RUSSIAN PIPE MARKET

In 2020, the Russian pipe market declined by 9% from 2019, mainly due to a 31% year-on-year decrease in consumption of large diameter pipes.

In the reporting year, TMK maintained its leadership in the domestic pipe industry in the segments of pipes for drilling, construction and operation of wells, as well as oil and gas transportation. The Company's total share of the Russian pipe market for 2020 was 23%.

OIL COUNTRY TUBULAR GOODS AND PREMIUM PRODUCTS

The Russian energy complex traditionally demonstrates greater resilience to global crises compared to markets abroad, so the drop in oil consumption due to the COVID-19 pandemic and OPEC+ production restrictions caused a comparatively moderate decrease in demand for oil tubular products. In 2020, Russia decreased its oil and gas condensate production by 8.6% year-on-year to 512.68 million tonnes under the OPEC+ agreements. At the same time, production well drilling in Russia remained high at 27 million meters (– 1% from 2019), while exploration drilling reduced by 13.3% to 984 thousand meters.

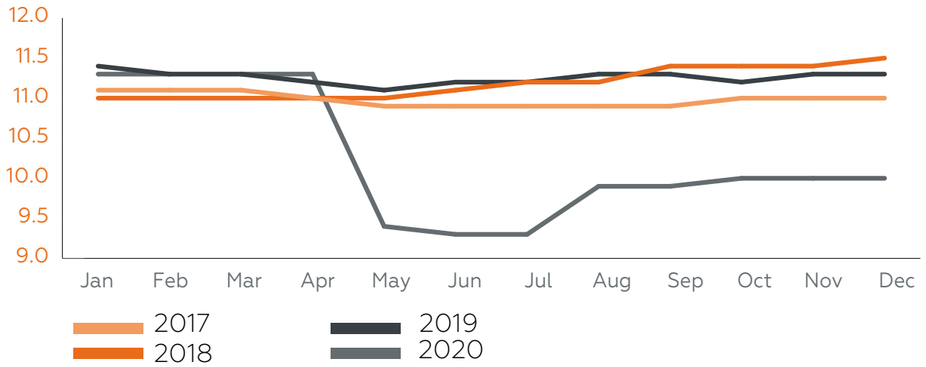
23%

the Company's total share of the Russian pipe market for 2020

50%

the share of horizontal drilling in 2020

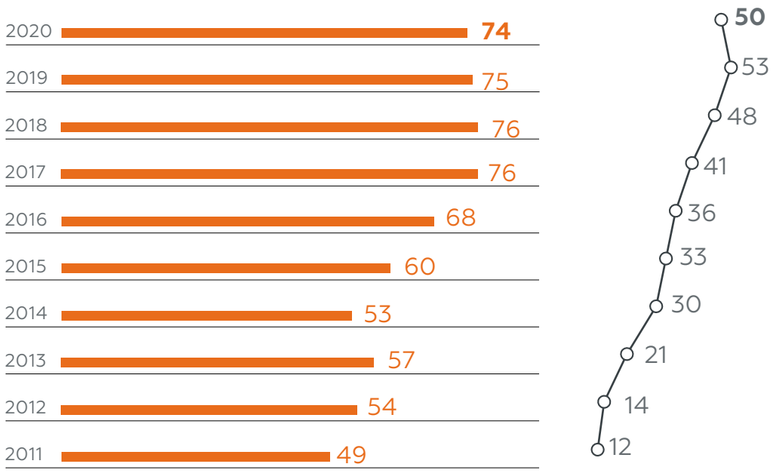
RUSSIAN CRUDE OUTPUT, MILLION BARRELS PER DAY



Source: CDU TEK data

Another OPEC+ agreement, concluded in April 2020, led to lower oil production, which provided significant support to oil prices. However, given the gradual depletion of existing fields in West Siberia, oil companies continued to develop new projects to replace reserves and increase hydrocarbon production after the end of the OPEC+ deal, including high-tech horizontal drilling, the share of which remained high at 50% in 2020.

