SOLUTIONS ERA

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For those who follow the trends in intelligent engineering solutions

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NEWSFEED

FIMA Polska is one of the 10 founders of The Polish-Lithuanian Chamber of Commerce which was officially registered and started operations on March 12. The association aims to help the two neighbouring countries to build new business ties and strengthen existing ones to promote cross-border communication, trade and investment. One of the association's founders, former Minister of Energy of the Republic of Lithuania, Jaroslavas Neverovičius, was elected the board chairman. Piotr Hajdecki was appointed Executive Director. He previously held the position of first secretary of the Trade and Investment Support Department at the Polish Embassy in Vilnius.

Poland is the financial centre of Central and Eastern Europe as well as one of Lithuania's major trading partners. Compared with other EU countries, this neighbouring market is developing rapidly. It's appeal to Lithuanian companies stems from the cultural similarities between the two countries and because it is the closest market of such a size geographically. Furthermore, Polish companies are among biggest investors in Lithuania.

Other Lithuanian initiators and founders include Žabolis ir Partneriai private capital investment group, VARUL law firm, AB Kauno dujotiekio statyba and UAB Laktopolis. The Polish founders include DJBW law firm, Sygnity S.A. and the General Manager of AB Klar Glass Lietuva, Artur Jan Woźniak.

Train tickets are now always available online at www.traukiniobilietas.lt after FIMA specialists installed an e-ticketing system on behalf of Lithuanian Railways.

Passengers can conveniently print out tickets or save them on their smart devices. The system itself is not an innovation but it is the first time that it has been introduced on Lithuanian railways. Electronic ticket offices were introduced at all stations, the ticketing and control equipment on trains was updated and an online ticketing website was created. All the systems have been integrated into a single one. The new ticketing system increases the number of ways that tickets are sold. It allows seat reservations, ticket purchases at stations, on trains and online as well as fully automated administration. Before the system was introduced, many functions used to be carried out manually and were computerised afterwards. The system includes an interface with the company's data processing system, SAP, a module for updating passengers on travel conditions, integrated timetables and prices. Now that tickets are available online, passengers will be able to save time and plan their trips more easily and will enjoy more flexibility and convenience. Lithuanian Railways can now update customers on different travel-related issues and provide them with attractive offers in a more efficient way. Future plans are to expand the ticketing system with an international ticket module, an application for smart phones and ticket machines and to offer more ways of paying for rail travel.

FIMA helps to create **a smart** electrical grid

FIMA has been central to work on upgrading Lithuania's electricity substations for five years with its role of replacing control systems with SCADA-advanced dispatching and communications systems. The introduction of these systems at the substations in the Jonava and Kaišiadorys regions last year completed the modernisation of all the dispatching centres run by the power distribution company, LESTO. Following the upgrades, the substations are all operating much more efficiently. They are ready to be connected into a common dispatching system which will allow electrical networks to be controlled centrally and remotely, improve the efficiency of resource distribution as well as guaranteeing the supply of power to consumers.

Introducing new technology, improving customer satisfaction and optimising the operating cost of the electricity grid are among LESTO's strategic goals. The company is planning to invest as much as EUR 1.7 billion in the modernisation and

Virgilijus Žukauskas, the director of LESTO's Electricity Grid Division. "The solution will undoubtedly prove useful during storms because the reliability of electricity supply is greatly dependent upon weather conditions".

> upgrade of the distribution grid by 2025. The money will be used to, among other things, replace overhead lines with underground or isolated overhead cables,

upgrade degraded transformers, improve voltage quality and connect new customers.

There will also be an increased focus on the introduction of a smart grid. About EUR 34 million has been allocated to these projects over the coming decade.

Automated installations are already being tested

The development of a smart grid includes a pilot project to assemble nine state-of-the-art switching facilities on 10kV power lines in Klaipėda and Šiauliai which got underway in the summer of 2014. The first project of its kind in Lithuania, this hardware is unique because it can be controlled remotely and is able to restore energy supplies automatically following a fault.

