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ENTERPRISES OF ZLATOUST DURING THE GREAT PATRIOTIC WAR

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Abstract

This article examines the contribution of Zlatoust enterprises to the victory over fascism. The evacuation of human and material resources from other regions to Zlatoust is described. The restructuring of city enterprises is analyzed. All enterprises produced defense products. The training of highly qualified workers, who mastered skills of manufacturing complex parts, assembling and adjusting precise aviation, tank and artillery tools in a short time, is described. Production lines were implemented by city factories. The flow method made it possible to better use the existing production areas and equipment, free up workers and machine tools. The authors characterize the work of Zlatoust gunsmiths and gunners, brave and tireless innovators. Thanks to the Lenin plant, the production of ammunition levels increased three times, and it was one of the main suppliers of shells for the army. The plant carried out military orders for the artillery troops, construction engineers, special railway units, as well as for the needs of the militia. The Lenin plant supplied metal-cutting tools for other plants (discs and segments for cold-cutting saws, drills, cutters, etc.). The article describes mass patriotic initiatives and movements of male and female workers: multi-station workers, two and three centurion workers, Komsomol youth front brigades, thousand-strong workers, wartime Stakhanovites, etc. It was the creativity of people that increased labor productivity 3.3 times. During the war years, the workers' initiative developed under the motto "Everything for the army, everything for victory."

Keywords: Evacuation, front-line brigade, supertasker, defense products

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1. Introduction

On May 9, 2020, our country celebrated the 75th anniversary of the victory in the Great Patriotic War. Some Western politicians and pseudo-historians distort the USSR's merits in the victory over fascism and attribute the decisive role to the United States and Great Britain. On July 1, 2020, citizens of Russia voted for amendments to the Constitution of the Russian Federation. One of the most important amendments is protection of historical truth. Any denigration of the heroic deed of the people in defending the Fatherland is unconstitutional. The amendment was proposed for the second reading of the bill on amendments to the Basic Law. It says that the Russian Federation honors the memory of defenders of the Fatherland and ensures the protection of historical truth. Diminishing the significance of the people's heroic deed in defending the Fatherland is not allowed. Vladimir Putin said that it is impossible to "steal" the victory in the Second World War. Therefore, historical science should objectively describe all past events.

The relevance of the issue is beyond doubt. This statement is confirmed by many world studies on the Second World War. The article (Bobowik et al., 2014) describes social representations of the historical past, embedded in historical experience and cultural values, which play a motivational role in justifying collective behavior. The influence of hierarchical and collectivist values and a low level of social development are mediated by the legitimization of social perceptions of World War II. The authors note that when controlling socio-structural differences (human development index), the indirect impact of the fact that the country is the winner of the war on the willingness to fight through the legitimization of perceptions of World War II was also significant. These findings suggest that the social representations of World War II serve as anchors for determining the nation's role in collective violence. Social beliefs that legitimize past collective violence seem to foster a more positive attitude towards potential future collective violence in the countries-winners (Bobowik et al., 2014).

Abel et al. (2019) in their study *Collective Memories across 11 Nations for World War II: Similarities and Differences Regarding the Most Important Events* point out that the Second World War affected almost all the peoples of the world. The events of the war and their consequences are still being discussed. In two studies, they examined how people from different countries remember the war. More than 100 people from each of 11 countries (Australia, Canada, China, France, Germany, Italy, Japan, New Zealand, Russia, the United Kingdom and the United States) presented their views on ten most important events of World War II. The findings show a great consensus and some striking differences on the important events. In particular, the collective memory of Russians about the war is very different from the memory of their former allies and enemies.

The topic of reburial and identification of soldiers who died during World War II stands apart. Ossowski et al. (2013) in their work *Example of human individual identification from World War II gravesite* presented their own methodology, which was applied to the identification of the Red Army soldiers. The authors discovered the Nameless burial of ten Soviet prisoners of war. Historical, anthropological and genetic studies conducted by researchers contributed to the personal identification of nine of them, including using a DNA analysis.

Li and Koustas (2019) in their work *The long-run effects of government spending on structural change: Evidence from Second World War defense contracts* managed to investigate the long-term impact

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of the largest government spending program in the history of the United States. The authors relate the dataset of military contracts to county-level economic data covering the period from 1930 to 2000. Using districts that did not receive defense spending as a comparison group and monitoring them according to the pre-war characteristics, they found that the wartime defense expenditures led to a steady redistribution of labor to manufacturing and other non-agricultural industries in military production centers, contributing to the long-term population growth (Li & Koustas, 2019).

