

The logo consists of a yellow triangle pointing upwards and to the right, with the letters 'M&R' in blue inside it.

M&R

科毅科技股份有限公司
M&R Nano Technology Co., Ltd.

黃光微影唯有科毅
Explore The Better Future

About M&R

Mission :

Progressive improvement and innovation

M&R Nano technology Co., LTD supplies technical lithography including Cleaners, Photoresist Coaters, Mask Aligners, Developers, Etching Machines, Photomask Designs and a variety of other equipment. We not only provide standard products, but also customize them through our professional R & D team.

Core concept:

The establishment of our company' s culture is a process of specific, progressive interpretation. We uphold the four core values containing enthusiasm, brilliant innovation, professional service, execution efficiency. And these are attitudes and values we strictly pursue, furthermore our principles of doing things.

Premium quality of products :

In order to pursue the excellent quality of our products, we continually develop manufacturing technology. A superior testing environment was created to guarantee high accuracy and quality of each our provided equipment. Besides, we constantly focus on improving the manufacturing process to increase efficiency and productivity, and to reduce production cost. We, therefore, are able to immediately respond to customers' needs with highly competitive products.

Competitive advantages :

M&R Nanotech provides excellent lithography equipment that could be used not only in semi-conductor related facilities, photoelectric displays, backlight module, but also in manufacturing process of the promising solar and LED industry.

With the advantage of advancement, innovation and miniaturization characteristic, our products can achieve automation and nano technology to the matched merchandise. Possessing updated technologies and leading innovation makes us become more "excellent and innovative" .

Market Distribution



Our Customers



M&R Introduction



Our Company



Perfect Employee Training



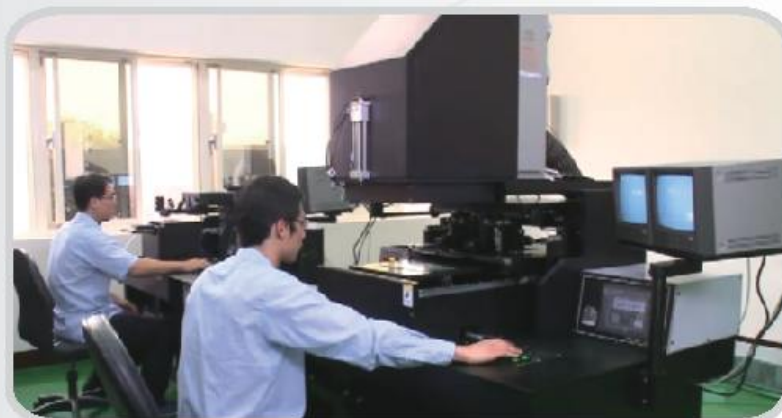
M&R Fab.



Products of M&R



Machine Display Area



Multipel Testing Program



Professional R&D Group



Installation Area

Main Products

Spin wash/Developer	P07	Spin Dryer/Hot N2 Dryer	P26
Spin Coater/Spray Coater	P08	Conveyor Type Cleaner/Stripper/Etcher	P27
Hot Plate	P11	Glass/Film Photomask/Chemical	P29
Oven	P12	Process service	P30
HMDS Oven	P14	Microprobe	P31
Mask Aligner(Auto/Semi/Manual)	P15	Fork	P32
UV LED Mask Aligner	P22	Mini-photo lithography total solution	P33
(Maskless Laser Direct Imaging System)	P23	Glovebox/Plating machine	P34
Other Introduction	P24	Microscope	P34
Wet Bench (Developer/Etcher)	P25	Used Equipments Sell	P34

Product Instruction



Products



Developer



Blue membrane cleaner



Two-stage Coater



Multiple Programmable Coater



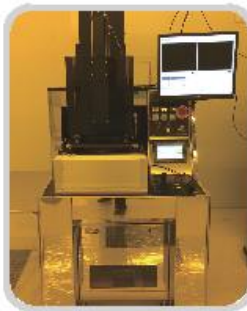
Programmable Coater



Semi Coater



8" -12" LED Aligner 8" -12" Aligner Two sides Aligner



Auto Aligner



2&4 Tracks Auto Aligner



Developer



Etcher & Stripper



Cleaner



UV Cleaner

Rinsing

PR
Coating

Exposure

Developing

Etching

SPIN WASH/DEVELOPER & BLUE MEMBRANCE CLEANER



MODEL: SWT

W 400mm x D 450mm x H 420mm



MODEL: SWA

L 1175mm x D 700mm x H 1100mm

Equipment Require: 2 "-6" Wafer substrat.

- Basic Specifications Appearance Material: P.P. resistant to isopropanol & acetone solvent material
- A set of suction cups
- Nozzle 3 (isopropyl alcohol *1, acetone *1, empty nozzle *1)
- Exhaust system
- Liquid cleaning system
- Motor: AC servo motor (speed: 10-6000 RPM)
- Fixed Nozzle *1 (N2)
- Way to open: open the way manually
- Nozzle head mining plastic material, resistant to ACE
- Pressure tank set low water sensor, automatic rehydration
- Design safety devices above the nozzle to avoid any adjustment
- Set the safety device, the production will automatically stop the open cover.

Equipment Require: 2 "-12" Wafer substrat.

- Appearance Material: The main body is made of SUS 304 bright material metal.
- Equipment Framework: Aluminum extrusion framework combination, strong structure.
- SUS 304 shiny steel plate cup basin cover structure.
- Program setting: Basin cover has to be closed can not be rotated.
- Operating window with transparent PVC or glass material, master the operation
- Exhaust system
- Drainage system
- Motor AC motor (speed: 30-1800rpm)
- Swing arm diameter swing AC motor.
- Machine safety protection
- Electronic control system
- Software PLC Programmable Automation Controller. Use the HMI connector.
- Recipe module: 6 groups formula
- Segment setting: Acceleration and time control can be set
- Password setting: You can set the password protection according to the authority.

SPIN COATER/MANUAL SPIN COATER

兩段式旋轉塗佈機/手動塗佈機



MODEL : AGS-0206S



MODEL :
AGS-1006T~AGS-1012T



MODEL : AGS-1012A

- Applicable size: Fragment -6" wafer substrate.
- Basic Specifications:
Appearance of the material: PP.
- Operating basin cover: stainless steel system actually 22MM
- Rotary motor DC brushless motor
- Rotation time setting LED is displayed directly. Can be set to switch seconds and minutes.
- Control panel: key knob type
- Power: single-phase 110V, 10A
- Speed: 300 ~ 6000RPM
- Standard accessories: 1/2 ", 1", 2 ", 4,6" separate set of suction cups
Vacuum pump a group.

- Applicable Scope: 2" ~12" wafer substrate.
- Appearance Material: PP.
- Operating Basin Sink: SUS material, round type.
- Basin Sink Lid: Transparently separable and PVC Material.
- Sucker specifications: a set of precision modeling aluminum with anodized protection.
- Exhaust system.
- Drainage system.
- Motor: AC Servo Motor (speed: 10 ~ 6000 RPM).
- Contains: Vacuum pump, vacuum exudative protection(indirectly), vacuum gauge, swinging arm*1.
- Program Device: PLC, Touch panel screen.
- Programs: abnormalities check, Formula and segments setting: 100 sets of formula and 30 segment sets for each formula.

