Construction and Environment Industry in Hungary





Hungarian Export Promotion Agency

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MINISTRY OF Foreign Affairs and Trade of Hungary

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Construction Industry





Construction Industry

Hungarians are proud of their creativity. They are happy to talk at length about the range of innovations associated with Hungarian scientists and inventors. The same applies to the results achieved by the construction industry. Hungarian specialist, Béla Gerster, is renowned for his role in constructing the Corinth Canal, which was completed in 1893 and was the longest of any such structure at the time. Translucent concrete and glass concrete have gained extensive international recognition among modern-day innovations from the construction industry, yet reusable plastic shuttering is also a Hungarian invention.

Currently, the construction industry is one of the most

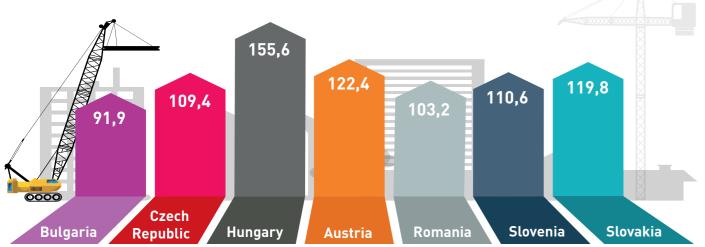
dynamically expanding segments in the Hungarian economy enjoying extensive government support, helping construction companies to expand their capacities and accelerate technological advances by facilitating new machinery purchases. The development trajectory of the Hungarian construction industry can be considered outstanding, even on a European level. In the past three years, the sector has increased its annual performance by more than 20%, with only a minimal increase in headcount due to the increased preference for automation and digitalisation.

The construction industry now plays an essential role in the export sector, with an increasing number of

Airport (SkyCourt) are also internationally recognised, Hungarian companies gaining popularity. Several of these companies have acquired factories or real estate as well as the Groupama Arena, which was named development companies (mainly in Poland), constructed 'The World's Best Newly-Built Stadium'. An increasing apartment complexes, shopping centres, designed number of international exhibitions and conferences (e.g. and built industrial and other special facilities, as the International Conference on Sustainability in Energy well as water treatment systems. The local sector's and Buildings) choose Hungary as the location for their strengths are the design, construction, development of events, underlining the country's importance and key role network infrastructures and recycling of construction in sharing professional knowledge on an international waste. Several historic and listed buildings in Hungary level and abroad demonstrate the sector's contribution to enriching the world's architectural heritage. Hungarian Using their significant R&D as well as professional training construction and civil engineering firms enjoy extensive background, the Hungarian construction companies offer international recognition, undertaking many outstanding innovative and future-oriented in-house solutions that guality projects from Germany to the Far East.

Hungary has a long-standing tradition in manufacturing construction products (e.g. wood products by Falco, plastic products by Graboplast, tiles by Zalakerámia). Companies specialising in roofing and interior design have a considerable, decades-long reputation and complete large volumes of international orders. To fulfil the high-level expectations of the sector, the Hungarian companies launched several innovation projects related to energy efficiency and alternative energy production which resulted in new insulation materials (e.g. glass foam and heated glass structures). As Hungary is rich in thermal water resources, it has several companies that specialise in high-quality sanitary appliances that can later be used in the spa industry.

The construction industry accounted for 5.4% of Hungary's total GDP in 2019, which means that the completed construction projects were worth EUR 12.7 billion. The Hungarian construction industry excels in quantity and quality, with an increasing number of Hungarian architectural plans and solutions gaining increased recognition in international competitions and exhibitions over the past few years. Europe's most extensive cultural and urban development programme is the Liget Budapest Project, including the House of Hungarian Music, which received international recognition and several prestigious awards. The Laposa Winery as well as the new passenger hall at Budapest



INCREASE IN CONSTRUCTION OUTPUT IN THE CEE REGION 2019 (%)

Using their significant R&D as well as professional training background, the Hungarian construction companies offer innovative and future-oriented in-house solutions that provide answers to the century's infrastructure and urban development sector's emerging technical, environmental and social challenges (e.g. smart mobility systems for public transport, intelligent parking systems - 'Cityzen', reusable plastic shutters).

As a result of the construction industry's outstanding development, over the past few years, Hungarian companies have been offering sustainable, modern, complex and - concurrently - sustainable systems. They have therefore also met their foreign partners' strict requirements in terms of environmental protection by using environmentally friendly or smart building materials, as well as implementing thermal insulation solutions.



Source: Hungarian Central Statistical Office

CSIKÓS TERV ARCHITECT LTD.

Csikós Terv Architect Ltd. offers comprehensive engineering solutions and development tracking from design sketches to the final products. Csikós Mihály, the founder and lead designer of the company, has almost 40 years' design experience and hundreds of projects completed in Hungary and many countries abroad. The company has created 3D visualisations and animations related to each project over the last 20 years. Csikós Terv Ltd. strives for high standards and top quality.

www.csikos.hu info@csikos.hu +36 20 923 09 38 H-2085 Pilisvörösvár, Zrínyi utca 23/A

PRODUCTS & SERVICES

Csikós Terv Ltd. provides comprehensive architectural services, ranging from sketches to complete plans. The company offers services in many different categories, such as houses, luxury homes, hotels, restaurants, shopping centres, public institutions or even ships.

The company focuses on premium quality services to fully meet client expectations; it always embraces challenges and often participates in unconventional projects.









ADVANTAGES

One of the company's most definitive advantages is its extensive experience in global projects (e.g. in Germany, France, Vietnam, Egypt and Saudi Arabia), with several returning customers. Another great advantage of the company is its experience in 3D visualisation.

REFERENCES

Hotel Four Points (by Sheraton): The company designed the interior of the Hotel Four Points by Sheraton in Kecskemét, Hungary's only Sheraton Hotel.

Shopping centres in Saudi Arabia: Following negotiations initiated at the Big 5 Saudi Exhibition, the company prepared the interior implementation plans and exterior design plans for four shopping centres in the Kingdom of Saudi Arabia.

Avalon Resort & Spa: The company prepared the designs and visualisations for one of the most popular resorts in Miskolctapolca, Hungary, which is located in the forest and offers outstanding recreational facilities.

PRIMARY TARGET MARKETS

Finland / China / Vietnam / Russia

KÖZTI CPLC.

KÖZTI Architects & Engineers, the architectural business with the longest traditions in Hungary, was founded in 1949. Since then, more than three thousand people have worked for the company.

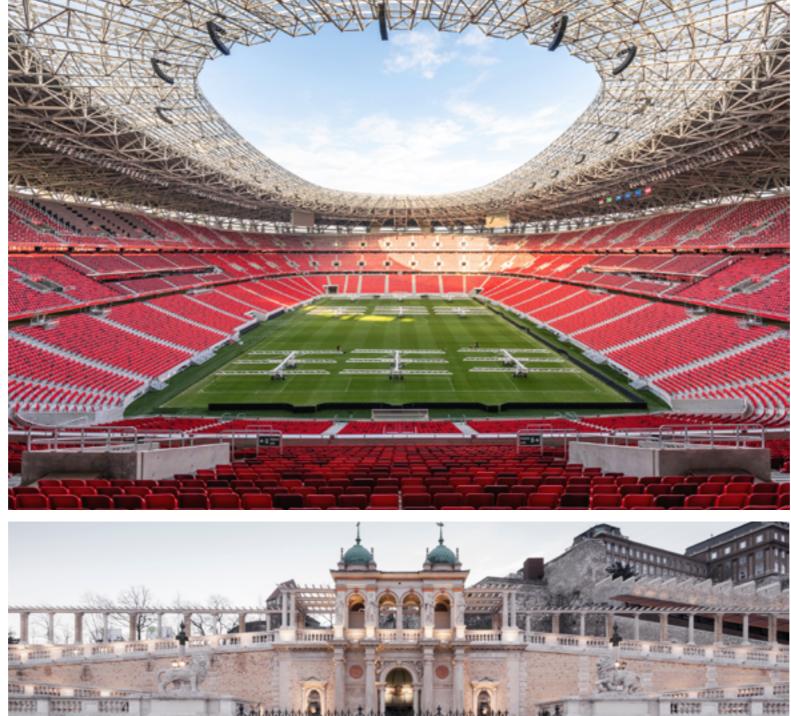
The company operates five large architect studios supported by specialist studios, with structural, electrical, building and engineering departments.

www.kozti.hu kozti@kozti.hu +36 1 4872 600 H-1023 Budapest, Lublói utca 2.

PRODUCTS & SERVICES

The company provides architectural and engineering services for the complex design of public buildings (hospitals, hotels, theatres, sports halls, stadiums, reconstructions, office buildings, airports, schools, universities, shopping centres), residential buildings and industrial buildings, from the concept design to the construction drawings.





Architecture



ADVANTAGES

The success of KÖZTI cPLC lies in the expertise and dedication of its employees, among them internationally recognised experts with decades of experience and ambitious young architects. The company ensures that the customers' visions are realised in a professional, energy-efficient and economical way by using the most innovative architectural solutions of the 21st century.

REFERENCES

Puskás Stadium National Athletic Centre, Budapest, Hungary Total project value: EUR 455,000,000

Reconstruction of Castle Garden Bazaar and Buda Castle and neighbourhood public transport development Várgondnokság Nonprofit Ltd., Budapest, Hungary; Local Government, District I., Budapest, Hungary Total project value: EUR 42,000,000

GTC White House office building GTC White House Ltd., Budapest, Hungary Total project value: EUR 31,000,000

PRIMARY TARGET MARKETS

China / India / Kazakhstan / South Korea / Saudi Arabia

POKA3D LTD.

