

ROBERT BROWN

(1929 to 2021)

giant of the glass industry

From humble beginnings as a self-employed and self-taught display artist, ROBERT BROWN would soon become a global force in the glass industry. A creative and artistic man from a young age, he had the drive and determination to succeed from very early on in his career.



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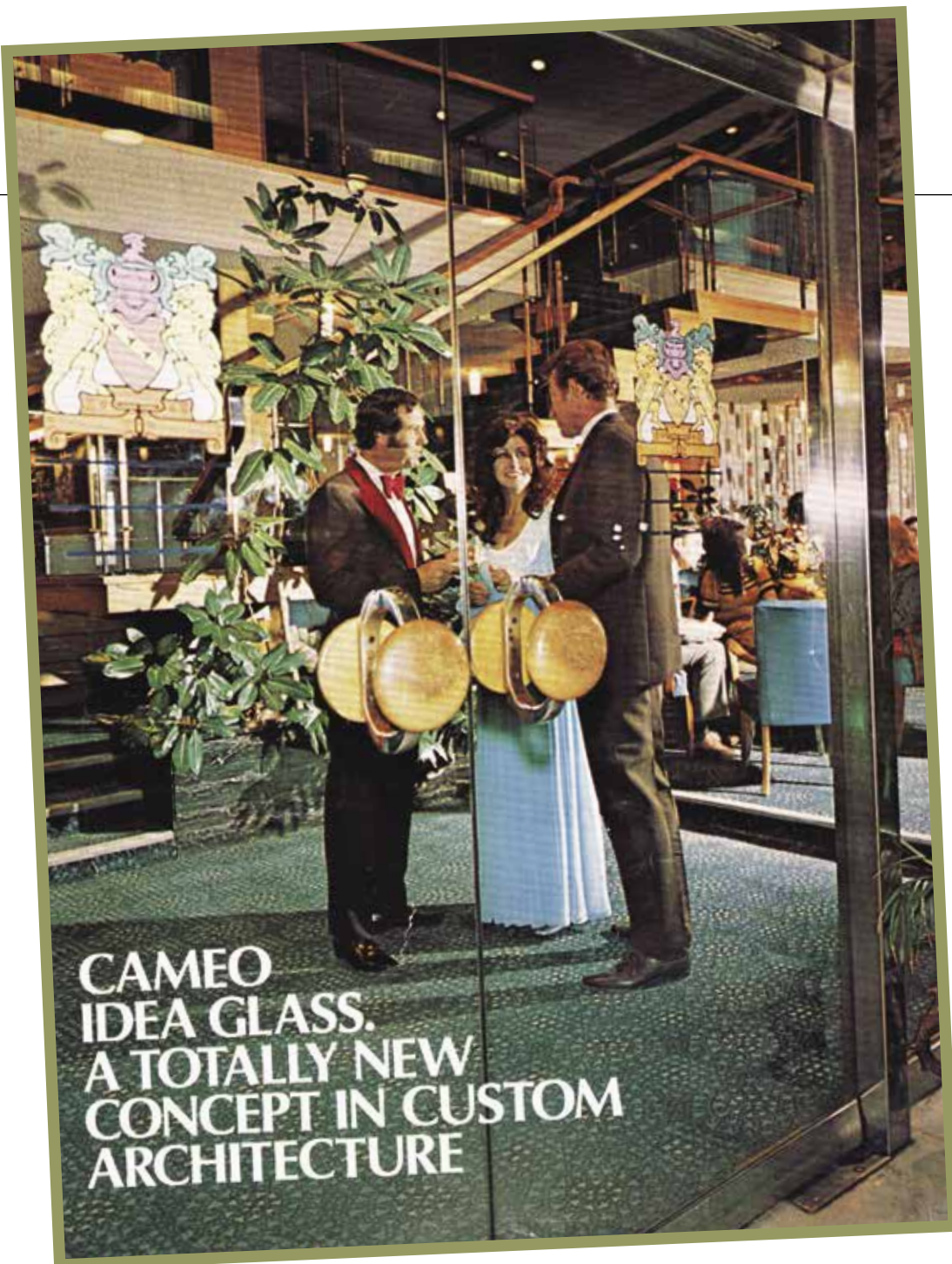
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It all began in 1958 when Robert Brown had his first experience with screen printing - producing advertising signs, cards and posters. This business grew to be the largest screen printing business in Adelaide (South Australia) by 1962.

