YourTube

Technology Motion Knowledge

07•2011
№2 (05)

PIPE FOR ALL MARKETS

YourTube is targeted to three audience groups – hailing from various countries and continents – and is published in parallel Russian, Romanian and English editions. The highlights of each magazine are different, depending on the division. This edition offers a compilation of selected materials published in the Russian and Romanian editions of YourTube No. 2 (05)

Magdalena Popescu, Director of Quality, Health and Safety, and Environmental Protection at TMK-Artrom.

TMK-Artom: Full Certification

The Artrom plant was one of the first in Romania to begin certifying its products, with the first certificates being received in 1993. National auditors did not exist at the time, so companies had to apply to specialized foreign firms.

When deciding on the certification of its products, TMK-Artrom's management has pursued the important goal of entering export markets. The presence of product quality assurances has helped the company implement ambitious plans.

The criteria and certification requirements have changed over time. Customers now want to have pipe quality assurances at all stages of production — from the raw material to finishing operations. In 2010, at the request of customers, TMK-Artrom received certification from Lloyd's Register for pipes used in ship building, as well as for steel billets produced by TMK-Resita for these pipes' manufacture.

Both Romanian facilities currently operate according to international standards in environmental protection, quality management, and occupational safety. They continue to work actively toward the certification of their products. Magdalena Popescu, Director of Quality, Health and Safety, and Environmental Protection at TMK-Artrom, said that the company is ready to meet further requirements imposed by the market: "Customers are the most stringent auditors, because they know what they need."

According to IHS CERA, global production of shale gas could reach 180 billion cubic meters per year by 2018.

Triumph of Oil and Gas

Strong global demand for energy continues to act as a catalyst for the growth in demand for tubular products. Market participants and analysts expect that this year production volumes in the Russian pipe industry will grow by 5 to 10 percent.

The political crisis in the Middle East and refusal in the European Union to develop nuclear energy in the wake of the accident at Japan's Fukushima-1 plant have provoked a rise in oil prices. According to industry analysts' most conservative forecasts, the average oil price for 2011 will be $96.80 per barrel. Rising oil prices are the main precondition for the further expansion of oil production.

Relatively recently, pipe manufacturers have been able to use new technologies to open up deposits of shale gas. The fact that investment companies consider shale gas to be a promising resource in the energy sector is evidenced by recent transactions in this market involving several large global firms.

Table of contents

YourTube Technology Motion Knowledge
2 (05) july 2011

Incorporator: TMK

Project manager: Svetlana Bazylchik BazylchikSI@TMK-group.com

Editor's office address: Russia, 105062, Moscow, 40 Pokrovka Street, Bldg. 2a Tel.: +7 (495) 775 7600 Fax: +7 (495) 775 7601

E-mail: pr@TMK-group.com www.TMK-group.com

Certificate of a publication No. FS77-40128 of June 11, 2010 The edition is registered with the Federal Service for Supervision in the Sphere of Communications, Information Technology and Mass Communications.
Any use of the materials without the editors' consent is prohibited
Printed in the Print.Market LLC printing office.
Print run is 4,000 copies.

людиpeople

Publication printer: ЛЮДИPEOPLE Group 129085, Moscow, 21 Zvezdny Boulevard, bldg. 1, office 18 Tel.: +7 (495) 988 1806 E-mail: ask@vashagazeta.com

Editor-in-Chief: Yelena Kostyuk Art director: Maksim Guelik Designer: Aleksandra Marochkova Correspondents: Ivonne Baez (USA), Mikhail Cherkasov (Russia), Adam Fuss (USA) Production Director: Oleg Merochkin Color correction: Sergey Souslov Proof-reading: Lexica

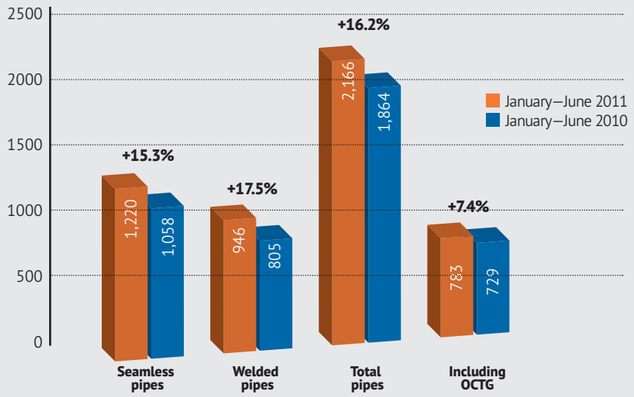
TAGMET HOSTS METAL TRADERS

TAGMET was recently the venue for a metal traders' conference that was held under the name "10 Years of TMK on Regional Markets — Results and Outlook." The organizers were TMK and the Russian Union of Metal and Steel Suppliers (RSPM). More than 120 dealers took part in the conference where a number of issues were discussed, such as the modernization of production facilities, product quality, and strengthening TMK's position in international markets. It was noted that the development of a dealer network, long-term contracts and guaranteed supply by plants to metal traders is beneficial to both parties. Vadim Braynis, Managing Director of Ariel Trade, expressed satisfaction with TMK's flexible marketing practices. Taking into account the wishes of customers, the company's facilities have organized truck delivery of their products and its transport to merchandise cars. The delegation had a chance to view the modern equipment at TAGMET — the steel vacuum degassing unit and the continuous casting machines in the open-hearth shop, and Russia's only PQF mill, which uses three-roll stand technology. ■

RECORD LEVELS

In the first six months of 2011, TMK shipped 2,166,000 tonnes of steel pipe to customers, which is a 16.2 percent increase in comparison to the first six months of 2010. Shipments of large diameter pipe amounted to roughly 377,000 tonnes, which is a 33.7 percent increase in comparison to the same period in 2010. Shipments of OCTG increased by 7.4 percent compared to the same period of 2010. In the first half of the year, TMK IPSCO shipments of tubular products amounted to roughly 479,000 tonnes, exceeding by 16.3 percent the volumes shipped in same period of 2010. The largest increase was observed in the line pipe segment, which was due to increased volumes of hydrocarbons that needed to be transported to processing and storage sites. Demand for premium products is also growing. The growing shale development in the U.S., where TMK IPSCO's share of premium connections used in gas production exceeds 30 percent, has allowed the company to optimistically forecast additional volume for its American division. In the first six months of 2011, TMK shipped approximately 236,000 premium connections developed in its Russian (TMK family) and American (ULTRA) divisions, which is 3.2 percent more than in the first six months of 2010. ■

Volumes of TMK Pipe Shipments in 2011 (thousands of tonnes)



Vladimir Sazonov, Director of Quality at TMK IPSCO, and Mike Brown, Manager of Process Engineering at TMK IPSCO.

SIX SIGMA ACADEMY

In March, TMK launched a project to train managers heading up improvement projects on the methodology of Lean Six Sigma. The training session lasts five months and is designed for production and technical personnel at TMK plants, as well as for employees of the management company. Each month, the course consists of one week of theoretical training and one week of practical training on the corresponding stages of DMAIC — Define, Measure, Analyze, Implement, and Control. The theory is taught by Robert Vaughn, Director of the Six Sigma Academy (New York), Mike Brown, Manager of Process Engineering at TMK IPSCO and a Six Sigma "Black Belt", and other professionals. Vladimir Sazonov, Director of Quality at TMK IPSCO, provides advice on the practical training sessions. ■

TMK PF AND ULTRA-QX RECEIVE INTERNATIONAL CERTIFICATION

TMK has successfully conducted qualification tests for TMK PF and ULTRA-QX premium connections (Grade P110, OD 245mm, wall thickness 11.99mm) in accordance with the ISO 13679 CAL IV standard. The tests were conducted at the Oil States Industries international testing center (Aberdeen, UK), which is where the world's largest oil and gas companies perform product qualification.

The tests were conducted by TMK-Premium Service, which tested TMK products for the first time for compliance with the ISO 13679 CAL IV standard. ■

RECENT DEVELOPMENTS IN PREMIUM

TMK has started production of the new TMK CWB premium connection for use in casing string. The Volzhsky Pipe Plant will be responsible for commercial manufacture of pipes threaded with TMK CWB connections.

TMK CWB is an upgraded version of the buttress connection, which is widely used by Russian oil and gas companies. TMK CWB has two unique characteristics. The first is the presence of an additional thrust face, which is designed for precise fixation given the tightness in the assembly process. This allows for an increase in the connection's gas-tightness and operational efficiency. The second is the connection's ability to be coupled with other types of threads and to be used as an adapter.

The new product type was developed and brought to production by specialists from TMK-Premium Service. TMK CWB has been successfully tested for gas-tightness under combined load at VNIITneft. ■

NEW TITLE FOR ADRIAN POPESCU

In April, Adrian Popescu, President & CEO of TMK's European Division, celebrated his 50TH birthday. He has been with TMK-Artrom for 26 years. To celebrate his birthday, a delegation headed by Dmitry Pumpyanskiy, Chairman of TMK's Board of Directors, arrived in Romania. The delegation included company leaders, friends and associates. Pumpyanskiy congratulated Popescu in Romanian, pleasantly surprising everyone present.

"Adrian is a professional of the highest level and is wholeheartedly devoted to the company. He is respected not only in Romania, where under his leadership TMK-Artrom and TMK-Resita have become absolute manufacturing leaders," said Pumpyanskiy. "Adrian has gone from being a machine operator apprentice at Artom to President and today not only stands in control of the Romanian facilities, but is also the President of TMK's European Division."

For his operational and commercial successes and his loyalty to the company, Popescu was awarded the title "Honored TMK Worker." A distinctive emblem and an honorary document were presented to him by TMK CEO, Alexander Shiryaev. ■

TMK AT HANNOVER MESSE

TMK and Trade House TMK participated in Hannover Messe 2011, an industrial exhibition that was held in early April in Hannover, Germany. Hannover Messe is the largest industrial and economic forum that is actively used by government officials and business leaders from many countries as a platform to promote goods and services, as well as to support contacts with foreign partners.

Hannover Messe received more than 230,000 visitors in total. More than 6,500 companies from 65 countries arrived in Hannover to showcase their achievements and to share innovative solutions.

During the exhibition, numerous meetings with customers took place at TMK's booth. The booth was also visited by a delegation from the Sverdlov regional government, which was headed by Governor Alexander Misharin and Minister of Economics Mikhail Maksimov. ■

TMK-PREMIUM SERVICE SHOWS OFF

Lukoil's V International Scientific Conference on Drilling has taken place. TMK-Premium Service's exhibition stand was specially developed for the conference. Aluminum models of Premium-threaded pipe were made in full size.

The forum between TMK-Premium Service developed an agreement for industrial trials of TMK PF connections in order to determine their possible use in offshore drilling.

In mid-May, Trade House TMK and TMK-Premium Service took part in the 35TH conference on the topic of "New Technical and Process Design Solutions in the Construction of Onshore and Offshore Wells." The conference was organized by the Association of Drilling Contractors.

TMK's presentation sparked great interest among industry professionals. In particular, they were interested in the project to create a new line of casing with premium connections, which is being implemented at the Orsky Machine-Building Plant. ■

ULTRA SQUEEZES COMPETITORS

TMK completed a shipment of casing with ULTRA SF premium connections to Gazprom Neft.

The shipment contained grade P110 casing with ULTRA SF connections (OD 127mm, wall thickness 9.19mm) that was produced by TMK IPSCO. The product is designated for use at the Urmanskoye field in the Tomsk Region.

"Previously Gazprom Neft imported this type of pipe from our global competitors. Now, having complemented our premium connections portfolio with Ultra threads developed by TMK IPSCO, our U.S. Division, TMK can supply a large range of world-class premium products to Russian oil and gas companies," said Alexander Shiryaev, TMK CEO. ■

RECENT DEVELOPMENTS

TAGMET has mastered the production of pipes and couplings of size 177.8 x 9.19 mm. These are seamless casing and couplings made of Grade P110 steel based on U.S. API Spec 5CT. The pipe modified by TAGMET with a TMK PF connection is designed for use in sour service environments, where high connection strength is especially important.