"These connectors are mounted on



With extreme weather events becoming more frequent, maintaining the reliability of the electricity grid – much of which dates back half a century – is an increasing challenge.

supports and it was decided to install them at sites where faults most commonly occur. They will

been installed in the Vilnius district," Virgilijus Žukauskas, the director of LESTO's Electricity

The hardware installed by FIMA specialists in Klaipėda has been integrated with the SCADA control and communications system which FIMA installed previously at LESTO's electricity substations.

ensure a more reliable supply of electricity to almost 5,000 customers in three districts of Lithuania. When a fault occurs, the connectors will automatically restore power supply to customers via a different source. Three more facilities of this type have

Grid Division, said.

Extreme weather conditions can disrupt the power supply

FIMA specialists designed and installed the new systems in Klaipėda. The hardware has been integrated with the SCA-DA control and communications system which FIMA installed pre-

viously at LESTO's electricity substations. "It ensures that dispatchers receive real-time alerts about faults in different sections of the grid. Dispatchers are able to restore power supply using remote control as soon as LESTO's staff repairs a fault

- which is faster than has ever been possible. Most household customers do not even notice faults and for those who do, the power supply is restored almost instantly without them having to wait as they did before," FIMA's project manager, Valentas Titarenka, said.

According to Mr Žukauskas, the solution will undoubtedly prove useful during storms because the reliability of electricity supply is greatly dependent on weather conditions. With extreme weather events becoming more frequent, maintaining the reliability of the electricity grid much of which dates back half a century - is an increasing challenge. The potential for expanding the system will be decided upon in the future but, if the project proves to be successful, it will be expanded to other parts of Lithuania.

More measures to cope

with extreme weather events

"We plan to continue investing in the reliability of the power distribution grid. Not only will we introduce some smart grid components but we will also bury more cables underground. This will make our grid more resistant to environmental factors and allow us to ensure more reliable supply of electricity to customers. This goal is included in the company's business strategy for 2014-2020," LESTO's representative said.

LESTO operates about 122,000 km of electricity lines serving 1.609 million customers across Lithuania.

Young people flock to FIMA's stand at KTU's Career Days 2015

FIMA was one of the main participants in the largest career contacts fair in the Baltic states – Career Days 2015 hosted by Kaunas University of Technology (KTU) – at the end of February. The event was held to give young people planning their careers the opportunity to meet potential employers and to get a closer look at what they do as well as for employers to meet promising potential candidates.





"We told them that what matters is their ambition and determination to start from the bottom and then grow and develop," FIMA's HR director, Lina Ponomarioviene, said.

Career Days attracted 130 businesses and thousands of students, graduates and pupils. As interactive and attractive as in previous years, FIMA's stand displaying its slogan for 2015, "Bring your energy to FIMA!", was among the most popular displays at the fair. Specially designed and built terminals invited young people to play a game to find out which part of the company would be the best place for them as employees. After a student placed his or her hand on a special surface, the terminal scanned it to display an assessment of their suitability to be a FIMA team member including motivation, a modern attitude and a thirst for knowledge. Based on the individual results, the terminal's application then selected the sector within FIMA most suitable for that particular student.

"Young people were much more interested in FIMA than in the previous years and we received all kinds of questions. They were keen to find out what FIMA is about and whether there was any chance of employment with us without any experience. We told them that what matters is their ambition and determination to start from the bottom and then grow and develop. Many students, including a few from overseas, already knew about FIMA and said that they would like to be employed by us. Our

idea behind this interactive game was to inspire ideas in young people about their professional careers and, at the same time, to show that engineering is also about creativity," FIMA's HR director, Lina Ponomariovienė, said.

Four representatives from FIMA worked at the stand providing active advice to young people, answering their questions and introducing them to FIMA's projects in their areas of interest. Specialists helped students to plan their careers and at the same time looked for potential team members for FIMA in an entertaining and dynamic environment. A few potential candidates handed in their CVs.

This was the 11th time KTU has hosted Career Days. The event took place at Žalgiris Arena and was the largest one to date.

Tomorrow's engineers in the Baltics

FIMA has been working hard to promote engineering and has participated in the biggest international engineering competition, EBEC (European BEST Engineering Competition), where it provides Team Design assignments. On the competition's tenth anniversary – on March 6 and 7 – EBEC was held at Santaka Valley of Kaunas University of Technology (KTU). Twelve teams competed to get through to the next round. This year, FIMA challenged engineers-to-be to design a chronometer. In neighbouring Riga, the task set by SIA FIMA was for students to design a prototype of a clean room.



