TOMAS VISION

Inspection System Measuring Machines

Japaness Design · Japaness Parts · M IT

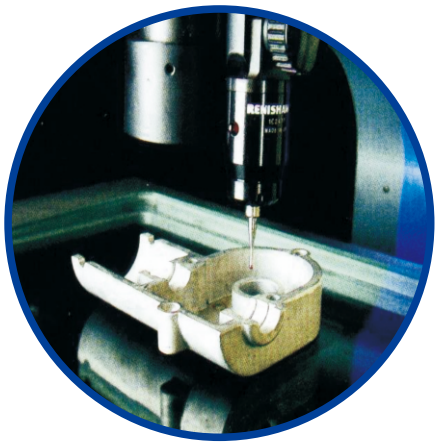
日本設計 · 日本零件 · 台灣製造

先進光學系統

Advanceed Optical Systems

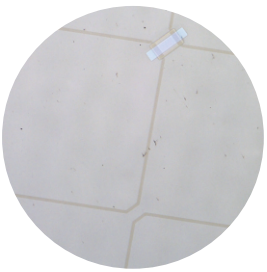
影像及探針二合一量測系統

Video and Probe 2in1 Systems

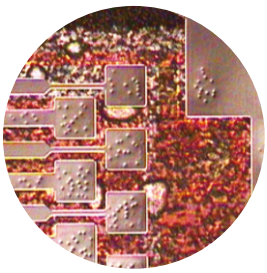


客戶範例：

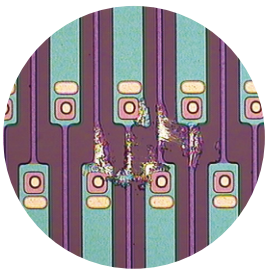
ITO



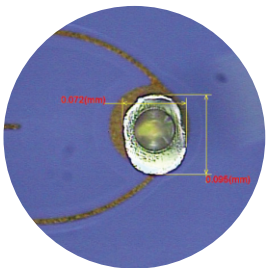
COG



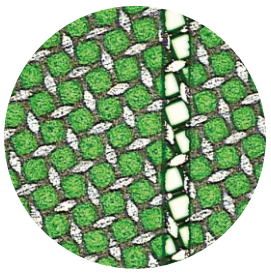
IC



LED



太陽能



標準光學影像量測系統

● Volume

• E100	100x100
• M11	100x100x200
• M21	200x100x200
• M32	300x200x200
• M43	400x300x200
• M54/G54	500x400x200
• M66/G66	600x600x200
• G96	900x600x200
• G129	1200x900x200

標準光學簡介：

1. 6265d系列鏡頭(20x~150x)
2. Navitar 0.5倍鏡頭(10x~75x)
3. Navitar 2倍鏡頭(40x~300x)
4. Navitar 4倍鏡頭(80x~600x)