SEMI SPIN COATER

半自動塗佈機(可規劃1/2/3/4頭塗佈機)



MODEL : AGS-01A~AGS-04A

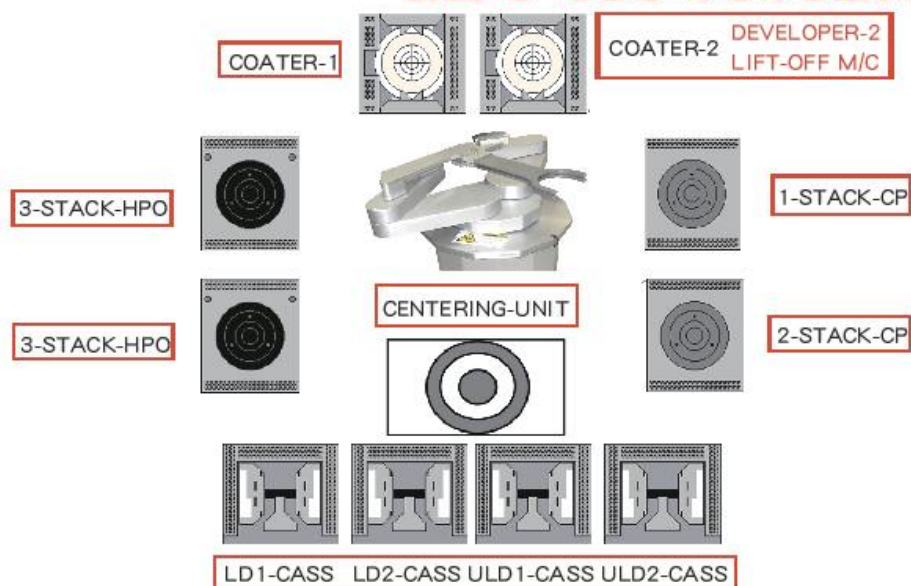


- Applicable Scope: 2" ~6" wafer substrate.
- Appearance Material: PP.
- Operating Basin Sink: SUS material, 3 cups in one set.
- Sucker specifications: a set of precision modeling aluminum with anodized protection.
- Exhaust system.
- Drainage system.
- Motor: AC Servo Motor (speed: 10 - 6000 RPM).
- Contains: Vacuum pump, vacuum exudative protection(indirectly), vacuum gauge.
- Program Device: PLC, Touch panel screen.
- Programs: abnormalities check, Formula and segments setting: 100 sets of formula and 30 segment sets for each formula.

AUTO SPIN COATER(DEVELOPER)

手臂移載式塗佈機(顯影機)

CENTRAL ROBOT COATER (DEVELOPER)& LIFT-OFF SYSTEM

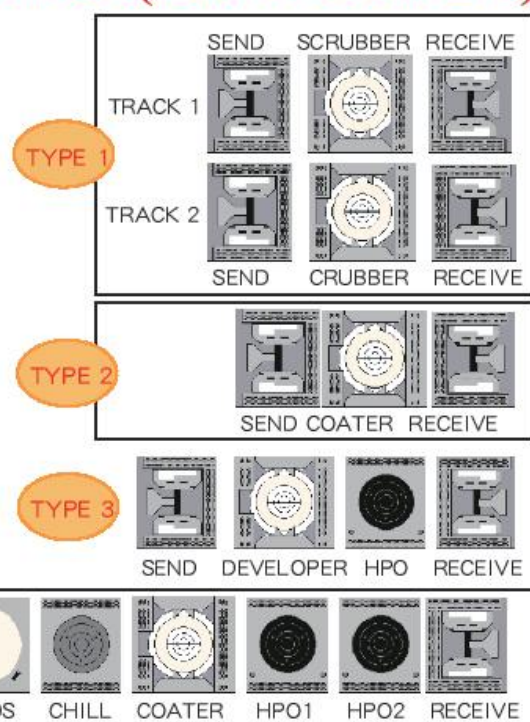
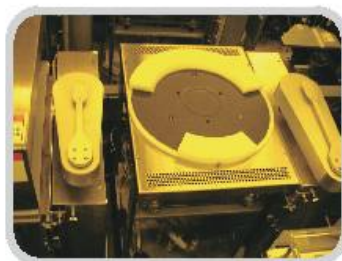


軌道移載式塗佈機(顯影機)

TRACK COATER(DEVELOPER)



MODEL:SVG86
SVG88



HOT PLATE

熱板



MODEL:AG-HP2S(200 x 200 mm)
W 200mm x D 200mm x H 170mm
Watt:750W
Time setting:0~99hr59min



MODEL:AG-HP3S(300 x 300 mm)
W 300mm x D 300mm x H 170mm
Watt:1500W
Time setting: 0~99hr59min

Equipment Overview:

Units : 0.1°C

Power: 220V

Temperature Scope:room temperature~350°C

Temperature Control: PID

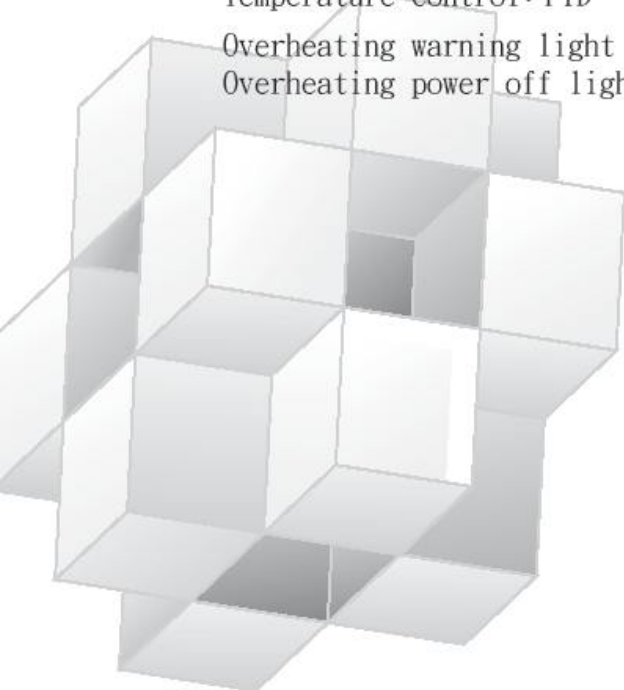
Overheating warning light

Overheating power off light

Temperature deviation correction

Overheating alarm

Surface temperature average at
100±2°C



HOT CIRCULATOR EXACT OVEN

精密型/高溫型熱風循環烘箱



type	inside W/H/D(cm)	outside W/H/D(cm)	°C	(W)
ATD-452	45*40*40	66*82*52	RT~260	110/220
ATD-602	50*60*50	75*116*62		220V 單相
ATD-802	80*100*60	110*164*78		
ATD-902	60*90*50	83*158*68		
ATD-1002	100*100*100	120*160*120		
ATD-1202H	90*120*50	109*160*67		
ATD-1202L	120*90*50	140*150*67		
ATD-1402	140*120*60	175*192*78		
ATD-1602	160*140*80	200*215*98	220V 3 相	
ATD-1802	180*140*100	220*215*118		
ATD-2002	200*160*120	240*235*138		



type	inside W/H/D(cm)	Outside W/H/D(cm)	°C	(W)
HTDH-455	40*45*40	73*114*72	RT~500	220
HTDH-605	50*60*50	82*127*72		
HTDH-805	80*100*60	112*168*90		
HTDH-905	60*90*50	92*158*83		
HTDH-1005	100*100*100	130*170*125		
HTD-1205H	90*120*50	122*190*83		
HTD-1205L	120*90*50	150*158*83		

