

TEST REPORT

報告號碼： HA70021/2021

頁數： 1 of 8

日期： August 24, 2021

漢泰先進材料股份有限公司
苗栗縣竹南鎮友義路 66 號 2 樓

以下產品由客戶提供並確認規格如下：

產品名稱： DLC 試片+硬陽試片+小螺絲

產品型號/ 編號： DLC 試片/ #1, #2;
硬陽試片/ #1 ~ #10;
小螺絲/ #1 ~ #10

數量： 共 22 件

測試執行日期： Jul. 26, 2021 to Aug. 20, 2021

我們依照客戶要求，根據客戶送交之樣品進行測試，結果如下：

委託測試要求：(依照客戶提供之測試規格進行試驗，詳細內容請參照附頁。)

1. 銅鹽加速醋酸鹽霧試驗
2. 醋酸鹽霧試驗
3. 腐蝕性氣體試驗

測試結果： 一如附頁所示

Signed for and on behalf of
SGS TAIWAN Ltd.

邱品淞

邱品淞
副理

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1. 銅鹽加速醋酸鹽霧試驗：

試驗設備：

名稱	廠牌	型號	序號
鹽水噴霧試驗機	T-MACHINE	TMJ-9701	T-01-150210

實驗室環境條件：

環境溫度： $(25 \pm 3) ^\circ\text{C}$ 環境濕度： $(55 \pm 20) \% \text{RH}$

試驗場址：

新北市五股區(新北產業園區)五權路 33 號

試驗方法/ 規格：

試驗方法：

參考 ISO 9227: 2017

鹽溶液：

5 wt.% 氯化鈉溶液添加銅鹽及醋酸以達到指定之 pH 值。

鹽溶液之 pH 值：

(3.1-3.3)

噴霧室溫度：

 $(50 \pm 2) ^\circ\text{C}$

噴霧量：

 $(1.0 \sim 2.0) \text{ ml} / 80 \text{ cm}^2 / \text{hour}$

噴霧時間：

1 小時

- 試驗後，以目視方式檢查樣品外觀有無異常現象。

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代測樣品：

型號/ 編號：

DLC 試片/ #1;

硬陽試片/ #1, #2

數量：

共 3 件

測試結果：

樣品型號/ 編號	檢查項目 外觀檢查(目視檢查) 樣品外觀是否有氧化腐蝕現象?
DLC 試片/ #1	否
硬陽試片/ #1	否
硬陽試片/ #2	否

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2. 醋酸鹽霧試驗：

試驗設備：

名稱	廠牌	型號	序號
鹽水噴霧試驗機	T-MACHINE	TMJ-9701	T-01-150210

實驗室環境條件：環境溫度：(25 ± 3) °C環境濕度：(55 ± 20) % RH試驗場址：新北市五股區(新北產業園區)五權路 33 號試驗方法/ 規格：試驗方法：參考 ISO 9227: 2017鹽溶液：5 wt.% 氯化鈉溶液添加醋酸以達到指定之 pH 值。鹽溶液之 pH 值：(3.1-3.3)噴霧室溫度：(35 ± 2) °C噴霧量：(1.0 ~ 2.0) ml/ 80 cm²/ hour噴霧時間：12 小時

- 試驗後，以目視方式檢查樣品外觀有無異常現象。

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代測樣品：

型號/ 編號：

DLC 試片/ #2;

硬陽試片/ #3, #4

數量：

共 3 件

測試結果：

檢查項目 樣品型號/ 編號	外觀檢查(目視檢查) 樣品外觀是否有氧化腐蝕現象?
DLC 試片/ #2	否
硬陽試片/ #3	否
硬陽試片/ #4	否

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3. 腐蝕性氣體試驗：

試驗設備：

名稱	廠牌	型號	序號
腐蝕性氣體試驗機	YAMASAKI	GH-180VL/M	680

實驗室環境條件：

環境溫度：(25 ± 3) °C
環境濕度：(55 ± 20) % RH

試驗場址： 新北市五股區(新北產業園區)五權路 33 號

試驗方法/ 規格：

試驗方法：參考 IEC 60068-2-42, Edition 3.0: 2003
測試氣體濃度：SO₂ = 25 ppm
測試溫度：25 °C
測試溼度：75 % RH
氣體流速：1500 ℓ/ hour
實驗儀容積：200 ℓ
氣體交換率：7.5 times/ hour
試驗時間：96 小時