光源簡介：

輪廓光源：
高亮度LED光源

表面光源：
1.高亮度多層多角度LED光源
2.獨立四分割光源

機構簡介：

1. 日本NB線性滑軌
2. 精密無牙螺桿傳動
3. 00級花崗岩基座
4. 鋁合金移動平台
5. Z軸採1:80粗細微調設計
   可量測重複性達1um

Advance Technology Group Measurement Systems

金相光學影像量測系統

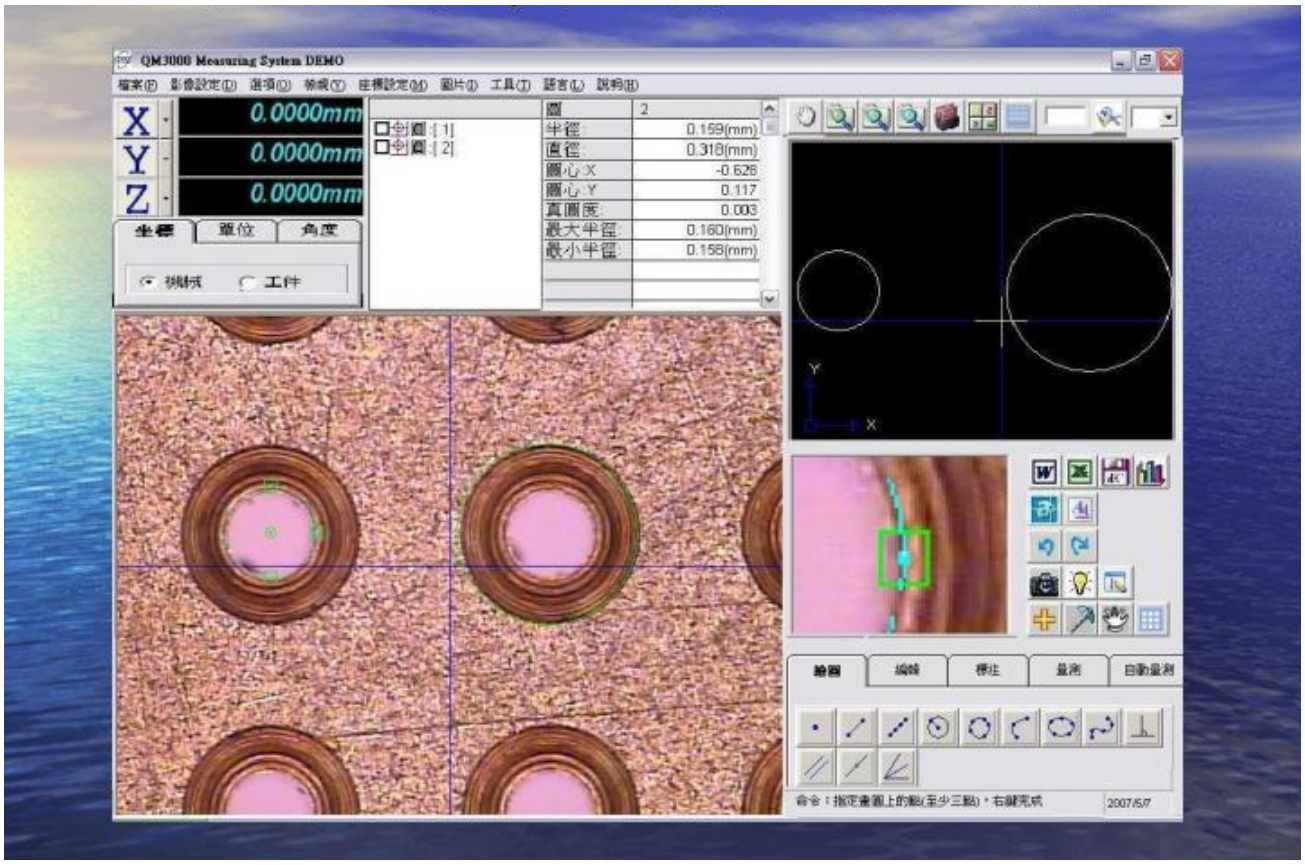
多功能量測簡介：

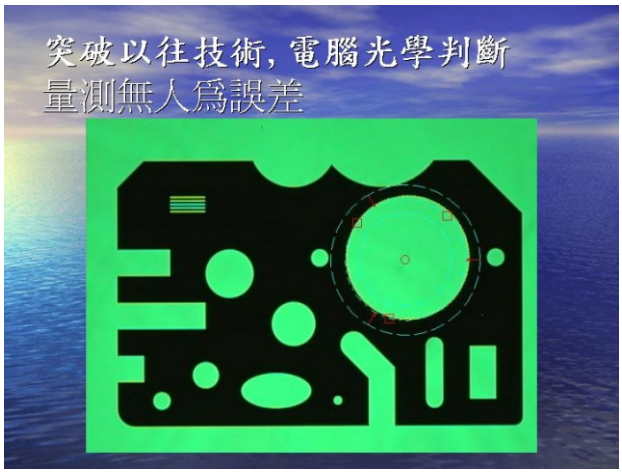
- 表面量測功能
- 輪廓量測功能
- Z 軸自動深度
- 高度量測功能
- 數據.圖形表格化
- RS232輸出與CAD串接
- 影印列印.擷取儲存PC

