

NEWS of FINCHEM & CHEMOSVIT LETTER

THE WORLD FACES DEMANDING CHALLENGES

Primarily, we have to adapt ourselves to globalization trends and mind global challenges, starting from preserving natural heritage and keeping continuous growth, up to searching for prosperity and co-operation to remain competitive as a country, as well as an individual business entity.

We have been responding to challenges related to the environment. Our company took significant protective measures long ago and has gradually switched to gas as a fuel. We keep looking for alternative sources for power generation. We have re-

Global development has been very hectic in the last few years, and it's still hard to talk about a stabilization after the late financial crisis. The world faces problems, globalization continues and political situation keeps changing – these are the factors that make us think of how to go on.

Michal Lach,
Chairman of the Board
of Directors of Finchem



nization to improve our living and working standards have been paid back in form of positive relations of the employees to the company, and in the responses of the ambient world to these measures. We want to continue this trend and invest in new cost-saving technologies, increasing flexibility and creating better working and natural environment for our employees and people living here, under the peaks of the High Tatras.

duced emissions of solvents and inks by launching up-to-date technologies and systems. Financial means invested in moder-

In addition to the assignments resulting from NATURA 2000, programme of the European Union, or Pure Power project, we have to face challenges based on world trading and international agreements to facilitate mutual business, support development, and increase demands for competitive power of business entities.

Our experience, vision, philosophy and strategy will be focused on co-operation with business partners, raw material suppliers and institutions so as to respond to the challenges of the inhabitants of the Earth to preserve good living conditions also for the future. I believe that, in co-operation with our partners, we will make success.

CHEMOSVIT at the Interpack

At the world exhibition of INTERPACK 2017 in Düsseldorf, the Chemosvit Group will be represented by our subsidiary companies of CHEMOSVIT FOLIE, TATRAFAN and STROJCHEM.

Our common stand B47, occupying 110 sqm in hall no. 11, can be found next to Inovia Technologies, BOBST, Janoschka Holding, Metsä Board, Starlinger and Van Dam Machine. The exhibition held between 4 and 10 May 2017, will present the world of packaging industry in the whole supplier chain from raw materials, products, up to technologies.



The word "can" deserves more attention. It describes the situation around us, in the family, in the company, in society, in the world. A very important precondition hereof is peace, safe environment, and stability of basic human values. The situation in the world is complicated, but everyone can contribute their share to securing stability around us. This is possible by applying the principles of humanity, communication and co-operation. There are many people willing to help immediately, and I am proud to say that our corporate culture supports them. The above standard co-operation with our customers and suppliers allows us to precede extreme situations, and supply our clients with our services comfortably so they can concentrate on improving their own products and services. What we "can" is being influenced by the environment and the market in which

I WANT, I KNOW – BUT CAN I?

In doing business, one must consider the future development of the market. We want to respond to circumstances, we don't want them to control us. It's important to have a vision – personal, corporate, and social. The most fitting for the situation are the words of Jan Amos Komensky, the teacher of the nations: I want, I know, but can I? We know, and we can. It's just the question of taking opportunity and employing professionalism, even if involving certain kind of risk and personal commitment.

Jaroslav Mervart,
Chairman of the Board
of Directors of Chemosvit

the company runs its business.

Employees are among the most important assets of the company. They, too, have to face external conditions and challenges, and as consumers, they are a part of the whole chain. The market demands continuous improvement of processes, pro-

ducts and services. Along with the development and enhancing knowledge, we consider this to be the only progressive way to sustainable development of business.

Our company has been running similar business as Tomas Bata had started. It was him who said that the company value is created by the people. It's not enough if the people are content with themselves, they have to have higher goals. To recognize the



requirements of the environment and to master processes they are responsible for. Only those having a clear vision and goals can be growing professionally,

and the company can be growing with them. Therefore, we need dedicated, strong-minded and loyal employees not satisfied with themselves, eager to reach more. Subsequently, they would demand more from the others.

We want our customers to feel well and comfortable, and trust our people, products and services. We will be pleased to offer them quality in line with their expectations and at favourable prices.

WE KEEP MONITORING THE LATESTS WORLD TRENDS

The business range of Chemosvit Folie includes food packaging film printing. The company employs practically all available printing techniques. We asked Martin Pitoňák, Sales Director of Chemosvit Folie, a.s. to give us more details of this business.

▲ What are the latest trends in printing business?

To sum it up, it is, in particular: continuous decreasing of job sizes; focus on quality; shortening delivery times; new, atypical look; social and environmental friendliness, and power economy.

We got already prepared for the trend of small jobs in the past. We have rotogravure printing machines with fast job exchange featuring short paths, drying zones, and low power demands. Of course, we also have high-speed machines, and are able to print large jobs effectively. We have modern flexo, and up to 11-colour rotogravure printing presses. And our latest investment includes an up-to-date offset machine from Comexi.

▲ Why did you decide for offset next to rotogravure and flexoprinting machines?

The development of offset printing of plastic films suitable for small jobs, has progressed rapidly in the last few years. Its advantage is lower time demand for flexo-plates production compared to rotogravure printing cylinders. Customers often require having the new packaging quickly introduced to the market, or to verify what will be the sale of a standard product with a new taste like. They want a small volume, but in rotogravure quality. Offset is here to meet this demand.

washing is necessary.

Graphic data for this machine will be processed in a new way, we will make use, in particular, of Hep-



tachrom® scanning of images. Among its advantages is that colours are precisely matched and inking stations need not washing at the job exchange, or inks need not be



▲ Why Comexi?

It features a central drum printing allowing the printing of tensile materials. The last station is flexoprinting, so white colour and special varnishes can be deposited here with sufficient covering power or special effects.

We have decided to buy an EB ink drying system instead of UV. We are a supplier of food packaging films, and UV systems, at times, display non-crosslinked monomers and atypical odour. Of course, we are aware of the significant progress made in this field in the last few years. EB curing method has several advantages: no solvents or photo initiators are needed and inks don't need to dry, which saves energy. Inks do not remain dry on the machine, so no daily

discharged. Data processing for the preparation of printing forms is automated, which eliminates mistakes occurrence. In this way, preparation times and reproducibility of jobs have become shorter.

▲ And what about digital printing?

Digital printing machines have been fairly well-established with printing of labels. Their advantage is that each picture can be different, and produced in different numbers. The disadvantage is a relatively high price and a small width, which limits us in the next converting, for example lamination. A too low printing speed is fitting only for promotion, or visual checking of how the final product would look like.

▲ Three years ago, your top-quality products were awarded by the National Prize for Quality of the Slovak Republic. It must have been a challenge...

We have been stressing quality at all times. Visual checking of material during printing had outdated long ago. Now we rely on inspection systems. We gradually install them on all of our printing machines, both rotogravure and flexoprinting, and prepare their installation on the machines of subsequent operations, i.e. laminating and slitting.

