



# **REVIEW 2015**

# INNOVATIVE GENERAL CONTRACTOR

An innovative company is always looking for new development paths. It is open to changes, constantly improving its activities, expanding the scope of its competence, offering new products and services, and increasing the efficiency of all processes. It is like a constantly evolving organism ready to immediately respond to any external changes. Not only can new products and services be innovative, but also the organisation of work where innovations provide a faster and more convenient way of satisfying customer demand.



# **REVIEW**2015

Events 2015	2	
From the Council of LNK Group	5	
Achievements of LNK Industries JSC	10	
From the Board of LNK Industries JSC	15	
Infrastructure construction	22	
How know-how is created	25	
Installation of pile foundations	28	
Civil Engineering	32	
We simply make the best offer		
Awards and recognition. Support		
Production	42	
Engineering as the driving force of TTS Company	45	
Major projects		

# Events 2015



#### JANUARY

# LNK Industries moves to a new LNK Centre office premises

The LNK Industries group enterprises are now situated in the A-class *LNK Centre* office building, which is a modern office complex located in the centre of Riga.



#### FEBRUARY

#### Reconstruction works of the vessel-mooring berth of the Freeport of Ventspils Authority are in progress

The final installation of new sheet piles as well as the concreting works of a new superstructure are in progress, along with surfacing works and power supply works. The reconstruction project involves both dismantling of the existing equipment, superstructure and backfill of the berth and the construction of the new superstructure and concreting, as well as construction of the new engineering communications and improvement of the territory adjacent to the vessel-mooring berth.



#### MARCH

LNK Industries receives awards and recognitions in the contests "Annual prize of the Latvian Construction Industry 2014" and «Construction Engineer of 2014 in Latvia» The "Riga Bulk Terminal" bulk cargo terminal was declared the best project of 2014 in the category "New Engineering Structure". The 1st place in the nomination for the "Project Manager of the Year in Latvia 2014" was awarded to Valery Goryun – "LATVIJAS TILTI" JSC.



#### JULY

#### The grand opening of the reconstructed berth for the administration of the Freeport of Ventspils – a renovation project implemented by LNK Industries

The extensive renovation of one of the oldest berths of the Freeport of Ventspils – the "Winter Port Berth" – is now over. The reconstruction gave a modern look to both hydraulic engineering structures and the Freeport's surrounding territory.



#### AUGUST

#### Academic Centre of Natural Sciences of the University of Latvia is put into commission

The first stage of the technical project's development, construction and authorial supervision for the Academic Centre of Natural Sciences of the University of Latvia was carried out by LNK Industries. This is one of the most advanced higher education and science buildings in the Baltic States and the first building of the future campus of the University of Latvia in Tornakalns.



#### SEPTEMBER

# The reconstruction of a historical building in the centre of Riga

In the quiet centre of Riga, on Alberta Street, which is considered the jewel in the crown of Art Nouveau buildings in Riga, LNK Industries started the reconstruction and restoration of a residential building, which includes the restoration of building's façade and interior, as well as construction of internal and external utility networks.



#### APRIL

# The 12th berth of the Freeport of Ventspils is put into commission

In addition to the construction of the berth itself, this large-scale project includes rebuilding of the sewerage inverted siphon under the River Venta, reconstruction of the existing railway and construction of an open storage area. Dredging of the water area of the berth and the adjacent channel to a depth of 12.5 meters was performed.



#### OCTOBER

# Apartment house in the centre of Riga is put into commission

A multifunctional apartment house in the historical centre of Riga, which combines the traditions of Riga's historical buildings and new tendencies of urban planning worldwide, is put into commission. The house has won the prestigious International Real Estate Federation (FIABCI) award "Baltic Prix d'Excellence" as the best new project in the premium segment.





#### \_\_\_\_

#### The construction of the Panemune – Sovetsk route on the border of the Republic of Lithuania and the Russian Federation is near completion

The construction of Panemune – Sovetsk route consists of the construction of a motorway, a viaduct and a bridge across the River Neman, which becomes a link between the Republic of Lithuania and Kaliningrad region of the Russian Federation.



#### JUNE

#### The conclusion of an agreement on the supply of technological equipment for the waste sorting factory and its installation at the municipal waste landfill

The waste sorting station in the Liepaja region is expected to be a fully functional complex, where LNK Industries is going to install the preliminary sorting devices for further processing of unsorted household waste as well as devices for recyclable waste sorting and its preparation for further transportation



#### NOVEMBER

# All lanes of the Salu Bridge are reopened to traffic

All six lanes of the reconstructed Salu Bridge are reopened to traffic and the first stage are reopened to traffic and the first stage of the bridge's reconstruction works is almost over. The road pavement is fully renovated, the rain water drainage system is fixed, the bridge's railings are replaced, the expansion joints are constructed, the lighting is installed and the bridge supports are renovated.



#### DECEMBER

#### The grand opening of the new buildings of the Riga Technical University's Laboratory and Scientific Library

The campus of the Riga Technical University (RTU) hosted an opening ceremony for its new Laboratory and Scientific Library buildings located at Kipsala.



Alexander Milov, D. Eng. Sc. Chairman of the Council of LNK Group

Artyom Milov, Chairman of the Board of LNK Group

Vadim Milov, Deputy Chairman of the Council of LNK Group

# From the Council of LNK Group

# challenging problems"

## DEAR CUSTOMERS AND PARTNERS OF THE LNK GROUP HOLDING COMPANY,

The brand of LNK Industries created by us has been steadily increasing its potential and workload over the past years. It has stepped outside the borders of Latvia and gained international recognition as an innovative construction and manufacturing general contractor. We are proud to say that the concept of the construction, equipment and automation of complex industrial objects offered by us has no analogues not only in the regional, but also in the global market.

Owing to the combination of competences in high-tech machine building industry, engineering and design, high managerial competence and innovative, even unique technologies we provide our partners with decisions that fully correspond to the motto of the LNK Group Holding Company - In optima forma, which in Latin means "the best possible way". Due to the synergy of multi-directional

"LNK Industries is used to solving

enterprises, almost if not all works are performed by LNK Industries' own highly qualified engineers, designers and workers at our own manufacturing facilities using our own equipment and schedules tested in practice. This is why we are able to win the most arduous of tenders and proudly commission the constructed, assembled and manufactured sites within the set deadlines.