Features:

- Material: Exterior made of SECC with painting treatment, and interior made of SUS stainless steel.
- Blower: Turbo fan.
- Packing: Silicon Packing
- Overheating Protection: Stand-alone over-heating protector, self-Diagnose function, overload power-off system.
- Circulation: Horizontal air-blowing, specific air-flow design and temp, uniform heating.
- Heating Method: PID+SSR
- Temperature Range: Room Temperature~450° C
- Temp. Controller: PID microprocessor control, button for setting PV/SV simultaneous timing heating and timing circuit-breaking heater.

- Material: Exterior made of SECC with painting treatment, and interior made of SUS stainless steel.
- Blower: Turbo fan.
- Packing: Made of heat-resistant fiber
- Overheating Protection: Stand-alone over-heating protector, self-Diagnose function, overload power-off system.
- Circulation: Horizontal air-blowing, specific air-flow design and temp, uniform heating.
- Heating Method: PID+SSR
- Temperature Range: Room Temperature~450° C
- Temp. Controller: PID microprocessor control, button for setting PV/SV simultaneous timing heating and timing circuit-breaking heater.

VACUUM DRY OVEN

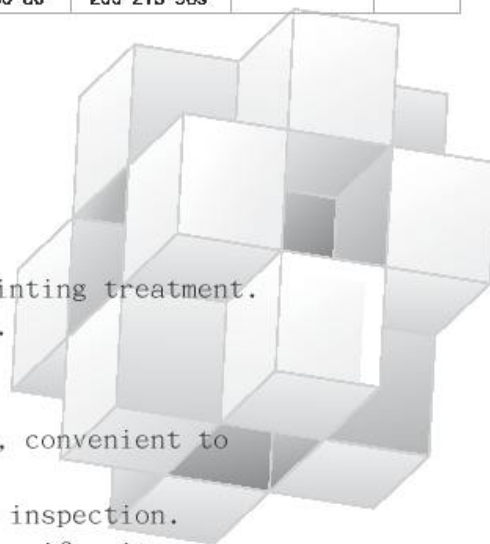
真空烘箱



Type	Interior W/H/D(cm)	Exterior W/H/D(cm)	°C	(V)
VOD-40	φ30*40L	44*73*66	RT~200	220
VOD-30L	30*30*30	50*76*47		
VOD-45L	40*40*45	60*86*62		
VOD-50L	50*50*50	79*110*75		
VOD-60L	60*60*60	89*120*85		
VOD-30LH	30*30*30	50*121*47		
VOD-45LH	40*40*45	60*131*62		
VOD-50LH	50*50*50	96*155*75		
VOD-60LH	60*60*60	200*215*98s		

Features:

- Interior Material: SUS Stainless steel.
- Exterior Material: Made of SECC steel with painting treatment.
- Circulation: Thermal radiation and convention.
- Temp. Range: 50° C~200° C.
- Vacuum: (1)Up to 5×10^{-3} Torr.
- (2)Exhaust ball valve and inlet valve, convenient to use and high leak tightness.
- (3)Tempered glass window for interior inspection.
- (4)Easy operation and excellent temp. uniformity.



HMDS OVEN

助黏劑真空烘箱



MODEL: AG-HMDS

Features:

- Material: S304
- interior Dimension: W36" * H36" * D28"
- interior Configuration: 3 shelves (680mm*880mm glass substrate)
- Temp. Range: 80~160° C
- Temp. Accuracy: $\pm 5^{\circ}$ C
- Operation Temp.: 150° C
- Power: Single Phase, 220V
- Door tightness: Robust lock device, excellent leak-tightness and no vacuum-leakage when door close
- Time control: Timing start when up to preset temp., heating and alarm stop when it's time's up
- Timer: Timing range 0-999 min, on timer for setting value and one for real value.

Notes:

- Heating stop when press both star button and stop button
- Temp. controlled by PID
- Heating stopped and alarmed by over heating.

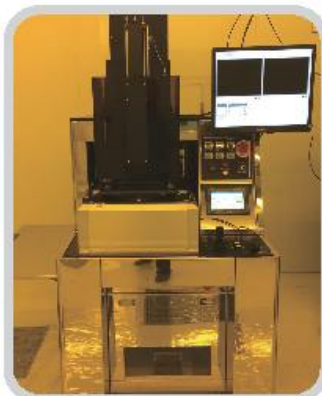
AG MANUAL MASK ALIGNER

手動曝光機

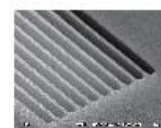
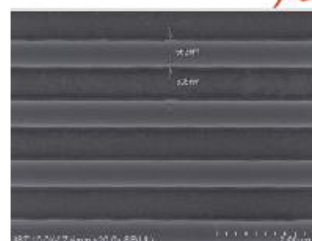
工業4.0 ready
大數據收集



8" ~12" LED Aligner
MODEL: AG2000-12N-D-S-M-V



8" ~12" Aligner
MODEL: AG1000-8N-D-S-M-H



Two-Sides Aligner
MODEL: AG350-4N-D-D-M-H



Two-sides alignment (Back Side IR/Visible)
one side exposure type
MODEL: AG1000-4D-D-R(V)-M-V

Two-sides aligner(Top & Bottom)
Back Side IR(紅外光對準)
Back Side Visible
(背面CCD/顯微鏡對準)

Applications

- -Main target customers: Research institutes or semiconductor wafer manufacturers
- There are Six areas (application) which could promote :
 - 1.Semiconductor
 - 2.Display (TFT LCD, TP = Touch Panel, OLED,...etc)
 - 3.LED
 - 4.MEMS (Bio Chips, DNA Chips, Micro-sensors, Micro-actuator, ,...etc)
 - 5.Passive components (mini-PR, Capacitors, Conductors../etc)
 - 6.Solar Cell (3,5 like GaAs substrate,...etc)

Specification

- Exposure light source :350W、500W、1KW、2KW
- Substrate Size : 2" ~24"
- Uniformity : > $\pm 3\%$ and < $\pm 5\%$
- Alignment Accuracy : $\pm 1\mu m$
- Throughput : $\geq 65wph$

