

Review of the Production and Economic Activities of the Tire Industry Enterprises of the Republic of Tatarstan

Gulsina Gabdullina¹^a, Ivanova Lyudmila Alekseevna²^b, Aisylu Akhmetgareeva³^c,
Ayupova Venera Kazbekovna⁴^d and Galieva Amina Shamilevna⁵^e

¹*PhD in economics, Kazan National Research Technical University named after A.N.Tupolev-KAI, 10, K. Marx Str., 420111, Kazan, Russia Economic and Humanitarian Disciplines Department*

²*Candidate of Pedagogical Sciences, Associate Professor of the Department of Management and Economic and Mathematical Disciplines of the Higher Educational Institution «University of Management "TISBI»*

³*Candidate of Economics, Institution of Higher Education «The University of Management «TISBI», 423821, Naberezhnye Chelny, Komsomolskaya naberezhnaya str. 6, Associate Professor, Department of Economics and Management*


⁴*Candidate of Pedagogical Sciences, Institution of Higher Education «The University of Management «TISBI», 423821, Naberezhnye Chelny, Komsomolskaya naberezhnaya str. 6, Associate Professor, Department of Economics and Management*


⁵*Undergraduate student Zhejiang Normal University, School of economics and management, Address 688 Yingbin Avenue Postal code / Zip code 321004, Jinhua, China*


Gulsina-kamilevna@yandex.ru, lavr_iv@mail.ru, ahmetice@mail.ru, ychilka07@mail.ru, mvflel@yandex.ru


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Abstract: The tire industry complex of the Republic of Tatarstan is one of the largest in the Russian Federation and continues to expand due to favourable market conditions, the strategic interest of PJSC Tatneft, and governmental industrial support measures. The structure of the tire industry complex is represented by two business areas—domestic (within the republic) and external (outside the republic). This paper provides a comprehensive overview of the production and economic activities of enterprises comprising Tatarstan's tire complex, analyses their organisational structure, production capacities, investment programmes, and international expansion, as well as assesses competitive advantages and market positioning in current geopolitical and economic conditions.

^a  <https://orcid.org/0000-0002-2870-6529>

^b  <https://orcid.org/0000-0000-0000-0000>

^c  <https://orcid.org/0000-0001-9124-0875>

^d  <https://orcid.org/0000-0001-9124-0875>

^e  <https://orcid.org/0009-0003-0519-5636>

1 OVERVIEW OF THE TIRE INDUSTRY COMPLEX OF THE REPUBLIC OF TATARSTAN

The tire industry complex of the Republic of Tatarstan is the largest in Russia. It continues to develop and expand due to favourable market

dynamics, the involvement of PJSC *Tatneft*, and state measures supporting industrial growth. The tire industry complex of the Republic of Tatarstan (RT) comprises two business areas, as shown in Figure 1: domestic (within the republic) and external (outside the republic).