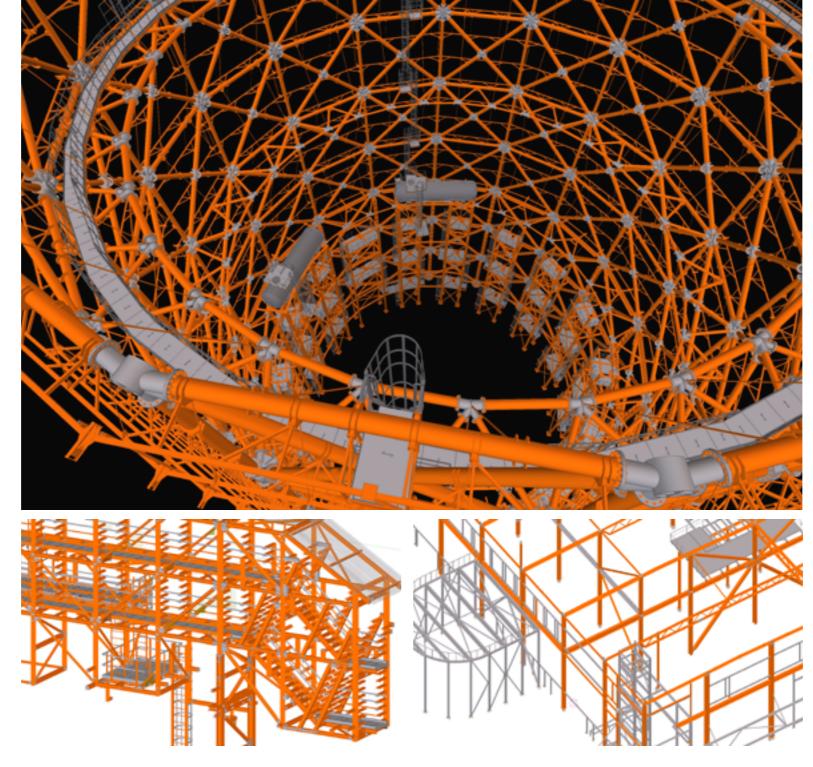
POKA3D is a Hungarian civil engineering company providing specialised engineering services for structural steel and RC projects in the areas of Industrial and Commercial Projects, Power Plants, Oil and Gas, Offshore and Transportation. In two decades of providing engineering services - founded in 1998 by Gabor Poka - Poka3D has completed more than 4,000 projects in over 35 countries. Its projects vary in scope and industry, demonstrating its steel and RC calculation and design, site engineering, mechanical engineering and power plant engineering skills. Poka3D is certified under ISO 9001 Quality Management System standards.

www.poka3d.com poka@poka3d.com +36 30 200 2245 H-1211 Budapest, Varrógépgyár utca 8-10.

PRODUCTS & SERVICES

Poka3D has designed significant projects in almost every area of engineering, from power plants and high-voltage towers to lattice steel bridges, dams and roller coaster equipment.

Poka3D provides engineering services in the fields of industrial, offshore, oil and gas and commercial engineering, including structural calculation, structural steel and joint calculation, structural detailing and design, 3D modelling of steel structures using TEKLA, strength analysis, reinforced concrete design and detail (in-situ and pre-cast) as well as mechanical engineering.





ADVANTAGES

In several countries, the proficiency and extensive experience of its engineers allow Poka3D to execute any civil engineering project of any size, from calculations to details. The scope of services will be adapted to the given project's specific needs.

Its engineers are known for their creative problemsolving skills and overcoming professional challenges in various industrial sectors.

Poka3D has thorough knowledge and numerous licences for various software, e.g. Tekla Structures, AutoCAD, Axis, Staad-Pro, Dlubal, Robot, IDEA, Solid Edge and Inventor.

REFERENCES

Russia: Cooling tower in Sakhalin, Enexio (GEA-EGI), static analysis, Tekla pipe support detail modelling, oil industry, structural calculation and TEKLA 3D design

Scandinavia: Commercial steel building, structural calculation and TEKLA 3D design

PRIMARY TARGET MARKETS

Germany / Denmark / Sweden / The Netherlands / Belgium

SINGER DESIGN LTD.

Singer Design's core team consists of architects and designers. Its common ambition - 'creating charisma by design' - results from more than a decade's mutual self-inspiration and a design philosophy tested by observations and experiences. It is the company's way of thinking and its unique workflow that shapes the way the core team interacts and leads every project. Singer Design Ltd. progressively extends its team to participate in international projects. Therefore, the company works in partnerships to provide professionalism, trustworthy consultancy, local experience and capacities.

www.singerdesign.eu adam@singerdesign.eu +36 70 945 7594 H-1137 Budapest, Radnóti Miklós utca 2., 5. emelet

PRODUCTS & SERVICES

Development consulting includes conceptual, operational and feasibility consulting and advice.

Value mapping swot research and analysis of the human-, environmental/process, and market features of the location

Design briefing consists of proposing a project theme (purpose), exploitable theme-communicating services and overall design specifications.

Overall service and brand design involves naming, brand identity, staff uniform, F&B experience, equipment and accessory design, as well as sound and scent concept and artwork curation, among others.



Architectural full service comprises master planning, landscape, architectural, interior and furniture design, as well as general engineering.

Operational experience design covers workflow specifications.

Construction site and operational supervision includes control of design criteria.



SINGER Design.

ADVANTAGES

Singer Design has built its design strategy method on the need for successful developments: to create superior development profitability via sentimental decision-making and loyalty on behalf of the customer.

Local SWOT-based identity creation responds to problems and enhances the site's strength in overcoming any competition by shaping the services and design of the property development.

REFERENCES

Hungary:

Hotel Grand, 10.657m2 building area, 101 rooms, ~30M EUR Hotel Baron, 12.320m2 building area, 127 rooms, ~40M EUR Hotel Insider, 4917m2 building area, 82 rooms, ~14M EUR

PRIMARY TARGET MARKETS

UK / Russia / France / Germany / UAE

TIBA ARCHITECTS STUDIO LTD.

TIBA Architects Studio - established in 2005 - provides comprehensive architectural and engineering services. Aside from grand design ambitions, a professional management structure supports the business strategy in each of its projects. Creative and dynamic professionals with international professional experience bring success to projects ranging in scale and function.

Outside of Hungary, the company has designed and completed projects in several European countries, including the UK, the Netherlands, Germany, the Czech Republic and Cyprus. In addition to a sensitive response to design challenges, TIBA's strength lies in its professional approach, constructive problemsolving ability and personalised services.

www.tiba-studio.com studio@tiba-studio.com +36 1 808 9330 H-1118 Budapest, Bartoniek Géza lépcső 2.

PRODUCTS & SERVICES

Service design, architecture, interior design, urban design, master planning, design management, cost management, consultancy, graphic design, design supervision, feasibility analysis, structural engineering, electrical engineering, building services, design management, HVAC and plumbing, cooling, building control, telecommunication, security, fire protection, technology supply, construction engineering and landscape architecture.









ADVANTAGES

- Sustainable design using low-emission, energyefficient technologies & renewable energy
- Application of international qualification systems
- TIBA is also ready to provide all of its services in the BIM environment.

REFERENCES

Hungary: Váci Greens offices, gross floor area: 66,000 m²

Telekom and T-System HQ, Budapest, gross floor area: 130,000 $\ensuremath{\mathsf{m}}^2$

Paris Department Store, heritage refurbishment, gross floor area: 9,000 $\ensuremath{m^2}$

PRIMARY TARGET MARKETS

EU / USA / Japan / Cyprus / China / Canada

CÉH INC.

CÉH is one of the leading Hungarian engineering businesses in building and bridge design, with more than 30 years' experience. The company offers design and engineering services, project management and consultation. As outstanding engineering experts on the Hungarian design, building & development market, it strives to increase its international presence by establishing partnerships. With its engineering and development expertise, 'CÉH brings value and system to the world to build the future'.

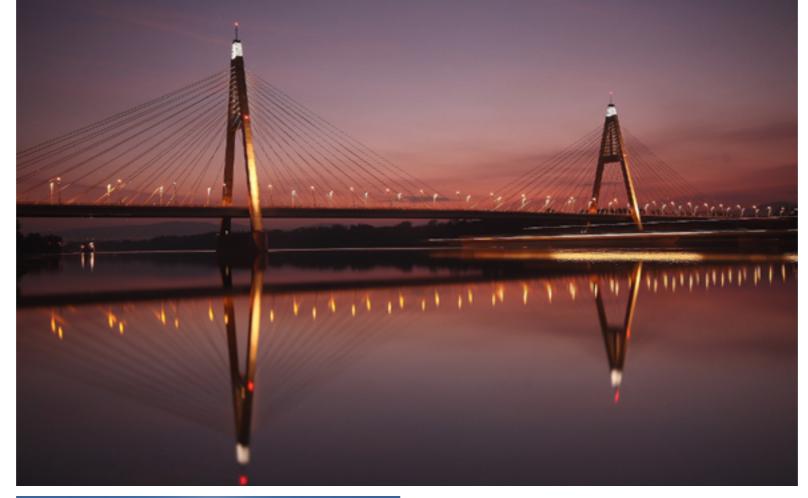
www.ceh.hu atoth@ceh.hu / markus.ferenc@ceh.hu +36 30 973 88 68 / +36 20 3877333 H-1112 Budapest, Dió utca 3-5.

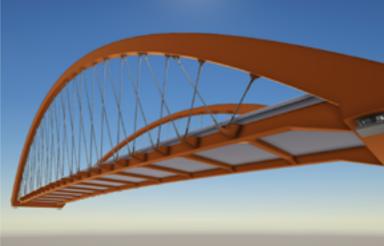
PRODUCTS & SERVICES

Its Building Design department undertakes full-scale, architectural, structural, HVAC and electrical design assignments.

End-to-end project management services are offered by consultants or in a package paired with a wide range of design and engineering services. Furthermore, the company offers clients outstanding professional knowledge and experience through its engineers, as well as state-of-the-art software, to provide excellent designs for new bridges or bridge reconstructions.

CÉH has completed multiple 3D-laser scanning surveys and modelling projects, including the scanning and modelling of the Hungarian State Opera House.