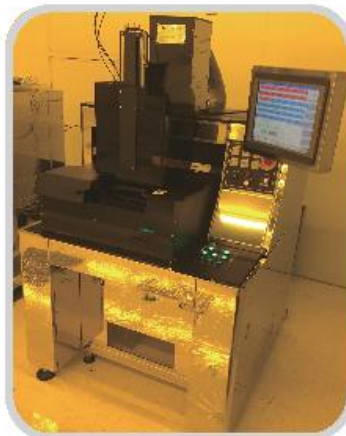
AG MANUAL MASK ALIGNER

手動曝光機

工業4.0 ready
大數據收集



Simple Type Aligner
MODEL:AG350-6N-R-U



AutoDose Aligner
MODEL:AG500-6N-N-A-M-V



Complex Stepping Aligner
MODEL:AG500-4N-N-A-M-H

優點:

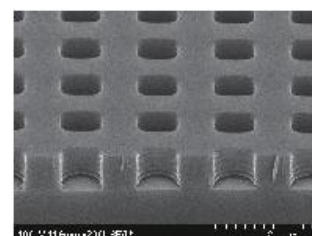
專利平整校正機構/高精度/人性化操作介面/依製程需求模組客製化

可選配雙面對準製程:

Back Side IR(紅外光對準)/Back Side Visible(背面CCD/顯微鏡對準)

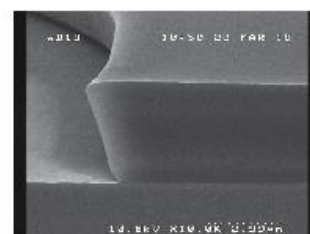
Applications

- Main target customers: Research institutes or semiconductor wafer manufacturers
- In addition, There are Six areas (application) which could promote:
 - 1.Semiconductor
 - 2.Display (TFT LCD, TP = Touch Panel, OLED,..etc)
 - 3.LED
 - 4.MEMS (Bio Chips, DNA Chips, Micro-sensors, Micro-actuator, ...etc)
 - 5.Passive components (mini-PR, Capacitors, Conductors../etc)
 - 6.Solar Cell (3,5 like GaAs substrate,..etc)



Specification

- Exposure light source : 350W,500W,1KW,2KW
- Substrate Size: 2" ~24"
- Uniformity : $> \pm 3\%$ and $< \pm 5\%$
- Alignment Accuracy : $\pm 1\mu\text{m}$
- Throughput : $\geq 65\text{wph}$



Rinsing

PR
Coating

Exposure

Developing

Etching

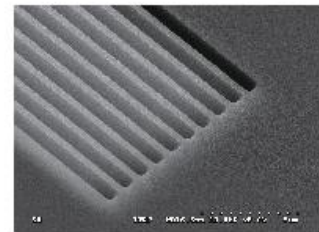
AG SEMI-AUTO MASK ALIGNER

半自動曝光機

工業4.0 ready
大數據收集



MODEL: AG500-6N-D-S-S-V



Applications

- Main target customers: Research institutes or semiconductor wafer manufacturers
- In addition, There are Six areas (application) which could promote :
 - 1.Semiconductor 2.Display (TFT LCD, TP = Touch Panel, OLED,..etc)
 - 3.LED 4.MEMS (Bio Chips, DNA Chips, Micro-sensors, Micro-actuator, ,...etc)
 - 5.Passive components (mini-PR, Capacitors, Conductors../etc)
 - 6.Solar Cell (3,5 like GaAs substrate,..etc)

Specification

- Exposure light source: 350W, 500W, 1KW, 2KW
- Substrate Size: 2" ~8" , 8" ~12"
- Uniformity $\leq 5\%$
- Alignment Accuracy : $\pm 1\mu m$
- Throughput : $\geq 70wph$

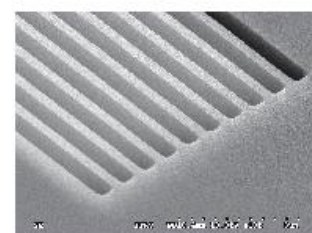
AG AUTO MASK ALIGNER

全自動曝光機

工業4.0 ready
大數據收集



MODEL:AG1000-6N-D-S-A-V



Applications

- Main target customers: Research institutes or semiconductor wafer manufacturers
- In addition, There are Six areas (application) which could promote :
 - 1.Semiconductor
 - 2.Display (TFT LCD, TP = Touch Panel, OLED,..etc)
 - 3.LED
 - 4.MEMS (Bio Chips, DNA Chips, Micro-sensors, Micro-actuator, ,...etc)
 - 5.Passive components (mini-PR, Capacitors, Conductors../etc)
 - 6.Solar Cell (3,5 like GaAs substrate,..etc)

Specification

- Exposure light source: 350W, 500W, 1KW, 2KW
- Substrate Size: 2" ~8" , 8" ~12"
- Uniformity : $\leq 5\%$
- Alignment Accuracy : $\pm 1\mu\text{m}$
- Throughput : $\geq 105\text{wph}$

Rinsing

PR
Coating

Exposure

Developing

Etching

AG SHEET BY SHEET

SEMI-AUTO MASK ALIGNER

FPD/TP 専用半自動曝光機

工業4.0 ready
大數據收集

FPD/TP Semi-Aligner
MODEL: AG05K-G30-ST-D

Applications

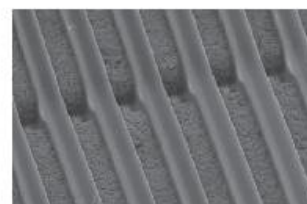
- Main target customers: Research institutes or semiconductor wafer manufacturers

In addition, There are Six areas (application) which could promote :

- 1.Semiconductor
- 2.Display (TFT LCD, TP = Touch Panel, OLED,..etc)
- 3.LED
- 4.MEMS (Bio Chips, DNA Chips, Micro-sensors, Micro-actuator, ...etc)
- 5.Passive components (mini-PR, Capacitors, Conductors../etc)
- 6.Solar Cell (3,5 like GaAs substrate,..etc)

Specification

- Exposure light source: 350W, 500W, 1KW, 2KW
- Substrate Size up to 730mm x 920mm
- Uniformity $\leq 5\%$
- Alignment Accuracy : $\leq 5\mu\text{m}$
- Throughput : $\geq 2\text{ppl/min.}$



AG DUAL (DOUBLE DUAL) TRACK AUTO MASK ALIGNER

快速(雙軌/四軌)曝光機

工業4.0 ready
大數據收集



Fast (Double, Four) Tracks
MODEL: AG05K-14N-DT-F

Applications

- Main target customers: Research institutes or semiconductor wafer manufacturers
- In addition, There are Six areas (application) which could promote :
 - 1.Semiconductor
 - 2.Display (TFT LCD, TP = Touch Panel, OLED,..etc)
 - 3.LED
 - 4.MEMS (Bio Chips, DNA Chips, Micro-sensors, Micro-actuator, ...etc)
 - 5.Passive components (mini-PR, Capacitors, Conductors../etc)
 - 6.Solar Cell (3,5 like GaAs substrate,..etc)

Specification

- Exposure light source : 3.5KW, 5KW, 8KW, 10KW
- Substrate Size: 4.5" ~ 7" , 7" ~ 11.6" , 12" Square Substrate
- Uniformity : $\pm 5\%$
- Alignment Accuracy : $\leq 5\mu\text{m}$
- Throughput : ~ 810 pnl/min.

