

台湾玻璃工业公司

TAIWAN GLASS IND. CORP.

2022 ANNUAL BRIEF

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生產基地 Production Facilities

台灣玻璃工業股份有限公司 TGI 1964年成立 Establishment
TAIWAN GLASS IND. CORP.

平板玻璃 Flat Glass

台灣台中廠 TF

TAIWAN TAICHUNG FACTORY

1983年投產

浮板玻璃 / 加工玻璃 / Float Glass / Processed Glass

微薄玻璃 / Ultra-Thin Glass

台灣鹿港平板廠 TF-4

TAIWAN LUKANG FLAT GLASS FACTORY

2006年投產

浮板玻璃 / Float Glass

台灣彰濱廠 TC

TAIWAN CHANGPIN FACTORY

2011年投產

低輻射玻璃 / 加工玻璃

Low-E Glass / Processed Glass

台玻青島玻璃有限公司 QFG

TG QINGDAO GLASS CO., LTD.

1993年成立

浮板玻璃 / 加工玻璃

Float Glass / Processed Glass

台玻長江玻璃有限公司 CFG

TG CHANGJIANG GLASS CO., LTD.

1994年成立

浮板玻璃 / 加工玻璃 / 低輻射玻璃

Float Glass / Processed Glass / Low-E Glass

台玻咸陽玻璃有限公司 TXY

TG XIANYANG GLASS CO., LTD.

2010年成立

浮板玻璃 / 加工玻璃 / 低輻射玻璃

Float Glass / Processed Glass / Low-E Glass

生產基地 Production Facilities

台玻成都玻璃有限公司 CDG

TG CHENGDU GLASS CO., LTD.

2002年成立

浮板玻璃 / 加工玻璃 / 低輻射玻璃

Float Glass / Processed Glass / Low-E Glass

台玻華南玻璃有限公司 HNG

TG HUANAN GLASS CO., LTD.

2003年成立

浮板玻璃 / 加工玻璃 / 低輻射玻璃

Float Glass / Processed Glass / Low-E Glass

台玻東海玻璃有限公司 DHG

TG DONGHAI GLASS CO., LTD.

2003年成立

浮板玻璃 / 平板玻璃

Float Glass / Flat Glass

台玻天津玻璃有限公司 TJG

TG TIANJIN GLASS CO., LTD.

2004年成立

浮板玻璃 / 加工玻璃 / 低輻射玻璃

Float Glass / Processed Glass / Low-E Glass

台玻安徽玻璃有限公司 TAH

TG ANHUI GLASS CO., LTD.

2010年成立

浮板玻璃 / Float Glass

台玻太倉工程玻璃有限公司 TTAR

TG TAICANG ARCHITECTURAL GLASS CO., LTD.

2010年成立

低輻射玻璃 / Low-E Glass

台玻武漢工程玻璃有限公司 TWAR

TG WUHAN ARCHITECTURAL GLASS CO., LTD.

2010年成立

低輻射玻璃 / Low-E Glass



TF, 250,068 M² (375 畝)



TF-4, 260,343 M² (395 畝)



TC, 272,480 M² (408 畝)



QFG, 429,126 M² (643 畝)



CFG, 404,770 M² (607 畝)



TXY, 452,703 M² (679 畝)



CDG, 452,027 M² (678 畝)



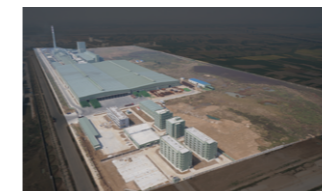
HNG, 364,907 M² (547 畝)



DHG, 398,096 M² (597 畝)



TJG, 300,448 M² (450 畝)



TAH, 572,643 M² (858 畝)



TTAR, 199,525 M² (300 畝)



TWAR, 222,000 M² (333 畝)

生產基地 Production Facilities

玻璃纖維增強絲 / 玻璃纖維布

Fiberglass Reinforced / Fiberglass Fabric

台灣桃園廠 TT

TAIWAN TAOYUAN FACTORY

1990年投產

玻璃纖維增強絲 / 玻璃纖維布

Fiberglass Reinforced / Fiberglass Fabric

台灣鹿港廠 TL

TAIWAN LUKANG FACTORY

1998年投產

玻璃纖維布 / Fiberglass Fabric

台嘉蚌埠玻璃纖維有限公司 TBF

TAICHIA BENGBU GLASS FIBER CO., LTD.

2012年成立

玻璃纖維布 / Fiberglass Fabric

台嘉玻璃纖維有限公司 TGF

TAICHIA GLASS FIBER CO., LTD.

2001年成立

玻璃纖維布 / Fiberglass Fabric

台嘉成都玻纖有限公司 TCD

TAICHIA CHENGDU GLASS FIBER CO., LTD.

2011年成立

玻璃纖維布 / Fiberglass Fabric

生產基地 Production Facilities

容食廚玻璃

Glass Container / Glass Tableware & Glass Kitchenware

台灣新竹廠 TS

TAIWAN HSINCHU FACTORY

1967年投產

容器玻璃 / 食器玻璃 / 廚器玻璃

Glass Container / Glass Tableware / Glass Kitchenware

汽車玻璃

Automotive Glass

台灣汽車玻璃有限公司 TAGC

TAIWAN AUTOGLASS IND. CORP.

1988年成立

汽車玻璃 / Automotive Glass

台玻悅達汽車玻璃有限公司 TYAU

TG YUEDA AUTOGLASS CO., LTD.

2010年成立

汽車玻璃 / Automotive Glass

鹽化工

Salt Chemical

實聯化工江蘇有限公司 SCJ

SHIHLIEN CHEMICAL INDUSTRIAL

JIANGSU CO., LTD.

2009年成立

純鹼 / 氯化銨 / 生技鹽

Soda Ash / Ammonium Chloride / Biotech Salt



TT, 181,181 M² (271 畝)



TL, 260,343 M² (395 畝)



TGF, 323,539 M² (485 畝)



TCD, 362,668 M² (544 畝)



TBF, 370,668 M² (557 畝)



TS, 129,090 M² (173 畝)



TYAU, 132,755 M² (199 畝)



SCJ, 2,000,010 M² (3,000 畝)

集團一覽 Company List

截至2022-03-31

| 項目 Item | 創立 Est. | 資本額 Capital | | 營業項目 Business Scope | 主要股東 Major Shareholder | 持股率 Holding % |
|--|--------------|----------------|-----------|-------------------------------------|---------------------------|------------------|
| | | 千元 | US\$000 | | | |
| 台灣玻璃工業股份有限公司 Taiwan Glass Ind. Corp. | TGI 1964 | 29,080,608 | - | 玻璃製造 Glass Mfg. | THG | 63 |
| 台灣玻璃美國銷售有限公司 Taiwan Glass USA Sales Corp. | TGUS 1973 | - | 461 | 玻璃銷售 Glass Sales | TGI | 100 |
| 台灣汽車玻璃股份有限公司 Taiwan Autoglass Ind. Corp. | TAGC 1988 | 300,000 | - | 汽車玻璃製造 Automotive Glass Mfg. | TGI | 87 |
| 台灣玻璃中國控股有限公司 Taiwan Glass China Holding Ltd. | TGCH 1993 | - | 1,300,000 | 大陸投資控股公司 China Investment | TGI | 94 |
| 台玻青島玻璃有限公司 TG Qingdao Glass Co., Ltd. | QFG 1993 | - | 87,800 | 平板玻璃製造 Flat Glass Mfg. | TGCH | 100 |
| 青島壓花玻璃有限公司 Qingdao Rolled Glass Co., Ltd. | QRG 1993 | - | 29,293 | 壓花玻璃製造 Rolled Glass Mfg. | TG-G | 100 |
| 台玻長江玻璃有限公司 TG Changjiang Glass Co., Ltd. | CFG 1994 | - | 94,000 | 平板玻璃製造 Flat Glass Mfg. | TGCH | 100 |
| 台嘉玻璃纖維有限公司 Taichia Glass Fiber Co., Ltd. | TGF 2001 | - | 110,000 | 玻璃纖維布製造 Fiberglass Fabric Mfg. | TGCH | 100 |
| 台玻成都玻璃有限公司 TG Chengdu Glass Co., Ltd. | CDG 2002 | - | 70,000 | 平板玻璃製造 Flat Glass Mfg. | TGCH | 100 |
| 台玻華南玻璃有限公司 TG Huanan Glass Co., Ltd. | HNG 2003 | - | 106,000 | 平板玻璃製造 Flat Glass Mfg. | TGCH | 100 |
| 台玻東海玻璃有限公司 TG Donghai Glass Co., Ltd. | DHG 2003 | - | 80,000 | 平板玻璃製造 Flat Glass Mfg. | TGCH | 100 |
| 台玻天津玻璃有限公司 TG Tianjin Glass Co., Ltd. | TJG 2004 | - | 96,000 | 平板玻璃製造 Flat Glass Mfg. | TGCH | 100 |
| 台玻咸陽玻璃有限公司 TG Xianyang Glass Co., Ltd. | TXY 2010 | - | 100,000 | 平板玻璃製造 Flat Glass Mfg. | TGCH | 100 |
| 台玻太倉工程玻璃有限公司 TG Taicang Architectural Glass Co., Ltd. | TTAR 2010 | - | 35,000 | Low-E 玻璃製造 Low-E Glass Mfg. | TGCH | 100 |
| 台玻悅達汽車玻璃有限公司 TG Yueda Autoglass Co., Ltd. | TYAU 2010 | - | 68,000 | 汽車玻璃製造 Automotive Glass Mfg. | TG-G | 60 |
| 台玻安徽玻璃有限公司 TG Anhui Glass Co., Ltd. | TAH 2010 | - | 85,000 | 平板玻璃製造 Flat Glass Mfg. | TGCH | 100 |
| 台玻武漢工程玻璃有限公司 TG Wuhan Architectural Glass Co., Ltd. | TWAR 2010 | - | 73,805 | Low-E 玻璃製造 Low-E Glass Mfg. | TGCH | 100 |
| 台嘉成都玻纖有限公司 Taichia Chengdu Glass Fiber Co., Ltd. | TCD 2011 | - | 108,000 | 玻璃纖維布製造 Fiberglass Fabric Mfg. | TGCH | 100 |
| 台嘉蚌埠玻璃纖維有限公司 Taichia Bengbu Glass Fiber Co., Ltd. | TBF 2012 | - | 60,000 | 玻璃纖維布製造 Fiberglass Fabric Mfg. | TGCH | 100 |
| 台玻文教基金會 TG Cultural & Educational Foundation | TG-F 1989 | 170,000 | - | 文教事業 Cultural & Educational Fdn. | TGI | 100 |
| 總資本額 Total | | 29,550,608 | 2,503,359 | | | |

2021 年度營運報告 2021 Operation Report

| 2021 年度 營運合併報表 | 銷售量 | 3,538千公噸(+1.7%) |
|---|--------------------|------------------|
| 營業收入 | 56,066百萬元(+34.0%) | =US\$ 2,002 mil |
| 營業利益 | 11,558百萬元(+359.4%) | = US\$ 413 mil |
| 營業外收支 | 2,185百萬元(+258.3%) | = US\$ 78 mil |
| 稅前淨利 | 13,931百萬元(+365.7%) | = US\$ 498 mil |
| 稅後淨利 | 12,231百萬元(+397.1%) | = US\$ 437 mil |
| 稅後淨利歸屬於母公司業主 | 11,477百萬元(+364.9%) | = US\$ 410 mil |
| 母公司業主權益 | 54,044百萬元(+23.4%) | = US\$ 1,952 mil |
| 股票市值 | 77,791百萬元(+37.2%) | = US\$ 2,810 mil |
| 每股純益 3.95元，股東權益每股18.58元=US\$0.67， 每股現金股利1.82元，股票股利0.0元，提股東會審議。 | | |

2021 年生產

| | | |
|---------|----|--|
| 平板玻璃 | 台灣 | 台中廠平板玻璃1座、鹿港廠平板玻璃1座、台中廠微薄玻璃1座，計3座生產線，年產 317千公噸 (+50.7%) |
| | 大陸 | 昆山、成都、天津、東莞、青島、東海、咸陽及安徽廠平板玻璃12座，福建光伏玻璃1座，計13座生產線，年產 2,754千公噸 (+8.8%) |
| 玻布 / 玻纖 | 台灣 | 桃園廠玻纖1座及鹿港廠玻布1座，計2座生產線，年產 77千公噸 (+16.9%) |
| | 大陸 | 昆山廠玻布4座、成都廠玻布1座、蚌埠廠玻布1座，計6座生產線，年產 56千公噸 (+3.8%) |
| 容食廚玻璃 | 台灣 | 新竹廠容食廚器玻璃7座生產線，年產 151千公噸 (-1.9%) |
| 汽車玻璃 | 台灣 | 台中廠汽車玻璃生產線，年產 7千公噸 (+28.8%) |
| | 大陸 | 鹽城廠汽車玻璃生產線，年產 13千公噸 (+18.8%) |
| 合計 | | 3,375千公噸 (+11.3%) |