▲ Do you manage to deliver your products at competitive times while being so focused on quality?

The pressure on delivery time is big. We struggle to enlarge and upgrade our machinery. Recently, we bought a new laminating machine for a solvent-free lamination, but we can produce cold-seal and laminate on in. We also bought a new Kampf slitter, and a new bag-making machine.

We have enlarged our storage room of rotogravure printing cylinders and keep buying metal cores.

and they have been increasingly in demand year on year.

Paper look has been among our news from autumn last year, and we believe, it would sell well in the future, too. We have already printed the first coffee packaging with this finish.

We were among the first to introduce rotogravure printed winning codes to the market fitting for direct contact with food. We have solved the issue of cold-seal printing on a laminate, or interlayer so the code is readable from the inside or from the outside. This year, we can offer various pictures instead of a 2-line winning text. We believe this news will attract our customers' attention.

▲ Why should a customer choose you as a supplier?

Together with our customers, we look for optimum packaging so the food is safely wrapped and does not deteriorate, and, on the other side, is not over dimensioned and too expensive (high barrier which is not needed for the respective product, too thick a material for a low-weight product, etc.). We can provide tailor-made solutions to the kind of food, packaging machine and customer.

Properties of our packaging are being checked in our laboratories equipped with up-to-date instruments acknowledged by the most demanding clients.

An inseparable part of our services is the assistance of service engineers. They have rich experience in setting packaging machines, which contributes to minimizing waste in production and application.

▲ Chemosvit Folie is the winner of National Prize for Social Responsibility...

A good reputation of the company is an important business issue, and ethical behaviour in line with the legislation a fundamental asset and a precondition of sustainable success. We are fully aware of this, and run our business in accord with our environmentally-friendly policy. We have managed and eliminated dangers that might occur during the production process and affect health safety of products. We have introduced and maintained HACCP system in line with the integrated management system of food health safety.

We are among the first manufacturing companies to adopt ethical code defining behavioural principles of all employees to the basics of SEDEC code. We are in everyday touch with customers, and their requirements determine our business.

▲ It must be difficult to catch an eye of a customer in such a flood of new products...

You can see it in the shops yourselves. There's lots of various goods and everyone wants to sell. That's why we don't settle for average. Years ago we introduced matt-glossy films,

PRINTING OF UNIQUE CODES

From 2004, Chemosvit Folie, a.s. has offered printing of unicodes to their customers to support their sale in consumer competitions.



A unique code can be printed using rotogravure technology and special, food-friendly inks inside or outside the final packaging. This code may bring joy to the winner, thus increase the sales of the customer. The database of unique codes can either be supplied by the customer, or be generated by random selection by our company in an agreed form, and supplied on a flash disc.

Lately, marketing and sales departments received several requests for the upgrade of unicode printers, as the existing equipment no longer met their demands, and as Chemosvit Folie always listened to their customers, they upgraded the equipment to the latest standard allowing the printing of more fonts and simpler images.

In order to do this, it was necessary to replace the complete control system, its hardware and software parts. This investment also included a camera control system of unicode printing, providing better supervision of code placement and correctness.

As by now the printing was limited by alphanumeric characters in 7 height points in one, or two-line version, after the printer upgrade, we are able to print more fonts and simpler images.



Taking into account technical limits and technology of the equipment, these codes can only be printed in printing direction using eight printing heads at the same time.

Samples of our unicode prints can be seen at Interpack fair.



PACKAGING AND BAGS WITH A PAPER FEEL

In today highly competitive world, the famous "packaging sells" holds particularly true. The development department of Chemosvit Folie, a.s. produced an interesting packaging that was immediately awarded by Gold Seal medal of the Printing Association of the Slovak Republic.

It is an original, paper feel packaging intended for food industry, untypical for rotogravure technology. It is not only paper look of film, but also its touch that makes it special, as the packaging is rough on the surface. In standard engraving of rotogravure cylinders,

visual effect is obvious, but smooth on touch, similarly as all other outputs of rotogravure printing.

In order to reach a rough surface, it was necessary to use a special method of cylinder engraving. The time of engraving was prolonged four times, and the coating was much higher than with the solvent-based technology. To reach the paper feel effect, a special, two-component varnish was applied.

Packaging made by this technology is fitting for food products and direct touch with foods. Paper packaging has a luxurious look and is very demanded by the customers searching for gift packaging and luxury wraps.



"SAVE FOOD" FOR A CHEESE PACKAGING

"Save Food" is an initiative of UNO focusing on better packaging characteristics and reducing losses of fresh and processed foods. It was joined by many institutions, corporations and private companies all over the world. Packaging was evaluated at SYBA competition, in category "Packaging of the year." The competition stresses material innovation, technology and design of packaging focusing on higher protection of foods in food chain from feedstuff up to final food products while minimizing packaging material, in line with the slogan: "As little as possible, as much as necessary."

In 2016, the winner of this award became Chemosvit Folie with their packaging of sliced Gouda cheese in tubs. Packaging is made of a laminate of a transparent flexible PET film and a PE film with EVOH layer. It has an excellent barrier to water vapour, oxygen and aromatic matters. The packaging is flexoprinted, easy open and reclosable. The film will cling to the tub without the need of additional sealing material, e.g. hot-melt. In this way, the packed food has a longer shelf life.



This and other products winning Save Food Awards are presented at Interpack 2017 show, in the area of "Innovationpark".





TERVAKOSKI FILM – THE BEST SOLUTION FOR ANY CAPACITOR

TERICHEM IS NOW TERICHEM TERVAKOSKI, a.s.

International BOPP capacitor film expert Terichem, Svit has decided to combine its brand name (Tervakoski Film) and legal entity name. The name change took place on 14 January 2017.

Terichem Tervakoski, a.s. will develop and produce Tervakoski Film exclusively in three sites: Svit, Slovakia; Tervakoski, Finland and Lutsk, Ukraine. The company's dedicated staff will continue working with the latest polypropylene capacitor film solutions and creating sophisticated technologies for existing and future applications – from smart grids to hybrid cars.

The name change does not affect capacitor film production in terms of personnel or ownership. Business ID, VAT and bank account numbers will remain unchanged. All capacitor film customers will also continue working with their current contact persons.



When we talk about demanding durability, we mean two things: firstly, we create specific solutions for the most demanding applications in the world; secondly, because of this, we demand that our products excel in extreme conditions. We are not interested in creating anything less than the best films in the world.

MACHINES WITH UNIQUE FINGERPRINTS

Capacitor films are typically sold in high quantities, with compromised quality. While many companies settle for "good enough", that would never work for us. We want our machines to have unique fingerprints. Our quality begins with exclusive raw materials and continues all the way to the end products. That makes our high quality one of a kind, as well.

