



經營理念 Business Principle

- 品質不妥協，客戶有信心。 Never Compromise Quality.
- 了解客戶的需求。 Understand the Customers' Requirements.
- 超越顧客的期望。 Transcend Customers' Expectation.

精湛光學科技股份有限公司
CHING CHAN OPTICAL TECHNOLOGY CO., LTD.

台灣：高雄市湖內區忠孝街110巷16號
No. 16, Lane 110, Zhongxiao St., Hunei Dist., Kaohsiung City 829, Taiwan
TEL: 886-7-693 7937-8 FAX: 886-7-693 3643
<http://www.ccm3s.com> E-mail: sales@ccm3s.com

CHING CHAN

精湛大陸總部
CCM China Headquarters



精湛台灣總公司
CCM Headquarters in Taiwan



2011. May
版權所有 翻印必究
Copyright reserved.



Made In Taiwan



CCM
New Era with Bless of New Born Twins

CHING CHAN OPTICAL TECHNOLOGY CO., LTD.
精湛光學科技股份有限公司



Index | 目錄索引

Professional Manufacturer of High Quality Sorting Machines

• 可篩選項目參考圖樣	3
• Sorting Items	
• 可篩選物件(僅供參考用)	7
• Illustration of sorting objects (for reference only)	
• PS-1500系列 - 標準型分度盤影像篩選機	9
• PS-1500 series - Rotary Disk Sorting Machine	
• PSL-1500系列 - 加大型分度盤影像篩選機	10
• PSL1500 series - Rotary Disk Sorting Machine	
• PSD-1500系列 - 加長型分度盤影像篩選機	11
• PSD-1500 series - Rotary Disk Sorting Machine for Long Screws	
• PSE-1500系列 - 渦電流篩選機	12
• PSE-1500 series - Eddy Current Sorting Machine	
• PSC-2500系列 - 輸送帶影像篩選機	13
• PSC-2500 series - Conveyor Sorting Machine	
• PSC-3500系列 - 輸送帶影像篩選機	14
• PSC-3500 series - Conveyor Sorting Machine	
• PSG-1500系列 - 玻璃盤影像篩選機	15
• PSG-1500 series - Glass Dial Sorting Machine	
• PSG-2500系列 - 玻璃盤影像篩選機	16
• PSG-2500 series - Glass Dial Sorting Machine	
• PQC-1500 - 首件品檢報告機	17
• PQC-1500 - First Article Inspection Machine	
• 篩選機週邊選擇配備	18
• Peripheral Equipments for Sorting Machine	
• 篩選機零附件選擇配備	19
• Accessories for Sorting Machine	
• 篩選機規格	20
• Sorting Machine's Specification	
• 篩選機篩選項目	21
• Sorting Machine's Sorting Items	
• 專利、CE及ISO證書	23
• Patents and CE, ISO Certificates	
• 全球客戶與代理	24
• Global Sales Spots & Agents	
• 大陸分公司	25
• China Branches	
• 篩選代工廠	26
• Sorting Service Plant	
• 精湛昆山、台灣總公司	封底cover
• CCM Kunshan and Taiwan Headquarters	



大廳接待處 Reception



明亮的辦公空間 Office



研發部菁英團隊 R&D Team



部門教育訓練 Internal Training



研發會議討論 R&D Meeting

公司歷史沿革

CCM Company Profile

Professional Manufacturer of High Quality Sorting Machines



1992.09 精湛公司成立，由二人開始創業，創業資金NTD 40萬，專業設計生產振動送料機等相關機械。
 1999.03 開始從事各種螺絲螺帽包裝機之事業。
 2000.04 開始螺絲影像篩選機之研發。
 2003.07 成立螺絲篩選代工廠，服務國內客戶之品質管制。
 2004.09 擴建廠房為總面積1,600坪，螺絲篩選機由15台增至30台來服務螺絲業。
 2004.10 開始銷售PS-1500-C2影像篩選機至國內外螺絲工廠。
 2005.02 ISO 9001-2000認證取得。
 2005.03 成功開發第三鏡頭之螺絲影像篩選機：PS-1500-C3檢測頭裂、文字等。
 2006.10 成立精湛東莞機械公司。
 2007.02 取得CE認證。
 2007.04 成功研發LS-1501螺絲輪裂技術並取得多國專利。
 2007.09 成立昆山精湛新自動化設備有限公司。
 2008.12 螺絲影像篩選機之銷售達到350台。
 2009.03 新辦公大樓啟用。
 2009.04 PSC輸送帶影像篩選機、PSE渦電流篩選機、PSG玻璃盤影像篩選機、PSD加長型螺絲影像篩選機(250mm)新機發表會。
 2009.11 榮獲第16屆經濟部中小企業創新研究獎。
 2009.12 昆山大陸總部成立。
 2010.03 昆山精湛新廠落成典禮暨新機發表會。
 2010.12 螺絲影像篩選機之累積銷售達到600台。
 2011.04 「精湛機械有限公司」正式更名為「精湛光學科技股份有限公司」。
 2011.05 新機發表：正式推出PQA~C首件品檢報告機、PSC-3500輸送帶影像篩選機、PSG-6500雙玻璃盤影像篩選機。