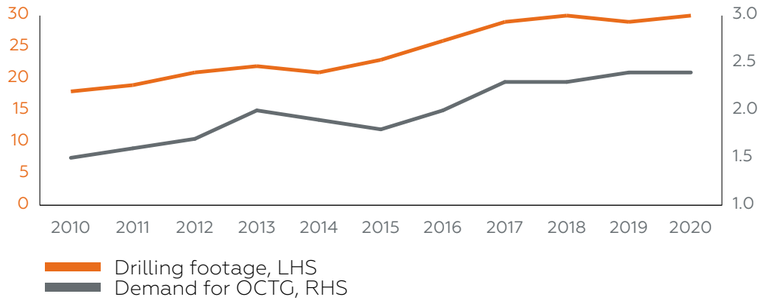
SHARE OF HORIZONTAL DRILLING IN RUSSIA'S TOTAL PRODUCTION DRILLING, %



Source: CDU TEK data, TMK estimate
Note: (a) production well drilling for oil production.

Along with the decline in production well drilling, the OCTG pipe market was down 7% year-on-year in 2020.

DEMAND FOR OCTG IN RUSSIA, MILLION TONNES VS. DRILLING FOOTAGE, MLN M



Source: CDU TEK data, TMK estimate

TMK has been the leader in the seamless OCTG market for many years, thanks to its focus on the development and supply of top-quality, high-tech, reliable, premium tubular products that meet our consumers' specific needs and help them produce hydrocarbons in challenging geological and climatic conditions, including offshore and Far North environments.

In 2019, **for the seventh year running, TMK topped the ranking of Russian suppliers** of tubular products for the oil and gas sector by the Center of Suppliers for the Fuel and Energy Complex (TEK-Rating), a rating agency.

The best suppliers of products and services are determined based on a direct survey of Russia's largest oil and gas customer companies. There is no jury to give final scores as they are based on consumers' responses about their experience with suppliers, including those abroad. The 2020 survey covered leading Russian oil and gas companies such as Gazprom, Rosneft, LUKOIL, Gazprom Neft and other market players.

The ranking of suppliers for the oil and gas industry was first compiled in 2013 in order to promote information support and competitiveness in the supply market for the fuel and energy complex, increase its transparency and openness, and enable the exchange of information on suppliers between fuel and energy companies.

In 2020, TMK focused its efforts on developing and promoting high-tech tubular products and solutions to meet growing customer demands. Despite the challenging global macroeconomic situation caused by the COVID-19 pandemic, oil price volatility and OPEC+ production restrictions, the demand for premium high-tech products remained stable.

During the year, TMK strengthened the sales of its **premium products for offshore projects.**

In 2020, the Company continued integrated deliveries of premium products to LUKOIL for well construction at the Filanovsky and Korchagin offshore fields in the Caspian Sea. TMK also delivered GreenWell lubricant-free coating premium casing pipe, 114.3 and 88.9 mm tubing and 139.7 mm L80 13Cr casing pipe with TMK UP CENTUM threaded connections, which can be used as tubing.

TMK opened a permanent representative office in Yuzhno-Sakhalinsk in November 2019 to provide full technical support to consumers of its products on the island and supply premium products and related services.

In January 2020, TMK and Sakhalin Energy agreed on a joint programme outlining and scheduling technical measures to enhance customer service and technical support for tubular product supplies for the Sakhalin-2 project. The programme documents provide for storage and maintenance of supplied tubular products, which will increase the reliability and efficiency of the strings in onshore fields.

The service development was driven by the growing volume of TMK's pipe supplies for Sakhalin-2 under a long-term contract. TMK delivered two batches of casing pipe in 2018–2019 and shipped another batch of TMK UP PF threaded premium casing pipe in 2020.

TMK is the only Russian manufacturer of offshore pipes with a diameter greater than 244.5 mm made from 13Cr steel

There is further potential for TMK's products in projects off Sakhalin, as the Company can offer the full range of tubular products to support oil and gas production in challenging environments. A major breakthrough of recent years has been the production of offshore pipes with a diameter greater than 244.5 mm made from 13Cr steel – **TMK is the only Russian manufacturer of this type of product.**

In 2018, TMK won Russia's largest tender for the supply of TMK-C casing pipe with TMK UP PF threaded connections to LUKOIL-Komi, with deliveries continuing during 2020.

As part of the import substitution program, Orsky Machine Building Plant shipped to Gazprom 168.3 mm 110CrNi casing pipe with TMK UP PF Premium Connections for construction of production wells in the Astrakhan Region. Earlier, Gazprom purchased such pipes from foreign manufacturers.

In 2020, for the first time ever, TMK shipped tubing to Gazpromneft-Zapolyarye for Kharasaveyskoye gas condensate field comprising 13Cr P110 pipe with TMK UP PF premium threaded connections.