Our current film manufacturing capacity consists of 3 tenter lines (latest from 2013) and 2 blown film lines. We also have 6 metallising machines and will expand our capacity with

two more in spring 2017. Tervakoski Film is now the leading supplier of MET and hazy films for power and smart grid applications (HVAC, HVDC); traction control and locomotive applications (AC, DC); industry and infrastructure applications (AC, DC). We have also been supplying the automotive industry with 1,9 µm pattern metallized film since 2014.

CO-CREATION AND CONFIDENT CHANGEABILITY

Our laboratory regularly runs routine and endurance tests for all main types of capacitor applications. For example, we recently deve-

loped and launched a brand-new film generation for all main application areas – with excellent market feedback.

One of our greatest strengths is that we have a long history of co-creation with customers and polymer suppliers. Together, we have created a complete supply chain – from polymeric design to converted films for capacitor manufacturers. To us, that is the only way to create powerful, cost-effective products with a long lifecycle. There are no shortcuts. If we want to continue creating the best film for any capacitor, we must ensure that it will always display superior endurance performance in the toughest stress conditions.

Tervakoski Film is a Terichem Tervakoski, a.s. trademark owned by Chemosvit, a.s. and Ab Rani Plast Oy.



TATRAFAN

A WELL-ESTABLISHED BRAND MARK IN BOPP FILM MARKET

Tatrafan brand mark is not an unknown mark in BOPP film world. We have an over 30 year-experience with its production. The company TATRAFAN, s.r.o. is a member of the Chemosvit and AB Rani Plast Group with know-how and experience in the field of converting flexible films using flexoprinting, rotogravure printing, lamination, metallization and other technologies to specific requirements of the customer. Martin Lach, the company director, told us more about the present and the future of the company.

■ Polypropylene films are among the most demanded materials in packaging industry these days. What is their advantage?

It is an excellent resistance to breaking, permeability of fluids and vapours, low specific weight, high yield and a relatively low price. BOPP films



contribute to prolonging shelf life of foods and protect them from adverse effects of moisture and oxygen. They are fitting for high-speed packaging machines. We can still enhance these properties by modifying the material to specific demands of the client. We have years-long experience and know how in the field, and co-operate with dominant European and global raw material suppliers. Our produced films are approved for the use by multinational companies – film converters.

■ What, in your opinion, is your strong point?

In addition to said positives, it is our long presence in the markets of Europe. Our company offers excellent technical support to customers, including transfer of know-how in film converting, adjusting and setting of packaging machines. Among the advantages is, for sure, our favourable location close to big converters of flexible films. The result is a good co-operation with the film converter, our sister company Chemosvit Folie, and the fact that we are able to produce tailor made films to specific requirements of our clients. We have a BOPP film production plant in the Ukraine. A matter of course is the certificate in quality and environmental management, occupational safety, health protection and hygiene standards.

■ What is your main product range these days?

We have a standard product range of 3-layer BOPP films, including low SIT films, matted, white, white-pearl, and anti-fog films. We offer release films, cold seal in laminates, ultra-thin release films for bitumen cardboard, and packaging of products requiring macro or micro-perforation.

■ What is the application range of TATRAFAN films?

In particular, tobacco and food products. Our films can also be used in industrial applications, e.g. bitumen cardboards of paperboard overwraps, featuring excellent properties and perfect cling effect, or labels of high yield and gloss. A specific



segment includes the production of BOPP capacitor films produced in co-operation with Terichem Tervakoski of Svit.



■ Your strong point with years-long history is tobacco film...

In tobacco industry, we are a supplier of films for different applications, e.g. individual boxes overwraps, bundle wraps and promotion packaging.

■ Can you be more specific?

Films for high-speed packaging of cigarette boxes supplied to the biggest producers of cigarettes. These include low-shrink TATRAFAN KXT film for soft boxes, medium shrinking film for hard boxes, or TATRAFAN SHT for bundle wraps. For premium packaging of boxes on high-speed packaging machines with excellent shrinkage, we use TATRAFAN AVT, for printable tobacco film we use TATRAFAN SHTE, and for upper bundle wraps of cigarette packs without paperboard, we use TATRAFAN LST that provides high strength of the

packaging, excellent look and sufficient barrier properties.

The development of shrinking BOPP films is based on an intensive co-operation with customers and suppliers.

■ Where is your development headed for?

We have been monitoring the latest trends in the world. TATRAFAN LST was developed for bundle wraps, without using the reverse paper, or paperboard layer (film to film). By standard, it is supplied in 25 um thickness, but it was also developed and proven in 20 um thickness. The development focused on maintaining mechanical and functional properties while reducing overall thick-

ness, i.e. an important economic and environmental aspect. Micro and macro-perforation are the next technological methods of TATRAFAN film converting used, in particular, for the packaging of fresh vegetables and fruit, or fresh bread and bakery products. Among the news is anti-fog film for the packaging of fresh foods, e.g. sandwiches, salads, etc. A matted TATRAFAN MATT LS film is intended for lamination. It provides the product with a luxury, matted look. Low melting temperature of 85°C allows to speed up the packaging line, or to reduce the temperature of packaging machines. A cost effective solution of transparent film with low sealing temperature is TATRAFAN KXLSE, intended, in particular, for temperature-sensitive products, e.g. chocolate bars, while preserving sufficient toughness and seal strength.

■ Do you envisage any bigger investment in production development?

The trend in flexible packaging production is the reduction of food waste by increasing utility and barrier properties of films while preserving their printability, thus reducing environmental impacts. Therefore, we plan to extend our product range with a 7-layer barrier cast film intended for the packaging of meat, meat products, cheese, and other foods.



CHEMOSVIT FIBROCHEM GAINS A COMPETITIVE EDGE IN THE PRODUCTION OF ONE OF THE MOST ECOLOGICAL YARNS IN THE WORLD

Sustainable development of raw materials, management of industrial waste and minimizing water and air pollution, are among the main topics of every company. Legislation makes the companies observe the adopted standards, i.e. implement changes of manufacturing methods and processes, which requires significant investments. Chemosvit Fibrochem, a.s. has proven its reputation of an environmentally-friendly company by winning many certificates and standards, e.g. ISO 14000, Oeko-Tex, and a meaning bluesign® certificate.

Regular auditing and reviewing the complete supplier chain and processes stand for a guarantee that the company fulfils its commitments to protecting the environment, maintaining cleanliness of water and air, and of social responsibility and creating favourable work conditions for its employees.

Our aim is to continue developing and supporting sustainable initiatives and to make sure that our suppliers and clients are informed



for our endeavours to reduce carbon trace, and of our knowledge of their pursued environmental policy.

