

# 誠創科技股份有限公司

## 2016法人說明會

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多晶藍寶石產業介紹

**Poly-Sapphire New Business Briefing**

# 多晶藍寶石生胚薄板製造優勢

Advantages of Poly-sapphire paste filming processes

➤胚體製作無須長晶之複雜設備與高耗電製作程序

Low-cost facilities & simple processes comparing to single crystal

➤毛胚薄板成型容易/大幅簡化切磨拋的製程、設備與加工成本

Filming processes with straight cutting and simple processes

➤燒結成晶時間短(<1天)/產量高/良率高

Heat crystal forming in less than 1 day, high productivity



# 多晶藍寶石生胚薄板製造優勢

Advantages of Poly-sapphire paste filming processes

➤低成本(約單晶薄板的<65%)

Low production cost

➤可製作大尺寸薄板

Highly feasible in making large size sapphire plates

➤硬度高/抗彎折強度佳/加工性較優

Much better sustainability in bending



# 強化玻璃，單晶與多晶(藍寶石薄板)成本與規格比較

## Production tech comparisons

Poly Sapphire與強化玻璃、單晶藍寶石技術比較



| 分類                              | 項目<br>items            | 強化玻璃<br>Tempered glasses | 單晶藍寶石技術<br>Mono crystal sapphire | 多晶藍寶石技術<br>Poly Sapphire |
|---------------------------------|------------------------|--------------------------|----------------------------------|--------------------------|
| 製程要求<br>Manufacturing processes | 技術門檻<br>Tech level     | 低 low                    | 中 Mid.                           | 高 high                   |
|                                 | 製程時間<br>Process time   | 中 Mid.                   | 長 long                           | 短 low                    |
|                                 | 薄板成型<br>Filming tech   | 中 Mid.                   | 難 hard                           | 易 easy                   |
|                                 | 產品尺寸<br>Feasible size  | 大 large                  | 小 small                          | 大 large                  |
|                                 | 良率<br>Yield            | 高 high                   | 低 low                            | 高 high                   |
| 成本差異<br>Cost/expenses           | 設備成本<br>Equipment cost | 低 low                    | 高 high                           | 中 Mid.                   |
|                                 | 生產成本<br>Manuf. cost    | 低 low                    | 高 high                           | 低 low                    |
|                                 | 應用範圍<br>Applications   | 廣 wide                   | 少 low                            | 廣 wide                   |

## 多晶藍寶石薄板特性比較 Comparisons of material characters

- 多晶藍寶石/單晶藍寶石/玻璃薄板的特性比較

|                                      | Glass          | Sapphire       | Poly-Sapphire  |
|--------------------------------------|----------------|----------------|----------------|
| In-line Transmittance                | Excellent(>90) | Good(>85)      | Good(>70)      |
| Transmittance                        | Excellent(>90) | Excellent(>90) | Excellent(>90) |
| Bending Strength(Mpa)                | >200           | >200           | >200           |
| Hardness (Mohs)                      | <7             | 9              | 9              |
| Weight                               | Good           | Good           | Good           |
| Thermal Conductivity<br>(W/°Cm) 導熱係數 | 1~3            | ~30            | ~30            |
| Anti-corrosion                       | Poor           | Excellent      | Excellent      |

依照應用需求  
提供不同的透  
光等級配方

硬度為玻璃  
的100倍

導熱率為強  
化玻璃的30  
倍以上

# 多晶藍寶石產品市場的應用(Poly Sapphire market) 保護蓋類(the cover glasses)

•各類保護蓋板為可預見的海量市場

Various types of cover glasses applications



# 競爭分析-1

## Competitive analysis

### 產品競爭分析

**產品競爭與取代性(competition from other materials)：**

- 康寧的大猩猩強化玻璃—目前全世界高硬度玻璃的應用主要對手
- 優勢：價格
- 弊勢：硬度及導熱性不如多晶藍寶石
- 預估隨著多晶藍寶石進入量產持續降低製造成本將可逐步取代其市場。

Corning is currently the major supplier of mid-to-small size tempered glasses, while the “Gorilla” series occupy most of the cover glasses for smartphones through competitive prices. However the Gorilla glasses are still insufficient in the characters of hardness and thermal conductivity. As poly-sapphire enters the market and continues to improve productivity and cost, it is foreseen that many Gorilla applications will be replaced through better cost/performance value provided by poly-sapphire.

# 競爭分析-2

## Competitive analysis

### 產業競爭分析

多晶藍寶石產業競爭(Poly sapphire industrial competition)：

1. 全台多晶藍寶石產業僅有誠創公司進行開發。
2. 誠創公司於應用擴展與行銷之優勢：

▲材料研發      ▲生胚製作

▲量產設計      ▲設備規劃

Only worldwide, the Sintronic in Taiwan have put efforts to this area. Sintronic is further pushing the business into reality through the advantages of both parties. Currently there is no competitors with similar technologies in the world.



