YourTube

Technology Motion Knowledge

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Living Our Values

10 Years of Technological Change

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News

GATEWAY TO THE CITY

The city of St. Petersburg and TMK have entered into a cooperative agreement to study and adopt advanced technologies and materials in the use of pipe in the centralized heat supply network and in the housing and utilities sector. The company will open representative offices and a warehouse in this northern capital, which will help ensure that tubular products for the city are delivered on time. St. Petersburg Province Governor Georgiy Poltavchenko expressed confidence in the collaboration, saying "TMK's professional credibility and global image will be put to work for St. Petersburg." ■

SCHOLARSHIPS FOR THE BEST

TMK has chosen its next round of recipients of the A.D. Deineko Scholarship (named for the Russian Federation distinguished metallurgist and director of the Pipe Industry Development Fund), which the company established in 2013 to encourage the most talented students at Moscow Institute of Steel and Alloys, the leading university in the training of specialists in the fields of metallurgy and metal science. Based on a competition, the scholarships are awarded to three full-time seniors studying in the Department of Pipe Production Technology and Equipment. This year, the scholarship award ceremony was held in Moscow during the Russian National Career Forum. Students recognized as scholarship recipients by RosNITI CEO Igor Pyshmintsev were Alexander Gusak, Artem Lelyotko, and Ekaterina Chubukova. ■

TMK ANNOUNCES 4Q 2014 AND FY 2014 OPERATIONAL RESULTS

- In 2014, TMK shipped a total of 4,377 thousand tonnes of steel pipe, up 1.5% year-on-year. In 4Q 2014, shipments grew by 10.4% quarter-on-quarter, reaching 1,218 thousand tonnes.
- Seamless pipe shipments went up by 3.8% year-on-year to 2,541 thousand tonnes. Shipments in 4Q 2014 increased by 11.5% quarter-on-quarter to 693 thousand tonnes.
- Welded pipe shipments in 2014 dropped by 1.5% year-on-year to 1,836 thousand tonnes due to lower demand for welded industrial and line pipe. In 4Q 2014, welded pipe shipments were up 8.9% quarter-on-quarter, reaching 525 thousand tonnes.
- Shipments of OCTG pipe, TMK's core product, grew by 5.5% year-on-year to 1,937 thousand tonnes. In 4Q 2014, shipments of this product increased by 5.2% quarter-on-quarter to 519 thousand tonnes.
- In 2014, TMK's American division increased its shipments by 5.8% year-on-year, reaching TMK IPSCO's all-time high of 1,238 thousand tonnes of tubular products. In 4Q 2014, the division's shipments grew by 9.5% quarter-on-quarter to 338 thousand tonnes.
- In 2014, shipments of seamless and welded OCTG pipe were up 22.6% and 3.3%, respectively, driven by the rise in drilling activity and development of unconventional hydrocarbon reserves in North America. In 4Q 2014, the shipments increased by 12.2% and 21.1% quarter-on-quarter, respectively. ■

News

IMPORT SUBSTITUTION

In a meeting at the Volzhsky Pipe Plant, Gazprom and TMK representatives discussed future implementation of the scientific and technical cooperation program between the two companies by the end of 2015, in which more than 20 new types of tubular goods for gas production and transport will be developed at TMK plants.
The practice of using pipe with TMK UP premium threaded connections will be expanded at Gazprom fields.
"We are trying to take into account Gazprom's needs in the development of new fields, which are dictated by the increasingly complex conditions for hydrocarbon production and transportation, and also by the growing demand for import substitution," said Volzhsky Pipe Plant Managing Director Sergey Chetverikov. ■

TMK IPSCO NAMED TO HOUSTON BUSINESS JOURNAL'S LARGEST MANUFACTURERS

Again this year, TMK IPSCO was named to the Houston Business Journal's list of largest Houston-area manufacturing firms, based on number of local employees. This year the company was ranked #16, up nine places from last year.

While this listing is based only on responding companies, it is important for us to be recognized as a leading member of the Houston Community. ■

TMK CEO Alexander Shiryaev and MMK CEO Paul Shilyaev

PRICE FORMULA

In late September, TMK signed an agreement on pricing terms for deliveries of large-diameter pipe to Gazprom, which is expected to have a positive influence on TMK financials, economic activities and operations. In November, an agreement on the application of a pricing formula for wide hot-rolled plate supplied to TMK plants through the end of 2015 was finalized with one of the main raw material suppliers – Magnitogorsk Iron and Steel Works (MMK). This pertains to deliveries of plate to the Volzhsky pipe plant for the fabrication of large-diameter pipe designed for large-scale gas pipeline projects being carried out by Gazprom.