#### EXPONENTIAL GROWTH OF EFFICIENCY

LNK Industries entered the premier league of general contractors in Latvia, becoming the most fast-growing construction company with a turnover of more than 100 million euros. The leading position was achieved primarily due to the use of the latest trends in assembling of automated and specialised terminals for bulk cargo, which only appeared 10 years ago. These terminals are being served by a high-performance automated loading system that provides exponential growth of production.

"Due to the synergy of multi-directional enterprises, almost if not all works are performed by LNK Industries' own highly qualified engineers, designers and workers, at our own manufacturing facilities using our own equipment and schedules, which are tested in practice."

#### **TURNOVER 2015**



LNK Industries has been sticking to this concept since 2008, when it constructed Ventspils Coal Terminal - the first closedtype facility in the Baltic region, where the workers were even wearing light-coloured uniforms!

Riga Fertilizer Terminal (RFT), which we constructed in the Freeport of Riga, is a champion in cargo handling rate - mineral fertilisers are transferred from the railcar to the ship in only seven minutes. We built dome-shaped warehouses for accumulation of cargo and it made us the third company in the entire world who is familiar with this technology. We made a giant pit under the railroad track at the unloading station, wherefrom fertilisers are transported into the domes below and above via tunnels. There are 120 different transportation routes displayed at the operators' control panel. The ship-loading machine has outlets for loading of two ships at the same time, and it works round-the-clock. The terminal transfers two million tonnes of cargo per year in an environmentally safe closed cycle. The peak of our proficiency is Riga Bulk Terminal, which is designed for eight types of cargo, both food and non-food, which can also be transferred in reverse regime. Our participation in this project was about 90%; moreover it was completed in record time - just in 1.5 years.

#### **TECHNOLOGY OF SUCCESS**

For the implementation of such projects, we introduced the technology of "crews". There are several "crews" for each technical area; they are perfectly coordinated and maintain the operation of our high-performance equipment seven days a week and 12 hours a day or even seven days a week and 24 hours a day. LNK Industries united the marine and landside builders and the TTS Transportation Technology Systems factory. This is why we are the only enterprise in the entire world that offers everything in one package, technologies included. We install equipment hand-in-hand with the people who have manufactured it or in their presence and we also provide maintenance. This guarantees our customers a 100% result and minimises their expenses, while all technological units are made using the best western-manufactured parts.

Besides, the financial assurance from a powerful and respectable general contractor provides our customers with a one stop principle when co-funded from European Foundations through the Investment and Development Agency of Latvia, as well as receiving a bank loan.

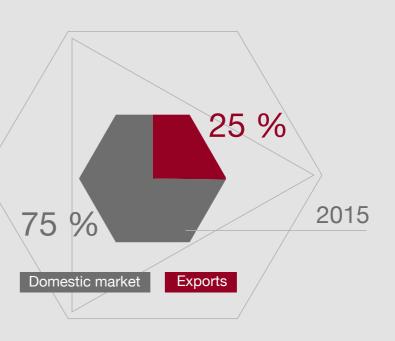
EXPORT MAP

LNK Group exports its products and services to Finland, Germany, Italy, Denmark, Lithuania, Russia, Belarus, Kazakhstan, Turkmenistan, China and Japan,



# $103^{*}$

\* Unaudited data prior to consolidation.



LNK GROUP HOLDING

includes 24 companies

divided into three strategic areas









#### **INVESTMENT IN FUTURE**

LNK Industries is used to solving unique issues. One of our mottos in life is: fortune favours a prepared mind. Our development is based on engineering and scientific staff and decisions. Aircraft testing (we started with it in Aviatest) and the operation of the ship-loading machine are all about the industrial automation and multichannel loading system. And we know how to do it. We have consciously developed both in the direction of landside and marine construction, which in cooperation with the TTS factory allowed us to offer a wide range of services. LNK Industries works closely with industrial customers. Numerous wood-working factories in Russia use our equipment, for example "Sveza" holding company. Both automatic and all-in-one solutions are also used there, from a log with bark to unfolded plywood. We strengthen our technological power by investing 2-3 million euros per year. The milling machine for the processing of largesize parts with micron precision allows us to manufacture large mechanical parts and apply for projects at a new level.

#### FUSION OF EXPERIENCE AND YOUTH

The LNK Industries brand presents the experience of all companies involved, including the 70-year old LATVIJAS TILTI that has built 2 000 bridges. Our success today is provided by a fusion of polished professionalism and youth - more than half of our team is young people of the most productive age about 30 years old.

# "The idea – to create a holistic approach to the construction of terminals and industrial sites was vital to us. It was accomplished."

We also outperformed our competitors in all the tenders because young people think differently. Our multicultural team has one thing in common and it is enthusiasm for work. The Council of the Holding Company ensures all the necessary conditions, encouraging initiative and team spirit. We involve the best people, giving them an opportunity to earn a good living, learn and progress in their career.

#### THE NEW PHILOSOPHY

The idea - to create a holistic approach to the construction of terminals and industrial sites - was vital to us. It was accomplished. It is a groundbreaking philosophy: we moved from the multi-purpose to specialised and high-performance technologies. You have to raise the efficiency - it is the formula for success of any business. We are the only ones to offer holistic solutions. It is a fact substantiated by the four operating terminals in Ventspils, Klaipeda and Riga. We will also build new sites in St. Petersburg, Riga and Murmansk. It is more beneficial and more rational solution all in the same hands.

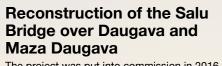
You are welcome to see for yourself!

Yours sincerely, Chairman of the Council of LNK, D. Eng. Sc. Alexander Milov

# Achievements of LNK Industries JSC







The project was put into commission in 2016.

