

Insights Belgian Economic Mission to SA

Profile

Partnership brings technology to aid in groundwater cleanups

ODS International, an award-winning Wallonian company specialising in equipment for the recovery of light non-aqueous phase liquid (LNAPL), has teamed up with local consulting engineering company Kantey & Templer to help organisations clean up their groundwater.

LNAPL (also known as “free phase product”) is the contaminant floating on groundwater generally associated with hydrocarbon pollution by-products such as petroleum, diesel and other petroleum-based fuels such as waste oil and crude oil.

Spills or releases of LNAPL into the environment sometimes occur at petroleum storage and handling facilities such as refineries, bulk product terminals, gas stations, airports and military bases. Once in the subsurface, LNAPL can be difficult to assess and is considered an environmental risk. Fortunately, because it is less dense than water, when LNAPL infiltrates soil it stops at the height of the water table from where, with the right equipment and methodology, it can be recovered.

ODS International — which has been active in environmental remediation for more than 20 years and was nominated for the Belgian Prix De L’Environnement Award For Best Technology For Sustainable Development in 2005 — has developed unique products and technology that enable

organisations to remove LNAPL without the major costs and extensive time requirements demanded by other systems.

Other technologies generally involve the removal of huge volumes of water from the soil, not all of which is necessarily contaminated.

The company’s patented subsurface ODS (oil deep skimmer) features a special floating device designed to



operate within fluctuating levels of groundwater and LNAPL, which means it removes thin layers of hydrocarbon products. In other words, mostly contaminated product is pumped to the surface, which reduces the need for further time-consuming and costly separation of LNAPL and water once product is above ground. The skimmer devices, which are inserted into the

contaminated subsoil via wells, are attached to a compact, fully automated unit supplied in its entirety by ODS International. Neatly sealed in a container, each unit comprises an automatic control panel, a vacuum pumping system, a board on which electric valves corresponding to the number of wells in operation on site are laid out, a 500l tank for pre-storage of LNAPL and a 1,000l tank for the further storage of recovered product.

“After initial consultation with the environmental engineers involved on each site — at which point we access the extent of the contamination (using sophisticated cameras and probes) and agree on a plan of action — we undertake to provide the equipment, which is shipped to the customer and placed on site for the duration of the remediation,” explains chief operating officer and majority shareholder at ODS International, Patrick Francois.

“We are on hand for the installation and to check the

quality of the wells, which is essential for efficiency. Thereafter, we regularly monitor the units. But, although we remain in close contact with our clients, the system is designed to be easily operated by engineers (like Kantey & Templer), with whom we form partnerships. Our business model is based on rental agreements which include operation, maintenance and monitoring.”

The ODS International system is, says executive associate in charge of environmental engineering at Kantey & Templer, Dion van Schalkwyk, not only highly effective in terms of design, it also offers the advantage of being largely self-operating.

“What makes it even more effective is that the system is supplied as a ‘package plant’.

Not only does it utilise patented equipment that is adjustable, can operate at any depth and has low sensitivity to the type of hydrocarbons — regardless of viscosity, homogeneity, dirt and corrosive properties — but the ODS system is delivered from Belgium as a fully-automatic and compact unit that’s essentially ready to go,” he says. “And, because once a site has been remediated the equipment becomes superfluous to the organisation, the opportunity to rent it makes absolute sense.”

ODS International is one of Wallonia’s green-tech success stories, and is keen to extend its reach into SA and beyond.



Efficient air, rail, road and water transport ensures the timeless movement of goods.

Flexible approach to operations is paying dividends, writes PENNY HAW

Airport to drive region’s economic development

THE word “flexible” is one you’ll hear often when discussing the prospect of doing business in Wallonia, Belgium. Determined to open up the region to new businesses and innovation, Wallonian government policy has made the area one of the most competitive regions in Europe by, among other things, trying to take a flexible approach to everything it does.

Liège Airport, also known as Liège-Bierset, has taken this a step further by setting itself the goal of becoming a “Flexport”.

