

◆ 台湾玻璃工业公司

TAIWAN GLASS IND. CORP.

2021 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2021-03-31

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
台玻福建光伏玻璃有限公司 TG Fujian Photovoltaic Glass Co., Ltd.	FPG 2006	-	82,928	光伏玻璃製造 Photovoltaic 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	-	35,000	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	-	98,000	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	2,537,482			

2020 年度營運報告 2020 Operation Report

2020 年度
營運合併報表

銷售量	3,478千公噸 (+0.5%)		
營業收入	41,908百萬元 (+0.3%)	=US\$	1,418 mil
營業利益	2,534百萬元 (+376.1%)	=US\$	86 mil
營業外收支	612百萬元 (+572.7%)	=US\$	21 mil
稅前淨利	2,991百萬元 (+330.0%)	=US\$	101 mil
稅後淨利	2,461百萬元 (+253.1%)	=US\$	83 mil
稅後淨利歸屬於母公司業主	2,469百萬元 (+270.4%)	=US\$	84 mil
母公司業主權益	43,808百萬元 (+9.1%)	=US\$	1,538 mil
股票市值	56,707百萬元 (+71.1%)	=US\$	1,991 mil
每股純益 0.85元，股東權益每股15.06元=US\$0.53， 每股現金股利0.5元，股票股利0.0元，提股東會審議。			

2020 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 211千公噸 (-23.4%)
	大陸	昆山、成都、天津、東莞、青島、東海、咸陽及安徽廠平板玻璃11座，福建光伏玻璃1座，計12座生產線，年產 2,530千公噸 (-1.5%)
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 66千公噸 (+13.2%)
	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 54千公噸 (-8.4%)
容食廚玻璃	台灣	新竹廠容食廚器玻璃7座生產線，年產 154千公噸 (+4.1%)
汽車玻璃	台灣	台中廠汽車玻璃生產線，年產 5千公噸 (-6.8%)
	大陸	鹽城廠汽車玻璃生產線，年產 11千公噸 (+14.6%)
合計		3,031千公噸 (-3.0%)

2020 年銷售

平板玻璃	台灣	銷售量 252千公噸 (-2.6%)，銷售額 3,665百萬元 (-5.6%)
	大陸	銷售量 2,885千公噸 (+0.1%)，銷售額 26,478百萬元 (+1.3%)
計		計3,137千公噸，新台幣30,143百萬元 = US\$ 1,020mil (+0.4%)，佔集團營業額 67.1%
玻布 / 玻纖	台灣	銷售量 72千公噸 (+21.0%)，銷售額 4,383百萬元 (+4.0%)
	大陸	銷售量 96千公噸 (-5.3%)，銷售額 5,974百萬元 (+2.3%)
計		計 168千公噸，新台幣 10,357百萬元 = US\$351mil (+3.0%)，佔集團營業額 23.0%
容食廚玻璃	台灣	銷售量 158千公噸(+8.9%)，銷售額 3,574百萬元 = US\$121mil (+3.5%)，佔集團營業額 8.0%
汽車玻璃	台灣	銷售量 5千公噸(-6.0%)，銷售額490百萬元 (+0.5%)
	大陸	銷售量 10千公噸(+6.3%)，銷售額350百萬元 (+5.2%)
計		計 15千公噸，新台幣 840百萬元 = US\$ 28mil (+2.4%)，佔集團營業額 1.9%
合計		銷售量3,478千公噸，銷售額新台幣 44,914百萬元 = US\$ 1,520mil (+1.3%)，減合併沖銷後，銷售額新台幣41,908百萬元 = US\$ 1,418mil (+0.3%)，內銷佔85%，外銷佔 15%

2020 Operation Report

2020 Consolidated Performance				
Sales Volume		3,477,506	MT(+0.5%)	
Operating Revenue	U\$	1,418 mil	(+0.3%)	
Operating Income	U\$	86 mil	(+376.1%)	
Non-operating Income and Expenses	U\$	21 mil	(+572.7%)	
Income Before Tax	U\$	101 mil	(+330.0%)	
Net Income After Tax	U\$	83 mil	(+253.1%)	
Income After Tax Attributable to Stockholders of the Parent	U\$	84 mil	(+270.4%)	
Total Equity Attributable to Stockholders of the Parent	U\$	1,538 mil	(+9.1%)	
Stock Market Value	U\$	1,991 mil	(+71.1%)	
Earnings per share : U\$0.03, Equity per share: U\$0.53				
Dividend Cash: U\$0.0169, Dividend Stock: U\$0.00, Totaling: U\$0.0169				
To be submitted to the shareholders' meeting for approval.				

2020 Production

Flat Glass	Taiwan	3 float plants annual production 210,669MT (- 23.4%)
	China	11 float plants & 1 photovoltaic glass plant, annual production 2,530,852MT (- 1.5%)
Fiberglass / Fiberglass Fabric	Taiwan	1 glass fiber plant, & 1 glass fabric plant, annual production 66,242MT (+13.2%)
	China	6 glass fabric plants, annual production 53,821MT (-8.4%)
Glass Container & Glassware	Taiwan	7 plants, annual production 153,712MT (+4.1%)
Automotive Glass	Taiwan	TAGC plant, annual production 5,375MT (-6.8%)
	China	TYAU plant, annual production 10,733MT (+14.6%)
Group Total		3,031,404MT (-3.0%)