2021 年銷售

| | | |
|---------|---------|--|
| 平板玻璃 | 台灣 | 銷售量 314千公噸 (+24.8%)，銷售額 4,248百萬元 (+15.9%) |
| | 大陸 計 | 銷售量 2,878千公噸 (-0.2%)，銷售額 35,196百萬元 (+32.9%) 計3,192千公噸，新台幣39,444百萬元 = US\$ 1,409mil (+30.9%)，佔集團營業額 66.6% |
| 玻布 / 玻纖 | 台灣 | 銷售量 87千公噸 (+21.5%)，銷售額 5,382百萬元 (+22.8%) |
| | 大陸 計 | 銷售量 90千公噸 (-6.9%)，銷售額 9,895百萬元 (+65.7%) 計 177千公噸，新台幣 15,277百萬元 = US\$546mil (+47.5%)，佔集團營業額 25.8% |
| 容食廚玻璃 | 台灣 | 銷售量 149千公噸(-5.6%)，銷售額 3,368百萬元 = US\$120mil (-5.8%)， 佔集團營業額 5.7% |
| 汽車玻璃 | 台灣 | 銷售量 7千公噸(+24.9%)，銷售額593百萬元 (+20.9%) |
| | 大陸 計 | 銷售量 13千公噸(+29.3%)，銷售額561百萬元 (+60.4%) 計 20千公噸，新台幣 1,154百萬元 = US\$ 41mil (+37.3%)，佔集團營業額 1.9% |
| 合計 | | 銷售量3,538千公噸，銷售額新台幣 59,243百萬元 = US\$ 2,116mil (+31.9%)， 減合併沖銷後，銷售額新台幣56,066百萬元 = US\$ 2,002mil (+34.0%)， 內銷佔86%，外銷佔 14% |

2021 Operation Report

| 2021 Consolidated Performance | | | | |
|--|-----|-----------|-----------|--|
| Sales Volume | | 3,537,757 | MT(+1.7%) | |
| Operating Revenue | U\$ | 2,002 mil | (+34.0%) | |
| Operating Income | U\$ | 413 mil | (+359.4%) | |
| Non-operating Income and Expenses | U\$ | 78 mil | (+258.3%) | |
| Income Before Tax | U\$ | 498 mil | (+365.7%) | |
| Net Income After Tax | U\$ | 437 mil | (+397.1%) | |
| Income After Tax Attributable to Stockholders of the Parent | U\$ | 410 mil | (+364.9%) | |
| Total Equity Attributable to Stockholders of the Parent | U\$ | 1,952 mil | (+23.4%) | |
| Stock Market Value | U\$ | 2,810 mil | (+37.2%) | |
| Earnings per share : U\$0.14, Equity per share: U\$0.67 | | | | |
| Dividend Cash: U\$0.0650, Dividend Stock: U\$0.00, Totaling: U\$0.0650 | | | | |
| To be submitted to the shareholders' meeting for approval. | | | | |

2021 Production

| | | |
|--------------------------------|--------|---|
| Flat Glass | Taiwan | 3 float plants, annual production 317,392MT (+50.7%) |
| | China | 12 float plants & 1 photovoltaic glass plant, annual production 2,753,570MT (+8.8%) |
| Fiberglass / Fiberglass Fabric | Taiwan | 1 glass fiber plant, & 1 glass fabric plant, annual production 77,438MT (+16.9%) |
| | China | 6 glass fabric plants, annual production 55,862MT (+3.8%) |
| Glass Container & Glassware | Taiwan | 7 plants, annual production 150,827MT (-1.9%) |
| Automotive Glass | Taiwan | TAGC plant, annual production 6,924MT (+28.8%) |
| | China | TYAU plant, annual production 12,756MT (+18.8%) |
| Group Total | | 3,374,769MT (+11.3%) |

2021 Sales

| | | |
|--------------------------------|--------|---|
| Flat Glass | Taiwan | Volume 314,538MT (+24.8%), sales revenue U\$152mil (+15.9%) |
| | China | Volume 2,877,854MT (-0.2%), sales revenue U\$1,257mil (+32.9%) |
| | Total | 3,192,392MT, U\$1,409 mil (+30.9%), 66.6% of group sales |
| Fiberglass / Fiberglass Fabric | Taiwan | Volume 87,137 MT (+21.5%), sales revenue U\$192mil (+22.8%) |
| | China | Volume 89,854 MT (-6.9%), sales revenue U\$354mil (+65.7%) |
| | Total | 176,991MT, U\$546 mil (+47.5%), 25.8% of group sales |
| Glass Container & Glassware | Taiwan | Volume 148,870MT(-5.6%), sales revenue U\$120mil (-5.8%), 5.7% of group sales |
| Automotive Glass | Taiwan | Volume 6,805MT(+24.9%), sales revenue U\$21mil (+20.9%) |
| | China | Volume 12,699MT(+29.3%), sales revenue U\$20mil (+60.4%) |
| | Total | 19,504MT, U\$41 mil (+37.3%), 1.9% of group sales |
| Group Total | | 3,537,757MT, revenue U\$2,116mil (+31.9%) : Net Sales revenue U\$2,002mil (+34.0%) domestic market 86% and export 14% |

合併財務一覽 Consolidated Financial Scan

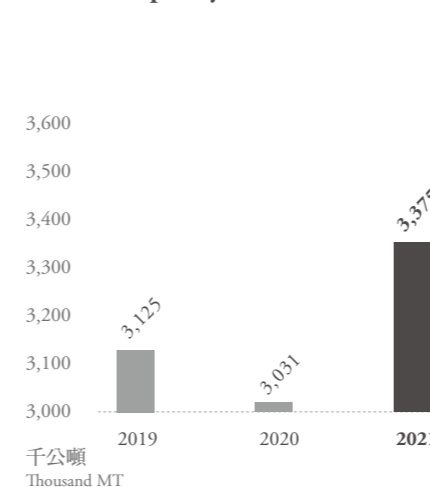
| 項目 Item | 單位 Unit | 2020 | 2021 | +% | -% |
|---|--------------|--------------------------------|----------------------------------|-------|------|
| 銷售量 Sales Volume | 公噸 MT | 3,477,506 | 3,537,757 | 1.7 | |
| 營業收入 Operating Revenue | 千元 U\$000 | 41,841,022 1,415,988 | 56,065,737 2,002,205 | 34.0 | |
| 營業利益 Operating Income | 千元 U\$000 | 2,515,844 85,141 | 11,557,967 412,755 | 359.4 | |
| 營業外收入及支出 Non-operating Income and Expenses | 千元 U\$000 | 609,934 20,641 | 2,185,402 78,044 | 258.3 | |
| 稅前淨利 Income Before Tax | 千元 U\$000 | 2,991,221 101,229 | 13,931,097 497,504 | 365.7 | |
| 稅後淨利 Net Income After Tax | 千元 U\$000 | 2,460,548 83,270 | 12,231,239 436,799 | 397.1 | |
| 稅後淨利歸屬於母公司業主 Income After Tax Attributable to Stockholders of the Parent | 千元 U\$000 | 2,468,521 83,540 | 11,476,678 409,852 | 364.9 | |
| 每股純益 Earnings Per Share | 元 U\$ | 0.85 0.03 | 3.95 0.14 | 364.7 | |
| 純益率 Earning Ratio | % | 5.88 | 21.82 | 271.1 | |
| 每股股利 (現金+股票) Dividend Per Share (Cash+Stock) | 元 U\$ | 0.5(0.5+0) 0.0169(0.0169+0) | 1.82(1.82+0) 0.0650(0.0650+0) | | |
| 資產總額 Total Assets | 千元 U\$000 | 89,929,777 3,157,646 | 99,455,329 3,593,039 | 10.6 | |
| 實收資本 Capital | 千元 U\$000 | 29,080,608 1,021,089 | 29,080,608 1,050,600 | | |
| 母公司業主權益 Total Equity Attributable to Stockholders of the Parent | 千元 U\$000 | 43,807,564 1,538,187 | 54,044,112 1,952,461 | 23.4 | |
| 每股淨值 Equity Per Share | 元 U\$ | 15.06 0.53 | 18.58 0.67 | 23.4 | |
| 自有資本率 Shareholders' Equity to Total Assets Ratio | % | 48.7 | 54.3 | 11.5 | |
| 合併權益報酬率 Return on Total Equity | % | 5.5 | 23.4 | 325.5 | |
| 股票市值 Stock Market Value | 千元 U\$000 | 56,707,186 1,991,123 | 77,790,626 2,810,355 | 37.2 | |
| 新投資金額 New Capital Expenditure | 千元 U\$000 | 3,445,279 116,595 | 3,043,048 108,673 | | 11.7 |

合併資產負債表 Consolidated Balance Sheet

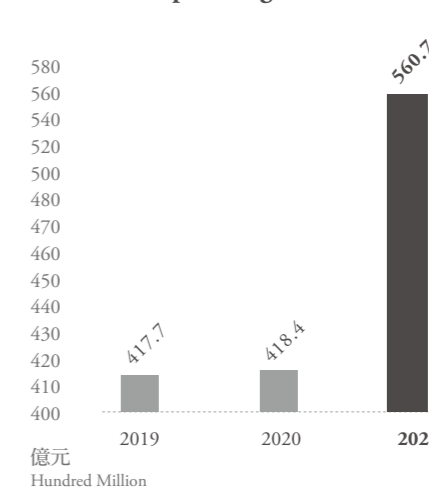
| | 2020 | | | 2021 | | |
|---|------------|-----------|-------|------------|-----------|-------|
| | 千元 | US\$000 | % | 千元 | US\$000 | % |
| 資產 | | | | | | |
| 流動資產 | 35,502,486 | 1,246,576 | 39.5 | 45,657,837 | 1,649,488 | 45.9 |
| Assets | | | | | | |
| 採用權益法之投資 | 4,616,442 | 162,094 | 5.1 | 5,482,791 | 198,078 | 5.5 |
| Investments Accounted for Using the Equity Method | | | | | | |
| 不動產、廠房及設備 | 46,050,857 | 1,616,954 | 51.2 | 43,948,199 | 1,587,724 | 44.2 |
| Property, Plant and Equipment | | | | | | |
| 其他非流動資產 | 3,759,992 | 132,022 | 4.2 | 4,366,502 | 157,749 | 4.4 |
| Other Noncurrent Assets | | | | | | |
| 資產合計 | 89,929,777 | 3,157,646 | 100.0 | 99,455,329 | 3,593,039 | 100.0 |
| Total Assets | | | | | | |
| 負債 | | | | | | |
| 流動負債 | 30,054,861 | 1,055,297 | 33.4 | 26,975,232 | 974,539 | 27.1 |
| Liabilities | | | | | | |
| 長期負債 | 10,872,579 | 381,762 | 12.1 | 12,581,798 | 454,544 | 12.7 |
| Long-term Loan | | | | | | |
| 其他非流動負債 | 2,202,140 | 77,322 | 2.5 | 2,123,804 | 76,727 | 2.1 |
| Other Noncurrent Liabilities | | | | | | |
| 負債合計 | 43,129,580 | 1,514,381 | 48.0 | 41,680,834 | 1,505,810 | 41.9 |
| Total Liabilities | | | | | | |
| 權益 | | | | | | |
| 母公司業主權益計 | 43,807,564 | 1,538,187 | 48.7 | 54,044,112 | 1,952,461 | 54.3 |
| Equity | | | | | | |
| 實收資本 | 29,080,608 | 1,021,089 | | 29,080,608 | 1,050,600 | |
| Capital | | | | | | |
| 非控制權益 | 2,992,633 | 105,078 | 3.3 | 3,730,383 | 134,768 | 3.8 |
| Non-controlling Interests | | | | | | |
| 權益合計 | 46,800,197 | 1,643,265 | 52.0 | 57,774,495 | 2,087,229 | 58.1 |
| Total Equity | | | | | | |
| 負債及權益 | 89,929,777 | 3,157,646 | 100.0 | 99,455,329 | 3,593,039 | 100.0 |
| Liabilities & Equity | | | | | | |

