

# Libbey:

# Industry needs more collaboration



**MR** Chandra Mangalagiri is a true glass industry veteran. He started in his current role with tableware industry specialist Libbey Inc. at the beginning of 2019 after a 25-year career in the industry.

He has worked in a variety of glass sectors, and been employed by notable companies such as Owens Corning, Corelle Brands (formerly known as World Kitchen) and Corning Inc. His roles have included process engineering, operations management, project management, and roles in product and process R&D. He has also worked with a variety of glasses such as LCD glass substrates, Valor Glass in pharma packaging, Gorilla Glass in speciality, Corelle, Pyrex and ClearFire in tableware.

“I’ve been fortunate to have been exposed to several different glassmaking sectors and learned the specific challenges and opportunities in each of them.”

Libbey is a familiar name in the glass industry. It celebrated its 200th anniversary in 2018 and



▲ Chandra Mangalagiri.

has grown globally in the last three decades. The tableware manufacturer is headquartered in Toledo, Ohio, USA and manufactures glass from six locations. It has two facilities in the US (Toledo and Shreveport), two in Europe (Leerdam, The Netherlands and Marinha Grande, Portugal) as well as facilities in Langfang, China, and Monterrey, Mexico. The Monterrey facility is the group’s largest with half of the workforce.

In 2018 the group sold about 1.2 billion pieces of tableware around the globe, with more than 70% of its sales concentrated in North America. The group supplies tabletop products through three sales channels: foodservice, retail, and business-to-business. Libbey is also in the food service business, with products being the largest share of its sales and customers. This sector includes restaurants, bars, hotels, cruise lines, resorts and healthcare facilities. Its retail channel sells to traditional brick and mortar establishments as well as direct to customers through its strong

Libbey Vice President of Global Engineering, Chandra Mangalagiri believes the various glass sectors should collaborate. He tells Greg Morris such partnerships would drive the industry forward.

glassmaker must make furnace rebuild decisions 2-3 years in advance for an asset that will operate for over ten years. I consider this to be an inflexible process. We are investing a large amount of capital for an asset that will supply glass for much longer than the near term that we can forecast market trends. For example, the restaurant industry trend has moved from 'dine-in' to 'take-out' to 'delivery'. Although you can see some macro trends, it is hard to pinpoint a forecast of what the product demand will be."

Three quarters of the total global glass production comes from four large segments – container, flat glass, tableware and fibre. The majority of these products have existed for more than a century, with glass manufacturers still making the same type of glass.

Some glass products such as TV picture tube has seen disruptive replacements like LCD glass substrates which allowed considerable ongoing growth and profitability because of product innovations, but this is not the case in other sectors. On top of this, there is an excess of capacity and too much competition in the market resulting in commoditisation, lower prices and profits.

Mr. Mangalagiri believes this will force players in the industry to ask themselves 'how are we differentiating and what product extensions are we introducing so that we can continue to survive in this market where demand for volume exists but the margins do not.'

He believes this is why innovation in the glass industry is critical.

"Step change innovation is needed in both the product space and process technology. Industry has seen process optimisation and automation in the last 2-3 decades but has seen very little product development."

While speciality glass companies like Schott, Asahi and Corning invest heavily in R&D and show continued product innovation in the glass and materials industry, the traditional glassmakers cannot afford to do so.

What can traditional glassmakers do to sustain profitability and grow markets?

"Different glass companies need to come together to collaborate and conduct joint product/process development where there is no competition. This is almost non-existent today and is a significant opportunity," states Mr. Mangalagiri.

He believes the glass industry can learn from the tech sector where there is more collaboration which has propelled that industry forward.

There has been a reluctance to collaborate in the past because of intellectual property (IP) protection concerns.

online e-commerce presence.

Libbey's strengths include its global reach with customers in more than 100 countries around the world, outstanding customer service and history of innovation. Its focus on new product development was reflected at a national restaurant show (NRA) last year where it launched 295 new items.

"This demonstrates that we really put product innovation at the forefront," states Mr. Mangalagiri commenting on the volume of new products.

"When you think of Libbey, you think of best in class products and service. We believe innovation is critical for sustaining momentum with customers and our superior service drives repeat customers."

## Challenges

The glass industry faces challenges in the upcoming years in terms of emissions regulations. On top of that, as any glassmaker knows, there is the ongoing challenge of working in a capital and energy intensive industry.

"In addition to the regulatory challenges, a

▲ Libbey is headquartered in Toledo, USA.

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“People are more conservative with sharing in the glass industry because they are concerned about giving away trade secrets and a fear of losing IP. Joint development which is not new, would help share costs, risks and propel advancements much faster than any one company’s investment.”

On top of this, “glass manufacturing decision makers need to be more prominent at industry events,” Mr. Mangalagiri suggests.

While glass scientists, technical managers and operations managers are usually prominent at conferences, the people who decide on capital investments are noticeably absent.

“You always see the same people at conferences! The decision makers in the glassmaking industry don’t attend conferences where we talk about problems. We need to educate the decision makers (typically executives of companies) about why these collaborations are necessary in the industry.

“If decision makers are in the room, the true challenges will come out, and a real discussion, with action, will occur. That doesn’t happen today.”

While there have been technology advances – sometimes in part to equipment supplier innovations – the industry will advance forward if there was more participation from the decision makers. These decision makers tend to work in isolation and push their technical teams to figure out solutions for challenges, and reduce costs and capital argues Mr. Mangalagiri.

“We have to learn from the tech world and change our perspectives.

▲ Libbey has six plants globally and manufactures a variety of tableware glass.

“Libbey is willing to work with other non-competing glass companies, industry suppliers, and with academia to drive innovation.”

### Customer push

He believes more innovation will occur in future thanks in part to customer and end consumer push for novel and environmentally friendly products.

Years from now people will still be drinking beverages and eating food from glass - its intrinsic health and environmental qualities will ensure this. But to drive innovation the glass industry must change its way of thinking to drive future technology improvements.

“Innovations will come from what consumers want to see,” he states.

He cites Libbey’s innovations, such as its ClearFire glass which digitised the forming process and its OptiMelt process which, in partnership with Praxair, has reduced energy in the glassmaking process as examples of this. In addition the company has transformed itself from a US centric to a global glassmaker.

In 2017 it also launched an E-commerce retail business which can sell direct through Amazon and other online retail platforms in a bid to capture a larger online audience.

“These are examples of how we are staying ahead of the game. The glass industry must come together to do the same.” ■

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