ADVANTAGES

For bridge design, CÉH acts as a general designer responsible for all engineering disciplines. It provides complex engineering solutions in building design with the aforementioned disciplines in-house (architectural, structural, mechanical and electrical design) and collaborates with long-term partners to deliver secondary and auxiliary services.

For the company's development projects, it strives to recognise and understand its clients' business angles and goals, allowing CÉH to utilise its wealth of economic, business and legal knowledge.



REFERENCES

Structural design of a pedestrian arch bridge spanning 55 metres with composite deck. Subcontractor of Sweco Infra & Rail. Vanhankirkonsilta (Hyvinkää, Finland), 2019-2020.

Apollo Tyres greenfield tyre factory (Gyöngyöshalász, Hungary), 175,000 m2. Full range of design and project management services, 2014-2017. Plant design created using 3D technology.

Hospital design: National Health Centre, Baku, Azerbaijan (2011-2014). 4,010 beds, intensive care units (ICU, NICU, PICU), 12 operating theatres, a special burns unit, an emergency and diagnostic unit, polyclinic (800 patients/day), three operating theatres for day surgery and the associated service units. SIZE: 100,000 m2. Client: MACAZ Construction MMC.

PRIMARY TARGET MARKETS

Finland / Norway / Sweden / Denmark / Germany

KÉSZ GROUP LTD.

KÉSZ Group is one of the largest construction companies in Hungary. Its successful international expansion, market independence and its sectorshaping role are what differentiate KÉSZ from its domestic competitors.

KÉSZ aims to become one of the leading companies in the CEE region, achieving international success as an independent Hungarian group of companies that, thanks to its background and spirit, represents its domestic values across borders.

www.kesz.hu/en kesz@kesz.hu +36 1 4766 500 / +36 1 4766 900 H-1095 Budapest, Mester utca 87.

PRODUCTS & SERVICES

KÉSZ's Engineering & Technologies Division includes the group's major engineering activities, from designing and executing buildings to manufacturing steel structures, vessels and reinforced concrete structures.

The company's diversity is proven not only by the broad range of references but also by its innovative solutions and continuous renewal capability.











ADVANTAGES

Thanks to its vast portfolio of services and resources, KÉSZ can effectively respond to the sector's emerging construction and economic needs, not only in Hungary but also in international markets.

All related tasks are carried out by the group's members, from design, implementation to operation.

KÉSZ's key advantage is its knowledge and its consistently delivered can-do attitude.

REFERENCES

Romania: general contractor of NYMPHAEA Thermal Spa & Wellness Centre

Ukraine: Jabil Ukraine, general contractor for the 2nd phase of a microelectronics manufacturing factory

Hungary: general contractor for Budapest Airport Pier B molo

Hungary: production and assembly of the steel roof for Puskás Arena

PRIMARY TARGET MARKETS

Germany / Russia / Ukraine / Serbia / Romania / Hungary

LES ILDZSAS CPLC.

As a Hungarian, family-owned company, Les Ildzsas's key target is to provide its customers with firstclass construction work on time and with maximum flexibility.

The company's core business is the construction of industrial buildings (halls, warehouses, factories, offices) in general construction, be it a greenfield investment, a renovation or an expansion project. Les Ildzsas works with its team of professionals on projects worldwide. Its management checks the condition of the work processes on-site daily; this is the guarantee for well-planned, thorough, quality work executed on time.

www.lesildzsas.hu info@lesildzsas.hu +36 30 942 5581 H-2120 Dunakeszi, Fóti út 45.

PRODUCTS & SERVICES

The company's activity covers the full implementation of industrial, commercial and residential projects, which could either be a complete renovation or a greenfield investment.

The company's services cover the renovation of buildings, from structural construction to professional work, to internal construction work, performing mechanical and electrical installation work. Les Ildzsas can also undertake the construction of external utilities, roads, as well as environmental and landscaping works.







ADVANTAGES

With its 30 years of experience in the construction business, Les Ildzsas's primary consideration is to provide its customers with first-class construction work with maximum flexibility yet strict compliance with deadlines. The company works with its highly qualified team of professionals on its projects throughout the country. Its management checks the condition of the work processes on-site on a daily basis, thus guaranteeing the well-planned, timely implementation and the quality undertaken.

REFERENCES

Hungary: Budapest ÁNY Security printing house, HUF 500 million

Hungary: MÁV-HÉV nationwide, hall renovation, construction, HUF 300 million HUF

Hungary: Nagyoroszi Knaus Tabbert hall construction, reconstruction renovations, HUF 400 million

Slovakia: heating and waterproofing municipal public buildings, HUF 200 million

PRIMARY TARGET MARKETS

Slovakia / Romania

WEINBERG 93 ÉPÍTO LTD.

Weinberg 93 Építő Ltd. is one of Hungary's leading innovative, structural steel manufacturing, installation and general contracting companies. Its market share has been growing steadily for 25 years, and the volume and complexity of the company's construction activities are also increasing year on year. Weinberg's main activity is the general construction and fabrication of steel structures. The company pays special attention to exploring the needs of its partners, providing a tailormade service and offering cost-effective solutions, from the design stage to the end of the warranty period.

www.weinberg.hu tornallyay.zoltan@weinberg.hu +36 30 982 1152 H-3950 Sárospatak, Malomkőgyár utca 7.

The company's 12,500 m² structural steel fabrication plant is equipped with state-of-the-art automated production lines, drilling and cutting machines, high-performance welding stations and surface treatment facilities. Its steel fabrication production capacity is up to 8,000 tons/year and Weinberg also has a 400 m² thin sheet bending plant. The company's 3,000 m² painting area is equipped with a 5-floor extraction system with active filtering modes for solvents, water-based paint systems and fire retardant coatings.

Laser cutting: Weinberg uses a Mazak Fabri Gear 400 III laser cutting machine, which not only cuts the profiles but also prepares the component joints for welding. It can cut pipes up to 410 mm in diameter, sections up to 300x300 mm in overall size, H beams, I beams, L sections, rolled or specially bent profiles with a 3D tilting laser cutting head. Machining: The company uses a Skoda FCW150 CNC controlled horizontal boring and milling machine, equipped with a stock of 60 tools. The maximum load capacity of the rotating bench is 25,000 kg, which also has a X, Y, Z, W axis direct measuring system. Working range: 13,000 mm x 3,000 mm x 1,900 mm.



PRODUCTS & SERVICES

As a general contractor, Weinberg undertakes the overall construction of steel, reinforced concrete buildings and halls, from their design through to turnkey delivery. The company's own construction equipment, permanent base of subcontractors and experienced construction managers on-site contribute to the smooth execution of the projects.





ADVANTAGES

Weinberg offers constructive cooperation to its customers right from the design phase. With its professional experience, the company supports and helps to realise their ideas. It provides a financial and professional guarantee for its work, from the design to the end of the warranty period. The facilities built by the company are cost-effective and economically sustainable. The outstanding guality of the steel structures Weinberg fabricates is justified by the high number of international - incl. overseas - orders. The company's references include stadiums, industrial facilities, office buildings, commercial projects and power plants. Weinberg has worked in Germany, Switzerland, Norway, Austria, the Benelux and the Czech Republic, among others. In addition to its horizontal and vertical drilling and milling machines, a MAZAK 3D laser work centre ensures the precise machining of large, individual parts.

REFERENCES

Enmech Hungary Ltd., production hall and warehouse for electronics manufacturing purposes - 10,500 $\,m^2$

Continental Automotive Hungary Ltd., factory expansion - 1 800 $\ensuremath{\mathsf{m}}^2$

PRIMARY TARGET MARKETS

Norway / Germany / Switzerland / Czech Republic / Benelux

FALCO CPLC.

Since the company's founding in 1939, FALCO has continued to grow, invest and develop its own activities in the wood industry. One of the key moments in FALCO's development was joining Kronospan in 2007: the company not only invested in FALCO, but also brought expertise and state of the art technology, modern organisation, new markets and an entirely new approach to the business. With a passion for wood, FALCO's team consistently brings forth innovative ideas for new products. The company's management is proud of its well-known principle: 'innovation is our tradition'.

www.falco-woodindustry.com office@falco-woodindustry.com +36 94 516 600 H-9700 Szombathely, Zanati út 26.

PRODUCTS & SERVICES

FALCO offers a wide range of options of innovate solutions when it comes to wood-based panels. Its product range includes a variety of particleboards, fibreboards, mirror and acrylic gloss boards, HDF boards, worktops, laminates, compact boards for interiors and exteriors, BETONYP® chipboard, OSB boards and other accessories.

The company's service portfolio includes the reliable LOVE EXPRESS stock programme, marketing tools for promotion, technical support, providing end users with insight into production and technology and optimised transportation to customer sites.







Materials



ADVANTAGES

FALCO's biggest advantage is the Kronospan background. Kronospan has specific key competitive advantages, such as market coverage with a dualbrand strategy, asset quality and vertical integration, a competitive cost base and a highly educated team of experts. FALCO places special emphasis on matching high technical and environmental standards in compliance with local legislation. The company pays special attention to low emissions, state-of-the-art processes and filter technology and focuses strongly on achieving a sustainable and circular economy because environmental responsibility plays a pivotal role in its operations.

REFERENCES

Trade partners: large furniture industry producers, DIYers, wholesalers, retailers and project companies

Projects: hotels, TV shows, fairs, shops and studios

4* ROMANA Beach Resort - rooms - Makarska, Croatia

Z-ROX - Office of The Year 2018 (Top 3) - Szombathely, Hungary

3* Super 8 hotel - rooms, public areas - Dresden, Germany

PRIMARY TARGET MARKETS

Italy / Poland / Germany / Austria / Czech Republic

GRABOPLAST FLOOR COVERING MANUFACTURERS LTD.

In over 110 years of existence, Graboplast Floor Covering Manufacturers Ltd. has become a leading specialist floor manufacturing company. The Hungarian-owned group of companies has four factories in three locations across Győr, Kecskemét and Tatabánya, with more than 90% of its income coming from export markets.