歷年財務簡表 Financial Charts by Year

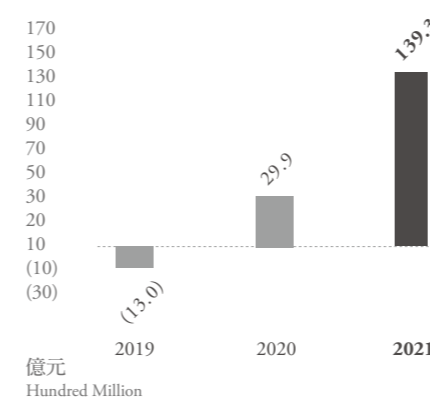
生產量 Capacity



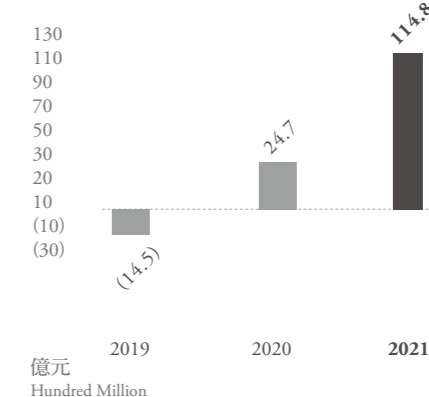
營業收入 Operating Revenue



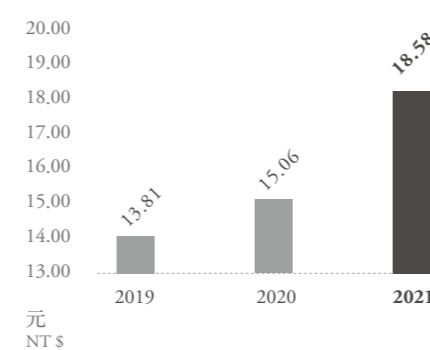
稅前淨(損)利 (Loss) Income Before Tax



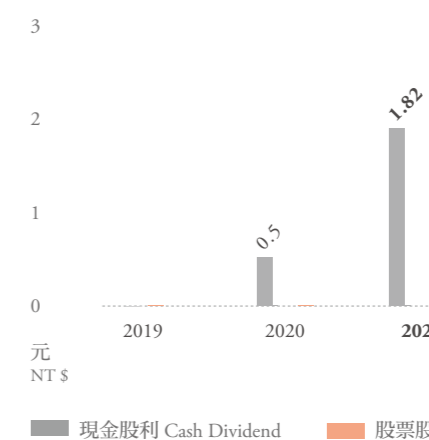
稅後淨(損)利歸屬於母公司業主 (Loss) Income After Tax Attributable to Stockholders of the Parent



每股淨值 Equity Per Share



每股股利 Dividend Per Share



董事長致詞

2022 年 展望



各位董事、股東好

綜觀台玻2021年表現，在原物料、應用產品需求暢旺，以及疫情逐漸趨緩下，帶動行業強勁需求表現，集團合併營收560.7億元，稅前淨利139.3億元，營運表現突出亮眼，感謝董事、獨董、公司幹部及全體員工的努力。

隨著新冠疫苗施打覆蓋率提升，世界各國陸續解封，全球經濟可望出現明顯復甦成長，但海運問題、Omicron的衝擊，以及俄烏戰爭，導致原油、天然氣及原物料價格走高，物價上揚，加上大陸政府動態清零政策，全球供應鏈緊張，更加劇市場對通膨的擔憂，為2022年的經濟前景蒙上不確定的因素，須審慎以對。

各產品營業內容報告:

在平板玻璃方面，台灣疫情管控良好，各廠營運及生產接單均維持正常，台玻持續降低生產成本，提高產品附加價值，加強產學研發合作，創造產品客製與差異化。鑒於台灣能源結構轉型及減碳排放趨勢，新建及危老改建的建物，都應符合更嚴格的建築外牆節能標準，台玻Low-E節能玻璃可有效阻隔至少60%的室外熱源，節省空調35%用電，降低用電量負荷，持續推動各界採用環保節能建築產品，是我們努力的目標與責任。

中國大陸平板玻璃市場，在需求與價格上均維持高檔，總體上取得了較好的業績，然而下半年進行能耗雙控的限電措施，以及建築行業危機，對整個產業鏈帶來影響，大陸政府為貫徹實現碳達峰、碳中和目標，建築節能標準不斷提升，高性能節能、智能玻璃使用已成為趨勢。整體而言，全年玻璃市場供需行情轉趨溫和，為穩中求進的態勢。

在纖維事業方面，台玻玻璃纖維產品持續以降低成本，加速研發，增加產品價值為方針。電子級玻纖布面對未來市場需求，成功研發並開始供應超薄布#1010布種。同時對於高速高頻傳輸、遠距商機等需求，台玻開發低介電(Low DK_係數:4.58/10GHz)玻纖布，持續取得國際終端大廠認證採用。對於FRP，2019年再度與美國歐文斯科寧公司合作之新窯，產能提高效率增加，持續供應客戶更全面及高性能環保產品。

在容食廚品牌方面，受到塞港缺櫃、運費高漲情況下，國外訂單出貨略受影響，台玻增加投標內銷市場各項標案，耐熱容器與廚器產線合併成一窯二線，並策略性調漲單價，維持既有利潤。台玻「TG」品牌全系列產品及包裝設計榮獲2021紅點設計大獎（Red Dot Design Award），對產品推廣銷售有明顯的助益。

台玻轉投資實聯化工江蘇公司43.99%，2021年純鹼市場供需格局改善，產品市場價格刷新歷史高位，氯化銨價格也受惠肥料市場尿素價格不斷走高連帶上漲，全年業績創高，實聯中控合併營業收入472百萬美元，合併淨利77百萬美元，行業景氣可望延續，維持獲利。

綜合國內外經濟金融情勢，貿易環境的變化，台玻不斷思考企業的組織結構和運營的優化，以應對急劇變化的國際市場。目前氣候變遷議題和全球2050年淨零碳排放已是世界趨勢。台玻訂立環境保護、社會責任、公司治理(ESG)各面向管理方針及績效目標，創建循環經濟，已連續7年獲得TCSA台灣企業永續獎傳統製造業銀獎之殊榮。在企業策略的實踐上，我們持續提升節水技術，利用回收水取代自來水，降低用水量，達到永續水資源的精神。於桃園、新竹、台中、鹿港各廠屋頂設置太陽能光電系統計8,700KW，預計2022年第四季完成裝設，實踐永續節能、綠色經營的願景。並運用AI智慧生產，節省能耗，提升品質。

我們持續強化公司經營體質，穩健地追求永續成長，來答謝所有股東、客戶、合作夥伴及全體員工，未來也會緊跟國際永續的浪潮趨勢，以核心本業為根基，並整合集團事業體發展模式，持續多元創新產業價值，以取得先機，迎接新局。

敬請各位股東惠予支持與指教

林伯豐

2022.06.09

Chairman's Message

2022 Operation Perspectives

Directors and stockholders, thank you and look forward to having your opinions on 2022 operation perspective.

In terms of the performance of Taiwan Glass in 2021, the booming demand for raw materials and applied products, complemented with mitigation of the pandemic, has driven a strong demand from industries. The Group's consolidated revenue is NT\$56.07 billion, and the net profit before tax is NT\$13.93 billion, an outstanding operating performance for 2021, thanks to the hard work of directors, independent directors, supervisors and all employees.

The global economy was expected to see a significant recovery and growth as countries around the world have gradually started to relax COVID-19 restrictions with increased vaccination rates. However, port congestion caused by the pandemic has led to continued global price spikes. Higher prices of crude oil, natural gas and raw materials are resulted from impacts of the Omicron variant and the Russia-Ukraine war starting from the end of February. In addition, the Chinese government has stuck to dynamic zero-COVID policy, resulting in global supply chain crisis and greater concerns about inflation. These factors create intensified uncertainty in the 2022 economic outlook. Thus, we have to pay close attention to the abovementioned possible risks to the 2022 economic development.

The following is a report on the business of each product.

As for flat glass, Taiwan's containment efforts against COVID-19 contributed to normal manufacturing, production and order processing of factories in Taiwan. TG continues to reduce production costs, increase the added value of products, and strengthen industry-academia collaboration to create product customization and differentiation. In view of the energy transition of Taiwan and the trend of reducing carbon emissions, new-builds and reconstruction of unsafe or old buildings should meet higher energy-saving standards of exterior walls. Our Low-E glass can effectively block at least 60% of outer heat sources and save 35% of the electricity consumed by air conditioners. Our goal and responsibility is to reduce electrical load and promote environmentally-friendly and energy-saving architectural products for people in all walks of life.

Better operation results in the flat glass market of China were achieved thanks to high demand and price. However, in the second half of the year, power crunch measures for dual control of energy consumption and intensity and real estate crisis have caused a domino effect on the entire industry chain. Coupled with Chinese government's goal to hit carbon emission peak and achieve carbon neutral, it is expected that the application of high-performance energy-saving and smart glass will become a trend with the continuous updates to energy-saving standards for buildings. Overall, this year has seen a relatively moderate growth in the supply and demand of the glass market, and we will seek progress while keeping growth.

In fiberglass business, Taiwan Glass is dedicated to reducing costs and speeding up research & development to increase our product value. As for electronic-grade fiberglass fabric, we have successfully developed and supplied the ultra-thin fiberglass fabric #1010 in response to the market needs in the future. Also, we have successfully developed low-dielectric (Low DK, coefficient: 4.58/10GHz) fiberglass fabric for high-speed, high-frequency transmission and remote business, which has been certified and continuously adopted by international terminal manufacturers. For FRP, the new kiln in cooperation with Owens Corning of the United States in 2019 has improved production capacity and increased efficiency, coupled with advanced fiberglass formulation and production technology to supply clients with more comprehensive, high-performance and eco-friendly products.

As for container, tableware, kitchenware glass and our private brand, shipment of overseas orders was slightly affected due to port congestion, shortage of shipping containers and high freight rates; thus, we have increased tenders in the domestic market in response to this. The production lines of heat-resistant containers and kitchenware glass were merged into one kiln with two production lines. We have also increased unit price strategically to maintain profitability. As for our private brand, TG, all products and packaging of TG won the 2021 Red Dot Design Award, which helps to promote the sales of the products.

In terms of Shihlien Chemical Industrial Jiangsu Co., Ltd. (SCJ, 43.99% of its shareholding held by Taiwan Glass), market price of SCJ's products hit a record high with improved supply-demand balance of the soda ash market in 2021. Besides, the price of ammonium chloride surged thanks to the continuous rise in the price of urea in the fertilizer market, contributing to a record high of SCJ's annual operating performance. The consolidated operating income of Shihlien China Holding Co., Ltd. is US\$472 million and the consolidated net profit is US\$77 million. The industry boom is expected to continue and maintain its prosperity and profitability.

Considering the economic and financial situation at home and abroad and the changes in global trading environment, Taiwan Glass has put emphasis on the optimization of organizational structure and operation of the Company in response to the rapidly changing global market. Climate change issues and net-zero by 2050 have nowadays become the global trend; thus we have set up management guidelines and performance targets for environmental protection, corporate social responsibility and corporate governance (ESG) to build a circular economy. Taiwan Glass has won the Silver Award in manufacturing sector of Taiwan Corporate Sustainability Awards (TCSA) for seven consecutive years. As for our corporate strategy, we are committed to improve water-saving technology by using recycled water instead of tap water to reduce water consumption and manage water resources sustainably. The installation of photovoltaic systems, which generate 8700KW of power, on the roofs of our factories in Taoyuan, Hsinchu, Taichung and Lukang is expected to be completed in the fourth quarter of 2022, which aligns to our vision of practicing sustainability, energy conservation and green operation. We will also adopt AI smart manufacturing to reduce energy consumption and improve quality.

We endeavor to strengthen the Company's operation, so that we can pursue sustainable growth to live up to the expectations of stockholders, employees, clients and business partners. In the future, we will follow the global trend of sustainable development. Based on our core business and integration of business units within the Group, we will strive to create value for industry innovation to get a head start and break new ground.