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# From the Board of LNK Industries



Artyom Milov, Chairman of the Board

## LADIES AND GENTLEMEN!

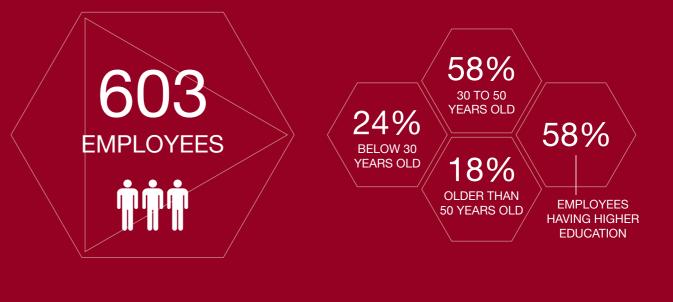
The growth of the global and Latvian economy – attraction of European funds and favourable environment for foreign investors – all of this has contributed to the dynamic development of our region and our company in particular. Judging from the annual results we may cautiously speak about the end of the crisis in the construction and manufacturing industry. The portfolio of orders is constantly growing, investors' interest is increasing, LNK Industries has expanded its presence in the region. However, the dramatic events in Ukraine and in Middle East in



**Evgeny Lotsov,** Board Member

2014 proved once again that global political processes directly affect businesses across the globe. Strained relations between the EU and the Russian Federation, and the introduction of reciprocal sanctions cause a feeling of uncertainty among businessmen from both sides, which in turn affects their willingness to invest in new projects. The formation of a new long-term plan for project financing from European funds leads to a delay in the start of technical implementation. Both public and private customers do not fully understand the level LNK INDUSTRIES GROUP





PILING AND DRILLING RIGS VIBRATORY HAMMERS 968 - 3000 KN CRANES WITH LIFTING POWER OF 4 - 130 T EARTH MOVING MACHINES (DIGGING, ROAD WORKS) EQUIPMENT FOR WORKS ON THE WATER (PONTOONS, TUGBOATS) TRUCKS

\* Unaudited data prior to consolidation.

4.174 mln euros **GROSS SALARIES** 



"All these projects proved to be successful thanks to the coordinated teamwork of designers and builders from different divisions of LNK Industries.

Our high level of professionalism and quality of performed works were highly appreciated by international investors, government officials and our partners in various countries."

of investment in certain project before its implementation begins. The adoption of the new construction law entails certain difficulties, as it became necessary to perform a great deal of harmonising the law with other normative documents. That included adapting to innovations for quality control managed by State Bureau of Construction Supervision. On the one hand, these new initiatives for inspection of projects and certification of experts improve control, but on the other hand they inadequately prolong the terms of site construction, which is not profitable for both clients and contractors.

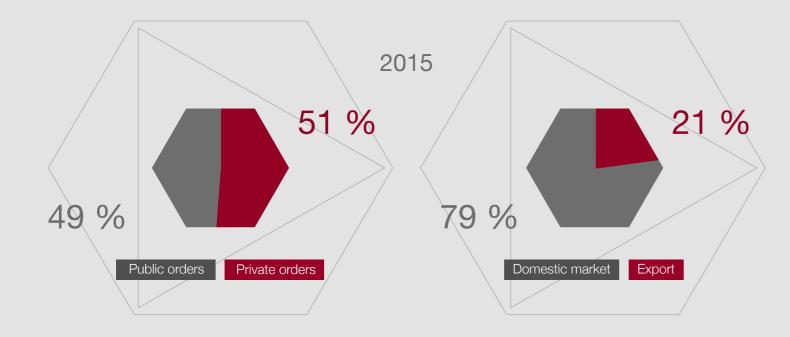
In 2015, LNK Industries launched several landmark projects that evidence our progress to a greater extend rather than simple financial parameters. We have built the unique Academic Centre for the University of Latvia. By the end of the year we constructed the new Laboratory and Scientific Library buildings for the Riga Technical University. Also, a multifunctional building on Baznicas Street was commissioned. All these projects proved to be successful thanks to the coordinated teamwork of designers and builders from different divisions of LNK Industries. Our high level of professionalism and quality of performed works were highly appreciated by international investors, government officials and our partners. Bridge construction has also reached a new level over the past period: we have completed a viaduct and a bridge in Panemune at the border with the Russian Federation, constructed a two-level junction of railway tracks in Klaipeda, completed the construction of two bridges in Tallinn, as well as the first reconstruction of Salu Bridge in Riga for the last 50 years. The civil engineering sector also was developing successfully: in 2015, we designed and built several residential buildings in the centre of Riga, also continued to construct a building that belongs to the international chain of hotels. Despite the good results, our company also faces certain challenges on a daily basis. Some of the most significant challenges include questions related to strengthening team work and assuring constant quality. Even though we have implemented a system that ensures a high level of quality control, finding the best personnel is an ongoing task. Our dynamic company is constantly looking for both experienced and young energetic professionals, who can achieve the best results for both the customer and our company by working hand in hand.



#### **Riga Bulk Terminal**

Reverse type terminal for handling bulk goods, both food and non-food. Riga, Latvia. The project was put into commission in 2014.

#### LNK INDUSTRIES SALES STRUCTURE



To solve this problem, our company has created a variety of programmes to attract and motivate new employees. It should be noted that our team includes experts from different countries with individual experience, which allows us to efficiently and flexibly solve tasks requested by customers.

Another important factor affecting the development of the company is its ability to adapt to different work conditions and the customer's requirements. The ability to build good relationships with the customer, to respond quickly to all requests while considering the interests of our company at the same time are fundamental pre-conditions for implementing any project. The experience and flexibility of our employees allow us to implement projects of any scope and level of complexity. These ideas are implemented during the preparation of tender documents, which not only require a flexible attitude, but also accuracy in accounting and working with the necessary documentation, and continue to be implemented during negotiations of the

contractual terms and of course when working together with the customer's team during the construction works. Our best reward is the timely implementation of a top quality project. We would like to thank our team for performing their work with such good quality that customers return to us again and again, which in fact is the barometer for our achievements.

We would like to note that our company has successfully completed the previously assigned tasks and expanded its presence in new markets. Entering the Estonian market, increasing the market share in Lithuania, participation in tenders in Finland, Scandinavia, Russia, the Czech Republic, Poland, and other countries allow us to elaborate a long term development strategy not only for the Baltic region, but also for Eastern and Northern Europe.

Yours sincerely, LNK Industries Board ●



Academic Centre for Natural Science of the University of Latvia

Riga, Latvia. The project was put into commission in 2015.