Graboplast products are made with the most advanced technology and are exported by the company, employing nearly 650 staff in more than 100 countries across five continents.

www.graboplast.com peter.herczig@graboplast.hu +36 96 506 154 H-9023 Győr, Fehérvári út 16/B

PRODUCTS & SERVICES

The Graboplast range of products has significantly changed over the last decade. The company concentrates on special flooring with great benefits developed inhouse, such as commercial, show, sports and transport flooring and the manufacturing of residential flooring.

The company's latest developments are LVT, SPC and homogeneous sheet vinyl within its wide selection of indoor vinyl and parquet floors.









ADVANTAGES

If there is one key to a more-than-110-year-old company, then it is adaptability, innovation and continuous work. Graboplast's experienced R&D team continually develops new products and innovative technical solutions. Its patented manufacturing processes allow Graboplast to create unique product features. Among the vinyl flooring manufacturers, the company was the first to switch to fully phthalate-free technology. Its floorings are 100% recyclable, and Graboplast can convert them into valuable raw materials incorporated into its flooring production.

REFERENCES

Las Vegas Lux show floor was used at the 2012 London Summer Olympics EUR 100,000

Graboplast was a TIER 1 transport flooring supplier for the 2014 Sochi Winter Olympics' bus supplier EUR 1,000,000

French Ministry of Defence (Hexagone Balard, Paris) EUR 70,000

PRIMARY TARGET MARKETS

Austria / Germany / Poland / Sweden / Denmark

MIXTURA LTD.

Mixtura Ltd., which produces and trades building materials, is located in the northern industrial zone of Veszprém, Hungary. The private business has been successful on the market for more than 25 years as a producer of building materials and a professional representative of technical products. Constant research, development activities and innovative potential ensure Mixtura's products' continuous renewal.

The company's competitiveness and steady market position help Mixtura establish an excellent QPR in its services. The main principle in its operation is order and thoroughness, which, paired with an appropriate professional technological and technical background, results in the company's stable growth. Mixtura always listens to its partners' unique needs, and thanks to its flexibility, strives to satisfy individual customer needs.

www.mixtura.hu/en mihalyi.balazs@mixtura.hu +36 20 365 8101 H-8200 Veszprém, Házgyári út 14.

PRODUCTS & SERVICES

Mixtura Ltd.'s product line includes facade and plinth plasters; primers; exterior and interior wall paints; insulation systems; industrial floor coverings; innovative, previous roads and pavements; as well as special additives, such as UV protector or HC products.





ADVANTAGES

Owing to continuous innovation and development, the company offers its customers 100% waterproof, environmentally friendly, long-lasting pavements. Mixtura's solutions provide a unique and exclusive look both indoors and outdoors. They offer an excellent solution in the fields of park construction, landscape architecture, tree trunk framing, car parks and community spaces.

One of the company's greatest strengths is the Mixton pavement, which is a resin-based, stabilised gravel pavement with water and air permeability.

The other being the Stabilizer®, which is an organic powder-based, crushed gravel pavement that can be used without any restrictions in landscape and water conservation areas.

REFERENCES

Mixton – Olimpica Park, Budapest Mixton & Stabilizer – Tagore Promenade, Balatonfüred Stabilizer – Hungarian Parliament, Kossuth Lajos Square, Budapest

PRIMARY TARGET MARKETS

Serbia / Slovakia / Romania / Ukraine / Croatia

AGM BETON CPLC.

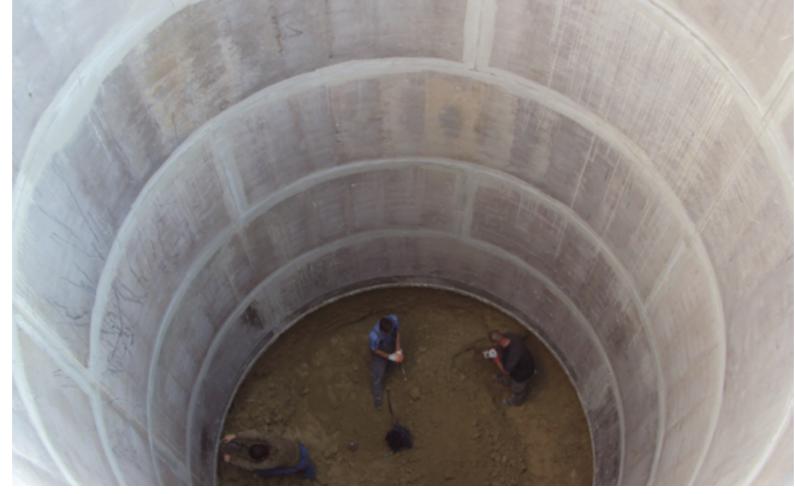
AGM Beton cPLC was founded in 1997. The company produces reinforced concrete pipes on its production site. It performs significant construction activities, using its pipes and other precast, reinforced concrete products in both civil and structural engineering. Thanks to its very high innovation potential, it is the manufacturer of reinforced concrete products of Europe's highest available quality; its reinforced concrete products have been sold in four European countries and another five countries overseas.

www.agmbeton.hu info@agmbeton.hu +36 29 610 460 H-2200 Monor, Külterület 0100/8. hrsz.

PRODUCTS & SERVICES

ROCLA pipes are ideal for construction because of the low pressure and gravity sewers, road and railway water culverts, vertical shafts, wastewater and rainwater pump shafts, shut-off shafts, oil and grease traps and wells. The uniquely designed, reinforced concrete products meet all special requirements.

The products are suitable for the construction of water towers from 100-1,000 m3, telecommunication transmission towers, large shafts made of segments with an inner diameter of 4.64 m, panel lines for hall roofing, water reservoirs up to 1,000 m3 and wastewater pump stations.









ADVANTAGES

Rocla technology: a combination of spinning and rolling procedures (in short) resulting in high quality, wearresistant pipes with a smooth inner surface, where no further processing is required. The technology guarantees complete water tightness.

Water and telecommunication transmission towers: by using precast structures, this results in an increased lifetime, shorter installation time and cost-efficient use. No scaffolding is required.

AGM possesses several patents that can be used in both the civil engineering and structural construction fields.

REFERENCES

Ericsson Sweden: telecommunication transmission towers located in Saudi Arabia, China, India, Egypt, Sudan.

Sade Civil Engineering Ltd.: jacking pipes to Romania

Building water towers from 100-500 m3 at various locations in Hungary since 2015.

PRIMARY TARGET MARKETS

Serbia / Croatia / Slovakia / Romania

BUDAPEST WATERWORKS CPLC.

In addition to supplying 2 million people with drinking water and providing sanitation services in Budapest and its conurbation area, Budapest Waterworks also operates Budapest Central Wastewater Treatment Plant's state-of-the-art, environmentally-friendly solutions.

Being a company that is more than 150 years old, Budapest Waterworks believes that the best solutions are always tailored to a particular situation. It selects the technology most suited to local circumstances at all times, offering its clients value for their money without hidden costs.

www.vizmuvek.hu/en international@budapestwaterworks.hu +36 1 247 7777 H-1138 Budapest, Váci út 182.

PRODUCTS & SERVICES

Budapest Waterworks designs - and partially implements - its investments by using the company's own capacities and involving subcontractors, while also participating in increasing numbers of foreign assignments around the world. The company also has construction experience in water infrastructure developments. Its mobile water purification systems are used both in the long and short term.

On the consultancy side, Budapest Waterworks is ready to share its experience with water utility companies or operators via various operations and processes, programmes (FOPIPs), in developing mid- or long-term investment plans for service areas.





ADVANTAGES

Budapest Waterworks has extensive experience in 24/7 drinking water supply and wastewater services, enabling the company to bring the 'operator's aspect' to its projects. The company has more than 150 years' consolidated knowledge. As the company is not committed to any supplier or producer, it is able to recommend the most suitable solution with no hidden constraints. Budapest Waterworks believes in tailored solutions, and therefore always provides its clients with a solution that best fits their unique conditions.



REFERENCES

Indonesia – Construction of water treatment units (with a capacity of 72 m³/h or 144 m³/h) in 36 locations.

Sri Lanka – Rehabilitation and expansion of two water treatment plants supplying the capital city with drinking water. Kalatuwawa plant was extended from 71,000 to 90,000 m³/d, and the Labugama plant from 40,000 to $60,000 \text{ m}^3$ /d.

Albania – Technical assessment of the Tirana Water Supply and Sewerage Utility (UKT) evaluating the sewage and drinking water network and treatment plant, drafting of development proposals to improve the technical quality of service.

IAWD – World Bank – Elaboration of business and longterm development plans for water utility companies in the Western Balkans, focusing on customer service, revenue collection and non-revenue water reduction.

Azerbaijan – Introduction of an electronic workforce management system, design and technical supervision of two drinking water reservoirs, preparation of the 10-year IT strategy for the state-owned water utility company, AZERSU.

PRIMARY TARGET MARKETS

Colombia / Albania / Montenegro / Serbia / Russia

NYÍRLIFT LTD.

The company is a supplier of various metal products for multinational companies. Nyírlift undertakes the contract manufacturing of metal products in small, medium and large series production, from unmachined metal products to laser cutting, bending, cutting, fitter work, surface finishing as well as packaging and delivery. Currently, the company's general activities include sheet metal working, laser cutting, CNC edge bending, CNC cutting, custom metal construction and locksmith work. Aside from the standard black sheet, stainless steel or galvanised sheet, the products to be machined may be even more unique.

www.nyl.hu/en gyartas@nyirlift.hu +36 70 676 9084 H- 1036 Budapest, Lajos utca 74-76. IV. emelet

PRODUCTS & SERVICES

The company is the largest independent lift distributor in Hungary. Nyírlift deals with all well-known brands, including Thyssenkrupp, Hyundai, Orona, Wittur, Kleemann, Metron, BKG, Geda and Hydral.

Nyírlift can implement the most extreme demands thanks to its manufacturing capacity, be it a unique panoramic round lift or a goods lift exceeding a capacity of 10,000 kg. Its portfolio includes panoramic lifts, freight lifts, home lifts, small freight lifts, escalators and moving walkways.