Lin, Por Fong

2022.06.09

台灣玻璃工業公司第 20 屆董事 / 第 3 屆審計委員 (2021-2024)

TGI 20th Directors / 3rd Audit Committee

| | | | |
|---|-------------------------------|--------------------------------|--------------------------------|
| 董事長 Chairman | 林伯豐 Lin, P F Since 1967 | | |
| 總經理 總裁 President & CEO | 林伯實 Lin, P S Since 1967 | | |
| 駐會董事 Executive Director | 林伯淳 Lin, P C Since 1976 | | |
| 董事 Directors | 林瀚東 Lim, H T Since 2009 | 彭誠浩 Peng, C H Since 2018 | 徐莉玲 Hsu, L L Since 2015 |
| | 林嘉宏 Lin, C H Since 2000 | 蘇育德 Su, Y T Since 1996 | 林嘉佑 Lin, C Y Since 2004 |
| | 林嘉明 Lin, C M Since 2006 | 蔡增銘 Tsai, T M Since 2018 | 連勝武 Lien, S W Sine 2021 |
| 獨立董事/審計委員 Independent Directors/ Audit Committe | 林聖忠 Lin, S C Since 2021 | 林瑞岳 Lin, Z Y Since 2021 | 王瑜哲 Wang, Y C Since 2021 |

台灣玻璃工業公司第 20 屆董事 / 第 3 屆審計委員 (2021-2024)

TGI 20th Directors / 3rd Audit Committee



台灣經營團隊 Taiwan Management Team

| | | | |
|----------------------------------|------------------|---|-------------------|
| 董事長 Chairman | 林伯豐 Lin, P F | 大陸事業部 平板事業部 營運長 COO, China Prod./Flat | 林嘉宏 Lin, C H |
| 總經理 總裁 President & CEO | 林伯實 Lin, P S | 彰濱廠副總 VGM, TC | 周敬群 Chou, C C |
| 駐會董事 Executive Director | 林伯淳 Lin, P C | 平板事業部營業協理 AGM, Flat Sales | 陳紀澄 Chen, C Y |
| 纖維事業部營運長 COO, Fiber | 蘇育德 Su, Y T | 台中廠協理 AGM, TF | 王國方 Wang, K F |
| 纖維事業部總經理 GM, Fiber | 林嘉佑 Lin, C Y | 鹿港平板廠協理 AGM, TF-4 | 石鎮界 Shih, C C |
| 纖維事業部副總 VGM, Fiber | 蔡維新 Tsai, W S | 玻璃新材料部副總 VGM, New Glass Materials | 趙宏榮 Chao, H J |
| 鹿港廠副總 VGM, TL | 劉敏雄 Liu, M H | 容食事業部總經理 GM, Container & Glassware | 謝進興 Hsieh, C H |
| 鹿港廠廠長 Plant Dir., TL | 紀錦水 Chi, C S | 新竹廠副總 VGM, TS | 吳蔚騰 Wu, W T |
| 桃園廠副總 VGM, TT | 陳慶良 Chen, C L | 容器部內銷協理 AGM, Container Trade | 曹志維 Tsao, C W |
| 桃園廠廠長 Plant Dir., TT | 余哲超 Yu, C C | 容器部外銷協理 AGM, Container Export | 吳明德 Wu, M T |
| 財務/管理本部總經理 GM, Finance/ Admin | 林嘉明 Lin, C M | 新竹廠生產協理 AGM, Prod., TS | 沈賢輝 Shen, H H |
| 管理本部副總 VGM, Admin. | 洪有欽 Hung, Y C | 車板本部總經理 GM, Autoglass | 呂宗祥 Lu, T H |
| 採購本部副總 VGM, Purchasing | 蔡增銘 Tsai, T M | 車板本部營業部協理 AGM, Autoglass Sales | 林信宏 Lin, H H |

大陸經營團隊 China Management Team

| | | | | |
|----------------------|---|--|-----------------|------------------|
| 台灣玻璃中國控股有限公司 TGCH | 董事長 Chairman 副董事長 Vice Chairman 董事 Directors | 林伯豐 Lin, P F 林伯實 Lin, P S 林伯淳 Lin, P C 林嘉宏 Lin, C H | 林嘉佑 Lin, C Y | 林嘉明 Lin, C M |
| 台玻長江玻璃有限公司 CFG | 董事長 Chairman 總經理 GM | 林嘉宏 Lin, C H 王鳳寶 Wang, F P | | |
| 台玻成都玻璃有限公司 CDG | 董事長 Chairman 總經理 GM | 林嘉宏 Lin, C H 姬文剛 Chi, W G | 李廣玉 Li, K Y | |
| 台玻咸陽玻璃有限公司 TXY | 董事長 Chairman 總經理 GM | 林嘉宏 Lin, C H 張政峰 Chang, C F | | |
| 台玻安徽玻璃有限公司 TAH | 董事長 Chairman 總經理 GM | 林嘉宏 Lin, C H 陳祺灝 Chen, C H | | |
| 台玻太倉工程玻璃有限公司 TTAR | 董事長 Chairman | 林嘉宏 Lin, C H | | |
| 台玻武漢工程玻璃有限公司 TWAR | 董事長 Chairman | 林嘉宏 Lin, C H | | |
| 台玻悅達汽車玻璃有限公司 TYAU | 董事長 Chairman 副董事長 Vice Chairman 總經理 GM | 林嘉宏 Lin, C H 孫海甲 Sun, H C 卞金宏 Pien, C H | 副總 VGM | 洪昌仁 Hung, C J |

大陸經營團隊 China Management Team

| | | | | |
|---------------------|--|--|--|-------------------------------------|
| 台嘉玻璃纖維有限公司 TGF | 董事長 Chairman 纖維事業部營運長 COO, Fiber 副總 VGM | 林伯豐 Lin, P F 蘇育德 Su, Y T 王明慶 Wang, M C | 纖維事業部總經理 GM, Fiber 營業部副總 VGM, Sales | 林嘉佑 Lin, C Y 蔡維新 Tsai, W S |
| 台嘉成都玻纖有限公司 TCD | 董事長 Chairman 纖維事業部營運長 COO, Fiber 副總 VGM | 林伯豐 Lin, P F 蘇育德 Su, Y T 林雲炎 Lin, Y Y | 纖維事業部總經理 GM, Fiber 營業部副總 VGM, Sales | 林嘉佑 Lin, C Y 蔡維新 Tsai, W S |
| 台嘉蚌埠玻璃纖維有限公司 TBF | 董事長 Chairman 纖維事業部營運長 COO, Fiber 總經理 GM | 林伯豐 Lin, P F 蘇育德 Su, Y T 蕭世欽 Hsiao, S C | 纖維事業部總經理 GM, Fiber 營業部副總 VGM, Sales | 林嘉佑 Lin, C Y 蔡維新 Tsai, W S |
| 台玻青島玻璃有限公司 QFG | 董事長 Chairman 總經理 GM | 林伯實 Lin, P S 宋成紅 Sung, C H | | |
| 台玻東海玻璃有限公司 DHG | 董事長 Chairman 總經理 GM | 林伯實 Lin, P S 陳月進 Chen, Y C | 副總 VGM | 顏和平 Yan, H P |
| 台玻華南玻璃有限公司 HNG | 董事長 Chairman 總經理 GM 節能玻璃部鍍膜副總 VGM, LE coating | 林伯淳 Lin, P C 李天明 Li, T M 趙新臣 Chao, H C | 鏡板部副總 VGM, Mirror glass | 趙成家 Chao, C C |
| 台玻天津玻璃有限公司 TJG | 董事長 Chairman 節能玻璃部副總 VGM, LE glass | 林伯淳 Lin, P C 趙新臣 Chao, H C | 管理部/浮法玻璃部副總 VGM, Admin/Flat | 侯琨玉 Hou, K Y |

集團產能 Production Capacity

台玻集團各產品總產能 Total Production Capacity of Each Product

| 產品 Products | 台灣 Taiwan | | 大陸 China | | 合計 Total | |
|--------------------------------------|-----------------|----------------|-----------------|------------------|-----------------|------------------|
| | 窯爐座 Furnaces | 噸 MT | 窯爐座 Furnaces | 噸 MT | 窯爐座 Furnaces | 噸 MT |
| 浮式平板玻璃 Float Glass | 2 | 340,000 | 12 | 2,974,750 | 14 | 3,314,750 |
| 微薄玻璃 Ultra-Thin Glass | 1 | 27,375 | - | - | 1 | 27,375 |
| 玻璃纖維布 Fiberglass Fabric | 1 | 20,000 | 5 | 95,000 | 6 | 115,000 |
| 玻璃纖維增強絲 Fiberglass Reinforced | 1 | 80,000 | - | - | 1 | 80,000 |
| 容、廚器玻璃 Glass Container /Glassware | 6 | 169,000 | - | - | 6 | 169,000 |
| 合計 Total | 11 | 636,375 | 17 | 3,069,750 | 28 | 3,706,125 |

台玻集團Low-E線加工產能 Capacity of Low-E Processing Production Lines

| 產品 Products | 台灣 Taiwan | | 大陸 China | | 合計 Total | |
|-----------------------------|--------------|---|--------------|---|--------------|---|
| | 生產線 Lines | 千 M ² Thousand M ² | 生產線 Lines | 千 M ² Thousand M ² | 生產線 Lines | 千 M ² Thousand M ² |
| 低輻射 Low-E 玻璃 Low-E Glass | 1 | 4,000 | 8 | 38,000 | 9 | 42,000 |

台玻集團汽車玻璃加工線產能 Capacity of Automotive Glass Processing Production Lines

| 產品 Products | 台灣 Taiwan | | 大陸 China | | 合計 Total | |
|--------------------------|--------------|---------------------|-------------|---------------------|-------------|---------------------|
| | 產線 Lines | 千台 Thousand Cars | 產線 Lines | 千台 Thousand Cars | 產線 Lines | 千台 Thousand Cars |
| 汽車玻璃 Automotive Glass | 1 | 250 | 5 | 2,810 | 6 | 3,060 |

產品介紹 Products

平板玻璃

平板玻璃為台玻核心產品，台灣及中國大陸為台玻平板玻璃生產製造的兩大區域。產品行銷台灣、中國、日本、韓國、東南亞、北美、中東、澳洲、歐洲、南非等世界各地區。

建築用

浮式明板玻璃 / 浮式色板玻璃

浮式明板玻璃表面平滑，波紋少，透視性佳；透過調伴適量高溫色料，成為色板玻璃，可減少輻射熱的穿透，節省能源，增加建築物外觀色彩變化，創造更高價值感受。

壓花玻璃

具有透光不透視之特性，亦可創造各種不同的模糊光影及陰影。

低輻射玻璃 / 低輻射複層玻璃

低輻射玻璃具高可見光透過率及低紅外線透過，隔熱效果極佳，符合環保節能及綠建材、綠建築的需求。低輻射複層玻璃為目前隔熱性能最佳的玻璃，同時也提供良好的隔音性能。台玻生產的低輻射玻璃，輻射率可達最高級的0.02。

反射玻璃

可降低太陽熱能直接穿透量，隔熱性能高，提供室內舒適感，亦能節省能源，並提供建築物多彩和諧的外觀。

強化玻璃

強度約為普通玻璃的3-5倍，當玻璃遭受外力破壞時會碎裂成豆粒大的顆粒，減少對人體的傷害，增加玻璃使用的安全性；強化玻璃有瞬間破裂的風險，應作熱浸處理(Heat Soak test)，確保使用上更安全。

熱處理增強玻璃

強度為普通玻璃的2倍，波紋較強化玻璃平整，且不易瞬間破裂。

膠合玻璃 / 高性能隔音膠合玻璃

具有安全性、防犯性、阻隔紫外線、防止玻璃碎片飛散等特性，如使用有色膠合膜，可提升建築物外觀的美感，且可減輕熱能進入室內，節省空調能源，增加生活環境舒適度。

台玻開發之高性能隔音膠合玻璃，除上述特點，提供更佳的中高頻的隔音效果，進一步提高隔音能力。

網印漆板玻璃

色澤多樣化，穩定不褪色，可減少太陽熱能進入室內，降低空調費用，經強化處理，安全性高，可替代石材、磁磚，減輕建築物外牆結構負荷，亦可有效降低眩光作用。顏色及圖案能提供客製化，創造建物獨特性及美感。

彎曲玻璃 / 彎曲強化玻璃

增添建築物外觀的變化性，及室內隔間的多變性；經過強化加工後，強度為一般彎曲玻璃的3-5倍，可因應對彎曲造型更大尺寸的要求，視覺品質佳。

銀鏡玻璃

反射影像清晰、精準，背漆可耐酸、耐濕，環保銀鏡運用無銅、鉛製程，避免重金屬污染，符合地球環保潮流。

光電用

優白玻璃

具有比一般透明玻璃更優越的光學性能，更高的可見光及透過率，大量提升太陽熱能和用率，可使用在任何需要高透光及高透視場合或產品，例如太陽能電池BIPV及高級建材需求使用，以因應未來因石油資源枯竭，人類對節能環保及再生能源的需求。