2020 Sales

Flat Glass	Taiwan	Volume 252,011MT (-2.6%), sales revenue U\$124mil (-5.6%)
	China	Volume 2,884,352MT (+0.1%), sales revenue U\$896mil (+1.3%)
	Total	3,136,363MT, U\$1,020 mil (+0.4%), 67.1% of group sales
Fiberglass / Fiberglass Fabric	Taiwan	Volume 71,726 MT (+21.0%), sales revenue U\$149mil (+4.0%)
	China	Volume 96,528 MT (-5.3%), sales revenue U\$202mil (+2.3%)
	Total	168,254MT, U\$351 mil (+3.0%), 23.0% of group sales
Glass Container & Glassware	Taiwan	Volume 157,619MT(+8.9%), sales revenue U\$121mil (+3.5%), 8.0% of group sales
Automotive Glass	Taiwan	Volume 5,447MT(-6.0%), sales revenue U\$16mil (+0.5%)
	China	Volume 9,823MT(+6.3%), sales revenue U\$12mil (+5.2%)
	Total	15,270MT, U\$28 mil (+2.4%), 1.9% of group sales
Group Total		3,477,506MT, revenue U\$1,520mil (+1.3%) : Net Sales revenue U\$1,418mil (+0.3%) domestic market 85% and export 15%

合併財務一覽 Consolidated Financial Scan

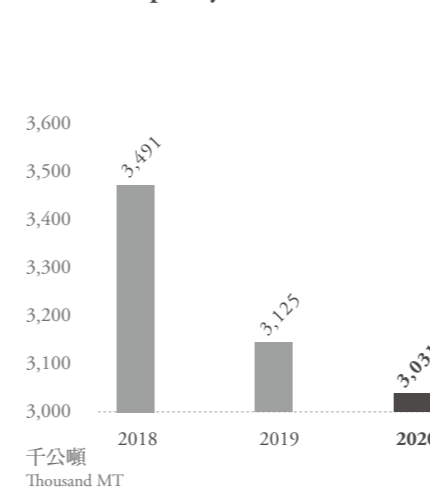
項目 Item	單位 Unit	2019	2020	+%	-%
銷售量 Sales Volume	公噸 MT	3,460,533	3,477,506	0.5	
營業收入 Operating Revenue	千元 U\$000	41,768,461 1,351,205	41,907,654 1,418,243	0.3	
營業(損失)利益 Operating (Loss) Income	千元 U\$000	(917,721) (29,688)	2,534,105 85,760	376.1	
營業外收入及支出 Non-operating Income and Expenses	千元 U\$000	(129,542) (4,191)	612,384 20,724	572.7	
稅前淨(損)利 (Loss) Income Before Tax	千元 U\$000	(1,300,423) (42,069)	2,991,221 101,229	330.0	
稅後淨(損)利 Net (Loss) Income After Tax	千元 U\$000	(1,606,778) (51,979)	2,460,548 83,270	253.1	
稅後淨(損)利歸屬於母公司業主 (Loss) Income After Tax Attributable to Stockholders of the Parent	千元 U\$000	(1,448,450) (46,857)	2,468,521 83,540	270.4	
每股純益 Earnings Per Share	元 U\$	(0.50) (0.02)	0.85 0.03	270.0	
純益率 Earning Ratio	%	(3.47)	5.89	269.7	
每股股利(現金+股票) Dividend Per Share (Cash+Stock)	元 U\$	0 0.0000	0.5(0.5+0) 0.0169(0.0169+0)		
資產總額 Total Assets	千元 U\$000	87,324,447 2,912,757	89,929,777 3,157,646	3.0	
實收資本 Capital	千元 U\$000	29,080,608 970,000	29,080,608 1,021,089		
母公司業主權益 Total Equity Attributable to Stockholders of the Parent	千元 U\$000	40,164,081 1,339,696	43,807,564 1,538,187	9.1	
每股淨值 Equity Per Share	元 U\$	13.81 0.46	15.06 0.53	9.1	
自有資本率 Shareholders' Equity to Total Assets Ratio	%	46.0	48.7	5.9	
合併權益報酬率 Return on Total Equity	%	(3.5)	5.5	257.1	
股票市值 Stock Market Value	千元 U\$000	33,151,893 1,105,800	56,707,186 1,991,123	71.1	
新投資金額 New Capital Expenditure	千元 U\$000	3,755,492 121,490	3,445,279 116,595		8.3

