

# 快速紡織物及布料甲醛測試系統 Quick Test System of Formaldehyde in Textiles and Clothing

## 輕便、準確及快速的甲醛測試系統

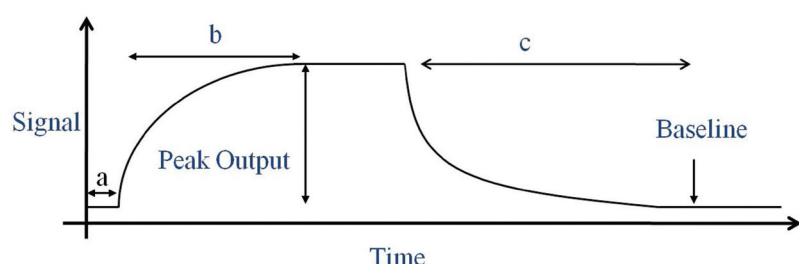
A portable, reliable and quick formaldehyde tester

隨着生活水平日漸上升，人們越來越重視紡織物中有否含有害物質，如常見的甲醛。雖然，業界已經使用標準紡織物甲醛含量測試方法，但需要特製的試劑、儀器，檢測人員亦需接受專門訓練方可使用，一般用戶通常難以使用。有見及此，理大科研小組最近成功研發了一個手提式的紡織物甲醛測試系統。此甲醛測試儀能快速準確地偵測布料的甲醛含量，只需十分鐘便可得知測試結果。

測試儀外觀  
Outlook of the tester



|                   |                 |
|-------------------|-----------------|
| Response time (a) | 15-20 seconds   |
| Peak time (b)     | 100-180 seconds |
| Clearing time (c) | 5-7 minutes     |



測試循環  
Test cycle of the formaldehyde testing system

Upon the improvement of living standard, formaldehyde released from textile products draws public's concern in recent years. Standard test methods provide accurate and reliable formaldehyde content measurement of textile products. However, these methods need special reagents, equipments and user training, which are generally not available to public. As a result, a handheld formaldehyde tester is developed.

This tester provides a convenient and quick measurement of formaldehyde content in textile products, without consumable items and does not need special training. The tester's result has high correlation with standard test result, and each test cycle can be completed in 10 minutes.

### Principal Investigator

Prof. Jinlian HU

Institute of Textiles and Clothing

### Contact Details

The Hong Kong Research Institute of Textiles and Apparel

Tel: (852) 2627 0180 Fax: (852) 2364 2727 Email: info@hkrita.com

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## 特色與優點

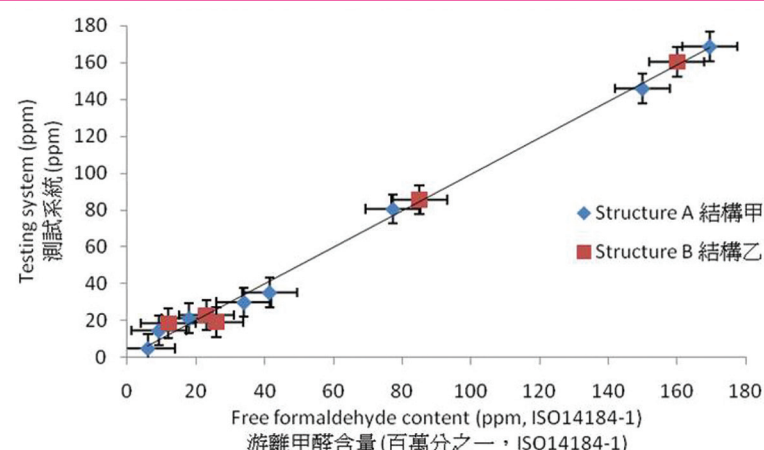
本系統方便易用，輕巧美觀，能快捷、準確地量度布料的甲醛含量。測試過程無須使用消耗品，既環保、且節省試劑的成本與準備時間

## 應用

可應用於布料的生產控制環節，加快工藝調整的週期和節約測試成本。亦可用於環境監控，檢測紡織品、家居物品(如家具、油漆等)或汽車等物料的甲醛釋放情況

## 獎項

第39屆瑞士日內瓦國際發明展 - 銀獎 (2011年4月)



測試系統與標準測試結果的比較  
Correlation between testing system and standard test method

Patent Application No: 201110081279.7 (China)

## Special Features and Advantages

This tester is portable, reliable and user friendly. It provides a quick, accurate and digitized test result to the formaldehyde content of textile materials. No consumables needed and therefore save the cost and time for reagents preparation in standard test

## Application

This tester can be used in manufacture process to save time and test cost during modification of finishing process. It can be used as environmental monitor about formaldehyde emission in textile or other products, such as household items, furniture, painting, walls and car interior decorations

## Award

Silver Medal - 39th International Exhibition of Inventions of Geneva, Switzerland (April 2011)