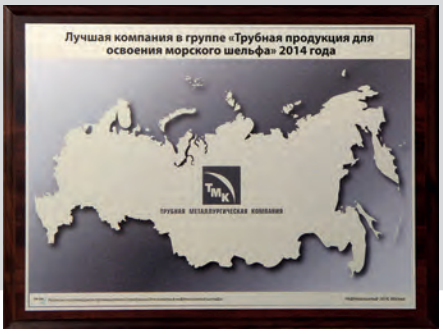
TMK CEO Alexander Shiryaev commented that the agreements with MMK and Gazprom "will allow all involved to optimize their internal workflow processes and improve their planning effectiveness and price-setting transparency." ■

CERTIFICATION CONFIRMED

The certification association Russian Register performed a recertification audit at TAGMET to ensure the plant's Quality Management System (QMS) meets the requirements of Gazprom proprietary standard 9001-2012.
Plant workers exhibited a high level of professionalism and knowledge of QMS regulatory documents and provided the audit committee with all the objective evidence as to how this knowledge is being practically implemented and applied at the plant locations. The experts commended how well the QMS is being applied at the plants and confirmed that the QMS fully satisfies the requirements of Gazprom proprietary standard 9001-2012. ■

FIRST IN OFFSHORE PROJECTS

TMK has been recognized as the best supplier of tubular goods for offshore development. The company ranked first in a survey of oil and gas company customers conducted prior to the ninth annual Offshore Oil and Gas Contracts conference (NEFTEGAZSHELF-2014). ■



ENVIRONMENTAL AUDIT PASSED

Volzhsky Pipe Plant passed a supervisory audit of the plant's environmental management system to test compliance with international standard ISO 14001:2004. Representatives of the TIC certification body performed the audit in all the main shops and at a number of plant auxiliary locations, and noted Volzhsky pipe plant specialists' competence and knowledge of the standard's requirements, the priority scheduling of environmental protection measures and the successful implementation of programs to modernize and retrofit production facilities. ■

NEW COOLING TOWERS

New series GRD compact mechanical-draft cooling towers with local recovery were recently installed at Sinarsky Pipe Plant. The state-of-the-art towers allow for output to be adjusted electronically, while maintaining the specified temperature inside the station. The compressor plant operator controls the cooling process via computer.

In addition to affording a significant reduction in electricity and process water consumption, bringing this new facility on-line will increase the time between overhauls of the compressor station's primary equipment and will enable replacement of an obsolete fleet of turbo compressors. ■

FOR SURGUTNEFTEGAS: ALL-INCLUSIVE

TMK delivered a package of high-tech tubular goods and equipment for drill string component parts to the Surgutneftegas Company for the construction of a well roughly 5000 m deep. The supply package included drill pipe with the TMK TDSAMC premium pipe joint and high-torque TMK TDSAMC tool joints developed by TMK-Premium Service specialists, as well as heavyweight drill pipe (HWDP) and drilling equipment (elevators and protectors) fabricated by third-party manufacturers.

Alexander Shiryaev, TMK CEO, said, "In cultivating the practice of interacting with our customers, not only are we focused on providing them with tubular goods of the highest quality to meet their specific requests, but we are also striving to become a comprehensive supplier of products and services for oil and gas companies." ■

Leadership Summit

Outstanding Finish to 2014, Plans for the Year Ahead Discussed at 2015 Leadership Summit

Engage, Execute, Exceed. That was the theme of the fifth annual TMK IPSCO Leadership Summit. In introducing the theme, CEO and President Dave Mitch said he expects the leaders to "act as one," to provide consistent direction, to support for each other's successes, to be collectively responsible for results and to exhibit consistent behaviors.

Dave recognized the leaders and the entire company for a strong, outstanding finish to 2014.

TMK IPSCO Chairman Dmitry Pumpyanskiy, speaking in a pre-recorded video, said,

"To me, 'engage' means work together – across plants, across functions, across divisions of TMK. Learn from your colleagues' experience, and share yours. 'Execute' means 'get it done.' Don't make or accept excuses. It may be a difficult market, but it is difficult for everyone. You are a strong team, with deep experience and strong management skills. Just get it done. 'Exceed' means go the extra mile. Strive for zero accidents – it is achievable. Strive for zero defects. Strive to achieve and exceed on sales and financial performance."

TMK IPSCO Chairman Piotr Galitzine provided an overview of the global oil and gas industry, pointing out that our strategy does not fundamentally change. To the right in complexity and up in price remains our direction. "Specifically this means we will continue to manufacture and market our domestic seamless product and continue to push pipe with TMK UP connections wherever possible," he said.