超白光伏玻璃

主要用於晶體矽太陽電池板的蓋板玻璃，具有低含鐵量、高透光率、低光反射率、高平整度、高機械強度、抗風化、抗沖擊等優異特點。

微薄玻璃

台中廠TF5為全新微薄觸控玻璃生產線，全面導入電腦化自動生產管理系統、無塵室及機械手臂收片等設備。2014年11月正式投產,厚度1.1mm、0.7mm至0.55mm皆已量產，0.33mm也已產出，鋁含量提升至4%，產品經過多重檢驗嚴格把關，媲美日系供應廠商,達到高品質的國際水準，可供應國內外電子大廠生產高品質之消費性電子產品。

產品介紹 Products

汽車玻璃

台灣汽車玻璃股份有限公司，生產製造各式汽車用前擋風膠合玻璃、天窗、車門窗及後擋風強化玻璃。為台灣主要汽車玻璃供應商，市場佔有率44%；產品通過世界各國汽車零件品質安全認證: 台灣車輛安全審驗中心、歐盟ECE、日本JIS、美國AS及中國CCC，並供應 TOYOTA、FORD、MAZDA、HONDA、NISSAN、HYUNDAI、SUZUKI等國內、外各大汽車製造廠生產線組裝及售後服務零件使用。

玻璃纖維增強絲

玻璃纖維的製造係將熔融狀的玻璃絲急冷固化而得之纖維狀材料。

用途: F.R.P(Fiber Reinforced Plastic)產業，利用玻璃纖維來強化塑膠材料，應用層面包括：船體類、營建類、耐腐蝕工程類、工程塑膠類、運動器材類、電子電器類、運輸工具類、航太軍事類等。 台玻目前玻璃纖維增強絲產品有切股氈(CSM)、併股紗束(CR)、直捲紗束(DR)、編紗束(WR)、切股(CS/O-CS)。玻璃纖維的優異性為耐衝擊强度高、電氣絕緣性佳，是FRP產業中最廣泛使用之材料。

玻璃纖維紗、布

玻璃纖維紗

係由慎選合格的原料精密混合，嚴格的生產條件控管，經由高溫溶解抽取而成。生產單纖直徑G(9 μ m)、E(7 μ m)、D(5 μ m)及BC(4 μ m)全系列玻纖紗，品質精良。除可用於織造電子級玻纖布、低介電玻纖布作為印刷電路板(PCB)原材料外，亦被廣泛使用作為補強材及其他用途。

玻璃纖維布

使用台玻自製的優質玻纖紗織造成不同厚度之電子級玻纖布和低介電玻纖布，主要供應國內外銅箔基板大廠生產黏結片及高壓成型板材用於印刷電路板。應用範圍包含精密的行動裝置及5G高頻高速資料傳輸，品質符合嚴格標準，並已取得國際終端大廠認證並持續採用。

玻璃器皿

容器

玻璃容器具有絕佳之透明度，且易封蓋及長時間保存內容物風味等優點。此外，玻璃容器亦能漸進加熱至高溫而不變形。且可百分之百的回收再使用之特性，不會破壞地球環境生態，勢必是未來政府環保政策與社會環保意識最為支持的一種包裝材料。為因應市場需求與考量環保因素，台玻致力於輕量瓶(NNPB)吹製技術，製造厚度輕薄均勻、外型美觀的瓶形，年產量超過2億支以上，不僅可減輕客戶的採購成本，並可節省原料與能源，進而促進對環境的保護。容器種類可分為: 狹口瓶、廣口瓶、輕量瓶(NNPB)，色澤可分為透明、茶色、綠色(翡翠綠、古典綠、香檳綠)等色。為提供嬰兒奶瓶市場多樣性的選擇，台玻新開發生產耐熱玻璃奶瓶，瞬間耐熱溫差可達150℃，符合國家CNS標準，提供消費者更具安全保障的高品質奶瓶。

食器

產品分為杯身較薄的吹製杯及杯身較厚、有手把的壓製杯，色澤及白度優並可提供客戶不同顏色的選擇(如: 黑色、鐵灰色、藍色、綠色、紫色等)，品質符合CNS、美國FDA、歐盟REACH及SVHC等多項國際標準。產品種類有水杯、啤酒杯、威士忌杯、馬克杯、密封罐、碗盤等，可搭配印刷、貼花、咬霧、噴砂、噴色等加工處理，讓產品更豐富。

廚器

為膨脹係數 α -33之硼矽酸耐熱玻璃，瞬間溫差可達150℃，且耐酸鹼性與強度均較鈣玻璃佳，大幅提升使用安全性及用途多樣化。產品主要為咖啡壺、沖茶器、泡茶壺、儲物罐等，並陸續開發接柄杯及雙層杯等加工產品，提高附加價值。

自有品牌

自有品牌

為朝向生產具有高附加價值的品牌市場，台玻創立自有品牌「TG」，以年輕世代為對象，聘請國際設計大師深澤直人，將對生活的看法融入設計，製作兼具美感與實用性的當代玻璃系列器皿，從台灣出發，行銷全球，TG全系列產品以及TG包裝設計榮獲2021紅點設計大獎雙獎項，於60多國的眾多參賽者中脫穎而出，更於同年度參與日本Good Design設計獎，自5,835件作品中獲得BEST100殊榮。

產品介紹 Products

實聯化工江蘇有限公司

純鹼

純鹼 (Na_2CO_3) 是重要的化工基本原料之一，廣泛應用於化工、玻璃、冶金、造紙、印染、合成洗滌劑、石油化工、食品、醫藥衛生等工業，使用量大，在國民經濟中佔有重要的地位。

氯化銨

氯化銨 (NH_4Cl) 是一種優良的氮肥，廣泛應用於複合肥行業。特別適用於水稻、小麥、棉花、麻類、蔬菜等作物，肥效快、持續時間長、能加速作物光合作用，促進新陳代謝，增根壯莖茂葉，提高作物的抗病蟲害和抗倒狀能力，增加產量。

生技鹽

鹽（氯化鈉）是化學工業的基本原料，廣泛應用於化工、醫藥、食品、飼料、洗劑、日化品、水處理、材料、紡織、染整、特用化學品等方面。鹽是人類和動物生存健康所必需，在生命健康產業中亦有寬廣發展空間。



實聯化工江蘇有限公司
SHIHLIEN CHEMICAL INDUSTRIAL JIANGSU CO., LTD.

產品介紹 Products

Flat Glass

Flat glass is the core product of TG. With production plants based in Taiwan and China, flat glass products are sold in Taiwan, China, Japan, Korea, South-East Asia, North America, Middle East, Australia, Europe, South Africa, and other regions of the world.

For ARCHITECTURE

Clear Float Glass / Tinted Float Glass

Clear float glass features smooth and flat surfaces, low distortion, and high transparency. With a prescribed quantity of high-temperature tint agent, it can be turned into tinted float glass, which reduces solar heat transmission to save energy and offers diverse exterior colors for buildings to create a sense of higher value.

Rolled Glass

Rolled Glass not only provides the function of visual screen but also enables shifts between light and shade.

Low-E Glass / Low-E Insulating Glass

Low-E glass offers high transparency, low infrared transmission and great thermal insulation that meet the demands of energy saving, green buildings and materials. Low-E insulating glass currently has the best thermal insulation performance, while also provides excellent sound insulation properties. The Low-E glass produced by Taiwan Glass has the highest class emissivity coefficient 0.02.

Reflective Glass

Reflective glass can reduce direct solar thermal penetration, provide high thermal insulation performance, offer indoor comfort, save energy, and create a colorful and harmonious building appearance.

Tempered Glass

Tempered glass is 3-5 times stronger than annealed glass. When broken, tempered glass would break into small fragments, which are less likely to cause injury and improves the safety of glass application. It can also withstand sudden changes in temperature. To avoid the spontaneous breakage, tempered glass should undergo heat soak test to improve safety in use.

Heat Strengthened Glass

Heat strengthened glass is 2 times stronger than annealed glass with less distortion, and less likely to occur spontaneous breakage.

Laminated Glass /

Sound Control Laminated Glass

Laminated glass has features of enhanced safety, security, protection from ultraviolet rays, control over transparency levels and shatter-prevention. The color laminated glass can raise the aesthetic appeal of the building, reduce the solar heat transmission to save energy and improve the comfort of living areas. In addition to the features above, sound control laminated glass, developed by TG, provides better sound insulation properties, ranging from medium to high frequency.

Ceramic Spandrel Glass /

Ceramic Silkscreen Glass

Ceramic spandrel and ceramic silkscreen glass provide a variety of stable and durable colors. They can also reduce air-conditioning cost by insulating solar heat. After being tempered to improve safety, spandrel and silkscreen glass can be a substitute for stone and tile to reduce the structural load on the external wall. The printing of the glass can also reduce glare. Various colors and graphics can be custom-made to meet designing needs as well as create particularity of space design.

Bent Glass / Bent Tempered Glass

Buildings glazed with bent glass can have advantages of diversified facade and interior partition. After tempering process, bent tempered glass, which is 3-5 times stronger than ordinary bent glass, can meet the requirements for larger sizes and exceptional optical quality.

產品介紹 Products

Silver Mirror

Mirror glass provides clear and exact reflections. Its back paint resists acid and humidity. Environmentally-friendly silver mirror is produced by copper/lead free process to prevent metal contamination, meeting environmental requirements around the world.

For SOLAR PANEL Super Clear Glass

Super clear glass has better optical performance with higher visible light and infrared transmittance than ordinary clear glass and greatly enhances solar heat transmittance. Super clear glass can be used for any applications and products that require high transmittance and transparency, i.e. the application of BIPV solar module and advanced construction materials, to respond to the issues of oil resource depletion and the requirements of clean and renewable energy.

Low Iron Photovoltaic Cover Glass

Mainly used as the cover of crystalline silicon solar modules with the advantageous features of low iron content, high transmission, low reflecting rate, high flatness, high mechanical strength, low probability of spontaneous breakage, anti-weathering, high impact resistance and so forth.

Ultra-Thin Glass

The TF5 furnace in Taichung Factory is a newly established production line for electronic grade ultra-thin glass. Introducing the installations of Computerized Automated Production Management System, cleanroom and mechanical arms for collecting glass panes, this line started production in November 2014 with mass production for 1.1mm and 0.7mm glass and production of 0.33mm glass. Aluminum content increased to 4%, all of the products undergo strict inspections before shipment. The high quality product is able to compete with Japanese manufacturers and provide for major electronic manufacturers at home and abroad to produce consumer electronic goods.

Automotive Glass

Taiwan Autoglass Ind. Corp., the main supplier of automotive glass in Taiwan with 44% market share, produces various laminated windshield glass, sunroof glass, side windows, and tempered rear windows. Its glass products not only are awarded the quality and safety certifications around the world, including VSCC in Taiwan, ECE in European Union, JIS in

Japan, AS in the U.S., and CCC in China, but also are supplied as Original Equipment and Automotive Glass Replacement for several international car makers, such as TOYOTA, FORD, MAZDA, HONDA, NISSAN, HYUNDAI, and SUZUKI.

Fiberglass Reinforced

Fiberglass reinforced is a fiber-like material manufactured by rapidly cooling melted glass filaments. FRP (fiber reinforced plastic) industry uses fiber glass to reinforce plastic composites, widely applied to the fields including: shipbuilding, construction, corrosion-resistant engineering, engineering plastics, sports/recreation, electronics, transportation, military and aerospace, etc. The products of TG fiberglass reinforced include Chopped Strand Mat (CSM), Conventional Roving (CR), Direct Roving (DR), Woven Roving (WR), and Chopped Strand (CS/O-CS). With outstanding characteristics of high impact strength and excellent electrical insulation properties, fiberglass reinforced is widely used in FRP industry.

Fiberglass Yarn & Fabric

Fiberglass Yarn

Fiberglass yarn is the product of qualified selected materials mixed in a specific proportion, melted in high temperature furnaces and drawn into filament under strict production control. TG produces good quality single filament with diameters ranging from G(9 μ m), E(7 μ m), D(5 μ m), to BC(4 μ m). Fiberglass yarn can be woven into E-glass fabric and Low Dk fabric for use in printed circuit boards (PCB). It is also widely used for strengthening, reinforcement, etc.

Fiberglass Fabric

TG utilizes our own fiberglass yarn to weave a series of E-glass fabric and Low Dk fabric with different thickness, supplying domestic and overseas Copper Clad Laminate (CCL) manufacturers with materials for prepreg and laminate, for use in PCBs. Applications include sophisticated mobile devices, 5G high speed and high frequency data transfer, etc. Meeting high quality standards, TG's products have been certified and continuously adopted by worldwide end users.