Rinsing

PR
Coating

Exposure

Developing

Etching

AG DOUBLE SPEED

AUTO MASK ALIGNER

快速(單軌)曝光機

工業4.0 ready
大數據收集

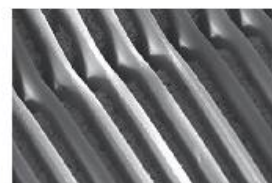
Fast Single Track Aligner
MODEL: AG10H-06S-ST-D

Applications

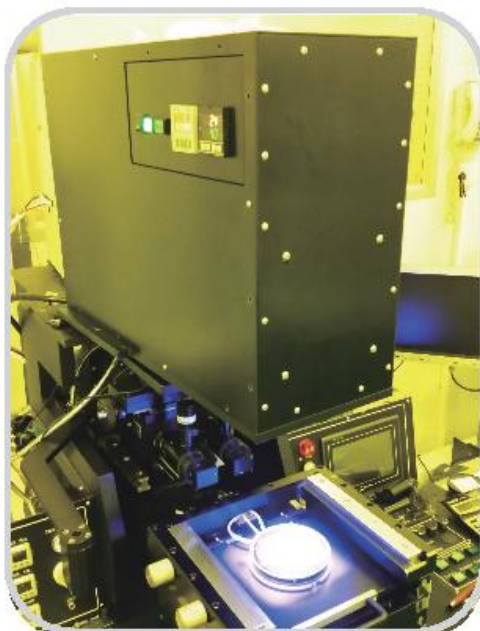
- Main target customers: Research institutes or semiconductor wafer manufacturers
- In addition, There are Six areas (application) which could promote :
 - 1.Semiconductor 2.Display (TFT LCD, TP = Touch Panel, OLED,..etc)
 - 3.LED 4.MEMS (Bio Chips, DNA Chips, Micro-sensors, Micro-actuator, ...etc)
 - 5.Passive components (mini-PR, Capacitors, Conductors../etc)
 - 6.Solar Cell (3,5 like GaAs substrate,..etc)

Specification

- Exposure light source: 500W、1KW、2KW
- Substrate Size up to 8 " Square Substrate
- Uniformity : $\pm 5\%$
- Alignment Accuracy : $\leq 5\mu\text{m}$
- Throughput : $\geq 4\text{pnl/min.}$



UV LED SYSTEM



製程更好
體積更小
壽命更長
耗電更少
曝光量精準
省去暖機時間
環境溫度降低

Applications

- Main target customers: Research institutes or semiconductor wafer manufacturers
- In addition, There are Six areas (application) which could promote :
 - 1.Semiconductor
 - 2.Display (TFT LCD, TP = Touch Panel, OLED,..etc)
 - 3.LED
 - 4.MEMS (Bio Chips, DNA Chips, Micro-sensors, Micro-actuator, ,...etc)
 - 5.Passive components (mini-PR, Capacitors, Conductors../etc)
 - 6.Solar Cell (3,5 like GaAs substrate,..etc)

Specification

- Substrate Size: up to 4" Round Substrate
- LED Wavelength: 365/405nm

UV CURING SYSTEM



- Illumination Type: LED、HID、Mercury Lamp、Halogen Lamp
- Exposure area up to 1200mm
- Applications:UV Curing, Dry Out

Rinsing

PR
Coating

Exposure

Developing

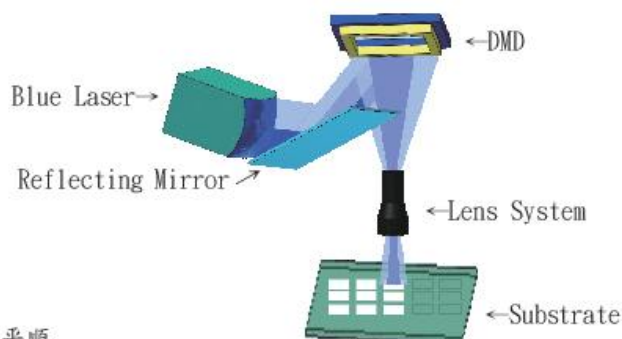
Etching

無光罩(掩模)雷射直寫曝光機

MASKLESS LASER DIRECT IMAGING SYSTEM(LDI)

應用範圍:

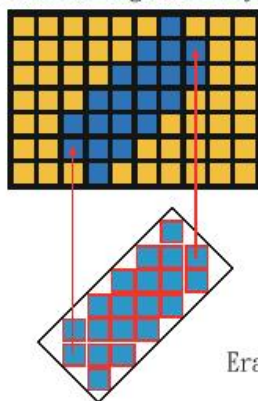
1)Touch Panel、2)Printed Circuit Board、3)Semiconductor、4)Photo Mask、5)R&D



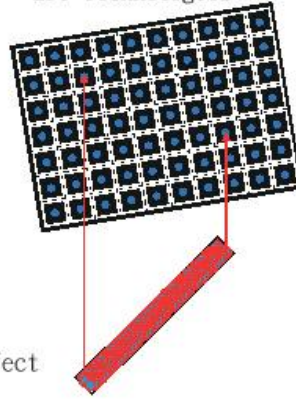
優點分析:

1)無光罩使用、2)線寬/線距解析度最小1um、3)圖案邊緣平順

Conventional Digital Projection

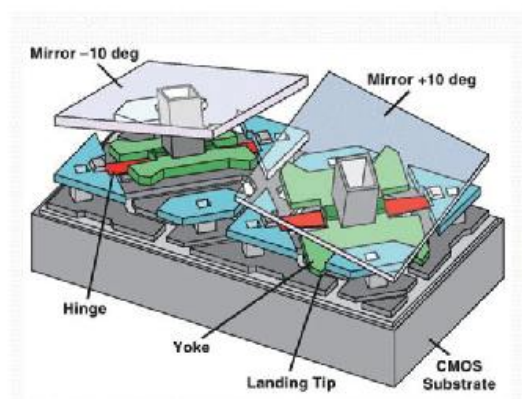


LDI Technologies



Erasing Saw Edge Effect

Improved Resolution and Smooth Line Edges



LDI機台規格表

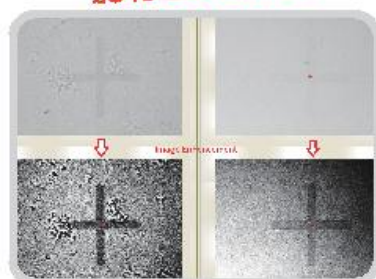
Item	量產型
線寬/線距解析度	5um/5um
圖案能力	灰階效果&3D圖形
光源	LED 405nm波長
產能	在650mmX650mm範圍內: " 晶圓片8 " 4晶圓、 " 晶圓片2 →50mj/cm2小於30秒
基板尺寸	最大900mmX 1500mm
資料格式	可使用的檔案格式 AutoCAD or PCB Prote!GeOBCAD
對位精度	小於±3um