GLASS PIONEER

In 1963 Robert was approached by a local domestic appliance manufacturer who wanted a glass control panel printed with ceramic colours. They gave Robert a production piece from the USA. Robert had no



SUSTAINED GROWTH

There was to be a pattern of innovation over Robert's career, and this continued in 1965 when his engineers designed and built a multi-stage toughening furnace. From this point the business grew rapidly. Seraphic quickly grew to supply glass panels to white goods manufacturers Chef, Frigidaire, Vulcan, Everhot, Malleys, Westinghouse, and Whirlpool in Australia. In 1967 he developed a toughened glass warming tray that was printed and fired with a unique silver-ceramic circuit. This technology was to be used years later to produce automotive demister windows, at a much lower cost than his rival using plating technology. After developing an early version of a roller hearth furnace, Robert found it was a little ahead of its time and it was converted to drop-moulding to pro-

experience of printing on glass or of ceramic colours but he set about producing a sample. It was approved for production and Robert only had a few months to tool-up. He had a small box-furnace designed and built and initially had to buy in the glass - pre-cut and drilled. Robert then set about printing and annealing the first ceramic

glass panels ever produced in Australia. From his memoirs, Robert recalls advice given to him many years earlier: 'There are many opportunities that will come your way in life. The trick is to choose the right ones.' From that point on, he was to concentrate on decorative glass manufacture. To do this, he launched a new company

that he named Seraphic. Robert soon needed continuous-furnaces and more production lines to meet public demand for electric stoves. Their popularity was driven by the fact that it was now possible to see inside the cooker through the large decorated glass door. He employed talented people for specific roles and this was always a key to his business successes.



duce glass giftware. His creative mind then perceived a unique way to print architectural glass with fine lines for heat reflection, however domestic appliances remained his primary focus.

A PASSION FOR DESIGN

Other innovations continued; equipment was designed and built in-house, including automated glass cutting, drilling machines, and improved furnaces. By this time Robert's business had grown to cover several locations and was the market leader in decorative toughened glass in Australia. Part of the business was sold and rebranded Pilkington-Seraphic.

HITTING THE GLOBAL MARKET

In 1974 a brief period of semi-retirement followed.

However, convinced that Britain and the Common Market could become a global centre for appliance glass, Robert set about planning the establishment of a company in the UK. That bold move would secure his reputation as an international leader in this highly-specialised field. He set up a factory at Bishop Auckland, in north-eastern England, choosing the location because it offered a willing workforce within an economically depressed region- especially after coal mine closures- as well as proximity to Teesside International Airport and Darlington's intercity rail link. Once again, Robert used his ability to recognise talent. He took with him to England a glass toughening furnace plus five skilled men and their families.

THERMAX

His new company, Thermax, was established in 1974/5 and the knowledgeable-team approach paid off, with a successful foray into the local UK domestic appliance industry. Quality of the product, printing and ceramic colours drove the expansion of the business and increased orders and higher volumes followed. The business also grew to be prominent in the supply of glass for London Cabs, telephone booths, hot-trays, trucks, tractors and glass hob tops. Robert travelled widely, displaying the Thermax brand -and reaping orders- at major trade fairs.

AUTOMOTIVE

Robert's talent for innovation changed forever the standard features of automobiles. An approach

from Sunbeam-Talbot for one of their models led to the innovation of printed black edges with a graduated pattern of dots on the rear window. Robert exhibited this at the Geneva Motor Show and there was much excitement in the industry. The Japanese car manufacturers and others, made repeated visits to the Thermax stand. This feature was subsequently adopted the world over and now appears on most modern vehicles.

Ever-inventive, Robert extended his product range in the automotive industry, capitalising on the emerging fashion of sunroofs and heated rear windows. The business grew in scale and turnover, adopting a can-do attitude. On one occasion a phone call from Italy resulted in an order for many thousands of black printed sunroofs, for urgent delivery. The answer was an emphatic 'yes - we can supply' and after the phone call, the staff then pulled out all the stops to satisfy the surprise order. Decorated sunroofs were also exported to the USA and Australia.

Robert's simplified process of producing vehicle rear heater-demisters with a single print process, developed years before in Australia, was effectively applied to mass production. He then pioneered



Plant No. 1 for the Manufacture of Domestic Appliance Glass.
Established in November 1974 No. 1 plant covers 36,000 sq ft with land provision for expansion three times.
Besides the U.K. home market, Thermax is deeply involved in export to E.E.C. and other countries.

- Our "in" factory services:
1. The conversion of customer drawings to film positives.
 2. Prototype and pre-production sampling.
 3. Constant communication during planning and production.

- Our more important products are:
1. Fascia and control panels for cookers.
 2. Oven doors—plain and decorated.
 3. Heat reflective oven doors.
 4. Shaped and ground oven doors.
 5. Food warmers.

USINE No. 1 pour manufacture de verre pour appareils ménagers.

Établi en novembre 1974, cet ensemble couvre 3.346 m² le terrain qui lui a été permis une expansion de trois fois.

Non seulement Thermax fournit le marché intérieur mais il exporte énormément vers le Marché Commun et d'autres pays.

Nos services ultra-modernes à l'usine:

1. Transformation des plans de la clientèle en positif sur film.
2. Prototypes et échantillons avant production.
3. Intercommunication continue pendant la planification et la production.