SAFETY FIRST

2014 was a stellar year for safety at TMK IPSCO. HSE Director Carl Raycroft reported that several of our plants had record-breaking performances, and the company's overall OSHA recordable frequency rate of .79 is the lowest ever recorded at TMK IPSCO.

Many of our plants are achieving their own safety records. Koppel and Blytheville both have had more than 2.4 million man hours worked without a lost time accident. Houston ULTRA has gone more than six years without a lost time accident. Geneva has gone nearly eight years without an OSHA recordable. Geneva, Odessa, Brookfield and the R&D Center went the entire 2014 without a recordable injury. These are tremendous accomplishments for the company and individual facilities.

Going forward, Raycroft says prevention will be the key to continuous improvement. Safety managers will focus on three main factors to ensure continuous improvement in the area of safety:

- Investigate all incidents with potential for injury
- Improved and focused observations
- Defined hazard assessments for non-routine tasks and managing change in our plants

TMK IPSCO WAY!

During the meeting, TMK IPSCO's Director of Organizational Development, Carmen Alston introduced the TMK IPSCO Way!

She pointed out that building on positive behaviors is how we will engage execute and exceed – that the right behaviors drive competitive advantage. The behaviors were developed through in-depth discussions with 36 leaders across 10 departments and eight sites over several months earlier this year. "Our performance resolve is always to achieve and exceed. We do business each day with absolute integrity and ethics, focusing our people, their growth and safety and delivering innovative solutions to our customers," she said.

To engage, execute, exceed, several key behaviors are essential for our success. Here they are:

- **Drive for results:** ... strive for excellence ... in all we do.
- **Take ownership:** accept accountability for actions.
- **Demonstrate a CAN-DO attitude:** be bold, take initiative, demonstrate courage, and embrace change.
- **Communicate:** Connect. Collaborate. Challenge. Celebrate.
- **Exhibit passion and pride for performance:** how we execute and serve our customers.

Carmen added that the behaviors will be embedded into our culture through the performance management system, through leadership assessment and development, through the Living our Values program and through new hire orientation and business conduct training.

SOCHI PRESENTATIONS

A number of TMK IPSCO employees were selected to present projects at TMK's Annual Scientific Youth Conference in Sochi. It was an honor for them to be selected but, due to the restraints of sanctions, they were not able to make their presentations. As an alternative, they presented to about 30 leaders at the R&D Center late last year. However, the winners were recognized during the Leadership Summit, and the overall winner, Gabe Rudek, made his presentation during the event (see complete story on the Scientific Youth Conference on p. 13).

LIVING OUR VALUES

The second annual banquet for the Living our Values recognition program was held the evening of the first day of the Leadership Summit. More than 70 leaders assembled at the La Torretta Conference Center, an hour north of Houston, to recognize all the finalists in the program and learn of the winners.

In kicking off the awards, Dave Mitch said, "We are recognizing all people who were selected as finalists for doing work that is reflective of our company values – innovation, people safety and sustainability, customer focus and outstanding quality. More than 200 people were nominated, either individually or parts of teams for work that reflects one or more of those values. The work of dozens of others whose nominations were not selected also represent solid contributions to the company.

Announcing the overall winner, Piotr Galitzine said, "Values are important – they represent who we are as a company. I'm about to announce the winner of this program, but in a broader sense all the nominees are winners because they all live the values of our company and contribute to its success."

CEO and President Dave Mitch recognized the leaders and the entire company for a strong, outstanding finish to 2014.

Safety and Sustainability took first prize. The award went to Carl Raycroft and the safety managers for each of our plants: Stephen Rihel, Mike Alderson, Oscar Carmona, Nick Wallace, Jim Harden, Rick Clifton, Anthony Duckworth, Bryan Thompson, Jaime Guzman, Nicola Prochinsky and Mike Skibinski. All plant managers in attendance represented their safety managers in accepting their awards.

In the **Innovation** value category, Shalandys Williams and Roger Bentley received the award for their work developing and implementing the Employee Engagement Events (E3's).

In the **People** value category, the trophy went to the team that negotiated the union contract for Ambridge and Koppel. In presenting the award, Peter Smith called the contract fair for both sides, and a firm cost basis from which to plan for the next four-and-a-half years. "This is crucially important in today's environment," he added.

The Safety and Sustainability award went to Carl Raycroft (at left), and the safety managers for each of our plants. Chairman Piotr Galitzine (at right) announced the award.

Shalandys Williams and Roger Bentley received the award In the Innovation category from Paul Fullerton.

In the People category, the trophy went to the team that negotiated the union contract for Ambridge and Koppel. Sheri Renas shares the award with Tom Kellner.

For Customer Focus, the award went to Ray Miller, for his work with customers on quality issues. Scott Barnes awards the trophy to Mike Christopher.