Pipes with premium threaded connections are designed for use in oil and gas wells operating in challenging climatic and geological conditions, including offshore, deep-water and Far North locations, horizontal and directional wells, and unconventional hydrocarbon reserve (shale oil, shale gas and oil sand) development. These connections offer high strength and tightness, along with enhanced resistance to high torsional, bending and tensile loads.

Backed by many years of experience in premium product shipments, TMK is always ready to offer its customers unique engineering capabilities and highly effective pipe solutions delivered to all expectations.

In 2020, TMK continued to develop and promote premium 13Cr and corrosion-resistant chrome-nickel alloy (TMK-C) tubular products.

TMK is one the world's largest premium connection manufacturers.

DEVELOPMENT OF TMK UP CONNECTIONS

2004
TMK 1

2005
TMK FMC
Cal II

2005
TMK GF

2007
TMK PF
Cal IV

2008
TMK FMT
Cal II

2008
TMK PF ET
Cal IV

2010
TMK TDS

2011
TMK CWB

2013
TMK UP MAGNA

2017
TMK UP CENTUM
Cal IV

2018
TMK UP Simplex

ADVANTAGES

01 Onshore and offshore fields

02 High H_2S and CO_2 concentrations

03 High temperatures

04 Arctic environment

05 Horizontal and directional drilling

06 Casing drilling

07 Steam-assisted gravity drainage (SAGD)

08 GreenWell lubricant-free connections

In the reporting year, we expanded our customer base and received new orders for tubular products with TMK UP CENTUM premium threaded connections. The connection is certified to ISO 13679 CAL IV, the strictest international industry standard for premium threaded connections, and demonstrates 100% tension and compression efficiency. The Company started producing casing pipe with TMK UP CENTUM premium threaded connections in 2017.

In 2020, TMK supplied pipe with TMK UP CENTUM premium threaded connections to Gazprom projects (construction of the Kovyktinskoye and Kharasaveyskoye gas condensate fields) and to NOVATEK. TMK UP CENTUM connection successfully passed the EMCEP connection evaluation procedure of Exxon Mobil and was also certified by Shell.

In 2020, TMK continued to develop and launch new premium connections and completed first deliveries of pipes with TMK UP SIMPLEX connection.

To expand its service offering, TMK-Premium Service engineers have developed ExpertProDrilling software to calculate parameters for pipe with premium connections, which makes it possible to select well-specific connections.

2020 became a new stage in the development of pipe-specific services as TMK signed the first service agreement to supervise the installation of TMK UP threaded pipes.

OILFIELD SERVICES

TMK Oilfield Services (TMK NGS) (Yekaterinburg) is a management company for oilfield service enterprises, including: Orsky Machine Building Plant (Orsk, Orenburg Region), Truboplast (Yekaterinburg), TMK NGS-Buzuluk (Buzuluk, Volga Federal District), and TMK NGS-Nizhnevartovsk (Khanty-Mansi Autonomous Area).

TMK Oilfield Services successfully meets market demand for tubing and casing pipe repair, diagnostics and threading, including pipe with TMK UP threaded connections, as well as for internal and external coating on threaded and line pipe.

In 2020, despite the challenging global macroeconomic situation caused by the COVID-19 pandemic, oil price volatility and OPEC+ production restrictions, TMK NGS enterprises were able to adapt to the new market conditions, demonstrating positive dynamics across different areas.

While shipments of oil country tubular goods with anti-corrosion coating decreased, TMK NGS-Nizhnevartovsk nearly doubled the volume of internal coating for tubing and drill pipes through signing direct service agreements in the region of operation. Orsky Machine Building Plant, a high-tech producer of gas cylinders (high-pressure vessels) for storage and transportation of various gases, shipped over 22 thousand gas cylinders, almost flat year-on-year.

TMK NGS-Buzuluk completed over 130 orders in 2020 to provide engineering support for TMK tubular products as well as for running over 310 casing and tubing strings in fields located in Russia, the CIS, and other countries. During the year, TMK continued engineering support for TMK tubular products during the construction of production wells at fields developed by major Russian oil and gas companies.

130 orders
in 2020 to provide engineering support for TMK tubular products

During the year, TMK continued engineering support for TMK tubular products during the construction of production wells at fields developed by major Russian oil and gas companies.