合併資產負債表 Consolidated Balance Sheet

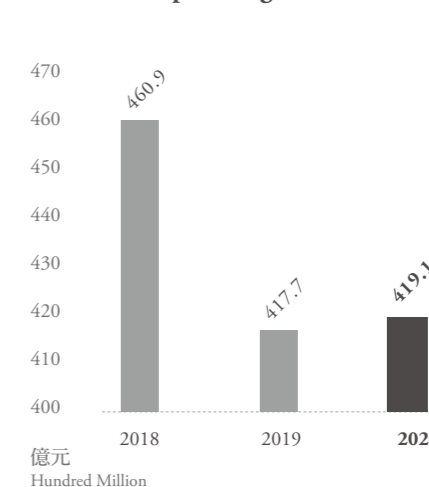
	2019			2020		
	千元	U\$000	%	千元	U\$000	%
資產						
流動資產	31,320,135	1,044,701	35.9	35,502,486	1,246,576	39.5
Assets						
採用權益法之投資	4,231,551	141,146	4.8	4,616,442	162,094	5.1
Investments Accounted for Using the Equity Method						
不動產、廠房及設備	47,732,878	1,592,157	54.7	46,050,857	1,616,954	51.2
Property, Plant and Equipment						
其他非流動資產	4,039,883	134,753	4.6	3,759,992	132,022	4.2
Other Noncurrent Assets						
資產合計	87,324,447	2,912,757	100.0	89,929,777	3,157,646	100.0
Total Assets						
負債						
流動負債	29,945,131	998,837	34.3	30,054,861	1,055,297	33.4
Liabilities						
長期負債	11,418,334	380,865	13.0	10,872,579	381,762	12.1
Long-term Loan						
其他非流動負債	2,599,771	86,717	3.0	2,202,140	77,322	2.5
Other Noncurrent Liabilities						
負債合計	43,963,236	1,466,419	50.3	43,129,580	1,514,381	48.0
Total Liabilities						
權益						
母公司業主權益計	40,164,081	1,339,696	46.0	43,807,564	1,538,187	48.7
Total Equity Attributable to Stockholders of the Parent						
實收資本	29,080,608	970,000		29,080,608	1,021,089	
Capital						
非控制權益	3,197,130	106,642	3.7	2,992,633	105,078	3.3
Non-controlling Interests						
權益合計	43,361,211	1,446,338	49.7	46,800,197	1,643,265	52.0
Total Equity						
負債及權益	87,324,447	2,912,757	100.0	89,929,777	3,157,646	100.0
Liabilities & Equity						

歷年財務簡表 Financial Charts by Year

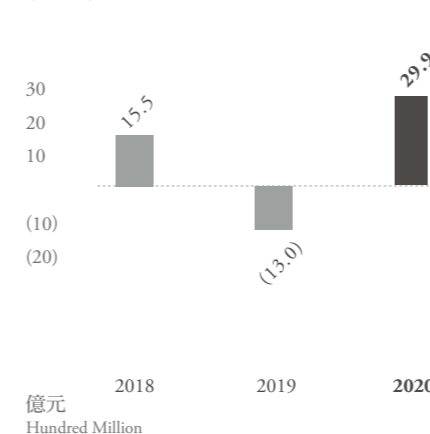
生產量 Capacity



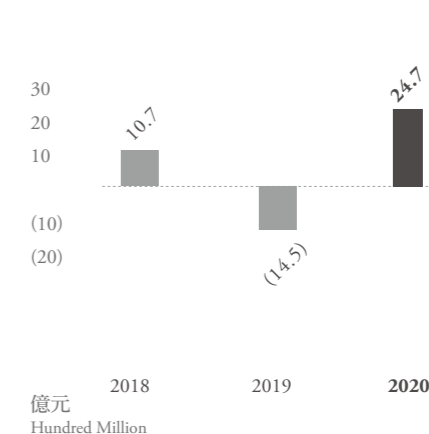
營業收入 Operating Revenue



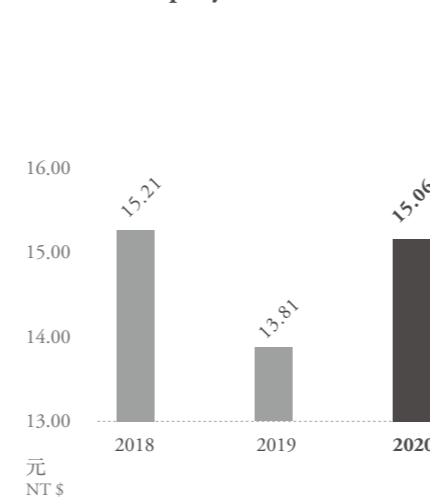
稅前淨(損)利 (Loss) Income Before Tax



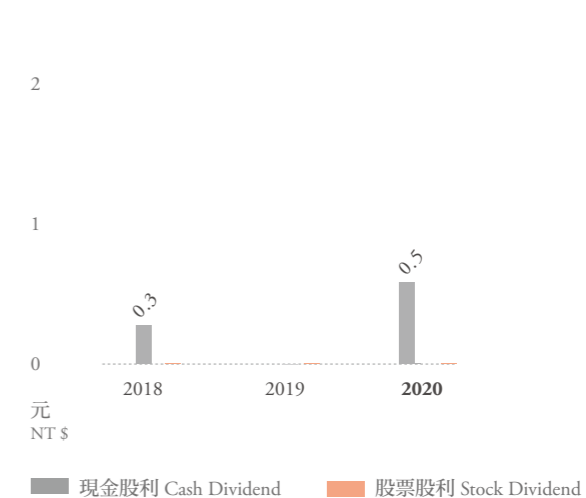
稅後淨(損)利歸屬於母公司業主 (Loss) Income After Tax Attributable to Stockholders of the Parent



每股淨值 Equity Per Share



每股股利 Dividend Per Share



董事長致詞

2021 年 展望



各位董事、股東好

2020年上半年全球受到新冠肺炎疫情蔓延及封鎖措施，各國陸續推出大規模貨幣政策和紓困計畫，全球經貿略見好轉。台灣及中國大陸有效控制疫情，經濟提早回溫。預期2021年在疫苗開始接種後，全球經濟可望逐步復甦，國際貨幣基金(IMF)將全球經濟成長預期，由原先預估5.5%上調至6%，創40年來最大增幅，其中台灣成長4.7%，中國大陸成長8.4%。部分國家央行甚至已經啟動升息以因應通膨來臨。整體來說，疫情仍有變化，不確定性依然存在，期待進口有效疫苗，抑制病毒擴散。

