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Preferred international journal of AIGMF in association with KANCH www.aigmf.com



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▶ Since 2011, formal cooperation with the AIGMF and Kanch with the goal of providing the Indian sub-continent with the best possible forum for the exchange of news and views between glass manufacturers and their suppliers. Glass Worldwide's international readership also benefits from being informed about the latest developments from the important Indian market.





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Indian visionary gains global recognition

John Wallis was among the invited guests at this year's Phoenix Award banquet in Berlin to celebrate the achievements of the 2013 Glass Person of the Year, Chandra Kumar Somany. They spoke prior to the event about C K's pride at receiving this recognition on behalf of the HNG family.

could be forgiven for slowing down the pace of his busy lifestyle. His sons Sanjay and Mukul, together with grandson. Bharat, now head an experienced management team at India's leading glass container producer, a successful float glass business and a revitalised glass six decades at the helm of Hindusthan National Glass & Industries Ltd. however, C K still maintains a close involvement with one of the international glass industry's most enduring family dynasties. Now, his achievements have been recognised by the Phoenix visionary entrepreneur as the 43rd 'Glass Person of the Year' and staging a celebratory banquet in Berlin in his honour, surrounded by close family and friends.

creation and constant development of HNG over a period of more than 60 years. Having started with a semiautomatic glass container production facility. HNG was India's first to convert to fully automatic operation

Now a spritely 80 years of age, C K still maintains an active interest in the company's affairs as nonhis vision, a constant drive towards innovation and the adoption of the latest technologies that the HNG Group has emerged as a market leader in the Indian glass packaging industry. The group now operates seven fully automated container (HNG Global at Gardelegen), producing more than 4800 tonnes, day of glass

Separately, the group also has a 700 tonnes/day float glass unit. which is soon to more than double

furnace and production line. Leading Turkish float glass producer, Trakya Cam Sanayii AS has recently created a joint venture with HNGFL and the Somany family, bringing valuable expertise in the development of valued-added, high performance processed materials for automotive and architectural use. Mr Somany confirms that Sisecam Group subsidiary Trakya Cam will be responsible for running a proposed specialist processing facility alongside the float plant. Both parties have a 50% shareholding in the venture, which is expected to exploit significan expansion opportunities in the local Indian marke "It is very different to HNG's glass container business in terms of products, manufacturing methods and customer requirements but I think we have managed it very well says the HNG non-executive Chairman.

Collectively, the extended HNG family has now grown to include approximately 14,000 people in India and

VISIONS NEARING REALITY

"Being the first Indian to receive the Phoenix Award makes me extremely proud on behalf of my nation, as well as everyone within the extended HNG family" says C.K. Somany. "It has been a collective effort that has resulted in this recognition, involving many colleagues





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Regional focuses

Market reports



Indian flat glass revival on the cards

Via exclusive interactions with a number of leading producers such as Asahi India Glass and Gold Plus Glass, Sunder Singh tracks the development of the Indian flat glass industry.

the lowest per capita users of float gises across the gibbs. In comparison to india, most Asian countries have a significantly

higher per capita flat glass usage.

population will inevitably lead to

GROWTH PANGS The local flat glass industry has

higher per capita consumption and

strong growth for the country's flat.

The second most populated country on the planet, India is often considered a nation of contrasts by many autistians. To an actant, the same is true of the country's flat glass industry. Despite a number gass industry. Lespite a number of investments in the infrastructure setter and a neveral in the construction industry. India has not acced a single float glass plant in the past two. in March 2014 was the last addition! with the cosum of a fical furnace by glass industry.

Served by eight fleat glass lines from been going through a lean patch for

five producers, the 5350 tennes/day - the last three years. A change of Indian float glass market is one of the - government in New Delhi in midmost under achieving. In fact, during most under achieving. In fact, during the last two years, most producers have been running at leve capacity utilisation rates, resulting in an output kwel of far less than 5000 tonnes/

Even taking the theoretical Even toxing me tracecical \$360 inmestder capacity into consideration, the annual output of float glass at about two million tonnes for a population of 1.29 billion results in a meager 1.52kg/year per

announcement of 100 smart cities and robust economic demand is bringing life back in stalled construction projects across the country. The flat glass industry is



register healthy growth rates for the last three quarters, which should auger wall for the future.

hindrance in the development of the domastic float glass industry. A few years ago, it was imports from Chine that formed more than 10% of total float glass consumption ficet class from the Widdle Fast has been increasing at a brisk rate. Although the Indian government has imposed

brisk rate. Although the Indian government has imposed anti-discripting and safeguerd duties, imports from these countries still take place. In a move in late 2016, three prominent glass producers (Sarti Gatan India, Gold Plus Gase Industry Ltd and IRIG Float Glass Ltd) flod a collective application. to the indian authorities alieging dumping of float glass.



