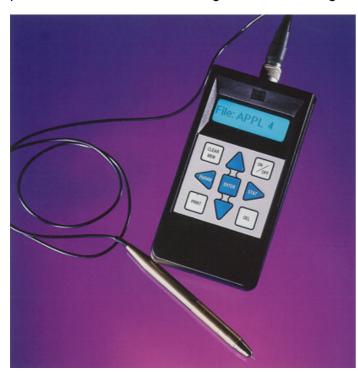
PTH THICKNESS OF PCB BOARD AND FLAT COPPER LAYER SURFACE HAND-HELD PTH-1 / ITM-52

Detecting flaws in PCBs must be done sooner, not later, That's why developed the PTH-1 / ITM-52, a portable measurement tool designed for measuring through-hole copper plating thickness in-process.



PTH-1 / ITM-52 SPECIFICATIONS

Physical technique:	Eddy current
Largest measurable board:	Unlimited
Thinnest measurable board:	1.0mm (40 mil)
Thickest measurable board:	2.4mm (96 mil)
Probe insertion:	Manual
Auto board thickness:	None
Smallest measurable hole:	Ø 0.45mm (18 mil) *
Largest measurable hole:	Ø 2.0mm (80 mil) *
Measuring range:	2μ - 100μ (0.1 mil - 4 mil)
Hole diameter range:	Probe EP-30
	0.8 - 2.0mm (32 - 80 mil)
	Probe EP-25
	0.6 - 0.8mm (24 - 32 mil)
	Probe EP-20 •
	0.45 - 0.6 mm (18 - 24 mil)
Flat copper layer surface:	Probe CSP-100 •
	15μ - 100μ (0.6 mil - 4.0 mil)

^{*} Measurement of holes less than 30mils or large than 60mils may be using special calibration mode.

A faster and easier testing method

- Best for measure PTH thickness of signal layer, double layer and multi layer PCB Board.
- Speediness measurement of PTH thickness even if etched or unetched board and tin plated.
- 0.45mm (18 mil) smallest measurable hole. (Optional)
- Duo feature, Plating Copper Thickness in PCB Througe Holes and Flat Copper Layer Surface. (Optional)
- Hand-held LCD with sure high-resolution, back-lit graphics LCD with sure touch keypad.
- Battery-powered and rechargeable with AC adapter.
- Durable anti-corrosive probe tip available for measures wet boards.
- Unique, patent-pending axial probe coil configuration creates less sensitivity to surface copper thickness or pad size on etched boards compared to other systems.
- Built-in functions include full descriptive statistics, histogram and capability indices.
- Stores up to 15,000 measurements with RS-232C downloading capability.

♦PTH-1 Function and measuring range

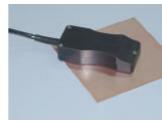
1. PTH thickness of PCB Board, from 2μ - 100μ (0.1mil - 4.0 mil) [EP-25/30 Kit]

◆PTH-1 Extra function (Optional) ■

- 1. PTH thickness of PCB Board, from 2μ 60μ (0.1 mil 2.4 mil) [EP-20]
- 2. Flat copper layer surface, from 15μ 100μ (0.6 mil 4.0 mil) [CSP-100]



Probe EP-20, for extra smallest PTH thickness



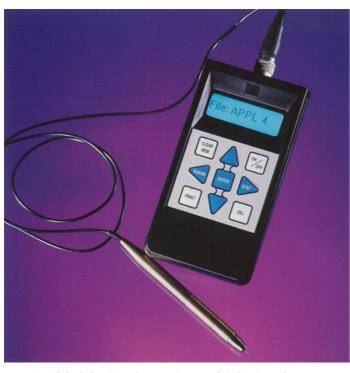
Probe CSP-100, for flat copper layer surface

Optional.

線路板 PTH 孔壁銅厚及敷銅板銅箔厚度測試儀

手提式 PTH-1 / ITM-52

生產過程中能及時發現瑕疵及減少完成品不合規格的損耗是很重要的,所以特別研製了 PTH-1 / ITM-52 這部手提式測厚儀,測量線路板線路刻蝕前 / 刻蝕後孔內壁鍍銅 (PTH) 厚度,同時也能測量敷銅板的銅箔厚度。PTH-1 / ITM-52 能夠快速地提供答案!



PTH-1 / ITM-52 規格

技術原理:	渦流式
••••••	
最大可測量板:	不限
最薄可測量板:	1.0mm (40 mil)
最厚可測量板:	2.4mm (96 mil)
探針插入方法:	手動 (或用探針座)
自動板厚度和孔徑辨別:	不需要
最小能測量孔:	Ø 0.45mm (18 mil) *
最大能測量孔:	Ø 2.0mm (80 mil) *
孔壁 Cu 厚度測量範圍:	2μ - 100μ (0.1 mil - 4 mil)
孔徑範圍:	EP-30 探針
	0.8 - 2.0mm (32 - 80 mil)
	EP-25 探針 `
	0.6 - 0.8mm (24 - 32 mil)
	EP-20 探針
	0.45 - 0.6 mm (18 - 24 mil)
銅箔厚度測量範圍:	CSP-100 探頭
	15μ - 100μ (0.6 mil - 4.0 mil)

^{*} 量度少於 30mils 或大於 60mils 時,需要使用特別之校正方法。 此為選件,須另外購買

一種快捷和容易的測試方法

- 適用於單層、雙層及多層板測量孔內鍍銅厚度。
- 無論已刻蝕和未刻蝕之板及已鍍錫(Sn)和未鍍錫(Sn)的線路板均可快速地測量出 孔內鍍銅厚度。
- 能測量的孔徑小至 0.45mm (18 mil)。 選件
- 雙功能,能測量線路板孔內鍍銅 (PTH) 厚度,及敷銅板銅箔厚度。 選件
- 高解度之 LCD 顯示,堅固耐用之鍵盤。
- 可充電電池及交流連接器 (200V)。
- 表面鍍鈦的探針可進行濕板測量,不會腐蝕探針。
- 唯一專利以渦流式設計,相比其他同類儀器能更少地受銅表面或蝕刻墊的影響。
- 內建功能包括:標準統計功能,長方條表示的統計圖和索引功能。
- 可儲存高至 15,000 個測量數據,及透過 RS-232C 傳送測量數據。

PTH-1,主要功能及測量範圍

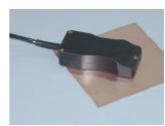
1. 線路板孔內鍍銅 (PTH) 厚度,測量範圍:2μ - 100μ (0.1 mil - 4.0 mil) **[EP-25/30 Kit]**

PTH-1 附加功能(選件)

- 1. 测量線路板孔內鍍銅 (PTH) 厚度,測量範圍:2μ 60μ (0.1 mil 2.4 mil) **[EP-20]**
- 2. 測量敷銅板銅箔厚度,測量範圍: 15μ-100u (0.6 mil 4.0 mil) [CSP-100]



EP-20 PTH 孔壁厚度測量探針



CSP-100 敷銅板測量探頭