1992.09 CCM was established, 2 persons company in the beginning with US\$12,000 of capital. The main product at the early stage was Vibratory-Feeder producing and design.
 1999.03 Invested the Packing Machine Business.
 2000.04 Started R&D of the Screw Sorting Machine Business (PS-1500-C2).
 2003.07 Started the service of Screws Sorting Business for the domestic fastener industry.
 2004.09 The factory sites expanded up to total 5,300 square meters. And the screw machines were increased to total 30 sets for serving fastener industry.
 2004.10 PS-1500-C2 Screw Sorting Machines market launch.
 2005.02 Acquired "Certificate of ISO 9001-2000."
 2005.03 PS-1500-C3 (3 Cameras) for sorting Head Cracks, Head Marks, etc.
 2006.10 CCM DonGuang branch set up in China.
 2007.02 Acquired "Certificate of CE".
 2007.04 Upgraded the sorting technology of LS-1501 for sorting Screw Wheel Crack and got the patents in the world.
 2007.09 CCM KunShan branch set up in China.
 2008.12 More than 350 Screw Sorting Machines were installed in the world since 2004.
 2009.03 New office inauguration.
 2009.04 New products launch for PSC, PSE, PSG, PSD.
 2009.11 CCM accredited with The 16th SMEs Innovation and Research Award.
 2009.12 CCM China headquarters set up in KunShan.
 2010.03 KunShan Branch new factory grand opened.
 2010.12 Machine worldwide sales reached 600 sets.
 2011.04 Renamed to "CHING CHAN OPTICAL TECHNOLOGY CO., LTD."
 2011.05 New products launch for PQA~C, PSC-3500, PSG-6500.

側視(牙)檢測功能 Side View(thread) Inspection Items



螺牙內外徑/牙距/牙角
Thread I.D./E.D./Pitch Distance/Thread Angle



搓牙不良/牙品質
Thread bevel



底部形狀/桿徑/頸下長度
Bottom shape/Shank Dia./length under head



拖尾/彎曲/尾部割溝
Cone point/bend/cutter

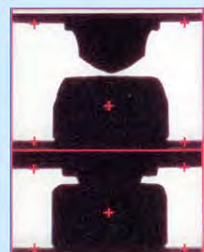


高低牙
High-Low Thread

側視(頭部)檢測功能 Side View(head) Inspection Items



頭部高度、寬度
Screw-head height, width



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

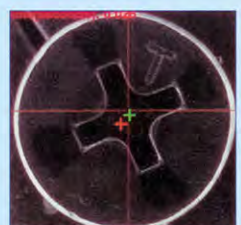


頭部套筒(旋轉式)
Head Socket Rotating



無效牙長(頸下牙高)
Ineffective Thread Length

上視檢測功能 Top View Inspection Items



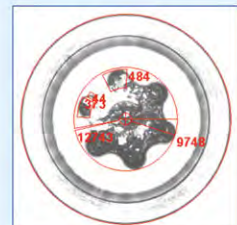
針孔同心度/真圓度
Pinhole alignment/Roundness



頭部文字、形狀
Head Mark

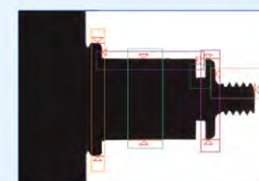


頭上裂痕
Head Crack



塞孔
Excess Material

側視CCD檢測功能 Side View CCD Inspection Items



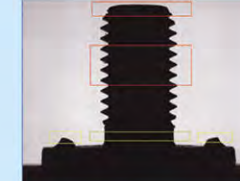
多段高度/寬度/厚度
Multi-Height/Width



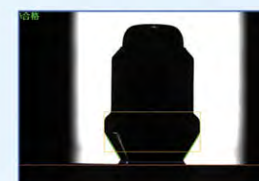
倒角/夾角
Chamfer



焊接螺帽三&四點獨立檢測
3 or 4 Welding Points



焊點高度/桿徑/螺牙
welding points/width/pitch

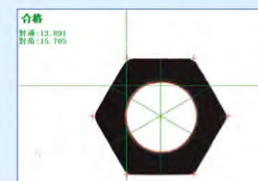


角度比對
Angle

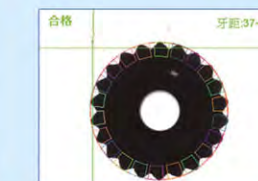
上下視CCD檢測功能 Top View/ Bottom View CCD Inspection Items