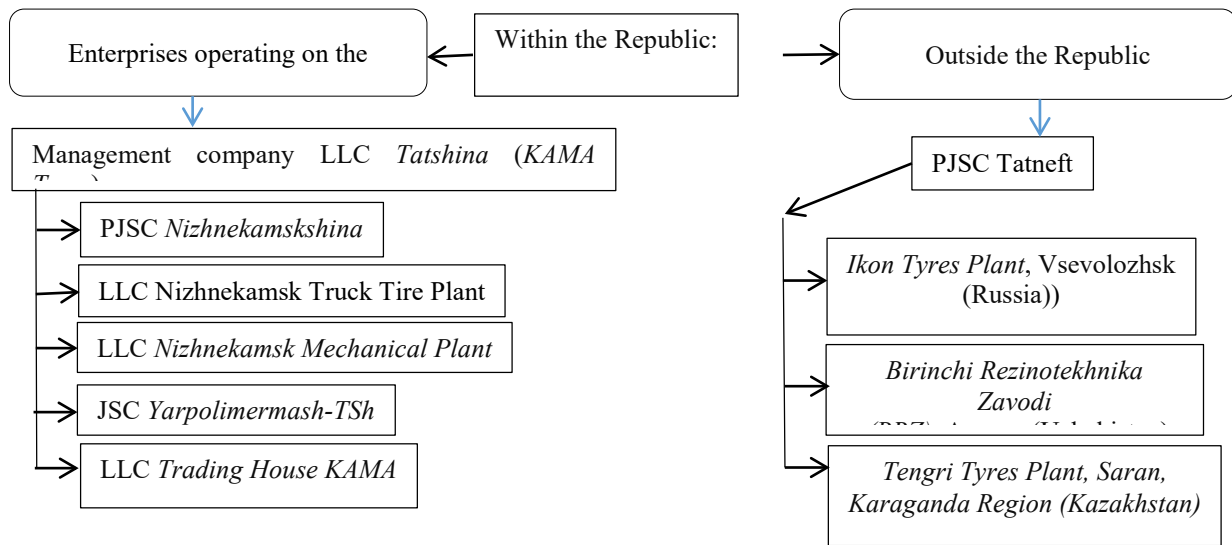


Figure 1: Tire Industry Complex of the Republic of Tatarstan.

1.1 Domestic Tire Industry within the Republic

Within the republic, the tire complex is successfully operating and developing. It includes enterprises producing various categories of tires such as *Nizhnekamskshina* and the *Truck Tire Plant (NZGSh)*, which has merged with the *Steel Cord Plant (CMC)*. The complex also incorporates several enterprises that directly influence its performance indicators: *Nizhnekamsk Mechanical Plant*, *Yarpolimer mash-TSh*, and *Trading House KAMA*. Until 2022, the complex was managed by PJSC *Tatneft*, after which management responsibilities were transferred to the managing company LLC *Tatshina*.

1.2 External Tire Business (Outside the Republic)

The “Tire Business” division within the *Tatneft Group* was established in April 2023. It includes three production facilities located both within the

Russian Federation and in friendly neighbouring countries:

- The tire plant in Vsevolozhsk, Leningrad Region (formerly owned by the Finnish company *Nokian Tyres*);
- The *Birinchi Rezinotekhnika Zavodi (BRZ)* in Angren, Uzbekistan;
- The *Tengri Tyres* plant in Saran, Karaganda Region, Kazakhstan.

All of the above-mentioned plants specialise in manufacturing various categories of tires and other rubber-technical products. The primary consumers of tire products in the primary market are automobile manufacturers. However, the secondary (replacement) market accounts for a significantly larger share of total sales.

In light of recent geopolitical changes, sanctions imposed by unfriendly Western countries against the Russian Federation, and aggressive price policies from Chinese manufacturers in the markets of neighbouring countries, tire products from Russian enterprises are currently sold primarily on the domestic market—approximately 90% as of today.

Table 1: Product Range Manufactured by Tire Plants of the Republic of Tatarstan.

Manufacturer	Passenger Tires	Light Truck Tires	Truck Tires	Special Tires	Agricultural Tires	Conveyor Belts
PJSC Nizhnetskaya	+	+		+	+	
LLC NZGSh			+		+	
Vsevolozhsk Tire Plant	+	+				
BRZ (Angren)	+	+		+	+	+
Saran Tire Plant	+		+			

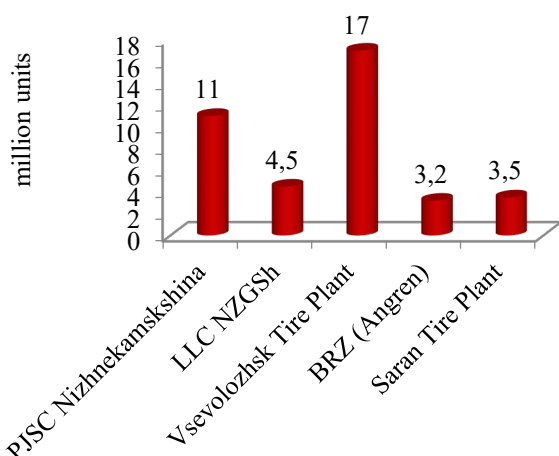


Figure 2: Production Capacities of Plants within the Tatarstan Tire Industry Complex.

As shown in Figure 2, if all enterprises reach their design capacity, the entire tire complex will be capable of producing 39.2 million tires annually, including 15.5 million from plants located within the republic and 23.7 million from facilities outside its borders (see Figure 3).