The connection's gas-tightness is ensured by the presence of a "metal-metal" pressurized center. The conical surface of the pipe and couplings create a stop and an additional gas-tight barrier.

Heat treatment regimes were chosen for the newly-developed pipe and couplings. The results of mechanical testing of pipes and couplings were positive. Samples of these products are now at VNIITneft where they will be tested for sulfide cracking.

The new product was developed in the pipe welding shop at TAGMET. Manufacture of ERW pipe with an OD of 219mm and wall thickness of 8 mm according to the GOST 10704 and GOST 10705 standards has commenced. These pipes are used to build pipelines and in various types of construction. ■

The Sales Matrix

TMK conducts well thought-out trade practices, maintaining a presence in major markets and steadily expanding in promising pipe-consuming regions. At the same time, the world is already changing, forcing global market participants to rethink their manufacturing and sales approaches. **Konstantin Semerikov**, Senior Vice President at TMK and General Director of Trade House TMK, tells us about the global company's sales strategy and tactics.

Mr. Semerikov, what does the TMK sales system look like now with its newly formed divisions in Europe and North America?
Our system is centralized, with a certain amount of independence for our European and American divisions. The effectiveness of this approach is proven by our positive sales trends. Our sales are based on a hybrid, matrix approach: geographic distribution on the one hand and product distribution on the other. We are the strongest in the regions where we have manufacturing facilities—in our domestic markets. This is explained by our economic and logistics systems, possession of country-specific solutions to protect our market and on the whole by our better knowledge of local particulars.

Over 85 percent of the products manufactured by our Russian facilities are delivered to the former Soviet Union—Russia and other CIS countries. Over 90 percent of TMK-Artrom's products go to European customers. In turn, TMK IPSCO's facilities sell over 95 percent of their products in the United States.

At the same time, in all "domestic" markets, we also offer product grades that are in short supply, which our facilities in the given region don't have but which are manufactured at our other facilities. Thus, we are expanding our product offerings to provide customers with a fairly wide range of products. With the Moscow-based Trade House in charge of overall coordination, the trading unit located in each given region is our leader when it comes to ensuring a comprehensive supply to domestic markets. If we offer a full line of products to Europe, for example, the leading coordinator will be TMK-Europe, in North America, it will be TMK IPSCO; and in Southeast Asia, it will be Trade House TMK in Moscow.

Of course, we are striving to expand our presence in other pipe-consuming regions. Today, TMK exports products to more than 65 countries. We have created and continue to develop the necessary infrastructure to advance this expansion of trading companies and representative offices around the world.

Do the products of all the company's facilities carry the same brand in the market?
All our products are sold under the TMK brand. The product certificates and tags list TMK first, and then the manufacturing facility. The existence of a single brand improves recognition, as well as loyalty among both old and new customers. We have a good example from TMK IPSCO's experience: when the company returned to the Canadian market, former customers recognized it first under the IPSCO brand as it had been known there before TMK acquired American assets. They recognized it and came back with orders. But now the Canadian market knows the TMK brand well and we don't just supply standard products there, but specialty pipes for the oil and gas industry.

Are there differences among the Russian, European, and American distribution channels?
In Russia, we sell through the Trade House and its subsidiaries. We also sell some general-purpose products through our dealers in Russia and other CIS countries. TMK has the largest dealer network, which currently includes 88 authorized representatives. In Romania, we sell our products through two channels: through metal traders and directly to end users. But in North America, our trade is mostly through distributors.

Is it hard to reach the end user in North America, or is there some other reason?
It's a specific feature of the local markets in the U.S. and Canada. The distributors don't just buy and sell pipe; rather, they provide additional services to their customers—oil and gas companies. In other words, they perform the functions of a pipe distribution center. The distributor provides the very same services of inspection, delivery, modified and just-in-time deliveries, or, on the other hand, acceptance of returns.

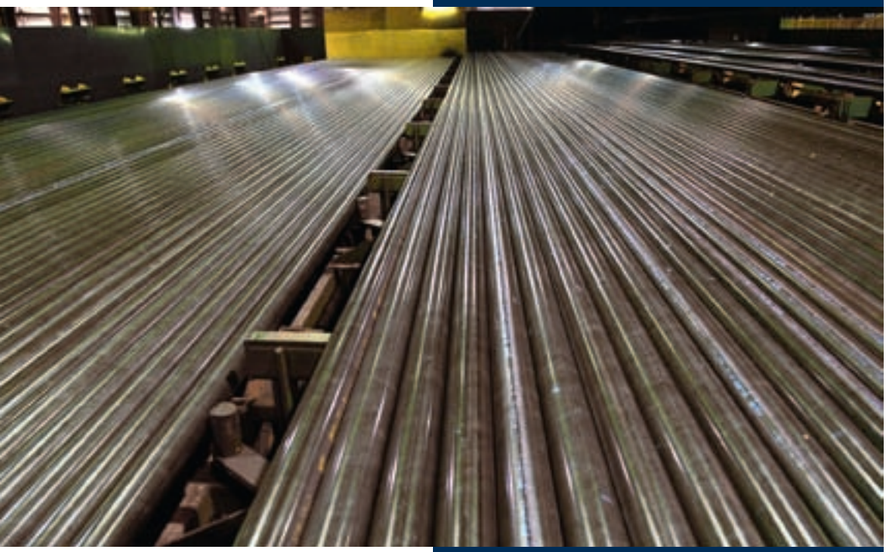
The end user pays only for products that are actually used without having to maintain that entire infrastructure.

In Russia, for example, there is a fundamental difference. For historical reasons, each major company has developed its own pipe distribution center. Unlike Russia, in the U.S. there are many small companies that cannot afford to maintain their own centers. The U.S. has over 1,000 oil and gas companies, from little ones with one or two rigs to major ones like ExxonMobil. The distributors don't always target the very same oil and gas company but normally supply 100 or 200 companies in a region. But in Russia, the five oil "majors" cover over 70 percent of production.

Americans are certainly willing to pay for service, but they don't want to incur the huge investment costs of developing their own logistics units.

Why doesn't TMK have its own retail network?

Any warehousing business requires considerable investment. To date, our priorities have been investing in the development of production capacity, and that policy has proven wise. Our existing dealer network provides the necessary level of sales in the regional Russian and other CIS markets. Even so, we are now implementing a warehouse trading program. Trade House TMK leases warehouse space from our Russian companies, where we store a wide range of pipes made by



those companies. The existence of warehouse stockpiles enables us to respond quickly to fulfill orders and thereby increase sales volume accordingly. Customers have a need for a wide range of products, but our working capital is insufficient. We solve this problem by investing our working capital in the development of stockpiles. In doing so, we are adhering to best practice in the industry.

Is TMK alone in Russia in following this practice?
Others do it as well to a varying extent, but we have consciously decided to hold intermediate stockpiles at facilities whose products belong specifically to the Trade House. That way we are able to make quick sales.

What are the specific features of your relationships with major dealers?
For this category, we build in special incentive programs on the idea of a lower unit price for greater volume. This practice is mutually beneficial. For us it means a stable workload, work scheduling, and more predictable financial performance accordingly. Our customers in the industrial pipe segment observe our results very attentively. Say a major client in the machine-building segment, KAMAZ, has rated TMK as a class-A supplier, thereby rating the quality of our products and service. In turn, we react sensitively to the slightest change in our rating. If we suddenly see a weakening of our position, we will do everything possible to restore it.

How do you structure your relationships with key customers?
Our most important customers are companies in the oil and gas sector, which accounts for over 70 percent of TMK's shipments. Half of this volume is seamless OCTG. A large share of these shipments is large diameter pipe, whose principal customers are Gazprom and Transneft. Our priority relationships are long-term and we have established these relationships with all the major oil and gas companies in Russia. Our Russian manufacturing facilities cooperated closely with oil companies even before the formation of TMK.

Now TMK, having consolidated the major pipe producers in Russia, is the unconditional leader for Russian oil companies. About 60 percent of all seamless oil-industry pipes are supplied by TMK. Our oil and gas service is also oriented towards Russian oil producers. The specific features of the oil and gas market are such that among companies that directly use tubular products, an enormous number of contractors work in that field, providing engineering and other associated services in the organization of the oil production process. They often consist of a business that has been spun off from a major global company and bring state-of-the-art technologies from foreign companies to Russia.

Experience has shown that establishing relationships with these entities is a guarantee that our products will be used and applied in specific fields. And while we previously thought we had to expand our relationship with ExxonMobil, we now understand that we must also establish ties with the subcontractors they select for regional tenders. With these trends in mind, we have boosted our efforts in this area, and all of our facilities are now becoming qualified both with end users and with service companies. This is one of the areas that promotes our presence in the oil and gas producing regions of the world.

What are the general supply trends in the global tubular products market?
The tubular component in global trade is shrinking as standard-quality tubulars are more frequently being handled through regional sales. Global trade is shifting to the premium product types. For example, until very recently high-strength casing was considered an item of global trade. In other words, it could be sold in every part of the world and the share of such sales was large. Today, this share is declining because local manufacturers who meet regional demands for casing have appeared in many parts of the world. These regions include the Middle East, Southeast Asia, Europe, Latin America and so forth. So the global trade today is more about trade in high-tech premium products, of which there are a limited amount on the market at the moment. Such products are in demand and sold worldwide, regardless of the manufacturer's geography.

How is TMK responding to this market challenge?
As one of the world's leading manufacturers, TMK fully accounts for the new trends in its operations, especially when it comes to meeting the need to offer highly complicated product types that are traded in world market. Our newly-created Premium division, which includes production and intellectual assets of TMK IPSCO and our Russian facilities, is working to develop premium products. Our program of expansion into promising markets is tied specifically to comprehensive deliveries of premium-class goods. These markets are Africa, Latin America, and Southeast Asia. Naturally, there is tight competition in these regions, but we believe our presence there will be justified.

What is TMK's potential for sales growth of internationally traded goods?
We have been measuring the upward trend in demand for tubular products for a long time. Oil and gas companies are expanding into the permafrost, where they require thermally insulated pipe and "thermal cases," and into viscous crudes, for which they also require insulated pipe capable of delivering heat-transfer agents to the pay zone. When producing fluids with high gas content, they require special gas-tight connections and the use of Grade X80 pipe has already become routine. Companies are engaged in offshore drilling. LUKoil is already producing from the northern Caspian Sea and Gazmorneft and Rosneft have plans to develop offshore fields in the Black Sea.

In creating a technical and technological platform for manufactureing next-generation products, we have carried out large-scale modernization projects at all our facilities. From this standpoint, we are completely ready to meet the market challenges.

To demonstrate compliance with our customers' technical requirements, we undergo qualification of our products with major companies. For example, we are now undergoing qualification for the Trans-Alaska pipeline, for the Shtokman gas and condensate field and other promising projects. It is no secret that in realizing the Shtokman project, Gazpromneft will not be alone in imposing requirements on suppliers; its foreign partners Total and Statoil will do so as well. We are ready for this and our technical developments are under way.

Global trade today is more about trade in high-tech premium products. Such products are in demand and sold worldwide, regardless of the manufacturer's geography.

Our TMK PF premium connections recently passed ISO 13679 CAL IV certification. This proves the world-class quality of our thread and allows us to enter the pool of leading global suppliers of tubular products for both onshore and offshore complex drilling and hydrocarbon production projects. We are proving our technical capabilities to supply high-tech products. In addition, we are working under research cooperation contracts with oil and gas companies. Taken together, all this supplements our understanding of customer needs and allows us to move forward rapidly on our chosen path.

What are the specific features of doing business in the post-Soviet space?
The CIS (Commonwealth of Independent States) market is extremely important to us because it is developing rapidly. New fields are being developed and pipeline projects are underway. The state companies working in the CIS countries are practically integrated into the all-Russian gas transport system. For us, this is an enormous plus. Moreover, the republics of the former Soviet Union have technical regulations developed back in the Soviet days. And the opinion of Russian institutes such as the Russian Scientific Research Institute of Natural Gases and Gas Technologies (VNIIgaz) carries great weight. All this plays into our hands as sellers.