內外徑/直徑/同心度
Alignment/Concentricity



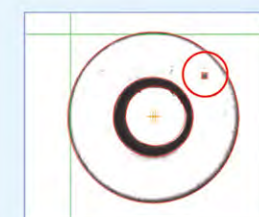
對邊/對角
AF /AC



齒數/牙距
Pitch number/Pitch Distance



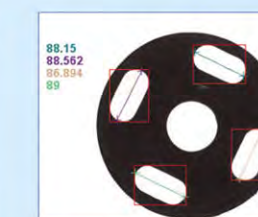
外型尺寸/兩圓孔距
Dimension/hole distance



表面瑕疵
Surface Flaw



頭裂
Head Crack



表面特徵(直徑/寬度)
Surface (Diameter/Width)



印記
Mark



側邊特徵
Side Feature



螺帽毛邊
Burr



偏心
Off Center

上下視CCD檢測功能 Top view/ bottom view CCD Inspection Items



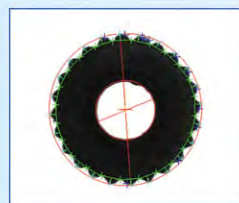
印記混料
Mark/ Material-Mix



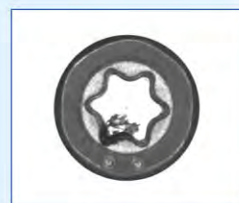
電鍍不良
Zinc



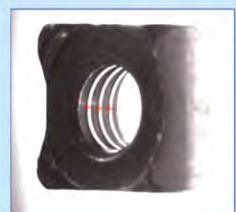
滾花牙高面積
Knurl Shape



斷針
Broken Pin



45° CCD 檢測功能 45° CCD Inspection Item



有無牙
Thread: Yes or No



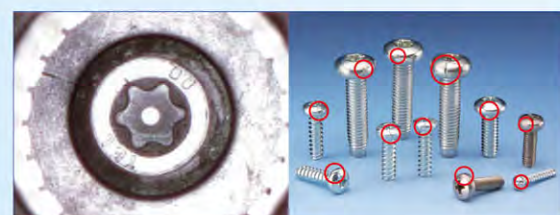
凸緣螺帽輪裂
Wheel crack of Flange Nut



選配檢測功能 Optional Inspection Items



黑色輪裂螺絲
Black Screw of Wheel Crack



電鍍輪裂螺絲
Zinc Screw of Wheel Crack



有無割尾
Cutter: Yes or No

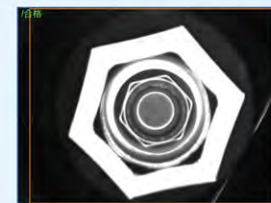


彎曲
Bending

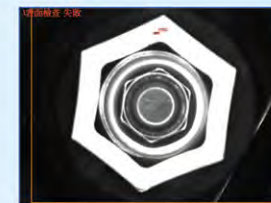


牙線角度
Pitch Angle

360° 外部裂痕檢測 360° External Crack Inspection



OK

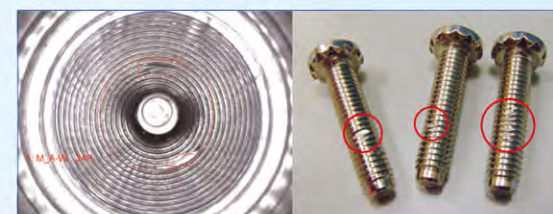


NG



NG 1

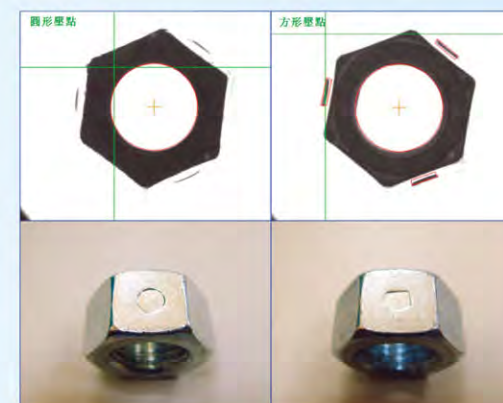
360° 檢測功能 360° Inspection items



螺牙360° 檢測之照片
360° Degree Thread Damage Inspection (Customized)



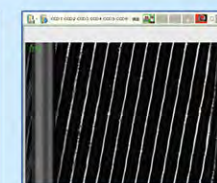
360° 內螺牙牙傷
360° Internal Thread Damage



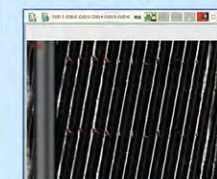
360° 外部檢測
360° External Inspection



螺絲牙傷 (360°)
Wire Thread (360°)



合格 OK



不合格 NG



**PS-1500**

標準型分度盤影像篩選機

Professional Manufacturer of High Quality Sorting Machines

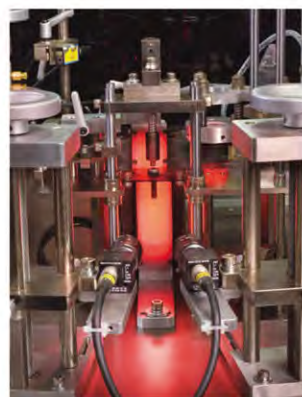
加大型分度盤影像篩選機

PSL-1500

Professional Manufacturer of High Quality Sorting Machines



PS-1500系列 標準型分度盤影像篩選機

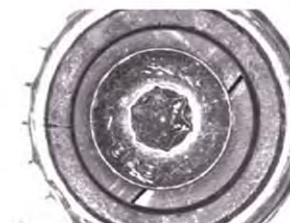
PS-1500 Series Rotary Disk Sorting Machine針孔檢測機構
Pinhole Inspection針孔檢測
Pinhole Inspection專利機台仿冒必究
Patented Machine. Counterfeit will be sued.**機器特色：**