**SINTRONIC**

2016年前三季  
財務資訊報告

# 2016年前三季合併綜合損益表

單位：新台幣仟元

|              | 2016年前三季 |         | 2015年前三季 |         | 年成長      |
|--------------|----------|---------|----------|---------|----------|
| 營收淨額         | 758,308  | 100.00% | 911,080  | 100.00% | -16.77%  |
| 營收毛利         | 113,382  | 14.95%  | 81,970   | 9.00%   | 38.32%   |
| 營業費用         | 127,299  | 16.79%  | 152,919  | 16.78%  | -16.75%  |
| 營業淨利(損失)     | (13,917) | -1.84%  | (70,949) | -7.79%  | 80.38%   |
| 業外收支         | (7,802)  | -1.03%  | 19,262   | 2.11%   | -140.50% |
| 稅前淨利(損)      | (21,719) | -2.86%  | (51,687) | -5.67%  | 57.98%   |
| 所得稅利益(費用)    | (6,175)  | -0.81%  | (4,874)  | -0.53%  | 26.69%   |
| 本期淨利(損)      | (27,894) | -3.68%  | (56,561) | -6.21%  | 50.68%   |
| 本公司本期淨損      | (31,796) | -4.19%  | (61,890) | -6.79%  | 48.62%   |
| 基本每股盈餘(新台幣元) | (0.33)   |         | (0.65)   |         |          |

# 2016年第三季合併綜合損益表

| 單位：新台幣仟元     | 2016年第3季 |        | 2016年第2季 |        | 季成長      | 2015年第3季 |        |
|--------------|----------|--------|----------|--------|----------|----------|--------|
| 營收淨額         | 273,890  | 100 %  | 249,386  | 100%   | 9.83%    | 322,046  | 42.5%  |
| 營收毛利         | 46,122   | 16.84% | 32,942   | 13.21% | 40.01%   | 34,587   | 4.56%  |
| 營業費用         | 41,190   | 15.04% | 41,914   | 16.81% | -1.73%   | 51,470   | 6.79%  |
| 營業淨利(損失)     | 4,932    | 1.80%  | (8,972)  | -3.60% | -154.97% | (16,883) | -2.23% |
| 業外收支         | (4,199)  | -1.53% | (7,666)  | -3.07% | -45.23%  | 19,096   | 2.52%  |
| 稅前淨利(損)      | 733      | 0.27%  | (16,638) | -6.67% | -104.41% | 2,213    | 0.29%  |
| 所得稅利益(費用)    | (5,260)  | -1.92% | 2,043    | 0.82%  | -357.46% | (2,999)  | -0.40% |
| 本期淨利(損)      | (4,527)  | -1.65% | (14,595) | -5.85% | -68.98%  | (786)    | -0.10% |
| 本公司本期淨損      | (7,187)  | -2.62% | (14,566) | -5.84% | -50.66%  | (3,882)  | -0.51% |
| 基本每股盈餘(新台幣元) | (0.07)   |        | (0.20)   |        |          | (0.04)   |        |

# 2016年前三季合併資產負債表

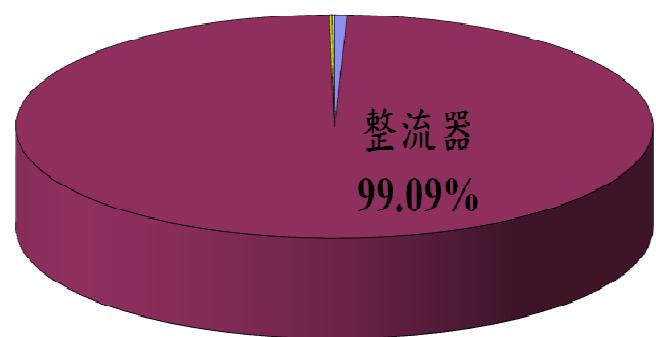
| 單位：新台幣仟元 | 2016年第3季         | 2016年第2季         | 2015年第3季         |
|----------|------------------|------------------|------------------|
| 現金及約當現金  | 264,775 20.13%   | 194,249 15.64%   | 157,623 11.79%   |
| 應收帳款     | 301,322 22.91%   | 258,646 20.83%   | 323,508 24.19%   |
| 存貨       | 167,730 12.75%   | 186,648 15.03%   | 187,272 14.01%   |
| 不動產廠房及設備 | 446,629 33.96%   | 469,891 37.84%   | 515,747 38.57%   |
| 資產總計     | 1,315,024 100.0% | 1,241,675 100.0% | 1,337,178 100.0% |
| 短期借款     | 238,297 18.12%   | 241,061 19.41%   | 238,270 17.82%   |
| 應付帳款     | 97,617 7.42%     | 105,700 8.51%    | 122,668 9.17%    |
| 流動負債     | 598,668 45.53%   | 493,705 39.76%   | 504,383 37.72%   |
| 負債總計     | 695,450 52.88%   | 592,657 47.73%   | 606,947 45.39%   |
| 本公司業主權益  | 484,185 36.82%   | 511,356 41.18%   | 585,705 43.80%   |

# 產品別營收比較

2016年

- CCFL
- 整流器
- 化學材料
- 其他

化學材料 CCFL  
0.15% 0.65%



2015年

- CCFL
- 整流器
- 化學材料
- 其他

化學材料 其他 CCFL  
6% 2% 1%