Joint ventures with foreign participation have recently begun to appear in the CIS. This is a promising class of customers but a more complicated one for us in this market. Relations with them require flexibility, agility, a higher level of technical support for sales and administrative support. And there's another fine point: the global oil and gas companies coming to the CIS—ExxonMobil, Shell, Total—generally bring traditional suppliers with them. In effect, we have to prove our competitiveness. This task is twice as hard as establishing relations from scratch.

Finally, the third group of customers in the CIS is made up of the Russian companies that have purchased hydrocarbon development and production licenses. For example, LUKoil is working actively through its subsidiaries in Kazakhstan and Uzbekistan. We are establishing long-term relationships with these customers as well.

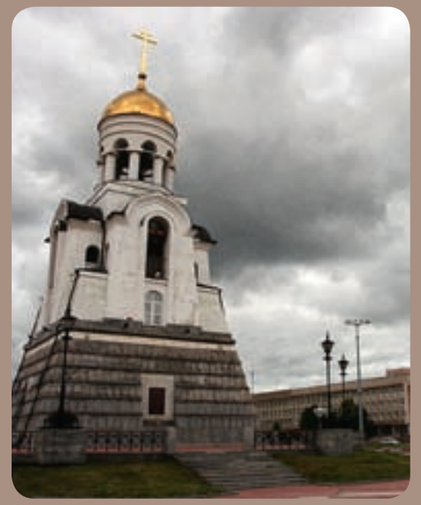
The Belarusian market, where the oil industry, mechanical engineering, and utility services are all well developed, is important to us. Among foreign tubular manufacturers in Belarus, we hold the lead. Finally, the presence of the Customs Union helps us in Belarus and Kazakhstan because it establishes unified rules and market protection principles.

What does the global presence that we are striving toward mean to TMK?
Our global presence means the company operates both in traditional local markets and in the world markets of oil and gas production and refining, in major and developing energy-producing regions, and continuous expansion of the boundaries of our "domestic" markets. In North America, it means Canada to the north and Latin America to the south. In Russia, it means the CIS countries, as well as a closer relationship with Europe, and so on. But if we want to be present globally—and we do—then we still must also increase our output of high-tech products. Quick response, and sometimes anticipation, of the market's changing needs will help us expand our presence both in local markets and in international trade. In realizing this strategy, we are not forgetting the importance of all our multinational team of sellers and their qualification level, nor those in our company who are engaged in product development and manufacture. All of us, in Russia, Europe, and North America, are creating the global TMK brand that has already won global recognition. ■

Denis Pleshakov, Director of Trade House TMK's Kamensk-Uralsky branch

Our branch sells products manufactured at Sinarsky Pipe Plant, which are in demand in the oil and gas, machine building, automotive, power-generation, chemical and petrochemical industries, as well as in construction, municipal utilities, etc. We sell hot-rolled general-purpose pipes, boiler pipes, and drawn and thin-walled pipes. Our partners include both end users of pipes and metal-trading companies. We ship mainly to the Russian market and throughout other CIS countries. We spend a lot of time monitoring the timely fulfillment of delivery contracts for tubular products. The branch operates the order tracking department responsible for shipping products to customers. We cooperate closely with partners, so keeping them informed on the progress of order manufacturing is an important task. The special features of our work are determined by the fact that Sinarsky Pipe Plant produces a wide variety of pipe grades, types, and sizes. We have to work with small orders, and every such order contains numerous items. It is not uncommon for a rail car to be made up of 25 or 30 types and sizes of pipes.

Our branch is not just a working group, but a friendly team of like-minded thinkers. We are continuously improving our work with customers, and have been cooperating productively with many of them since we opened the branch. That kind of long-term cooperation speaks to the trust and confidence of our customers.



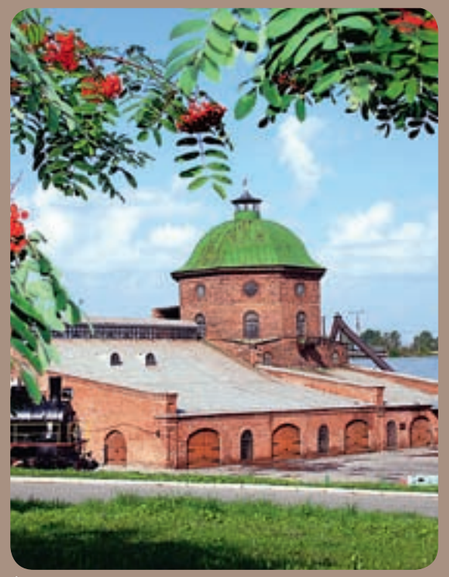
Alexander Nevsky Chapel was built on the central square of Kamensk-Uralsky in 2001 in honor of the city's 300th anniversary.

1 Zavodsky proyezd, Kamensk-Uralsky, Sverdlovsk Region
Tel. +7 (3439) 36-3719, +7 (3439) 36-3001

Oleg Malarshchikov, Director of Trade House TMK's Polevskoy branch

The pipes made by Seversky Tube Works, which we sell, are used in the oil and gas industry, machine building, construction, municipal utilities, and for building various types of pipelines. These are electro-welded general purpose pipes, including galvanized varieties, as well as seamless and shaped pipes. We are currently bringing a new product to the market—assorted shaped pipes—in collaboration with a Greek company, TMK-CPW [TMK-Corinth Pipe Works]. The product is shipped to all Russian regions, as well as to the former Soviet republics and further abroad. The product is widely known, and customers trust its quality. We use a regional network to organize sales: each sales manager is assigned a specific region. We stress improving relations with customers, so a separate order tracking department was created from the sales division. It ensures that pipes are shipped in strict compliance with contractual deadlines. For everyday interaction with the customers, the department interacts closely with the planning and production division and the facilities, generates and provides information on warehouse pipe availability and production. All of this enables us to offer attractive terms both to wholesale buyers and to customers with smaller orders, shorten delivery times, and make the branch's operations more flexible.

Our branch is a united team of professionals. In the past six months, our top and middle management structure has actually been completely revamped. We have set ambitious goals and have full confidence in their successful achievement.



The Seversky Blast Furnace Museum in Polevskoy preserves the history of Ural metallurgy. Among its exhibits is the only Russian and European blast furnace from the 19th century.

7 Vershinin St., Polevskoy, Sverdlovsk Region
Tel. +7 (34350) 3-2105, +7 (34350) 3-3275

Mikhail Oshchepkov, Director of Trade House TMK's Volzhsky branch

We sell the products that are manufactured at Pipe Rolling Shop 1 and the Pipe Extrusion Shop at Volzhsky Pipe Plant, targeting mainly the machine-building and power generation industries. We sell large diameter pipes (primarily spirally welded) on regional markets, and support orders that come from Trade House TMK's Moscow office.

Unlike the company's other branches, we mostly operate directly with end users, so customer orientation is a critical component of our operation. We have the technical agreements with practically all of our customers in place, and these agreements take their individual needs into account. We strive to deliver products as quickly as possible, loading local rail cars as the customer desires—up to 20 items per car. This customized approach, the ability to offer customers what they want, is very important. As you know, the best customer is the one that comes back again and again with new orders, and we try to create all the conditions for long-term mutually advantageous cooperation. This approach has been successful; it's no accident that we can sell much of our output in the Ural region, right next to our competitors.

Our branch always takes on big commitments to meet the planned targets. The guarantee of our success is our highly motivated and well-educated work force.

Volgograd is known for its famous statue—The Motherland Calls—which has entered the Guinness Book of World Records as one of the world's tallest. At 85 meters, it is almost twice as tall as New York's Statue of Liberty.

6 Avtodoroga St., Volzhsky, Volgograd Region
Tel. +7 (8443) 22-2777, +7 (8443) 55-1829

Aleksandr Kuznetsov, Director of Trade House TMK's Taganrog branch

Welded and seamless general-purpose pipes manufactured by Taganrog Metallurgical Works (TAGMET) are the products that we offer to the market. Due to their wide range of applications—in housing and utilities, the gas industry, and construction—we deliver most products to metal trading warehouses belonging to the company's dealers and agents in the regions for subsequent distribution in small lots to end users. Deliveries are made to every region in Russia, with the southern and central parts of the country accounting for over 80 percent. In addition, our branch is the main supplier of general-purpose pipes throughout the CIS.

We offer our customers a wide range of products from steady warehouse stocks (10,000 tonnes of welded pipe and 5,000 tonnes of seamless pipe), and we make up multi-item mixed lots by rail car or truck. We were the first to provide delivery to our customers' warehouses with our own fleet of trucks. This service is in demand now, and this experience has been adopted by other units of Trade House TMK. We emphasize the continuous expansion of our clientele and the promotion of TAGMET products. We conduct training workshops for dealers, actively work to promote products for the regional and municipal needs of the Rostov Region and cooperate with self-regulating organizations of builders in Southern Russia. We operate in a highly competitive market, so our sales associates are distinguished by their energy and persistence in achieving goals.

The monument to Peter the Great in Taganrog is considered one of the best in the world. It was erected in 1903 by the sculptor Mark Antokolsky.

1 Zavodskaya St., Taganrog, Rostov Region
Tel.: +7 (8634) 65-03-58, +7 (8634) 32-42-02

Sales in the Americas – A Story of Growth

In June 2005, TMK entered the North American market when it opened a small trade house—TMK North America—in Houston, Texas. Since then, the company's business has grown dramatically, particularly following the acquisition of IPSCO's U.S. tubular production facilities in the summer of 2008. As in other regions where TMK operates, sales operations are key to the company's success in the Americas. *YourTube* spoke recently with two leaders who are responsible for overseeing the sales in the region—Chuck King, President of TMK North America and Director of Industrial Sales, and George Adams, Director of OCTG Sales – Americas at TMK IPSCO.

TMK IPSCO's share in the U.S. OCTG market continues to grow. Is this growth expected to continue?
George Adams: Our market share will continue to increase as we improve efficiency at our various facilities, maintain and improve our high level of customer service, and as we bring in more high quality Russian seamless material to expand our ability to service more customers with OCTG products. I expect us to gain market share, particularly in the heat-treated, high-end, value-added products that fit into our target "shale" market areas. The seamless material that we import from Russia supplements the pipes produced by our seamless facilities in Koppel and Ambridge, which will allow us to sell more tonnes and gain a bigger market share. Customer acceptance of our Russian seamless has been strong and accepted for not only API, but also for high pressure, critical well applications with ULTRA™ premium threads.

The ULTRA connections and all of the heat-treated, value-added products, including the Russian imported products, are in high demand.

What are some of the biggest challenges TMK IPSCO is facing in the U.S. OCTG market now?
George Adams: Imports pose a challenge, although we're also being challenged by the new mills that are starting up here in the U.S., which will bring on much more capacity in the next 18 months. The key to our growth is to keep providing excellent customer service, dependable deliveries and our high quality TMK IPSCO products. There's no doubt that customer service and quality are how we grow business today. If you don't have it, then you won't grow and will in fact lose business. The customer is not always "right," but they are the customer.

How do sales take place? Does the company sell pipes directly to end users, or do we work with distributors?
Chuck King: Most of our pipe products are sold through distributors, although we do have some direct project line pipe sales. It often depends on the end user preference. Some prefer to buy directly from us, while others prefer to buy through distributors. It can even depend on the project in question.

What are the advantages of working with distributors?
Chuck King: Aside from selling to the end users for us and offering an extended sales force, distributors will represent our product and work with us in getting customer approvals. Distributors also act as a credit buffer, which is helpful when working with smaller end users. There are lots of advantages, particularly when the distributors are good.

George Adams:
"The key to our growth is to continue to provide excellent customer service, dependable deliveries and our high quality TMK IPSCO products."

How does TMK IPSCO decide to work with a given distributor?
Chuck King: We have long-standing relationships with a number of distributors and have agreements with them, although we review progress on those commitments on a quarterly basis. We have scorecards that are designed to measure performance. Our goal is to review relationships on an annual basis, and depending on performance we make adjustments.