The Image copy from TI

OTHER INTRODUCTION

Outstanding Aligner Image Process Capability

影像強化能力



在模糊肉眼難以辨識的下，
依然能夠完成精密對位任務

IR Enhancement



IR Enhancement



IR Enhancement



OPTION PARTS

220nm、365nm
254nm、400nm
260nm、420nm
280nm、436nm
310nm、more



200W、2KW
250W、3.5KW
350W、5KW
500W、8KW
1KW、10KW



Intensity meter (3D列印Curing也可使用)

NUV/UV Lamp



LightSource



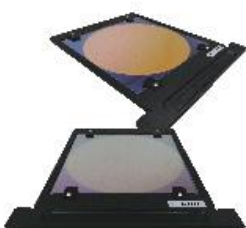
Robot & Pre-aligner



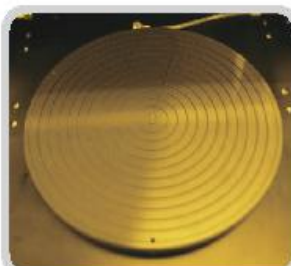
Back side Visible



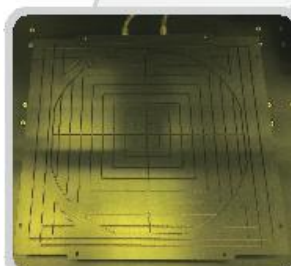
Multi-sub. Chuck



Filter



Chuck



Multiple Chuck



Ceramics Chuck

WET BENCH

顯影機 / 蝕刻機 (DEVELOPER/ETCHER)



MODEL: AGWM (Manual)



MODEL: AGWS (Semi)



MODEL: AGWA (Auto)

Features:

- Main Material: SUS 304, USA made PP
- Notch: Customized
- Electronic Control System: PLC, PAC or PC
- Control Panel: Touch Panel
- Pipe System: Back of equipment
- Exhausting System: Top of equipment
- Illumination: Acid resistant type
- Equipment Bottom: Acid leaking sensor, settable and lockable columns * 4, wheels * 4
- Window: Transparent PVC
- DI/N2 Gun: Set at two sides of bench
- Warning Lights: A set of 3 colors

Types:

- Lift Off Etcher
- ITO Etcher
- High Temp. Etcher



HOT N2

Wafer Dryer



MODEL: AGH-1300S- 單槽
W 474mm x D 370mm x H 938mm



MODEL: AGH-1300D- 雙槽
W 720mm x D 520mm x H 1660mm



Features:

- Operation: Manual
- Controller: PLC
- Appearance Material: PP with 10mm thick
- Piping System: Within rear of the hot N2 dryer
- Exhaust: Backside of the hot N2 dryer
- Foot Stand: Wheel 4, lockable and settable columns*4
- Opening Type: Pivoting upward, rightward or leftward
- Load: Manual
- Rinse Liquid: IPA
- Drying Gas: N2
- Temperature: $80 \pm 5^{\circ}\text{C}$

Advantages:

- Compact and Space-saving
- Quick Drying (around 5 minutes)
- No water streak after Drying
- Low possibility of causing substrate broken
- Easy operation
- Available to dry off pieces of wafer
- Current leakage breaker and protection device
- Over heating protection



Rinsing

PR
Coating

Exposure

Developing Etching

CONVEYOR DEVELOPER/ETCHER/STRIPPER/CLEANER

水平式(枚頁式)高速顯影 / 蝕刻 / 去光阻 / 清洗機



Developer
MODEL: AGCD

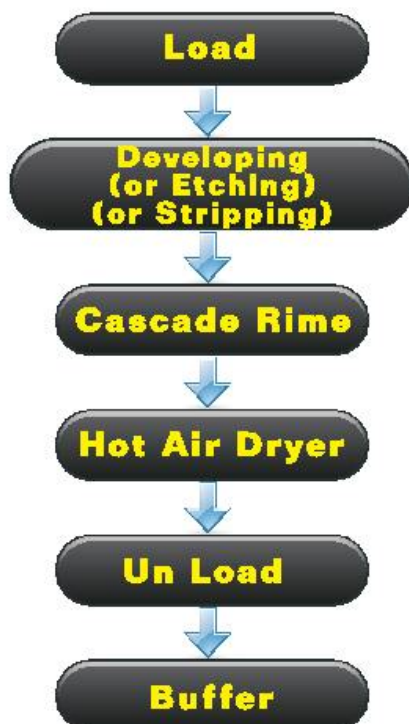


Etcher&Stripper
MODEL: AGCE



Cleaner
MODEL: AGCC

Application	Size
觸控面板 Touch Panel 顯示器 Display Panel	~ 550mm × 650mm
發光二極體 LED 半導體 Semiconductor 微機電 MEMS 被動元件 Passive Component	2" ~ 12"



Feathers:

- Horizontal transport
- Automatic control
- Surface even treatment
- Dry
- High producing
- Less Water, Energy

UV CLEANER MACHINE

UV清洗改質機



UV Cleaner& Modifier
MODEL:AGCC-UV



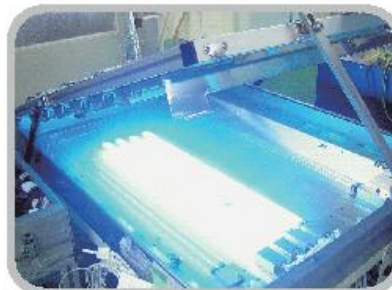
UV Modifier
MODEL:AG-UV

Features:

- UV Light Clean: wafer surface clean
- UV Light Modified: For some materials can increase the color saturation
- Decompose Hydrocarbons
- Kill Germs
- Remove Part of Oiliness

Illumination wavelength: UV- C
(185nm&254nm)

Effective exposure range: 100mm-2400mm



光罩 (PHOTO MASK)