Rear workers of Zlatoust contributed much to the victory. The treacherous attack on the USSR destroyed many enterprises; the most important economic regions were captured by the invaders. However, the Soviet government was able to evacuate large plants and factories in the shortest possible time. Due to its territorial location and proximity of resources, the South Ural was a successful rear zone, where it was possible to locate enterprises and equipment from other regions. Human and material resources were evacuated to Zlatoust.

2. Problem Statement

The objective of this study is to reveal the labor heroism of Zlatoust workers during the Great Patriotic War.

3. Research Questions

The research subjects are as follows:

1. the process of evacuation of enterprises from other regions to Zlatoust and the restructuring of Zlatoust enterprises on the "military track";
2. fruitful work of front-line brigades during the war years and training of highly qualified personnel in production.

4. Purpose of the Study

The purpose of the study is to describe the work of Zlatoust enterprises in the wartime conditions.

5. Research Methods

The historical-descriptive, historical-chronological, historical-biographical methods and the method of synthesis, analysis and comparison were used.

6. Findings

During the Great Patriotic War, more than 30 enterprises, construction organizations and institutions were evacuated to Zlatoust. They evacuated 18 enterprises and equipment from Dnepropetrovsk, Kiev, Krivoy Rog, Makeevka, Donetsk, Lugansk, Kharkov, four enterprises from Moscow and Moscow region, three enterprises from Leningrad and Leningrad region, three enterprises

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from Tula, including the abrasive plant from Luga, the First Moscow watch plant named after S. Kirov, Kiev garment factory named after Smirnov-Lastochkin, the pumping plant from Odessa, Tula and Podolsk machine-building plants, construction trust "Yuzhtyazhstroy" from Kharkov. Together with the enterprises, 21,294 people were evacuated. The open-hearth shop of the metallurgical plant mastered the smelting of 17 grades of alloy steels, which were previously smelted only in the electric steel foundry. Many of the newly developed steel grades were previously produced by the Elektrostal and Dneprospetsstal plants. Blooming began to produce large ingots (Kozlov, 2004).

At the end of October 1941, the first echelon with equipment of the 1st Moscow Watch Factory was sent from Moscow to Zlatoust. 170 skilled workers and 120 engineers and technicians arrived in Zlatoust. The factory was housed in seven rooms in different parts of Zlatoust. To manufacture aircraft, tanks, artillery, machines were required, and the city authorities decided to locate the factory in the building of the drama theater and a neighboring school.

On December 1, 1941, equipment began to be installed. If in Moscow it was located in a 4-storey building with an area of 16 thousand square meters, in Zlatoust, it was located in the building with a total area of 4.7 thousand square meters. In such difficult conditions, on December 25, 1941 the factory managed to produce the first parts on the first machines. This day is considered to be the birthday of the Zlatoust Watch Factory. Installation of the main equipment continued until the end of February 1942. But to master the technique, workers were needed. Highly qualified Muscovite watchmakers urgently began to train 14–15-year-old girls and boys and housewives. They had to quickly master the skills of producing complex small parts, assembling and adjusting precise time instruments.

A group of 15-20 students was controlled by one instructor. Operators were trained during one month, and complex machine tool operators were trained during two months. In total, 1,700 new workers were trained during the war years, including machine operators – 478, adjusters – 113, locksmiths – 65, assemblers – 527 and inspectors – 114 people. In 1942, watchmakers increased the production volume: in the first quarter – 748 thousand rubles, in the second quarter – 5759 thousand rubles, in the third quarter – 11.536 thousand rubles. In total, during the war years, Zlatoust watchmakers produced 127 thousand aircraft, 77 thousand tank and 45 thousand artillery devices, 75 million parts and assemblies for ammunition. Almost 73 % of Soviet tanks and 92 % of aircraft were equipped with Zlatoust clocks.

During the war years, ZWF and many other enterprises, for example, the plant named after V.I. Lenin operated in the city. Since the beginning of the Great Patriotic War, the plant produced defense products. Its share in the gross output of the plant was 68 % by the end of 1941, 76 % – in 1942, and 78 % – in 1943 and until the end of the war. The enterprise produced shells and mines. It was necessary to rebuild production for a very short time. To increase the output of defense products, the thermal shop was expanded and a new mechanical shop equipped with equipment evacuated from Dnepropetrovsk plant was created. In 1943, production lines were introduced in shops 23 and 25. The flow method made it possible to better use the existing production areas and equipment, free up workers and machine tools.

