The two major segments of the glass industry in India are flat glass and container glass. Both these segments are witnessing steady growth on the backdrop of increased consumption from various sectors.

**Container Glass**

Container glass is witnessing a surge in demand from the food and beverage sector, especially from the alcohol/beer industry. Higher disposable income coupled with urban lifestyle is driving this demand and, as a result, the per capita consumption of container glass is going up. This is, however, still way less than the global average. South and West India are responsible for the increased demand for container glass in India.

Although glass is the most eco friendly packaging material, it has been replaced by...
plastic in some non-critical areas. This is even more applicable in India where the regulations about packaging are not so very stringent. These days even certain syrups are packed in plastic bottles, which should not happen ideally. The unorganized sector also provides stiff competition to the organized sector. Their customers, mostly beverage companies, are indifferent to quality or manufacturing process. As a result, the onus of educating them is on the organized container glass manufacturers. Another advantage of glass is that since glass is chemically inert it does not alter the taste of the food or beverage in it – hence it does not create any health issue. With regards to manufacturing, glass requires significantly less energy to produce than plastic and can also be recycled, thus bringing down the cost of purchase.

The use of technology

Manufacturers in the organized sector are trying to use technology in such a way that it improves the inherent characteristics of glass. This will help them compete with other types of packaging materials. They are adopting technologies such as Narrow Neck Press and Blow (NNPB), which makes glass 30 per cent lighter than with the normal manufacturing process. Another advantage that the glass industry in India enjoys is that the cost of labour is relatively lower than its western counterparts, making it competitive in the international arena.

It has come to notice that in some cases, container glass is being reused without proper sterilization – which raises serious health concerns, as well as affecting the market of container glass as demand reduces.

As a glass manufacturing unit caters to customers within a radius of 500 kilometres it is important that they have a pan India presence in order to serve a large customer base and get more market share. However, organized players often have to compete with unorganized players in specific regions where they have a strong customer base. They must also compete to procure the raw materials at competitive prices. High transport costs often squeeze the profit margin of the players. Institutional buyers bargain hard to get the best deal, leaving little room for the manufacturers.

**SODA ASH**

The profitability of the glass industry is taking a hit as the price of soda ash – which forms an integral part of raw materials for glassmaking – is becoming even more expensive. As a result, the glass industry has requested a cut in customs duty so as to tide over the crisis. It has also requested the government to allow full CENVAT credit on capital goods.

(At present it is only 50 per cent).

Moreover, increased imports of flat glass from China are causing the Indian glass industry to suffer. The industry is also witnessing some consolidation as well as capacity expansion by the big players. The glass industry as a whole is trying to reduce carbon emissions as an attempt to save the environment. In the back end the companies are trying to employ better technologies, which are more efficient and reduce wastage.

**FROM CONTAINER TO FLAT GLASS**

Of late some container glass manufacturers have started to make flat glass so as to capture the market in high growth segments. Paper, metal and plastic have taken away a certain amount of applications from glass – thus the glass industry is trying to reinvent itself in certain areas. In the last six months profitability of the manufacturers who export to foreign countries has been hit severely as the rupee has proved to be less competitive compared to the dollar. To tide over the crisis some of the companies were focusing more on their domestic sales rather than the exports. They are looking to venture into ‘tier 2’ cities for better growth opportunities. They are also looking to strengthen their after sales service and improve their product offerings. Moreover, some of the companies are also starting to invest in their manufacturing capabilities during these turbulent times – while some others are setting up new ventures or revamping their existing production lines. In some cases (certain categories) there has been a demand supply mismatch – where capacity exceeds supply, putting manufacturers under pressure.

**THE FLAT GLASS SECTOR**

In the flat glass segment real estate and automobile sectors are the biggest buyers. With the advent of interior designers and Multinational Corporations who prefer glass architecture, the flat glass market is also witnessing healthy growth. At present, flat glass is being used more than ever before in residential and commercial buildings. Architectural glass mostly used is single paneled and doubled paneled glass is used only in special cases. Apart from aesthetics purposes, glass is also being used for its additional value added properties in diverse uses. The number of green buildings is on the rise – which has considerably increased the consumption of flat glass –
such as glazed glass, reflective glass etc. Increased consumption for value added flat glass can be seen in regions such as Mumbai and NCR.

However, the uses of glass in retrofit buildings are strictly limited. Growth in the hospitality and education sectors adds to the demand for flat glass. Green buildings are getting a boost as glass helps in energy conservation as well as in recovering the additional costs incurred over a few years – thus making investments profitable.

Green buildings

Green buildings with the right type of glazing can save energy to the tune of 35 to 40 per cent when compared to ordinary glass. In modern architecture glass connotes openness – an important attribute in today’s world. Flat glass is comparatively lighter than traditional brick and mortar buildings – thus putting less pressure on the foundation of the building. Moreover, flat glass is not as fragile as it used to be in the past. This is because development in glass processing technology has helped the industry to make various types of glass, which are much more secure and fit to be used for various architectural uses. In this market, quite a few companies have been founded which provide various types of glass and glazing options for buildings. These companies take every precaution to meet the desired safety parameters, and often have to address issues pertaining to workmanship and labour problems. Growth in the flat glass market gives rise to the demand of films that can be fitted to the glass for better value addition. Glass is sold directly to customers, as well as through distributors.

Value added glass

The demand for value added glass is on the rise. Laminated glass and solar glass is likely to see a massive increase in demand. Also part of flat glass, decorative glass with digital printing has caught the eye of interior designers. Of late there is an attempt to use laminated glass in vehicle windshields. If this comes into effect, the demand for laminated glass will increase considerably. As India tries to increase its share in green energy solar power will play a very important role in the future. As a result, the demand for solar glass is certain to increase. But, at the same time, the industry is likely to face stiff competition from Chinese counterparts and cheap imports from the European Union who want to clear their inventory. Again, US banks are giving cheap credits to solar power developers in India who have a mandate to use products from American companies. This alone can affect solar glass manufacturers in a negative way.

The future outlook for the glass industry remains optimistic as demand from all segments is likely to pick up. The industry is also likely to gain once the laws and regulations are made more stringent and the old ones are revamped.