At the end of 1975 the Combine began to develop and introduce an integrated quality control system (IOCS) based on the standards of the establishment.

The Combine is now one of the largest of its kind in the country. In 1976 it manufactured products worth 115 million 824,000 rubles. Six types of the products of the Combine have been awarded the State Label of Quality.

**CHERKASSY MAN-MADE FIBRE PLANT**

_Yu. T. Turchanenko_

The plant is situated on the southwestern outskirts of the town of Cherkassy. The central roadway of the plant passes over the spot where Hero of the Soviet Union Aleksol Surikov fought enemy tanks in single combat and with his last hand-grenade killed 13 German soldiers and officers and himself. A plaque commemorates his heroism.

The construction of the Cherkassy cellulosic fibre plant was begun in 1958. The project was declared a shockwork project for young communists by the Central Committee of the All-Union Lenin Young Communist League and the plant was built by about 3000 young workers and young communists from the various Republics of the Soviet Union.

The plant produced its first rayon textile yarn on June 5, 1961, the date which represents the birthday of the plant. In the same year the Cherkassy cellulosic fibre plant was awarded the privilege of calling itself a 22nd Congress of the CPSU plant in recognition of its successes in socialist competitions.

The second phase of the plant came on stream in October 1963 after which the plant was the first in the Soviet Union to produce 8,4 tex rayon yarn which enabled Soviet industry to manufacture a new range of high-quality woven fabrics and knitted goods. For developing and introducing the technology of this yarn a group of plant workers (L. V. Grifiskov, Yu. T. Turchanenko, P. A. Butyagin, and others) was awarded a silver and seven bronze medals at the Exhibition of the Achievements of the National Economy of the USSR.

The third phase of the plant started operations in 1970. It is equipped with the latest models of the PNSh-100I type machines in place of the PNSh-180-I2S2 type. On the new machines the rayon is produced by a continuous process which made it possible to reduce the floor space for rayon production without reducing the output capacity of the section and to use the freed space for a hitherto unplanned cellophane section with a design capacity of 13,000 tons/yr.

In a joint project with the Cherkassy Chemical Construction Trust the personnel pledged themselves to bring the cellophane section on stream in 1972, i.e. a year earlier than planned. This commitment was fulfilled.
The personnel were the winners of the socialist competition in honor of the centenary of the birth of V. I. Lenin and were awarded the Centenary Certificate of Honor of the Central Committee of the Communist Party of the Ukraine, the Presidium of the Supreme Soviet of the Ukrainian SSR, the Council of Ministers of the Ukrainian SSR, and the Ukrainian Trade-Union Council.

The plant was awarded the Order of the Red Banner of Labor for completing the assignments and socialist commitments of the Eighth Five-Year Plan ahead of the target date, for successes in the utilization of latent production resources, and for introducing advanced process technologies.

In 1972, in recognition of its success in the All-Union Competition in celebration of the 50th anniversary of the founding of the USSR the plant was awarded the Jubilee Badge of Honor by the Central Committee of the CPSU, the Presidium of the Supreme Soviet and the Council of Ministers of the USSR, and the All-Union Central Trade-Union Council, and 822 production workers, engineers and technicians, and office staff were awarded the medal "For Valorous Labor."

Since the plant came into operation a total of 1000 production workers, engineers, technicians, and other personnel have received orders and medals of the USSR. For completing the tasks of the Ninth Five-Year Plan ahead of the target date 327 workers of the plant were awarded the badge "Shockworker of the Ninth Five-Year Plan."

A significant contribution to the development of technical progress at the plant comes from inventors and the efficiency experts. During the Ninth Five-Year Plan the implementation of 1171 efficiency experts' suggestions and 20 inventions produced savings of 1 million 813,000 rubles. A total of 1665 workers participated in the work of the efficiency experts during that period. Toolmaker V. L. Rudov in Maintenance and Mechanical Engineering Section No. 1 was awarded the status "Merited Efficiency Expert of the Ukrainian SSR," and P. P. Magai, a fitter in the Instrument and Automation Section the status "Best Young Efficiency Expert of the Ukrainian SSR" for their active participation in this field.

Since 1961 the following large-scale measures were implemented at the plant in connection with the introduction of new techniques and advanced technologies:

the process of finishing the rayon textile yarn on OK-I2 machines has been automated; the savings resulting from the increase in labor productivity amounted to 12,000 rubles;

continuous-process filters for the expressed caustic soda were installed in the continuous-mercerization sections; the resulting economies in caustic soda and cellulose gave a saving of 12,000 rubles;

the viscose solution process was automated, the result being an improvement in the quality of the spinning solution and finished product;

a method was developed and adopted on an industrial scale for the production of viscose sponge from viscose waste for the cable industry; the process was awarded two silver and five bronze medals at the Exhibition of the Achievements of the National Economy of the USSR;

very important work was carried out in the warping sections for the purpose of improving the organization of the processes, e.g., the creels have been modified which made it possible to increase the package weight and the output of rayon textile yarn on the form of warp, the result being an increase in the labor productivity at the plant and the users' establishments; the savings amounted to 192,500 rubles;

an automatic system was installed for determining the degree of pressing of the soda cellulose on the continuous-mercerization installations;

a method was developed for dissolving the cellulose xanthate on "GART" apparatus with reflux condensers; the result was an improvement in the quality of the spinning solution and finished product and produced a saving of 140,000 rubles;

the spinning speed for rayon textile yarn was greatly increased (to over 100 m/min) which made it possible to produce 2400 tons/yr more yarn than at ordinary spinning speeds (70-80 m/min) without large capital outlays and without changes in the production area.

the design was developed for a new spinning machine, viz., the PNSh-100I, to replace the project-specified PNSh-180-1282 type;