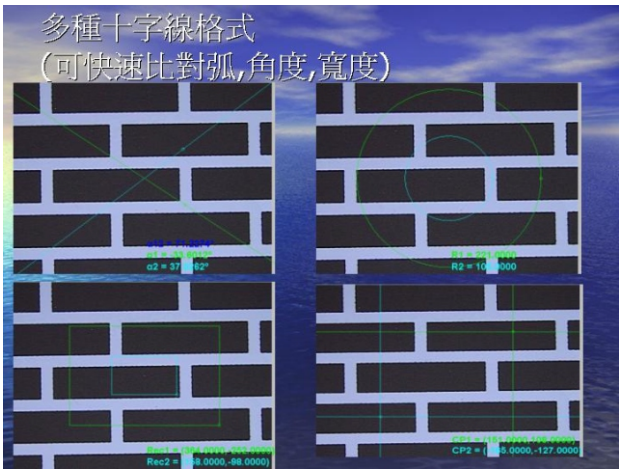
金相光學簡介：

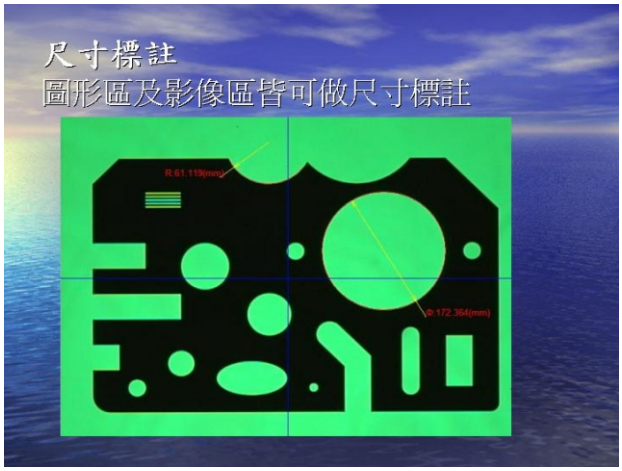
1. Olympus/Nikon/KWFM金相鏡頭組
2. 目鏡：10x/20x廣角型
3. 物鏡：5x/10x/20x/50x 平場消色差物鏡
4. 照明裝置：6V20W鹵素燈泡
5. 聚光器：雙透鏡阿貝式聚光器，附無段式光圈，雙偏光鏡及單色(藍、綠、黃)濾光鏡
6. 最新設計的光學系統，配備高級平場消色物鏡(Plan-Achromatic Objective),所有鏡片均經全面抗反射真空鍍膜處裡(Fully-Coated),影像對比鮮明，解像力極高