# Infrastructure construction



#### Panemune – Sovetsk route

The construction of Panemune (Lithuania) -Sovetsk (Russia) route that includes a motorway, a viaduct and a bridge across the River Neman. Panemune, Lithuania The project was put into commission in 2015.

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# to the efforts of our team"

The work performed at LATVIJAS TILTI construction sites in recent years borders on fantasy. The pier of a cargo-passenger terminal in Klaipeda has been built in a place where there was nothing but a splashing sea a few years ago. Piles are being driven to a depth of 20 metres in the bogged basin of the River Neman creating a space for concrete bridge abutments, which in turn are covered with 400 m long bridge spans. The dismantling of the first oil pier in Ventspils Port is a complicated work, which included extraction of the enclosing sheeting and contaminated soil from its casing. It was performed by divers and special machinery in harsh weather conditions, often waiting for storms to pass, and they even managed to finish it before the set deadline. A project that looks as unrealistic fantasy even on paper is successfully implemented thanks to the efforts of our team. That is a very astonishing fact; separate processes involve dozens of people and the price of every mistake made by each one of them is extremely high, but nevertheless these processes connect, form a perfect chain and provide the desired result.

Yes, there are hardly any innovations in conservative spheres of construction industry, especially in bridge and hydraulic engineering construction; however, over the last ten years innovations have appeared and they allow very complex structures to be assembled with millimetre precision.

# How know-how is created

"A project that looks as unrealistic fantasy even on paper is successfully implemented thanks



Gennady Kamkalov, Chairman of the Board of LATVIJAS TILTI

"Testing of pre-stressed reinforcement wire units – there are very few people in Europe who are able to do it. We have found a few specialists in the EU and Russia, and now we partially delegate the task to them while continuing the reconstruction of the bridge that was once built by our company. This is how real know-how is created."

#### DEPARTMENT OF INFRASTRUCTURE CONSTRUCTION

represented by LATVIJAS TILTI JSC in the group



\* Unaudited data prior to consolidation.

#### WINNING BY A LANDSLIDE

LATVIJAS TILTI has a set of the most complex engineering competences in this field, not only in Latvia, but also in the whole region. When participating in yet another tender with a unique engineering task, we motivate ourselves with one thought: if we are unable to do it within the set timeframes and with top guality, then most likely - no one can. In addition, our victory might be achieved by offering the best price of works, which demands the constant application of engineering thought, very strict planning and the organisation of numerous interlinked but parallel processes. We have to prepare while keeping in mind that many unforeseen situations may appear, and the team must be ready to solve them. We have introduced strict planning of calendar and financial schedules and we manage to follow them. It is extremely important because if the project goes beyond the calendar schedule - it will most likely also go beyond the financial plan. If we finish the project earlier - not owing to, but despite all the circumstances - it automatically means that we have managed to comply with the project and construction estimate cost. It allows us to win tenders by a landslide.

#### 100% RELIABILITY

In bridge and hydraulic engineering construction, one cannot strive for cost-effectiveness at the expense of quality. It is like an aeroplane: you travel with the same safety in both business and economy class. Having vast experience in construction, we know how to calculate precisely and correctly. This is why we provide a tender price that will definitely cover all construction costs. We also include a system that coordinates subcontractors' work and ensures efficient purchasing within tenders. It is a hard daily work of a large group of people, where everyone has to do the best job possible. We have developed an electronic system for the coordination and approval of decisions. Currently we are working on modernisation of the management of business processes in order to automate the decision making and information exchange process for all parties involved. All of our facilities have CCTV cameras in place. We also ensure the multilevel inspection of documentation turnover and a procedure of detailed adoption, approval and framing of decisions. It is the only way to operate within the conservative fields, where you do not have the right to make a mistake.

#### TIME TO BE CREATIVE

There is always a room for some creativity. Of course, it depends on the tender's conditions, and very often it already includes a technical project. In Estonia, on the River Pirita, near Nehatu we will demolish two old bridges and build two new ones. We were given the basic conditions on traffic capacity and highway centrelines that we needed to comply with. Then we had a complex creative process, where we had to decide between several priorities: to construct a bridge that would look beautiful and appropriate for that location (after all, it is our first project in Estonia), to fit within the budget limits, and finally to use our resources to the maximum. As a result, we came up with the best decision possible - a reliable and appealing solution at the same time. The aesthetics of engineering decisions are also significant. As times move on, it is getting more and more important. Currently we are solving a particularly hard task of testing pre-stressed reinforcement wire units, which were laid in Salu Bridge many decades ago - wires that hold the whole structure. There are very few people in Europe who are able to

16.71\* mln euros SAL FS

8.41\* mln euros **FXPORT** 

carry out such tests. We have found a few specialists here in the EU and in Russia, and now we partially delegate the task to them while continuing the reconstruction of the bridge that was once built by our company. This is how real know-how is being created.

Shareholders have done enormous work in building a vertically integrated industrial structure that allows the holding company to solve any task. We work a lot with the TTS factory, which fulfils its obligations very strictly. Our general contractor LNK Industries provides us with all the necessary resources. We definitely have a mutual understanding and cohesion. A smooth running and thoroughly controlled chain of works leads to the desired result.

Yours sincerely, Chairman of the Board of LATVIJAS TILTI Gennady Kamkalov

# Installation of pile foundations



Pedestrian and Cyclist Bridge Babites local municipality, A10 highway Riga-Ventspils



# The Company specialising in the installation of pile foundations in the Baltic States

Established in June 2015, "LT Piling" LLC is a subsidiary enterprise of the "LATVIJAS TILTI" JSC enterprise, which is part of the LNK Group Holding Company. Our main activity is the installation of pile foundations in the Baltic States. "LT Piling" LLC is an enterprise in which all the best technologies and expertise in the field of pile installation are concentrated.

The use of pile foundation installation technologies makes it possible to install foundations before the excavation of foundation pits and allows us to use piles as enclosing structures, thus significantly reducing both the construction time and costs. We have portable drilling machines of the German concern "Bauer" at our disposal, which are the most advanced equipment of such level in the Baltic States. With the help of this equipment, it is possible to install cast-in-place piles both with soil excavation and without it.