Nos produits les plus importants sont:

1. Plaque avant et panneau de réglage pour fournaux.
2. Portes de four, simples ou décorées.
3. Portes de four réfléchissant la chaleur.
4. Portes de four, en forme et usées.
5. Chauffe-plats.

ANLAGE NR. 1 für die Herstellung von Haushaltsgeräten Glas. Geegründet im November 1974 Anlage Nr. 1 erstreckt sich über 3.344 Quadratmeter mit Landvorrat für dreifachen Wuchs.

Neben dem Heimatmarkt V.K. ist Thermax in Export in die EWG und andere Länder wesentlich beteiligt.

Unsere Werkdienstleistungen:

1. Umsetzung der Kundenzeichnungen auf Filmbilder.
2. Prototyp- und Vorprodukt-Vorbereitung.
3. Ununterbrochene Beantwortung während Planung und Produktion.

Unsere wichtigsten Produkte sind:

1. Schieber- und Bedienfelder für Herde.
2. Klare und verzierte Backofentüren.
3. Waagereck reflektierende Ofentüren.
4. Profilerte und geschliffene Ofentüren.
5. Spisewärmer.



*With
Compliments*

and sold technology licences for a new printing application with thermoplastic ceramic ink.

Fiat and Peugeot were early customers of automotive products. Thermax grew to be the larg-

est sunroof supplier in Europe, adopting the new name of Interglass.

Some years later, the business supplied the spectacular glass atrium at King's Cross railway station in London.





MATERIALS PREPARATION
Processing starts in the Cutting Department where the "Jumbo" sheets, 3210 x 6000 mm, are cut accurately into the size required by the customer. Our high technology cutting line accommodates an infinite number of sizes being cut together in small or large quantities.

Edge treatment to achieve the finish may be annealed, ground or polished.

Hole drilling is the final material treatment process. The most popular sizes we produce are 6 mm to 250 mm.

From start to finish, as in all Departments, up to date, well maintained machinery is essential in order to meet the stringent demands placed on manufacturers by today's toughened glass users. Our existing customers are well aware of our commitment in this area.

PRÉPARATION DE MATÉRIEL
Le traitement débute dans l'atelier de découpe, où les feuilles "Jumbo" de 3210 x 6000 mm, sont découpées avec précision aux dimensions requises par le client. Notre technologie "high tech" nous permet de découper simultanément un nombre infini de dimensions, en petites ou grandes quantités.

Les bords sont ensuite traités: arêtes abrasives, douçage ou polissage.

Le perçage de trous constitue la dernière étape du traitement. Les dimensions les plus demandées par nos productions sont: 6 mm à 250 mm.

Du début à la fin, et dans toutes les services, il est essentiel de disposer de machines de pointe, bien entretenues, pour répondre aux exigences des utilisateurs de verre trempé d'aujourd'hui. Nos clients actuels se déclarent parfaitement satisfaits de notre constante application à cet égard.

MATERIALVORBEREITUNG
In unserer Schneidabteilung fängt der Herstellungsprozess an. Hier werden "Jumbo"-Glasscheiben von 3210 x 6000 mm groß auf die vom Kunden verlangte Größe zugeschnitten. Unsere hochmoderne Zugschneidemaschine ermöglicht es, eine unbegrenzte Anzahl verschiedener Größen in jeglichen bestimmten Mengen zu schneiden. Nach dem Schneiden folgt die Kantenbearbeitung, je nach Spezifikation entweder gebördelt, feingestrichelt oder poliert.

Der letzte Vorgang beim Materialvorbereiten ist das Bohren von Löchern, wenn benötigt, wobei Größen von 6 mm - 250 mm die Norm sind.

Von der sehr hoch ausgelegten Vorrichtung von Verarbeiten und Bohren zu erfüllen, ist unsere Grundtatsache, dass bei uns vom Anfang bis zum Ende der verschiedenen Bearbeitungsprozesse nur die neuesten und besten Maschinen eingesetzt werden.

Unsere einzigartigen Spitzenleistung in diesen Bereichen wird uns immer wieder von Kunden bestätigt.

PUTTING HIS PEOPLE FIRST

Robert proved to be a trend-setter as well, in equality for female employees. He had always ensured equal opportunities for men and women in all roles in the factory and paid them the same wages. The Bishop Auckland

factory had a workforce of more than 300 at one stage - a triumph in an area otherwise known for its significant unemployment. The magnitude of this achievement won Mr and Mrs Robert Brown an invitation to the Royal Garden Party, Buckingham Palace in July 1979.

RETIREMENT

In September 1985 Robert retired from the UK business and the family returned to their home base in Adelaide, Australia. In retirement he enjoyed his small collection of classic cars and joined the Sporting Car Club. Other passions included cruises,

ing, ballroom dancing, cooking, and family. He loved framing in his own studio, and he glazed pictures, artworks and photos for his family. He had a great, sarcastic sense of humour and drew many cartoons and caricatures - leaving a lasting legacy of his comic words for friends and family.