Prolen® yarn is among the most ecological yarns these days. It is largely due to its chemical-physical properties, and also its final application. Low melting point reduces energy demands for stabilization of final products, and for ironing and drying while in home use. As the lightest yarn, it has a significant indirect influen-

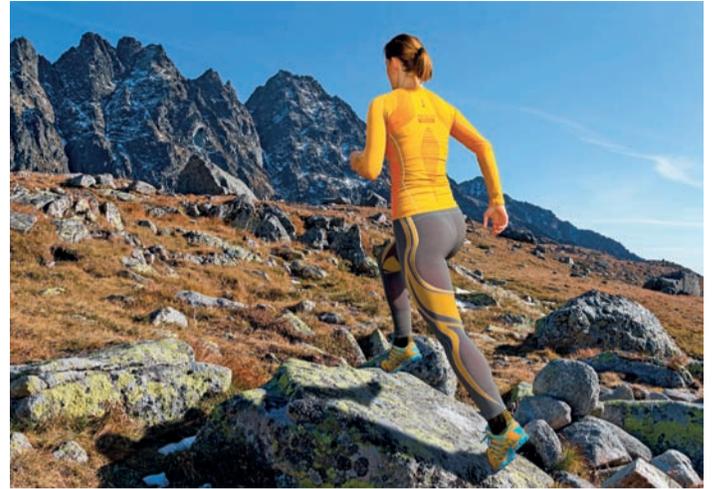
ce on greenhouse gas reduction. As Prolen® yarn doesn't absorb moisture, it supports fast drying and lowers energy and water consumption in industrial, medical and hotel applications. This property also prevents surface dyeing that would contaminate ground waters and oceans, thus polluting local ecosystems.

Prolen® yarn is fully recyclable and allows an effective waste management not only in our premises, but also with our final clients. It offers different opportunities of use in other applications and industries. As all additives and modifiers are implemented directly into the yarn mass, no leakages are detected in waste water in the next washing, i.e. they do not contaminate our rivers and ground waters.

It is very important to mind the ecological aspect of textiles and clothes, as they indirectly influence the philosophy of an ecologically behaving consumer.

Sustainable development

In drawing strategy of sustainable development for the years 2017-2021, it was necessary to consider the consequences of all external factors on our production: ecological, economic, technological and social, and thus to eliminate



the impact on our customers, employees, economy, and our company as a whole.

Among our savings and waste-reduction objectives for 2017 is power economy, and an effective use of sources and raw materials. Implementing electronization in our processes safeguards continuous improvement in all departments of Chemosvit Fibrochem. Investment in the development of water management, new risk-control tools, programs involving our employees and consumers in effective use of water and waste management, seem to be innovative and promising ways of reducing water consumption and making more effective use of recycled waste in the future.

The most focused trend of 2017 involves innovations and the next development. Improvement of technological processes, effectiveness of manufacturing methods, investment in new machines and human resources, are the preconditions for launching new products considering ecological issues and lack of raw materials in the world.



YARN PROVIDING NEW COMFORT

Our company keeps introducing innovative ecological products and modifications to the market reflecting the latest trends and demands of the current consumer. New technologies, advancement in consumer behaviour and growing social concerns of many companies disturb traditional business models and bring along drastic changes to the existing markets. Not all of the innovations focus on sustainable development. New generation of products and services means changes in preference styles of consumers, thus induce modification of production processes proving sustainable improvement and economy.

▲ What is the particular focus of your investments in 2017?

We want to focus on using natural materials and minerals as additives and modifiers of our polypropylene yarn Prolen® aiming at improving utility properties of final textiles. It would safeguard good functional properties for active sporting, medical applications, automotive or furniture industries.

Our new modified yarn Prolen® Soft brings a better feel resembling natural materials. Final products of this yarn have an improved water resistance. New modified yarn Cellen® was developed in an interesting fusion of natural cellulose and polypropylene, and offers wholly new utility properties for final users.

This year, we introduce a brand new grade of yarn, Prolen® Spun-feel, replacing standard polypropylene yarn, bringing new feel comparable to that of cotton or wool.

▲ What is new about technical fibre?

A specially developed yarn Prolen® Composite for composite materials in combination with glass yarn brings along significant weight

There is no particular need to introduce the brand of Prolen®. In over 40 years, it has established itself in the world and has become a part of functional wear of the most prestigious sports textile marks in the world. What news does it bring along these days, we asked Alena Balogová, Director of Chemosvit Fibrochem, a.s.



reductions for automotive and aeronautic industries, thus contributing to reducing green-house gas emissions.

In co-operation with significant European institutions and

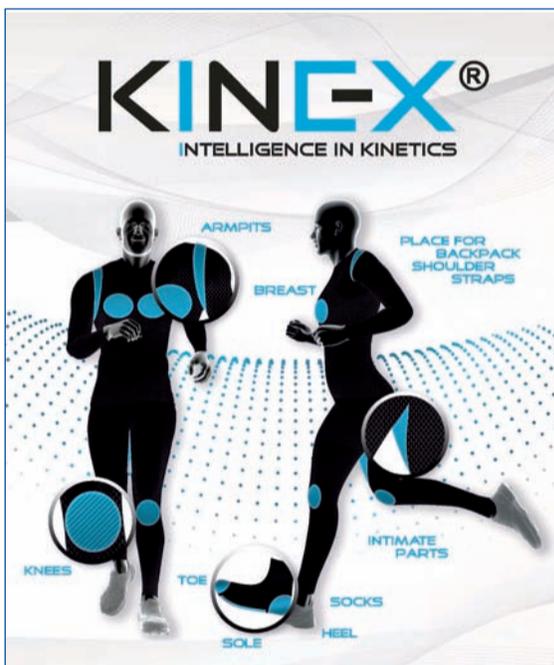
tion meeting high demands and satisfying all requirements of our customers.

▲ Won't you let slip any speciality?

In co-operation with a significant French partner, we have developed a brand new grade of yarn named Kinex® that is to be presented at the exhibitions of Shanghai Inter-textile Apparel in China, Performance Days in Munich, and one of the biggest textile technical exhibitions, TechTextile in Frankfurt. Kinex® yarn features excellent utility properties for sports activities effectively using kinetic energy, as due to minimum coefficient of friction and abrasion, it ensures the protection of skin from swelling, redness and irritation. The yarn prevents high friction and heat formation, thus protecting critical parts of the body from harm in top sports performances. Together with several important partners and world brand owners, we want Kinex® yarn to bring significant comfort for sportsmen, military and governmental units and all other users, in particular, for fine children skin applications.

▲ Do you prepare some news in socks production?

Along with the new yarn, we introduce a hi-tech collection of socks with anti-pressure effect, Kinex® Socks, protecting feet at sports and everyday activities.



companies, Chemosvit Fibrochem joined the whole-European project of BIO4SELF in the production of biodegradable yarn for furniture, electronical and automotive industries based on polylactid (PLA) fibres.