LARGE DIAMETER PIPE

In 2020, the Russian LDP market decreased by 31% year-on-year to 1.4 million tonnes, with most demand for LDP in the Russian market coming from Gazprom and Transneft.

In mid-2020, Gazprom held a tender for the purchase of about 1.3 million tonnes of pipe in 2020–2022 for the construction of the Power of Siberia, Bovanenkovo–Ukhta and Ukhta–Torzhok pipelines. The supply was split between five participants, including TMK. In the reporting year, Gazprom procured LDP for the Power of Siberia project (the section from the Chayandinskoye to the Kovyktinskoye field), development of the Kharasaveyskoye and Semakovskoye fields, and the Bovanenkovo–Ukhta project (3rd string).

In 2020, TMK's share of LDP supply in the Russian market totaled 11%. TMK supplied longitudinally welded large-diameter pipe for Gazprom's Ukhta–Torzhok project (3rd string) and pipe for the repair and maintenance needs of subsidiaries of Gazprom and Transneft as well as for export.

11%

In 2020, TMK's share of LDP supply in the Russian market totaled

INDUSTRIAL PIPE

TMK's core business is OCTG manufacturing. However, the Company also launched new products for construction, utilities, automotive, power engineering, aircraft manufacturing and nuclear industries. In 2020, industrial pipes accounted for 26% of the Group's total sales.

Despite the challenging macroeconomic situation due to the spread of COVID-19 in 2020, welded industrial pipe consumption increased 1% compared to 2019 driven by higher demand from the construction industry after pandemic-induced restrictions were lifted. Seamless industrial pipe consumption in 2020 was down 7% year-on-year.

In 2020, TMK signed an agreement to supply pipes to Amur Gas Chemical Complex, one of the world's largest polymer production enterprises, currently constructed by SIBUR in the Amur Region. TMK will deliver a set of integrated solutions including seamless pipes, welded large-diameter pipes and various pipeline connections (bends, fittings and other pipeline sections) – more than 36 thousand tonnes in total in 2021–2023. Previously, pipes for construction of gas and petrochemical facilities of such scale in Russia were mainly supplied by foreign manufacturers.

In 2020, TMK and State Atomic Energy Corporation Rosatom continued to strengthen and expand partnership under the agreement on cooperation signed in 2019, whereby the parties agreed to collaborate on the production and use of high-tech tubular products, including joint development of new steel pipes. TMK has developed unique pipes which it will supply to Rosatom's mechanical engineering division for its BREST-OD-300 experimental demonstration power unit. As part of a project to establish the closed nuclear fuel cycle, TMK will produce over 200 thousand meters of pipe to equip the steam generators of a fast neutron reactor.

A technology to produce extra-long heat-exchange pipes made of special durable, ductile steel was developed exclusively for the new power unit. The high-strength austenitic steel withstands both steam water and superheated steam, as well as liquid lead, which is used in a reactor as a coolant. At the same time, the steel's chemical, physical and mechanical properties remain stable along the entire length of the product. The extra-long heat-exchange pipe was developed by TMK subsidiary TMK-INOX together with partners – the Dollezhal Research and Development Institute of Power Engineering (NIKIET), the Bardin Central Research Institute for Ferrous Metallurgy and the Russian Research Institute of the Tube & Pipe Industries (RUSNITI), which is part of TMK.

A technology to produce extra-long heat-exchange pipes made of special durable, ductile steel was developed exclusively for the new power unit.

To expand cooperation with Rosatom and build up its capabilities in the promising nuclear piping market, at the end of 2020 TMK acquired controlling stakes in OJSC Rakityansky Armaturny Zavod and several other companies controlled by LLC Truby 2000, one of Russia's leading manufacturers of nuclear piping systems. Truby 2000 enterprises engineer, manufacture and supply pipeline equipment made of carbon, boiler and stainless steels for nuclear and thermal power plants. The enterprises' aggregate annual capacity is about 1,200 tonnes of pipe, positioning Truby 2000 as one of Russia's top four manufacturers of nuclear piping systems for many years. Since 2007, the enterprises have delivered more than 15 thousand tonnes of pipe for nuclear power plants in Russia and Belarus and currently supply pipe under the delivery agreement to the Akkuyu NPP in Turkey, constructed by State Atomic Energy Corporation Rosatom.

1.2

tonnes of pipe

Truby 2000's aggregate annual capacity