ADVANTAGES

Complete production of small and large series products from flat sheet metal to surface treatment, quality control and packaging.

In case of a large series order, Nyírlift is ready to extend its machine stock with a suitable single-purpose machine or tool as part of a long-term business relationship.

REFERENCES

Nyírlift ensures maintenance and remote monitoring of lifts in accordance with regulations applicable throughout Hungary. The company undertakes to perform lift maintenance and operations in each European Union country bordering Hungary.

- WITTUR LLC Krupina total project value: EUR 800,000
- Sematic Hungary Ltd. total project value: EUR 738,090
- MST Engineering Ltd. total project value: EUR 83,940
- MSK Hungary LP -total project value: EUR 164,740

PRIMARY TARGET MARKETS

Germany / Russia / Ukraine / Serbia / Romania / Hungary

WM SYSTEMS LLC.

As a leading European IoT & IIoT developer company, cellular IoT is in WM Systems' DNA. The company provides future-proof industrial IoT devices and managed data services.

The company is a renowned IoT, IIoT/M2M developer based in Hungary, with offices in Romania and Slovakia, employing 20 specialised engineers.

WM Systems controls the entire product development process, from R&D, design, hardware, firmware and software development to manufacturing and quality assurance and guarantee.

www.wmsystems.hu intersales@wmsystems.hu +36 1 310 7075 H-1222 Budapest, Villa utca 8.

PRODUCTS & SERVICES

The high-quality routers, modems, gateways and DCUs are designed and manufactured in Europe. The company also possesses device management solutions.

The solutions and services for utility companies, system integrators, energy providers and industrial partners includes smart metering solutions (100% compatible smart meter modems for Landis+Gyr, Itron, Elster/ Honeywell and EMH meters), smart grid solutions (twoway cellular communication devices for a smarter grid) and industrial automation solutions (industrial routers, modems, DCUs and switches).

WM Systems LLc 5G COMPATIBLE SOLUTIONS









ADVANTAGES

WM Systems' devices operate on any cellular network and any module option, including industrial connectivity and transparent/'push'/'pull' data sending features with numerous types of metering protocols. The company provides the following safety features: AES128/256 and TLS encryption, IPSec/Tunneling, VPN, HTTPS, SSHv2, supercapacitor. The devices use the OpenWrt system web interface with management features: TR-069 support, Device Manager® (FW updates, remote configuration). The products have an IP51/IP67 enclosure, DIN rail, expansion options. Certifications and test reports are available.

REFERENCES

Poland: Industrial LTE router development. WM Systems has been the supplier since 2018, 30+ k units sold.

The Netherlands: CDMA450 router and 4G router for public street lighting switch. The company has been the supplier since 2016, 30+ k units sold.

Switzerland: 4G, LTE Cat M/NB electricity metering modem for Elster meters. The company has been the supplier since 2014, 20+ k units sold.

PRIMARY TARGET MARKETS

Austria / Germany / Spain

Environment Industry





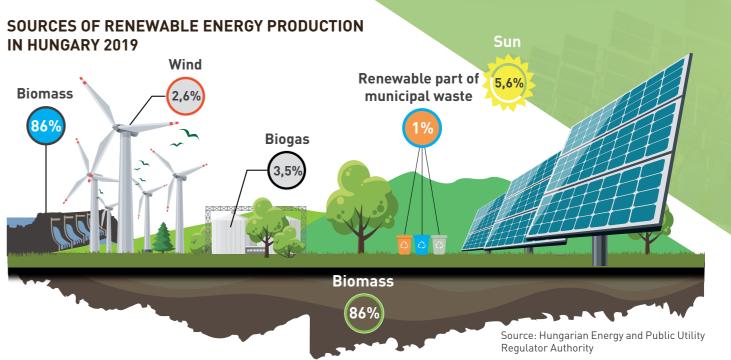


Environment Industry

One of Hungary's most important natural resources is water. Hungary is one of the richest countries in Europe in both surface freshwater and in geothermal waters below the surface. Within the environmental industry, another prominent area is renewable and environmentally friendly energy production. Over the last decade, Hungary has dedicated significant resources to developing the renewable energy sector. The greatest developments were implemented in the biomass and solar-based energy production sectors, so there are now several companies using the most up-to-date technologies. Renewable energy sources provide 13-14% of Hungary's energy production; however, in some periods more than 20% of the energy production was provided by renewable energy sources. Several contemporary technological solutions have recently been implemented in other areas of the environmental industry, from wastewater treatment to waste recycling to the coverage of public utilities in the country's settlements.

Hungarian companies, as a result of investments and developments, are able to offer their foreign partners sustainable, modern and complex systems that meet the highest environmental requirements. Outstanding areas of the environmental industry: recycling of construction waste, complex flood-protection systems, water and wastewater treatment, renewable energy production solutions for households and municipalities, geodesy, balneology research and well drilling, complex smart city solutions and natural disaster management expertise.





The growing competitiveness and the international recognition of the Hungarian environmental industry and its solutions are demonstrated by prestigious international awards (e.g. the Ethnographic Museum). Hungary was able to organise several world-class international exhibitions and events (e.g. Budapest Water Summit), which also indicates that the country is on the road to becoming a focal point for the international environmental knowledge base network. These days, Hungarian companies are able to offer complex environmental solutions of their own, which results in adjusting these technical-technological solutions to the environmental challenges of the 21st century, both in urban areas and in the countryside. Hungarian higher education, the postgraduate training programmes and the country's R&D activities in the field of environmental industry also contribute to Hungary's leading global position.

Due to logistical and historical reasons, the Balkans and Eastern European countries are still considered to be the primary export target markets for the Hungarian

environmental industry. Recently, the geographical perspectives of the industry were broadened as the economically developing and moderately developed regions (e.g. Asia and Africa) also need efficient and unique environmental technologies and know-how. In these markets, however, lower wage levels and guality recruitment must be taken into account in addition to development opportunities. The companies should follow an integrated approach in these regions. Hungarian companies should therefore outsource labour-intensive activities to local entrepreneurs, where possible, while themselves simultaneously performing value-added activities requiring special expertise.

KEXPORT CLUSTER

KEXPORT Cluster is a cooperation network involving Hungarian environmental enterprises, which aims to provide expertise, knowledge and technology via a wide range of environmental technologies and services in foreign markets.

Cluster's strategic goal is to create new business opportunities by promoting intersectoral cooperation, exploring foreign cooperation opportunities and generating projects through joint product and service marketing and market research. Cluster members focus on introducing know-how, patents and industrial protection, own industrial property rights and implement several EU-funded RDI projects.

www.kexport.eu/en info@kexport.eu +36 1 350 7271 H-1024 Budapest, Keleti Károly utca 11/A I/4.

PRODUCTS & SERVICES

Cluster members offer accredited measuring, sampling (air, noise, soil, vibration, water, waste, wastewater), construction and renovation work at water utilities. Members also undertake microbiological water monitoring, environmental audits and impact assessments, industrial wastewater treatment, planning and manufacturing systems for material transport and processing. Cluster members' service portfolios also include alternative fuel production and the preparation of biomass and pretreated waste for energy recovery; pre-treatment and the recycling of paper, plastic, aluminium and electronic waste; remediation; NO DIG pipe renovation; waste management and water loss measurement of water networks.









ADVANTAGES

By intermediating the cluster members' different competencies, and by covering the entire environmental sector, KEXPORT is able to offer solutions for complex challenges. Such a synergy with an extensive international network of businesses, governmental bodies and municipalities facilitates consortial partnerships in global tenders and joint participation at international forums and exhibitions with B2B events.

REFERENCES

A complex study underpinning the rehabilitation of the Vérke canal for the future utilisation of the riverbed sediment, partially funded by the Hungarian Ministry of Foreign Affairs and Trade's Water Export Diplomacy programme.

Region: Transcarpathia Project total: EUR 60,000

V4 cooperation agreement with the waste management clusters in Poland, the Czech Republic and Slovakia.

PRIMARY TARGET MARKETS

Serbia / Poland / Slovakia / Romania / Ukraine

ENVIHORIZONT LLC.

Envihorizont LLC. supports the technological optimisation of sewage plants, technological planning of environment and water quality protection facilities, technical consultation and on-site measuring for environmental monitoring. Envihorizont is active in the fields of climate and environmental protection as well as human healthcare. The company's integrated engineering is designed to support its activity linked to bioenergetics and highly specific biotechnology applications, to ensure sustainability, the profitability of activities and projects of integrated climate protection, bioenergetic, biotechnological and bioindustrial facilities.

www.envizont.eu gemd@envizont.eu +36 70 941 3143 H-7100 Szekszárd, Rizling utca 11.

PRODUCTS & SERVICES

Integrated RDI activity in the fields of climate, environmental and health protection, bioenergetics and biotechnologies.

Envihorizont's specific activities are design, skills and project coordination, overseeing photobioreactors and complexes, on-site measuring and testing, as well as technology control and optimisation.

Envihorizont's microalgae technology is ready to be challenged industrially and to prove that the company can provide turnkey, optimal solutions (including licensing and operation optimisation). Trainees have the opportunity to participate in Erasmus and Erasmus+ programmes. The company operates a testing laboratory equipped with fixed and mobile equipment.









ADVANTAGES

The developments represent the best available technologies in the field for engineering health, antiviral, climate and environmental protection adapted to actual and perspective challenges associated with health and economical rehabilitation following the COVID-19 pandemic. The technologies are highly efficient - economically and energetically - in conformity with circular economy and sustainability. The fully automated and remotely-controlled equipment require less space and achieve a higher productivity rate compared to traditional pieces. The zero carbon and trading efficiency, affordable bioenergy and biofuel production, low water and ecological footprint and perseverance with long-term strategies are all important aspects in Envihorizont's operation.

REFERENCES

Coronavirus Protection Modular Complexes for worldwide applicability, different complexity and sizes, investment cost of EUR 1 million to EUR 100 million.