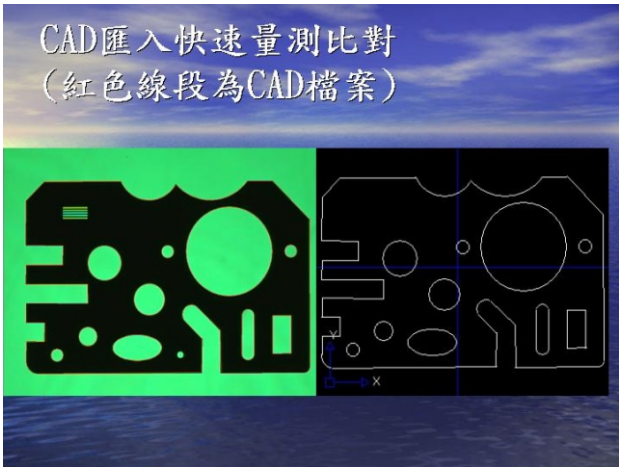
QM3000 量測軟體功能說明



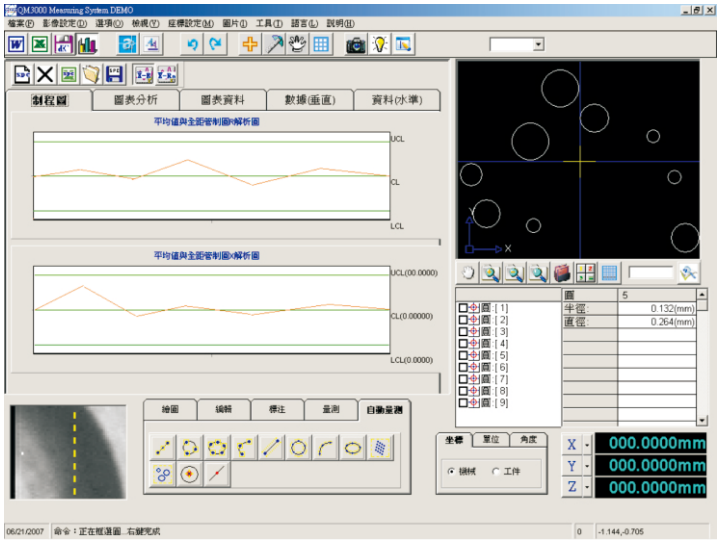




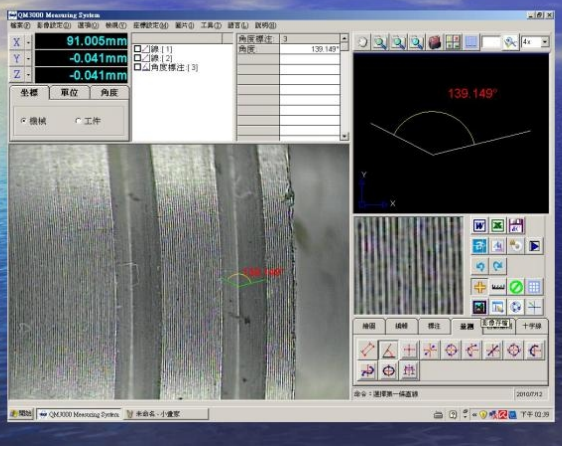




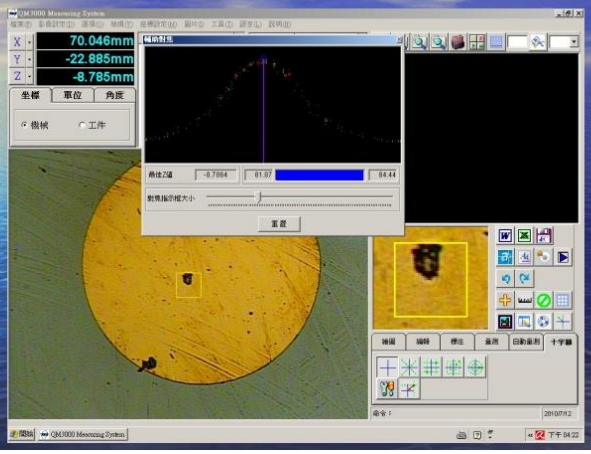
一般尺寸及幾何公差設定
(垂直度,平行度,同心度,真圓度,真直度)