“After nearly 20 years ago of focusing primarily on being the best cargo airport possible, we decided to set ourselves the goal of becoming the definitive Flexport,” says cargo sales manager at Liège Airport, Eric Gysen. “The name represents services tailored to the needs of cargo operators and a real alternative to other congested, restrictive and prohibitively high-cost large airports.

“We’re flexible because we operate 24/7, don’t have a curfew and are not restricted by time slots. We can also accommodate schedule changes, have plenty of space and can open up additional space with little warning. All this means we can help keep costs down by ensuring short taxi times and by getting planes back in the air quickly — planes that stand still cost money. What’s more, our promptness and flexibility means getting products — particularly perishables — on the road quickly to final destination.”

Liège Airport is Belgium’s largest cargo airport and Europe’s eighth largest cargo airport. It’s also been home to TNT Express’s European hub since 1996 and, although it is used primarily for freight, the airport also serves more than 20 destinations for passengers for whom it operates an efficient and modern airport terminal.

Located in Grâce-Hollogne, northwest of the city of Liège in the east of Belgium, the airport is in the centre of the golden triangle of Paris, Amsterdam and Frankfurt, which means

goods can rapidly be delivered from the airport by road.

“It helps that we have easy access to the motorway,” says Gysen. “About 15 trucking companies service the airport, which gives customers quick access to major cities across Europe. There’s also the advantage of access to the port at Liège, which will also soon be home to the new Triligiport, and the fact that the high-speed freight train, the Euro Carex, will travel to Liège.”

The airport, which was originally established as a military aerodrome during World War I, is well known for its expertise and specialised facilities for sensitive and perishable goods. It provides access to 1,575m² of cold storage facilities and temperature controlled warehouses. These accommodate 250 tons of perishables — such as pharmaceuticals, healthcare products, fruit, vegetables, flowers and animals — every day.

“Every year, more than 3,000 horses travel through Liège Airport, which is considered the hub for departures and arrivals of horses competing in global equestrian events throughout central Europe,” says Gysen. “We also handle cattle and other livestock. We’re fully equipped with specialised transport systems for animals, stalls, stables and also an integrated veterinary and analytical laboratory on site.”

Aside from two runways (one measuring 3,690m, which enables all types of fully-loaded



aircraft to take off, and the other 2,340m long), the airport is located in a large, uninhabited area. More than 60 hectares of the property have direct access to runways and another 300 hectares of plots are available for logistics on the property.

Late last year, the new 6,500m² Liège Airport Business Park was opened. Then, earlier this year — as part of the €10m expansion, which will also include a new freight handling area and border inspection post — the airport opened the first building of its new Cargo City North. This development will eventually cover an area of more than a hundred hectares of land. The first phase, incorporating 47 hectares, is scheduled to be complete by 2014.

Second-line development is also under way. In the medium term, front-line and second-line space is set to triple to 600,000m². The ultimate development plan extends further, with about 350 hectares of economic zones under

consideration. The airport will offer a multimodal connection by linking directly to the planned Euro Carex from Paris to Brussels and Cologne.

Major airlines such as Qatar Airways, Ethiopian Airlines, Emirates, Lufthansa Cargo, TNT Airways, El Al Cargo, Iceland Air, AV Cargo, FedEx, National Airlines and Maximus Cargo regularly fly in and out carrying freight. Ethiopian Airlines recently upgraded its freighter fleet with two B777Fs, which operate daily to Liège. Qatar Airways flies between Johannesburg and Liège twice a week, transporting flowers, agricultural products and fish.

Two of Wallonia’s leading clusters, BioWin and Logistics in Wallonia, operate from offices at Liège Airport which, says Gysen, helps advance integrated services and facilities.

“The airport is an enterprise for regional development,” says Gysen. “It has already provided for 80 businesses, 3,200 direct jobs and 6,000 indirect jobs. Major new products are being planned to intensify this development. We’re excited about Liège Airport’s potential as a regional economic driver over the coming years.”

■ The Belgian economic mission to SA takes place from tomorrow until October 26. For further information, contact the consulate general of Belgium, Wallonia-Brussels trade commission in Johannesburg on (011) 884-5581 or johannesburg@awex.org.za.