The Lenin plant increased its output three times and was one of the main suppliers of shells for the front. The plant carried out military orders for engineering and construction, sapper, special railway units, as well as for the needs of the militia. The plant supplied metal cutting tools (discs and segments for saws for cold cutting metals, drills, cutters, etc.) to other plants.

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The rate of quantitative production of shells can be traced on the example of 122 mm projectiles: in 1940, 216 pieces were produced per day, in 1941 – 1380 pieces, in 1942 – 1570 pieces, in 1943 – 3180 pieces. In 1941, the output increased to 152 % in the Soviet Union, and to 330 % at the plant. In 1942, the figures were 218 and 600, in 1943 – 264 and 530, in 1944 – 310 and 280, respectively.

The high rate of production of this projectile was due to the implementation of a progressive design of the projectile (all-body version), advanced technological processes (untreated chamber, "hot crimping" on a mechanical press, etc.), flow-mechanized technological lines (chains), as well as mass patriotic initiatives and movements of male and female workers. It was the lively creativity of the masses that increase labor productivity by 3.3 times.

During the war, the staff of Zlatoust Metallurgical Plant worked for the good of the Motherland. The resolution adopted at a general meeting on the second day of the war said: "Knowing that our tons of metal go to tanks and planes, guns and shells, we, metallurgists, promise to ensure the daily implementation of plans in full compliance with government orders." Without too much fuss, in an organized manner, the plant manufactured products for the defense industry. Zlatoust people did everything to provide the country with high-quality metals. Both the mind and the talent of engineers, the experience and knowledge of foremen and workers were mobilized.

In open-hearth furnaces, chromium-nickel, chromium-silicon-manganese and other alloy steels were smelted. According to Biserov's (1912) note published in the Proletarskaya Mysl newspaper on January 18, 1942, his brigade sought to produce as much steel as possible. In August, it produced 109.6 %, in September – 111.7 %, in October – 115.3 %, in November – 119.4 %, in December – 120.7 %. The names of the steelworkers N.A. Biserov and V. M. Amosov are mentioned in the book "Ferrous metallurgy of the USSR. 1917–1967". They were speed masters of the war (Matseevich, 1971).

The development and mastering of the technology for smelting steel grade 18KhNMA presented a particular difficulty. This steel was used to make critical parts of internal combustion engines. Smelting it on a mass scale allowed engine builders to dramatically increase the production of aircraft engines. Smelting of alloy steels in open-hearth furnaces increased from 20 % in the first year of the war to 78 % of the total volume of smelted metal in 1943 (Matseevich, 1971). Open-hearth furnaces mastered dozens of new steel grades.

For the development and mastering of the technology for smelting high-alloy steels in open-hearth furnaces, in 1943, a group of specialists was awarded the first-degree State Prize. But they refused this money. On March 25, 1943 the People's Commissar of Metallurgy I.F. Tevosyan sent a telegram: "We ask to transfer our money to the aircraft construction fund". Their desire was satisfied: their money was transferred for the construction of the Soviet aircraft. In addition, Zlatoust garment factory produced military uniforms and shoulder straps, and Zlatoust shoe factory – footwear for the chemical troops.

7. Conclusion

More than 30 thousand Zlatoust residents defended their homeland, and almost every third of them died. The prewar number of population of Zlatoust was 103 thousand people. The city worked for the defense 1418 days without holidays and weekends; the contribution of Zlatoust residents amounted to 1580437 tons of steel; 1,407,046 tons of rolled products; 13,795,608 shells and mines; 109,512 machine

guns; 41,859 aircraft cannons; 292,269 hours for tanks, aircraft and the Navy. At the beginning of the war, Zlatoust Metallurgical Plant was the only plant that produced high-quality steel; Every second IL-2 aircraft had Zlatoust cannons (IL-2 attack aircraft was the most massive aircraft) (Gurevich, 2002).

Plant traditions accumulated by many generations of workers, foremen, engineers and technicians, were manifested during the war years. Mutual assistance, as a factor of comradely relations, was provided by collecting warm clothes, personal savings for the construction of artillery batteries (3200 thousand rubles were collected), forming the people's militia and training staff, etc. (Chepurov, 1993). During the war years, the workers' initiative became stronger and developed under the motto "Everything for the front, everything for victory". Selfless work and courage contributed to the victory.

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