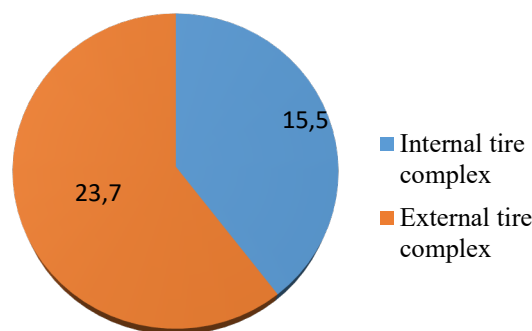


Figure 3: Comparative Production Capacities of Tire Complexes (million units) Located Inside and Outside the Republic of Tatarstan.

The main competitors of tire products manufactured by enterprises in Tatarstan are listed in Table 2.

Table 2: Main Competitors of the Tatarstan Tire Industry Complex.

Manufacturer	Location	Tire Categories	Competing Brands
S8 Capital	Kaluga	Passenger, light truck	Torero
S8 Capital	Yaroslavl, Omsk	Passenger, light truck	Cordiant, Tunga
Pirelli	Kirov, Voronezh	Passenger	Formula
Triangle	China	Passenger, light truck	Triangle
Voltyre	Volzhsk	Light truck, agricultural, industrial	Voltyre
Yokohama	Lipetsk	Passenger	Yokohama
AShK (Altai Tire Plant)	Barnaul	Light truck, agricultural, industrial	Forward, Altaishina
Belshina	Belarus	Passenger	—

Source: Compiled by the author based on [sources provided].

2 CHARACTERISTICS OF THE TIRE INDUSTRY ENTERPRISES OF THE REPUBLIC OF TATARSTAN

Let us provide a concise description of the enterprises comprising the Tatarstan tire complex. We begin with the domestic segment, which unites

enterprises of the tire business under a single industrial structure — KAMA TYRES, managed by LLC Tatshina. The group includes two production facilities and three auxiliary enterprises ensuring production, maintenance, and commercial activities.

The competitive advantages of the KAMA TYRES enterprises include:

- geographical proximity to major automobile assembly plants;
- an extensive dealer network;
- and the presence of an in-house scientific and technical centre.

2.1 PJSC Nizhnekamskshina

PJSC *Nizhnekamskshina* is one of the largest tire manufacturers in Russia, producing nearly one-third of comparable tire products in the country. The company serially produces 348 types of tires for passenger and light commercial vehicles, agricultural and industrial equipment, bicycles, and all-terrain vehicles (ATVs). The product range includes 118 tire sizes with rim diameters ranging from 10 to 20 inches.

The company produces high-quality products in accordance with the international standards ISO 9001:2015 and IATF 16949:2016. Continuous work is being carried out to expand the product range in line with market demands and to enhance competitiveness, directly linked to the successful implementation of investment programmes. A significant portion of investment resources is allocated to modernising core technological equipment and developing new tire categories and dimensions.

Between 2023 and 2024, as part of the investment programme, the following projects were implemented:

- establishment of a bicycle tire production line with a capacity of 3 million units per year;
- production of ATV tires — 37.8 thousand units per year;
- production of run-flat and special-purpose tires — 3.2 thousand units per year;
- development of new tire sizes.

Plans also include launching unique tire models for SUVs and crossovers with rim diameters ranging from 19 to 21 inches.

The implementation of these investment projects will enhance the company's profitability and competitiveness in both domestic and international tire markets.

2.2 LLC Nizhnekamsk Truck Tire Plant (NZGSh)

LLC *Nizhnekamsk Truck Tire Plant* is among the largest manufacturers of high-quality truck tires in Russia and across the post-Soviet region. The plant produced its first truck tires in April 1978 for heavy-duty *Ural* vehicles.

Since 2022, the enterprise has merged with the *Steel Cord Tire Plant (CMC)*, forming a single unit within KAMA TYRES. KAMA TYRES became the first producer in Russia of steel cord radial tires (SCRT) designed for off-road applications and equipped with adjustable internal pressure systems.

The plant's design capacity is 4.5 million tires per year, supplying domestic manufacturers such as *KAMAZ*, *NefAZ*, *Ural*, *PAZ*, and others, as well as the Ministry of Defence of the Russian Federation. Additionally, tires are exported to both near and far-abroad countries. The enterprise employs approximately 1,500 personnel.

At present, NZGSh manufactures truck tires of both combined and steel cord types, offering around 120 product positions, including:

- 82 product types of *KAMA* and *KAMA PRO* steel cord tires;
- 30 product types of combined *KAMA* tires for trucks, buses, and trolleybuses, including 29 models for agricultural machinery.