Leaders in audiovisual services

WALLONIA is, along with Tuscany in Italy, one of two European regions selected by the European Commission for its exemplary strategy of supporting the creative economy as a driver of economic change. But creativity is nothing new to Belgium, which has a particularly exciting history of producing comics.

Indeed, you might be thinking “Tintin” but, in fact, 2013 marks 75 years since Belgium’s famous reporter-cum-bellboy,



Spirou, put the Wallonian industrial town of Marcinelle, near Charleroi, on the comic map with the production of the 52-page weekly, Journal de Spirou.

Published by Jean Dupuis and drawn initially by French cartoonist, Robert Velter — who is better known as Rob-Vel — the adventures of Spirou created an entire industry and also generated several spin-offs, including the Smurfs, Lucky Luke and Marsupilami. Journal de Spirou is still going strong with a circulation of 90,000 copies, making it the biggest children’s magazine in Belgium and the second-largest in France. Spirou’s empire also includes animated cartoons, albums and branded merchandise.

In 2007, Dupuis established a partnership with Wallonia’s French public broadcaster RTBF (Radio Télévision Belge Francophone), which resulted in the establishment of DreamWall and KeyWall. The idea of the partnership, says general manager, Thibault Baras, was to provide a “one-stop shop” with a full range of audiovisual production services in one place.

While Journal de Spirou continues to be published in an adjacent building, DreamWall creates two-dimension animated cartoons (including an animated version of Spirou), three-dimension animations, and virtual studio sets for RTBF and other clients. It also produces three-dimension visualisation projects, including a recent video explaining the features and benefits of a light-rail metro in Charleroi.

DreamWall is also overseeing a team of about 20 animators who are working on parts of a new full-feature animation movie

of Asterix, which has a budget of €30m and is scheduled for release in 2015. The company also provides services such as editing, audio mixing and studio filming, and access to a three-dimension projection room.

KeyWall, whose virtual techniques division produces several weather bulletins a day for television and also records numerous magazine-type programmes, plans to expand substantially into an area that is used to store Dupuis comic books. This will provide greater space for virtual studios, which will also be available to rent, and allow for growth in post-production operations.

“DreamWall and KeyWall are increasingly fulfilling the role of ideal partner for the realisation of audiovisual projects that combine the clever use of technology, creativity and skills,” says Baras. “Since our creation, we’ve been enriched by the expertise and talent — and passion — of some of the best people in the business of animation and visual production. We’ve also helped train people operating in the sector from other countries.”

Moreover, its location in Marcinelle makes the work of DreamWall and KeyWall eligible for the tax shelter audiovisual financing system and various subsidies from Wallimage. Created by the Wallonia government, Wallimage is a company that supports audiovisual productions and enterprises financially. The Mons-based organisation acts as an advisory and investment company. It analyses bids for its subsidiaries, Wallimage Coproductions and Wallimage Enterprises, which invest in films and audiovisual companies.

Mechanical engineering a sector of excellence in Wallonia

GIVEN Belgium’s long tradition as a successful and technically advanced industrial region, Wallonia’s mechanical engineering sector is among its most dynamic and successful. It comprises about 3,000 companies, which make up 40% of Wallonian industry, and provides 60,000 direct jobs, which account for 25% of the region’s industrial employment.

Every year, the sector invests €590m in research and development in cutting-edge technologies for the aerospace, automotive, construction, electrical, industrial automation, metals, information and communication technology, mounting and cranes, plastics and composites, security and defence industries.

“The field of mechanical engineering is vast and covers all competencies that call on knowledge of mechanics,” says mechanical engineering and advanced materials specialist for AWEX, Tanguy Huybrechs-Tondreau. “It covers aerospace and the automotive industry, as

well as all the mechanised industrial procedures, from healthcare product assembly lines to the production of household goods and the chemical industry. Robotics and automation are also linked to mechanical engineering and represent sectors in which Wallonia excels. Wallonia’s qualities of precision, reliability and speed in electromechanical engineering have helped the region’s engineers turn it into a sector of excellence.”