綜觀台玻2020年表現，上半年受疫情影響，需求不振，下半年行業需求增加，集團全年合併稅前淨利為29.9億元。以下就各產品營業內容進行報告：

在平板玻璃方面，台灣市場因規模較小，加以進口玻璃低價競爭，導致價格維持低檔並呈現衰退。台玻持續強化產銷系統，提高產品附加價值，推廣符合現今環保節能的Low-E玻璃，配合國內建案、裝修市場多元化及消費習性多變之趨勢，提供多樣性產品，期能擴大需求，帶動成長動能。

中國大陸平板玻璃市場，上半年同樣受疫情影響，房地產延後開工，玻璃訂單大幅推遲，廠家受制於庫存、資金雙重壓力，出現集體冷修情形。下半年隨著復工復產推進，需求快速恢復，加上政策監管控制新增產能，落後產能亦在環保排汙許可壓力下陸續退出，造成實際產能持續收縮，同時光伏玻璃景氣突然攀升，供應緊缺，部分企業在利潤的驅動下轉產光伏玻璃，使浮法玻璃供給更加緊縮，導致價格上漲，整體而言，今年景氣呈現上揚。

新材料玻璃，為因應中國大陸及印度市場對於保護貼需求增加，今年將生產0.33mm與0.44mm規格，改善品質並提高含鉛量，達到全產全銷為目標。

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。對於FRP，與美國歐文斯科寧公司合作之新窯，產能提高效率增加，先進玻璃纖維的配方與生產技術，持續供應客戶更全面及高性能環保產品。電子級玻纖布面對未來市場需求，成功研發並供應超薄布#1010布種，配合客戶需求規格，同時對於5G佈建、遠距商機、電子新品備貨等需求，台玻開發低介電(Low DK)玻纖布，持續取得國際終端大廠認證採用。

在容食廚器方面，生產及銷貨均有增加，特別是容器產品受到國內外客戶喜愛，逐步提高單價，並形成長期穩定的訂單。台玻「TG」品牌於2020年12月在台玻大樓一樓設店開幕，對於產品銷售與推廣具有正面助益，TG產品及包裝設計更榮獲2021紅點設計大獎（Red Dot Design Award）。

台玻轉投資實聯化工江蘇公司44%，自2014年投產以來，每年均達全產全銷，2020年上半年受到疫情影響，市場庫存水位偏高，供需失衡，下半年起需求增加，帶動純鹼價格上漲，全年微幅獲利。2021年在預期經濟復甦，原物料價格全面上漲情況，亦將有正向的發展。

展望未來，在經營發展策略上，台玻身為國內玻璃產業之龍頭企業，將持續深化節能玻璃產品應用，進行玻璃纖維布具前瞻性、高附加價值產品與製程技術研究開發，不斷檢討優化成本與產品的改良與精進，強化企業競爭韌性；同時，持續落實製程優化與節能，提升資源再利用，並推動導入工業局「清潔生產評估系統」認證，全面以智能化精實生產，適時檢測生產效率與能源物料耗用，強化勞安、環安、人資管理的應變能力，以及風險意識管控，並以玻璃產業為根基穩健經營，追求永續發展，並榮獲工業局表揚頒發優良工廠。

面對當前能源轉型的關鍵時刻，我們期待政府能積極務實制定相關節能、創能政策，提供長期穩定、充裕的能源，建構友善的投資環境，強化企業投資信心。

敬請各位股東惠予支持與指教

林伯豐

2021.07.02

Chairman's Message

2021 Operation Perspectives

Directors and stockholders, thank you and look forward to having your opinions on 2020 operation perspective.

In the first half of 2020, faced with the spread of the COVID-19 pandemic and lockdown measures, many countries launched large-scale monetary policies and stimulus packages, which has led to a slight rebound in global economy and trade. Taiwan and China have started to rebound thanks to effective control of the pandemic. The global economy is expected to recover gradually after the start of vaccinations in 2021. The International Monetary Fund (IMF) upgraded its forecast for 2021 global growth from the original 5.5% to 6%, the largest increase in 40 years. According to the forecast, Taiwan and China will grow by 4.7% and 8.4% respectively. Some central banks have started raising interest rates in response to the advent of inflation. Overall, how the pandemic develops remains uncertain and we hope that imported vaccines are effective enough to stop the spread of the virus.

In terms of the performance of Taiwan Glass in 2020, the COVID-19 pandemic resulted in sluggish demand in the first half of the year. Taiwan Glass Group's annual consolidated net profit before tax is NT\$2.99 billion, which can be attributed to the increased demand from industries in the second half of the year. The following is a report on the business of each product.

For flat glass, the relatively small Taiwan market and price competition with imported glass have resulted in low prices and price drops. Consequently, Taiwan Glass continues to strengthen its production and sales system, increase the added value of products, promote Low-E glass that is in line with environmental protection and energy conservation, and provide a variety of products to meet diversified needs of domestic construction projects, interior design and consumption habits, which will hopefully increase demand and boost our growth.

The flat glass market of China was also affected by the pandemic in the first half of the year. Delayed real estate constructions caused a backlog of orders, prompting manufacturers to shut down collectively for cold repair when they were faced with inventory and financial pressure. In the second half of the year, the supply shortage can be attributed to gradual resumption of work & production, quick recovery of demand, new production capacity under supervision & control as policy requires, and outdated production capacity gradually withdrawn under the pressure of pollutant discharge permits. Meanwhile, a sudden surge of demand for photovoltaic glass and shortage of supply prompted some profit-driven manufacturers to produce photovoltaic glass, causing an even tighter supply and a price hike in float glass. Overall, this year has seen a boom in the flat glass market of China.