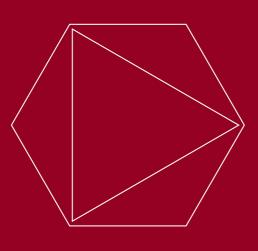
The main services of "LT Piling" LLC are the installation of bored pile foundations, installation of driven pile foundations and pile testing.

Yours sincerely, Member of the Board of LT Piling Aleksey Bakanov



**Aleksey Bakanov** Member of the Board of LT Piling

# 







# We simply make the best offer

"You are constantly improving and cultivating the business processes; you learn to see the systemic problems and coming up with algorithms to solve them"

In general, the construction sector has witnessed a leap during recent years. Customers' requirements to quality and work management have increased. Willing or not, it has disciplined the sector. Construction works are now carried out more thoroughly than before the crisis. Those who could not keep up with the requirements left the market. We started to comply with these requirements before the others did. We had a meticulous and scrupulous attitude towards the acceptance of work. The enterprise has changed a lot, but as time goes on, you stop noticing it and it seems like it has always been this way.

### CONSISTENCY IS WHAT MATTERS

What helps us win tenders? It is the perseverance, patience and ability to prove that we have the best offer possible that complies with all the conditions of the tender. Engineering solutions are already included during the stage of preliminary design. In fact, we only need to add specifications. For this purpose, we have our own technological design group in the enterprise. It always has a heavy workload. We try to audit projects and refine the details by ourselves, because it is convenient to work this way. All technologies have been in use for a long period of time. Hydraulic engineering construction in the "house on water" The Pearl, post-tensioned slabs in the new building of the University of Latvia – we are familiar with all of this and we have used it many times before. It is also worth mentioning a dewatering project for a three-level underground car park of Alojas Businesa Centrs, which is located near a street with dense traffic flow, in the middle of a real estate development area and 10 metres below the ground waters. We have built it all, and it will all be there in the future as well!



**Sergey Komarov,** Chairman of the Board of Enfort construction enterprise



# "Most of the work is done by our own efforts. Flexibility and efficiency in process management prove that this decision works"

Practice is the best teacher. You are constantly improving and cultivating the business processes; you learn to see the systemic problems and coming up with algorithms to solve them. There are specific methods that help to avoid mistakes – decision coordination. With time, Enfort becomes more and more systematic: in addition to the arrow diagram that has been used by builders since the dawn of time the finances, quality and labour safety are monitored consistently. We have been striving towards it for ten years, but unfortunately it cannot become an automated process. The Chinese have figured out how to print houses using a 3D printer. Maybe one day we will get to this and would be able to print houses from sand and cement!

#### WE ARE A RESULT-ORIENTATED TEAM

The biggest advantage of working within a holding company is that there is always work for you to do. Even in the toughest years we haven't fired a single person or forced anyone to take an unpaid leave; we haven't even reduced wages. For us, the stability is more than just a beautiful word – it is our reality. The personnel training in Latvia is quite weak, even in universities. We tend to come across a lack of qualifications at all levels. We have to take people in and teach them ourselves. If you create conditions for them and provide a regular wage, people start to notice that it is reliable – and it pays off.

Gathering all of the best under our wing is a principle of LNK Group. That is why we feel confident in any project: we receive engineering support that is essential when dealing with complex issues. We always have "the help of a friend": for hydraulic engineering works – LATVIJAS TILTI, for the manufacture of mechanic and metal structures – TTS factory, for automatics – Aviatest.

A single strategy of the holding helps with management issues in relations with banks, insurance companies and so on. We always have an opportunity to get all the necessary resources from the holding company. We aim for the desired result, for the best outcome. Our motto is "Look for a thousand opportunities, not a thousand reasons".



## DEPARTMENT OF INDUSTRIAL AND CIVIL ENGINEERING CONSTRUCTION

represented by Enfort LLC in the group



## WE ARE WILLING AND ABLE

We ensure management of all projects by our own efforts. Flexibility and efficiency in process management prove that this decision works. If we have to work double shifts - we do it. We even worked 24 hours a day when in was required by the technological scheme (during the casting of silos at the concrete factory in Broceni, the sliding formwork required such a schedule). Yes, there are many micro-enterprises that have lower overhead costs and they offer cheaper work implementation. But we involve subcontractors not because we want to save money, but because we need specific competences. Our tender price will be more beneficial because of the integrated organisation of works. The human factor and responsibility are important. I work with great pleasure and it seems like it is all I can do. We hire those who are interested in working with us. Our team is

\* Unaudited data prior to consolidation.

established, the staff determines everything, and they contribute to our success 100%. Without the people, there is nothing. Each project, even the simplest one, can be interesting. When you are laying the foundation - you anticipate the work ahead of you; when you deliver the work - you are pleased with it. It is difficult to name one project I am proud of; it seems fine, but as time passes by, you think that you could have done it in a more functional, prettier and technical way. There is always a room for improvement. You just have to find it.

Yours sincerely,

Chairman of the Board of Enfort Construction Enterprise Sergey Komarov





#### Contest "Latvian Construction Industry's Annual Award 2014"

1st place in the nomination for "New Engineering Structure" -"Riga Bulk Terminal" Project, general contractor LNK Industries 2nd place in the nomination for "Reconstruction of Engineering Structures" - "Reconstruction of Streets and Construction of the Overpass in Vilnius, Lithuania" Project, one of LNK Industries enterprises - "LATVIJAS TILTI" Joint-Stock Company in cooperation with its Lithuanian partner "Kauno keliai" Enterprise. Recognition in the nomination for "Reconstruction of engineering structures" - "Renovation of the Existing Bridge Across Daugava in Jekabpils" Project.





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**Recognition in the nomination for** "Reconstruction" – "Recon struction of the 8th bulk of the Riga 1st Hospital" Project.

#### Contest "Civil Engineer of the Year in Latvia 2014"

The 1st place in the main category "Project Manager of the Year in Latvia 2014" - Valery Goryun «LATVIJAS TILTI» JSC.

#### Contest "The Big Prize of Construction Industry 2015"

Special award in the category "Engineer of the Year" to the Project Manager of the "LNK Industries" Joint-Stock Company, Vadim Bogdanov for projects implemented in the Freeport of Ventspils.