The winners for Outstanding Quality, were the cross functional team from operations, sales, process engineering, quality, safety, and human resources. Pras Adhikari, at right, officiates.

For **Customer Focus**, the award went to Ray Miller, for his work with customers on quality issues. He was nominated by Mike Christopher, who accepted the award on Ray's behalf.

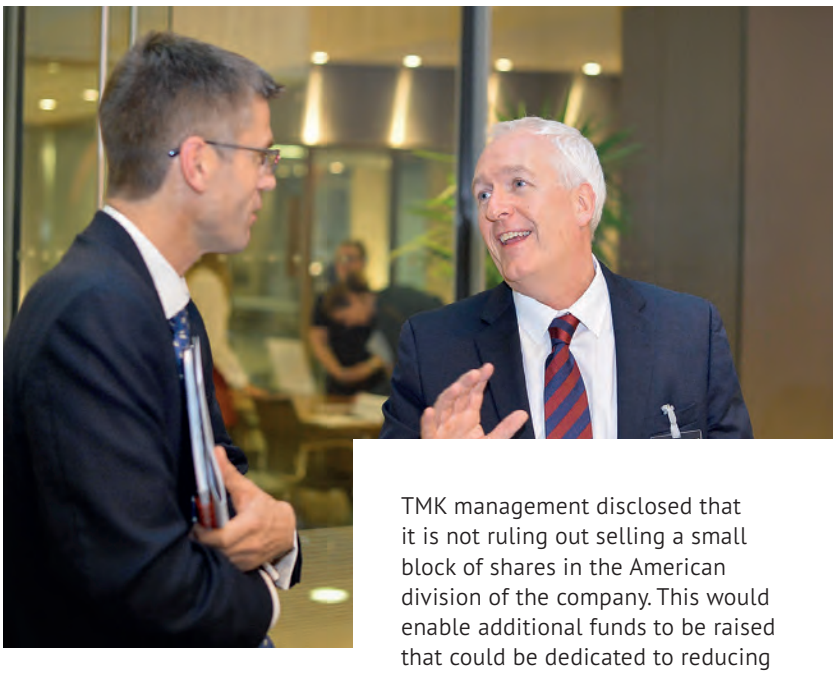
For **Outstanding Quality**, the winners were the cross functional team from operations, sales, process engineering, quality, safety, and human resources who came together to improve the performance and to work with customers to grow Wilder's business: Murray Giesbrecht, Mark Wolber, Mike Stefko, Gary Durbin, James Murray, Michael Bergfeld, Kevin Benjamin, Harley Romans, Pat Cook, Bryan Kinman, Eric Klotz, Tom Everson, Rick Clifton, John Linneman, Andrew Fischbach, Rich Arndt, Dennis Weber, Adam Calendar, Keith Brown, Steve Lawrence and Sharon Zipprian. ■

TMK Investors' Day 2014

TMK Investors' Day was held for the first time in October 2013, in two world financial centers – New York and London. This new format for interacting with the investment community immediately proved its value. Due to the positive response the company held a second Investors' Day in London in October 2014.

In 2006, TMK was the first Russian steel pipe manufacturer to place its securities on the London Stock Exchange. TMK shares are now traded on the London Stock Exchange, in the U.S. over-the-counter trading system (OTCQX), and on the Moscow Stock Exchange (MICEX-RTS). Considering TMK's beginnings in securities trading, it was fitting that the 2014 TMK Investors' Day centered around presentations by Chairman of the Board of Directors Dmitry Pumpyanskiy and other top TMK management in a London Stock Exchange conference room. More than 60 people attended the meeting, while another few dozen watched the presentations remotely, via the company's website.

TMK Chairman of the Board of Directors Dmitry Pumpyanskiy



Mr. Pumpyanskiy reported that the company is currently operating in complex macroeconomic conditions caused by the devaluation of Russia's currency, the drop in oil prices, and the rise in interest rates. At the same time, the weakening of the ruble may make export operations more profitable. Russian consumers' demand for the company's products remains stable, while restrictions on importing American and European oil and gas technologies into Russia will strengthen TMK's market position in the future. "We also see that sanctions have forced Russian oil and gas companies such as Gazprom to look to the east, and we are planning to supply our products to projects that will deliver gas to China," said Mr. Pumpyanskiy.

The company's key priorities for the future include increasing production efficiency, reducing costs and improving its product mix. Among the company's main objectives are reducing the net debt/EBITDA ratio to 2.5 by the end of 2016 and raising the share of premium products among OCTG tubular shipments to more than 30% by 2018.

TMK management disclosed that it is not ruling out selling a small block of shares in the American division of the company. This would enable additional funds to be raised that could be dedicated to reducing the debt load.