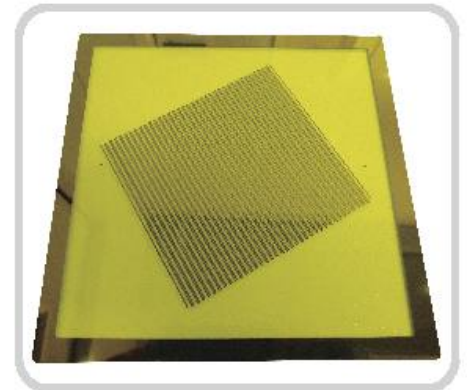
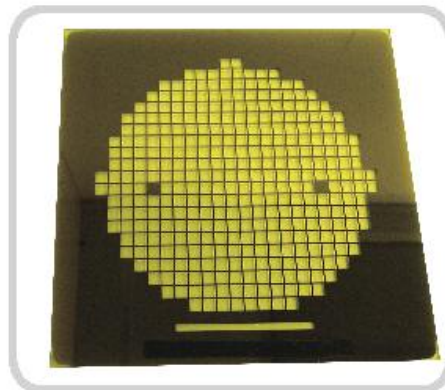
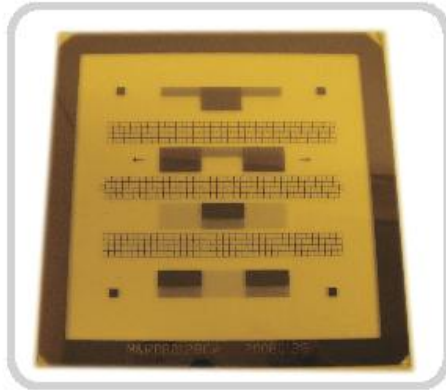


Photo Mask Production:

- Photo Masks: Main Mask, Reproduce Mask.
- Photo Mask Sizes: 4", 5", 6", 7", 9", 18", 24" (We have 4", 5", 6", 7" Reproduce Copy Service)
- Photo Mask Types: Soda Lime, Fused, Silica, Mylar Film, Quartz, Emulsion

Features:

Resolution (Write Grid)	Minimum Geometry	Chrome	Substrate
500nm	40 μ		Glass/Film
250nm	20 μ	YES	Glass
125nm	10 μ	YES	Glass
50nm	5 μ	YES	Glass
5nm	1 μ	YES	Quartz
1nm	0.5 μ	YES	Quartz

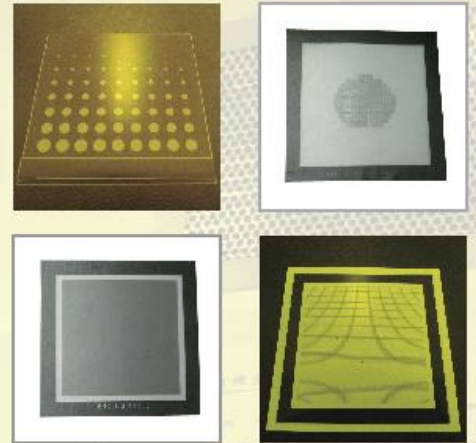
化學藥品

正/負型光阻:

- 1) SU8 1040 (厚高深寬比負光阻 → 0.8 to 10 μ m)
- 2) SU81060 (厚高深寬比負光阻 → 6.0 to 50 μ m)
- 3) SU81070 (厚高深寬比負光阻 → 15 to 200 μ m)
- 4) SU81075 (厚高深寬比負光阻 >100 μ m)
- 5) SU8 Developer (顯影液)
- 6) SU8 Stripper (去光阻液)
- 7) D-35 (Metal Ion 無機濃縮顯影液)
- 8) DS-10 (PC-60i & 20i 去光阻液 & NPR-10D 顯影液)
- 9) VLSI-237 (Metal Ion Free 有機顯影液)
- 10) NPR-20 (Negative Photoresist 負光阻)
- 11) NPR-2500F (Negative Photoresist 耐酸負光阻)
- 12) NPR-7000F (Negative Photoresist 耐酸負光阻)
- 13) PR-10 (Positive Photoresist 正光阻)
- 14) PC-20i (Protective Coating 樹脂保護膠)
- 15) S-100 (正負兩用光阻剝膜液 & PC-20i 有機剝膜液)
- 16) S-6000 (Positive & Negative Photoresist 正負光阻)

PHOTO MASK

- ▶ Class 100 Inspection Facilities
- ▶ Automated Optical Inspection
- ▶ 50x Scope Inspection by Certified Technicians
- ▶ Automated Cleaning
- ▶ FQA includes Bright Light Surface Inspection
- ▶ Industry Accepted Clean room Packaging
- ▶ Compacts are double bagged and sealed



Professional Lithography Laboratory Rental & Process OEM Service

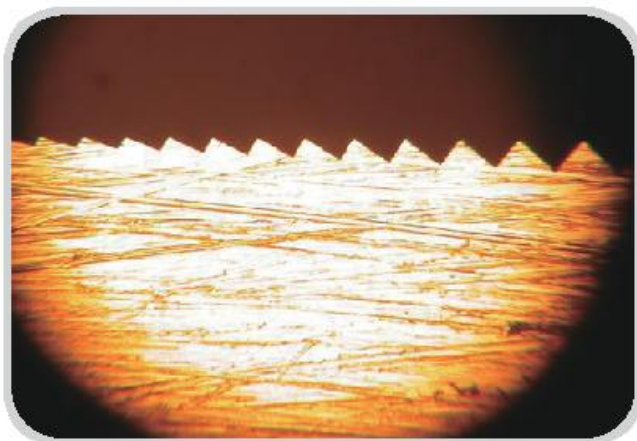


MICROPROBE

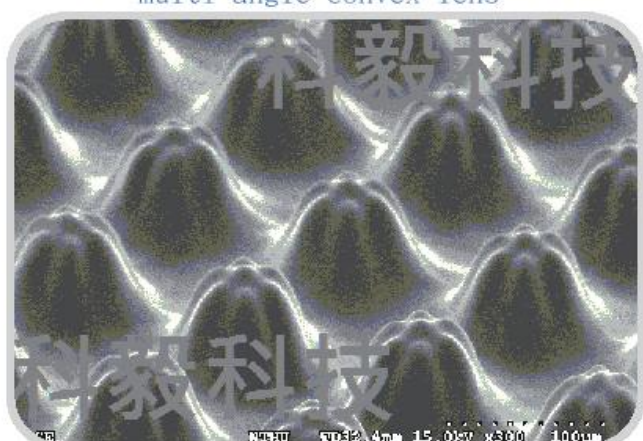
微針模仁/微探針

- 1) Micro-probe die core: Micro-probe array, each pin diameter 0.1mm, for painless blood collection needle (diabetes) or micro-needle beauty, miniature thermal, optical or biomedical detection.
- 2) 3D micro-structure die core: Micro-concave, concave lens diameter each 50um, where there are multiple concave lens concave about 15um, the available solar energy, optics, optic electronics industry.
- 3) 3D micro-structure die core: Micro-lens, each lens diameter of about 100um, there are multiple convex lens, the lens diameter can be controlled micro height, can be used for solar energy, optics, optic electronics industry.
- 4) Micro-lens die core: Micro-lens, each lens diameter 100um, can control the height of the micro-lens diameter, can be used in solar energy, optics, optic electronics industry.