As for new material glass, in response to the increased demand for screen protectors in China and India markets, we will produce 0.33mm and 0.44mm screen protectors, improve quality, increase aluminum content and achieve the goal of full production and sales.

In fiberglass business, Taiwan Glass is dedicated to reducing costs and speeding up research & development to increase our product value. For FRP, the new kiln in cooperation with Owens Corning of the United States 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 electronic-grade fiberglass fabric, in response to the market needs in the future, other than the ultra-thin fiberglass fabric #1010 which we have successfully developed and supplied, we have tailored our products to clients' specific needs. To meet the needs for 5G deployment, remote business and new electronic products, we have also successfully developed low-dielectric (Low DK) fiberglass fabric, which has been certified and continuously adopted by international terminal manufacturers.

Production and sales have increased in terms of container, tableware and kitchenware glass. Containers are especially popular among domestic and foreign clients, which leads to a gradual increase in price and orders. The flagship store of our private brand—TG—opened on the first floor of Taiwan Glass Building in December 2020. The flagship store aided the promotion of our products a lot and boosted sales. In addition, the products and packaging design of TG won the 2021 Red Dot Design Award.

Shihlien Chemical Industrial Jiangsu Co., Ltd. (SCJ), with 44% of its shareholding held by Taiwan Glass, has reached full production and sales every year since its start of production in 2014. In the first half of 2020, high inventory resulted from the pandemic led to supply and demand imbalance, while in the second half of the year, the price of soda ash soared as demand increased, which helped to maintain SCJ's slight profit growth throughout the year. With an expected economic recovery in 2021 and rising prices of raw materials, this will be a promising year for SCJ.

Looking ahead, in terms of business development strategy, Taiwan Glass, the industry leader in the domestic glass industry, will continue to work on the application of energy-saving glass, conduct research and development on forward-looking, high-value-added products and manufacturing technology for fiberglass fabric, while focusing on cost-based optimization, product improvement & enhancement to boost the competitiveness of our company. Meanwhile, we put continuous efforts into of process optimization, energy conservation, reuse of resources, and promoting certification of “Cleaner Production Assessment System” by the Industrial Development Bureau. In addition, our intelligent manufacturing allows timely monitoring of production efficiency and consumption of energy & raw materials. We will strengthen our adaptability in labor safety, environmental safety and human resources management while paying attention to risk awareness management. We will operate steadily based on our glass business, pursue sustainable development & growth and achieve our goal of being awarded excellent factory by the Industrial Development Bureau.

Facing the critical moment of energy transition, we expect the government to, actively and pragmatically, formulate relevant policies regarding energy conservation and new methods of electricity generation, provide sustainable, stable and abundant energy resources, create an investment-friendly environment and boost investor confidence.

Lin, Por Fong

2021.07.02

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	平板事業部營運長 COO, 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	平板廠生產協理 AGM, Flat Prod.	石鎮界 Shih, C C
纖維事業部總經理 GM, Fiber	林嘉佑 Lin, C Y	平板廠管理協理 AGM, Flat Admin	王國方 Wang, K F
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	新竹廠生產協理 AGM, Prod., TS	沈賢輝 Shen, H H
桃園廠廠長 Plant Dir., TT	余哲超 Yu, C C	新竹廠研發協理 AGM, R&D TS	鍾洞生 Chung, T S
大陸事業部營運長 COO, China Prod.	林嘉宏 Lin, C H	車板本部總經理 GM, Autoglass	呂宗祥 Lu, T H
財務/管理本部總經理 GM, Finance/ Admin	林嘉明 Lin, C M	車板本部營業部協理 AGM, Autoglass Sales	林信宏 Lin, H H
管理本部副總 VGM, Admin.	洪有欽 Hung, Y C		
採購本部副總 VGM, Purchasing	蔡增銘 Tsai, T M		

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	林伯豐 Lin, P F		
	副董事長 Vice Chairman	林伯實 Lin, P S		
	董事 Directors	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	林嘉宏 Lin, C H		
	總經理 GM	王鳳寶 Wang, F P		
台玻成都玻璃有限公司 CDG	董事長 Chairman	林嘉宏 Lin, C H		
	總經理 GM	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	林嘉宏 Lin, C H		
	總經理 GM	張政峰 Chang, C F		
台玻安徽玻璃有限公司 TAH	董事長 Chairman	林嘉宏 Lin, C H		
	總經理 GM	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	林嘉宏 Lin, C H		
	副董事長 Vice Chairman	柳忠明 Liu, C M		
	總經理 GM	吳英華 Wu, Y 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	林伯豐 Lin, P F 蘇育德 Su, Y T	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	11	2,651,250	13	2,991,250
微薄玻璃 Ultra-Thin Glass	1	29,280	-	-	1	29,280
光伏玻璃 Photovoltaic Glass	-	-	1	237,250	1	237,250
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	7	169,000	-	-	7	169,000
合計 Total	12	638,280	17	2,983,500	29	3,621,780

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	42,100	9	46,100

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	2,000	6	2,250

產品介紹 Products

平板玻璃

平板玻璃是台玻發展的核心產品，台灣及中國大陸是台玻生產製造的兩大區域。產品主要行銷台灣、中國、日本、韓國、東南亞、北美、中東、澳洲、歐洲、南非及俄羅斯等地區。

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。

壓花玻璃

具有透光不透視之功能，亦可創造各種不同的模糊光移及陰影。

低輻射玻璃

具高透光率低紅外線透過，隔熱效果佳，符合環保節能及綠建材、綠建築的要求。世界先進國家生產之低輻射玻璃皆以雙層玻璃(隔熱及隔音效果佳)成品銷售。台玻各種低輻射玻璃產品輻射率可達最高級的0.02。