The event met the expectations of most of the participants, who, through face-to-face communication, were able to learn more about the company and better understand one another. This kind of trust, backed by reliable information, is what lays the foundation of any successful business. ■

Alexander Klachkov: 10 years of technological change

In 2014, TMK completed most of its Strategic Investment Program, which was initiated in 2004. During the ten-year period, the company's plants underwent large-scale reconstruction, resulting in a complete upgrade of production. With the latest equipment and technologies now at its disposal, TMK's arsenal of market opportunities has grown significantly.

TMK Chief Engineer **Alexander Klachkov** describes how this work was performed and its outcomes.

Alexander Klachkov, can you describe the amount of work that was done to modernize production? Are there many examples of this being done by other companies?
We did a colossal amount of work, in terms of the scale of construction and the investments made. Even Soyuztrubprom in its day never undertook such a global reconstruction project. Its greatest achievement in the late Soviet era was the construction of the steelmaking and rolling plants at the Volzhsky Pipe Plant. Since then we have taken a number of actions to rebuild this equipment.

There are almost no other examples of this kind of modernization in the marketplace, with the exception of the larger Chinese companies. Our closest competitors – Tenaris and Vallourec – have some large individual projects. In recent years each company has brought a new rolling mill on-line. But they didn't undertake a reconstruction as comprehensive as ours.

How have the technologies in metallurgical production and pipe production in particular changed in the last decade and to what extent have these technologies been implemented at TMK?
One of the most important changes has been the transition to manufacturing seamless pipe directly from continuous-cast billets, bypassing the billet-rolling step. Prior to this, only rolled billets or blooms were used for pilgering. At all our plants we have eliminated this limitation, which has enabled us to lower product cost.

The second achievement has been a gradual departure from the pilgering method, which was invented in the late 19th century. We will soon phase out pilgering in the company's pipe production at Seversky Tube Works. The challenges that lie before us are to improve the pipe-rolling plants at Sinarsky Pipe Plant, which I think will happen in the next few years.

Does the company now supply itself with all of the billets it needs?
We produce 90% of the billets we need. We could meet all of our demand if we chose to, but right now this is the production volume we find optimal. It is more advantageous to buy the rest of the billets from an outside local manufacturer. Nevertheless, if the billets we purchase were to suddenly jump in price, we could always produce more of our own.

You directly oversaw the investment program, first as the director responsible for it and then as the company's chief engineer. In this substantial undertaking, what moments do you remember most?
What I remember most is the continuous caster construction project at TAGMET in 2006. This was the first major project we implemented as part of the investment program. The first casting occurred on the very day of the caster's ceremonious launch, in front of an assembled gathering. It was extremely risky. Failures occur even on systems that have been in operation a long time, so when a system is being launched for the first time, stoppages are all the more likely. The caster is tall and at the start of the production line the guests could not see the casting process begin. When the billets finally emerged en route to the gas-cutting machines, everyone breathed a sigh of relief.

What has been most challenging in implementing these projects – finding good equipment, selecting the technology, installing the systems, or something else?
All of these steps are very important and require a lot of effort and specific qualifications. But the most important step begins after the

equipment has been installed – this is the shakedown period. The first thing to learn is how to operate with minimum downtime and eliminate emergency equipment breakdowns. Second, the equipment must operate at the output called for in the design plans. And third, the prescribed product quality level must be achieved, based on the capabilities of the new equipment.

There are inherent challenges because all equipment has its quirks. Each is a unique specimen and requires a customized approach. That is the first thing one has to consider during the shakedown process. The second challenge has to do with the fact that we are now adopting advanced state-of-the-art technologies, some of which are not yet being used anywhere else in the world. We must treat such advanced equipment as prototypes that must undergo a period of improvement. We need to finish perfecting it, sometimes in collaboration with our equipment-manufacturing partners. During this process, we are doing the learning and they are learning from our example.

As a result of modernizing, we have outfitted TMK plants with the most modern, best performing equipment out there.

At the same time that the equipment is being updated, people have to be trained how to operate it and which technology to choose. No matter how perfect a machine, it cannot replace the person who must know how to operate and maintain it.

How are team members reacting to this technological transformation? Are people ready to move onto a "new track"?
Our workers feel how their lives are changing and they are happy about the changes. The plant workers can compare how things were before and are after.

In terms of skill levels, many workers do need to be retrained, which involves new knowledge and improving labor efficiency. New equipment calls for new awareness, such as what to be on guard for all the time and what processes need to be monitored constantly. We are seeing the allure of new production technology for many workers, especially young people who are eager to enroll in specialized training institutes so they can come work for us.