- 可加裝2~4支相機。
- 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。

Features:

- Can add up to 2 ~ 4 Cameras.
- Specially designed for the Standard Screw/Nuts.
- The Rotating Mechanism for inspecting the Recess Depth or Broken Pin is available.
- Can superadd the Bottom Sorting System (LS-1503) for inspecting the Cutter.

PSL-1500系列 加大型分度盤影像篩選機

PSL-1500 Series Rotary Disk Sorting Machine黑色輪裂螺絲
Black Screw of Wheel CrackLS-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支相機。
- 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不同角度取像。
- 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。

Features:

- Can add up to 6 CCDs.
- 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 available (Optional function).
- Can sort the bending or accepted products at the same time.
- The Upper/Lower Thread of Screw can be inspected by 4 cameras at the same time.



PSD-1500 | 加長型分度盤影像篩選機

Professional Manufacturer of High Quality Sorting Machines

PSD-1500系列 加長型分度盤影像篩選機

PSD-1500 Series

Rotary Disk Sorting Machine for Long Screws



專利機台仿冒必究

Patented Machine. Counterfeit will be sued.

機器特色：

- 可加裝6支相機。
- 可加裝輪裂檢測系統。
- 可檢測彎曲。
- 可檢測長度150~250 mm。

Features:

- Can assemble 6 Cameras.
- Can assemble the Wheel Crack Sorting System (LS-1501).
- Can inspect Screw Bending.
- Can inspect Screw length 150~250 mm.



渦電流篩選機 | PSE-1500

Professional Manufacturer of High Quality Sorting Machines

PSE-1500系列 渦電流篩選機

PSE-1500 Series

Eddy Current Sorting Machine



可檢測：

- 不同材質混料

Available Sorting Items:

- Material Mixed



機器特色：

- 可檢測螺絲螺帽或圓棒之類緊固件。
- 渦電流+影像檢測，可達0ppm之目標。
- 特殊裂痕檢測。

Features:

- It can inspect screws, nuts or cylinder as fastener.
- 0 PPM can be achieved if linked with the optical Sorting Machine.
- Special cracks inspection.

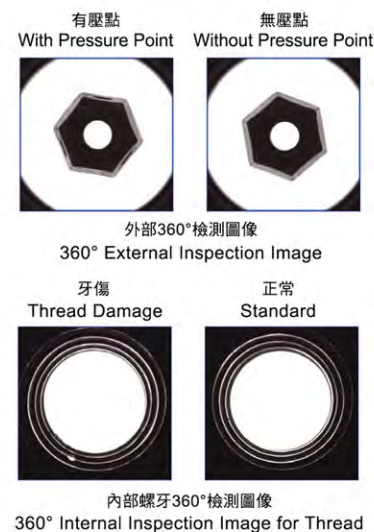


PSC-2500 | 輸送帶影像篩選機

Professional Manufacturer of High Quality Sorting Machines

PSC-2500系列 輸送帶影像篩選機

PSC-2500 Series Conveyor Sorting Machine



機器特色:

- 平面式輸送帶設計，適用於螺帽類之檢測件。
- 依檢測項目多寡，可選配2~4支相機。
- 內外360度檢測（選配）。
- 可選用無接縫皮帶。
- 人性化操作介面，功能最先進。

Features:

- Flat-conveyor design for nuts.
- According to inspection criteria, it can add 2 to 6 cameras.
- 60 degree inspection internal & external parts of nuts (optional devices).
- Application of seamless conveyor.
- User-friendly operation interface, the most advanced functions.

輸送帶影像篩選機 | PSC-3500

Professional Manufacturer of High Quality Sorting Machines



PSC-3500系列 輸送帶影像篩選機

PSC-3500 Series Conveyor Sorting Machine



機器特色:

- 傾斜式輸送帶設計，適用圓柱體之檢測件，如：光桿、無頭螺絲等。
- 依檢測物長度及檢測項目多寡，可選配1~4支相機。
- 依精度要求，可選用高達130萬畫素之相機。
- 程式可自動判斷檢測物件之頭尾方向，送料機構不需選邊，可提升送料速度。
- 人性化操作介面，功能最先進。

Features:

- Inclined-conveyor design for columnar parts, such as rod and screw without head.
- In accordance with parts' length and inspection criteria, it can add 1 to 4 cameras.
- Depending upon precision expectation, 1.3 mega pixel camera is available as option.
- Automatic identification of parts head and end, no need to adjust feed-in system, which enhances the feed-in speed.
- User-friendly operation interface, the most advanced functions.