MOL Group Hungary, 60,000-120,000 Nm3/d biomethane, EUR 50 million.

Multifuel filling stations around the Silk Road and Belt, Xi'An, China-Amsterdam, NL, USD 75 million, China-Central & Eastern Europe Investment Cooperation Fund.

PRIMARY TARGET MARKETS

USA / Brazil / India / Russia / Peru

KIS ENGINEERING AND TRADING LTD.

KIS Engineering and Trading Ltd. was established in 1990 with six employees and, in the last 30 years, has grown to become an enterprise with more than 200 employees. Today, it provides comprehensive engineering packages, including design, feasibility studies, equipment manufacturing, erection, installation, commissioning, licensing, personnel training and maintenance.

As customer satisfaction is emphasised in the business policy, only high-quality work is acceptable. Since 1995, the company has held all the necessary certificates and qualifications, and has been running an ISO 9001 quality management system certified by TÜV Rheinland since 2003.

www.kiskft.hu papp.andras@kiskft.hu +36 30 311 6723 H-3792 Sajóbábony, Gyártelep

PRODUCTS & SERVICES

In the field of engineering and equipment, KIS Engineering and Trading Ltd.'s service portfolio ranges from static calculations and the production and assembly of various products, from electrical and instrumental construction to engineering, electrical and instrumental maintenance.

The company also manufactures equipment for the chemical, environmental and pharmaceutical industries, tailor-made equipment and structures, steel structures,



columns for the chemical industry and plastic equipment. KIS Engineering's portfolio also includes the design and licensing of stainless steel pressure containers (with a capacity of 50 and 216 litres and a maximum service pressure of 5 bars).





ADVANTAGES

With 30 years' experience in dynamic technological development, KIS Engineering and Trading Ltd. has experience in the operation of its technologies; the company is therefore aware of the day-to-day technological problems and provides strategic advice. It employs more than 25 engineers and work is executed by experienced employees, yet together with its subcontractors, the company can mobilise a workforce of approx. 400 people. Utilising the help of other members of the KIS GROUP, the company helps its customers during the licensing process (feasibility studies, applications, lien with authorities, etc.). As a medium-sized company, KIS Engineering and Trading Ltd. can combine the flexibility and price advantages of SMEs with the reliability and stability of large corporations.

REFERENCES

Ge Water and Process Technologies (today SUEZ) -Manufacturing of water desalination equipment

Alpes Environment SARL – Manufacturing and installation of a solvent regeneration unit

Evonik – Various manufacturing and installation work

TEVA Pharmaceuticals – Various manufacturing and installation work

PRIMARY TARGET MARKETS

Central and Eastern Europe / Balkans / Post-Soviet Union countries

POLYDUCT LTD.

Polyduct Ltd. was established in 1992. Its main profile is rotational plastic moulding. The company's unique technology is excellent for the standardised production of wide and heavy hollow plastic bodies in a large variety of shapes.

In its vast product range, Polyduct Ltd. seeks solutions to the growing requirements of environmental protection, water and wastewater management and the urban world. On top of being a supplier, Polyduct Ltd. is one of the experts in all related sectors. To maintain its position as market leader, the company expanded its product and mould planning and production activities. In 2013, the company established a distribution subsidiary in Romania (SC. POLYDUCT S.R.L.), then in Serbia in 2018 (POLYDUCT doo).

www.polyduct.hu polyduct@polyduct.hu +36 54 480 666 / +36 30 228 22 H-4181 Nádudvar, Kabai utca 62.

PRODUCTS & SERVICES

The company, as a Hungarian producer, is a competitive supplier for the water (unique water treatment and system of public utilities), the urbanisation (waste treatment, playgrounds, Streetfitness, furniture for public places, traffic control products) and industrial cooperation (technical development, the implementation for industrial companies) industries.









ADVANTAGES

Each piece of the final product is important to meet standards. Polyduct Ltd. is committed to the highest quality in its activities, work and products, which is also guaranteed by an ISO certification and the operating enterprise resource planning system. The company strives to find solutions before problems occur in production. It flexibly adapts to market and business environment changes. The use of its products enables settlements and villages to avoid soil pollution, facilitate selective waste management and recycling and to operate household sewage treatment systems.

REFERENCES

KEHOP-3.2.1-15-2016-00006 project Product: composter Value: EUR 2,250,000

LINAMAR Hungary Ltd. OROS DIVÍZIÓ industrial cooperation Product: plastic parts Value: approx. EUR 300,000/year

Sc. Fluid Group Hagen water industry, Romania Product: water meters Value: approx. EUR 400,000/year

PRIMARY TARGET MARKETS

Romania / Serbia / Croatia / Montenegro / Poland

ARUNDO BIOENERGY LTD.

Arundo BioEnergy is a Hungarian biotechnology company offering homogenous and genetically stable Arundo donax plantlets to be cultivated for raw material in the biomass, biogas, cellulosic bioethanol, pellet, briquette, paper and furniture industries.

The company is the sole user of the worldwide patented embryogenic cell-based micropropagation technology that allows the mass production of the high yielding, durable, virus-free perennial energy crop.

www.arundobioenergy.com info@arundobioenergy.com +36 20 942 4245 H-1045 Budapest, Berlini utca 47-49.

PRODUCTS & SERVICES

Arundo donax is commercialised in either bare-root form (requires acclimatisation) or as soil ball (field-ready) plantlets, depending on the destination.

The gene bank of 19 different ecotypes allows for optimised plantlet material for mild temperate, continental, Mediterranean, semi-arid, subtropical and tropical regions, adapted to a wide variety of ecological conditions.

The plantlets are accompanied by acclimatisation and plantation expertise, with cultivation and plantation management consultation on request.









ADVANTAGES

The benefit of Arundo is that it has a lifespan of 25 years, with annual harvests as early as in the first year as a perennial crop. With a yield of 50-80 dry tons/ha/year, Arundo is one of the most competitive biomass sources available on the market. Being a durable crop, it can be grown on marginal land in regions with long drought periods, potentially requiring minimal agricultural input.

Other advantages: no pollen, no allergen impacts, no G.M.O., no biohazard risks, no pathogens, free of viruses and not invasive as it has no fertile seeds.

REFERENCES

Italy: Arundo Italy, biogas production Spain: Biothek, power generation Mauritius: Equilibre, power generation India: CleanStar Energy Pte. Ltd. China: Lu Lin Fuhai Xiangyang Agriculture Co.

PRIMARY TARGET MARKETS

UK / France / Italy / Germany / Austria

PLATIO LLC.

Platio is a Hungary-based tech company that uses renewable energy and recycled materials to create sustainable building materials. The products can be used wherever conventional solar technologies cannot be deployed. Platio aims to be part of the modern architectural world and pave the way to aesthetic, space-saving and green power sources. The company is rapidly growing in international markets: today, it is present in 16 countries with 12 reseller partners.

www.platiosolar.com sales@platio.cc +36 70 391 4708 H-1137 Budapest, Katona József utca 41.

PRODUCTS & SERVICES

The Platio Solar Pavement is a premium paving module made from recycled plastic, equipped with high-impact glass and high-performance solar cells.

Main features

Dimensions: length/width/depth - 340/340/61 mm

Solar cells

High-performance monocrystalline PV cells, nominal power: 21.50 Wp/pcs (186 Wp/m2)

High-impact glass tiles

Solid, tempered, scratch resistant and slip-proof hardened glass tiles protect the solar cells.

Recycled materials

Recycled plastic waste, durable structure, similar lifespan as concrete.









ADVANTAGES

Platio's product is an investment in a renewable energy source that integrates into the corporate environment with its innovative design, and it is an aesthetic alternative to roof-mounted solar panels.

The company's modern, space-saving and attractive premium paving module is the best choice to supplement other installed renewable energy sources, and unlike roof-mounted solar panels, Platio Solar Pavement does not present a fire risk. It has a reduced carbon footprint, making it a perfect choice for environmentally conscious businesses.

REFERENCES

Green Mall – Astana (Kazakhstan), area: 80 m2, performance: 13.06 kWp

Residential home system – Kecskemét (Hungary), 9.25 m2, 1.72 kWp

Bicycle path - Gárdony (Hungary), 117 m2, 18.43 kWp

PRIMARY TARGET MARKETS

USA / Germany / Spain / Italy / France

THERMOWATT LTD.

Thermowatt Ltd. was established in 2007 in Budapest, Hungary, with the aim of implementing, managing and operating systems based on its proprietary invention. Its 'Method and circuit arrangement for recovering heat from wastewaters' has been patented in Hungary, Russia and Ukraine and granted a patent in a further 35 countries by the European Patent Office (EPO). Thermostat technology was first recognised by the Spanish Aqualia Award for Innovation in 2013 and received the Water & Energy Award in 2014 at the Water-Energy Exchange (WEX Global). It also came first as Innovator in the Water for Real Estate Sector award in 2015 in Abu Dhabi at the International Water Summit.

www.thermowatt.hu info@thermowatt.hu +36 23 428 702 H-1023 Budapest, Árpád fejedelem útja 26-28.

PRODUCTS & SERVICES

Thermowatt technology's primary goal is to extract wastewater from the sewer line, direct it to a heat exchanger in a mechanically filtered form and then lead it back to the sewers along with the separated solid particles. The heat energy recovered by heat exchangers is transferred into utility heating or cooling via water / water heat pumps. The system's unique advantage is that the same heating system is applied for both cooling and heating. To operate in the most efficient and energy-saving manner, the system elements are carefully designed, optimised and harmonised. The technology has also been tested at extremely low and high external temperatures $[-17^{\circ}C - +37^{\circ}C]$ and under fluctuating



quantity and quality wastewater conditions. It is suitable for water heating systems up to 63°C and as part of virtually any cooling system. The system is ideal for larger energy demand buildings (1 MW and over) where major wastewater flows are available (city centres, vicinity of sewer networks). Its compact size allows it to be built under or above the ground to provide heating and cooling energy all year round. The closed working system does not produce any smell or hazardous waste on the site and saves considerable energy thanks to its high efficiency (COP) indicators.