Could you say a few words about the market for distributors? Is it dominated by older firms, or are there a number of new players?
Chuck King: It's really a mix of players we see in the market. Many distribution companies have been in business for a long time. Some are family-owned firms that have been in existence for 100 years or more. There are also new players coming

Chuck King:
"The biggest demand has been for line pipe, which is used mostly in offshore and onshore transmission lines, as well as in refinery applications and some limited construction and structural applications."

to the market, which is good for us because it helps to ensure competition and quality service. There are distributors that have been formed by combining several older, smaller companies.

Which particular markets have the most potential for future growth right now?
George Adams: Geographically, as far as shale plays go, there are really several that show huge potential for TMK IPSCO: Marcellus Shale, Eagle Ford Shale, Bakken and Niobrara oil shales, and the Horn River, Montney Shales as well as the oil sands in Canada.

We are also doing quite well in West Texas now. Because of the high price of crude oil, any project that has oil along with gas is attractive. These kinds of projects also require larger diameter pipes, which we can serve with the imported Russian products, as well as from our high quality Wilder facility.

On a more hemispherical level, Canada and Latin America are key to our growth and expansion in the west.

What are TMK IPSCO's plans in Latin America?
George Adams: It's a developing market for us now, and one that we

are really serious about penetrating more deeply. We have been hiring sales representatives who are fluent in Spanish and Portuguese, which is obviously important. We've also been taking other steps to make inroads there. Latin America is a big part of our strategy now and will be for quite some time.

What are some of the industrial products that are in the greatest demand now?
Chuck King: The biggest demand has been for line pipe, which is used mostly in offshore and onshore transmission lines, as well as in refinery applications and some limited construction and structural applications. We also see strong demand for mechanical tube, which is used in the automotive and agricultural sectors, as well as in hydraulic cylinders and oilfield accessories of different kinds, to name a few. Finally, there's coupling stock, which we sell directly to about six coupling manufacturers that we work with. They buy the coupling stock, machine it into couplings, and then turn around and sell the couplings to TMK IPSCO for use on our OCTG pipes.

And OCTG products?
George Adams: The ULTRA connections and really all of the heat-treated, value-added products, including the Russian imported products, are in high demand. And I do not see it dropping back as long as the shale plays dominate the drilling portfolios of U.S. oil and gas companies. I'd like to emphasize again that with regard to the imported seamless products, we are rapidly gaining greater levels of customer acceptance.

Russian-manufactured products are marketed similarly to the way U.S.-manufactured products are – we promote the same high quality and the same guarantees and are working towards similar pricing. We are continuing to build and develop an extremely strong sales team whose "key" deliverable is a very high level of customer service. We are gaining strength and momentum in the marketplace with the entire TMK and TMK IPSCO product range, both OCTG and premium connections. We have world class facilities, products, quality and personnel. The future is ours - all we have to do is reach out and take it!

North of the Border

In August 2010, TMK IPSCO opened a sales office in Calgary, Alberta to better serve the company's growing customer base in Canada. Since then, Canadian sales of TMK IPSCO's products have taken off, and the company's engineers are working to develop new products to help oil and gas companies tap the country's vast hydrocarbon resources.

Dmitry Butorin, TMK IPSCO's Director of Sales in Canada, spoke with *YourTube* about the company's success to date and the specific features of working in the Canadian market.

» The top of the Calgary Tower affords a fantastic view of the city. The floor of the observation deck is glass, and the tower is built at such a slope that, when looking below, one can fully enjoy its height, which reaches up 191 meters.

How have sales been at TMK IPSCO's Calgary office since it was opened last August?
We've been doing better than planned at this point in the year and we're on target to meet our goal. With high-priced oil, the Canadian market is working at its maximum capacity. In western Canada, the rig count earlier in the year was about 650 during the peak of the drilling season before the spring break-up, which is the maximum given the limited number of people in the region who can operate these rigs. It has been a very good year for us so far.

What are the main products that TMK IPSCO has been selling in Canada?
About 95 percent of what we sell in western Canada is OCTG produced at TMK IPSCO's U.S. facilities. Interest in TMK Premium's ULTRA™ line of premium connections has been one of our highlights so far this year, particularly the ULTRA-DQX™ connection. We were awarded trial orders and are pursuing follow-up business. We are also working on trial orders for Russian seamless OCTG products that meet Canadian specifications to complement the U.S. product range.

Where are most of TMK IPSCO's products used in Canada?
More than 90 percent of drilling for hydrocarbons occurs in three provinces: British Columbia, Alberta and Saskatchewan, with Alberta being the biggest. TMK IPSCO delivers pipes to all three. The orders for ULTRA-DQX-threaded pipes have gone primarily to gas wells in northern British Columbia. Our ULTRA group is currently working on a new type of connection for use in thermal operations, which will allow us to take advantage of the oil sands projects in Alberta.

Is Canada similar to the U.S. in that sales are primarily made to distributors?
Yes, Canada is similar to the U.S. and we have a set of OCTG distributors that are unique to this market. Just as in the U.S., there may be occasions when we will work directly with the end user.

What are some of the big differences between the Canadian and U.S. markets?
The Canadian market is very seasonal, which has a lot to do with weather conditions. The rig count is at its highest in winter, when the ground is frozen. Then every year when the weather begins to warm up and the ground begins to thaw, activity comes to nearly a complete stop. This time varies from year to year, but is referred to as spring break-up. The activity gradually begins to pick back up when the weather and ground conditions make moving equipment to well locations possible again.

Another difference between the two markets is that the market for pipe products tends to be more stable in Canada than in the U.S., which affects to a certain extent the way we work.

TMK IPSCO Canada
Sales Office
150 6TH Avenue SW #3000
Calgary, AB T2P 3Y7
Tel.: +1 403 538 2182

STRUCTURE OF THE EUROPEAN DIVISION

TMK's European Division is a conglomerate of four companies located in Romania, Germany, and Italy.
Romania has two of the division's manufacturing units: TMK-Reşiţa in Reşiţa and TMK-Artrom in Slatina. Slatina also houses the Management Unit, whose task is general operational management of TMK's European Division.
The office of TMK-Europe's commercial office is located in Cologne, Germany, and it specializes in sales of TMK-made pipe. In addition, TMK-Europe performs engineering procurement tasks for TMK's manufacturing units in Russia and Romania. Finally, TMK-Italy's sales office in Lecco handles the distribution of TMK-made tubular products.

EUROPE IS A MOSAIC OF BUSINESS CULTURES

In 2009, radical changes were made to TMK's European sales practices. The company switched its trading houses from scattered sales of tubular products by separate companies to a comprehensive and unified promotion of the TMK Group's entire range of tubular products to European clients. In an interview with Adrian Popescu, President & CEO of TMK's European Division, we learn the details of the new distribution system.

Mr. Popescu, what provided the impetus for the change in your sales strategy?
The fragmentation of European sales had been one of our key shortcomings. TMK-Europe, TMK-Italy, and sometimes TMK-Artrom as well, sold Romanian products separately and sold TMK's Russian-made tubular products. The uncoordinated sales policy within the group sometimes even created competition, which hurt our business.

So in 2009, we decided to change our sales policy. First, we did away with the division whereby teams worked only with Romanian pipes or only with Russian pipes. From then on, sales teams began to sell the full package of products from the TMK Group of companies, regardless of their country of origin.

At the moment, Romanian pipes remain the main product we sell, but given the constraints of the size range, it is well complemented by products from TMK's Russian plants.

How hard was it to create a unified distribution system?
It wasn't easy. After numerous attempts and possible solutions, analyzing schemes, each more complicated than the previous, we understand that simple is better. We decided to take advantage of our more than 25 years of experience managing business operations in Romania, Italy, and Germany, when we, the European sales management team, reattempted various ways of working.

We built the system on several fundamental principles. First, it had to be a single, unified whole. Second, we didn't want to create additional structures, so we decided to use the existing management and staff. Third, we agreed to retain a unified logic and the necessary sales flexibility. And finally, we clearly stipulated that the new system of sales units would be the sole seller of TMK products regardless of the point of sale.

What problems did you have to face?
Europe has many business traditions. Together with a variety of languages and cultures, this creates enormous problems in the development of a common sales methodology. The traditions are so varied that they can only be compared to a mosaic comprising the business culture of a multiethnic Europe. Even so, we managed to combine the pieces of the mosaic according to their similarities and to determine the basic principles of the most efficient sales organization, from our standpoint.

We didn't just have to change our clients' mindset; we had to change our own. To sell Russian pipes on the European market, we have to make a much greater effort than to sell Romanian pipes. The EU market is protected by trade measures that seek to prevent dumping. In this context, selling Romanian products is much easier. Even so, we believe we have achieved our objective.

How does the sales management system look in terms of organization?
We divided the European business space, both inside and outside the European Union, into three zones. The first is the responsibility of the TMK-Europe sales team and includes central and northern Europe. The second is southwestern and western Europe; the TMK-Italy sales team is responsible for it. The TMK-Artrom sales team works with the Balkan countries and southeastern Europe.

The first two zones are the responsibility of Luca Zorzi. The Balkan zone is headed by Valeru Mustaţă, who heads the business and logistics unit, as well as

"After numerous attempts and possible solutions, analyzing schemes, each more complicated than the previous, we understand that simple is better

administrative operations at both Romanian facilities.

As for tenders and bidding on major projects, we did not apply the principle of geographic division here, because this area is the responsibility of TMK-Europe.

Could you boast a bit about the success the reorganization of your sales system has brought?

The results are noticeable. Even during the crisis, TMK managed to enter new niches in the European market and start selling its products where we have never been. I'm talking about Poland, the Baltic countries, the UK and Bulgaria. Every year, our sales volume grows, but the most important thing is that we can see a noticeable trend of growth in sales of value-added products.

Today, direct sales in the designated geographic zones of Europe (save for participation in major projects and spot sales) look as follows: southwestern and western Europe account for the biggest order volumes at 39 percent, central and northern Europe is second with 36 percent, and the other quarter of our sales comes from the Balkans and southeastern Europe.

Have you unified your European logistics?

Deliveries of Romanian-made tubular products are strictly centralized. Employees of the TMK-Artrom Business and Logistics Directorate look after this.

TMK-Artrom is responsible for delivering its products to end users within Europe, but for export operations outside Europe (sales involving TMK IPSCO in North America, TMK-Middle East, and TMK-Global), it provides logistical support up to the loading port on the border of the European Union.

How have the changes affected marketing?

The organization of marketing operations has proven an interesting task. We decided not to hire additional staff, but to perform a series of tasks with our existing workforce.

We held a series of consultations on the subject. At one of our regular general meetings of sales teams, it was decided that sales teams would submit monthly reports on key events during the reporting period. The reports are sent to the marketing department of the TMK-Artrom management unit, where they are transformed into a consolidated monthly report. This is a detailed and up-to-date account of the European market as a whole. Then the information is distributed to all sellers in the division, making it possible for them to see the big picture.

What work practices do you use to improve sales efficiency?

To maintain the most efficient relations between the sales teams and the technical specialists of the European Division, we have a

To sell Russian pipes on the European market, we have to make a much greater effort than to sell Romanian pipes. The EU market is protected by antidumping measures against "tempting" products from Russia. In this context, selling Romanian products is much easier. Even so, we believe we are managing our objective of selling the full line of TMK products

tradition that we have supported for three years now. It has actually proven itself. This tradition involves holding meetings between employees of our European companies for joint discussion of key issues: sales performance and plans, technical analysis of product quality issues, effective pricing methods, etc.

These meetings are held twice a year. The host is one of the Division's companies. Salespeople, technical specialists, logistics specialists, and representatives of production and business units are attendees. All issues are discussed openly, and all ideas and opinions are considered. At the end of the meeting, deadlines are set, aims and objectives are clearly stated and necessary measures are identified.

Have you managed to create a unified IT infrastructure?