In 2017, we plan to launch new manufacturing capacities to improve high-tenacity technical yarn and enlarge our product range of technical applications intended for ropes, strong bands, straps and architectural textiles. This year, we are investing in manufacturing capacities for textiles produc-

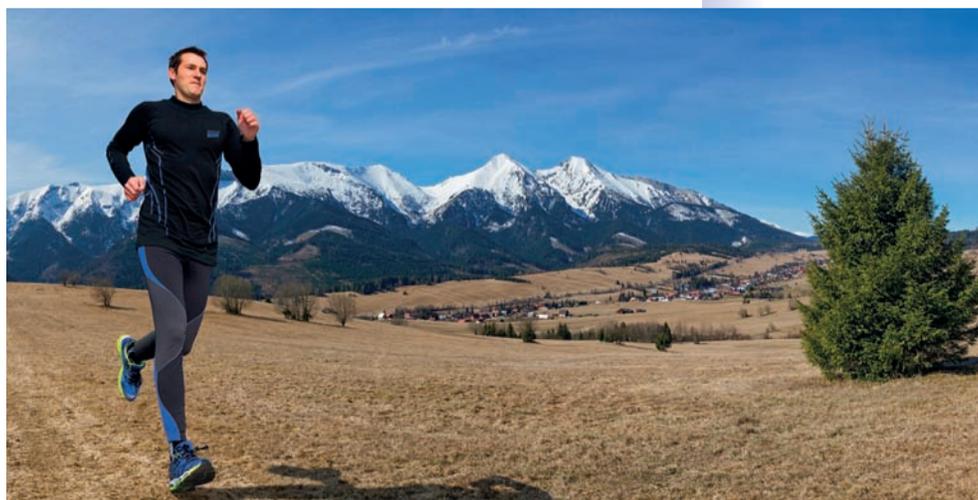


BIO4SELF Project

The main aim of BIO4SELF Project is to develop a bio-composite material with high tenacity and strength. Chemosvit Fibrochem has joined the project as a technological designer participating in the development and production of PLA fibre with high melting point and top values in tenacity and strength. Its task is to ensure industrial spinning and drawing of this fibre.

Certificates defended

Yarns of Prolen®, Prolen® Siltex, Prolen® Bodyfresh with antimicrobial finish, accepted by Oeko-Tex®, in plain, texturized, unbleached and mass-dyed finishes, meeting humanecological conditions of Oeko-tex® Standard 100 of products for children of up to 3 years of age, were certified in the most demanding class I. The certificate was awarded in 2006 by an Austrian institute, Österreichisches Textil-Forschungsinstitut (OTI) in Vienna, and has successfully passed several demanding re-audits.





GLOBAL 8D PROJECT WE KEEP IMPROVING CONTINUOUSLY

Following the respective requirements of ISO 9000, ISO 14000, OHSAS 18000 a ISO 22000, Chemosvit Folie, a.s. decided to launch a project named: „Solving of problems using quality tools.“

We have focused on the following goals:

■ to search for system solutions of problems to the rules and principles of quality management, to detect root causes of problems, to adopt corrective measures, to review their effectivity and introduce permanent changes so as to minimize the number of internal non-conformities and complaints;

■ to secure continuous improvement of quality.

Modern quality tools were selected to solve repeated and critical problems. We have decided to apply the method of GLOBAL 8D and QRQC combined with modern technologies to analyse and solve problems, e.g. brainstorming method, and 5x method. Their application allows the use of quality tools like Pareto analysis and Ishikawa diagram.



The aim of G8D is to identify, correct and eliminate repeated problems. It is also useful to improve the product and manufacturing technique quality. It launches permanent corrective measures based on statistical problem analysis and focuses on the origin of problem and its root cause. In practice, it is being the preferred method in solving official passive complaints from the customers.

QRQC method (Quick Response Quality

Control) is the method of a quick response, and is a strong tool to solve problems in internal processes of the company.

The project also includes the preparation of 8D workflow to create software information support for G8D through complex electronic evidence.

The setting of quality management process in all shifts and all days of the week has necessitated the change of structure in quality and laboratory management, and the involvement of quality engineers from different productions having the best knowledge of individual manufacturing processes, professionally skilled and experienced. Their main task was to solve immediate problems at the time and place of occurrence, i.e. to perform permanent audit in the process of production – in printing, laminating and slitting departments. The heads are the owners of processes, or technologists responsible for adopting corrective measures and final solving of problems. Projects are being co-ordinated by quality managers and supervisors.

The result of G8D analysis is Report 8D requested by many customers. The project implementation is our contribution to improving quality of our services for customers.



CHEDOS–marked trucks have been crossing Europe for over 23 years. The company offers services related to customs clearance, forwarding and servicing of FIAT cars.

“Satisfaction of our clients, innovation and ethics are among the main focuses of the company, aiming at keeping an important position in transportation market,” said Michal Dida, Director of Chemosvit Chedos.



● Which of the current trends do you find most important?

That the company main-

tains the trend of investing into the road freight transport vehicles meeting the

most stringent ecological criteria conforming to top EURO 6 emission standard. These vehicles, the trucks, are the most ecological transportation means with diesel-type fuel allowed to

working environment, invest in protection means and stress cleanliness at all workplaces including trucks and lorries that must be immediately cleaned as necessary, and stand ready

the European legislation. We must observe and implement the rules. An environmentally-friendly approach is a corner stone of our philosophy, which is also confirmed by the awarded certificate of Quality Management System to ISO 9001 in waste disposal and quality management system to our company.



DRIVING THE ROADS OF EUROPE

drive the European roads. Among the trends is also investing in skilled personnel, improving qualification and responding to new market challenges.

● The latest trends also include environmental protection, healthy life style and care of employees...

Our employees work in modern offices and technologically up-to-date premises. We mind the safety and hygiene of the

for the next use. In every new investment we mind simplicity and safety of work of drivers, mechanists and other staff of our company. Each new investment also means improvements for our employees.

● What measures supporting the philosophy of ecologically-friendly company did you adopt?

Road freight transportation is strictly controlled by

● What are your main objectives for the time to come?

We want to replace lower-emission trucks and trailers with EURO6 standard vehicles so as to simplify the work of truck drivers. In all investment we mind, in particular, ecological point of view and the care for employees.

STROJCHEM PACKAGING MACHINES WITH A 50-YEAR TRADITION

Machinery Division

“Our aim is to get integrated as a supplier of assembly units of high added value in heavy machinery. A positive synergy effect of machinery units in combination with heavy technologies has become obvious,” said Marián Kuruc, Director of Strojchem, a.s.



“We want to get a stronger position in rotary parts market having lately acquired a grinding machine, a lathe, a wheel balancing machine, and invested in the education of people operating these machines.

