

Seeing the light

Purvish Shah, Director of Gopal Glass Works and Hons. Treasurer of the All India Glass Manufacturers' Federation, spoke exclusively to *Glass Worldwide* about opportunities for innovation in the manufacture of patterned, rolled and wired glass, and explained why his family's firm has recently diversified into the solar glass business.



Purvish Shah, Director of Gopal Glass Works.

Founded in 1978 in Ahmedabad, Gujarat, west India by Shri Jayantilal J Shah and the late Shri Dhirajlal Sheth, Gopal Glass Works began with a production capacity of just 50tpd of patterned and wired glass. Today, the company's facility is spread over 30 acres and output from its three furnaces exceeds 380tpd, ensuring the manufacturer maintains its 50–60% share of India's patterned glass market, in addition to supplying dealers and distributors in SAARC countries, Africa, the Middle East and Europe with high quality products. Specialising in clear and coloured patterned glass and wired glass (the only company



Gopal Glass Works has a state-of-the-art manufacturing facility spread over 30 acres with a production capacity of over 380tpd.

in India to do so), Gopal Glass Works offers more than 30 designs – of which several are trademarked, predominantly for use in windows, partitions and louvres.

Patterned glass – a sheet of glass with a pattern of translucent texture embossed on one or both sides to enable light transmission whilst offering various privacy levels – is made by squeezing semi-molten glass between two metal rollers, one of which is engraved with the desired marking. Thickness is controlled by adjustment of the gap

between the rollers. The depth, size and shape of the patterns largely determine the magnitude and direction of reflection – from almost clear to completely obscured. Gopal Glass Works produces a range of traditional and contemporary designs (e.g. linear, geometric, organic, floral...) in clear, coloured and mirrored form, and in 3–8mm thickness. The company's wired glass (made by infusing wired mesh in between two glass layers) offers additional security and safety – it does not splinter if broken – and is produced in 6mm and 8mm thickness. Gopal Glass Works' rolled glass, widely used for photo framing, is produced in 2, 2.5 and 3mm thickness, in both clear and tinted varieties.

New blood

A third-generation member of the family business, which now employs 1,000 people, Purvish Shah joined Gopal Glass Works after completing a masters in entrepreneurship management. Since 2006, his areas of focus as a Director have been technology, strategy and innovation at the company, with responsibility for looking after plant ▶



The new solar glass factory boasts a 150tpd furnace capable of producing all types of photovoltaic glass.

operations, resource optimisation, new product development and diversification opportunities.

Demand for flat glass is “robust in India” and the market is currently growing, reports Mr Shah. “Per capita consumption is pretty low compared to the world average of flat glass usage, so there is ample opportunity.”

Under Mr Shah’s watch, Gopal Glass Works is “at the forefront for technology adoption,” able to produce different colours of glass simultaneously from its multiple furnaces. “For furnace design we have

preferred [to use] SORG who are one of the best in efficient furnace design,” he attests. “With SORG we have done two projects and have a successful partnership.”

Other suppliers are “more or less domestic-based,” but “the logic to procure the technology is not limited to demographic boundaries,” Mr Shah underlines. “There is a concrete process of project identification and the selection of right supplier who can offer the desired solution.”

Solar glass

Challenges to Gopal Glass Works’ patterned/wired glass business include “inflation, cheap and subsidised supply from China and the [fact that] patterned glass usage is very niche and limited,” acknowledges Mr Shah. Therefore it seems expedient that in 2021, the group conceptualised a project to

diversify into solar glass.

“The biggest motivation was the demand and awareness for green energy business,” says Mr Shah. “India [receives] a lot of sunshine and solar photovoltaic modules are the ‘need of the hour’ to mitigate carbon emissions [from traditional energy sources].” Gujarat state is the hub for Indian solar module manufacturing facilities, observes Mr Shah, therefore “all the solar photovoltaic module manufacturers are our potential customers.”

The basic manufacturing process of solar glass is similar to Gopal Glass Works’ traditional flat glass operations, “as both are rolled glass,” notes Mr Shah. “The only difference is iron content, which is much less in solar glass.”

Commissioned this year, Gopal Glass Works’ new state-of-the-art fully-automated solar glass factory is equipped with a 150tpd furnace to produce all types of solar photovoltaic glass, particularly small sizes of anti-reflective coated and non-coated glasses.