產品介紹 Products

Container, Tableware & Kitchenware

Container

Glass containers possess the special advantages of excellent transparency, easy sealing and flavor preservation. Furthermore, glass containers can be heated up gradually without deforming. It is also 100% recyclable and, therefore, environmentally friendly, fully aligned with government's environment protection policy and supported by social environmental consciousness groups.

In light of market demand and environmental concerns, TGI has put emphasis on NNPB technique to produce lightweight glass bottles, consistent wall thickness and good appearance, with production capacity more than 200 million pieces each year. Besides saving cost for customers, lightweight bottles require less raw materials and energy, therefore are more environmentally friendly.

Glass containers are classified by shape: narrow neck bottles, wide mouth jars, lightweight bottles (NNPB) and by color: flint, amber, green (emerald, antique, champagne green), etc..

To provide more choices to the markets, TGI has developed and produced heat-resistant baby feeding bottles, capable of withstanding thermal shock up to 150°C, which meets the requirements of CNS and safety standards of high quality.

Tableware

Tableware glass includes blown-wares with thin walls and press-wares for thicker walls or glasses with handles. With its high transparency and clarity, various colors (ex. black, charcoal, blue, green, purple) are available for clients to choose from. The fine quality of our tableware products have been approved to meet CNS, FDA, ROHS, REACH and SVHC standards. A variety of products including tumblers, beer glasses, whisky glasses, mugs, canisters, bowls/plates with diverse value-added process such as screen-printing, frosting, sand-blasting and color spraying meet market needs.

Kitchenware

Kitchenware glass is made of α -33 borosilicate material with thermal resistant to 150°C temperature difference with better alkali and acid-resistance than sodalime glass, enhancing the safety and diversity of products. Product range includes coffee / tea pots, pitchers,

jars, etc, and we continue to add value by developing handle-attaching and double-wall glassware.

Private Brand

Toward the brand market of producing high value added products, TGI established its private brand "TG". This brand is young-generation-oriented. TGI has commissioned Mr. Naoto Fukasawa, who is an international designer, to design products with his perspectives of life, and then TGI manufactures the containers of contemporary glass series, which contains esthetic sensibilities and practicability. Starting from Taiwan, TG will market its private brand around the world. TG Tableware series and TG Packaging had both been awarded the 2021 Red Dot Design Award, standing out among competitors from 60 plus countries around the world; in the same year, TG had also been awarded the Good Design Award, Receiving the Best 100 prize among 5,835 applications.

Soda Ash & Ammonium Chloride

SHIHLIEN CHEMICAL INDUSTRIAL JIANGSU CO., LTD.

Soda Ash

Soda ash (Na_2CO_3) is one of the most important industrial chemicals with widespread applications. It is one of the basic raw materials for glass, for papermaking, dyeing and detergents, and can also be used as flux for metallurgy and softener for water purification.

Ammonium Chloride

Ammonium Chloride (NH_4Cl) is mainly used as nitrogenous fertilizer for the complex fertilizer industry. It accelerates photosynthesis and crop metabolism, contributing to plant health and thereby increases crop yield. It is highly suitable for rice, wheat, cotton, hemp and vegetables, with a quick and long-lasting fertilizing effect.

Biotech Salt

Common salt (sodium chloride) is a basic chemical used in many industries, including chemical, pharmaceutical, food, feeds, detergents, toiletries and water treatments materials, textile, dyeing, specialty chemical etc. As common salt is also critical to sustain human and animal life, there is plenty of room for growth in the life and health sectors.

產品介紹 Products

低輻射玻璃 (Low-E玻璃)

台玻所生產的高性能低輻射(Low-E)玻璃，以真空澱鍍的方式於玻璃表面鍍上單銀、雙銀或三銀等多層不同材質鍍膜，藉以達到現代建築玻璃高透光率、高熱阻隔、低反射率等環保節能及綠建築設計需求。使用Low-E複層玻璃可有效的阻斷熱的三個傳遞路徑(輻射、傳導、對流)，為建築物提供最好的節能減碳效益及最佳的冬暖夏涼環境。

具有同樣可見光透過率的三種玻璃之總熱透過率：

三銀玻璃 < 雙銀玻璃 < 單銀玻璃

三銀低輻射玻璃 (PTE, TTE)

具有世界一流的光熱選擇性，

提供了自然光穿透與太陽熱能控制的最佳比率，節能玻璃的最佳選擇。

雙銀低輻射玻璃 (PDE, TDE)

適合高隔熱性能的需求，

卓越的自然光穿透、太陽熱能阻擋及室外熱能隔絕，為各種節能玻璃的理想選擇。

單銀低輻射玻璃 (PLE)

提供有效的陽光熱能阻擋，

適合各種建築靈活性設計且具有良好的隔熱水平。

"節能"低輻射玻璃 (JN)

擁有特殊的低輻射隔熱膜層，

暴露於空氣中有極佳的穩定性，可用於單片、複層、膠合等各式玻璃，進一步提升玻璃隔熱性能。

Low-Emissivity Glass (Low-E glass)

The high performance low-emissivity (Low-E) glass produced by Taiwan Glass is coated, by vacuum sputtering, with multi layers of different materials such as single silver double silver or triple silver on the glass surface. This product offers high transparency, good thermal insulating, and low light reflectance, the energy-saving properties required by modern architectural glass and green building design. Low-E insulating glass can effectively block three heat transfer paths (emission, conduction, convection), providing the best energy-saving and carbon-reduction benefits to buildings and indoor comfort all year round.

Total heat transmission comparison of three different Low-E coatings based on same visible light transmittance:

Triple Silver Glass < Double Silver Glass < Single Silver Glass

Triple Silver Low Emissivity Glass (PTE, TTE)

World-class light to solar gain option

Providing the best ratio of natural light transmittance and solar thermal control as the best choice for energy saving glass.

Double silver low-e glass (PDE, TDE)

Suitable for high thermal insulation requirements.

Offering excellent natural light transmittance, solar heat blocking and outdoor thermal isolation as an ideal choice for various energy saving glass.

Single Silver Low Emissivity Glass (PLE)

Effective solar heat blocking.

Suitable for various flexible building designs with good levels of thermal insulation.

"Jie Neng" Low-E glass (JN)

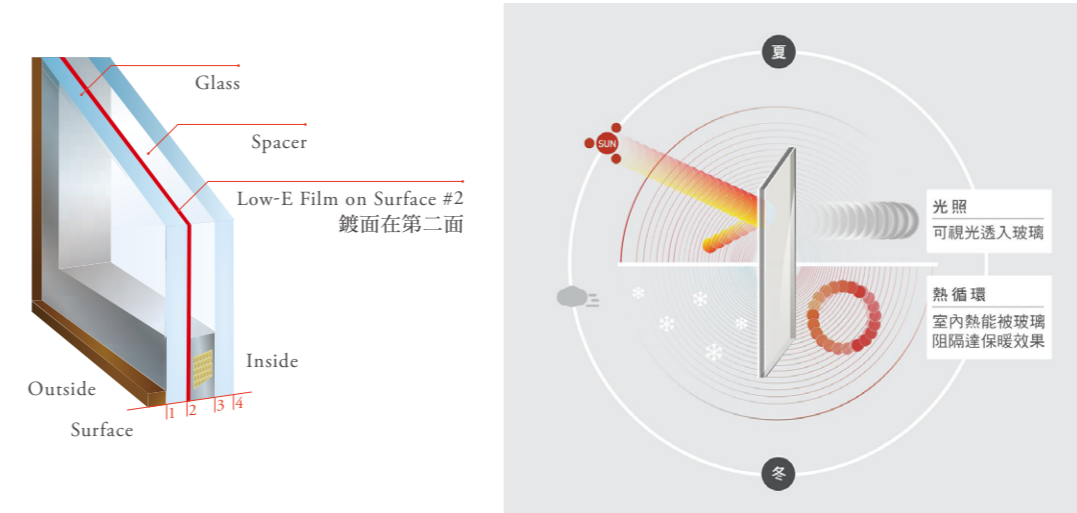
With a special low-emissivity thermal insulation coating layer.

Excellent stability, even exposed to air, to be used for various types of the glass such as single pane, insulating glass, and laminated glass to further improve glass thermal insulation performance.

產品介紹 Products

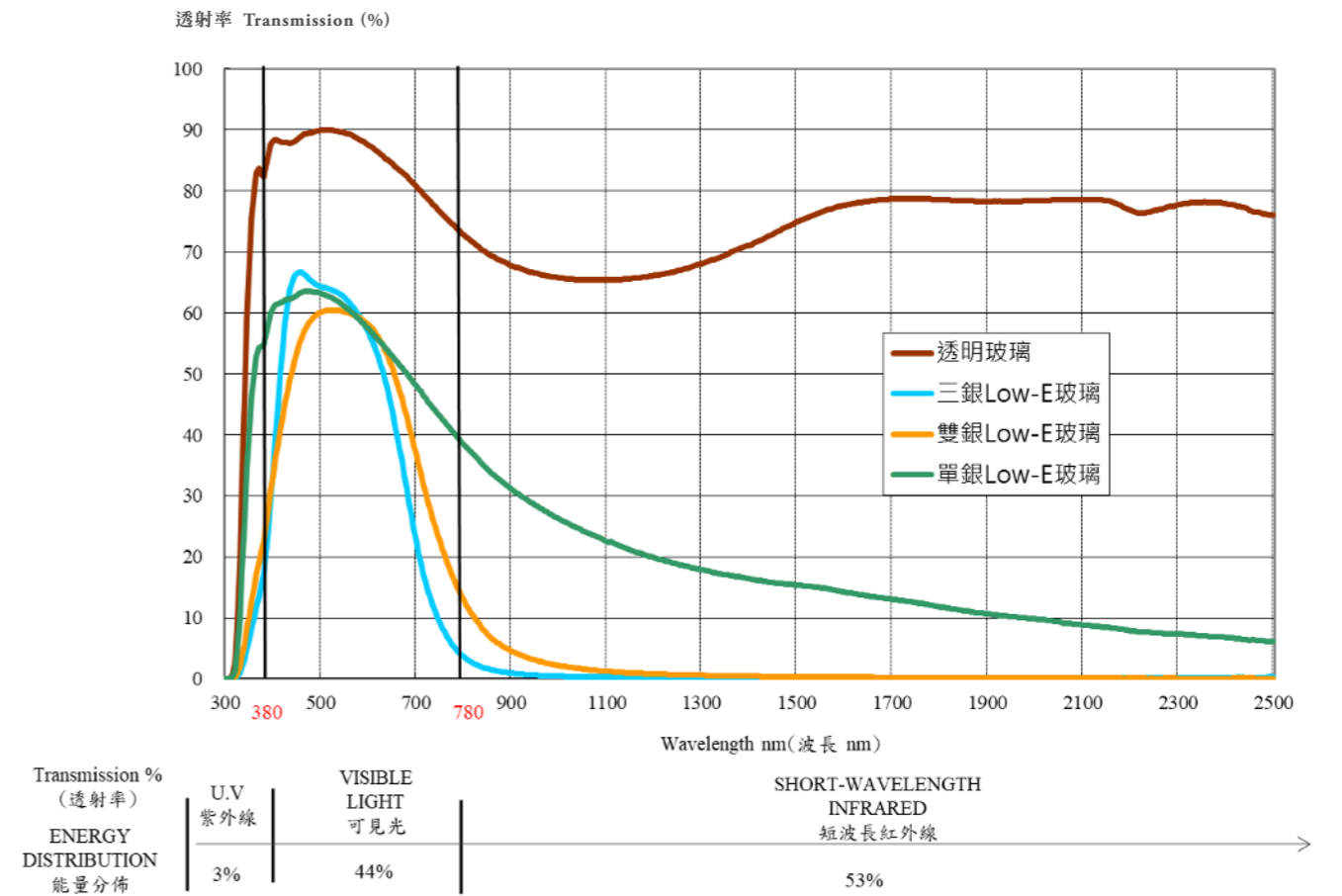
低輻射中空玻璃構造圖

Construction of Low-E Insulating Glass



不同鍍膜在太陽光譜中透射率的比較

Spectrum for Different Coating Glass Transmission



產品介紹 Products

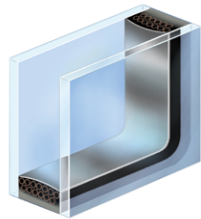
TPS玻璃

新一代中空系統

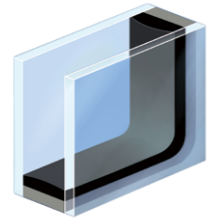
TPS是一種新型的中空玻璃暖邊系統，它是以特殊丁基膠為輔材，填入分子篩的熱塑性隔條。

特性

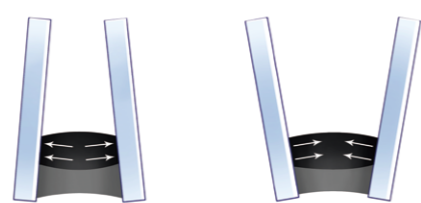
1. TPS: Thermo Plastic Spacer / 熱塑性隔條
2. TPS熱塑性隔條不含金屬嵌入物
3. 提高玻璃邊緣的熱阻隔性
4. 溫度均勻分布在整個玻璃表面
5. 有效降低凝露的產生
6. 彈性邊緣密封
7. 使玻璃設計變得更為靈活和方便
8. 完美的匹配玻璃裝配行業
9. 高的質量控制=更長的使用壽命



普通型 Conventional IGU
分三部分：剛性間隔填充分子篩塗布丁基膠
Three parts: fixed spacer filled with desiccant and a special butyl.