We are in the process of IT integration, as it's true that the development of many aspects of the operation of TMK's European Division is being held back due to the inability to interact effectively online.

The project to convert all division members to a unified IT system was launched at the beginning of the year and is to be implemented in several stages. It will provide both the salespeople of TMK's European Division and other participants in the sales system with access to a unified database. They will all be able to review steps of order fulfillment online, from manufacturing to finishing and inspection, all the way to detailed information on order shipment. ■

Valeru Mustață, Deputy General Manager of TMK-Artrom and TMK-Reşiţa:

Slatina – picturesque city in southern Romania on the Olt River. It was first mentioned in an official document issued by Vladislav I Vlaicu, Prince of Wallachia, in January 1368.

Our department sells TMK-Artrom-made seamless pipes for industrial applications, including pipes for machine building and automotive manufacturing. The TMK-Artrom sales team is responsible for European sales of both Romanian and Russian products. We supply products directly to our customers in Romania, Hungary, Serbia, Bulgaria, and Macedonia. With our American colleagues, we arrange export deliveries of TMK-Artrom products to the American market. Our department has several main areas of emphasis: the sales team makes direct sales of TMK-Artrom products in the Balkan region, and back office employees plan and support sales of TMK's trading houses in Europe and beyond. The sales logistics team of the European Division and the marketing department also work with us.

Our customers know we are always open for dialogue and willing to answer their questions at a moment's notice. All this would be impossible without the teamwork of all divisions of the TMK Group.

TMK-Artrom, Business Department
30 Drăgăneşti Street, Slatina, Romania
Tel.: +40-249-430054

Luca Zorzi, General Manager of TMK-Italia and Authorized Trade Agent for TMK-Europe:

Every year the carnival in Cologne – Germany's carnival capital – draws up to a million tourists to spend two unforgettable weeks.

Lake Como – Italy's third largest. It is famous for its medieval towns along the shore, one of which is Lecco.

The European Division's trading companies coordinate the sales of the TMK Group's products in two zones simultaneously: TMK-Europe in central and northern Europe and TMK-Italia in southwestern and western Europe. Additionally, TMK-Europe performs engineering procurement for TMK's manufacturing units in Russia and Romania. Sales teams work directly with the end users in assigned geographic zones of responsibility, collecting and transmitting enquiries for TMK-Artrom's management unit regarding Romanian products or Russian-made products from Trade House TMK in Moscow. They also coordinate the placement of incoming orders. Representing TMK in major projects and tenders in coordination with Trade House TMK is another important job for us.

TMK-Europe operates two sales units specializing in the sale of welded and seamless tubular products that make up the sales department. The TMK-Italia team consists of sales representatives and a back office group to support transactions. The language of communication for sellers in the European Division is English, because the teams are multinational. They include Germans, Italians, Romanians, and Russians. But this doesn't prevent smooth operation; to the contrary, it expands the range of capabilities for establishing contacts and better understanding among our partners and colleagues at TMK.

TMK-Europe
Germany, Köln, Hohenstaufenring 62,
Tel/Fax: +49 (221) 2723-8910, +49 (221) 272-0081

TMK-Italia
Italy, Lecco, Piazza degli Affari 12,
Tel/Fax: +39 (0341) 36-5151, +39 (0341) 36-0044

TMK-Artrom Conquers America

Twenty years ago, TMK-Artrom needed to conquer the highly promising North American market. Today, American customers account for 25 percent of the order portfolio of TMK's Romanian division. But TMK-Artrom has no intention of resting on its laurels. The company is continuing to expand and improve its product line.

The first attempts at North American sales were difficult, to say the least, and the results were poor. Artrom began in the shadow of Romanian pipe makers such as Zalău Silcotub (now Tenaris) and Petrotub Roman (now ArcelorMittal), which had already proven themselves on the OCTG markets. The problem was aggravated by the fact that over 90 percent of the North American market was for OCTG. The Slatina plant was underequipped for production and appropriate inspection of products for this market segment, although the company did produce pipes for the oil industry. Even so, from the standpoint of the Romanian pipe industry's level of modernization in the 1980s and 1990s, Artrom's facility was equipped with fairly modern lines to manufacture seamless pipes for machine building.

The company debuted in the mid-1990s. Artrom contracted with several American trading companies, including Crispin. "At the time, all existing business channels on the North American market were focused on OCTG products, and the only thing we could offer that market in terms of our profile was coupling stock and 'green' casing," explained Alexander Neamțu, head of TMK-Artrom's engineering department.

»» Artrom signs a distributor agreement with the American company Crispin Inc. From the left: George Terhes, General Director of Silcotub; Andrei Crispin, Owner of Crispin Inc., and Adrian Popescu, General Director of Artom. 1995

GROWING PAINS

The reaction of the American market, considered among the most discriminating in the world, was predictably negative. Romanian pipes did not meet the market's high standards. Artrom lacked the equipment and experience to compete with more efficient manufacturers. For a period of about three years, things went well, but only thanks to inertia and the professionalism of the Romanian engineers. They took risks and fulfilled orders without appropriate technical gear and proper inspections. "We took the first steps, pushing the envelope of our manufacturing capability," admitted Neamțu.

"GOOD TO SEE YOU AGAIN!"

The 2000s were marked by large-scale privatization and timid attempts by Artrom to reenter the U.S. market with a wider assortment of products. The company's contacts with Canadian buyers helped. One auto parts and safety air-bag manufacturer saw good potential in Artrom's line of pipes for machine-building. That gave it an entry to the U.S. and Canadian market for these pipes.

Artrom delivered its products in partnership with a mid-range distributor well known to the North American automotive industry. "Our customers used products of our supply partly in their auto-parts manufacturing shops and partly for sales in the northern U.S., where important auto manufacturing centers are located," recalled Neamțu.

All that time, Artrom continued to deliver OCTG to customers in Houston. And over time, casing sales on that market even grew. However, the product quality still left something to be desired, leading to new technological problems with the company's customers. So Artrom's employees and partners gradually came to believe that the most suitable North American market for Artrom's products was not the OCTG market, but machine builders.

Once again it was no easy task: customers wanted perfection, but Artrom had to restore its good name, which had suffered from the OCTG problems.

"We learned our American lesson well, but step by step, we began to develop in a new direction," said Neamțu. "I can say that it wasn't until we finally found our place on the North American market that we started our business in that region."

The further success of Artrom, which by then had been acquired by TMK, was aided by the pipe company management's decision to form TMK-North America in Houston. TMK organized its trading house in 2005 to promote TMK-made pipe, including products for machine builders, in both the North and South American markets.

The American market forced the Slatina facility to adapt to the specific needs of overseas customers—to develop heat-treating capacity and learn to make new value-added products. Artrom's technological breakthroughs were supplemented by the distribution skills of experienced sales-people from the Trade House TMK's American branch. The results of this alliance were dazzling. In four years, from 2004 to 2008, Romanian pipe sales in the U.S. jumped 250 percent, from 10,000 to 25,000 tonnes, and last year, after the collapse of 2009, they practically returned to their pre-crisis levels.

Supply dynamics of TMK-Artrom products to the U.S. and Canada (years, tonnes)

Year	Tonnes
2001	808
2002	4,488
2003	7,979
2004	9,710
2005	12,616
2006	15,360
2007	19,913
2008	24,551
2009	6,241
2010	21,968

ALL ROADS LEAD TO NORTH AMERICA

TMK-Artrom chose the market niche where it was most competitive in terms of price and quality. Only elite pipe makers for machine building dare to enter it. Today, 60 percent of TMK-Artrom's products are this class of pipe, of which some 25 percent are destined for North American customers.

American pipe users get the most of their customer status to make the best choice from the large number of competing offers on the market. "In the past year, several delegations from the U.S. visited us and performed audits and a series of very strict certifications. They studied our entire manufacturing process, from the collection of scrap metal to the finished product," explained TMK-Artrom's Quality Manager Magdalena Popescu.

HOW TO WIN AMERICANS' TRUST

TMK-Artrom was forced to walk a difficult and torturous path to win the trust of the customers who require perfection from their suppliers. Audits and certifications proved to be effective ways of convincing discriminating partners in the U.S. "In general, they prefer to perform customer audits through which they can evaluate us," Popescu explained. "So for example, in order to be confident of the quality of TMK-Artrom's pipe, American customers ordered an English specialist company to perform a preliminary audit of the TMK-Reşiţa and TMK-Artrom facilities. And only after receiving positive results did they come in person." This convinced the American customers that they were dealing with a worthy manufacturer and they recommended adding TMK-Artrom to their lists of approved suppliers. "The fact that they listed us is the best confirmation of our effectiveness," concluded Popescu.

Winning the American customer isn't enough. You have to continuously keep up relations with them at a certain level, said Neamţu, who explained that Americans value personal relationships very highly. "After my trip to the U.S., there was an order inflow. We believe great distances between partners necessitate the provision of additional security and reliability. They come out of personal contacts." Popescu is also convinced that customers must be given support. "Many prefer working with us from the technical standpoint, but quality and delivery times are equally important parameters. Americans are very price-sensitive, but they are even more sensitive to quality. They are willing to pay a higher price for quality goods," he said.

The American market forced the Slatina plant to adapt to the specific needs of overseas customers—to develop heat-treating capacity and learn to make new value-added products

ARTROM IMPROVES THE MECHANICAL PROPERTIES OF ITS PIPE

The Romanian facility is undertaking steps to adapt its product line to the requirements of the U.S. market and further increase the proportion of products with increased added value. In particular, this refers to pipe hardening and tempering, which are not yet in such demand in Europe. These operations permit TMK-Artrom to improve its pipes' mechanical characteristics, which is vitally important given the specifics of their application.

As of today, pipe for machine building and coupling stock are the two main types of TMK-Artrom products for American customers. The size range is fairly wide: outside diameters from 60.3 to 230 mm [2.37–9.06 in.] and wall thicknesses from 10 to 60 mm [0.39–2.36 in.]. Pipes with enhanced mechanical properties account for a substantial share of the Romanian company's output. "Our portfolio consists mainly of orders for low-alloy steel pipes, where our profit margin is the highest. It meets our expectations," said Neamţu. "In working with carbon steel, it's hard to count on a similar result: the strong competition affects the price and accordingly the profit," said Alexander Neamţu.

Unfortunately, the Romanian company faces certain manufacturing constraints. "For this reason, we wanted to increase our capacity for hardening by installing additional equipment," said Neamţu. "This would enable us to work with greater wall thicknesses, over one inch. We did install a new furnace and are preparing a separate production line to perform hardening and tempering. In the next three years, we plan to carry out an investment program that will make us more flexible in making pipes for the machine-building and power-generation industries."

A PROMISING FUTURE OVERSEAS

TMK-Artrom's future in the U.S. depends on the continuous improvement process that began more than 15 years ago and has now reached a stage of relative maturity. The ability to respond quickly to market demands, in combination with steps to adapt products to particular overseas orders, is important in adapting the company's operation to the American market. "But the challenges of the future are not at all for the faint of heart," admitted Popescu. "The market we have entered is so technologically advanced that pipes are really no longer just pipes. This may be why the U.S. is the only country that has developed separate standards for mechanical pipes. In the future, I don't think they will be called 'pipes,' just… something different." ■

In four years – from 2004 to 2008 – sales volumes of Romanian pipes in America grew by 250 percent: from 10,000 to 25,000 tonnes

A Week to Celebrate — OTC 2011

TMK actively participated in all aspects of OTC 2011, which took place May 2-5 at the Reliant Center in Houston, showcasing an innovative booth attended by numerous visitors and customers, and a 1920s-themed gala party served as the highlight and culmination of the event.

TMK IPSCO Chairman Piotr Galitzine perched in front of the stage, a replica of the setting at Chicago's famous Green Mill jazz club. He sat quietly, enjoying the music of New Orleans' own Delfeayo Marsalis on trombone, accompanied by a full quartet, as they performed jazz standards of America's early 20th century.

"This band is fantastic," Galitzine mused. "We've really outdone ourselves. We have managed to create a big, high-end event, with a personal, family feeling. TMK really is the talk of the town."