- 試驗後，以目視方式檢查樣品外觀。

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代測樣品：

 型號/ 編號： 硬陽試片/ #5 ~ #10;
小螺絲/ #1 ~ #10


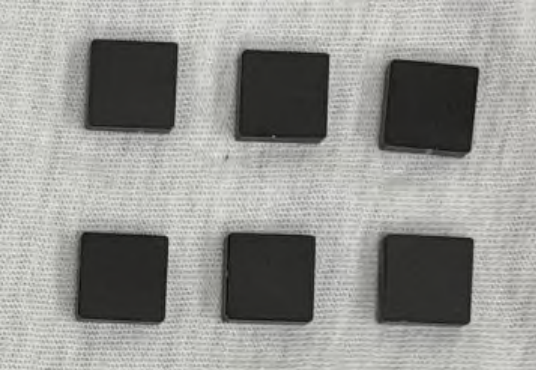
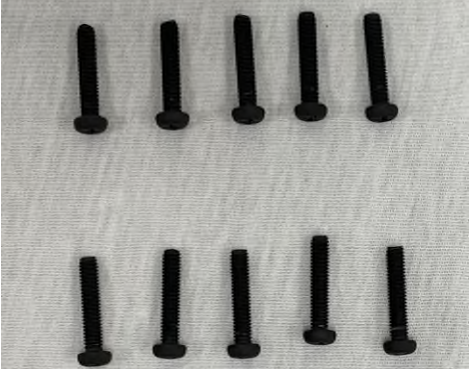

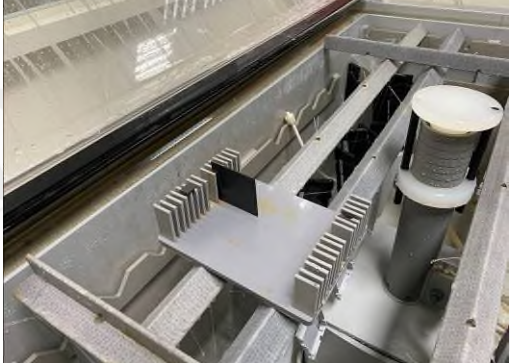
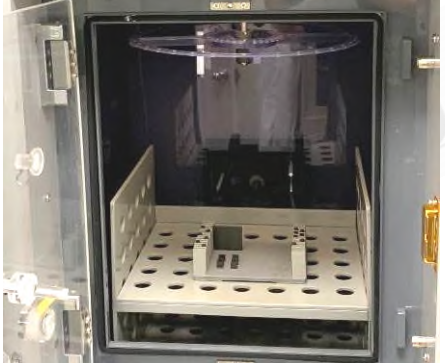
 數量： 共 16 件

測試結果：

樣品型號/ 編號	檢查項目	外觀檢查(目視檢查) 樣品外觀是否有氧化腐蝕現象?
硬陽試片/ #5		否
硬陽試片/ #6		否
硬陽試片/ #7		否
硬陽試片/ #8		否
硬陽試片/ #9		否
硬陽試片/ #10		否
小螺絲/ #1		否
小螺絲/ #2		否
小螺絲/ #3		否
小螺絲/ #4		否
小螺絲/ #5		否
小螺絲/ #6		否
小螺絲/ #7		否
小螺絲/ #8		否
小螺絲/ #9		否
小螺絲/ #10		否

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試驗照片：

	
<p>1. 樣品外觀：DLC 試片</p>	<p>2. 樣品外觀：硬陽試片</p>
	
<p>3. 樣品外觀：小螺絲</p>	<p>4. 銅鹽加速醋酸鹽霧試驗</p>
	
<p>5. 醋酸鹽霧試驗</p>	<p>6. 腐蝕性氣體試驗</p>

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