TPS
一個整體：熱塑性隔條填充分子篩
One single unit: Thermo Plastic Spacer filled with desiccant.

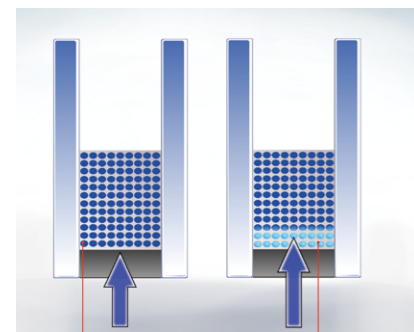


良好的力學性能
Better mechanical performance

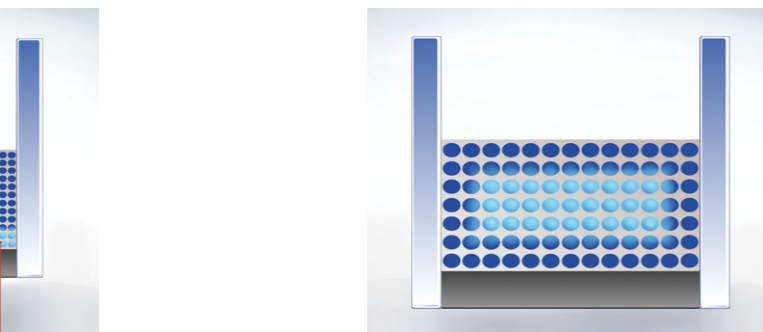
TPS濕氣屏障的原理 The Principles of TPS Moisture Barrier

長久的使用壽命源自最終的水氣屏障

The durability is ultimately determined by the barrier of moisture.



初期水分滲入
Humidity penetration in early stage.



水分滲入後期形成自然屏障
After the penetration, the moist develops a natural barrier.

- 乾燥的分子篩 Dry desiccant
- 半飽和分子篩 Half-saturated desiccant
- 飽和分子篩 Saturated desiccant

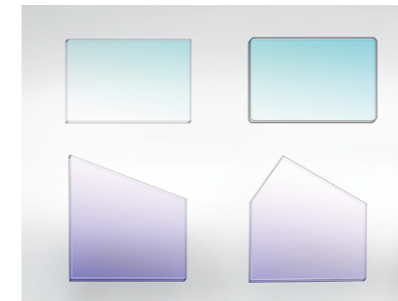
產品介紹 Products

應用領域

1. 住宅建築
2. 商用建築
3. 結構幕牆
4. 高速鐵路
5. 汽車、大型巴士

Applications

1. Residential building
2. Commercial buildings
3. Structural curtain wall
4. High speed rail
5. Vehicles and buses



1. 生產形狀靈活多樣
Dynamic and various shapes



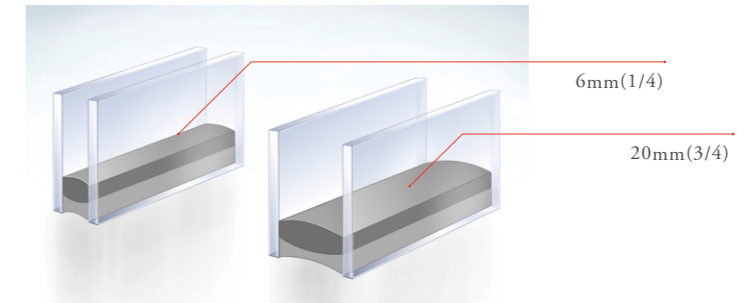
2. 鏤空的中空玻璃系統
Hollow-out insulating glass system



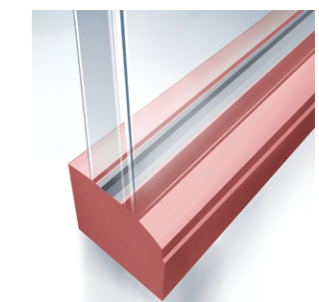
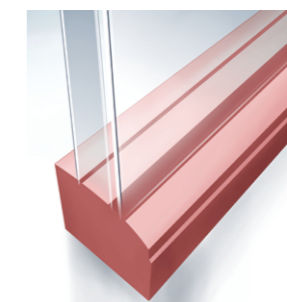
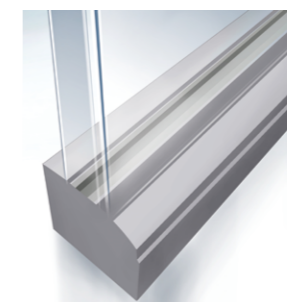
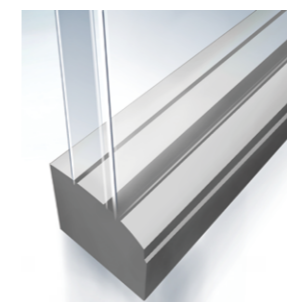
3. 內飾條協調地裝在熱塑性隔條上
Moulding / decoration strip works perfectly with Thermo Plastic Spacer



4. 有邊或無邊的中空玻璃
Insulating glass with or without edge



5. 隔條寬度通常可以在6到20mm的範圍內任意調節
The width of spacer normally can be freely adjusted between 6 and 20mm



6. 在窗框和玻璃之間獲得更好的視覺感官
Better visual effects for the frame and glass

Low-E 玻璃應用 Applications



國泰置地廣場
Cathay Landmark
Low-E (TDE44) 複層玻璃



聯合大於大樓
UDN Group Office and Residential Complex
Low-E(TDE47)膠合複層玻璃



台北南港國家會展中心
Taipei Nangang Exhibition Center
Low-E(TDE78)複層玻璃



高雄海洋文化及流行音樂中心
Kaohsiung Music Center
Low-E(TDE78)複層玻璃

Low-E 玻璃應用 Applications



中信金控台中金融大樓
CTBC Taichung HQ
Low-E(TTE60A/TSE45)網印複層玻璃



潤泰敦峰
The Silk Court
Low-E(PE40)膠合複層玻璃



高雄市立圖書館總館
Kaohsiung Main Public Library
Low-E (TDE60) 複層玻璃



元利信義聯勤
One Park Taipei
Low-E(TDE78)膠合複層玻璃



東京小田原市江之浦測候所
The tip of the Summer Solstice Observation Gallery ©
Odawara Art Foundation



國泰民生建國大樓暨台北國泰萬怡酒店
Cathay Landmark Minsheng-Jianguo
Low-E(TDE44)複層玻璃

節能實例 Energy Saving Project Case Study



臺北南山廣場 Taipei Nan San Plaza

「臺北南山廣場」辦公大樓，總高272公尺，建物帷幕外牆由台玻協助三菱地所及瀚亞建築師事務所共同設計，外牆面積九成以上均為玻璃結構，並獲得內政部「建物外玻璃熱透過率(THT)值在0.3以下的綠建築節能(鑽石級)標章」及榮獲台灣優良智慧綠建築暨系統產品獎2017 TIBA AWARDS最高榮譽的「鉑金獎」。

1. 採用台玻Low-E節能複層玻璃，中間為12mm的空氣層有效阻隔熱能，相較一般玻璃，可減少45%的冷氣耗電費。
2. 安全性亞洲最強：以最高規格的結構設計，基樁打至岩盤，並裝置兩顆阻尼器，搭配亞洲最強可抗16級風壓的大樓帷幕，減少大樓受高空強風和颱風所造成的搖晃，提供最高等級的安全保障。

The building “Taipei Nan San Plaza” is built with a height of 272 meters. 90% of this building’s external wall is made of glass structure, designed cooperatively by TGI, Mitsubishi Estate and Archasia Design Group. It was awarded as a green building on the merit of external glazing with a coefficient of thermal transmittance (THT) smaller than 0.3 (Diamond Level) for its curtain wall, and was awarded Platinum Award of 2017 TIBA AWARDS – Taiwan Intelligent Green Building and System Product Awards.

1. It adopted TGI’s Low-E energy-saving insulating glass units with a 12mm space, effectively reducing heat and saving 45% of electricity cost for air conditioning compared with common glass.
2. The highest class safety in Asia: designed with the highest-profile structure, this building was piled to bedrock, installed two shock absorbers and the strongest curtain wall in Asia which can resist 16 Bft wind pressure to reduce building shake caused by strong gale and typhoon, providing the highest class safety.

股務記錄 Stock

| 年 Year | 加權指數 Taix | | 股價 Stock Price | | 股利 Dividend | |
|-----------|--------------|-------|-------------------|-------|----------------|-------|
| | High | Low | High | Low | Cash | Stock |
| 1973 | 514 | 225 | 38.60 | 25.20 | 1.00 | 2.00 |
| 1974 | 498 | 188 | 35.20 | 11.30 | 0.70 | 1.80 |
| 1975 | 429 | 190 | 28.30 | 13.60 | 0.70 | 1.80 |
| 1976 | 417 | 257 | 26.95 | 17.00 | 2.00 | 0.84 |
| 1977 | 450 | 313 | 27.65 | 17.30 | 0.80 | 1.70 |
| 1978 | 688 | 447 | 36.00 | 24.80 | 1.24 | 1.96 |
| 1979 | 659 | 502 | 35.40 | 24.40 | 2.072 | 1.428 |
| 1980 | 599 | 480 | 32.20 | 23.30 | 1.889 | 1.111 |
| 1981 | 600 | 502 | 27.70 | 20.50 | 0.50 | 1.50 |
| 1982 | 546 | 421 | 23.00 | 15.40 | 0.20 | 1.10 |
| 1983 | 765 | 434 | 38.20 | 17.10 | 0.72 | 1.48 |
| 1984 | 969 | 764 | 37.00 | 30.20 | 0.60 | 1.60 |
| 1985 | 840 | 636 | 33.10 | 20.30 | - | 1.40 |
| 1986 | 1039 | 839 | 40.10 | 31.70 | - | 1.60 |
| 1987 | 4673 | 1063 | 95.00 | 38.70 | - | 1.80 |
| 1988 | 8789 | 2341 | 125.00 | 58.50 | - | 1.80 |
| 1989 | 10773 | 4873 | 188.00 | 78.00 | - | 2.00 |
| 1990 | 12495 | 2560 | 144.00 | 36.90 | - | 1.80 |
| 1991 | 6305 | 3316 | 71.00 | 39.70 | 0.458 | 1.042 |
| 1992 | 5391 | 3327 | 47.50 | 28.00 | 0.35 | 1.00 |
| 1993 | 6070 | 3135 | 53.00 | 29.70 | 0.35 | 1.00 |
| 1994 | 7183 | 5194 | 65.00 | 41.70 | 0.35 | 1.50 |
| 1995 | 7051 | 4503 | 63.50 | 46.00 | 0.35 | 1.50 |
| 1996 | 6982 | 4690 | 67.50 | 47.50 | - | 1.903 |
| 1997 | 10116 | 6802 | 66.50 | 36.30 | 0.76 | 1.09 |
| 1998 | 9277 | 6251 | 44.90 | 30.30 | 1.35 | - |
| 1999 | 8608 | 5474 | 34.80 | 20.10 | 1.25 | - |
| 2000 | 10393 | 4555 | 39.80 | 22.00 | 0.80 | 0.81 |
| 2001 | 6104 | 3411 | 33.20 | 17.80 | 1.00 | - |
| 2002 | 6484 | 3846 | 29.10 | 17.60 | 0.30 | 0.70 |
| 2003 | 6182 | 4044 | 28.60 | 20.30 | 0.40 | 0.80 |
| 2004 | 7135 | 5255 | 33.00 | 24.30 | 0.50 | 1.00 |
| 2005 | 6600 | 5565 | 31.50 | 23.70 | 0.40 | 0.80 |
| 2006 | 7823 | 6232 | 30.40 | 21.60 | 0.24 | 0.96 |
| 2007 | 9859 | 7306 | 46.30 | 25.55 | 0.40 | 0.80 |
| 2008 | 9309 | 3955 | 41.55 | 13.30 | 0.20 | 0.30 |
| 2009 | 8188 | 4165 | 27.70 | 15.40 | 0.20 | 0.30 |
| 2010 | 8990 | 7072 | 38.50 | 24.60 | 0.60 | 1.00 |
| 2011 | 9220 | 6609 | 53.70 | 27.10 | 0.45 | 0.45 |
| 2012 | 8144 | 6895 | 37.30 | 23.75 | 0.10 | - |
| 2013 | 8647 | 7603 | 35.20 | 25.70 | 0.10 | - |
| 2014 | 9569 | 8264 | 33.50 | 21.00 | - | - |
| 2015 | 9973 | 7410 | 24.60 | 10.65 | - | - |
| 2016 | 9430 | 7627 | 16.05 | 11.15 | - | - |
| 2017 | 10854 | 9273 | 22.90 | 12.60 | 0.50 | - |
| 2018 | 11253 | 9478 | 23.60 | 12.75 | 0.30 | - |
| 2019 | 12122 | 10875 | 12.15 | 11.20 | - | - |
| 2020 | 14760 | 8523 | 19.70 | 6.46 | 0.50 | - |
| 2021 | 18291 | 14720 | 47.90 | 15.80 | 1.82 | - |
| TOTAL | - | - | - | - | 26.45 | 45.67 |