Furthermore, he says, the fact that machines, materials, components and processes involved in mechanical engineering of the 21st century increasingly touch on varied and highly advanced scientific and technical fields has led to “the hybridisation of mechanical engineering”. And with the “hybridisation of technologies, it is impossible for a single company to integrate all the required know-how. It must turn to other organisations that specialise in certain technological fields,” explains

Huybrechs-Tondreau. “Many of Wallonia’s older, original equipment manufacturers and integrators are large companies. However, in certain niches, particularly in emerging sectors or sectors yet to see the consolidation of their industry, SMEs play the role of original equipment manufacturer/integrator, which provides interesting new opportunities for interaction and partnerships.”

The hybridisation of technologies and strategic positioning of the different types of organisations in relation to one another encourages mechanical engineering companies to work more closely together, which led to the establishment of a formal network by way of the Wallonian competitiveness cluster in mechanical engineering, MecaTech Cluster. The network extends to universities and research centres.

About 73% of the sales achieved by Wallonia’s mechanical engineering sector are exported every year. More

and more of these are heading to Africa, including several interesting installations in SA.

Among these installations was the commissioning late last year of an uninterrupted power supply (UPS) system at the South African Reserve Bank in Pretoria by KST UPS of Battice, Wallonia and Sub-Sahara Power Distributors of Johannesburg.

KST UPS is a medium-sized company with more than 30

years’ experience in the design and manufacture of rotating machines specifically for UPS systems. Data centres, banks, governments, airports, hospitals and other organisations that demand continuously reliable supplies of power are among the system’s primary users.

“An uninterrupted power supply is essential to many operations and without a system that protects all eventualities,



KST UPS manufactures rotating machines specifically for UPS systems.

serious financial and other major consequences can occur,” explains international sales manager for KST UPS, Jonathan Hubert. “Demand for reliable and safe power supply in the field of critical systems power engineering has reached an all-time high. This is exacerbated by increasing disturbances generated by modern loads, reduced power quality due to renewable energy supplies, and the increasing use of sensitive electronic devices requiring higher quality power supply.”

KST UPS’s core product is the Dynamic Rotary UPS Rotabloc which, says Hubert, is a robust product based on efficient, conventional electrical and mechanical components.

“Critical functions of our UPS do not make use of fragile components such as power semiconductors and capacitors, chemical batteries. The simple design excludes complex technologies such as friction couplings, magnetic bearings, high speed flywheels, vacuum or gaseous containment,

sophisticated electronic converters. Its simplicity leads to ultimate reliability and low service costs which, added to the energy saved by the low UPS losses, produce a low total cost of ownership,” he says.

KST UPS is represented in SA by Cape Town-based power distribution solutions and rotary UPS specialist, Innovative Power Equipment. Among the projects under way in southern Africa is the installation of a KST UPS for Parmalat’s Mozambique factory.

Meanwhile, at Eskom’s coal-fired power station at Matla near Kriel in Mpumalanga, engineering and contracting company, Harmon — which is owned by Belgium-based Harmon Group (74%) and South African businesswoman Shirley Chauke (26%) — is busy with the refurbishment of units one to six electrostatic precipitators (ESPs). The base-load plant, built in the early 1980s, has a station capacity of 3,600MW, generated by the six units. The ESP refurbishment is set to improve the collection efficiency

of the flue gas cleaning plant by controlling particulate emissions.

Another Wallonian mechanical engineering company active in Africa is Fleurus-based Delaunoy, which is a fourth generation family business that has been in operation since 1921. Servicing the petrochemical, chemical, steelmaking, automobile and printing sectors, nuclear and conventional power stations, and providing contracting services for metal construction and assembly, Delaunoy has been particularly active in Algeria, Tunisia, Cote d’Ivoire and the Democratic Republic of Congo.

“We’ve had many years of successful experience in Africa. Now, with the Belgian economic mission coming to Angola and SA, we look forward to finding out what opportunities exist in other regions of the continent. We hope to expand our markets and continue to grow Wallonia’s mechanical engineering activities in Africa,” says Jean-Robert Ndudi, who oversees exports to Africa for Delaunoy.