How difficult was it to introduce the new systems while current production systems were still operating?
This did create some additional difficulties in the engineering and installation of equipment in areas that were still active. Equipment was installed and brought on-line in a certain order that allowed for the old equipment to continue operating. Though difficult, it was well worth it. By using existing buildings, shops and infrastructure, we minimized our investment costs. And, since we didn't stop production, we eliminated production losses that could have occurred during the equipment construction and installation period.

To what does the company attribute its ability to increase production efficiency, now that its technological infrastructure has been updated?
As a result of modernizing, we have outfitted TMK plants with the most modern, best performing equipment out there. The new pipe-rolling plants consume significantly less metal. The introduction of new steelmaking technologies allows for product cost to be reduced. And, the increased output from the production units' output has provided increased opportunities for improvement of labor productivity. We are also able to address other important issues, such as resource conservation, increasing energy efficiency and the use of recycled resources.

Does this mean that TMK is ready to implement new environmental standards?
We are consistently working to reduce our environmental impact. Now that the upgrades have been completed, the primary equipment at our factories is of European manufacture, meaning it was already engineered and manufactured to meet the requirements of the European Council's environmental mandates, which are what gave rise to the term "best available technologies." Most of our projects comply fully and we are working on the few production facilities that still need modernizing to meet the new standards.

Ten years ago, when the company began modernizing its production facilities, did it appreciate the scope of this work?
It was clear that the work of rebuilding obsolete systems and constructing new ones would require a lot of manpower and resources, but even so, significant adjustments had to be made as the process unfolded. At the very beginning, in 2004, the investment program was a bit more modest and the company itself smaller. When TMK finally emerged on the global stage and we began competing with the very best global manufacturers, it became clear that we would have to do a great deal more in terms of technical upgrades.

In other words, modernization has enabled the company to use the newest equipment and technologies to create a certain framework, which now has to be supplemented and improved, as circumstances require?
That's exactly right. We have created a base, but innovations of various types are constantly being made in manufacturing and engineering. Customers are imposing new requirements, which we are striving to meet. It's a process of continuous improvement.

What projects are in the works for the near future?
We are now focusing more of our efforts on finishing operations – heat treatment, pipe finishing, coating application and threading, which enable us to increase the price of the end product. At Seversky Tube Works, they are planning to build a new heat-treatment bay and we are refurbishing some modern pipe-threading lines and plain-end pipe inspection lines. At Sinarsky Pipe Plant and TAGMET the pipe threading lines are being refurbished and at Volzhsky Pipe Plant we are expanding our coupling capabilities. Improvements are also in the works at TMK IPSCO sites.

Is there anything we still have not achieved in the area of pipe production?
No single company makes everything and it would not make sense to do so. Certain products have limited application, so there is no point creating a dedicated production facility for them merely in order to have a more complete product range. Our product line includes about 90 percent of everything that currently exists on the pipe supply market. This is a very high level.

What feelings do you have after completing such a colossal amount of work?
When you are working on a project, you are living that project. You are working toward the moment when everything will be completed. Then, finally, the launch day arrives – the very thing that you and your colleagues were working toward for so long. You are extremely proud, but feel a little empty because everything is over. You need your next project. As Vysotsky wrote: "The whole world is in the palm of our hand – you're happy about that and you experience just a bit of envy towards those whose peak still lies ahead of them." Fortunately, we have not yet run out of projects and plans. ■

The Next Generation

This fall, TMK held its Youth Research and Practical Conference (YRPC). The 10th anniversary forum proved to be unprecedented in terms of the number of participants and the number of and variety of events.

The YRPC has become an effective platform for promoting the projects of young specialists representing the company's key areas. New product development, technological advancement, financial resource management, addressing environmental problems, upgrading IT-systems, and developing personnel training programs were highlighted at YRPC. What's more, most of the work presented is being implemented, providing tangible economic results. In his welcoming remarks to conference delegates, Dmitry Pumpyanskiy, Chairman of the TMK Board of Directors, underscored this point when he said, "Everyone who takes part in the work of the YRPC is making a significant contribution to the company's development."

A number of TMK IPSCO employees were selected to present projects at TMK's Annual Scientific Youth Conference in Sochi. It was an honor for them to be selected but, due to the restraints of sanctions, they were not able to make their presentations in Sochi. As an alternative, they presented to 30 leaders at the R&D Center on December 9, 2014. Presentations were evaluated in the categories of Best Overall Presentation, Most Innovative Idea, and Best Financial Benefit to the Company. The Best Overall Presentation was given at the Leadership Summit in January.

The level of projects presented by the young specialists rises from year to year. "This, of course, is the main goal – to encourage the professional growth of talented employees, to encourage their interest in scientific research activities, and to involve them in solving the company's most urgent problems," said TMK Vice President for Organizational Development Nikolay Kolbin. Therefore, it is not surprising that the YRPC has become a real "talent pipeline."