| 主要股東(2022-04) | |
|-------------------------------|-------|
| Major Shareholders | (%) |
| 台豐投資股份有限公司 | 14.44 |
| Tai Hong Investment Corp. | |
| 合和投資股份有限公司 | 13.84 |
| Ho Ho Investment Corp. | |
| 台建投資股份有限公司 | 8.56 |
| Tai Chien Investment Corp. | |
| 台玉投資股份有限公司 | 8.44 |
| Tai Yu Investment Corp. | |
| 台成投資股份有限公司 | 7.84 |
| Tai Cheng Investment Corp. | |
| 台嘉投資股份有限公司 | 5.42 |
| Tai Chia Investment Corp. | |
| 林建成嘉記股份有限公司 | 4.71 |
| Lim Kien Seng Kah Kih Co. Ltd | |
| 台玻職工退休基金管委會 | 1.35 |
| TGI Retirement Fund. | |
| VANGUARD EMERGING | |
| MARKETS STOCK INDEX | |
| FUND,A SERIES OF VANGUARD | 0.79 |
| INTERNATIONAL EQUITY INDEX | |
| FUNDS | |
| Total | 65.39 |

| | |
|--------------------|-----------------|
| 股東總人數 | 96,744人 |
| Total Shareholders | |
| 總成交量 | 9,080,211,196 股 |
| Transaction Volume | |
| 員工總人數(2022-04) | 台灣 4,261人 |
| Employees | 大陸 8,501人 |
| | 合計 12,762人 |

決算日期：2021年12月31日
 Fiscal Year Ends on December 31,2021
 股東常會：2022年6月9日
 General Shareholders' Meeting: June 9,2022
 公告：公開資訊觀測站
 Public Notice: <http://mops.twse.com.tw/mops/web/index>
 辦理過戶：台灣玻璃工業公司 股務課
 Stock Transfer Registration: TGI Stock Affairs Div.
 會計師：安永聯合會計師事務所
 C.P.A.: Ernst & Young

集團沿革 Taiwan Glass Group History

1964

1964 公司創立，資本額一億五千萬元
Company established, capital NT\$150 million



1965 日本旭硝子株式會社平板玻璃技術合作
Asahi, Japan for Sheet Glass TAA.



新竹廠破土典禮
Hsinchu Factory Groundbreaking



1967 新竹平板廠投產
TS Factory Sheet Glass Plant Production



1970

1970 美國WHEATON GLASS 容器玻璃技術合作
Wheaton Glass PLC. USA for Container Glass TAA.

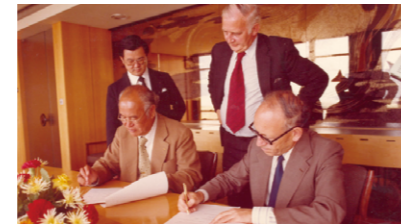


1972 台玻大樓落成
TGI Building inaugurated



1973 台玻股票上市
TGI Stock listed on Taiwan Stock Exchange

1974 英國PILKINGTON PLC. 色板玻璃技術合作
Pilkington PLC. UK for Tinted Glass TAA.



1977 德國VEBA GLASS AG. 食器玻璃技術合作
Veba Glass Ag. Germany for Tableware Glass TAA.

1980

1980 英國PILKINGTON PLC. 平板浮法玻璃技術合作
Pilkington PLC. UK for Float Glass TAA.

1983 台中平板浮法廠投產
TF Factory Float Glass Plant Production

1987 美國OWENS CORNING FIBERGLASS CORP. 玻璃纖維技術合作
Owens Corning Fiberglass Corp. USA for Fiberglass Reinforced TAA.



1988 日本柴田株式會社耐熱玻璃技術合作
Sibata Hario, Ltd. Japan for Heat-Resistant Glass TAA.

1988 日本鐘紡株式會社玻璃纖維布技術合作
Kanebo, Ltd. Japan for Fiberglass Fabric Glass TAA.



1989 二十五週年慶 25th Anniversary



1990

1990 桃園玻璃纖維布及玻璃纖維廠投產
TT Factory Fiberglass Fabric & Fiberglass Reinforced Plant Production

1992 創辦人大陸考察
Founder Lin, business visit to China

1993 台灣玻璃中國控股公司創立
Taiwan Glass China Holding Ltd. Established

1994 德國HERMANN HEYE 容器玻璃技術合作
Hermann Heye, Germany for Container Glass TAA.

三十週年慶 30th Anniversary



青島廠建廠 QFG Construction



集團沿革 Taiwan Glass Group History

1995

1995 日本石塚硝子株式會社食器玻璃技術合作
Ishizuka Glass Co., Ltd. Japan for Tableware TAA.

台中、桃園、新竹三廠ISO-9002認證通過
TF, TT, TS, Factory ISO-9002 Certification

青島浮法玻璃有限公司投產
Qingdao Float Glass Co., Ltd. Plant Production



創辦人訪問北京 Founder Lin, Beijing visit



1997 台玻長江玻璃有限公司投產
TG Changjiang Glass Co., Ltd. Plant Production

1998 鹿港玻璃纖維布廠投產
TL Factory Fiberglass Fabric Plant Production

2000 台中廠引進雙銀輻射玻璃技術
Taichung Factory Double Low - E Glass Coating Technology

2001

2001 桃園、新竹、台中、鹿港四廠ISO-14001認證通過
TT, TS, TF, TL, Factory ISO-14001 Certification

2002 創辦人榮獲第32屆全球玻璃工業鳳凰獎(美國)
Founder Lin, Awarded with the Phoenix Award (USA)



台玻長江玻璃有限公司CFG-2投產
TG Changjiang Glass Co., Ltd. CFG-2 Plant Production

2004 台嘉玻璃纖維有限公司投產
Taichia Glass Fiber Co., Ltd. Plant Production

台玻東海玻璃有限公司投產
TG Donghai Glass Co., Ltd. Plant Production

台玻成都玻璃有限公司投產
TG Chengdu Glass Co., Ltd. Plant Production

四十週年慶 40th Anniversary



2005

2005 台玻華南玻璃有限公司投產
TG Huanan Glass Co., Ltd. Plant Production



台嘉玻璃纖維有限公司TGF-2投產
Taichia Glass Fiber Co., Ltd. TGF-2 Plant Production

2006 台玻昆山玻璃有限公司CFG-3投產
TG Kunshan Glass Co., Ltd. CFG-3 Plant Production

台玻天津玻璃有限公司投產
TG Tianjin Glass Co., Ltd. Plant Production

鹿港平板廠TF-4投產
TL Factory TF-4 Flat Glass Plant Production

2007 台嘉玻璃纖維有限公司TGF-3投產
Taichia Glass Fiber Co., Ltd. TGF-3 Plant Production

2008

2008 台玻成都玻璃有限公司CDG-2投產
TG Chengdu Glass Co., Ltd. CDG-2 Plant Production

台玻華南玻璃有限公司HNG-2投產
TG Huanan Glass Co., Ltd. HNG-2 Plant Production



台嘉玻璃纖維有限公司TGF-4投產
Taichia Glass Fiber Co., Ltd. TGF-4 Plant Production



新竹廠TS-7壓花窯改建容器窯
Hsinchu Factory TS-7 Rolled Glass Furnace Rebuilding to Container Glass Furnace

2009 桃園廠TT-1擴建FRP
Taoyuan Factory TT-1 Fiberglass Reinforced Furnace Rebuilding & Expansion

彰濱廠引進最新低輻射玻璃鍍膜技術
Changpin Factory New Low-E Glass Coating Technology

台玻福建光伏玻璃有限公司動土
TG Fujian Photovoltaic Glass Co., Ltd. Established & Groundbreaking

集團沿革 Taiwan Glass Group History

2010

2010

台玻悅達汽車玻璃有限公司創立
TG Yueda Autoglass Co., Ltd. Established



台玻太倉工程玻璃有限公司創立及動土
TG Taicang Architectural Glass Co., Ltd. Established & Groundbreaking

台玻咸陽玻璃有限公司創立
TG Xianyang Glass Co., Ltd. Established

台玻安徽玻璃有限公司創立
TG Anhui Glass Co., Ltd. Established

台玻武漢工程玻璃有限公司創立
TG Wuhan Architectural Glass Co., Ltd. Established

台玻福建光伏玻璃有限公司投產
TG Fujian Photovoltaic Glass Co., Ltd. Plant Production



2011

2011

彰濱廠投產
Changpin Factory Plant Production

新竹廠ISO-22000認證通過
TS Factory ISO-22000 Certification

台玻悅達太陽能鏡板有限公司創立
TG Yueda Solar Mirror Co., Ltd. Established

台嘉成都玻纖有限公司動土
Taichia Chengdu Glass Fiber Co., Ltd. Groundbreaking



台玻安徽玻璃有限公司動土
TG Anhui Glass Co., Ltd. Groundbreaking

台玻武漢工程玻璃有限公司動土
TG Wuhan Architectural Glass Co., Ltd. Groundbreaking

2013

2013

台玻咸陽玻璃有限公司烘窯投產
TG Xianyang Glass Co., Ltd. Plant Production



台玻安徽玻璃有限公司烘窯投產
TG Anhui Glass Co., Ltd. Plant Production



新竹廠TS-10耐熱容器窯 / TS-11耐熱食器窯投產
Hsinchu Factory TS-10 / TS-11 Production

台玻東海玻璃有限公司DHG-2投產
TG Donghai Glass Co., Ltd. DHG-2 Plant Production

實聯化工江蘇有限公司投產
Shihlien Chemical Industrial Jiangsu Co., Ltd. Plant Production



2012

台玻悅達汽車玻璃有限公司投產
TG Yueda Autoglass Co., Ltd. Plant Production



台玻華南玻璃有限公司
低輻射鍍膜玻璃生產線投產
TG Huanan Glass Co., Ltd. Low-E Glass Production

台玻太倉工程玻璃有限公司
低輻射鍍膜玻璃生產線投產
TG Taicang Architectural Glass Co., Ltd. Low-E Glass Production

台玻武漢工程玻璃有限公司
低輻射鍍膜玻璃生產線投產
TG Wuhan Architectural Glass Co., Ltd. Low-E Glass Production

集團沿革 Taiwan Glass Group History

2014

2014

台玻東海玻璃有限公司DHG-3投產
TG Donghai Glass Co., Ltd. DHG-3
Plant Production

台玻集團創業五十週年
50th Anniversary of TG



台中廠TF-5微薄玻璃投產
Taichung Factory TF-5 Ultra-Thin Glass
Production

2015

台嘉成都玻纖有限公司投產
Taichia Chengdu Glass Fiber Co., Ltd.
Production

2019

2019

台嘉蚌埠玻璃纖維公司投產
Taichia Bengbu Glass Fiber Co., Ltd.
Production



林伯豐董事長榮獲日本政府頒贈
「旭日重光章」
Chairman Lin Por-Fong Conferred with
The Order of the Rising Sun by the Japanese
Government



2020

TG 品牌旗艦店開幕
TG Flagship store opening



2022



TAIWAN GLASS GROUP
台玻集團

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www.taiwanglassgroup.cn

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