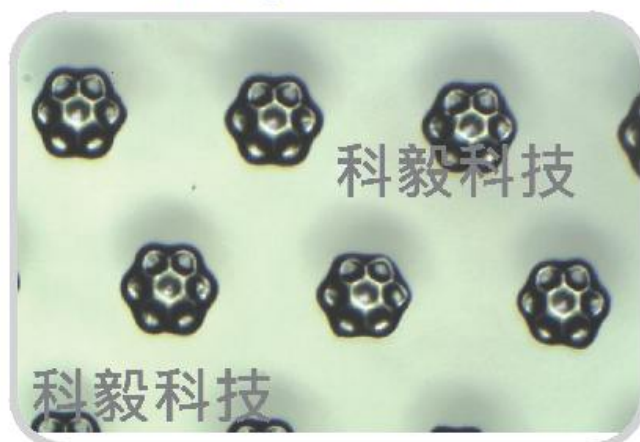
Light Guiding Board, V-cut Die Core



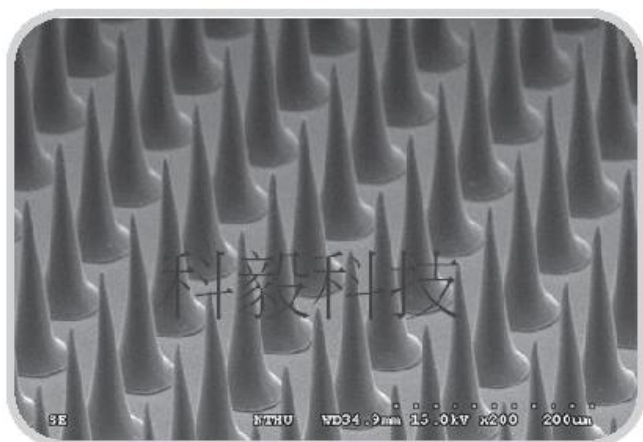
Miniature processing body forming multi-angle convex lens



Miniature processing body forming multi-angle concave lens



Micro-needle



FORK

機械手臂牙叉

「Accurate, No Components」 · 「Professional Design, Process」

Application: Any type of robot arm

Size: 2" ~12"

Material: Aluminum

High Quality
Evenness

Customized

High Vacuum

Super Thin

High
Strenthness



Customized Fork



4"、6" 3 Points Fork



2" Suction Plus Fork



8" ,12" Complex Material (Embedded with peek thin board)



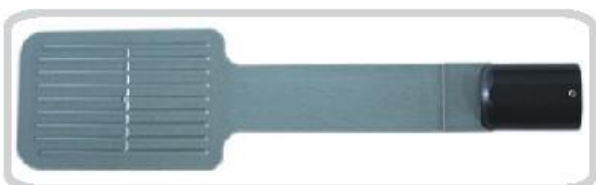
2" Protruding Fork



12吋FORK



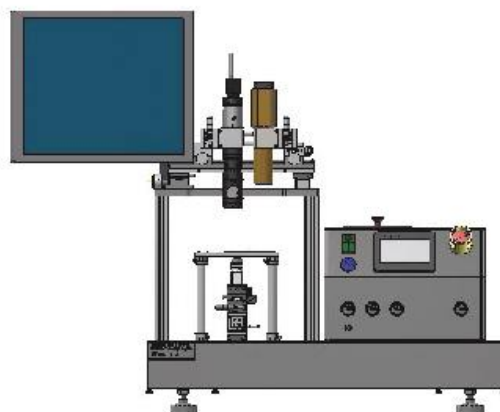
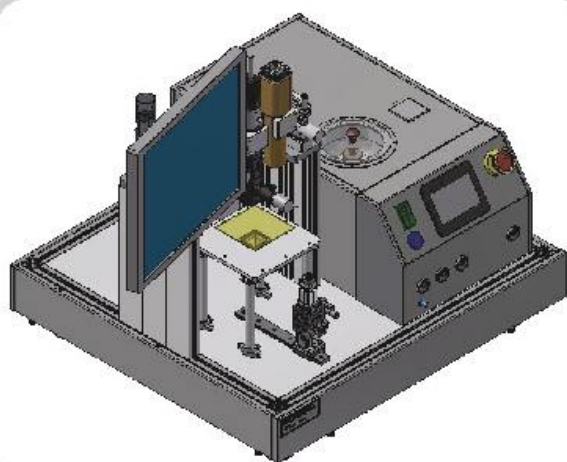
12" Vacuum Pen



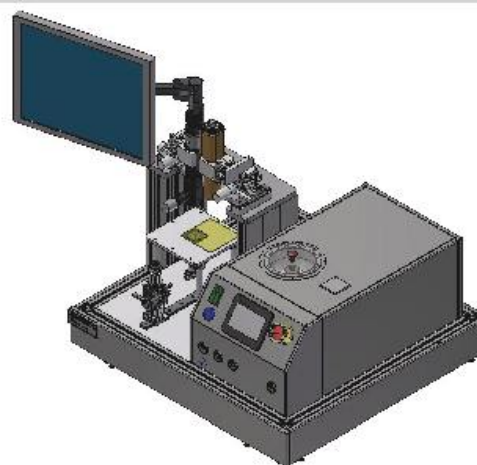
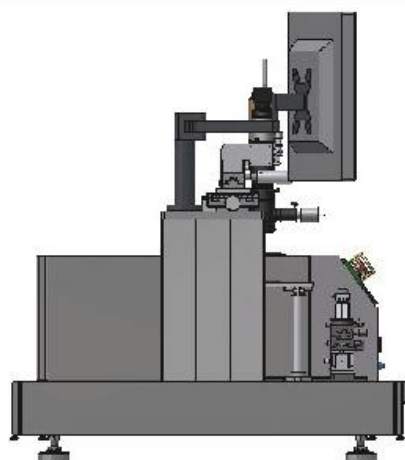
史上CP值最高 - Mini微影整合方案

Mini-photolithography total solution

- * 尺寸小、輕巧、易安裝
- * 價格具競爭力
- * 少量多樣
- * 綠能科技
- * 減少光罩製作成本
- * Mask: 4吋
- * Substrate: 0.5吋以下(含破片)



Coater, Mask Aligner, Developer all in one !



OTHER

電鍍機

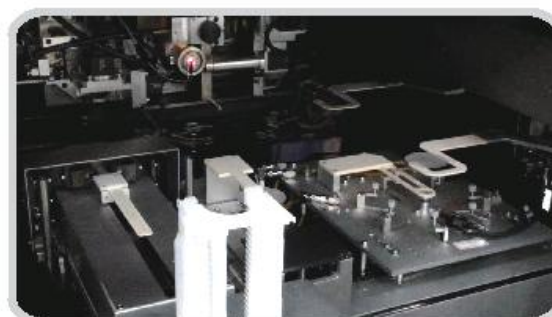


WFP-V4-2
晶圓電鍍機



WFP-F3-6
湧泉式晶圓電鍍機

REFURBISHED NIKON STEPPER



手套箱GLOVEBOX



顯微鏡及附屬零件MICROSCOPE



金相顯微鏡



視頻顯微鏡

顯微鏡相關附件:

目鏡
物鏡
光源
移動平台



原廠替代品及零件供應

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