The high-end event that Piotr Galitzine was speaking of was a 1920s-themed gala party, which was hosted by TMK and held on May 4 at Tony's Restaurant in Houston as part of the Offshore Technology Conference (OTC) festivities. More than 350 attendees, including TMK and TMK IPSCO senior officers, numerous high-ranking customers and their guests, came to celebrate not only TMK IPSCO's success, but also the 10th anniversary of TMK.

Party guests, dressed in zoot suits, flapper-style dresses and cocktail attire, dined on a gourmet selection of meats, cheeses, seafood, chocolates, and desserts, as well as enjoyed mint juleps and signature cocktails. Alongside the world-class band, a cabaret singer and dancers took the stage to perform classic numbers. The décor included ice sculptures and a 1920 Rolls Royce. Models carrying tommy guns and wearing feather boas greeted guests as they arrived.

We were able to showcase our latest technology, as well as organize a party in high style

TMK IPSCO President and CEO Vicki Avril spoke to the crowd of VIPs in attendance that evening. "This year marks the 10th anniversary of TMK," she said. "TMK IPSCO has been part of the TMK global family for the last three of those 10 years, and in that time, the company has climbed to the top of our industry. Our accomplishments are due to a number of factors, such as the start-up of new production equipment, advancements in our technology, enhancements to our existing manufacturing operations, and dramatic changes to our industry environment, especially in relation to horizontal drilling in the major shale plays."

"But most of all," she added, "we owe our company's success to our customers, suppliers and employees. Without our customers, none of what we do would matter."

While the party served as the highlight and culmination of the event, TMK actively participated in all aspects of OTC, which took place May 2-5 at the Reliant Center in Houston. OTC is the world's foremost event for the development of offshore resources in the fields of drilling, exploration, production, and environmental protection. The conference drew more than 78,000 visitors (the most in 30 years), with more than 2,500 exhibiting companies from 40 countries. More than 110 countries were represented at the conference, which ranks among the top 10 trade shows in the U.S. in terms of attendance.

OTC is the premier event TMK showcased an innovative booth at the conference – a modern two-story design resembling the company's international displays. Featuring two large monitors, sleek modern styling, and a bar and lounge, the exhibit featured the latest products offered by the company. On the lower level, visitors and customers were able to learn about the new products using a newly developed iPad application (see sidebar story), and then enjoy premium Russian vodka upstairs. Specialists from both TMK and TMK IPSCO introduced OTC visitors to the company's promising new developments and projects. "OTC is the premier event in our industry," said Scott Barnes, Vice President and Chief Commercial Officer at TMK IPSCO. "Our presence at OTC was designed to give our guests an innovative experience. From showcasing our latest technology to feasting and celebrating at a party in high style, we created an event that was both meaningful and memorable for our guests."

Also coinciding with OTC, on the afternoon of May 3, TMK hosted a groundbreaking ceremony for the company's new Research and Development Center (see related story, "New Era of R&D Begins in Houston").

Finally, TMK took part in an OTC 2011 Round Table on May 3, which was sponsored by the Russian Chamber of Commerce of Texas (RCCT). Piotr Galitzine, Chairman of TMK IPSCO; Sergey Bilan, Vice President of Marketing and Premium Product Development at TMK; and Vladimir Shmatovich, Vice President of Finance and Business Development at TMK, were participants in the discussion, which centered on offshore drilling. ■

TMK IPSCO Creates iPad Application for U.S. Sales Team

In April 2011, TMK IPSCO unveiled a new iPad application featuring TMK Premium's line of ULTRA™ connections. The app is an interactive tool for the sales and technical teams to communicate the value of TMK's ULTRA Premium Connections to customers at all levels of an organization—from drilling engineers to purchasing.

"When we designed the app, we wanted the tool to be able to answer our customers' most common questions instantly," said Elizabeth Rudnick, Manager of Marketing Research and Analysis at TMK IPSCO. "It's been very exciting to see our customers impressed as the team utilizes the app at trade shows and on customer visits. It's energizing to showcase our innovative products in a culturally relevant way."

Along with a company overview detailing TMK's global production and commercial footprint, the iPad application contains in depth information on each of the ULTRA connections. Each product description explains the connection's key features along with a map showing the complex shale plays in which they have been used. Additionally, users are able to generate technical data sheets for each connection based on inputs for nominal OD, nominal weight and grade. Once these specifications have been set, users can then email the data sheets directly to customers in PDF format.

A second version of the iPad application is currently being designed to include information on TMK's Russian connections and new ULTRA connections. The new version of the iPad application is scheduled to be released in the fall of 2011.

New Era of R&D Begins in Houston

This May, leaders from TMK IPSCO were joined by TMK's board of directors and senior leaders to break ground on the company's new Research & Development Center in Houston.

Since the groundbreaking ceremony, which coincided with TMK's participation in the events at the Offshore Technology Conference (OTC 2011 – see related story), a considerable amount of work has already been completed on the site, with the building's foundation laid and exterior walls largely erected. Work continues to proceed at a fast pace, with the 50,000-sq.-foot facility scheduled to open in the fall of 2011.

"This new facility is a testament both to our commitment to innovation and to our position of leadership in the industry," said Piotr Galitzine, Chairman of TMK IPSCO. "The work we do here will lead to advancements in the production of pipes and pipe connections, which are becoming increasingly important as oil and gas companies continue to expand into difficult, unconventional drilling environments. Other products are on the drawing board as well."

STATE-OF-THE-ART FACILITIES AND EQUIPMENT

The building will feature a high bay testing area, a variety of support laboratories, 27,000 square feet of office space, and a two-and-a-half story glass entry atrium at the center point. Initially, the facility will provide space for 75-90 employees. The new building is designed to allow room for future staff expansion.

Along with a spacious and attractive building, the new center will feature state-of-the-art equipment, including two high-tech connection testers rated at four million pounds and two million pounds of tension, respectively. Other key equipment will include a scanning electron microscope (SEM), a collapse tester, tensile and fatigue testers, as well as equipment for a corrosion testing lab. In the past,

IGOR PYSHMINTSEV, General Director of RosNITI

The establishment of the R&D Center in Houston is a natural and well thought out step. I know this project well, as we repeatedly met with our American colleagues to discuss the idea of establishing such a center. We also discussed the necessary equipment and the areas in which the center would collaborate with RosNITI. This is a logical development since the tasks that our researchers and our engineers face are very similar on both sides of the ocean. Last year, we began our first joint project to modernize the physical and computer modeling technologies that are used in the continuous rolling of enhanced precision pipes. Our first experience of collaboration was a good learning experience, and this year, we mapped out an expanded program that takes into account the growing opportunities on both sides. This center will allow for significant strengthening of the company's research potential by bringing researchers and developers together and giving them access to all the necessary equipment. I congratulate everyone on this event and heartily wish my American colleagues the greatest success.

The Research & Development Center puts our company at the cutting edge of technology. Not only will we have some of the world's best equipment and processes here, but we'll have some of the world's top professionals in the fields of engineering, science, manufacturing and metallurgy

the company has generally relied on third parties to perform much of the connections testing and metallurgical inspection in the U.S. to ensure its pipes meet the highest quality standards. Once opened, the Research & Development Center will bring in-house much of the work involving simulation, modeling and analysis that has been performed by outside providers.

This highly important work covers all areas related to pipe design and inspection, including alloy design, welding, mechanical forming, connection integrity, non-destructive testing, and others. Finally, the center will also work to improve the quality of steelmaking itself, engaging in a wide range of metallurgical research involving both carbon- and micro-alloyed steels.

BUILDING RESEARCH RELATIONSHIPS

Although the center will represent a major new direction for TMK IPSCO, it will also continue the tradition of excellence in research and innovation in the wider TMK family. The new center will serve both Russian and U.S. engineers and will collaborate with numerous organizations, including MIT and several other top industrial forums, research labs and universities.

Finally, the new TMK IPSCO Research & Development Center is expected to work closely with the Russian Research Institute for the Tube and Pipe Industries (RosNITI), which has been part of TMK since 2007 and is celebrating its 50th anniversary this year. "This is a very exciting endeavor," said Pras Adhikari, Vice President and Chief Technology Officer at TMK IPSCO. "The Research & Development Center puts TMK at the cutting edge of technology. Not only will we have some of the world's best equipment and processes here, but we'll have some of the world's top professionals in the fields of engineering, science, manufacturing and metallurgy." ■

30 Years On,

Big Investments Bring New Life to Wilder

The northern Kentucky town of Wilder, situated a few short miles from the mouth of the north-flowing Licking River, is a special, if somewhat accidental, place. Located just beyond the historic towns of Newport and Covington, Wilder was incorporated in 1935 to provide a home for the workers employed at the Newport-based Andrews Steel Company's south plant.

This year, the Wilder facility, now owned by TMK IPSCO, is celebrating its 30th anniversary of continuous operation and holds the distinct honor of being the company's oldest facility, a site where the history of steel production goes back much further, to just after the Civil War.

MORE THAN A CENTURY IN THE MAKING

Steelmaking in this part of northern Kentucky dates back to 1867 when Alexander Swift of Cincinnati founded the Swift Iron and Steel Works in Newport, which was later bought by two brothers and incorporated as the Andrews Steel Company. In 1935, the Andrews brothers relocated enough of the company's workers to the area around its south plant to formally incorporate the town of Wilder.

Benefiting from its location along the Licking River, as well as good rail connections, the plant's business continued to grow, and by the 1940s, it had begun to manufacture pipe for the oil and gas industry. Several changes of ownership in the 1940s and 1950s led to its renaming as ACME Newport Steel, and in the early 1960s, as Interlake Steel.

Interlake continued to operate the plant until August 1980, when it made the decision to close its Newport and Wilder operations after the local union refused to accept the company's new contract offer. Approximately 1,200 workers lost their jobs when the plant shut down, and according to local news reports at the time, Newport's municipal finances were thrown into crisis with $200,000 in lost occupational and payroll taxes.

After Interlake closed the plants, four members of the management team—Clifford Borland, Ray Bittner, Ron Noel and Dennis Eggleston—came together to form Newport Steel, which reopened the facility in Wilder on April 20, 1981.

Newport Steel was renamed as the NS Group in 1984, and the company proceeded to make a number of major acquisitions, including Erlanger Tubular in Catoosa, Oklahoma (1986), Koppel Steel in Koppel and Ambridge, Pennsylvania (1991), and Curley's Machine Shop in Odessa, Texas (2006).

Wilder has pulled through difficult times to become one of the regional industry's most important players

Although problems of high operating costs and low steel prices forced the NS Group to make a number of difficult changes at Wilder, including the closure of the plant's melt shop and hot strip mill in 2001, other improvements following Wilder's reopening—especially the installation of the 16-inch pipe mill in 1984—had created enough value to make the facility attractive enough for Canada's IPSCO to purchase in 2006. Two years later, in 2008, IPSCO's tubular assets, including the Wilder facility, were sold to Russia's TMK Group, which was fast on its way to becoming one of the world's largest pipe producers.

CELEBRATING PAST AND FUTURE

Like many plants in the steel industry, Wilder has experienced ups and downs, as well as periods of closure and uncertainty. But unlike many, it has pulled through difficult times to become one of the regional industry's most important players. This year's 30th anniversary celebrations have therefore given the plant's employees and management alike the opportunity to appreciate how far they have come.

The recovery of the plant's business in 2010 after a difficult 2009 has paved the way for a number of exciting new investments that will improve operational efficiency and add value for TMK IPSCO's customers

"This is a year for all of us at Wilder to look back proudly at our past successes and to honor our employees who have been with us these 30 years," said Jim Truskot, Plant Manager at Wilder. "But 2011 is also a year when we can look forward with confidence to a bright future at Wilder."

