C REATIVE WORK IS A GUARANTEE OF SUCCESS

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All branches of the national economy of the USSR recorded significant growth in the Ninth Five-Year Plan. The drive for greater production efficiency has become a genuinely national concern. A significant contribution in the fulfillment of the most important tasks of the Ninth Five-Year Plan came from inventors and efficiency experts whose creative labor helped to increase production efficiency on the basis of scientific and technical developments, which resulted in more efficient utilization of all latent resources and in lower outlays on labor and materials.

In the industry of refractory materials work is in hand, with the active participation of efficiency experts and inventors and in creative collaboration with the personnel of the scientific-research institutes, on resolving problems relating to the mechanization and automation of heavy annual work, the development of new product types, economies in the use of materials, fuel, and energy, and to the expansion of the range and improvement of the quality and service durability of refractory products. The objective of the efficiency experts and inventors is to overfulfill the production targets and socialist commitments.

A group of efficiency experts at the Semiluk Refractories Plant have developed a charge-setting system for the mechanized loading of refractory bricks on kiln trucks in packets. The adoption of this system on five presses resulted in 20 workers being released for other work and in a saving of 23,400 rubles p. a. All other presses of the Plant will be equipped with this system in the near future.

A casting machine for lightweight compositions has been installed at the Semiluk Plant with the result that six molders were transferred to other sections, the hard manual work has been eliminated from the molding operation, and labor productivity has increased. The machine gives a saving of 15,900 rubles p. a.

At the Magnesit Plant the quality of the molded products has been improved and 26,100 rubles saved as a result of the introduction of an invention in the form of a "Device for the automatic regulation of the action of toggle presses."

The mechanization of the operation of doffing the bricks from the turret presses of the Nikitov Dolomite Plant made it possible to release one doffer from each press for other work.

Equipment for the bilateral pressure-molding of bricks has been installed at the Chasov-Yar Refractories Plant, and a device which automatically doffs standard Dinas bricks from turret presses at the Krasnogorovsk Plant.

At the "Krasnaya Zvezda" Chamotte Plant a team has developed methods of mechanizing and automating laborious operations, which resulted in lighter work for 46 persons.

At the Borovich Refractories Combine use is made of a screening truck during repair work in the firing zone of the tunnel kiln with the result that kiln downtime for general overhaul has been reduced giving a saving of 31,700 rubles p. a.

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In the refractories division of the Nizhnii Tagil' Metallurgical Combine the adoption of two inventions, viz., "Securing the refractories of rotary kilns during the lining process" and "Utilization of the material from the dust chamber of rotary kilns," is saving 115,400 rubles for the national economy p. a.

At the Pervoural'sk Dinas Plant, efficiency experts have mechanized the operation of sweeping the debris from repaired tunnel trucks and installed a vibroconveyor for removing the dust from under the electrostatic precipitators.

A "Competition for young workers for the best suggestions and inventions aimed at the mechanization of manual processes, an increase in the labor productivity, and an improvement in product quality" organized by the Main Committee for the Exposition of Advanced Experience in the National Economy of the Ukrainian SSR, the Secretariat of the Lenin Young Communist League of the Ukraine, the Presidium of the Ukrainian Republican Council of the All-Union Society of Inventors and Efficiency Experts, and the Scientific and Technical Society attracted 296 entries on the mechanization of the operations of doffing the bricks from the presses and loading them on the kiln trucks at the plants of the Ukrainian Refractories Administration. A total of 211 of these proposals were tested and 179 were adopted.

A large number of the ideas of efficiency experts for developing and putting into practice advanced methods of assembling and packing refractory products have been translated into reality at refractory plants. At the Magnezit Plant a method has been developed for mechanizing the assembly of bricks on a pallet and a device has been installed that cuts the cardboard for packaging them; at the Belokamensk Plant the packaging of standard bricks has been improved; at the Pervoural'sk Plant the handling of the green product to the charge-setting points at the tunnel kilns has been mechanized; at the Zaporozhe Plant a machine has been installed for cutting the packing paper and cardboard that saves 9700 rubles p. a. and increases labor productivity by a factor of 5.3; at the Borovich Combine a new design machine for packet-banding has been installed; at the Bogdanovich Plant, lightweight and standard bricks are now loaded on railroad by trucks by a high-density method and the loading of clay on trucks is automatically controlled; at the Novomoskovsk Plant the system of conveying the pallets with checker blocks from the presses to the charge-setting points has been improved; and at the Chasov-Yar Plant a group of efficiency experts have designed a steel template for pallets that saves 11,500 rubles p. a.

At some establishments efficiency experts and inventors have helped to implement large-scale measures in the reconstruction of production sections, introduction of new techniques and technologies, and the production of new types of refractories. A new type of tunnel kiln with a water seal has been taken in service at the Pervoural'sk Dinas Plant. At the Vnukovo Refractories Plant production has been launched of refractories for stopperless steelcasting. Over 9 million tons of steel have been cast without using stoppers. At the Bogdanovich Refractories Plant a continuous process for the production of high-alumina heat-insulation fiber has been introduced. The fiber is used for the manufacture of insulation slabs for blast-furnace regenerators. Efficiency experts from the Bogdanovich Plant participated in 1975 in the All-Union Exposition of Achievements of the National Economy, viz., on a stand showing the "Production of Fibrous Heat-Insulation Products."

The Ukrainian Scientific-Research Institute of Refractories has developed the production technology for waterless compositions for the iron notches of the 5000-m³ blast furnace of the Krivoi Rog Metallurgical Plant. These compositions give a reliable notch seal with one third the usual quantity.

The Podol'sk Refractories Plant has started producing quartz nozzles for continuous steelcasting machines. The Eastern Institute of Refractories has developed a technology for unfired quartzite ladle brick. The process has been introduced at the Pervoural'sk Dinas Plant.

The performance of the teams of efficiency experts and inventors in the refractories industry in 1975 is illustrated by the following figures: a total of 13,814 workers acting as efficiency experts and inventors successfully submitted 14,610 suggestions and 177 inventions which saved 6,656,500 rubles.

In 1975 a total of 560 comprehensive creative teams and 46 public design offices were in operation in the establishments of the refractories industry. The teams and offices participated in the development and installation of electrical systems for the automatic control of clay and chamotte grinding and of remote-control systems for the two-roll dry mixers at the Dokuchaev Flux-Dolomite Plant. At the Druzhkov Ore Administration a stand has been set up for dismantling and re-assembling BelAZ-540 trucks by mechanized means. At the Krasnogorovsk Refractories Plant, efficiency experts have proposed the construction of mobile scaffolds for use when replacing window blocks.

The tasks for the new stage in the development of the national economy of the USSR were defined at the 25th Congress of the CPSU. The 10th Five-Year Plan must be a five-year period of efficiency and quality.