Sorting System



有無割尾
Cutter: Yes or No



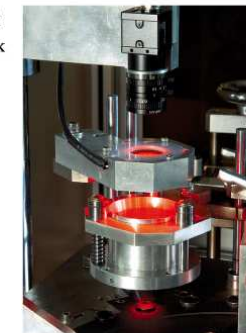
PSL-1500系列 加大型影像篩選機

PSL-1500 Series Sorting Machine



黑色輪裂螺絲
Black Screw of Wheel Crack

LS-1501輪裂檢測系統
LS-1501 Wheel Crack
Sorting System



專利機台仿冒必究
Patented Machine. Counterfeit will be sued.

機器特色：

- 可加裝2~6支鏡頭。
- 針對一般尺寸螺絲、螺帽設計。
- 可加裝旋轉機構檢測針孔深或斷針。
- 可加裝底部檢測系統，檢測有無割尾。

Machine's Character :

- Can assemble the 2 ~ 6 Cameras.
- Specially designed for the Standard Screw / Nuts.
- Can assemble the Rotating Mechanism for inspecting the Recess Depth or Broken Pin.
- Can superadd the Bottom Sorting System (LS-1503) for inspecting the Cutter.

專利機台仿冒必究
Patented Machine. Counterfeit will be sued.

機器特色：

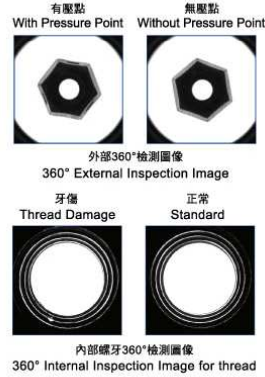
- 可加裝2~6支鏡頭。
- 針對汽車用較大尺寸螺絲、螺帽設計。
- 加裝輪裂檢測系統，可篩選螺絲或凸緣螺帽之輪裂。
- 螺帽或拉帽可加裝雷射檢測有無螺牙。
- 針對螺牙須多角度全檢由三支鏡頭分不同角度取景。
- 螺絲彎曲也適用此機台，可一次分檢彎曲或良品。
- 螺絲上下層可一次由四支鏡頭檢測。

Machine's Character :

- Can assemble the 2 ~ 6 Cameras.
- Specially designed for the Automotive Screw / Nuts.
- Can assemble the Wheel Crack Sorting System (LS-1501) for inspecting the Wheel Cracks of the Screw / Nuts.
- Can superadd the Laser Fiber for inspecting the Thread (Yes or No) of the Nuts or Rivet.
- Specially designed for inspecting the threads by 3 cameras from different angles.
- Screw Bending Inspection is suitable for this machine. Can sort the bending or accepted products at same time.
- The Upper/Lower Thread of Screw can be inspected by 4 cameras at same time.

PSC-2500系列 輸送帶篩選機

PSC-2500 Series Conveyor Sorting Machine



機器特色:

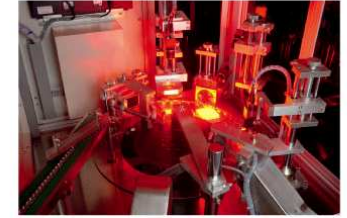
- 可加裝2~4鏡頭。
- 可同時內外360度全檢，檢測無死角。
- 人性化操作介面，功能最先進。
- 無接縫皮帶，避免造成誤判。

Machine's Character:

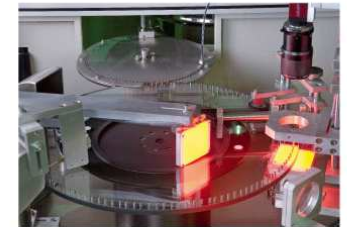
- Can super-add 2 to 4 cameras.
- Can 360 degree inspect Internal & External Thread.
- User-friendly operation.
- No any seam on the conveyor for avoiding erroneous inspection result.

PSG-2500系列 玻璃盤篩選機

PSG-2500 Series Glass Sorting Machine



玻璃盤特寫
A Close-Up for Glass Plate



內部特寫布斯範例
A Close-Up for Bush



機器特色:

- 可加裝2~4鏡頭。
- 檢測零件範圍廣， $\varnothing 2\sim\varnothing 35$ mm皆可適用。
- 快速更換零件，操作簡單。
- 可同時正反面一次檢測。

Machine's Character:

- Can super-add 2 to 4 cameras.
- Available sorting range from $\varnothing 2\sim\varnothing 35$ mm
- Easy for changing parts & operation.
- Can inspect the positive & negative side at same time.