\approx THERMOWATT

ADVANTAGES

The system can be used in both cooling and heating mode – even simultaneously. Thanks to the quick and easy installation, Thermowatt's system has a significantly lower footprint compared to geothermal alternatives, and zero water consumption compared to cooling towers. The system can be very easily accessed and maintained, making city centre installation possible. The integrated control system ensures simple and easy monitoring (even remotely). The low operational costs, efficient operation and no limit regarding the size of the system makes Thermowatt's system an excellent choice.

REFERENCES

The Hungarian Military Hospital Flow of wastewater 480 m³/h

University of Szeged Flow of wastewater 136 m³/h

Budapest Sewage Works Flow of wastewater 140 m³/h

Budapest, Újpest district the City Hall Flow of wastewater 250 m³/h

PRIMARY TARGET MARKETS

The Balkans / Turkey / EU / Southeast Asia

BDL LTD.

BDL is committed to offering personalised, systematic solutions in all aspects of the water industry. Due to BDL's diverse professional activities, it considers technical, ecological and economical aspects to find the most sustainable alternatives to support clients in optimal decision-making.

BDL has contributed to the development and protection of the aquatic environment in Hungary and in neighbouring countries.

www.bdl.hu info@bdl.hu +36 1 224 0670 H-1118 Budapest, Rétköz utca 5.

PRODUCTS & SERVICES

The company provides conventional civil engineering including design and implementation - services with a clear focus on water utilities.

Professional financial and economic planning services facilitate successful investments and efficient operation (Dynamic Cost Comparison, Life-cycle Costing).

The integrated water utility asset evaluation methodology (MIAD software) enables the creation of sustainable and responsible bases for asset management and allows utility service tariffs to be optimised.









ADVANTAGES

The company stands out by providing professional financial-economic planning services to facilitate successful investments and efficient operation.

Developed by its Utility Asset Evaluation department, the Multipurpose Infrastructure Assessment Database, 'MIAD', software is a fully integrated, complex system specifically prepared for asset evaluation.

REFERENCES

Using MIAD software, BDL has so far evaluated 24,300 kilometres of the water supply network and over 22,400 kilometres of the sewer network, water utility network and technological facilities, which altogether means 1.5 million items in more than 2,000 municipalities.

PRIMARY TARGET MARKETS

Romania / Serbia / Croatia / Slovakia / Ukraine

ENVIPROG LTD.

The ENVIPROG group has been active in the field of environmental consultancy since 2003. The company has vast experience in preparing, implementing and operating complex projects requiring considerable added value. ENVIPROG's main profile is environmental consultancy. Its strength is collaboration in an international setting. Aside from complying with legislation, ENVIPROG facilitates efficient operation even in the planning phase. As a result of its professional work, its clients acquire all the licenses required for their operations and can pursue their activities under the regulations.

www.enviprog.com toth.roland@enviprog.com +36 70 214 6417 H-8000 Székesfehérvár, Honvéd utca 3/A

PRODUCTS & SERVICES

Air quality engineering services

The most frequent task in air purity protection is determining the emissions from an activity. Dispersion modelling is suitable for determining the parameters of the sources to be established.

Noise reduction services

The company arranges the noise sources associated with the activity in a database and produce a 3D noise map. As a result of the noise mapping, measures necessary for noise reduction may be taken.

G.I.S. mapping

The exacting depiction of geographic information promotes an easy understanding of the results presented and the evaluation of conformity with legislative regulations.









ENVIPROG GROUP Engineering Consultant Ltd.

ADVANTAGES

ENVIPROG is familiar with environmental technologies and the best available techniques. Based on its professional experiences, the company can solve air quality and noise emission issues, as well as optimise environmental expenses.

A high-quality IT background and deadline tracking serve as a basis for its management system.

The company's continuous availability guarantees prompt reactions and responses to client questions and requests.

REFERENCES

Hungary: SAMSUNG SDI, battery production Hungary: Pannonia Bio, bioethanol production Hungary: TORAY Group, carbon fibre production

PRIMARY TARGET MARKETS

Qatar / Singapore / USA / UAE / China

HUNGARIAN WATER PARTNERSHIP

The Hungarian Water Partnership is a network for companies and professionals in the water and wastewater sector. The company improves its economic performance in a dynamic and growing international environment and concentrates on the complete water management process. It is integrated into the different segments of the water industry: from engineering-design to construction, and from consultation to operation and maintenance. It possesses outstanding professional and innovative knowledge, which recognised on a global scale, with more than 15 years' experience in the field of EUfunded projects and excellent relationships with various professional water-related organisations.

www.hungarianwaterpartnership.com info@hwc.hu +36 1 224 0670 H-1118 Budapest, Rétköz utca 5.

PRODUCTS & SERVICES

The Hungarian Water Partnership offers cost-effective and affordable water and wastewater solutions, such as drinking water purification, wastewater treatment, stormwater management, water reuse, containerised solutions, leachate treatment and air treatment, as well as consultation, financial-economic planning, financial support and complex solutions.

It supports the realisation of solutions from planning to operation, and provides partnerships, professional cooperation and networking on an international level.







ADVANTAGES

The Hungarian Water Partnership helps to connect people, allowing them to share their knowledge, experience and know-how regarding the most innovative solutions to challenges. It aims to develop, provide and promote best practices, water-related international frameworks and standards, supporting transitions to sustainable practices to prevent environment-related water crises.

REFERENCES

Capacity building, knowledge exchange in China, ASEM Water Seminars, water conferences, professional cooperation.

Drinking water treatment plant in Vietnam Capacity: 10,000 m³/d serving 100,000 people

Municipal street dewatering in the United States Stormwater treatment, oil separation, capacity: 5-10 l/ sec/item

PRIMARY TARGET MARKETS

Western Balkans / Egypt / Vietnam / China

ORGANICA WATER LTD.

Organica Water is a global provider of innovative solutions for the treatment and recycling of wastewater. Over the past two decades, Organica Water has developed a highly imaginative approach to wastewater treatment for urban and residential areas. Today, Organica is an international company with offices on six different continents.

It is the world leader in bringing sustainable wastewater solutions to communities worldwide, with more than 110 facilities in 16 different countries. Organica's portfolio of wastewater treatment solutions covers the full value chain, from design to facility construction (leveraging the Organica Food Chain Reactor solution) and operations management (focused on its digital services offering).

www.organicawater.com info@organicawater.com +36 1 455 8060 H-1094 Budapest, Tűzoltó utca 59.

PRODUCTS & SERVICES

For wastewater facilities, Organica offers core products and services to enable the construction of a complete WWTP based on the Organica Food Chain Reactor (FCR) facility, which is a type of Fixed-Film Activated Sludge system utilising a fixed-bed biofilm that grows on both natural (plant) and engineered (patented bio-fibre media) root structures, all housed in a compact, odourless, botanical garden-like facility. The result is a wastewater facility that offers a significantly reduced physical footprint, zero 'psychological' footprint and lowers operational and infrastructure costs compared to other activated sludgebased wastewater treatment solutions.



Organica's operation management offering pulls together its expertise in process design, bio-kinetic modelling and analytical sensors/instruments with digital software to help facility owners run their wastewater facility reliably and efficiently, 24/7/365.

Organica's flexible solutions cover the complete spectrum, from complete operations and maintenance to basic digital monitoring, allowing clients to start small and progress as they see the savings.





ADVANTAGES

Organica's facilities utilise active biofilms on natural (plant) and engineered root structures, all housed in a fully-enclosed, odourless facility.

The result is a solution that offers a significantly reduced physical footprint and lower operational and infrastructure costs when compared to conventional wastewater treatment solutions, all in the form of a pleasant, botanical garden-like environment that can even be located in the city centre.

REFERENCES

South Pest – Hungary (serves 500,000 people) – Client: Budapest Waterworks, treatment plant upgrade

MM2100 – Bekasi, West Java, Indonesia (serves 580,000 people), existing plant upgrade at one of the leading industrial parks in Indonesia

Sechelt – Canada (serves 22,000 people), Water Resources Education Center, provisions made to increase capacity and provide incremental nutrient removal cover for up to 50 years

PRIMARY TARGET MARKETS

Egypt / Saudi Arabia / UAE / India / Indonesia

PURECO LTD.

PURECO designs, builds, operates and maintains water and wastewater treatment facilities with special dedication and professionalism in the fields of drinking water purification, communal and industrial wastewater and landfill leachate treatment, stormwater management and air treatment, while respecting site environments, whether natural or urban. The company develops optimal and costeffective, life-long solutions to keep the environment safe by focusing on added value and sustainability. PURECO is an international company with several offices in Central & Eastern Europe, and it is also present in Asia, Africa and the Middle East.

www.purecoreferences.com info@pureco.hu +36 1 224 0670 H-1118 Budapest, Rétköz utca 5.

PRODUCTS & SERVICES

Thus far, PURECO GROUP's sole focus has been on water treatment and management. As in previous years, a strong need has been emerging for air pollution control. In recent years, the company's experts have developed the PURECO VENTUS bio-antiperspirant product family. Starting development 2-3 years ago, the company tested its products on pumping stations and wastewater treatment plants it had itself constructed.

After the initial successful tests, the company completed the product range, and now there are five various biofilter unit styles using biodegradation for odorous air treatment with biomass. Units are available from the smallest 10 m3/h to the largest VENTUS that can handle and treat 100,000 m3/h airstreams. PURECO has a special unit that uses a different purification method: adsorption with activated carbon.







ADVANTAGES

Unpleasant smells are often associated with industrial activities, especially municipal wastewater collection and treatment, at wastewater treatment and sludge treatment plants, near sewerage systems, at landfills and composting plants, during food or chemical industry plant operations. Using the biodegradability of microorganisms, the VENTUS biofilter system is an environmentally friendly, sustainable and safe solution to eliminate odour problems. Believing in complex solutions, PURECO not only offers the biofilter system but several optional components, such as a gas scrubber, dust separator, air distributor (for multi-unit modules) and operating cost optimisation (container units can be individually connected).