Traditionally an ambitious conference, the YRPC program was packed with valuable content: team-building and time management workshops, public speaking, effective negotiating, the Best Young Team Lead contest, and an indoor soccer tournament. The thrust of the YRPC remains on research and practice. This year's sessions grew in numbers and actual company projects, based on requests from members of the expert committees.

Mr. Pumpyanskiy attended a debut session entitled "New Product Types and Attributes," and listened with great interest to suggestions regarding one of the company's priority focus areas – development of products for use in difficult conditions. In the work presented, young specialists focused on reducing the net cost of pipe by creating competitive grades of steel and product processing modes that satisfy the new, stricter requirements of customers.

Company managers showed great interest in another new session – "5S, TPM, and SMED Projects." "Reports on lean manufacturing are not purely scientific; they are based on a practical component, as well as on employees' awareness of their personal responsibility for labor efficiency," said TMK chief engineer Alexander Klachkov.

For the first time at the YRPC, TMK chairman Dmitry Pumpyanskiy and CEO Alexander Shiryaev conversed with youth using an "open dialogue" format. "It is very important for us to know whether we are understanding one another, whether we are speaking the same language," commented Mr. Pumpyanskiy.

Based on the questions asked by the young specialists, it was clear they were excited about the company and the activities of each of its subdivisions. Meeting participants also devoted attention to matters that are in the news lately – the economic situation, geopolitical circumstances, and sanctions. All participants in the discussion were excited about TMK's future. "Our mission is to become the number one company in the world," said Mr. Shiryaev. "We have already created a technical foundation that will enable us to manufacture quality products for many years into the future. Now all of our attention is on advancing technologies, developing innovative products, and improving business efficiency. We are counting very much on these young specialists in all of these endeavors."

Following were the TMK IPSCO presentations:

Gabe Rudek *(photo at left)*
Recognized for Best Overall Presentation
Indirect spend category – minimizing our costs with couplings

Telmo Souza
Recognized for Best Financial Benefit to the Company
Development of Seamless Sour Service Grades

Andy Graves
Recognized for Most Innovative Idea
Developing request management processes to track electronic approvals and Enterprise Process Solutions

James Wharrey
Ambridge Hot Mill – Increased utilization and improved OEE

Bryan Thompson
Engineering out Safety Hazards

Reese Thompson
Melt shop burner which boosted the melt rate from 62 tph to 70 tph

Richard Arndts
16" Mill Upgrades at Wilder – Accumulator, Cutoff, Hydro test

A New Industrial Revolution

October 24, 2014 marked the launch of a new pipe-rolling line featuring a FQM continuous mill at Seversky Tube Works (STW). This project signified not only the completion of extensive plant renovations, but also the final phase of the decade-long TMK investment program. "The most modern and powerful pipe mill in all of Russia has been built in Polevskoy," remarked Russian Federation Prime Minister Dmitry Medvedev.

On his visit to STW, the Prime Minister was accompanied by Russian Federation Presidential Envoy to the Ural Federal District Igor Kholmanskikh and Sverdlovsk Regional Governor Evgeniy Kuivashev. Chairman Dmitry Pumpyanskiy conducted a tour of pipe mill № 1, where a new pipe-rolling line was being put into operation.

First, the Prime Minister and Regional leaders visited the control room and the master console, where the pipe mill operators are stationed and integrated control of the mill is carried out. All of this work is performed automatically; the shift foreman only monitors the process as it is displayed on the information panels.

Dmitry Pumpyanskiy conducted a tour of Pipe-Rolling Mill No. 1 at STZ.

NEW PIPE MILL AT STZ

- Improved quality and product mix
- Seamless hot-rolled pipe with highly-accurate dimensional parameters
- Pipe with proprietary TMK UP Premium connections
- Corrosion-resistant and low-temperature seamless pipe for Arctic applications

4 years

of on-site work conducted while ongoing production continued

17 billion

rubles invested in this project

90%

increase in volume of seamless pipe produced

» Continuous Fine Quality Mill (FQM)

Making their way into the shop, accompanied by Mr. Pumpyanskiy and STW Managing Director Mikhail Zuyev, the government delegation witnessed the three-roll pipe-rolling mill and other equipment on the new line in operation. Mr. Pumpyanskiy described the technological process and the features of the mill, which is designed to produce high-tech seamless pipe, including pipe used in challenging oil and gas production conditions. "The entire team working at this production facility has been retrained and has apprenticed on an analogous mill at TAGMET in Taganrog. At Seversky Tube Works in Kamensk-Uralsky, we are now building vocational training centers," he said.