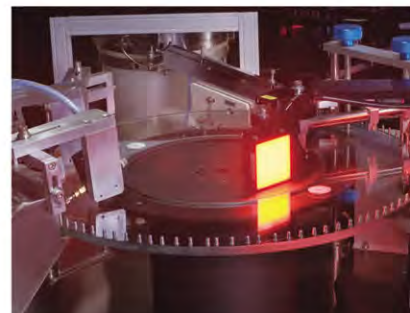


PSG-1500 | 玻璃盤影像篩選機

Professional Manufacturer of High Quality Sorting Machines

PSG-1500系列 玻璃盤影像篩選機

PSG-1500 Series Glass Dial Sorting Machine



內部特寫
A Close-Up for Internal Parts



機器特色:

- 利用玻璃高透光性，物件可平穩放置於檢測盤面者皆可檢測。
- 可於底部增設攝影機，透過高穿透玻璃盤檢測，適用於需兩面檢測且無油漬之物件。
- 檢測速率：依物件及供料系統而定，最快每分鐘可達400~1,500個。
- 檢測時不會造成牙傷

Features:

- Highly-transparent glass plate. Fit for grease-free parts which can be placed on the glass plate steadily.
- Bottom surface inspection by optional under camera.
- Speed: 400~1,500 ppm/ Depend on individual case.
- It will not damage threads of screws.

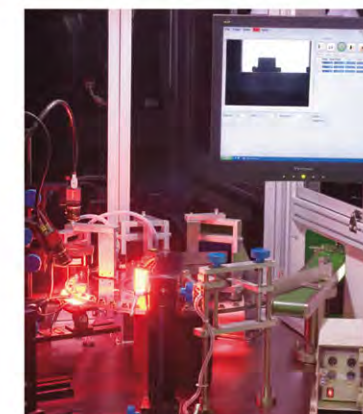
玻璃盤影像篩選機 | PSG-2500

Professional Manufacturer of High Quality Sorting Machines

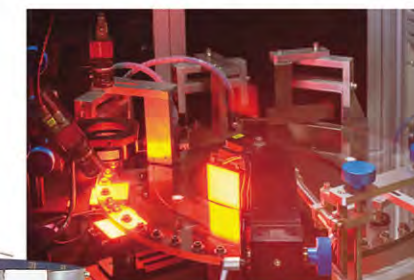


PSG-2500系列 玻璃盤影像篩選機

PSG-2500 Series Glass Dial Sorting Machine



玻璃盤特寫
A Close-Up for Glass Plate



機器特色:

- 可加裝2~4相機。
- 檢測零件範圍廣，Ø10~Ø35 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。

Features:

- Can superadd 2 to 4 cameras.
- Available sorting range from Ø10~Ø35 mm
- Easy for changing parts & operation.
- Can inspect the positive & negative side at same time.



PQC-1500 | 首件品檢報告機

Professional Manufacturer of High Quality Sorting Machines

Peripheral Equipments for Sorting Machine

Professional Manufacturer of High Quality Sorting Machines



PQC-1500系列 首件品檢報告機

PQC-1500 Series First Article Inspection Machine



內部特寫
A Close-Up for Internal Parts



項目 Item	機型 Type	PQC-1500
量測物件 Application Range		頭高 Head Height: 3~12mm 頭徑 Head Diameter: 5~24mm 長度(頭下長度) (Under Head) Length: 10~135mm 線徑 Wire Diameter: 3~18mm
檢測精度 Inspection Precision		±10μm
重複精度 Repeat Precision		±5μm
檢測時間* Inspection Time		30~300 sec/pc
淨重/總重 Net/Gross Weight		300/430 kgs
機器尺寸/ 裝箱後材積 Machine Dimension/ Dimension after creating	L: W: H:	1,000/1,200 720/920 1,730/2,060

*視檢測項目及檢測物長度而定
Depending on inspection items and part's length

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

機器特色:

- 可以檢測一般螺絲及部份特殊形狀螺絲。
- 可做快速360°旋轉之面檢測。
- 防呆式中心定位。
- 採用高級遠心鏡頭及平行背光，不會產生視角誤差。
- 具自動檢測功能，不需設定。
- Z軸採用光學磁性尺高精度定位。
- SPC報表，提供製程品質分析。
- 檢測項目：對邊、對角、頭寬、頭厚、皿頭角度、皿頭G值、華司寬、華司厚、R角、牙外徑、牙底徑、牙距、三角牙(C值)、谷距、牙角度、有效徑(機械牙、牙角度60度)、桿徑、桿長、總長、有效牙長、多段牙長、尖尾度數、束尾徑、鑽尾長、鑽尾寬、高低牙外徑。

Features:

- Suitable for general fasteners as well as fasteners with special shape.
- Speedy inspection with 360 degree rotation.
- Error proofing centric positioning.
- Advanced telecentric lens and parallel backlight avoid visual angle errors.
- Automatic inspection, no setting steps required.
- Z axel applies optical magnetic scale for high-precision positioning.
- SPC report integrated for manufacturing process quality analysis.
- Inspection Items: Across Flat, Across Corner, Head Width, Head Height, Pan Head angle, Pan Head G value, Washer Width, Washer Height, Radius, Major Thread Diameter, Minor Thread Diameter, Thread Pitch Distance, Triangle Thread(C value), Thread Valley Distance, Thread Angle, Effective Diameter(mechanical thread, thread angle 60 degree), Shank Diameter, Shank Length, Total Length, Effective Thread Length, Multi-Length of Thread, Sharp Tail Angle, Sharp Tail Diameter, Sharp Tail Length, Sharp Tail Width, Up-and-down Thread Diameter.