The competition consists of three phases – local, regional and European finals. The firms involved present students with two types of assignments: a Case Study, designed for those who are good at analysing a situation, find a suitable solution and present it, and Team Design for teams who are focused on designing. As in previous years, FIMA specialists provided the Team Design assignments.

Chronometers designed in just 14 hours

In Lithuania, the teams had 14 hours to design a chronometer from materials provided. Against all odds, as many as 11 teams managed to complete the task and presented their work.

The electronics team – "Neturim ką veikt" ("We have nothing to do") was this year's winner. Its members will attend the second round for the Baltic Region between the May 15 and 18 in Estonia. Two teams – last year's winner, "Koviniai ežiai" ("Combatant hedgehogs"), and the youngest team, "Svarkės", were awarded consolation prizes. The first team's device was the only one to comply with all the assessment requirements but because the chronometer did not activate due to a human factor during one of the three tests, only the time measurements of two of the tests were recorded. The second team was the only one to create two chronometers in two days.

"All the teams worked very hard with genuine enthusiasm. All the work was unique and innovative and showed a real team spirit. The future generation of young engineers pleasantly surprises us every year and reminds us time and time again how exciting and creative a profession in engineering can be," the project manager at FIMA's Solutions department, Simonas Šidlauskas, said.

Sophisticated ventilation for clean rooms in Latvia

In the local round in Latvia, FIMA invited students to design a prototype of a clean room with a special air-refining ventilation system. Clean rooms are often used in laboratories and FIMA is

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"UTURE ENGINEERS II



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going to equip such premises at the National Centre for Physical and Technology Sciences of Vilnius University.

The greatest challenge for future engineers was to design a ventilation system that ensures proper air circulation in clean rooms and reliably filters out unwanted materials from the air. The ventilation systems designed by the students were tested by adding ground cinnamon to them. All 21 participating teams in Latvia managed to complete the task presented to



The teams needed 14 hours to design a chronometer from provided materials.

them by our Latvian colleagues.

Riga team was acknowledged as the best in Europe

The second round of the competition EBEC Baltic, also took place in Latvia last year. At Riga Technical University (RTU), 116 students from 25 universities in 19 countries competed to become the best engineers of the future as they tried to solve problems that engineering professionals come across in real life. Industry-leading companies provided assignments for them. As in previous years, SIA FIMA presented the students with one of the major challenges. The Latvian team turned out to be the strongest and won the first place in all three – local, regional and final – rounds.

SIA FIMA tasked students with designing a miniature prototype of a data centre resistant to fire, water and other hazards. The resistance of the structures was tested by immersing the prototype in water for two minutes, exposing it to fire for the same duration and dropping a 16 kg weight onto it.

"FIMA has been co-operating with technology students for years. I think it is important that private businesses support activities like this competition within their industries – practical tasks that simulate real situations help to develop the skills which will come in handy in real life. We are glad that Europe's best future engineers met in Riga and even more so that our country's team came out as a winner. Colleagues from SIA FIMA prepared the assignment with as much enthusiasm as the students when they tried to solve it. It means that engineering is a very creative occupation where creativity is combined with a positive approach," SIA FIMA's Marketing director, Laura Geistarde-Šube, said.

The Latvian team – "Mērcīte" – won in the construction category at RTU and then made it all the way to the following round in Yekaterinburg (Russia) and to the finals in Riga. The team's structures were unanimously ac-



"Practical tasks that simulate real situations help to develop the skills which will come in handy in real life," SIA FIMA's Marketing director, Laura Geistarde-Šube, said.



knowledged as the best in Europe.

Apart from FIMA, other providers of assignments for EBEC 2014 were the German logistics company Deutsche Bahn and the European Patent Bureau.

EBEC aims to bring together tomorrow's engineers, giving them the opportunity not only to improve their knowledge and skills but also to apply them in practice as they look for solutions for real day-to-day situations. More than 6,500 students take the EBEC challenge every year within their selected construction case study category.

BEST (Board of European Students of Technology) Kaunas hosts the EBEC competition in Lithuania. It is the only representative of the international, non-governmental, non-political and non-profit student organisation, BEST, in the country. BEST unites more than 96 technology universities across Europe. Having its office at KTU, BEST Kaunas has been operating for ten years, seeking to provide the opportunity for KTU students to explore Europe, its culture and other spheres.