FOCUS ON INDIAN SUB-CONTINENT > India

Indian glass industry set for 'brisk action'

Although India's flat and container glass sectors have not been the subject of major capacity expansion or the entry of new players in recent times, both are gearing up for brisk action. With the GLASSPEX India exhibition returning to Mumbai on 13-15 March 2015, Sunder Singh evaluates the leading players in both sectors.

Four months is not a long time for the revival of a country's industry but in its first few months in office, the national government in New Delhi has made remarkable progress with respect to India's moribund economy and struggling industries. Economic indicators, which were falling quarter years, have started to improve.

Signaling a turnaround for the economy and adding to the current festive cheer, the first quarter (April-June) GDP growth came in at a higher than expected 5.7%. This latest growth performance is the highest for the last nine quarters. The Q1 GDP growth has been buoyed by coupled with a strong showing by the local mining and construction sectors. Industries that were running at very low capacity utilisation rates are redrawing their plans against the prospect of healthy anticipated demand.

GLASS CONTAINER TRENDS Dominated by Hindustan National Glass, Piramal Glass and AGI Glasspac, the Indian glass container industry involves a dozen mid-scale producers besides these three. HNG is in the process of stabilising

additions at its existing Nasik unit and commissioning of the greenfield project at Naidupet, Andhra Pradesh. Of the other players. Piramal and Janta Glass have added capacity and modernised their production facilities. Two small glass container units belonging to liquor manufacturers Mohan Meakins and Khoday Glass faced closure due to their operations becoming uncompetitive.

The Indian glass container industry has been facing the consequences of a double-edged sword; on one side, lower growth in end user segment and oversupply in the glass market and on the other hand, rising prices for raw materials and fuel. Major end user liquor and beer growth had contracted from double to single digit in the last two years. Following the change in government office in New Delhi and resulting economic rebound however, producers are gearing up for brisk business in coming year.

The country's production and supply of container glass increased steadily in line with demand until 2012 (10600 tonnes/day). with capacity additions by all key players pre-2012 years, combined with sluggish demand, leading to >



low capacity utilisation. With steady demand growth anticipated in the coming years and no major extra capacity additions expected, existing capacity utilisation is expected to remain at healthy levels

Company	Location	Capacity (tonnes/day)
HNG	Pan-India	46(1)
AGI Glasspac	Andrea Pradesh	1600
Firamal Glass	Gujarat	860
Haldyn Glass	Gujarat	320
Mohan Meakin	Utter Pradesti	240
Surrise Glass	Gujarat.	220
Jente Glass	Gujarat	220
Universal Glass	Uttar Prodesti	215
Hyaline Glass	Madhya Pradesh	150
Vitrum Glass	Mirrini	130
Fragati Glass Industry	Gujarat	130
Enid Glass Industry	Gujarat	120
Small-scale Firozated-based units	Uttar Pradesh	900
Cumulative capacity of all remaining small producers	Pan-India	700
TOTAL		10605











Regional focuses

Interviews with figureheads



Indian visionary gains global recognition

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aving recently celebrated his 80th birthday, C K Somany could be forgiven for slowing down the pace of his busy lifestyle. His sons Sanjay and Mukul, together with grandson, Bharat, now head an India's leading glass container producer, a successful float glass business and a revitalised glass Hindusthan National Glass & Industries Ltd, however, C K still maintains a close involvement with one of the international glass industry's most enduring family dynasties. Now, his achievements have been recognised by the Phoenix Award Committee, confirming this visionary entrepreneur as the 43rd 'Glass Person of the Year' and staging a celebratory banquet in close family and friends

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C K still maintains an active interest in the company's affairs as nonexecutive Chairman. It is through innovation and the adoption of the latest technologies that the HNG Group has emerged as a market leavier in the Indian glass packaging industry. The group now operates seven fully automated container plants in India and one in Germany fi-ING Global at Gordelegen)

producing more than 4800 tonnes/ Separately, the group also has a 700 tonnes/day float class unit which is soon to more than double

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Representing the interests of India's glassmakers

Sanjay Ganjoo, Chief Operating Officer at Asahi India Glass Ltd took over as President of the All India Glass Manufacturers' Federation in 2014. Every major local producer of flat and hollow glass is now an AIGMF member, with the organisation successfully representing the interests of the industry and its products.