Taking into account specific requirements of our clients, we plan to complete our machinery fleet with a working machine that would allow the production of higher value-added parts, and bring better technological safety to production, in line with the requested quality and standards.

In the future, we want to develop CNC programs using CAM products, and to establish an electronic archive of technical documentation so as to positively affect production preparation, give better outputs for calculations and prices, etc.

Our task for the future is to educate people in the field of using technologies effectively, and to have them prepared to respond to new challenges from our customers, in particular in CAD, CAM, CNC programming, free cutting parameters, etc.”

Chempack, a packaging machines division

Taking into account experience of the last few years and requirements of clients, the company has completed its range of offered packaging machines and lines with the following:

- heat-shrink film packaging
- stepping packaging machine with reverse unwind
- vertical manual and semi-manual packaging machines fitted with a weighing system for the starting businesses and small bakery plants.

Among new structure solutions to innovate our product range is the following:

- packaging machine with reverse unwind, and a box motion with cross seal

- packaging machine for packing in protective atmosphere – hermetic seals
- packaging machine for packing into the bags
- robotization in handling specific products
- back-feeding of products



Our packaging machine BH-11 with four drives, fully computer controlled, developed by our own construction department, is about to become a flag ship of our company. BH-011 is equipped with a vertical base plate allowing simpler setting of basic nodes, cleaning and operating its modular parts. We can offer our machines together with packaging films of our sister company Chemosvit Folie.

- welding school and special weldings application
- completing offered service range with basic machine diagnostics, vibrodiagnostics and measurement of leakages in pressurized air distribution systems
- electro solutions, MaR, including SW Siemens and EPLAN designing

Foundry division

Our endeavour is to develop our foundry in such a way as to fulfil demands of our clients for cast products and their machining in machinery shops.

We want to focus on heavy castings (grey, ductile iron and cast steel) and manual working for specific customers in automotive, power and mining industries, in weights ranging from 150 to 3000 kg. Our primary duty



Servicing and assembly works

Having regard to growing pressure on assembly works, we plan to focus on value-added products, or activities subject to certification or accreditation, in particular:

- complex structure solution focusing on mechatronics aiming at delivering services related to the modernization of machinery, conveyers, feeders, etc.

and responsibility is to meet all obligations resulting from environmental legislation of EU standards by implementing the system of environmental protection to ISO 14001:2004. In the near future, we would like to obtain certificate of OHSAS 17001:2007 in occupational safety and health protection. Hereby, we would like to implement principles of safe work and health protection taking into account heavy operations like cast steel, grey and ductile iron production and machining of castings.



RECYCLING

HAS SIGNIFICANTLY REDUCED WASTE DUMPING VOLUMES

Product range of recycled plastics is broad and involves different grades of polyethylene, polypropylene and polyamide resins. In addition to this, the company introduced to the market injected technical moulds, e.g. packing units, cores, parts of steel and aluminium products, etc. "Lately, we have enlarged our product range with recycled plastics differing in polymer grades, MFI, colourfulness and fillers," said Július Frkáň, the Head of Division. These days, the division produces 20 regranulate and 3 agglomerate grades. After merging with BOPP films, the volume of recycled produce is expected to grow to 5000 tonnes in 2017.

"In the field of injection-moulded products, we invested in the latest fully electrified injection moulding press and a new injection moulding form for the production of cores. The press was put into operation in January 2017," said Director. Technological equipment for processing recycled plastics and injection-moulded products will result in increasing production volume and extending product range of recycled and injection-moulded plastics.

Business in large injection-moulded parts, e.g. structurally expanded boards and wall elements used for the production of containers, septic tanks, water-metering shafts and waste water treatment plants will continue after the transformation, and the next en-

In November 2016, the company Chemosvit Environchem, a.s., involved in waste management, namely in recycling plastic waste by injection moulding and producing wooden packaging, was transformed into TARAFAN, s.r.o. All activities of the original company remained with the division named "Packaging production and waste processing". TATRAFAN, s.r.o. also produces basic BOPP and tobacco films.

richment of product range is being prepared. This includes the

growing level of water. Their low weight and fast assembly on any

of structurally expanded plastic board made of recycled



production of mobile expanded flood-prevention boards currently prepared within a

surface, no matter if asphalt, gravel or mud, do not assume any special site preparation.

polypropylene in 1 x 1 m dimension and 8 cm wall thickness. Wall board is smooth on one side and fluted on the other. Its weight is 21 kg. After the flood threat ends, the boards get simply disassembled and put into transportation container.



research project with the Institute of Manufacturing Systems and Konštrukta Trenčín. These are envisaged to be used as a protection element from a slowly

Two men are enough to build a wall in a relatively short time. Mobile flood-prevention boards are produced of plastic and metal parts with the main element

In addition to processing plastic waste, the division is actively working on reducing dumping volume from all waste. "We use mixed waste as an alternative fuel for cement works, and polyolephines for the production of oil by pyrolysis," said J. Frkáň. Waste dumping has gradually decreased; in 2016 it was lower by 62 tonnes than in 2015. And that is, for sure, an asset for the environment.

LAMINATION CAPACITY GOT INCREASED

Recently, Chemosvit Folie put into operation a new laminating machine COMEXI NEXUS DUAL HP SSD. It is expected to produce laminates with an exact cold-seal deposition for chocolate packaging using flow-pack system (an alternative to aluminium film and paper). The machine can laminate films with the width of 1330 mm and in thicknesses ranging from 6 to 200 micrometres.

NEW TRUCKS AND SEMITRAILERS

Transportation company Chemosvit Chedos, s.r.o. has completed its vehicle fleet with new trucks and semitrailers. The fleet was enriched with 3 VOLVO and 5 KRONE trucks. New trucks have a new tarpaulin design. From now on, they will be crossing the roads of Europe under the mark of CHEDOS, with tarpaulin in a different colour design: the colour of a truck will be in red and CHEDOS sign in grey.

RECYKLOGROUP

Chemosvit Folie is among the founders of Recyklogroup, a.s., a company authorized by the Ministry of Environment of the Slovak Republic to be responsible for packaging producers. Its task is to secure the system of assorted waste collection and its funding within law-prescribed collecting, sorting and recycling limits in contractually-bound towns and municipalities.

POWERS

LAUNCHING THE MOST UP-TO-DATE TECHNOLOGIES

Chemosvit Energochem, a.s. takes a special position among the environmentally-focused companies under the High Taras. From its founding in 1934, it has undergone many significant changes in using the basic fuel: they switched from mazut, then lignite, to natural oil gas used now. In 1996, a new company Chemosvit Energochem was founded that made a huge leap forward having built a modern heating plant with a combined, heat, electricity and chill production, a so-called trigeneration, which is among the top power productions in Europe. Its business range also includes supporting services for the Slovak electricity and transmission grid in the field of secondary output regulation.