New generation firefighting solutions

With Lithuania becoming progressively more westernised, this change is also reflected in building infrastructure with fire safety solutions being a particularly good example. In the West, fire safety engineering systems are treated as an integral part of a building, whether a commercial or a residential one. However, in Lithuania these systems are usually only introduced because this is prescribed by the country's construction regulations. Nevertheless, some customers not only realise the value that fire safety engineering systems add to buildings but are also aware that they can mean lower costs of ofreal estate insurance and building operating costs. Even though an installation that conforms with existing regulations and standards requires more investment, such systems can considerably reduce the damage caused by a fire and by firefighting operations.



Head of FIMA's Kaunas branch, Sigitas Kazklauskas. "I am encouraged that customer attitudes are changing gradually and this has become a trend. We have encountered a growing number of customers who care about what happens if an accident does occur, what consequences they will have to face and whether their insurance will cover the damage. They choose to invest in the most effective preventative safety equipment tailored to their specific needs."

After signing a partnership agreement with a leading international producer of fire safety engineering systems, FIMA now offers EconAqua low-pressure water mist sprinkler systems in the Lithuanian market. Its members – the head of the Kaunas branch, Sigitas Kazlauskas, and project manager Raimundas Skapčius, discuss fire extinguishing systems.

What fire extinguishing systems are the most popular in Lithuania?

Fire extinguishing systems are selected according to a building's use as well as the customer's needs and plans. Fires can be extinguished using water, gas, foam or powder, but water-based systems seem to be the most common and the most frequently used ones. Premises are normally equipped with special water sprinklers that have a glass lock which explodes when exposed to increased temperatures during a fire and water is then sprinkled onto the source of the fire. Because such a system requires a relatively large amount of water, municipal water supply systems are sometimes incapable of guaranteeing it. On top of all that, the losses caused by water sprinkled to suppress fire are as high as those caused by the fire itself. Water-based extinguishing is not even considered as an option for premises containing equipment or materials which, when exposed to water, can be damaged or can increase combustion or even cause an explosion, so one must choose from other solutions customised for such premises and buildings.

What do you mean by that, how are the right systems selected?

As far as damage is concerned, not only does a large amount of water extinguish fire but it also destroys property – floors, hardware and software, documents, etc. – it depends on the purpose of the facility which is ablaze. For this reason gasbased extinguishing systems are normally used, for instance, in libraries and data centres as these are home to a lot of electronic equipment that would be irreversibly destroyed by water. Water-based solutions are inefficient in the petroleum and chemical industries because it is almost impossible to extinauish fires involving petroleum products (fuels, lubricants) or alcohol with water and gas is too expensive, so foam is often chosen as an option. A special blend of a water and foam concentrate coats the treated surfaces with a foam layer that prevents exposure of the source of fire to oxygen. This stops the fire from spreading and halts the burning process. In the timber industry, where a single spark can burn everything to ashes in seconds, special spark suppression systems are used. Another option is using special gas in an airtight room to reduce air oxygen levels to the point where a fire becomes impossible. However, it is very costly and the room must be vacated for a long time, which is why such systems are used very rarely and only for very specific facilities (e.g. historic buildings, museums exhibiting historic artefacts where building lines for a firefighting system would be impossible, etc.).

Several types of systems sometimes need to be combined. The project to build the ninth block of the Lithuanian power plant is one of the integrated solutions which was introduced by FIMA's specialists. As part of the project, a fire alarm system, a system to detect different types of gas and



FIMA has introduced fire extinguishing systems using Novec 1230 at the 1st Palace of the Lithuanian Parliament's data centre.

fire extinguishing systems based on water, foam and two types of gas were introduced.

All these systems are efficient and are used according to a building or facility's purpose or function. In February, FIMA signed a contract with one of the world's oldest manufacturers and providers of fire safety engineering systems, the German company Minimax Viking (hereinafter referred to as Viking GmbH & Co.KG). Boasting more than a century of its operation and innovation in the firefighting market, the corporation offers a complete range of fire safety equipment which pushes the boundaries of technology. Because we are the exclusive representative of Viking GmbH & Co.KG in Lithuania, we can offer the best industry-tailored solutions to our customers to meet their needs and plans.