Today, Wilder is one of four TMK IPSCO facilities that manufacture welded tubular products. Its 16-inch mill—its main production asset—manufactures OCTG casing, line pipe 5L, standard pipe and piling A252. There is also an 8-inch mill that serves to relieve TMK IPSCO's facilities in Blytheville, Arkansas and Camanche, Iowa when they reach full capacity. As anyone who visits the Wilder facility today can see, the future is the primary focus for its 293 employees. The recovery of the plant's business in 2010 after a difficult 2009 has paved the way for a number of exciting new investments that will improve operational efficiency and add value for TMK IPSCO's customers. One of the most important efficiency-related improvements has been the elimination of the intra-rail system that transports pipe out of the mill. The project began earlier this year and has largely been completed.

"Reduction of intra-rail service to the 16-inch pipe mill has already lowered our costs," said Truskot.

Michael Bergfeld, Project Manager at Wilder, stands in his future office at the plant's new threading facility.

"We have saved in terms of man power and improved the safety of our shipping bay, which has already helped us to be more cost competitive in the marketplace."

Another major investment at Wilder this year has been the installation of two new end facing machines, which have filled a need to improve bevel quality and meet the current production demands of the mill.

"The new end facers at Wilder have greatly increased the efficiency of the process flow in the north end of the mill," said Dave Diederich, Director of Welded Operations and Interim Chief Operations Officer at TMK IPSCO. "The previous end facing units caused significant bottlenecks in our production process at Wilder, so we are quite pleased with the greatly improved efficiency in that area."

The addition of a Work In Progress (WIP) system was another exciting development at Wilder

Aside from these operational investments, the Wilder facility is also seeing a physical transformation

Construction work on Wilder's new threading facility is proceeding rapidly.

this spring. Designed to separate the operations of the plant's weld line from the finishing line, which operate at different speeds and capacities, the new WIP has provided more balanced and continuous operation while reducing the impact of changeover and downtime.

"Along with the new end facers, the new WIP handling equipment has already enhanced the efficiency of the process flow on the mill and finishing lines," said Diederich.

Aside from these operational investments, the Wilder facility is also seeing a physical transformation. The staff enjoys a newly renovated office building, and many of the abandoned buildings have been removed. New siding on the 16-inch mill provides better insulation, which not only improves temperature control inside the mill but also reduces noise levels for the plant's neighbors in Wilder.

BRINGING THREADING ON SITE

The biggest investment taking place at Wilder this year is the construction of a new thread shop, which began in early March and is expected to be commissioned in late summer and achieve full production capacity by early 2012. This facility will thread Wilder's full range of welded tubular products according to API standards and will significantly reduce cost associated with shipping products to TMK IPSCO's facilities in Catoosa, Oklahoma and Camanche, Iowa, which currently thread Wilder products. It will also bring significant savings in terms transporting products to the company's customers in the nearby Marcellus shale region.

"We don't necessarily sell a lot of product locally, but being able to ship to our customers in the east will be much easier once threading can be done on site," said Truskot.

The new threading facility will feature one API thread line, a quality gauge room, an electrical room, offices and break facilities, as well as storage space for couplings and caps. The thread line's team will consist of two crews totaling 14 hourly employees who were hired entirely from within Wilder, as well as a supervisor. One of the most significant features at the new facility will be a robot designed to handle the large couplings that will be threaded on site.

"This will be the first such robot to be used at TMK IPSCO," said Diederich. "We're planning to introduce others as we move toward the use of higher technology at our various facilities."

Overseeing the construction process is Michael Bergfeld, Project Manager at Wilder, who will serve as Threadshop Operations Manager once the threading facility is commissioned.

"It has been exciting to be leading this project from the beginning, and we're looking forward to commissioning later this summer and working our way to full production capacity early next year," said Bergfeld, a native of Iron Mountain, Michigan who holds a degree in Mechanical Engineering from the Rose Hulman Institute of Technology and has been with TMK IPSCO since April 2008. Apart from overseeing the Wilder threadshop project, Bergfeld has also served as a project engineer at the company's facility in Camanche, Iowa and has worked on projects at the plants in Blytheville, Arkansas and Geneva, Nebraska.

GROWING WITH TMK

Just as Cincinnati's vibrant skyline has matured just across the Ohio River, the Wilder facility has come a long way and overcome numerous challenges since it was reopened by Newport Steel 30 years ago. Yet despite all the tough times, more than 100 of the original employees from the plant's opening in 1981 are still at Wilder today. ■

HOW DO EMPLOYEES FIND BEING PART OF A LARGE INTERNATIONAL COMPANY?

"Even 20 or 25 years ago, people would have gone crazy if they had found out that we would be bought by a foreign company," said Steve Schultz, Director of Human Resources at Wilder, who celebrated his 30th anniversary in April. "But now, we're all aware that globalization is here to stay and that it's a good thing. I'd say the transition over these past couple of years has been pretty seamless."

Immune to Corrosion

Text: **Sergey A. Rekin**, Doctor of Technical Sciences Managing Director, TMK-Premium Service

In May, TMK introduced a new high-tech product to the Russian market: Grade L80 tubing made of steel containing 13-percent chromium with TMK FMT premium connections. TMK is Russia's first manufacturer to master the production of pipes from this grade of steel for use in hydrocarbon extraction.

The past decade has seen steady growth in the global market for oil and gas pipes manufactured using high-alloy, corrosion-resistant steels and alloys. They are effective for use in the fields where the extracted products contain corrosive components such as hydrogen sulfide and carbon dioxide. Sulfide corrosion cracking under stress caused by hydrogen sulfide is the most dangerous type of failure in pipes and downhole equipment, so manufacturing hydrogen sulfide–resistant pipes has garnered considerable attention. Yet, well pipe and equipment continue to suffer enormous losses due to carbon dioxide corrosion, which is a widespread and common phenomenon in oil and gas fields.

The mechanism of pipe failure due to high concentrations of corrosive CO_2 in produced fluids appears to be as follows: when carbon dioxide gas dissolves in water, it is converted to carbonic acid, whose action promotes rapid general corrosion and pitting. The action of pitting is local and its rate can be several times greater than the average rate of general corrosion. Similar problems occur in offshore fields, where pipes are exposed to seawater containing chloride ions. The number of these offshore wells is growing every year, which is a driver of growth in the market for alloy steel pipes.

In highly corrosive environments, casing and tubing of martensitic steels containing chromium have been used successfully. Steel with 13% chromium demonstrates high corrosion resistance. The technical requirements for Grade L80 are formulated in API 5CT.

Steel pipes with 13% chromium are currently used in the Russian oil and gas industry but they can only be purchased abroad. Given the increasing importance of solving problems related to carbon dioxide pipe corrosion, TMK began developing new corrosion-resistant pipes in 2005. On its 5500 extrusion line, the Volzhsky Pipe Plant manufactured a trial batch of 139.7 × 9.19 mm [5½ × 0.362 in.] casing and 153.7 mm [6.05 in.] couplings to work out the technology to produce the required geometry and mechanical properties to meet API Spec. 5CT for 13Cr pipe of Grade L80. Then the Sinarsky Pipe Plant and Taganrog Metallurgical Works (TAGMET) carried out studies to develop the technology to thread TMK FMC connections and copper plated couplings for the new pipe. Specialists from the Russian Scientific Research Institute of the Pipe Industry (RosNITI) and TMK's Russian plants developed a program to test for compliance with Gazprom's requirements and jointly carried it out with specialists from Gazprom's Russian Scientific Research Institute of Natural Gases and Gas Technologies (VNIIgaz). The results led to a positive VNIIgaz Finding No. 31323949-169-2007, "On the Quality and Area of Application of L8013Cr API 5CT Steel Made by TMK at Gazprom Fields Whose Production Contains Carbon Dioxide."

The first attempt at industrial production of the new pipe showed that its manufacture could only be carried out cooperatively by using the technological capabilities of the company's other facilities. These capabilities had been fully acquired through implementation of TMK's Strategic Investment Program. By 2009, the program was fully established and the latest equipment had been installed at the facilities. Work then resumed to

Given the increasing importance of solving problems related to carbon dioxide pipe corrosion, TMK began developing new corrosion-resistant pipes

confirm the technological feasibility of making pipes through collaboration between the company's plants on a commercial scale.

RosNITI specialists developed the technological path for making a trial batch. Following this path, the Volzhsky facility manufactured a trial batch of semi-finished pipe from billets produced by Dniprospetsstal in December 2009, which it then shipped to Sinarsky. The batch comprised 37 pipes sized 88.9 × 7.34 mm [3½ × 0.289 in.] (5.340 metric tonnes) and 19 coupling pipes sized 108 × 18.5 mm [4¼ × 0.73 in.] (6.21 metric tonnes). In early 2010, the Sinarsky facility performed hot straightening, geometric inspection and mechanical testing. Sinarsky then performed final heat treatment and sizing of the trial batch.

To permit further testing, TMK-Premium Service developed the specification STO TMK-PS 82105964-001-2010, "TMK FMT Strength Class L80 13Cr Threaded Tubing: Technical Specification and Acceptance Inspection." Specialists from TMK-Premium Service reached an agreement for field testing of a trial batch of tubing at Tomskneft (Strezhevoy, Western Siberia). Western Siberian fields traditionally produce highly corrosive fluids, and given contemporary trends in corrosion protection, the oil company's management decided to employ

Coupling machine on the OCTG thread line at Sinarsky Pipe Plant's Shop #3.

TMK's Grade L80 13-Chrome tubing at their Chkalovskoye field where they had found that the carbon dioxide environment was one of the dominant factors in corrosion of downhole pipelines and equipment.

A trial order for 60 metric tonnes of pipe was placed with Sinarsky and billets were purchased from Dniprospetsstal. At its Shop 2, Volzhsky manufactured semi-finished plain-end pipe and performed acceptance inspections for compliance with documentation and the STO TMK-PS specification. Sinarsky then manufactured TMK FMT couplings and performed heat treatment, sizing, straightening, threading and copper plating of couplings, screwed the couplings onto the pipes, marked and packaged them. The finished pipes were delivered to Tomskneft for its Chkalovskoye field, where they demonstrated adequate corrosion resistance in highly corrosive environments. ■

The Tomsk Route

In the very center of western Siberia, in the oil and gas province of the Tomsk oilmen, swamps and the taiga are not the harshest test. In these oilfields, ordinary steel pipes in production wells fall apart within a few short months. Oil production in these outlying areas therefore requires special high-strength pipes resistant to carbon dioxide corrosion. This spring, at Tomskneft's Chkalovskoye field, new TMK tubing made of chromium steel passed strength tests. Specialists from TMK-Premium Service and the Sinarsky Pipe Plant joined with oil workers to run a pipe string into a well.

CHROMIUM – THE STAFF OF LIFE

The fields in the Tomsk Region being developed by Tomskneft, whose principal shareholders are the Rosneft Oil Company and Gazpromneft, have traditionally been characterized by highly corrosive environments. For this reason, oil workers have always preferred foreign pipes manufactured from alloy steels with good mechanical properties and strength. Manufacturing such pipe is difficult and laborious, so it costs much more, both for the manufacturer and for the customer. However, the use of corrosion-resistant pipes offers a noticeable financial benefit. They not only serve their full-rated life in the wells where they are originally installed, they can also be reused in other projects. This applies primarily to tubing, which can be reused several times. Supporting the maximum number of times a pipe can be assembled and uncoupled is a critical customer requirement for tubing.

The 13-percent chromium steel pipe developed by TMK and offered for industrial testing at Tomskneft's Chkalovskoye field is the first Russian equivalent to this high-strength product. The Grade L80 Cr13 tubing with a diameter of 73.02 mm [2⅞ in.] and a wall thickness of 5.51 mm [0.217 in.] with TMK FMT connections was manufactured for TMK-Premium Service in collaboration between the Volzhsky and Sinarsky plants. In March, a trial batch of 700 pipes was delivered to Strezhevoy, the center of the Tomsk oil industry. In April, Vladimir Churkin, head of TMK-Premium Service's service division, and process engineers Vadim Khvostantsev and Dmitry Taskin of Sinarsky Pipe Plant were sent to the Chkalovskoye field to collaborate with Tomskneft specialists on the assembly and running of a tubing string at one of the two wells that had been designated for TMK pipe.