In addition to producing new tire models, the plant also restores the treads of steel cord tires to ensure extended service life. For this purpose, a dedicated retreading facility has been established — one of the largest in Russia. Restoration of *KAMA*, *KAMA PRO*, and other branded SCRT tires is carried out using the cold retreading method, which allows preservation of the carcass's operational resource without loss of quality. The production capacity of this facility is 35,000 restored tires per year.

2.3 Supporting Enterprises of the Nizhnekamsk Tire Plants

To ensure the effective operation of the tire plants in Nizhnekamsk, several supporting enterprises are engaged: LLC Nizhnekamsk Mechanical Plant (NMZ), LLC Trading House KAMA, and JSC Yarpolimer mash-TSh.

2.3.1 LLC Nizhnekamsk Mechanical Plant (NMZ)

LLC *Nizhnekamsk Mechanical Plant (NMZ)* is a manufacturer of engineering and non-standard equipment for all enterprises within KAMA TYRES. In addition, it performs maintenance and repair services for production equipment used in these facilities.

The plant possesses highly advanced technological capabilities, enabling the production of a wide assortment of products — from precision components to multi-ton assemblies, totalling approximately 6,800 items.

Notably, NMZ is the only plant in Russia manufacturing rubber mixing chambers (models *RS-250*, *RS-270*, and *RS-620*) and spare parts for them, which are used in tire production facilities.

To meet technological requirements efficiently and promptly, NMZ relies on unique equipment, extensive production experience, and a team of over 1,300 qualified specialists.

2.3.2. LLC Trading House KAMA

LLC *Trading House KAMA* was established at the end of 2002 to conduct wholesale trade in automobile parts, assemblies, and accessories, including the distribution of tire products from *PJSC Nizhnekamskshina* and *LLC NZGSh*. The company's authorised capital amounts to 36.9 million roubles, and it employs about 1,000 people.

2.3.3 JSC Yarpolimer mash-TSh

JSC *Yarpolimer mash-TSh* was founded in Yaroslavl on 2 October 2001. Since 27 October 2008, its sole managing organisation has been LLC *Tatshina*. Previously, until 2 September 2022, the enterprise operated under the name *JSC Yarpolimer mash-Tatneft*.

Its core activity is the production of specialised industrial equipment, particularly for tire plants within the KAMA TYRES group. The company manufactures tire and tire-mounting machinery, vulcanisers, repair equipment, tread-cutting machines, and other related devices. The company's authorised capital amounts to 400 million roubles, and approximately 100 employees work at the facility.

JSC *Yarpolimer mash-TSh* is a fully integrated manufacturing facility, performing all necessary operations in-house. It includes model, foundry, forge, mould and polymer equipment, machining, and assembly shops.

The full production cycle is ensured by a modern machinery fleet, including five-axis milling machines, Lang engraving machines, electro-erosion

equipment, and a metrological control complex. The company's engineering centre develops new and modernises existing equipment, designing technological processes and tooling.

3 OVERVIEW OF TATNEFT'S TIRE BUSINESS DIVISION

In addition to tire industry enterprises located within the Republic of Tatarstan, it is necessary to consider enterprises of this industry situated outside the republic but owned by the Tatarstan-based company Tatneft.

In April 2023, the Tatneft Group established the business division "Tire Business," which incorporated three production facilities: the tire plant in Vsevolozhsk, Leningrad Region; the rubber-technical plant in Angren, Uzbekistan; and the Tatar-Kazakh joint tire venture in Saran. The combined production capacity of the three plants is approximately 24 million tires per year, with a product range encompassing nearly 1,200 tire models, spanning from budget to premium segments.

3.1 Vsevolozhsk Tire Plant (Russia)

The Vsevolozhsk tire plant was constructed by the Finnish company Nokian Tyres in 2005, with an investment of around one billion euros. However, due to the devaluation of Russian assets as a result of stringent EU sanctions, the plant was sold to Tatneft for 285 million euros.

Currently, the plant produces the same tires as before, but under the new Ikon Tyres brand in the premium and mid-price segments. Tatneft retained all assets, including equipment, technology, and formulations. The production process is largely automated. Since the plant has not yet reached its planned output, it employs over 1,100 people compared to 1,500 previously.