What kind of a fire extinguishing system you would advise investing in?

As mentioned before, fire extinguishing systems are selected according to a building or facility's purpose or customer's plans. Every case is individual, so a feasibility study is carried out every time including calculations to select the best solutions for the customer. The low-pressure water mist sprinkler system available from Viking GmbH & Co.KG as an unparalleled solution when in comes to the efficient use of water. We are the only provider of such a system in Lithuania. We can name the precise benefits behind a water mist sprinkling solution compared with the conventional water-based fire extinguishing system. In the case of a conventional water-based system, 1 litre of sprinkled water spreads over a surface of 3 m2. Whereas a water mist sprinkler system turns the same 1 litre of water into a mist of different-sized water droplets which spreads over a surface of 60 m2. EconAqua uses less electricity and up to 85% less water than conventional water-based systems with its extinguishing station and water tanks taking up between 60% and 80% less space. Because smaller amounts of



Empty gas-based extinguishing cylinders must be replaced within 24 hours. In the future, we may site gas filling equipment in Lithuania.

water are used to suppress fire, the system requires pipes in smaller diameters, which facilitates the system's integration with other engineering systems within a building. Water mist droplets replace part of the oxygen in the room, stopping the spread of fire in a very efficient way. It takes less time for smaller droplets to heat up and evaporate, so the cooling process is guicker. Such extinguishing efficiency is normally available only with high-pressure systems, but these are costly and tricky to operate (special high-pressure water pumps, special-quality water with additives and a stainless steel pipeline are required and grime can clog the tiny holes of the water sprinklers). The new generation low-pressure water mist extinguishing system, EconAqua, comes at a lower cost yet ensures the same effect. The maximum pressure used in EconAqua is 16 bars, so no expensive high-pressure pipes, profile parts or closing reinforcement are required. This system needs slightly higher investment than a conventional water-based one but is cheaper to operate and causes less damage when it puts a fire out. So from a longer-term perspective, it is an investment which more than pays for itself. Not only does it help to save water, space and operating costs, but the damage caused by putting a fire out is much less. Water will

continue to be used for putting fires out – just as it always has been – but the difference is in how it is delivered.

Why did you choose Viking GmbH & Co.KG as a partner?

The fire extinguishing systems sector is a promising area where FIMA strives to achieve the highest standards. We have been developing it intensively in our Kaunas branch. Partnership with Viking GmbH & Co.KG enables us to offer the best solutions and systems to our customers to meet their needs and future plans. The manufacturer has delivered special training to our team on installing these systems and we have been developing our professional skills and knowledge in this area. FIMA and Viking GmbH & Co.KG share an integrated approach to the solutions that are being introduced.

Skapčius: This manufacturer is special not only for its century-long experience and tradition but also for designing, manufacturing and certifying hardware for fire safety engineering systems as well as designing, assembling and maintaining such systems. The professionals at Viking GmbH & Co.KG can follow the manufacturing and the assembly processes, which enables them to see what can be improved and where – there is no system or part of a system



that the company's specialists do not know inside out. On top of all that, the company has an in-house fire research centre. Models to a scale of 1:1 are developed to test the system and its elements and are then tested until the insurer confirms the correct operation of the system and its components and issues a certification permit. The fire research centre covers an area of 320 m2 and is 15m high, which means that any potential fire can be simulated and tested. It is a complicated and cost-consuming process that most competitors do not invest in. Viking GmbH & Co.KG assumes full responsibility for its product. All partners working with this manufacturer's systems are specially trained to install and assemble them and are selected not just randomly but based on their proven ability to ensure and retain quality on behalf of Viking GmbH & Co.KG. What follows is regular communication, advice and feedback from us as partners. For

> example, should

we have

any issues

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stalling

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Of course, mist is just another form of water. Water will continue to be used for putting fires out – just as it always has been – but the difference is in how it is delivered.

FIMA's project manager Raimundas Skapčius. "The new generation EconAqua needs slightly higher investment than a conventional water-based one but is cheaper to operate and causes less damage when it puts a fire out. So from a longer-term perspective, it is an investment which more than pays for itself. Not only does it help to save water, space and operating costs, but the damage caused by putting a fire out is much less."