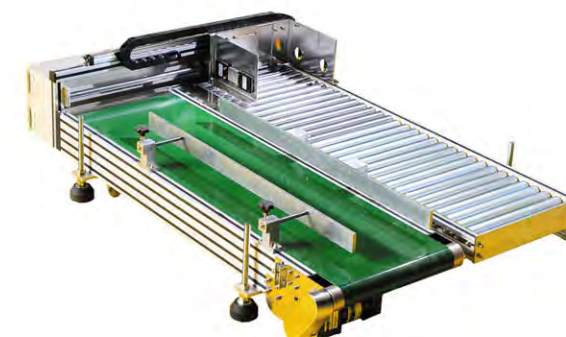
DS-510 自動進出輸送系統(雙層)

DS-510 Automatic Packing System (Double Layers)



DS-610 自動進出箱輸送系統

DS-610 Automatic Packing System



HS-1000 直立式 自動補料儲料斗

HS-1000 Upright Automatic Hopper



HS-800 自動補料儲料斗

HS-800 Automatic Hopper



HS-300 儲料斗

HS-300 Hopper



規格表 Specifications

項目 ITEM	機型 TYPE	DS-610	HS-300	DS-510	HS-800	HS-900	HS-1000
機器尺寸 Machine Size		長 (L):1,420 mm 寬 (W):960 mm 高 (H):360 mm	長 (L):500mm 寬 (W):350mm 高 (H):660mm	長 (L):2,750mm 寬 (W):1,450mm 高 (H):1,470mm	長 (L):1,700 mm 寬 (W):1,600 mm 高 (H):2700 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
淨重/總重 NW/GW		160/220 kg	25/64 kg	480/850 kg	278/422 kg	729/1131 kg	285/393 kg
振動馬達 Vibrating Motor					1/3 HP	1/3 HP	
馬達 Motor		輸送帶 (Conveyer) 90Wx2台				升降機 (Elevator) 1HP, 750W	1/2 HP
裝箱後材積 Dimension after creating		長 (L):1,600mm 寬 (W):1,200mm 高 (H):700mm	長 (L):680mm 寬 (W):530mm 高 (H):940mm		長 (L):1,820mm 寬 (W):1,820mm	長 (L):4,120mm 寬 (W):2,240mm	長 (L):1,600mm 寬 (W):1,550mm

*可依客戶實際需求客制尺寸。

*Specification can be customized.



篩選機零附件選擇配備 Accessories for Sorting Machine

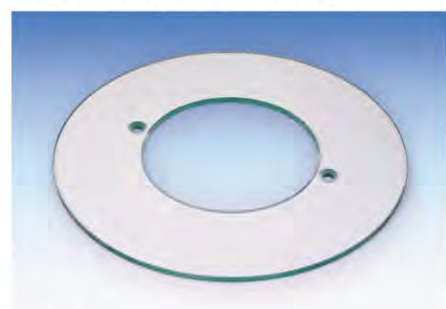
Professional Manufacturer of High Quality Sorting Machines

篩選機規格 Sorting Machine's Specification

Professional Manufacturer of High Quality Sorting Machines



分度盤
LS-200 Rotary Disk 3mm thick



玻璃盤
LS-1505 Glass Dial



輪裂檢測系統 (專利版權，仿冒必究)
LS-1501 Wheel Crack Sorting System
Patent Certified



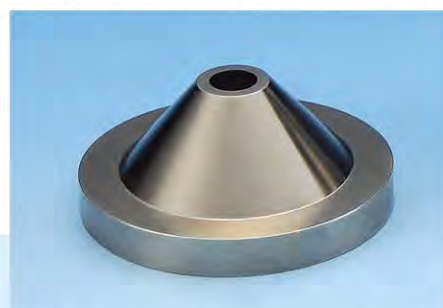
LS-100-C25 渦電流探頭
LS-100-C25 Eddy Current probe



分度盤
LS-285 Rotary Disk 7mm thick



輸送皮帶
LS-1506 Conveyor Belt



輪裂檢測不同尺寸錐形鏡組 (專利版權，仿冒必究)
LS-1502 Cone Mirrors
Patent Certified



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

機械尺寸規格表 Specifications:

機型 Type		PS-1500		PSL-1500		PSD-1500		PSE-1500		PSC-2500		PSC-3500		PSG-1500		PSG-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~Ø16.0						Ø1.2~Ø3.0			
頭部外徑 Head Width	mm	5~15		10~25		10~35		5~25		10~35		5~20		2.5~8		10~35	
頭部厚度 Head Height	mm	2~10		2~25		5~30		3~25		2~25				0.5~7		2~25	
頸下長度 Length Under Head	mm	5~80		15~115		125~250		15~115				5~45		1.5~12			
篩選精度 Sorting Precision	pixel	±1		±1		±1		±2 HRC		±1		±1		±1		±1	
篩選速度 Sorting Speed	PPM Max.	100~600		100~400		60~100		100~300		100~450		100~400		100~900		100~900	
使用氣壓 Air Pressure	kg/cm ²	5															
電腦主機 Computer		工業用電腦 Industrial Computer															
類比相機 Analog Camera																	
數位相機 Digital Camera		BASLER		BASLER		BASLER				BASLER		BASLER		BASLER		BASLER	
淨重/總重 Net/Gross Weight	kgs	795/1,145		1,060/1,480		1,800/2,192		1,060/1,507		845/1,105		680/770		580/670		845/990	
機器尺寸 Machine Dimension	L:	890		1,060		1,215		1,815		1,260		900		930		1,000	
	W:	890		1,060		1,700		800		830		830		1,000		1,000	
	H:	1,772		1,630		1,960		1,845		1,845		1,800		1,890		1,890	
機器 (主機/震動盤+電腦座) 裝箱後材積 Dimension after crating (Host/Vibrating Plate+Computer Base)	L:	1,480	1,580	1,650	1,800	2,420	1,450*	1,860	1,860	2,200		2,200		1,950		2,240	
	W:	1,270	1,030	1,580	1,100	1,850	1,450	1,350	1,350	1,800		1,260		1,430		2,080	
	H:	2,120	1,970	2,120	1,970	2,240	1,400	2,240	2,240	2,140		2,240		2,240		2,240	

以上數據僅供參考，如有變動不另行通知。
*不含震動盤。

註: 使用PSG篩選時:
1. 其工件必須能站立
2. 頭部直徑: 頸下長度為2:1時，為最佳物件比例
3. 依物體實際尺寸，最佳篩選精度可達±0.01mm

CCM reserves the right for specification amendment without prior notice.
*No Feeder.

Remarks: when use PSG sorting machine, please notice conditions below.
1. The sorting parts must be able to stand on Glass plate.
2. The sorting parts head width : length under head = 2 : 1 is the best proportion.
3. The best Sorting Precision can be up to ±0.01mm, it depends on the real dimension of the sorting part.



打○表示標準功能，打✓表示選配功能

○：Standard function

✓：Optional function

可篩選項目表 Sorting Items:

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

機型 Type 項目 Item	PSE-1500
硬度 Hardness	○
材質 Material	○



打○表示標準功能，打✓表示選配功能

○：Standard function

✓：Optional function

可篩選項目表 Sorting Items:

機型 Type 項目 Item	PSG-1500	PS-1500	PSL-1500	PSD-1500	PSC-2500
內孔徑真圓度 Inner Roundness	○	○	○	○	○
內孔同心度 Inner Concentricity	○	○	○	○	○
內孔徑塞孔 Inner Excess Material	○	○	○	○	○
短對邊 Shorten AF	○	○	○	○	○
針孔塞孔 Pinhole Excess Material	○	○	○	○	
特徵數量 Feature No.	○	○	○	○	○
特徵角度 Feature Angle	○	○	○	○	○
特徵相似度 Feature Similarity	○	○	○	○	○
特徵長度 Feature Length	○	○	○	○	○
特徵至中心距離 Feature-Center Distance	○	○	○	○	○
滾花間距 Knurl Distance	○				○
滾花高度 Knurl Height	○				○
印記 Mark	○	○	○	○	○
側邊特徵 Side Feature	✓				✓
尺寸混料 Material-Mix	○	○	○	○	○
斷針 Broken Pin	○	○	○	○	
搓牙不良 Deformed Thread	○	○	○	○	
360°旋轉測牙傷 360° Rotation-Thread damage			✓		