The new heating plant stands for a progressive technology with efficiency rate of min. 10% primary energy savings (fuel energy) compared to a separate electricity and heat production in separate condensa-



pany is to produce and supply all kinds of power at maximum efficiency, ecologically and economically. Taking into account the gradual depletion of natural re-



7.5 MW of central absorption chill source ranks the company among the biggest chill producers in Europe.

Chemosvit Energochem has drafted a long-term plan of refurbishment and modernization of local electric-power distribution grid, heat supplies, technological



and drink water, sewage and drainage system, neutralization waste water treatment plant, and took measures to increase power effectiveness while reducing environmental loading. Well, the place for improvement and progress here is undoubted.

tion-type power plants. "We are fully aware of our social responsibility towards the employees, and an ambient environment," said Peter Ferjanček, the company director. "In the field of environmental protection, we have reduced CO₂ loading 7-times, and significantly cut down nitrogen oxides released into the air, by having launched the most up-to-date technologies. From 2005, our production is totally free of sulphur oxides, solid particles and water pollutants."

The main credo of the com-

sources and growing prices, the world started the way of Best Available Technologies, which is also among the strategic intentions of Chemosvit Energochem.

Within modernization, the company has enlarged the range of supplied energies with chill, in form of so-called chill water for technological purposes, and air conditioning of manufacturing premises. It is being supplied by a central supply line of ca 60 km length directly to the off-take place through 14 compact offtake stations. The installed capacity of

"BEST ENTERPRISE" AWARD

Chemosvit Energochem, a.s. has made a giant leap forward, having built a heating plant with a combined electricity, heat and chill production, a so-called trigeneration, that is among the unique projects in Europe. For its excellent business reputation, effective management and a continuous growth, it was ranked among TOP companies in Europe, and was awarded the prestigious prize of Best Enterprise in the production and supplies of powers. EBA Association has been rewarding the best national companies within European business from 2000, and among the main evaluation criteria is innovation, attractiveness of realized investment, hi-tech, quality and professionalism of personnel, applying modern methods of management, position of the enterprise in home markets, business reputation, competitive power, marketing strategy and image in the region.



FITTING FOR A CONFERENCE FITTING FOR A FAMILY HOLIDAY



Hotel Spolcentrum

Spolcentrum hotel has suitable rooms for the occasions of this kind. In addition to lounges and training centres for 20, 30 or 40 people (a terrace accessible from the biggest room), the attendants may avail themselves of cinema-restaurant with a satellite video projection. The large saloon features conference equipment, i.e. two large-size projection screens, projectors and high quality sound distribution system. These rooms are also suitable for social events – balls, graduation celebrations, wedding or family jubilees, etc.

Spolcentrum hotel has always been closely connected with the history of the town, as its architects, Vladimír Karfík and M. Drofa, were Bata's architects from Zlín. It was opened as "Spoločenský dom" in 1946, and it has always been a centre of all happenings in the small town of Svit under the High Tatras. The hotel was fully reconstructed and modernized after 2000. A modern, 3-star hotel with apartments, restaurants, a coffee-house and a social hall, lounges and a modern sports-relaxation centre with a tennis hall, bowling path, wellness and fitness centre was opened for the public. The wellness features different kinds of sauna (Finnish, steam, aromatic) and a cooling zone. A broad range of massages (classical, vacuum, body bank, lymph drainage, lava stones) will meet expectations of the most demanding guests. Wacuwel and solarium are a matter-of-course. After sports activities or relaxation, the guests can enjoy refreshment in a lobby bar.

A wide offer of meals and drinks is available in restaurant and coffee-house. The guests are waited on in comfortable premises of a cinema-restaurant featuring a large video-projection, bar and two lounges for private groups. The events like goose-feasts, Valentine's dinners, New Year's Eve celebrations, Sunday buffets with hotel special dishes, have been very popular with the public.

There are 40 spacious 2 or 3-room apartments in the hotel,

International conference of technologies, regular meetings of power engineers from all over Slovakia, trainings of young trade unionists, all-Slovakia meeting of iron founders, meeting with premier economists and other personalities – and many more events were already held in the conference room of Spolcentrum hotel in Svit under the High Tatras.



www.spolcentrum.sk
Recepcia: +421 52 715 2003,
e-mail:
recepcia@spolcentrum.sk

some of them equipped with a balcony or a terrace. Each features its own eating nook, a fridge, a bathroom with a tub, TV with satellite, and Internet connection. On the third floor, the guests can avail themselves of a clubroom with a large TV screen and a billiard. There is a large parking lot near the hotel for over 100 cars.

Spolcentrum hotel has a very favourable position in the centre of the region under the High Tatras, and is a starting point for many hiking trips to the Tatras, Slovak paradise or Aquapark in Poprad, and other attractive destinations. The towns of Poprad and Svit are connected via a cycling path.

Svit is found ca 8 km from Poprad, and 12 km from Starý Smokovec. Poprad airport and D1 highway feeder are 4 km away.



Lopušná Dolina Hotel

Lopušná valley can be found about 6 km from Svit, surrounded by a thick forest. In addition to beautiful nature and clean air, there is a ski centre for winter enthusiasts, only a few metres far from the hotel. The hotel was completely reconstructed and offers accommodation in 14 new rooms, and one family apartment. The capacity is 37 beds and 10 extra beds. There are several tourist cabins with fireplaces near the hotel, and two

<http://hotellopusnadolina.eu>
hotellopusnadolina@chemosvit.sk
+421 52 715 20 03,
+421 905 033 871

tennis courts. Lopušná dolina hotel has become a much sought-after place not only for the tourists, but also those searching for a place to organize a family or a corporate event.

In summer, it is a favourable starting point for many attractive hiking trips to the High and Low Tatras, Kozie chrbty mountains, a near-by Spiš castle, or an architecmonic pearl of Levoča town. Last but not least, it's a paradise for mushroom-pickers.

INDUSTRIAL AREA OF CHEMOSVIT OFFERS FAVOURABLE PREMISES FOR MANUFACTURERS

Total area of Chemosvit in Svit occupies 450 000 sqm. It is a seat of companies involved in the production and converting of plastic packaging films, production of polypropylene fibres, transportation services, machinery production, plastics recycling, and generation and supplies of powers. In addition to the companies of the Chemosvit and Finchem Group, it is also being employed by external companies, which makes the area an important industrial park. Peter Repčík, Director of Chemosvit, a.s. supplied us with more information of the site.



air, freight and personal elevators, etc. which we can adapt to the needs of potential lessees.

Of course, there are some limitations. Our premises cannot be leased to businesses whose operation would negatively influence our core productions (e.g. food film), or to those polluting air, water, or producing dangerous waste. The Chemosvit area neighbours with the river of Poprad and the mountain range of Baba, which are in the fourth level of natural protection.