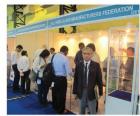


Sanjay Ganjoo has spent his entire Ltd, the largest integrated flat glass company in India, which produces some 1200 tonnes/day and consumes about 18,000 tonnes of glass/month. Having originally joined the company's automotive glass operation near New Delhi as an engineer in 1989, a series of promotions through the management structure led ultimately to Mr Ganjoo's appointment as Chief

GLASS WORLDWIDE > issue sixty two 2015

of the All India Glass Manufacturers' Federation in September 2014 and is currently just over halfway through a two year term of office. It had been a key goal of the AIGMF and Mr Ganico personally to involve India's flat glass community within the previously largely hollow glassfocused organisation. Today, this goal has been realised, with a specialist Architectural Glass Panel having been created and every major flat glass manufacturer now a member. As a result, it has been possible to bring more flat glass issues to the AIGMF agenda, where they can now be taken up by the glass industry as a whole, instead of on a company-bycompany basis.

"We are pushing forward with building regulations for India, codes that have to be properly defined" Saniay Ganino explains, "So we are trying to bring in these rules and promote architectural glass by among users." To support these efforts, the AIGMF organised a conference entitled 'Use of glass in buildings - Facades of the future and a lot of value in terms of saving resources.">



the need for regulations relating to human impact, fire safety and energy' during GLASSPEX India 2015 exhibition in Mumbai last March, "India's architectural specifiers still have very limited knowledge about the use of glass as a facade there are many concerns but we are seeking to bring clarity."

According to Mr Ganjoo, the Architectural Glass Panel is currently promoting flat glass for use as a partition walling material in competition with plywood, brick and plastic, as well as for firewall duties. "Glass can be a good replacement for these materials because it is 100% recyclable and has







Technology topics

Latest technical advances



Vial forming innovations from Indian specialist

Having improved production capacity with additional manpower, a different building and the introduction of advanced tooling machines, OCMI India is working to optimise its glass processing equipment, starting with the 16 station TAM vial forming machine, which represents the Ahmedabad factory's main product. Alessandro Crescentini reports.

Originally manufactured by OCMI India the 16 station TAM16 vial forming machine was created to satisfy the expectations of local vial manufacturers looking for a simple productivity and a reasonable price Increasing local quality standards the latest developments and improvements to be applied to it machine in close co-operation with the Engineering Department at OCMI's Italian headquarters.

With a maximum mechanica speed of 1700 pieces/h, the recently announced TAM114 indexing rotation machine provides the same vial quality of European-made continuous rotating forming machines like FLA20 and FLA35 models, manufactured at OCMI's Italian facility. Several of the innovations applied to this machine are visible in the main mechanical, electronic and pneumatic components, in the devices aimed at improving glass tubing operations and to obtain the best final product in the context of hydrolytic resistance.

The control of machine functions is performed via a user-friendly touch screen, developed with the same graphics concept of other OCMI machines produced in Italy and France

The TAM114 development completes the OCMI Group's equipment portfolio by covering the needs of factories more oriented to index rotation machines.

CAMERA INSPECTION

On demand, the forming machine can be equipped with the OPTIVIAL dimensional control, OPTIVIAL software can be implemented in the touch screen to attain a fully integrated control system from the cabinet.

This camera system was developed with the same concept



of the device already available for continuous rotation vial machines and allows users to check production in real-time, to detect any type of entering problem in the chucks and to verify accurate machine settings. For the most advanced

installations, the TAM114 machine can been adapted for connection to the ROBOGLASS automatic loader, in order to minimise manual handling of

ADVANCED LUBRICATION The oil pump design adopted for

forming tool lubrication and all pneumatic components are sourced rom leading European suppliers and the latest plunger lubrication system allows users to spray oil from inside machine in a clean working condition.

without the risk of glass contamination

design was realised, with special attention given to safety conditions. In addition, the completely renovated chucks are manufactured according to OCMI vial and ampoules continuous rotating machines, in order to make the centering operation easier and more accurate.