反射玻璃

可防止陽光直射，隔熱性能高，提供室內居住者舒適感，亦能節省能源，並呈現多彩和諧的建築物外觀。

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成為豆粒大的顆粒，減少對人體的傷害，增加玻璃使用的安全性；可耐溫度之急速變化，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、隔離紫外線、控制可視光線透過率、防止玻璃碎片飛散等特性，如使用有色膠合膜，亦可提昇建築物外觀的美感，且可減輕熱能進入室內，節省冷氣能源，增加生活環境舒適度。台玻開發製成之高性能隔音膠合玻璃，除上述特點，更具備了極佳的中高頻的隔音效果。

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。可用於織造電子級和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和Low Dk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鈉鈣玻璃佳，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

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包裝設計更榮獲2021紅點設計大獎雙獎項（Red Dot Design Award），於60多國的眾多參賽者中脫穎而出。

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 one of the core products of TG. With production plants based in Taiwan and China, TG's major markets reach Taiwan, China, Japan, Korea, South-East Asia, North America, Middle East, Australia, Europe, South Africa, Russia, and so forth.

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 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 higher added-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 glass offers high transparency, low infrared light transmission and great thermal insulation that meet the demands of green buildings and construction materials. All Low-E Glass manufactured in developed countries is made into insulating glass (which offers better insulation and soundproof performance). Every TG Low-E glass can achieve the highest class emissivity coefficient 0.02.

Reflective Glass

Reflective glass can deflect incident sunlight and provide high thermal performance for indoor comfort. It can save the energy, and meanwhile improve the aesthetic appeal of the building.

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, also provides an excellent 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 and Low Dk fiberglass 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 and Low Dk fiberglass 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 international terminal manufacturers.

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, TGI 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.

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

Low-E 玻璃

單銀低輻射玻璃

1. 紅外線反射率高，可直接反射遠紅外熱輻射；
2. 表面輻射率(ε)低，吸收外來能量的能力小，從而再輻射出的熱能少；
3. 遮陽係數(SC)可選擇範圍廣，可根據需要調節太陽直接輻射能透過量，充分應不同的設計需要。
4. 低熱傳係數(U值)，室內冬暖夏涼。

雙銀低輻射玻璃

1. 較高的可見光透光率，室內可充分利用自然光采光。
2. 極低的太陽能透過率，有效限制紅外熱輻射透過；遮陽係數(SC)較單銀Low-E玻璃更低。
3. 更低的熱傳係數(U值)，隔熱性能好，進一步提高室內舒適度。

三銀低輻射玻璃

高透光率、低反射率、低SC值並存，極低的輻射率與雙銀低輻射玻璃或單銀低輻射玻璃對比，具有同樣可見光透過率的三種玻璃：
SC三銀玻璃 < SC雙銀玻璃 < SC單銀玻璃
SC三銀玻璃建築物最佳的節能方案

Low-E Glass

Single Low-E Glass

1. Because of the high infrared reflectance, the Low-E glass can reflect far infrared heat radiation directly.
2. Due to the low emissivity, the glass surface is less able to absorb external energy, and thus lower the reradiated thermal (heat) energy.
3. With wide range of shading coefficient (SC) options, customers can choose different levels of direct solar heat transmission based on needs and designs.
4. With low thermal transmittance (U-Value), it makes indoor warm in winter and cool in summer.

Double Low-E Glass

1. With higher visible light transmittance, it allows to make the most of indoor natural lighting.
2. The solar heat transmission through windows is extremely low. It effectively limits the infrared. Its shading coefficient is also lower than Single Low-E Glass.
3. Due to lower thermal transmittance (U-Value), it has better thermal insulation and further improves indoor comfort.

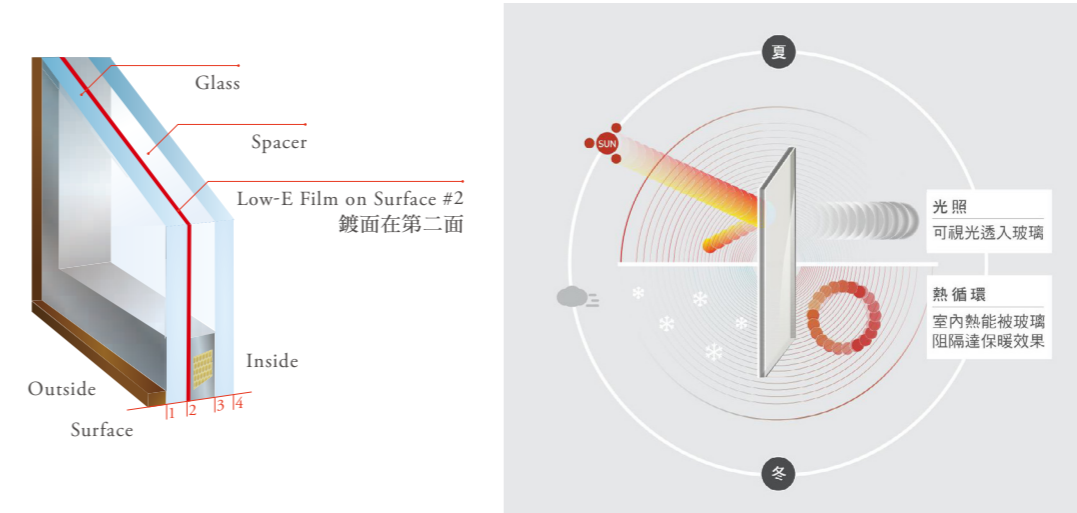
Triple Low-E Glass

With all the features of high transparency, low reflectivity, low SC values, and low emissivity. Compare Double Low-E glass or Single Low-E glass with the same visible light transparency:
SC Triple Low-E glass < SC Double Low-E glass < SC Single Low-E glass
Triple Low-E Glass is the best energy-saving solution for the building.