LNK Industries supports a number of cultural and sporting events, charity projects, helps orphaned children and organises projects to promote an active lifestyle.

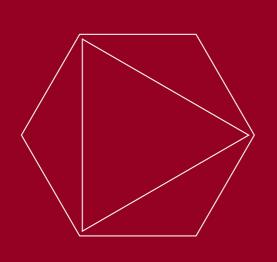
#### LNK Industries supports:

- "Nikars" football club
- "Jēkabpils" basketball club
- The social care and social rehabilitation institution "Spriditis"
- The travelling photo-exhibition "Unique Construction Shots"
- The international music and arts festival "ARTISSIMO".

Christmas decoration for the inhabitants of the city "Join the Holiday Spirit!" was presented on behalf of the LNK Industries under the annual Riga festival "Christmas Tree Trail".

42 LNK INDUSTRIES REVIEW 2015

# Production







# Engineering as the driving force of TTS Company

"We do not seek to copy our own proven projects from our portfolio and tailor our solutions according to the individual needs and specific purposes of the customer for each case."

For TTS Company, last year was a record-breaking one because of the number of orders for engineering and consulting services. In order to decide on investment solutions, customers began to contact us for competent and detailed projects where everything is calculated with maximum precision.

### FINDING NEW SOLUTIONS

The projects created by our engineers feature low energy consumption, high ecological compatibility and maximum efficiency in utilising the site. We do not seek to copy our own proven projects from our portfolio and tailor our solutions according to the individual needs and specific purposes of the customer for each case. Unlike many large companies in the industry, we do not believe that everything has already been invented and we offer the best of it. We are able to develop and execute any complex package in accordance with the customer's needs. Sometimes it means a deliberate simplification of the technologies and production processes in order to save yet complete the project without postponing it. We are ready to work in stages by starting with small things and gradually developing the project. That's exactly how our cooperation with our customers – Riga Fertilizer Terminal – is shaping up; after the facility for transshipment of nitrogenous fertilisers, they are preparing to build the potassium terminal at their site.



**Igor Lukashevsky,** Chairman of the Board of the TTS plant

"In the age of the active emergence of new technologies, a modern and competent engineer who refrains from using well-known solutions, but starts "from scratch" becomes the key figure of the project, developing areas that have been poorly researched in the world."

#### EXPANDING THE POSSIBILITIES

We are always aware of the latest inventions in any individual and related industries. In the age of the active emergence of new technologies, a modern and competent engineer who refrains from using well-known solutions, but starts "from scratch" becomes the key figure of the project, developing areas that have been poorly researched in the world. As a result, we can choose the optimal solution out of several elaborated options.

For example, when we were assembling a modern factory for household waste sorting in the Liepaja region, we implemented mechanical and optical sorting solutions, as well as the eddycurrent methods. Nobody in the world had ever implemented such science-based solutions, because the morphological composition of waste in Europe is fundamentally different from its local counterpart. Our engineers have solved the task of disposing of several types of recyclables and minimising of the portion of wastes dumped at the landfill. Latvia, Lithuania, Estonia and other post-Soviet countries have similar problems with waste sorting, and TTS Company knows how to solve them.

#### UNCOMPROMISING SAFETY

We refuse to make compromises when it comes to matters of safety. Savings on materials are imaginary and false savings. Any off-design replacement of a part leads to unnecessary costs, especially if such a defective part needs to be replaced at the remote site or continuous production facility such as the port terminal. For TTS Company, safety and reliability of every solution come first. Our engineers will not accept an incorrect concept just because it was easier or cheaper. We do not rely on luck. In each and every situation our engineers calculate the load-bearing capacity of the material with uncompromising assurance. We confirm our calculations by utilising process simulations and stress and load tests.

TTS Company invests in labour safety and cleanliness and quality of manufacturing. We are constantly improving our Quality Control Department, as it is a key resource for identifying and eliminating defects in various areas of the manufacturing process in order to prevent their occurrence in the finished structure or unit.



TTS (Transportation Technology Systems) factory 15 Granita Street, Rumbula, Riga, Latvia



Metal structure for painting chambers



#### PRODUCTION DEPARTMENT

represented by TTS LLC in the group

ESSENTIAL AREAS FOR DEVELOPMENT

We see our role in finding unique solutions as early as the tendering stage - a thing that many Western manufacturers tend to view as economically irrational. That is how we receive new orders.

Waste management of Balticovo, the largest poultry farm in the Baltic States, in a closed-loop cycle – it is the cogeneration of electricity and heat and production of organic granular pasteurised fertilisers. In Europe, there is no technology designed and ready for this task, so we had to adapt several solutions to the specific nature of the product and combine and integrate them as a package installed in one of the poultry buildings and connected to utility networks. In Russia, there are farms of the size of Balticovo (about 2 million laying hens), which may probably be interested in similar solutions. We are ready to work together with Russian partners to localise the production of structures for such facilities. This is also true in the light of the global tightening of environmental standards for production. Mechanised transport module for transporting of Airbus wings from the factory to the assembly plant - TTS Company is producing it by the request of German FFT Company, a known provider of solutions for the industry. This module is a complex frame with movable elements controlled electronically, which is



\* Unaudited data prior to consolidation.

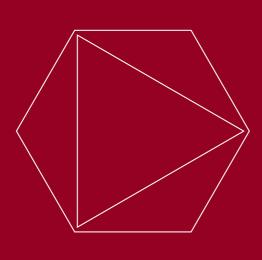
placed on the chassis and loaded into the «Beluga» aircraft. It requires chronometric precision. Our engineering team was able to identify a number of errors and defects in the project and eliminate them prior to the stage of manufacturing. This again bears testament to the huge engineering potential of TTS Company.

At the TTS plant, large structures are processed utilising a new 5-axis machine that ensures high precision machining of the parts weighing several tens of tonnes. Among our new clients are the Lithuanian-based Baltic Crane Industries and a giant electrotechnical company ABB, for which TTS Company manufactures housing for a 70-megawatt motor.