After touring the production line, the Prime Minister examined TMK products displayed inside the shop and visited with plant workers. "The capacity of this plant is astonishing!" said the Prime Minister and he expressed his wishes for the company's prosperity and continued development as he watched the first pipe roll out.

Seversky Tube Works is one of the oldest enterprises in the Urals, having celebrated its 275th anniversary in 2014. Despite its age, the plant is now one of the most modern plants in Russia today. Mr. Medvedev made note of this at a meeting on the implementation of the best available technologies in the industry. "It is no accident that today we have gathered here together at Seversky Tube Works," he said. "This is the very place where, in recent years, a number of inefficient production facilities were shut down and the plant was refurbished. The plant is a good example of how the preservation of traditions and the adoption of the best modern – and, in this case, the best available – technologies and state-of-the-art equipment, can propel an enterprise to the forefront."

Mr. Pumpyanskiy noted that pipeworkers supported the adoption

Construction involved STZ and DANIELI specialists

TIMELINE

2007
Contract entered into with Italian company DANIELI for the design development of an FQM continuous mill.

2008
Utility lines extended to the future mill and units upgraded so they can be successfully incorporated in the new production line.

2010
Site preparation; billet yard, Electrostal piercer and rotary furnaces are renovated.

2013
Installation of new pipe-rolling production line process equipment 90% completed.

2014
May: Preparations for the mill to go on-line.
July 4-5: Rolling-mill operators and specialists from DANIELI hot-test the equipment.
October 24: New FQM continuous mill at STW is placed into operation, with Dmitry Medvedev present.

FINE QUALITY MILL (FQM): NEW PRODUCTION OPPORTUNITIES

Improved product quality and expanded range of manufactured products

Seamless hot-formed tubes with high accuracy of geometric parameters

Pipe with TMK UP premium threaded connections – designs pioneered by TMK

Arctic grade seamless pipe for use in Far North settings and corrosion-resistant pipe

of the best available technologies and emphasized that in recent years, more than 400 billion rubles have been put into the development of this industry. As a result, the Russian pipe industry has reached a new level of technological development, often surpassing its global competitors. "New plants have emerged and production capacity has been created at existing plants, harnessing the best technologies so that innovative, high-quality products can be produced," said Mr. Pumpyanskiy. He added that the need to take this step is long overdue and now is "the best time" to do so. Virtually the entire range of tubular goods needed for the stable operation of the oil and gas production industry is now manufactured in Russia. In Mr. Medvedev's view, Seversky Tube Works, where "the most modern pipe mill in Russia" has been put into operation, can become a model for the nation. ■

Dmitry Medvedev examined TMK products shown on the stand.

The Prime Minister also met with plant employees, shared his impressions and answered questions.

WorldSkills Hi-Tech National Championship

The WorldSkills Hi-Tech Championship, held in fall 2014 in Yekaterinburg, brought together 159 young professionals representing 89 industrial enterprises from 30 regions across the nation. An actual factory was built and 11 competition sites were set up for the event.

Workers from the Seversky Tube Works and Sinarsky Pipe Plant represented the company in several competitions, and in the end, Seversky Tube Works workers not only placed among the top ten competitors but took home medals. Electrical engineers Dmitriy Klevakin and Aleksandr Simonov took third place; during the three days of competition, they managed to create and program an automated system for moving and sorting parts. Lathe operator Alexey Zhdanukhin took fourth place, and electrical engineer Artem Ovchinnikov finished sixth.

Now the Championship finalists will have to prove their mastery in the next stage of the competition. A Russian national team will be created from among the winners to take part in the WorldSkills International Championship in São Paulo (Brazil) and in the European Championship in 2015.

"This is the first time we've ever sent a team to participate in such a competition, and we already have something to show for it. This confirms that TMK workers have high-level skills," commented TMK Senior Vice-President Andrey Kaplunov at a meeting of company managers and Championship competitors. It was decided that the new format of the professional skills competition should be incorporated into TMK practice, adding in some of the competition's principles, including occupational safety and health, and also expanding the list of job competencies in engineering areas.

The state-of-the-art international format of the Championship, along with the chance to interact with colleagues from other firms and companies, gave the young plant workers invaluable experience for professional growth and development. ■

» Workers from the Seversky Tube Works and Sinarsky Pipe Plant represented the company in several competitions.

» Workers not only placed among the top ten competitors but took home medals.

BACKGROUND

The WorldSkills International Association was founded in 1946 with the mission to raise the profile and improve standards for occupational training and job skills throughout the world and to popularize blue-collar occupations by holding competitions for young people ages 16 to 25. The Championship is organized biannually in various WorldSkills International member countries. Russia joined the Association in 2012 and is now working on an application to host the 2019 world championship.

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