COMMENT

According to the Business Risk Manager of Lietuvos draudimas, Arūnas Raziūnas, fire extinguishing systems play an increasingly important role in customers' and property developers' plans. "Insurers assess the specific risk at the insured site, including existing fire detection and automatic and manual firefighting systems. What we appreciate most are duplicated systems, i.e. when fire detection and automatic extinguishing systems are combined. The availability of automatic extinguishing is of particular relevance," Mr Raziūnas explained. "More and more loyal customers trust insurers' advice and research fire detection and extinguishing systems before they plan their facilities. The planning of rooms correctly-sized for their intended use can reduce costs in the future on account of lower fire insurance premiums".

TABLE WITH BENEFITS BEHIND ECONAQUA OR DIAGRAM:



A conventional sprinkler system

- droplet size > 1 mm
- Surface of 1 litre of sprinkled water: about 3 m2



A water mist system

- droplet size << 1 mm</p>
- Surface of 1 litre of sprinkled water: about 60 m2

ic system, we could visit a site

which has faced similar difficul-

ties to discuss most practical

and efficient solutions in that

particular case. I know no oth-

er manufacturer which provides such versatile services and support.

What trends do you see in the world of fire extinguishing systems?

Here, as in many other areas, businesses are looking for environment and people-friendly solutions and are focusing on best value for money and efficiency - both in terms of prevention and when it comes to putting fires out. For instance, in the past, gas-based fire extinguishing systems used fluorinated (FM200) gases which persist in the environment for as long as 33-65 years, destroy the ozone layer and are hazardous to people's health. Today they have been replaced with a new generation gas, Novec 1230, which has little to no effect on the environment, does not contribute to climate change and, unlike its predecessors, is organic because it disperses in the atmosphere in just five days and is not harmful to people. FIMA has introduced fire extinguishing systems using Novec 1230 at the Lithuanian History Museum, the 1st Palace of the Lithuanian Parliament's data centre and the Ministry of the Interior. Even more effective and safer gas may be discovered in the future.

The ways of identifying the outbreak of a fire as quickly as possible, how to use water more efficiently and extinguish any blaze faster and with less water are constantly under review. Because of this the time taken to activate sprinklers has been reduced and, as we can see, water mist is produced by increasing the water pressure and developing special sprinklers. In addition, increasingly sensitive smoke and temperature detectors are being manufactured.

Pressure in the cylinders of gas-based systems is increased. For example, the pressure in the Viking GmbH & Co.KG gasbased system is 50 bars (compared with 25-42 bars in the competing ones). It means that higher pressure causes the gas to be sprayed over a large area. Fewer cylinders are required and they take up less space yet ensure greater efficiency. Innovations for other systems are being developed to the same end.

In Lithuania, it is still common practice to install fire safety engineering systems based on low-quality design documentation or to compromise quality to save money. Afterwards, the state commission which provides a report to insurers may overlook these nuances, and so may the maintenance providers because of intense competition. In such cases, defects or poor workmanship are only discovered when a fire occurs. The question is who suffers the most. Disasters like this are potentially ruinous to all concerned: from the building's owner to its

insurers.

I am encouraged that customer attitudes are changing gradually and this has become a trend. We have encountered a growing number of customers who care about what happens if an accident does occur, what consequences they will have to face and whether their insurance will cover the damage. They choose to invest in the most effective preventative safety equipment tailored to their specific needs. The choice of fire extinguishing systems available today is wide indeed but we only offer the best solutions to our customers. We co-operate with the world's leading hardware manufacturers and can guarantee that our work is top-notch. This is a virtuous circle in which everybody - FIMA, customers and insurers - is able to feel safer.

We have a number of plans of our own. In the future, we may site gas filling equipment in Lithuania. For the time being, used empty cylinders are transported to other European countries. Because this process - transporting cylinders under pressure and full of gas - is complicated, it can take up to three weeks and customers often choose to buy replacement cylinders on the spot. Empty gas-based extinguishing cylinders must be replaced within 24 hours, so it would be sensible to have such equipment available locally.

