With the initiative of the communist and workers' parties of the socialist countries, a Council of Mutual Economic Aid (COMECON) was established in January, 1949. This was one of the most important joint decisions that laid the foundation for a new type of intergovernmental relations based on the principles of socialist internationalism. Cooperation in the framework of COMECON became an unabated part of the strategic course of the communist and workers' parties, which was directed toward bringing the peoples of socialist countries closer from all sides and toward extensive development of economic integration.

Through the scientific guidance of the social processes, the communist and workers' parties created conditions for further consolidation of the socialist countries and internalization of the material and cultural life of peoples of the member-nations of COMECON.

The successes of this collaboration appear in the unforeseen growth of economy, culture, and standard of living of brotherly peoples.

At present, 10 countries of Europe, Asia, and Latin America are members of COMECON: Poland, Hungary, Rumania, German Democratic Republic, Republic of Cuba, Mongolia, Bulgaria, Yugoslavia, USSR, and Czechoslovakia. Under the leadership of their own communist and workers' parties, the peoples of the member-nations of COMECON achieved great successes. At the 32nd meeting of COMECON (in June, 1978) it was noted that the member-nations of COMECON were successfully executing their current five-year plans. As compared to 1975, in 1977 the national income of the member-nations of COMECON increased by 12%, the output of industrial products by 12.4%, and about 80% of the industrial products was obtained on account of the rise in labor productivity. The total trade turnover of the member nations of COMECON during this period increased by 24% and exceeded 158 billion rubles. There has been a continuous rise in the material well-being of workers, the actual national income has risen and the household service has improved.

It was noted in the meeting that a great amount of work has been carried out to realize the complex program of further deepening and improving the collaboration and developing the socialist economic integration of the member-nations of COMECON as resolved in the 25th session in 1971. The long-term result-oriented program of collaboration in the fields of energy, fuel, raw materials, agriculture, food industry, and machine building for the period up to 1990 were approved in the meeting.

In the development of many-sided collaboration of the member-nations of COMECON in the field of glass and ceramics, the activity of the Permanent Working Group (PWG) on glass and ceramics industry, operating in the framework of the Permanent Commission of COMECON on construction, has a great significance.

The principal trends of working of PWG were as follows: coordination of the development plans of the glass and ceramic industry, specialization and cooperation in production of the member-nations in this field; forecasting the development of production of materials and wares of the glass and ceramic industry including products grouped under building materials; mechanization and automation of production processes; formulation of standards for COMECON; exchange of advanced experience of production, scientific achievements and technical information as well as coordination of scientific and technical studies.

In accordance with the above trends the PWG of the glass and ceramic industry worked out a series of proposals for the consideration of the Commission. These proposals were approved and transferred to the delegations of the countries for implementation in the industry.

An agreement has been concluded on the specialization and cooperation in production between Czechoslovakia and Hungary as well as between the German Democratic Republic and Poland. These countries have concluded bilateral agreements on long-term collaboration in supplying ground sheet glass. The producing...
countries made a commitment to implement measures for maintaining the necessary technical level of these 
products and also for meeting the needs of remaining member-nations of COMECON for those items.

Besides, proposals have been made for specialization, cooperation, and wide exchange of experience in 
the field of manufacture of consumer goods. An agreement has been reached about assorted exchange of pro-
ducts among the countries and also about organizing symposia and international exhibitions.

With a view to improving the production technology and intensifying the scientific—technical collabora-
tion, works are being carried out on toughening glasswares by ion exchange and mastering their production 
with a view to developing the industrial technology of toughening structural and technical glass, semifinished 
products for spectacles, and domestic glasswares. Along with the above, works are also being conducted for 
intensifying the production of high-grade wares, electroilluminating glass, and lead cut glass for raising the 
technical level of production of these products and increasing the labor productivity, based on the mutual util-
ization of advanced scientific—technical experience.

In the field of mechanization and automation of production processes within the framework of PWG on 
the glass and ceramic industry, schemes have been formulated for automatic control of the production process 
of stretched sheet glass with the help of computers. As a result, technical specifications satisfying the world 
standards on equipment and systems used in progressive manufacture of stretched sheet glass have been 
formulated.

The adoption of equipment and systems for automatic control of processes of charge preparation, glass-
making, glass drawing, and glass cutting will enable the countries to raise the output of glassmaking furnaces, 
to improve the quality of manufactured glass, to reduce the fuel consumption, to raise the labor productivity, 
and to release the serving personnel from heavy physical labor.

Besides, schemes have been worked out for mechanization of the final operations in the technological 
production lines of commercial glass. The aim of this work is to examine the technical problems of the tech-
nology and equipment for mechanization of these operations. The economic effectiveness of this lies in the 
following factors: rise in the output of lines, improvement in the quality of products and their service per-
formance, reduction in the number of workers, and substantial decrease in product losses in the process of 
bottling the glass containers.

A report was prepared on the major trends of development of the glass and ceramic industry of the 
member-nations of COMECON up to 1990. High and steady rates of growth of production of the glass and 
ceramic industry are characteristic for these countries.

Along with the rise in the output of traditional materials, there is a need for developing new materials 
and products with specific properties such as chemical resistance, strength, heat resistance, thermal stability, 
etc., and also for increasing their production.

The glass and ceramic industry of the member-nations of COMECON plays an important role in expand-
ing the product exchange with other countries. The manufacture of traditional products of the glass and 
ceramic industry (sheet and commercial glass, sanitary ceramics, etc.) is due to the development of the 
branches that require these products. The production of multiple glass panes, enamelled facing glass, glass 
fiber, glass tubes, domestic porcelain, and high-grade glass is rising at high rates.

Based on the forecasts, it is observed that the demand in glass and ceramic building materials and in 
products of mass consumption will be met primarily by indigenous production, while in the manufacture 
of products for industrial uses there is a possibility of specialization and cooperation in making different types 
of materials and products. Particularly, this relates to such products as glass fiber, glass pipes, glass 
apparatus, electrotechnical wares, special building materials like glass blocks and profiled and colored sheet 
glass, etc.

In the glass and ceramic industry of the member-nations of COMECON there is a tendency for mechan-
izing the manual operations and organizing the individual technological operations into continuous production 
flow lines with the use of automatic control and computers.

Any rise in the capacity of glass-drawing machines requires a corresponding rise in the capacity of 
glassmaking furnaces. In the majority of cases it is achieved by intensifying the processes of glassmaking and 
increasing the specific capacity of melting with simultaneous reduction in fuel consumption. With a view to 
raising the output of furnaces electric preheating and also electric making of glass are adopted. Both these 
methods are distinguished by higher economy, as compared to glassmaking in usual furnaces, because of the 
fact that the specific rate of extraction of molten glass increases, its quality improves, and specific heat con-