REFERENCES

Hungary: modernisation and reconstruction of the existing Szentendre wastewater treatment with Ventus biofilter containers.

Serbia: biofilter container in Subotica, odourless waste management.

Hungary: complex industrial air treatment solution with the VENTUS C biofilter for the city of Pécs.

PRIMARY TARGET MARKETS

Bulgaria / Serbia / Croatia / Ghana / Egypt

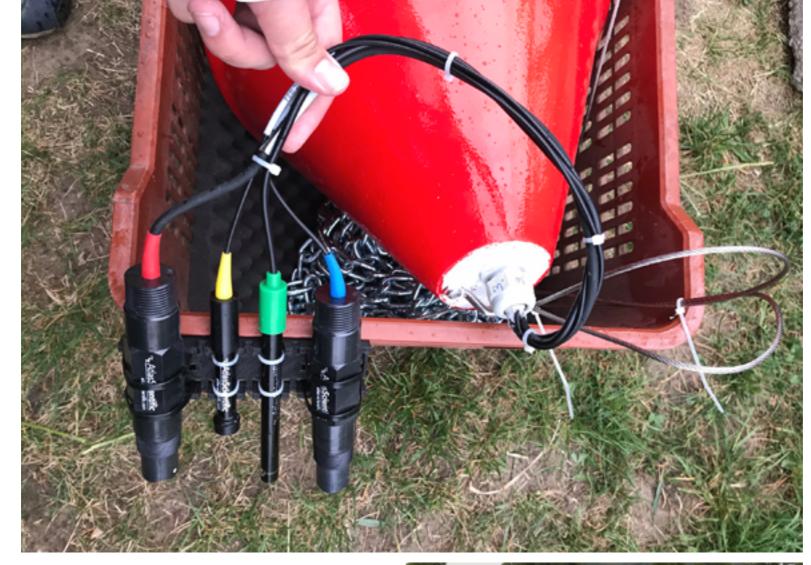
WATERSCOPE INTERNATIONAL INC.

WaterScope International Inc. is a young yet dynamic company run by experts with more than ten years' water management experience. The team, always searching for innovative technology, actively implements the IoT world's results into everyday work, and encourages its partners to act in a similar fashion. WaterScope International Inc. offers support and stateof-the-art solutions. The company leads national and international projects and harmonises research and development. Its projects cover a wide range of topics: water management, quality control, smart monitoring, sensor measurements and wireless data transfer.

www.waterscope.eu waterscope@waterscope.eu +36 30 244 8031 H-8900 Zalaegerszeg, Nyár utca 4.

PRODUCTS & SERVICES

The Sensors2Net system offers innovative, intelligent solutions: data collection, interpretation, design and implementation. Be it tight urban applications or distant rural communities, the sensor data, collected on-site, are transferred wirelessly to any dedicated server. Users can perform AI-assisted analysis and make operational decisions regardless of time and place. The results are real-time monitoring, early error detection, water loss prevention and predictive maintenance vs preventive maintenance. All of this fits seamlessly into existing and newly implemented water management processes alike.









ADVANTAGES

The installation of the products is quick and easy, even on white spots on the map, and does not require any cabling. The composition of the products enables simultaneous handling of a large number of sensors. Among the many advantages of WaterScope's products, the low operation and maintenance costs, the high scalability and customisability and the ability to cover a large area with low power needs are just a few. The special sensors are able to access data where GSM or LTE service is unavailable or insufficient, and they provide proper bitrate for the sensor data collection on a high-security level as well as server-side data-processing with Alassisted data analysis. The company applies its years of BIG DATA handling experience to its projects.

REFERENCES

Turkey: industrial zone, Izmir, Kemalpasa - wastewater flow control

Hungary: Lake Maconka - monitoring the lake's water quality, real-time information for fishermen on current fishing conditions

PRIMARY TARGET MARKETS

Italy / Austria / Germany / Singapore / Korea

BÁLINT ANALITIKA LTD.

BÁLINT ANALITIKA is a 100% Hungarian-owned laboratory, which has been serving domestic and foreign, agricultural, food and feed manufacturers, distribution companies, industrial plants and municipal facilities for 25 years.

www.laboratorium.balintanalitika.hu elelmiszer@balintanalitika.hu +36 1 206 0732 H-1116 Budapest, Fehérvári út 144.

PRODUCTS & SERVICES

The company offers accredited analytical tests, including the testing of cereals and cereal products, feed, feed raw materials, nutritional values, allergens, vitamins, heavy metals, elements, and pesticide and pharmaceutical residue analysis.

Polycyclic aromatic hydrocarbons; toxin and other organic micro-contaminant analysis; microbiological and hygiene testing; accredited sampling; drinking water, mineral and medicinal water, surface and subterranean water analysis; the examination of soil, municipal and hazardous waste, sewage sludge.









ADVANTAGES

According to the MSZ EN ISO/IEC 17025:2018 standard, BÁLINT ANALITIKA's laboratory is accredited and has the advanced instruments and experts for the analyses. The laboratory has more certifications for the following standards: MSZ EN ISO 9001:2015, MSZ EN ISO 14001:2015, OHSAS 18001:2007.

BÁLINT ANALITIKA is the only domestic testing laboratory with 'NATO qualified supplier' status, according to AQAP 2110:2016.

REFERENCES

Several environmental analyses for all industrial branches, industrial plant disinfection, surface and subterranean water and soil cleaning.

Numerous analyses for the food and feed industry, i.e. the milling industry, slaughterhouses, meat production, dairy, bakery, confectionery, beverage manufacturers.

PRIMARY TARGET MARKETS

Romania / Serbia / Croatia / Slovakia / Ukraine

BAY ZOLTÁN Nonprofit Ltd.

Bay Zoltán Nonprofit Ltd. for Applied Research provides services in innovation and technology transfer. It offers its customers complex scientific and technological solutions in several areas of expertise, devised to enhance their competitiveness. The company also acts as an innovation intermediary through its applied R&D and technology transfer activities.

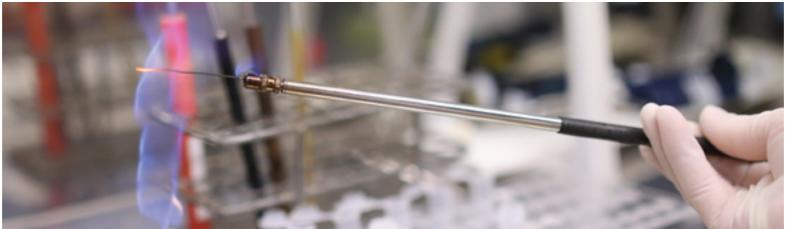
Bay Zoltán Nonprofit Ltd. is able to meet the industry's research and development needs from the conception of an idea to its realisation. It actively builds international consortia, networks, and EU tenders in R&D and innovation. The company also offers business development services as a technology incubator.

www.bayzoltan.hu/en bayzoltan@bayzoltan.hu +36 1 463 0500 H-1116 Budapest, Kondorfa utca 1.

PRODUCTS & SERVICES

The company provides services in the field of material and technology development, operational safety, biotechnology, VR/AR, electronics and IT (hardware and software development), material characterisation, logistics and innovation services.







ADVANTAGES

Bay Zoltán Ltd. actively builds international consortia, networks and EU tenders in R&D and innovation. It also offers business development services as a technology incubator. The company has a complex infrastructure system comprising various laboratories dealing with electrochemistry, environmental protection, fermentation, industrial laser technology, mechanical testing, mechatronics, nanomaterials, non-destructive materials testing and secondary raw materials. Bay Zoltán Ltd. also runs a Software Centre and a Virtual Reality laboratory.

REFERENCES

- Ni-based catalyst holder development (BorsodChem Ltd.)
- Recovery of secondary raw materials from red mud (Martin Metals Ltd.)
- Recovery of Si from end-of-life solar panels (www. resielp.eu)
- Treatment of non-recyclable plastics (Bara-Q LLC)
- Production of innovative brake discs made of recycled metals (radiusproject.es)

PRIMARY TARGET MARKETS

India / Canada / Russia / Israel / Japan / Germany

REMAT CPLC.

ReMat cPLC was founded in Hungary in 1995. The utilisation of plastic waste started in 1997; the company's main profile is recycling technological and packaging waste.

At present, ReMat cPLC has a capacity of almost 25,000 tons per year, which makes it the largest plastic wasteutilising company group in Hungary. The company has two production sites, one in Tiszaújváros and another in Rakamaz. ReMat cPLC utilises polyethylene and polypropylene packaging waste with modern technology.

www.remat.hu tvkremat@t-online.hu +36 49 521 664 H-3580 Tiszaújváros, TVK Ipartelep 2096/3, 2096/8 hrsz.

PRODUCTS & SERVICES

The LDPE translucent and LLDPE translucent granulates are made entirely of industrial collected waste material. The light colour LDPE or black version is made of 60 per cent industrial, 40% selective collected waste material. The PP mixed colour granulate is made of a mixture of BOPP foils, strapping tapes, geotextiles, etc. The quality of the recycled material is always tested by ReMat cPLC in its laboratory. In every single case, the company makes foil from the regranulate produced.

Pallets are packed with PP granulates in 25 kg bags and transported shrink-wrapped; net weight is 1,250 kg/ pallet. ReMat cPLC packs them into Q bags and transports them on shrink-wrapped pallets; the total net weight is 1,300 kg/pallet. Heat-treated pallets are also available upon request.







ADVANTAGES

Environmental protection is a daily management task at the company. ReMat cPlc. uses the best technologies available.

ReMat cPLC continuously strives to meet the demands of innovation, flexibility, customer satisfaction and the environment, using the best technology available.

REFERENCES

Hungary: Manitox Ltd. Slovakia: KORA joint-stock company France: Flexya

PRIMARY TARGET MARKETS

Ukraine / Russia / Germany / The Netherlands / Denmark

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Promotion Agency