The plant intends to expand its tire range in line with market demand. The Russian market has recently seen an increase in the number of Chinese vehicles, which require tires of non-standard sizes. Consequently, there will be significant demand for tires to retrofit these vehicles, making the production of new tire sizes a pressing priority. Additionally, the plant has established a research department dedicated to developing new production technologies.

A crucial objective for the plant is to increase production volumes to 17 million units per year. The

existing technical base allows this goal to be achieved. However, securing sales markets remains a challenge, as many previous markets are closed to Russian producers. Therefore, focus should be placed on markets in Latin America, the Middle East, and Southeast Asia. It is also necessary to enhance cooperation with Russian automakers, who require approximately 40 million tires per year for initial equipment, with Chinese manufacturers supplying 20% of tires in the budget segment.

3.2 Birinchi Rezinotekhnika Zavodi (BRZ), Angren (Uzbekistan)

The rubber-technical plant Birinchi Rezinotekhnika Zavodi (BRZ) in the Angren Free Industrial Zone was commissioned in August 2018. It joined the Tatneft Group's Tire Business in 2023, with Tatneft becoming the sole owner.

The authorized capital of BRZ amounts to USD 30 million. The plant's annual design capacity includes 100,000 linear meters of conveyor belts, 200,000 agricultural tires, and 3 million automotive tires. Currently, the plant can produce over 60 sizes of automotive tires (R12–R18), three types of agricultural tires, and more than 100 types of conveyor belts of varying widths, including heat-resistant, rubber-cord, and rubber-fabric types according to custom orders.

Production at BRZ is high-tech and automated, utilizing equipment from global leaders in the tire industry, such as FISCHER (Germany) for breaker cutting, rubber mixing installations from KOBELCO (Japan), COMERIO (Italy) rubber calendaring equipment, VMI EXIUM (Netherlands) tire assembly equipment, XYLON (Germany) X-ray inspection systems, and dynamic balancing equipment from KOBELCO (Japan). The products meet international standards (ISO 9001:2015, ISO 50001:2018, EC117, EC-30, IATF 16949:2016) and are certified under Uzbekistan's national system.

Tires from BRZ, marketed under the Bars brand, are primarily used for initial equipment at ADM Jizzakh and UzAuto Motors in Uzbekistan. ADM Jizzakh began semi-knockdown assembly (SKD) in 2021 for Kia, Lada, and Renault vehicles, later adding Chery and Haval. Full-cycle production began in spring 2024, with the Kia Sonet model achieving maximum localization. UzAuto Motors produces Chevrolet Damas, Chevrolet Tracker, and Chevrolet Onix.

3.3 Tengri Tyres Plant, Saran (Kazakhstan)

The Tengri Tyres plant in Saran, Kazakhstan, is the third facility in Tatneft Group's Tire Business and a joint venture with the Allur Group. Construction began in 2021, and by summer 2024, the plant produced its first tires under the Attar brand. Upon reaching full design capacity, the plant will employ 1,100 people.

The production process covers the full tire manufacturing cycle: raw material preparation, rubber compound and component production, tire assembly, vulcanization, and quality control. The plant features advanced technologies, high automation, energy efficiency, and environmentally friendly practices. Its design capacity is 3 million passenger tires and 500,000 commercial tires (all-steel radial). The plant has potential for further expansion. Attar-branded tires belong to the budget segment and are intended for the Kazakhstan market as well as for export to Russia and other countries.

3.4 Quality Standards and Strategic Goals

According to A. Pantyukhov, Head of the Tire Business Division: "Unified production and product quality standards have been implemented across all three plants, in accordance with the best global practices in the tire industry, regardless of the tire segment."

Thus, the tire complex of the Republic of Tatarstan includes plants both within the republic and abroad. For Tatarstan, this brings benefits in terms of budget revenues and the creation of a positive image as a successful region in Russia and on the global market. Within the republic, two tire manufacturers operate successfully, producing over 15 million units per year across a wide range of products. Their operation has created jobs, contributed to social infrastructure development, and supported environmental protection programs.

Tatneft Group's Tire Business includes three plants—in Vsevolozhsk, Uzbekistan, and Kazakhstan—with a combined design capacity of 23.7 million tires of various models per year across all price segments, from budget to premium. Once the plants reach full capacity, the total workforce will exceed three thousand employees.

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