

UVCP 回掛垂直連續電鍍銅設備

U-TURN VERTICAL CONTINUOUS COPPER PLATING EQUIPMENT

新型第M431175 & M433392號



特色 / FEATURES

- 本設備為IC載板Flip Chip BGA、CSP、FC CSP等SAP和MSAP電鍍銅製程專用機，可搭配電鍍阻劑連線作業
- 採用單一尺寸框架輔助生產，輸送過程中板面可完全避免與外力碰觸，確保線路的品質
- 上料採用六軸式機械手搭配影像CCD自動尋邊避免碰觸到線路，確保上板的品質
- 下料用機械式夾持自動下板，節省人力成本
- 超微線路能力可做到LW/LS:9/12 μm
- 品質一致的鍍層厚度均勻性
- 對於超薄板超微線路、填盲孔、填通孔分佈力有傑出的表現
- 模組化設計適合各種產能需求
- 線內自動藥水剝掛
- 容易操作及維護

- Specially for SAP and MSAP process of IC substrate i.e. Flip Chip BGA, CSP, FC CSP, it can be collocated with resister plating process.
- One fixed size of frame to assist production to ensure smooth transportation without touching panels to get better plating quality of pattern.
- Use 6 axis robot with CCD to detect edges of panels accurately.
- Unloading M/C to unload panel automatically to save manpower.
- For extra fine pattern: LW/LS:9/12 μm
- Uniform distribution of plating quality.
- Remarkable throwing power for extra fine pattern on thin board, micro via filling and through hole filling.
- Modular design fulfill customers' requirement.
- Auto. online chemical stripping.
- Easy operation and maintenance.

規格 / SPECIFICATION

- 板片尺寸：單一尺寸框架輔助生產
- 板片厚度：0.046 ~ 4.0 mm
- 線速度：0.2 ~ 0.7 m/min (可調)
- 電鍍視窗：610 x 5280 mm/Chamber
- 銅缸數：1~6 (選擇)
- 電流密度：30 ASF (max.) for DC Rectifier
- 陽極型式：不溶性氧化銦陽極
- 陰極型式：單掛式連續輸送

- Panel size: Frame with one fixed size
- Board thickness: 0.046 ~ 4.0 mm
- Line speed: 0.2 ~ 0.7 m/min (adjustable)
- Plating window: 610 x 5280 mm/Chamber
- Plating cell: 1~6 Chamber (Option)
- Current density: 30 ASF (max.) for DC Rectifier
- Anode: Insoluble anode (Ti mesh with IrO₂ coating)
- Cathode: Single track continuous conveyance

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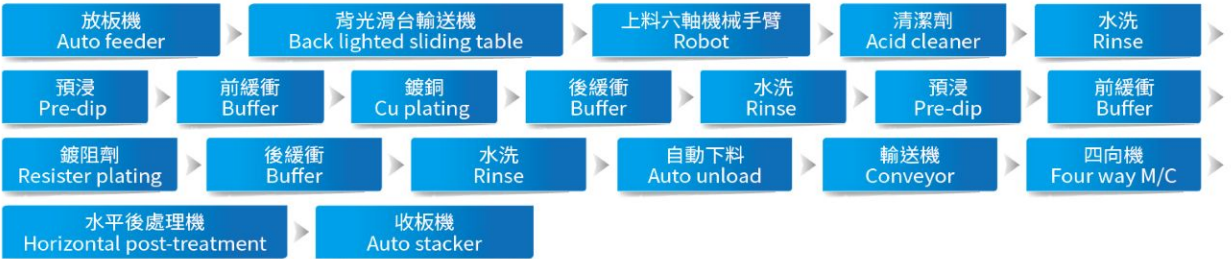
UVCP(DT) 回掛垂直連續電鍍銅設備(雙列型)

U-TURN VERTICAL CONTINUOUS COPPER PLATING EQUIPMENT(DOUBLE TYPE)



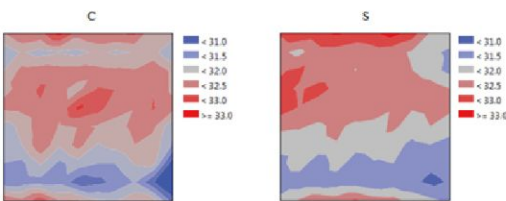
新型第M288080號

流程 / PROCESS



PERFORMANCE: COPPER THICKNESS DISTRIBUTION:

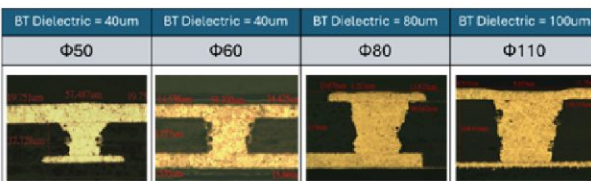
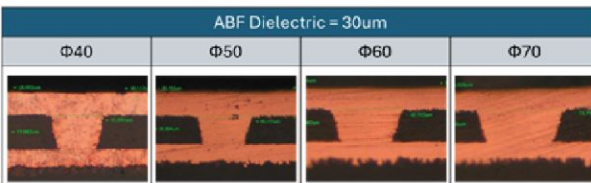
PLATING THICKNESS: 21 μ m (23.5ASF)



	PANEL 1		PANEL 2		PANEL 3	
	C1	S1	C2	S2	C3	S3
MAX	32.4	32.8	32.6	33.4	32.7	33.0
MIN	30.8	30.7	30.7	31.2	30.9	30.9
AVG	31.6	31.9	31.7	32.2	31.9	31.9
R	1.6	2.2	1.9	2.1	1.8	2.1
STDEV	0.4	0.5	0.4	0.5	0.4	0.5
3* σ /avg	3.50%	5.02%	4.19%	5.07%	3.62%	5.13%

應用 / APPLICATION

VIA FILLING:



THROWING POWER OF THROUGH HOLE (PPR):

Hole diameter (mm)	0.2	0.25	0.3
C.D. (ASD)	1.6		
Board thickness (mm)	3		
A/R	15	12	10
TP	97%	99%	115%

