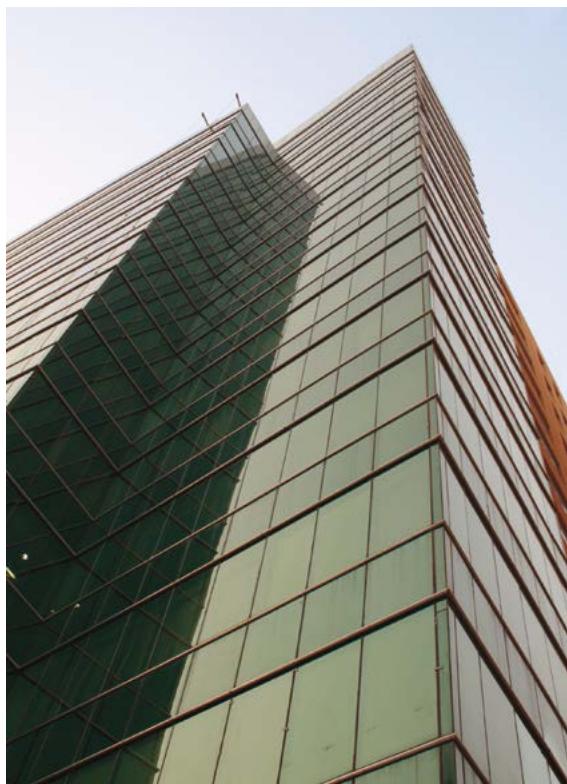


# Indian float glass industry review

The Indian flat glass industry has been dominated by three companies for the past two decades, namely Gujarat Guardian (a collaboration between Guardian Industries and local business partners), Asahi India and Saint Gobain. While the former still operates with a single plant, the other two have each added a second float line. But faced with ever increasing demand from this vast country, some local businesses have also jumped into the fray, starting three float lines in the past year. Another four lines are in the pipeline, as freelance correspondent Sunder Singh explains.

**T**he total volume of float glass manufactured in India is approximately 1.2 million tonnes annually, of which almost 77% is consumed domestically. Demand for float glass, barring the economic slowdown in 2008-09, has been increasing at a compound annual growth rate of between 15% and 20% in the last two to three years, against a global growth rate of close to 4%.

Local demand is divided into automotive (5%) and non-automotive (95%). Although consumption grew by 18% in the period to 2007, a difficult time was experienced in 2008-09, when aggregate sales declined by 4%. In 2009-10, the industry recorded a growth of 13%; however, this year-on-year growth reflects a 'low base effect', given that there was negative growth in 2008-09, due mainly to reduced demand during the previous year.



Skyscrapers dominate the Gurgaon skyline.

## PROMISING FUTURE

There is a huge market for float glass in the country, resulting from rapid growth in the housing and automotive sectors. Considering the fact that India's per capita glass consumption is only 0.7kg, compared to an average of 8-10kg in other developing economies, rapid urbanisation and an equally rapid growing automotive sector offer tremendous growth potential.

Glass consumption for architectural purposes has increased significantly in the last 10 years, with strong demand for structural glazing and curtain walls, resulting in a phenomenal increase in the availability of flat glass in terms of type, composition and characteristics. Safety, too, has become a major concern in all new projects. Additionally, Indian architecture in recent years has evolved progressively towards the use of environmentally beneficial building materials, with an increasing number of projects now applying for green building certifications. Furthermore, developers have become more demanding in terms of glass performance and processing quality. This has led to the increased use of high performance glass in contrast with the ordinary reflective glass that formerly dominated the landscape in India.

Manufacturer	Market share (%)
Saint Gobain	39.3
Asahi India	28.6
Gujarat Guardian	20.0
Gold Plus Glass	10.3
Hindusthan National Glass	1.6
Sejal Float Glass	0.2

Market share of float glass producers in India (March 2010).

## SAINT GOBAIN INDIA

Located in the southern part of the country and covering an area of 177 acres, Saint Gobain India's glass complex houses two float lines, with a cumulative daily manufacturing capacity of 1500 tonnes, making it India's largest producer of float glass. The modern plant also features automotive processing lines for toughening and laminating windscreens, scalable to two million car sets, a solar control reflective glass manufacturing facility to produce on-line coated glasses, a mirror processing line which makes eco-friendly (copper-free, lead-free) mirrors and a magnetron coater to manufacture high performance energy efficient glasses.

The company is planning another world class complex – on a larger scale – at Bhiwadi, Rajasthan. "We chose Rajasthan because northern India accounts for a third of the company's sales" comments South Asia Director, Mr B Santhanam. "We will save on transportation costs, as materials are currently shipped from our existing plant to north India." SGGI generates just under a third of its total sales from northern and western India. The site was also chosen to accommodate the needs of the fast growing industrial corridor planned between Delhi and Mumbai.

The first phase of the Bhiwadi complex will involve an investment of \$225 million. It is planned to be operational by the first quarter of 2013. The next phase would see investments in other facilities, equipping SGGI to provide end-to-end solutions to the architectural, automotive and solar industries. >



Modern glass buildings provide the level of comfort required by the latest generation of Indian executives.