產品介紹 Products

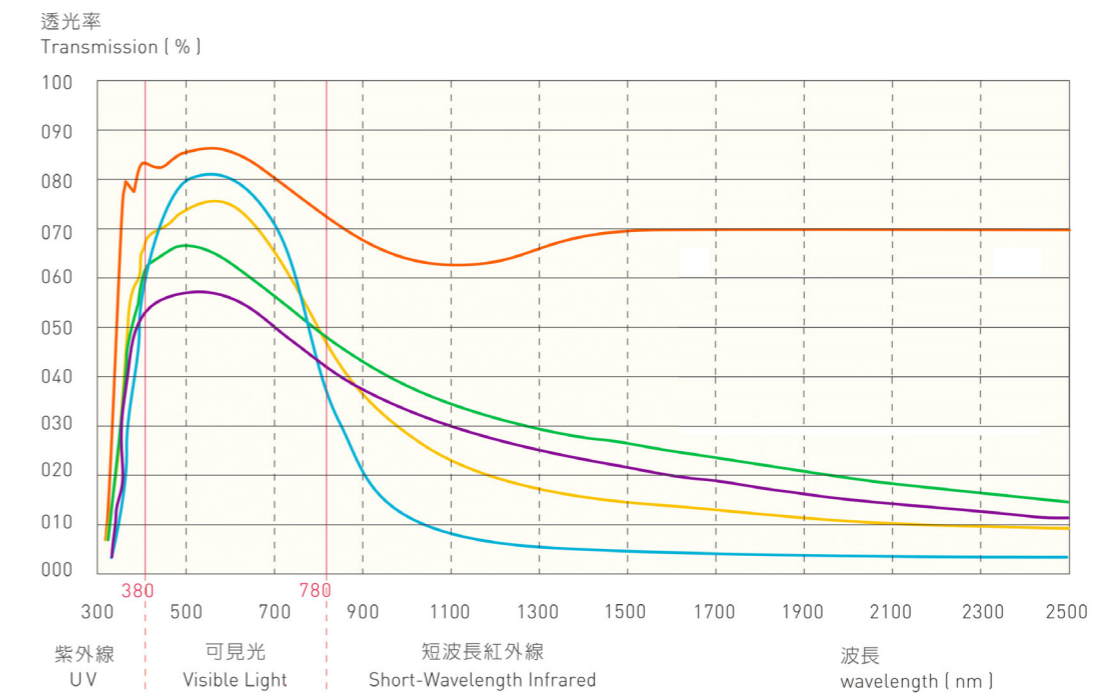
低輻射中空玻璃構造圖

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



空調耗電比率

透明玻璃	用電比率：1.00
三銀Low-E玻璃	用電比率：0.57
雙銀Low-E玻璃	用電比率：0.62
單銀Low-E玻璃	用電比率：0.66
熱控單銀Low-E玻璃	用電比率：0.64

產品介紹 Products

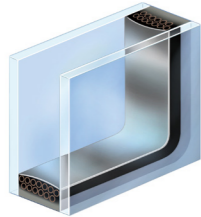
TPS玻璃

新一代中空系統

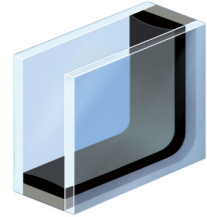
TPS是一種新型的中空玻璃暖邊系統，它是以特殊丁基膠為輔材，填入分子篩的熱塑性隔條。

特性

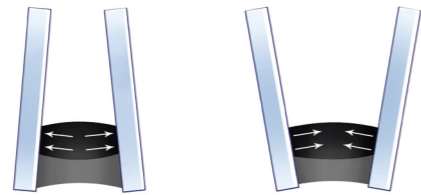
1. TPS: Thermo Plastic Spacer / 熱塑性隔條
2. TPS熱塑性隔條不含金屬嵌入物
3. 提高玻璃邊緣的熱阻隔性
4. 溫度均勻分布在整個玻璃表面
5. 有效降低凝露的產生
6. 彈性邊緣密封
7. 使玻璃設計變得更為靈活和方便
8. 完美的匹配玻璃裝配行業
9. 高的質量控制=更長的使用壽命



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.