SMART INVESTMENT





- EconAqua uses less electricity and up to 85% less water than conventional water-based systems with its extinguishing station and water tanks taking up between 60% and 80% less space.
- A: A conventional system's extinguishing station
- B: An EconAqua extinguishing station with a reduced-volume water tank (saves up to 60% of floor-space)
- C: An EconAqua extinguishing station with a direct connection to the municipal water supply system (saves up to 80% of floor-space)



FIMA receives deserved recognition in Belarus

"Although Belarus' economic development may seem to be lagging behind, it is actually a very promising market that presents us with a niche opportunity. Projects such as a 5-star Marriott or Europe's fifth largest water park in Minsk are good examples as they give us the opportunity to introduce the most advanced technological solutions," FIMA's development director in Belarus, Dmitrij Šadčenev, said.

FIMA BR which is the daughter company of the intelligent engineering solutions provider, FIMA, in Belarus has been an important player in the local market for years. **Operating since 2010, the company has survived the economic downturn and has continued to receive many significant orders.**



The new water park in Minsk is one of Europe's largest.



Dmitrij Šadčenev, FIMA's development director in Belarus: ""We often have to work under extremely strained conditions and to make urgent and non-standard decisions. But we have experience and our co-workers in Lithuania are there to support us. So we are able to deliver work to a high standard and in time as well as share our know-how, develop professionally and learn from our partners. Belarus' specialists often come to work on projects in Lithuania, which is of great relevance to us."

FIMA was the first company in Belarus to offer integrated electronic engineering solutions. Because it deployed the systems to a high standard, FIMA has earned a reputation as a reliable partner among local customers and providers.

"Belarus has a lot of infrastructure that needs upgrading. The government is now in the investment planning process, so we are expecting new procurement opportunities and projects. The current economic situation in Belarus is not very favourable, but it is a good time for more focus on in-house training. We hope development does not stop either," Mr Šadčenev said. The headcount of FIMA BR in Belarus has grown from 5 to 65 and its portfolio of projects has also expanded. The company works with both public and private customers.

"We co-operate with global software and hardware manufacturers and are able to integrate electronic engineering systems made by different manufacturers which may, at first glance, seem incompatible. Our advantage lies in our experience with big projects that require simultaneous installation as well as our work integrating sophisticated systems with a myriad of

different functions," the company's development director in Belarus added.

2014 was the most successful year for FIMA BR with a turnover of EUR 8.5 million, more than 30 new contracts and a number of large-scale projects.

A joint team of 70 FIMA specialists from Belarus and Lithuania implemented Belarus' largest project to install more than 20 engineering systems in the country's largest water park which is also the fifth largest in Europe.

These include video surveillance, access control, 3,000 lockers with electronic locks, visitor management, electronic orders at restaurants, building control and even a unique drowning prevention system. All these solutions will ensure that this impressively-large park operates safely and efficiently.

Last year saw the start of a 5-star Marriott project financed by the Qatar Investment Fund. FIMA BR's specialists have designed and are now installing an access control and building control system, video surveillance and sound reproduction systems, data communication networks and parking management solutions at the luxurious complex. As part of this project, the company is working with professionals from Dubai, India and other countries.

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FIMA BR has also upgraded more than 15 crossroads in Minsk and a number of pedestrian crossings by introducing 'smart' traffic light control systems. In addition, it manufactures equipment used in road traffic infrastructure, including traffic lights, buttons for pedestrian crossings and controllers – all to Belarus' requirements.

FIMA BR's Lithuanian parent, FIMA, was founded in 1992. Its professionals develop and install security, automation and telecommunications systems and implement integrated municipal infrastructure, transport, railway and energy engineering projects. Lithuania's market leader is expanding its operations in neighbouring countries including Latvia, Poland and Belarus and has plans to set up in the Nordic countries.





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FIMA is the leading electronic engineering systems integrators in Baltic countries, offering telecommunications, security, automation and data center solutions as well as individually tailored solutions for transport and energy sectors.

The company implements intelligent engineering solutions for businesses and governmental organisations in the Baltic states and Belarus and is continuously involved in projects of technological innovation. In two decades of operation, FIMA has carried out several thousand projects of a various scale and degree of complexity.

FIMA's headquarters are based in Vilnius, Lithuania. The company has subsidiaries in Latvia, Poland, Belarus.

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