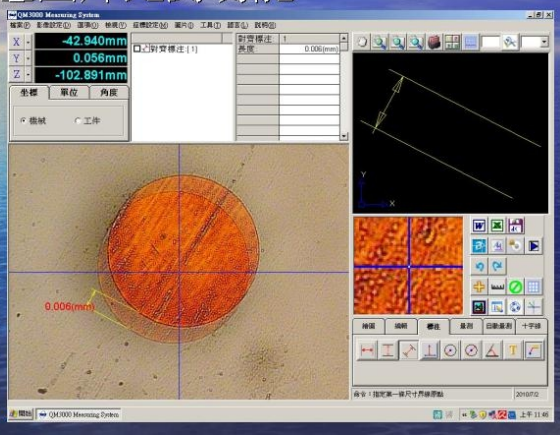
不需探針，可直接量測溝槽角度



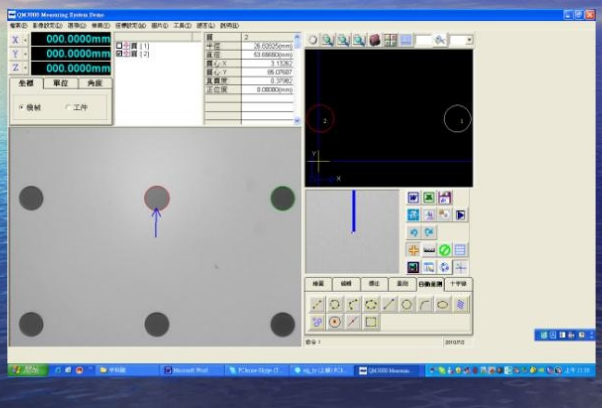
Z軸輔助對焦



彩色圖片比對功能



GPS 圖元快速尋找功能



Telecentric定倍鏡頭

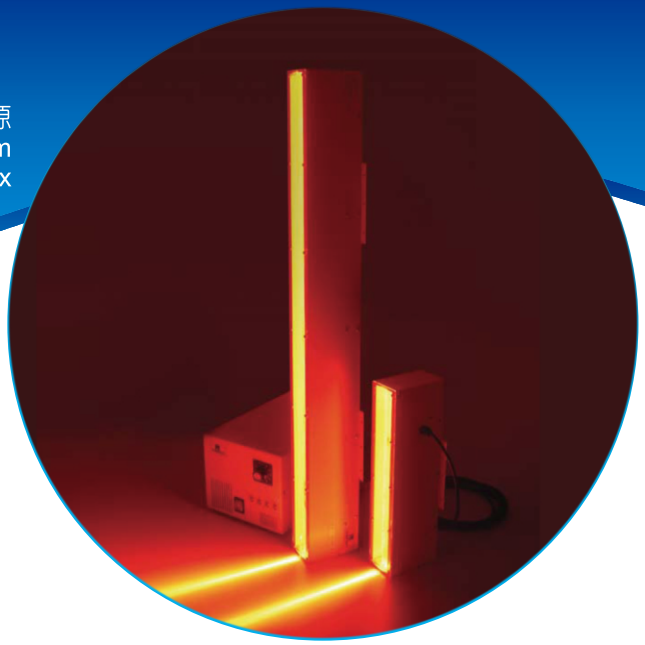
機器視覺專用 Telecentric

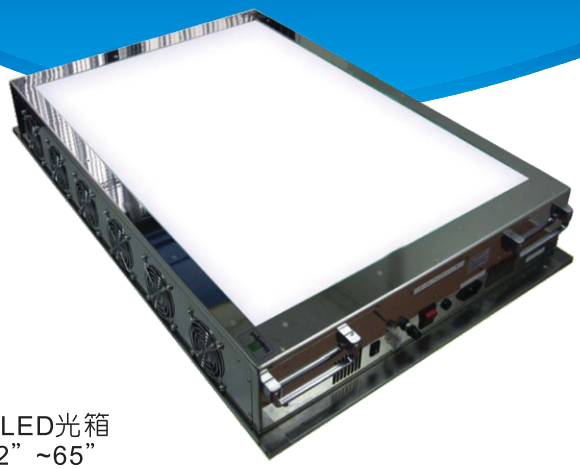
型號	倍率	WD(mm)	DOF(mm)	NA	Distortion	Resolution	Ccd/size
Yc05x190	0.5x	190	3.23	0.025	0.03%	13.53	1/2
Yc08x170	0.8x	170	1.79	0.028	0.04%	11.98	2/3
Yc08x190	0.8x	190	2.42	0.021	0.21%	16.21	2/3
Yc1x110	1x	110	1.60	0.025	0.03%	13.42	2/3
Yc1x70	1x	70	0.89	0.045	0.02%	7.46	2/3
Yc2x110	2x	110	0.50	0.040	0.42%	8.39	2/3
Yc2x70	2x	70	0.54	0.037	0.26%	9.07	2/3
Yc4x110	4x	110	0.20	0.050	0.33%	6.71	2/3
Yc4x70	4x	70	0.21	0.047	0.11%	7.14	2/3