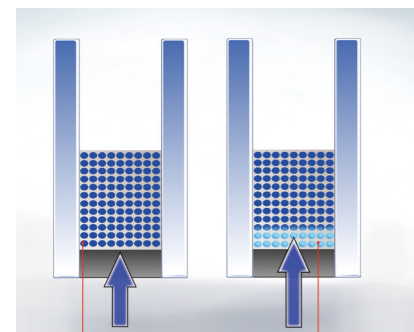


良好的力學性能
Better mechanical performance

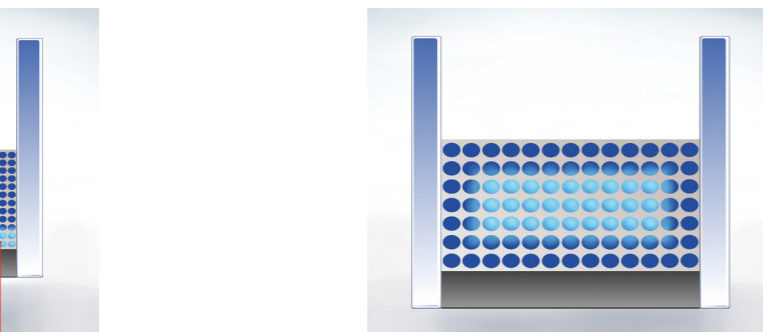
TPS濕氣屏障的原理 The Principles of TPS Moisture Barrier

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

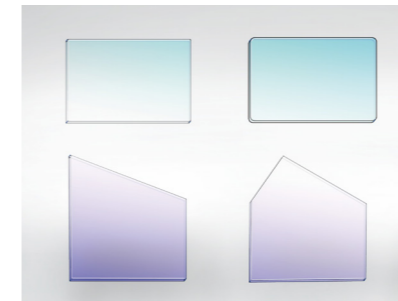
產品介紹 Products

應用領域

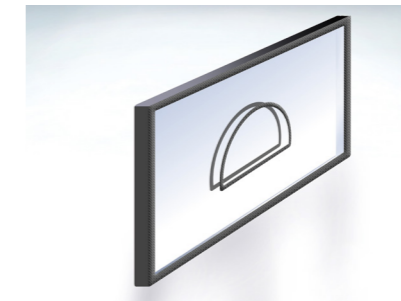
1. 住宅建築
2. 商用建築
3. 結構幕牆
4. 高速鐵路
5. 汽車、大型巴士

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



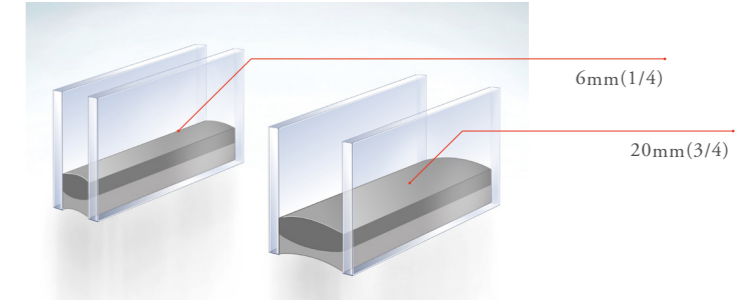
2. 鏤空的中空玻璃系統
Hollow-out insulating glass system



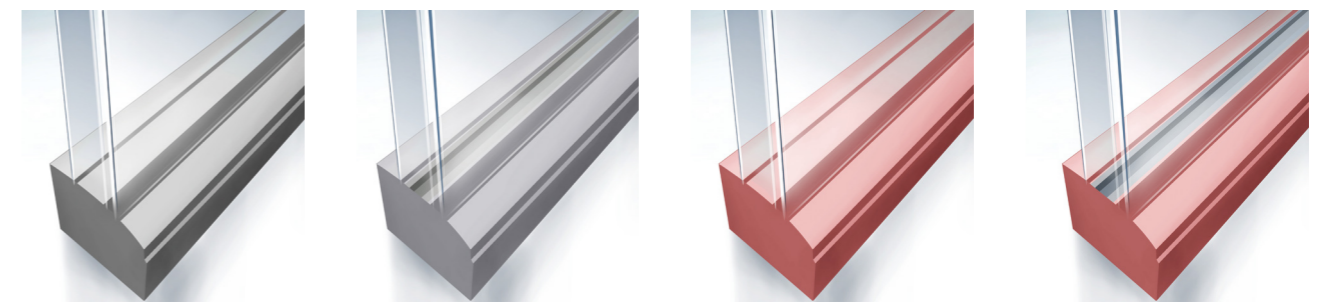
3. 內飾條協調地裝在熱塑性隔條上
Moulding / decoration strip works perfectly with Thermo Plastic Spacer



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	-
TOTAL	-	-	-	-	24.63	45.67

主要股東(2021-04)	
Major Shareholders	(%)
台豐投資股份有限公司	14.45
Tai Hong Investment Corp.	
合和投資股份有限公司	13.85
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	7.85
Tai Cheng Investment Corp.	
台嘉投資股份有限公司	5.43
Tai Chia Investment Corp.	
林建成嘉記股份有限公司	4.71
Lim Kien Seng Kah Kih Co. Ltd	
富邦人壽保險股份有限公司	4.58
Fubon Life Insurance Corp.	
台玻職工退休基金管委會	1.35
TGI Retirement Fund.	
S.E.A. Glass Industry Pte Ltd	0.86
Total	70.08
股東總人數	56,318 人
Total Shareholders	
總成交量	2,113,283,025 股
Transaction Volume	
員工總人數(2021-04)	台灣 4,485 人
Employees	大陸 8,488 人
	合計 12,973 人

決算日期: 2020年12月31日
 Fiscal Year Ends on December 31, 2020
 股東常會: 2021年07月02日
 General Shareholders' Meeting: July 2, 2021
 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

台玻東元真空節能玻璃股份有限公司創立
TG Tecu Vacuum Insulated Glass Corp. Established

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



台玻東元真空節能玻璃股份有限公司投產
TG Teco Vacuum Insulated Glass Corp.
Plant Production

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

2015 台玻悅達太陽能鏡板有限公司投產
TG Yueda Solar Mirror Co., Ltd Established.
Plant Production

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



2021