“We announced the start of our new solar glass manufacturing plant at our group entity Gobind Glass & Industries [acquired by Gopal Glass Works in 2012], thus becoming the second Indian manufacturer of solar glass,” explains Mr Shah.

“There is huge gap [in] solar glass manufacturing in India,” he continues. “We have a capacity of 1GW with a market demand of 20GW per annum in the country. It will not be a challenge for such a small capacity.”

The majority of equipment at the factory was designed and supplied from Europe, “with the latest and sophisticated technology,” according to Mr Shah. “Suppliers selection was based on the expertise of the subject their reliability and cost effectiveness.”

The solar plant employs around 250 people – “We have an experienced team and have hired a talented pool from the industry,” states Mr Shah. “With the country’s focus on green energy and CO₂ mitigation, India is poised to take the lead in the solar sector in the coming future.”



The All India Glass Manufacturers' Federation
invites Project work

on

Green Energy via Solar Glass

विषय: सोलर ग्लास से हरित ऊर्जा

Project can be supplemented by a Model / Essay / Poem / Drawing / Photography

Send Entries at info@aigmf.com
Last Date of Submission: 25th July 2023
(International entries are welcome)

GRAND PRIZE:
Stand a chance to win ₹25,000
and publication in our magazines

Salient Features of Glass:

- Transparent
- Sustainable
- Fully Inert
- 100% Recyclable
- Adds to overall Décor
- Enables Communication
- Eco-Friendly

Top 100 entries get a specially designed 80 Years AIGMF Glass Mementoes

1st Prize ₹25,000
2nd Prize ₹15,000
3rd Prize ₹10,000



Age Group: 7-24 Years



Winners will be announced on:
INTERNATIONAL YOUTHDAY
12th August 2023

Best entries will be published in:




and at: www.aigmf.com

SUPPORTED BY:





TERMS & CONDITIONS:

- The entrant should be aged between 7-24 years
- Only one project per applicant, either neatly hand-written or computer typed or animated work needs to be submitted with self-declaration about the ownership of the project
- All entries need to be mailed at info@aigmf.com with any Photo ID issued by the Govt. (as Address and Date of Birth proof) or Passport or School/College ID, along with email ID and contact number
- AIGMF has the rights to use the submitted entry for its social media channels, events, newsletters, publications i.e. Kanch, Glass News and Glass Worldwide, reports, etc.
- Any false information provided within the context of the contest by an entrant, concerning identity, address, telephone number, email address, ownership of write-up or non-compliance with these rules, will result in the immediate elimination of the entrant from this contest
- The last date to submit the entries is 25th July 2023 (Date is subject to change)
- There is no entry fee for this contest



Responsibility for the future

Strongly focused on environmental, social and governance business practices, Gopal Glass Works consumes more than 50% of its power from renewable energy sources (including wind and solar), and the company has made several investments for achieving energy efficiency, resource

optimisation and environmental protection. "We are extremely conscious of our environmental impact," states Mr Shah. "We were one of the earliest to install wind turbine and rooftop solar panels. We make a conscious effort to reduce our water consumption."

As the Hon. Treasurer of the All India Glass Manufacturers' Federation (AIGMF) and a previous executive committee member of the 'umbrella organisation' for all segments of the Indian glass industry, Mr Shah takes

an active role in a body that he believes plays a "vital role" in the betterment of the country's glass manufacturing – enabling meaningful representation of "the industry's issues with the government and different organisations."

Being a member of the AIGMF "helps in understanding the different glass manufacturers' aspects of business and helps in getting information on current trends and the direction of glass technology," he adds.

With a whole new business strand to future-proof, Gopal Glass Works stands to benefit from this forward-looking approach to sharing know-how and staying abreast of the latest developments.

"We are a growing company with high ambition and a family of glass technocrats who are hungry for success," concludes Mr Shah. ●



The rolled glass process at Gopal Glass Works.

Further information:

Gopal Glass Works Ltd.,
Ahmadabad, India
tel: +91 79 26421851
email: sales@gopalglass.com
web: www.gopalglass.com

GLASS WORLDWIDE DIGITAL ARCHIVE

Sponsored by



The Digital Archive of past and current issues is presently available free of charge on our website alongside Hot Topics news, highlights from the latest issue and the Virtual Marketplace.

www.glassworldwide.co.uk