### ASAHI INDIA

This group's venture into float glass manufacture started in 2001, with the acquisition of Float Glass India Ltd (FGI) which, in 2003, merged with AIS. Today, AIS Float Glass produces a wide range of quality value-added products and is a premier supplier of float glass in the country. AIS Float Glass has two manufacturing units located at Taloja (Maharashtra) and Roorkee (Uttarakhand), with a combined capacity of 1200 tonnes/day. Asahi India has a 28.6% share of float glass sales in India.

Subsidiary company, AIS Auto Glass dominates the local automotive glass business and has continued to maintain a leadership position for almost 20 years. It virtually had a monopoly in automotive glass but with Saint Gobain also entering the business, the company's market share has reduced, although it remains the most important player in the sector.

It was in 1987 that AIS Auto Glass started manufacturing toughened glass for cars. Today, it has four plants located at Bawal – Haryana, Roorkee – Uttarakhand (north), Chennai – Tamil Nadu (south) and Taloja - Maharashtra (west) and three sub-assembly units/warehouses at Halol – Gujarat, Pune – Maharashtra (west) and Bangalore – Karnataka (south). These plants and sub-assemblies are strategically located close to India's automotive manufacturing hubs and produce a complete range of automotive safety glass, engineered to global quality standards.

### HNG

India's leading glass container manufacturer, HNG Group has also entered the float glass sector, firing up its first float furnace in Halol, with a production capacity of 600 tonnes/day. The INR 6 billion plant became operational in February 2010 and has been financed by parent company HNGIL in association with International Finance Corp, a subsidiary of the World Bank and DEG, Germany, with a debt equity ratio of 60:40. The HNG Group brings over five decades of manufacturing expertise to the initiative, helping the group to become undisputed leader in the glass container business.

HNG Float tied up with Toledo Engineering Co (TECO), USA for the design, engineering, installation and commissioning of the float plant and sourced ancillary machinery from global players like CNUD and Bottero. At present, the plant manufactures clear glass but plans are also in place to make tinted glass in grey, bronze, green and blue, heat-reflective glass (soft and hard coat), low-E, low iron solar, ultra clear glass and automotive quality glasses. For further up scaling, the potential exists to add a second line to produce an additional 850 tonnes/day.

### GUJARAT GUARDIAN

India's first float glass manufacturer, Gujarat Guardian Ltd (GGL), is a joint venture between Guardian Industries Corp, USA, Modi Rubber Ltd and Gujarat Alkalies & Chemicals Ltd and commenced production in 1993. GGL currently manufactures float glass in thickness of 2mm-12mm and mirror glass, with a 630 tonnes/day float line, along with a mirror manufacturing plant with a capacity of 4.2 million m<sup>2</sup>/year.

Guardian has been trying for some time to start an independent float operation in India but joint venture partner Modi Group has opposed the plans.

### GOLD PLUS GLASS

One of India's leading glass processors, Gold Plus Glass started producing raw float materials from a 460 tonnes/day installation in 2009. Chinese company Qinhuangdao Yaohua Glass Machine Manufacture Co Ltd executed this project on turnkey basis and today, the facility offers materials in thicknesses from 2mm to 12mm.

### SEJAL FLOAT GLASS

Sejal Float Glass produces 550 tonnes of float glass/day from a facility occupying an area of 150 acres. The plant is located at Jhagadia, Bharuch District in Gujarat, approximately 8km from NH-8 and well-connected to railways and port facilities. The plant is in close proximity to raw material supplies, as well as the major consumer markets of Gujarat and Maharashtra.

### MARKET CONCERN

Float glass imports from China and Indonesia have long posed a threat to the success of Indian glass manufacturers. Nevertheless, the levy of anti-dumping duties on these imports provides some protection.

The local glass industry also faces problems of a slump in demand, excess supply and falling prices, as additional manufacturing capacity has come on stream, pushing prices down. Current demand is estimated at 3150 tonnes/day, while supply is about 3600 tonnes/day, including 400 tonnes of imports. The market for architectural glass declined by 3% in 2009, the first such decline witnessed in more than a decade. This decline has been felt more with top of the range products, mainly because many large real estate projects have been delayed.

Exports too have taken a hit because of the worldwide economic slowdown. The industry continues to export, especially to West Asia, the Mediterranean region, Australia, New Zealand and parts of the Far East but sometimes without generating profits. However, anticipating strong growth, the industry has invested in fresh capacities in other markets too, of which at least three float lines started commercial production in the last year.

The economic slowdown that hit the housing sector hard has caused a slump in demand, while the automotive sector is only now beginning to pick up again. At 10%-12% growth in consumption, the fresh capacity coming into commercial production should readily be absorbed by the market. In the long-term, there will be growth but in the short-term, a stagnation in demand is predicted.

Mr B Santhanam, Managing Director of Saint-Gobain Glass India suggests that large construction projects (shopping malls and office complexes) have not yet been revived and these projects account for the majority of architectural glass consumption. According to Sanjay Labroo, Managing Director and CEO of Asahi India Glass, along with excess supply, costs have also increased, while sales prices have failed to improve in the last nine years.

However, Amrut S Gada, Chairman and Managing Director of Sejal Architecture Glass, is confident that demand will pick up within the next year. Moreover, he believes the latest plants will operate at only about 80% capacity for some time. With the economy showing signs of revival, demand for glass will once again be back in double figures. "If there is a slowdown" Mr Gada asks "why are multi-national companies adding capacity?" ■

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