TTS Company upgrades its equipment and replenishes its workforce capacity in order to manufacture bridge structures for Scandinavia. We have undergone audits from the Norwegian companies Skanska, NLI and NCC to work in the field of bridge building in the always viable market of Norway.

Yours sincerely, Chairman of the Board of the TTS plant Igor Lukashevsky 🛑

# Major projects







# **Riga Fertilizer Terminal**

State -

The most modern and secure terminal for the transshipping and short-term storage of mineral fertilisers in the region of Northern Europe. In its work, the terminal uses effective and modern methods of cargo transshipment and storage that are environmentally safe.

# Facts and figures

Riga, Latvia.

2 mln t of mineral fertilisers per year

1.5 km total length of conveyors

6 dome-type warehouses

**130 th. t** total one-time capacity of storage areas





# **Riga Bulk Terminal**

A multi-purpose terminal for bulk cargo transshipment. The terminal has four operating lines. The integrated automation system provides continuous monitoring of the operation of the terminal equipment and coordinated work of all lines.

## **Facts and figures**

Riga, Latvia. Project was put into commission: 2014

**2 mln t** of bulk cargo

## 1 mln t

turnover at the 1st stage of development

**333 m** length of the coast line

#### **900 m** total length of conveyors

2 mln t turnover at the 2nd stage

**4** wagon loading / unloading stations

**8** types of cargo

> 1 100 m<sup>3</sup>/h (to 900 t/h) capacity of the lines "vessel - railway wagons" > 1 200 m<sup>3</sup>/ h (600 t / h) capacity of the lines "railway wagons - vessel"

No. of Concession, Name

Same and the

## **12th berth of the Free Port of Ventspils** This is a project intended to develop the infrastructure of the Free Port of

This is a project intended to develop the infrastructure of the Free Port of Ventspils and it includes the construction of 12th berth. The ongoing tasks include rebuilding of the urban sewer siphon, reconstruction of the railway, construction of the berth and bulk sites, as well as deepening of the area around the berth and the underwater channel. Ventspils 12th berth will be one of the largest berths accepting Panamax-type ships. It will increase the cargo acceptance opportunities and create new jobs in the city.

# Facts and figures

Ventspils, Latvia. The project was put into commission in 2015

321 m berth length **12.5 m** depth of the area around the berth and channel **21 050 m<sup>2</sup>** area of bulk site



# Vessel-Mooring Pier 25b of the Freeport of Ventspils One of the oldest piers of the Port of Ventspils was reconstructed in the so-

One of the oldest piers of the Port of Ventspils was reconstructed in the socalled «Winter Port». Within the framework of the pier's reconstruction design, hydraulic engineering structures were overhauled and the adjacent territory was landscaped.

# **Facts and figures**

Ventspils, Latvia. The object was put in commission in 2015.

**18.6 m** length of the sheet-pile wall **6 – 7 m** depth of the pier's water area **700 m<sup>3</sup>** of the hydraulic concrete

> 1000 t of metal in the sheet-pile walls 518 m length of the restored cordon line 4 223 m<sup>2</sup> of the concrete pavement

6

# **Dismantling the 1st pier of Ventspils Free Port** The largest project in Latvia for cleaning up soil contaminated with petroleum

The largest project in Latvia for cleaning up soil contaminated with petroleum products. The cleaning is done by flushing the soil utilising microbiological technologies developed in Latvia. In the future, it will be possible to significantly increase the amount of transshipped coal at the terminal adjacent to the territory of the port.

## Facts and figures

Ventspils, Latvia. Project was put into commission in 2014

> 197 m length of the pier > **27 000 m<sup>3</sup>** of treated soil

**1959 - 1961** years of design and construction

1 1

HIERA



# Panemune – Sovetsk route

Panemune (Lithuania) – Sovetsk (Russia) route includes a highway, an overpass and a bridge across the River Neman in Panemune, Lithuania.

## Facts and figures

Panemune, Lithuania. The project was put into commission in 2015

<b>477 m</b> bridge length	<b>82 m</b> overpass length of the bridge across the River Neman	<b>11</b> bridge spans
<b>17 m</b> depth of piles	<b>12</b> supports	<b>42 m</b> distance between supports
<b>1 532 t</b> of steel superstructure	<b>1 875 m<sup>3</sup></b> of continuous monolithic concrete roadway slab	<b>4 550 m<sup>3</sup></b> of monolithic concrete supports



U-read -

- Specific and

# Two new bridges in Estonia

Design and construction of two new bridges and roads allowing to cross the River Pirita in Nehatu, on the border of Tallinn. The project is intended to improve the traffic conditions making the traffic flow more uniform and improve the safety of pedestrians and cyclists, as well as upgrade the infrastructure of the region.

## Facts and figures

Nehatu, Tallinn. The project will be put into commission in 2015

2<br/>4-lane bridges> 500 m<br/>length of the renovated road<br/>section Tallinn - Narva with<br/>bridges17.2 m<br/>width of the roadway<br/>of Bridge Nehatu I

**2.5 and 3.5 m** width of the pedestrian way 233 t of steel bridge structures

6

spans







# III expansion phase of Baltijas Industriālais parks (BIP)

Construction of 2 new buildings with construction of all utility networks, finishing and landscaping works. One of the most important facilities comprised of warehouse, office, retail and industrial buildings in Riga.

## Facts and figures



# Academic Centre for Natural Science of the University of Latvia

The Centre for Natural Science is one of the most state-of-the-art centres of education and science in Europe. The facility will house the Faculties of Biology, Chemistry, Geography and Earth Sciences, Medicine, the Institute of Microbiology and Biotechnology and the Institute of Chemical Physics.

## Facts and figures

Riga, Latvia. Building was put into commission in 2015

7

storeys

**300** seats in the Great Hall **36 m** building height

≈ 20 000 m<sup>2</sup> total floor space of the building

**≈ 11 000 m<sup>3</sup>** concrete

**124** large bored piles



# **Construction of the new Laboratory Building of the Riga Technical University**

The laboratory building will be equipped with the facilities necessary to execute high-level researches and complex analyses.