Mechanical improvements have been applied to critical operations like glass tube bursting and cutting, where 'smokes' must be removed as much as possible from the

OCMI and OCMI India can also provide post-forming lines, specially conceived to receive the output of two TAM114 forming machines. The first complete line was recently installed at one of India's biggest glass factories located in Maharashtra

Alessandro Crescentini is Sales Manager at OCMI-OTG

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web: www.ocmigroup.com

German quality precision parts from India

An established supplier to GPS and Verallia factories worldwide, Accuramech has recently made its extensive range of precision IS machine parts available on a global scale. Viral Modi, Managing Director, spoke exclusively to Glass Worldwide.

ocated in the Indian engineering hub of Pune, Accuramech's roots date back to 1997 when a HBD, with the sole purpose of supplying IS machine parts to GPS America, a Saint-Gobain company.

In 2009, HBD was acquired by Saint-Gobain and renamed Accuramech. This transformation of the parent organisation into a multi-national firm provided the capability to leverage the technical knowhow of Verallia. As a result of Saint-Gobain's involvement. Accuramech extended its customer base to include European plants as well as North American facilitie and GPS Glasproduktions-Service in Essen, Germany Accuramech's relationship with GPS has seen busin double between the two companies over the past





EXPANSION FOCUS

Accuramech is headed by Viral Modiwho previously worked at three fferent Verallia plants in North America, His initial priorities were wide range of parts to offer, not just to Verallia but also to other glass mpanies. The focus now is to

The core values of Accuramech are 'Highest quality, customised service through new development and competitive pricing'. As a result of substantial investments in R&D and a 50% increase in staffing levels in 2012, the company is now in a position to make a strategic decisio to broaden its scope and make its parts available to other glass and IS nachine manufacturers. "We were waiting to fulfil our existing customer eeds and have a wide range of parts in our catalogue to offer to external stomers" explains Mr Modi.

Continuing the successful operation between Accuramech and GPS remains a key priority. "In fact, we are thinking of doing bigger things together. Not just parts but more assemblies, bigger and heavier parts"

GPS has also provided positive feedback to the co-operation. "They are supplying from India but it is German quality - that is the key of sales at GPS. Sandy Howells. Marketing Manager, also confirms tha on quality: "For all incoming parts, we put them to the same standard quality test. All vendors have to meet the quality criteria whether they are from our requirements and together, we

achieve what GPS is renowned for





Global events coverage

Conferences and exhibitions

Potential visitors look to Glass Worldwide for the latest news on conferences, as we preview and review more events than any other international magazine.



5th glasspex INDIA and 1st glasspro INDIA 2017

glasspex and glasspro take place at India Expo Mart, Greater Noida next February. Companies involved in glass equipment manufacture, the glass industry and the glazing trade can now register for both trade shows.

The fift glasspex INDIA vill be staged from 23 to 25 February 2017 at India Expo Mart, Granter Noda, dose to New Delhi. Conceptualised on the lines of its flagsphs show, glassate Disseldorf, glasspex INDIA vill showcase the entitle array of glass, ranging from production to processing and application, offering trade visitors technological innovations, progressive processing techniques and the latest trends in class applications.

glass applications.
glasspox INDIA has become
established as a platform for the
exchange of ideas, making contacts
and business deals in the Indian
market. Exhibitors from 13 countries
(India, Germany, France, the UK, Italy,
Sinappore, China, Tairvan, Crich)

Republic, Austria, Iran, Finland and the USA) participated in 2015 and expressed their satisfaction with the quality of the 3222 visitors. Exhibitors in 2015 included

Accuramech Industrial, AIGMF,
AMRSE OF J Dichter, BOF, Bottero,
Carmat, Cenacon, CNUD, Dombusch,
Dubhriam Meury, Electroglass, EME,
Emmed, Eriaz, Eurotherm by Schneider
Bectric, Pickert & Winterling, FC,
Frivas, Plammalie, Fosiba, Forma,
Lutroni, Gardent Denver, GMMR, Glass
Service (Czech Republic), Glass Service
Bloby, GPS, Grapholde, Heat
Bloby, GPS, Grapholde, Heat
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Mascot, Mingle, MSK, PD, Berfactories,



Dignitarios at the official opening of glasspox INDIA 2015. Glass Worldwide

OCMI, Olivotto, Pennekamp, Pennine, Pneumofore, Poco, PSR, Quantum, Raforix, Ramsey, Raytek, Rondot, Saint-Gobain SEFPRO, Sharmik, Sheppee, Siemens, SORG, Special Ceramics, SGS, SVA, TECO Group, Tiama, VDMA, Waltec. Z & J. Technologies, Zecchetti and ZIPPE.

