Markets overview

The glass industry in Russia, Uzbekistan and Ukraine

During the first half of this decade the CIS has faced considerable economic and industrial hardships. Nevertheless, despite the hurdles along the path towards economic success, glass companies continue to make investments in research and development, as well as in the modernisation of factories. This brief report outlines the current status of the glass sector in the three most populous member states of the former Soviet Union.

In the Commonwealth of Independent States (CIS), approximately 800 glass furnaces output 8.9 million tonnes of glass annually. Glass production and processing facilities amount to 302, of which most are located in the Russian Federation (184) and the Ukraine (75). Of the total facilities, 125 produce glass containers, 21 produce glass fibre, and 132 produce high
quality glass and crystalware, a sector in which Russia boasts a long tradition and renowned skill. Thirty firms produce flat glass (Fourcault, float, LDF, Pittsburgh). The production of glass for technical purposes also constitutes a considerable part of the total.

To date, there is no official representative body for this sector which has a 200,000-strong workforce although the forming of glassmaker unions in the Russian Federation and the Ukraine, as well as the Eurasia Glass Association, should be imminent.

**Current status**

As shown in the table, there has been a considerable decline over the past three years in the production of glassware - approximately 48 per cent less than maximum output levels - in the Russian Republic and the Ukraine.

The technological level of glass plants in the CIS is markedly below that of the rest of the developed world. In fact, only about 30 per cent of all glass containers are made on high-performance modular IS machinery. In the flat glass sector, an average of only 47.9 per cent of the total is produced by the float and LDF methods (59 per cent in Russia, 26.5 per cent in the Ukraine, 100 per cent in Kyrgyzstan, 0.05 per cent in other member states). Seven float facilities are at present planned or under construction, four of these in Russia, the others in the Ukraine, Belarus (Belorussia), and Kazakhstan.

The processing of flat glass is carried out in 21 factories which turn out glass sheets, while another 92 process mirror glass. Laminated glass is made by 40 companies and tempered glass by 26.

With respect to exports, quality glass tableware (pressed glasses, crystalware, giftware, etc.), glass beads and optical glass stand out. A significant amount of not particularly high quality flat glass is exported to China, Mongolia, the Czech Republic and certain African nations.

Imported glass machinery is used in practically all sectors (furnaces, shaping, etc.). Most equipment comes from Germany, Britain, Sweden, Finland, France, Italy, the Czech Republic and Hungary.

**Growth prospects for Russia**

Local experts in the glass sector maintain that since the onset of *perestroika* in 1985, there has been clear progress in the research and development of new glass materials. For instance, the increasing use of “Bisipor” heat insulating material and the experimentation of new technologies for obtaining liquid glass from this. There is also polymeric triplex, BL sitals (a particular type of crystallised glass and glass ceramics), refractories containing XC-95E chrome, and batchers for ‘stromi’ mixtures. A group of experts has proposed reconsidering the ‘Steklotekh’ project, carried out by the *Misheronkij* glassworks (near Moscow) and the *In.Glen* company, possibly joined by another local firm, *Ventursteklo*.

*Intersteklo* of Moscow, in collaboration with *In.Glen*, has hopes of building a new factory, or modernising an existing but unused one, in central Russia, and installing imported JS-12-2 machines. Furthermore, *Ventursteklo*
UKRAINIAN GLASS PRODUCTION IN 1994

<table>
<thead>
<tr>
<th>Type</th>
<th>Output (millions sq. m.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>window glass</td>
<td>23.4</td>
</tr>
<tr>
<td>polished glass</td>
<td>5.0</td>
</tr>
<tr>
<td>wired glass</td>
<td>0.4</td>
</tr>
<tr>
<td>unpolished tempered glass</td>
<td>0.3</td>
</tr>
</tbody>
</table>

and Eurasia Glass are coordinating the federal “Glass in Russia” programme as well as the regional “Glass in Moscow” programme. These schemes foresee the modernisation of the Saratov and Salavat glassworks, along with the setting up of glass bottle manufacturing facilities by modernising existing plants such as those in Ashgabat (Turkmenistan) and Raikikhin (in the Amur region), as well as the Daghestanske Ogni plant (in the Russian city of Daghestan), the Krasnyj Bogatyr works (in the Vladimir region), and others.

Uzbekistan

In Uzbekistan, the biggest glassmaker is the state consortium for the production of building materials, Uzstroimaterialy. The company has two operations, Ao Kvarts and Gasalkensky stekolny zavod.

Ao Kvarts is about to complete construction of a plant for the production of 10 million sq. m. of glass annually, with start-up scheduled for the end of 1996. The plant is expected to supply about 80 to 85 per cent of the state’s flat glass requirement. In recent years, regional authorities in Uzbekistan have financed the construction of a number of small local factories for the production of glass food containers.

The Uzbekistan government has set out two specific priorities for Uzstroimaterialy, these being:
(a) the supply of small and medium-sized containers for use in the state’s pharmaceutical industry;
(b) the supply of automotive glass for cars manufactured by the local joint venture between Uzbeko and South Korean, Daewoo, where 160,000-200,000 vehicles are built annually.

Ukraine

An estimated 40 glassworks are found in the Ukraine, where glass plays an important role in the country’s industry. Approximately 30 to 40 per cent of the total production output is exported.

The economic crisis in the country has had a general effect on the glass sector. Since 1993, practically all producers have dropped their output by around 30 per cent, as a result of the breakdown of inter-company economic relations, and increased difficulties in obtaining raw materials fuel and energy in general.

Almost all factories are obsolete and are in need of modernisation. In 1994, more than 300,000 parts and machine accessories were imported for the cold working of glass.

Conclusion

Although production levels have fallen sharply, research and development initiatives have progressed. With potential demand clearly great, what emerges above all is a significant need for foreign technology and investment to modernise all spheres of the glass industry in the CIS.