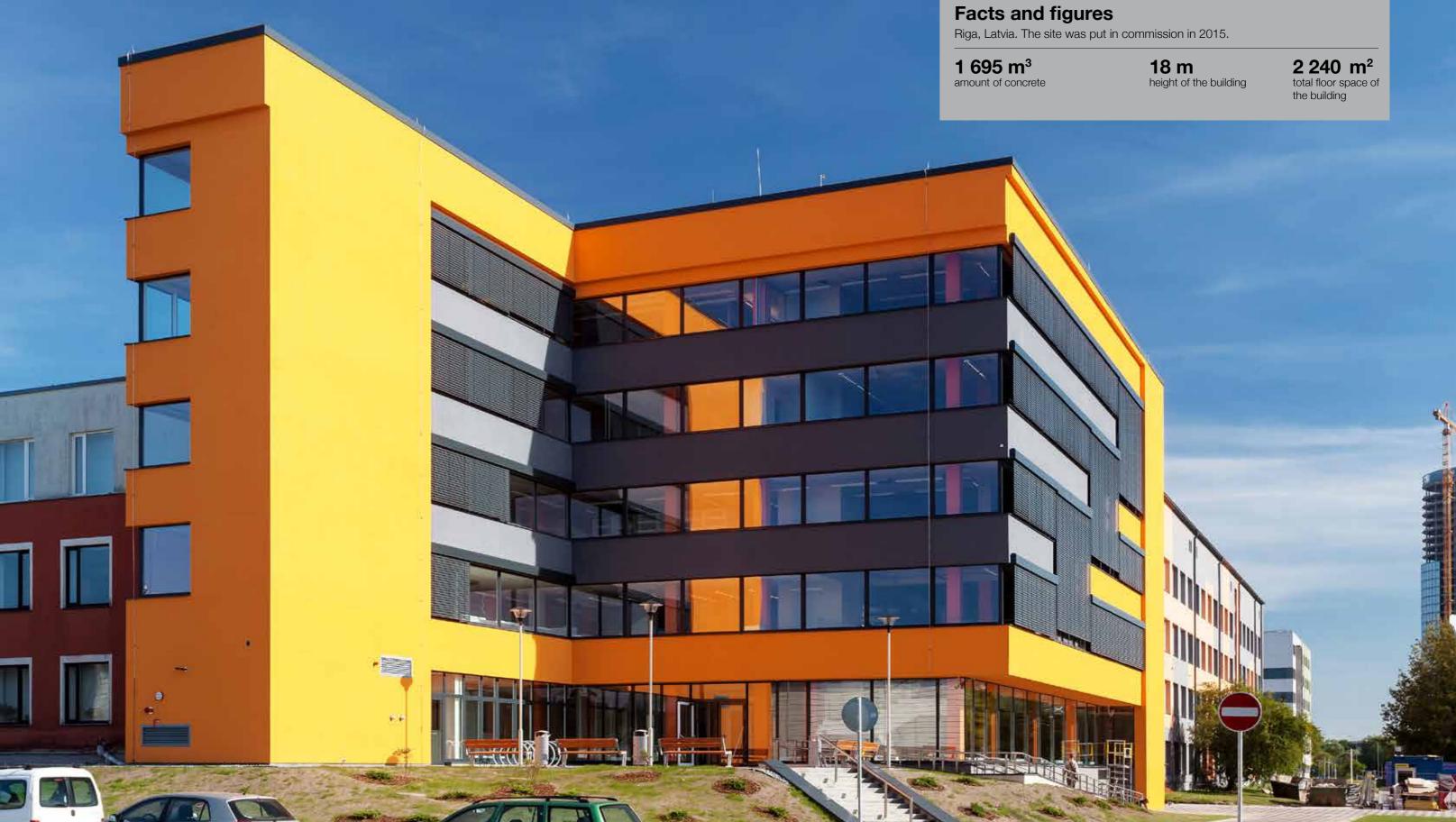
## **Facts and Figures**

Riga, Latvia. The site was put in commission in 2015.

**3 275 m<sup>3</sup>** amount of concrete

**16 m** height of the building **4 346 m<sup>2</sup>** total floor space of the building





# **Reconstruction of the Scientific** Library of the Riga Technical University

All library departments of the Riga Technical University will be located in a single building and the equipment of the library will be modernised.

# State-of-the-art multifunctional project

The modern state-of-the-art multifunctional project in the centre of Riga. It was created for those who appreciate time, comfort and modern technologies. A panoramic view of the city opens out from the windows and terraces of the residence.

## Facts and figures

Riga, Latvia. Building will be put into commission: 2016

740storeysapartments

nts

**24 m** building height

**4 574.6 m<sup>2</sup>** total floor space of the building **3 227.7 m<sup>2</sup>** total floor space of the apartments **2 360 m<sup>3</sup>** of concrete

# **Multifunctional building**

The modern residential estate with full finishing in the historical centre of Riga.

## **Facts and figures**

Riga, Latvia. Project was put into commission in 2015

7 storeys

the particular and the second

1 underground floor **140 t** of reinforcement bars

23 m building height **2 218 m<sup>2</sup>** total floor space of the building **2 100 m<sup>2</sup>** of glass on the façade of the building

# **Construction of the hotel**

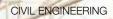
The hotel of the international chain of hotels will be located in Pardaugava, close to the Kipsala exhibition hall. LNK Industries constructs the building itself and also its external utility networks. Post-tensioned concrete reinforcement technology is used for the building's structures.

N

## **Facts and figures**

Riga, Latvia. Building will be put into commission in 2016

<b>11</b>	<b>4</b>	<b>38 m</b>
storeys	lifts	building height
<b>1 322.7 m<sup>2</sup></b> building area	<b>135</b> bored piles	<b>≈ 4 000 m<sup>3</sup></b> of concrete



# **Reconstruction of the hotel building**

Reconstruction project of the hotel building in the centre of Riga includes both works on the underground floor and works in the aboveground part of the building. Main works to be carried out during the reconstruction include masonry works, concrete works and assembly of flooring.

## **Facts and figures**

Riga, Latvia. Building will be put into commission: 2016

6 storeys **23 m** height of the building 1 015.9 m<sup>2</sup> construction area

**4 181.4 m<sup>2</sup>** total floor space of the building **19 790 m<sup>3</sup>** total volume of the building

**198.4 m<sup>2</sup>** of driveways and parking spaces

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