The complementary event, glasspre INDIA international exhibitor for flat glass processing and products - will open its doors at the same time in Delhi, showcasing the latest trands and innovations in flat and processed glass products and spicitations. Also on display will be the latest glass processing solutions, tools, auxiliary products and services.

"The motivation behind the launch of sister event glasspro INDIA is the endeavour to provide a platform dedicated to strengthen the flat glass sector" explained Birgit Horn, Director of glasstec at Messe Düsseldorf.

"Flat glass and its applications are majorly used in the control of sector, which represents the dominant ond user market. The Bulld Fair Alliance, with its concept of providing integrated building solutions, is the perfect complement for the exhibitor and visitor profiles of glasspro INDIA."

Build Fair Allience is an alliance between global withbloor organism Mease Dissoldorf India. Nürnberg Messie India, Messie Flankfurt, FSAI and ISHRAE to co-locate their events under on end to provide one-stop integrated building solutions to stateholders of the Indian construction Indianty. Fearlist Tate app and of the Build Fair Alliance are: ACREX India 2017 covering HVAC, refrigeration and building automation systems; EHVSTERRAU FRONTALE INDIA 2017, focusing on facede and fenestration products; FSIE 2017, highighting the safety and security solution; SEI 2017, howasing purchibing systems; and glasspro INDIA 2017, encorassing solutions and innovation for the fat glass industry. III

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email schreiberg@messe-duesseldorf.de
web: www.glasspex.com or www.glassproindia.com

WHAT GLASS CAN DO FOR YOU

AIGMF will organise its 12th international conference with the theme What glass can do for you' alongside the fifth glasspex INDIA and first glasspor INDIA exhibitions. This bleanual two day conference on 23-24 February 2017 will cover topics on various glass industry sectors, namely flat, solar processed, container and tablewere, featuring indian and international speakers from the glass industry and related consciences.

A detailed conference programme will be included within the January/February 2017 Issue of Glass Workbwide, the media partner for the conference and preferred international journal of the AIGMF in association with Kanch.

When available, more information about the conference and speakers can be found at www.aigmf.com.





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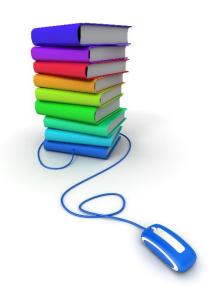






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Complete coverage

- On average per issue, Glass Worldwide publishes 80 editorial pages and 70 pages of advertising.
- ► 78% of readers confirmed that they use advertising and editorial content from Glass Worldwide to influence their selection of products and services.



Opportunities for brand exposure







Emphasising the successful AIGMF/Glass Worldwide partnership, a selection of comments from AIGMF dignitaries include:



"Glass Worldwide is the *only* magazine outside India that I read cover to cover. Outside India, it is easily the industry's best magazine in my opinion." Sanjay Somany Vice Chairman & Managing Director of Hindusthan National Glass & Industries (HNG)



"We subscribe to several copies of Glass Worldwide because it's the global industry's most useful magazine. Our senior people go through every issue because it is very informative on the industry's latest developments." Vijay Shah is Executive Director and Chief Operating Director of Piramal Enterprises Ltd and Director of Piramal Glass



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"Glass Worldwide brings us expert information and education, such as new processes, development and equipment, without which we would be starved. We need this knowledge to continue to make better quality products at lower cost."

Pradeep Kheruka, Vice Chairman at Borosil Glass Works

"Glass Worldwide contains fantastic articles and on so many occasions I have read things that I did not know previously. Glass Worldwide brings knowledge to this part of the world where we are trying to understand the global industry and are just starting to get into the science of manufacturing. Sanjay Ganjoo, COO of Asahi India Glass Ltd



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"Glass Worldwide is the magazine that keeps us updated on the latest trends and information from the glass industry worldwide. Glass Worldwide is very popular among glass professionals in India and is often a common point of reference and discussion." Mr S S Parmar, Director of Vitrum Glass (Empire)

"Cooperation with Glass Worldwide is very good because it is recognised as the best glass magazine outside India." Sushil Kumar Jhunjhunwala, Managing Director of La Opala RG Ltd



Thank you for your time



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