BY ATV ONLY

The trip from Moscow to the rotation camp at the Chkalovskoye field where oil is produced is a long one. First, one must fly three and a half hours to Nizhnevartovsk, followed by an 80-kilometer drive to Strezhevoy. From there, a helicopter is the only way to reach the field.

The flight over the taiga is an unforgettable experience. For the entire 215 kilometers, the majestic and inaccessible taiga, a subarctic coniferous forest striking in its uncompromising beauty, extends outside the window. A green sea of pine, spruce, larch, and fir—occasionally crossed by manmade cuts and waterlogged plains—stretches for hundreds of kilometers. Every so often, oil derricks stick up, traces of human civilization in this harsh wilderness. In conquering nature, people have put natural riches to use, but they have also assumed the huge responsibility of conserving

TMK-Premium Service offers services that are unique on the Russian market and is the only company in Russia that develops and produces Premium Connections. In addition, specialists from TMK-Premium Service monitor the delivery of threaded pipe to the customer and support its operational commissioning.

Although running the string of 314 pipes to a depth of over 3,000 meters [9,800 ft.] took more than two days (52 hours), it was successful. During assembly, the TMK specialists and oil workers detected no discrepancies either on visual inspection or on inspection of correct assembly by manometer pressure and screwing marks

nature itself. This immutable law is of special importance in the land of the oil workers, and helicopters regularly patrol production areas to ensure there are no oil spills anywhere.

The rotation camp where the Tomskneft oil workers live is located only a kilometer and a half from the helicopter pad, but it cannot be reached by foot as it is surrounded by impassable mud. An all-terrain vehicle is a typical mode of transportation for the oil workers. The powerful machine quickly delivers the visiting TMK specialists to the site where they will support the running of the pipe string.

The camp itself is small and compact. In the taiga, it is best for people to stay close together. Paneled one-story cabins house the oil workers and the numerous contractors involved in the oil production process. A gas flare burns continuously in the center of the camp to control the permissible concentration of gas in the air. This associated gas, insidious due to its lack of odor, is released by the oil production process at the Chkalovskoye field.

With a sharply continental climate that is often similar to that of the Far North, the living conditions for the oil workers are extremely harsh. In winter, the average temperature in and around Nizhnevartovsk is –40°C. In spring and summer, the temperature rises above freezing, but blood-sucking insects pester the workers. Swarms of mosquitoes and gnats descend on anyone foolish enough to go without any protective gear. Encephalitic taiga ticks, whose bites are life-threatening, live in the forest.

The taiga, where wild animals rule, begins just beyond the trailers. At the camp, they tell a story of the Kolymskoye field where a bear once attacked a worker who had erected a fence against unwelcome forest visitors. Fortunately, the oil workers came to their friend's rescue in time and managed to drive off the bear. Camp residents have seen bear tracks in the snow more than once; one must always be alert here.

A STRING OF 314 PIPES

On the evening of April 24, when the well was ready for the pipe and the necessary equipment had been installed, the specialists from Tomskneft and TMK began assembling the string. Since running pipe is a continuous process, the specialists worked in shifts. The weather was difficult, and as soon as they began running pipe, snow began to fall, instantly turning to slush. At night, the temperature fell to –9°C, and a snowstorm began.

Representatives from TMK-Premium Service and Sinarsky Pipe Plant closely monitored the assembly process to ensure that all technological requirements were met.

"We carefully examined each pipe and its thread to rule out any mechanical damage. Then we thoroughly wiped the pipe to remove the protective grease and applied screwing check marks to the pin and box ends of the pipe to guarantee correct assembly," explained Churkin.

The first phase of assembly and running of the string was done manually. "First, you have to connect the pin of the new pipe to the box of the previous one, make two or three turns, and then with the mechanical wrench locked to the pipe, torque it fully. To know how far to turn, we put the marks on first," explained Churkin. "Then the wrench is removed, and the hoist lowers the finished part of the string. Once the last pipe is lowered down to its coupling, it's clamped in place and we begin connecting the next pipe. It seems like a simple, standard sequence of operations, but it requires close attention and precision. A small deviation from the standard in even one connection and the string's seal will break." In the final phase, the string is connected to the pipeline system and to the oil tank farm.

Representatives from TMK-Premium Service and Sinarsky Tube Works closely monitored the assembly process to ensure that all technological requirements were met. "We carefully examined each pipe and its thread to rule out mechanical damage."

Although running the string of 314 pipes to a depth of over 3,000 meters [9,800 ft] took more than two days (52 hours), it was successful. During assembly, the TMK specialists and oil workers detected no discrepancies either on visual inspection or on inspection of correct assembly by manometer pressure and screwing marks. The pipe quality permitted the work to be done quickly and without complications. Once the string was assembled, the well was placed in production.

In late May, a tubing string was run into a second well at the Chkalovskoye field. Based on the results of the two runs, both parties confirmed that the first phase of industrial testing had been successful. In the next phase, the new pipe will be tested after commissioning. If the residual properties of the tubing remain within the standard limits, TMK will not only be listed as a supplier of high-strength products but will also gain new opportunities for entry into the global market's premium segment. ■

Piotr Galitzine Speaks to Booth Executive MBA Class of 2012

On May 13, Piotr Galitzine, Chairman of TMK IPSCO, spoke to the Executive MBA Class of 2012 at the University of Chicago's Booth School of Business. The program's diverse group of nearly 100 students consists of professionals from a wide range of industries who travel to Chicago twice a month from as far as Santiago de Chile.

In his speech, Galitzine gave an overview of TMK's business, emphasizing the importance of product and geographic diversification for global companies. He also spoke at length on the implications of future growth in energy consumption.

"Mr. Galitzine's speech and the following discussion revealed several important lessons that readily apply to managers, executives and entrepreneurs who operate in the global economy," said Denis Prokofiev, Senior Reservoir Engineer at Shell E&P and a member of the Executive MBA program at Booth who organized the event. "Not only does geographic diversification allow a company to pursue new markets, it also allows it to ride different and local market trends, which helps to smooth the ups and downs of the business cycle roller coaster… Furthermore, it necessitates expansion of the product mix and pursuit of better technologies and business practices to serve a larger customer base more efficiently." Julia Pavlovich, Senior Imaging Engineer at Analogic Corporation in Peabody, Mass. and a member of the Executive MBA program at Booth, also shared her impressions of the event.

"I was very impressed with the depth of the overview of the oil and gas industry and TMK's role as a global producer of steel pipes," Pavlovich said. "Mr. Galitzine touched on very important questions of the future of the global energy industry and his views on the growth of Chinese and Indian energy consumption were very enlightening." In speaking about the growing demand for oil, Galitzine said, "There will not be any decrease from $112 per barrel for Brent and $100 per barrel for West Texas Intermediate. The reason is that the emerging market economies want to a) produce and export more, and b) enjoy a higher standard of living, which requires energy from hydrocarbons and plastic products. India, the world's most populous democracy, is adding 75,000 people to its middle class every day; China is consuming half of all new oil growth worldwide…Someday we will look back at $100 oil and remember how good it was." ■

TMK Trading House, Moscow
40-2a, Pokrovka Str.,
Moscow 105062, Russia
Tel: +7 (495) 775 7600,
Tel/Fax: +7 (495) 775 7602
E-mail: tmk@tmk-group.com

Branch office TMK Trading House, Volzhskiy
6, Avtodoroga 7 Str., Volzhskiy, Volgograd region, 404119, Russia
Tel: +7 (8443) 22-27-77, 55-18-29
Tel/Fax: +7 (8443) 25-35-57

Branch office TMK Trading House, Polevskoy
7, Vershinina Str., Polevskoy,
the Sverdlovsk region, 623388, Russia
Tel: +7 (34350) 3-21-05, 3-32-75
Tel/Fax: +7 (34350) 3-56-98

Branch office TMK Trading House, Kamensk-Ural'skiy
1, Zavodskoi proezd Rd., Kamensk-Ural'skiy,
Sverdlovsk region, 623401, Russia
Tel: +7 (3439) 36-37-19, 36-30-01
Tel/Fax: +7 (3439) 36-35-59

Branch office TMK Trading House, Taganrog
1, Zavodskay Str., Taganrog,
Rostov region, 347928, Russia
Tel: +7 (8634) 65-03-58, (8634) 32-42-02
Tel/Fax: +7 (8634) 32-42-08

Representative office TMK, Azerbaijan
22, Karabakha Str., Baku, AZ1008,
Azerbaijan
Tel/Fax: + 994 (12) 496-19-18
E-mail: baku@tmk-group.com

Representative office TMK, Turkmenistan:
29, Arshabil chaeli Str., "Nebitshi" hotel,
1939, Ashgabat, Turkmenistan
Tel/Fax: +993 (12) 48-87-98
E-mail: ashgabat@tmk-group.com

TOO TMK-Kazakhstan
38/1, office # 5, Zheltocsan Str., Astana,
010000, Kazakhstan
Tel/Fax: +7 (7172) 31-56-08, 31-08-02
E-mail: info@tmck.kz

Representative office TMK, China
APT19 I, NO.48 Dongzhimenwai Str.,
Dongcheng District, Beijing,
China ZIP. 100027
Tel: +86 (10) 84-54-95-81,
+86 (10) 84-54-95-82
Tel/Fax: +86 (10) 84-54-95-80
E-mail: beijing@tmk-group.com

Representative office TMK, Singapore
10 Anson Road #33-06A International
Plaza, Singapore 079903
Tel: +65 (622) 33-015
Tel/Fax: +65 (622) 33-512
E-mail: singapore@tmk-group.com

TMK Global AG
2, Bldv. Du Theatre, CH-1211 Geneva, CP
5019, Switzerland
Tel: +41 (22) 818-64-66
Fax: + 41 (22) 818-64-60
E-mail: info@tmk-global.net0

TMK Europe GmbH
Hohenstaufenring 62, D-50674 Koln,
Germany
Tel/Fax: +49 (221) 27-23-89-10,
+49 (221) 272-00-81
E-mail: info@tmk-europe.eu

TMK Italia s.r.l.
Piazza degli Affari, 12, 23900 Lecco, Italy
Tel/Fax: +39 (0341) 36-51-51,
+39 (0341) 36-00-44
E-mail: info@tmk-italia.eu

TMK IPSCO
2650 Warrenville Road, Suite 700
Downers Grove, IL 60515, USA
Tel: +1 (630) 874-0078
Fax: +1 (630) 874-6431
Toll Free: 1-866-654-0078
(U.S. and Canada)

TMK IPSCO Canada Sales Office
150 6th Avenue SW #3000
Calgary, AB T2P 3Y7
Tel: +1 403-538-2182
Fax: +1 403-538-2183

TMK North America, Inc
8300 FM 1960 West, Suite 350, Houston,
TX 77070, USA
Tel: +1 (281) 949-10-23,
Fax: +1 (281) 445-40-40
E-mail: cdavis@tmkna.com

TMK Middle East
P.O. Box 293534 Office 118, Block 5EA,
Dubai Airport Free Zone,
Dubai, United Arab Emirates
Tel: +971 (4) 609-11-30,
Fax: +971 (4) 609-11-40

TMK Africa Tubulars
1st Floor, Convention Tower, Cnr.
Heerengracht Str. & Coen Steytler Ave.
Foreshore, Cape Town 8001, South Africa
Tel: + 27 21 403-63-78,
Tel/Fax: + 27 21 403-63-01
E-mail: info@tmkafrica.com

GIobal Strength

As one of the largest North American producers of welded and seamless pipe and premium connections, TMK IPSCO is dedicated to serving the oil and gas industry. Our legacy of quality, industry-renowned customer service, and focus on innovative products and services allows us to drive unparalleled value for our customers. TMK IPSCO is committed to being the premier supplier of energy tubulars. As part of OAO TMK, one of the world's largest pipe producers, we offer an expanded line of steel pipe and tube, providing our customers with even more options to meet the market's evolving needs.

TMK IPSCO

Tel: 888.258.2000