VisionRoot

客製化LED光源

客製化LED線型光源
50mm~1200mm
100000Lux



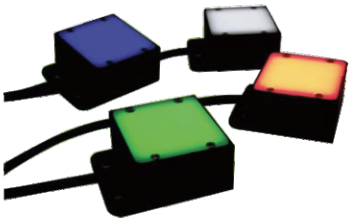


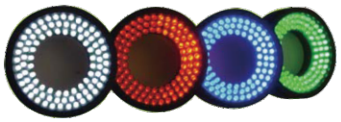
客製化LED光箱
12” ~65”
40000cd/m^2

客製化高亮度LED條型光源

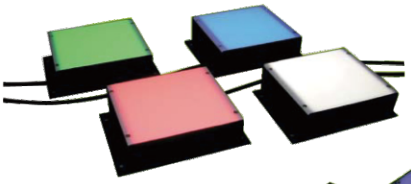
客製化高亮度
LED
背光源

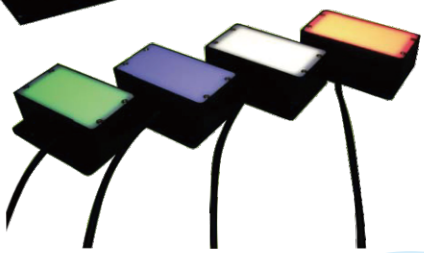
無影型環型LED光源





聚光型環型LED光源





LED背光源

標準型LED同軸光源

LED光源調光器

HI POWER
LED同軸光源 (1W/3W)

詳細規範

機　　型	E100/M11/M21	M32/M33/M43	M54/M66(G54/G66)	G96	G9012
機械性質	4x4／8x4	12x8/12x12/16x12	20x16／24x24	36x24	48x36
量測行程 mm	100x100 100x100x200 200x100x200	300x200x200 300x300x200 400x300x200	500x400x200 600x600x200	900x600x200	1200x900x200
外觀尺寸 LxWxH	530x450x700 620x360x808 620x760x808	762x850x820 930x850x820 960x969x880	1800x1500x1500	2400x1500x1500	2400x1500x1500
重　　量	40kg/68kg/120kg	150kg/180kg/190kg	500kg	650kg	800kg
床台荷重	20kg	25kg	30kg	35kg	40kg
床　　台	鍍硬鉻處理				
基座材質	鋼構鋼材 / 花崗岩				
精密滑軌	日本NB線性滑軌				
精度 XY (L:mm)	2.0+L/200μm	3.0+L/200μm	4.0+L/200μm	5.0+L/100μm	6.0+L/100μm
精度 Z	3.0+ L/200μm				
重覆性 XY	2.μm				
重覆性 Z	2.μm				
光學尺讀值	1.0μm / 0.5μm				
影像系統	日本超高解析彩色系統				
輪廓光源	日本高亮度LED				
表面光源	日本四分割高亮度LED				
光學鏡頭	6.5：1無段式鏡頭，18-360X				
量測系統	中文量測軟體及多功能處理器				
使用環境	68℉ (20℃)/ 溫度變化量：<2℉ 濕度：30-80%				
電　　源	93-264 VAC， 47-63 Hz，10 Amp Max.				

適用行業別：

LCD / 觸控面版 / 手機 / LED / IC / 印刷電路板 / 軟版 / 連接器 / BGA / 導線架
精密沖壓 / 油封/橡膠 / 塑膠 / 開關 / 齒輪 / 螺絲

銷售實績：

台 積 電・日 月 光・華新光電・晶元光電・奇力光電・億光電子
奇美電子・友達光電・瀚宇彩晶・捷聯電子・洋華光電・介面光電
宸鴻電子・元太科技・台達電子・大億科技・瑞儀光電・輔祥實業
Sony Ericsson / Motorola / SAMSUNG / HTC / Sarhap