



Double Coated PET Tapes

8004PT, 8004DL, 8018PT, 8018DL

聚酯基材雙面膠帶

技術資料

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產品描述:

聚酯基材雙面膠帶 8004PT, 8004DL, 8018PT, 8018DL, 係以聚酯薄膜為基材, 對於膠帶裁切加工之尺寸穩定性佳, 並於貼合及沖切加工具有優異之操作性. 其壓克力膠系結合高黏著力與優異之剪切力, 保持力之特性, 適合各種表面之貼合, 包括多種塑膠件.

8004PT, 8004DL 及 8018PT, 8018DL 係特別針對平面顯示器產業之需求設計, 諸如光學薄膜之黏貼, 泡棉, 絕緣膜之貼著固定, 及系統組立之貼合應用均可適用.

產品結構:

| 產品編號 | 膠系/ 顏色/ 膠帶厚度 (不含離型紙) | 表面膠層 Faceside adhesive | 基材 | 背面膠層 Backside adhesive | 首要離型紙* Primary liner 顏色, 形式, 印刷 | 離型紙 厚度 |
|------------------|--------------------------------------|------------------------------|---------------------------------|------------------------------|--|---------------------|
| 8004PT 8004DL | 壓克力膠 半透明, 0.0015" (0.039mm) | 0.0005" (0.013mm) | 聚酯 PET, 0.0005" (0.013mm) | 0.0005" (0.013mm) | 聚酯薄膜 淺藍, 半透明, 淺灰色 3M 字 樣印刷 | 0.002" (0.051mm) |
| 8018PT 8018DL | 壓克力膠 半透明, 0.0025" (0.063mm) | 0.001" (0.025mm) | 聚酯 PET 0.0010" (0.025mm) | 0.0005" (0.013mm) | 聚酯薄膜 淺藍, 半透明, 深灰色 3M 字 樣印刷 | 0.002" (0.051mm) |

- 8004DL, 8018DL 係分屬 8004PT, 8018PT 之雙離型膜產品, 其第二離型膜 (Secondary liner) 係透明之 PET 膜, 厚度 0.002" (0.051mm)
- 離型膜之離型力 <20g/in

產品特徵

1. 3M 8004PT, 8004DL, 8018PT, 8018DL 係膠性軟硬適中之感壓膠系統, 其主要之特性表現結合高黏著強度與高保持力, 剪切力特性, 且可貼合於各種表面, 包含多種塑膠表面
2. 3M 8004PT, 8004DL, 8018PT, 8018DL 具優異之尺寸穩定性, 可避免不當之延伸, 有更精準操作過程, 另外於重工操作中, 可避免殘膠之現象發生.

典型之物性與貼合表現

Note: 以下之技術資料係屬典型之測試數據 – 非供特殊情形使用

| | 8004PT | 8018PT |
|--|----------------|----------------|
| | 8004DL | 8018DL |
| 對不鏽鋼板黏著力 | (Kg/in) | (Kg/in) |
| ASTM D3330 –180 度剝離, 2 mil 鋁箔為測試背材, 測試條件為 22°C, 50%相對溼度 | | |
| Backside | | |
| 20 mins RT | 1.0 | 1.0 |
| 72 hrs RT | 1.4 | 1.4 |
| Faceside | | |
| 20 mins RT | | 1.2 |
| 72 hrs RT | | 1.8 |
| 對 PC 之黏著力 | | |
| ASTM D3330 –180 度剝離, 2 mil 鋁箔為測試背材, 測試條件為 22°C, 50%相對溼度 | | |
| Backside | | |
| 20 mins RT (Kgw/in) | 1.0 | 1.0 |
| 72 hrs RT | 1.4 | 1.4 |
| Faceside | | |
| 20 mins RT (Kgw/in) | | 1.1 |
| 72 hrs RT | | 1.8 |
| 高溫耐受性 | | |
| 耐溫範圍: | | |
| 長期耐溫 (天, 週) | 250°F (121°C) | |
| 短期耐溫 (分鐘, 小時) | 300°F (149°C) | |
| 耐溶劑性: | Good | |
| 抗 UV 特性: | Good | |

膠帶使用操作程序

貼合表現與有效貼合面積息息相關，堅實之感壓程序可明顯增加膠帶之貼合表現。以下系 3M 建議之標準膠帶使用操作程序：

- (a) 欲達最佳黏著，黏著表面必需清潔與乾燥。一般建議以布沾取1：1比例之IPA (Isopropyl Alcohol, 異丙醇) 與水的混合溶液進行表面擦拭清潔後，待表面完全乾燥。(注意：使用IPA前，請先參照此溶劑之建議注意事項)。
- (b) 在清潔溶劑乾燥後，將膠帶貼合於黏著表面，以滾筒或其他方式 (刮板) 平均施以約 15psi (1.05公斤/cm²) 之壓力，使其有效貼合。
- (c) 將膠帶離型紙撕除，然後將欲貼著之材質貼上，同樣施以15psi 之壓力，使其有效貼合，若欲去除氣泡，建議加大壓力，以物品所承受之限度為上限。
- (d) 建議理想的施工溫度介於15°C至38°C之間，勿低於10°C。
- (e) 欲使膠帶保存至使用時仍具有穩定的品質，建議之儲存環境為21°C和50%相對濕度。
- (f) 黏貼膠帶時，宜以一端先貼合後，再緩壓至另一端，以減低氣泡產生之機率。

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