Patents & Certificates

Professional Manufacturer of High Quality Sorting Machines

專利、CE及ISO證書

Global Sales Spots & Agents

Professional Manufacturer of High Quality Sorting Machines



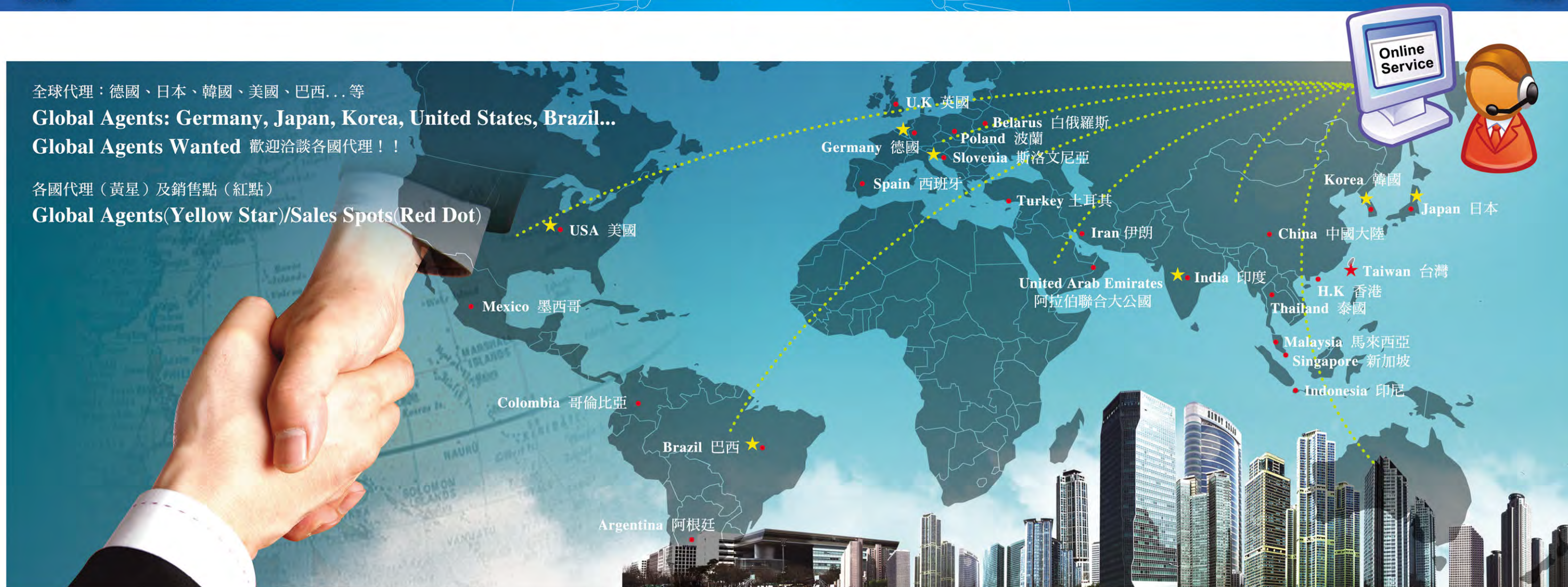
全球代理：德國、日本、韓國、美國、巴西...等

Global Agents: Germany, Japan, Korea, United States, Brazil...

Global Agents Wanted 歡迎洽談各國代理！！

各國代理（黃星）及銷售點（紅點）

Global Agents(Yellow Star)/Sales Spots(Red Dot)



堅強的研發團隊
確實的品質管理
永續的售後服務

Top R&D Team
Reliable Quality Control
Sustainable After-Service

精湛絕對是您最佳的事業夥伴！
Your Superb Business Partner-CCM!



大陸分公司-東莞、昆山、溫州廠 China Branches - Dongguan, Kunshan & Wen Zhou

Professional Manufacturer of High Quality Sorting Machines

篩選代工廠

Sorting Service Plant

Professional Manufacturer of High Quality Sorting Machines



昆山廠
Kunshan Headquarters

昆山全盈自動化設備有限公司 QUANYING MACHINERY (KUNSHAN) CO., LTD.

江蘇省昆山市千燈鎮聖祥中路225號
No. 225, Shengxiang Midst Rd., Qiandeng Town, Kunshan City, Jiang Su, China.
TEL: 86-512 5729 7027-28
FAX: 86-512 5729 7029



廠區一隅
Corner of factory



大廳接待處
Reception



客服團隊
Service team

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>

精湛科技溫州公司 WEN ZHOU CHING CHAN TECHNOLOGY CO., LTD.

浙江省溫州市甌海區仙岩鎮官山垵路
Guan Shang Yang Rd., Hsien Yen Village, Ou Hai Dist., Wen Zhou City, Zhe Jiang, China.
TEL: 86-577-8532 6311 FAX: 86-577-8532 6300

精湛科技寧波辦事處 NINGBO BRANCH CHING CHAN TECHNOLOGY CO., LTD.

寧波市北侖區小港鎮渡口路興業城市花園
29th Building Chengshijiyuan Dukou Rd., Xiaogang Town, Beilun Area, Ningbo City, Zhejiang Province, China.
TEL: 86-574-8616 2817 FAX: 86-574-8616 2817



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, Durability, and Function.

兩岸全檢代工服務據點：

全盈自動化股份有限公司

高雄市湖內區忠孝街110巷16號

Tel: 07-693 7937

全盈自動化股份有限公司桃園分公司

桃園縣蘆竹鄉南山路二段62號

Tel: 03-212 7137

昆山全盈自動化設備有限公司

江蘇省昆山市千燈鎮聖祥中路225號

Tel: 86-512-5729 7027-28

東莞市精湛機械有限公司

廣東省東莞市大朗鎮松木山村美景中路1808號 Tel: 86-769-8111 5067/5077