• What particular premises are available in Svit?

External business companies can lease here office rooms, manufacturing buildings or storage sites within the Chemosvit area. Free land available for business use takes ca 32 ths. sqm. Other facilities and lands are also offered outside the company area, in the town of Svit.

power supplies, guard duty, fire protection, waste processing, care for property, operative maintenance, assembly of machine-technological units, IT services, accounting, human resources management, ed-



ucation, catering and others that we can provide under more favourable conditions than any other entity outside our area.

• There are several companies currently running their businesses within the company area. Which are they?

These are the companies primarily involved in production, building and trading business, e.g. Provent, or Thermo Line, engaged in the production of air conditioning systems. The company CWS-boco, Slovakia, offers complete services in the field of hygiene devices. From March 2016, a Danish company Nissens producing cooling equipment has been headquartered within our area. A German company Pilz Slovakia offering components for automation, has a seat in our administration building. To name a few out of several building companies seated within the Chemosvit area, it's Steelmat, Slovakia, PSP Bau, or M-L-M. Cleaning services are in the competence of Chemeko, and waste management of Refil.

• Do the businesses make use of them?

Yes, of course, they do. They make use namely of the company guard duty, security and technical services, fire protection, handling equipment, railway siding, maintenance of machine-technological units, assembly works, IT services and some other tailor made provisions.

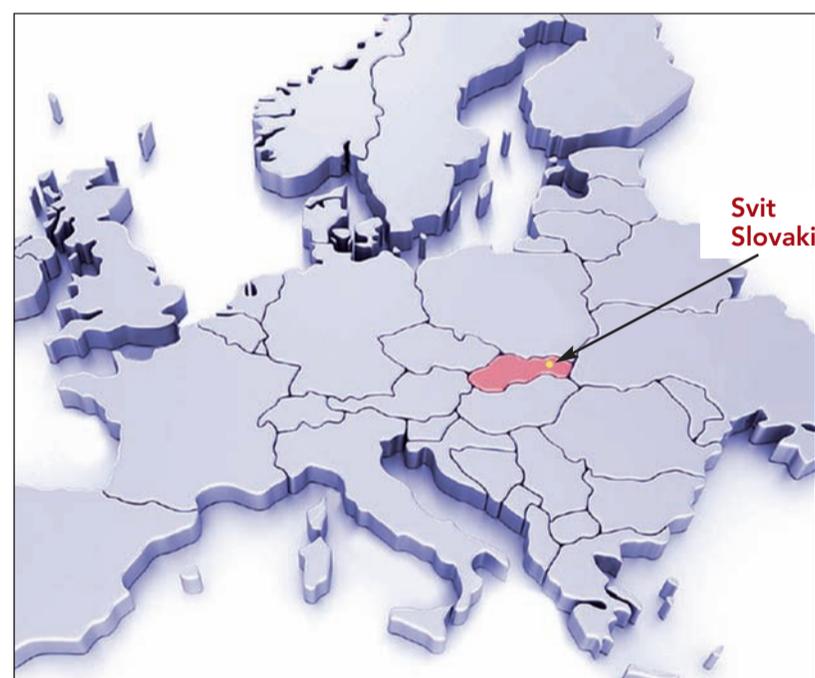
• Among the advantages of the industrial park is, for sure, its favourable location...

Yes, it is. We have a railway siding to our site, there is a motorway connection to E18, and a highway approach in a close vicinity. And

Poprad airport within a short reach.

• What business is preferred to be run in the premises offered?

• How can potential businessmen learn about availability



of our industrial area?

All necessary information can be found on our web side.

All in all, there are 38 companies leasing premises from Chemosvit within the area. Other service providers and shops lease their premises from our Spolcentrum hotel.

• Did you prepare sites for these companies?

Of course, if a party concerned demands some modifications, we make them to its requirements.

• What benefits are offered to potential businessmen in the Chemosvit area?

Potential businessmen can use complex services offered within the Chemosvit and Finchem Group, e.g.





CHEMOSVIT FOUNDATION

A four-leaf clover symbolizes happiness and unity, therefore it's not a coincidence that it is a central motto for the logo of the Chemosvit Foundation. Why, its mission is based on solidarity, empathy and fellowship of employees of 12 companies of the Chemosvit and Finchem Group who established this charity organization back in 2003.



HAS BEEN HELPING IN THE REGION

The Chemosvit Foundation has been helping already for fourteen years. During this time, it has gained a strong position among the entities supporting health and social centres, cultural and sports facilities and education institutions in Svit and the nearby region. The companies of the Chemosvit and Finchem Group help employees and their family members in need. From its founding in 2003, 1268 requests for assistance were received, out of which, 755 were accommodated. Most of the requests were approved in the last two years. In 14 years, the Foundation allocated 294 ths. Eur, out of which almost a quarter was paid to current and former employees (in form of social assistance, children camp contributions, support of sports, tuition fees for the handicapped children, arts activities, and others).

Other financial means were used to assist

organizations in Svit, elementary schools or kindergartens, sports clubs, artistic ensembles and associations, unions, senior centres, etc. Almost a half of the funds was used for social assistance.

Last year was not an exception, either. The Foundation received 175 requests, out of which 148 were accommodated. The applicants received almost 32 ths. Eur, and the biggest sum was paid again in form of social assistance for the employees.

The source of income of the Foundation is 2% of tax received from the income of natural persons, the employees, 2% from the founders of the Foundation and other legal entities (which represents 64% of the whole income) and other incomes of the Foundation, e.g. a traditional Christmas collection from employees, etc.



Any natural or legal person can contribute to the account of the Foundation either by a donation, or by a 2% tax deduction. The account No. in Tatrabanka is: IBAN SK66 1100 0000 0026 2238 1900 with the name of „Nadácia Chemosvit“.



LONG TRADITION OF BLOOD DONATION

Voluntary blood donors awarded by Jansky and Kňazovický memorial plaquettes for multiple blood donations, are appreciated every year by Chemosvit and Finchem. This humane activity has a long tradition in Chemosvit, as the first mass blood donation of employees took place as early as in 1950. These days, there are two awardees of Kňazovický plaque for 100 donations among the company employees: Miroslav Gorlický and Miroslav Čuba.



COMPANY FOR YOU – WE LIVE WITH YOU

Among interesting benefits for the employees of the Chemosvit and Finchem Group is the activity named: "Company for you – we live with you." It includes mutual relations of service providers and goods producers within and outside the region for the current and former employees who are retired, based on an employee's or a pension's card. The benefit includes discounts in per cent for the services and goods offered in the region, e.g. aqua parks, laundry, repair shops, optics, hair dressers, groceries, butcheries, cyclist shops, various consultancy services, etc. Number of providers is increasing.