

# LIEGE

Liège

## Automotive Sector and Mobility



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A training centre and a business park capable of accommodating investors in the automobile industry is developing around the most beautiful motor racing circuit in the world.



©Breuer

Breuer Technical Development is developing parts and components for major automobile manufacturers as well as alternative motor technologies such as hybrid engines.  
<http://www.btd.be>

## ▶▶▶ Liege is Still Showing the Way

Although Belgium has had no major national manufacturers for a long time, the automotive sector represents a large part of the economy. In fact, more than a million vehicles roll off its assembly lines each year: a record for such a small region! The Walloon Region and in particular the Province of Liege benefit greatly from this economic vitality and from their strategic situation at the heart of a zone which, within a radius of 300 miles, produces more than 8 million vehicles a year or 2/3 of the European car production. It is therefore not surprising that many companies are created and developed to supply the automobile industry directly or indirectly with components or subassemblies for vehicles, a good proportion of which are innovative materials. Other companies develop and sell in-board software systems (ITS – Intelligent Transport /Traffic Systems), design and simulation services or services relating to new methods of propulsion. So a series of SMEs and also of research and training cen-

tres based in the Province of Liege supply an industry subject to constant change with products, services and skills. The constraints of the environment (CO<sub>2</sub> emissions, materials recycling etc.), economy (emergence of low-cost cars), energy (oil price increase), safety and mobility (congestion of the road network) make the automotive sector more and more demanding and competitive. A constant challenge that the Liegeois have been taking up for over 100 years, when many companies from the province (Imperia, Nagant, FN, ...) were exporting the cream of their car and motorcycle production to the entire world.



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©TI Automotive

Ti Automotive is a reference supplier for the automobile sector. The "Specialty Steel Strip" division is a world leader in fluid transfer systems and fuel systems for automobiles.  
<http://www.tiautomotive.com>



©Carat Duchatelet

Carat Duchatelet carries out the conversion and armour plating of top-range vehicles for prestigious customers all over the world.  
[www.carat-duchatelet.be](http://www.carat-duchatelet.be)



## ▶▶▶ The Innovative Materials of the Cars of Today... and Tomorrow

Several Liege companies supply the automotive and equipment manufacturers with more and more improved materials. This is the case with, among others, the SIMONIS Group that specialises in the transformation of polymers by injection. The company carries out production, assembly and finishing of the most sophisticated parts. Thanks to the skill of its staff in working with plastics, chemistry, engineering and robotics, the production unit handles the transformation of over 700 types of polymer, from the simplest to the most complex. It uses the traditional single-material injection technique but also the more complex technique of two-material injection. In addition it has become involved in microtechnologies with the production of high-precision parts at competitive prices in small and large production runs.

<http://www.simonis-plastic.be>



©Simonis

The firm VANHULEN is another example of a supplier of innovative materials, one which is active in the automotive sector but also in aeronautics, space and defence. The company produces mainly precision springs (compression springs, tension springs and torsion springs) whose weight varies from 1/2,800th of an ounce to 11 ounces. Their design, aided by calculation software and by a prototyping service allows the customer to obtain a small run of industrial springs in a very short time so that he can check their suitability for use.



©Vanhulen

<http://www.vanhulen.be>

## ▶▶▶ Jyco in Europe with the Parent Company of Nomacorc to Develop VTPs!

Based in Michigan (USA) and already established in Canada, Mexico, Japan and China, JYCO Sealing Technologies specialises in the development and production of vulcanised thermoplastic (VTP) sealing systems for the automotive sector. This very competitive technology allows Jyco to count Daimler Chrysler and General Motors among its customers. Jyco decided to collaborate with the NOËL GROUP, an American company from North Carolina specialising in the transformation of synthetic materials, which includes the firm Nomacorc in its portfolio, in setting up in the Province of Liege and working with the major European manufacturers.

<http://www.jyco.net>

<http://www.noelgroup.net>

## ▶▶▶ An «Auto-Mobility» Cluster that is Going in the Right Direction!

In the Walloon Region, the car and mobility sector benefits from the existence of the *Cluster Auto-Mobilité de Wallonie* (Walloon Region Auto-Mobility Cluster), an independent, interdisciplinary network with 170 members made up of companies, universities, research centres and support services. The Auto-Mobility Cluster, based in Liege, is working in particular on the development of innovative products and new activities and on the expansion

and long-term survival of the companies. On an international level, it encourages new businesses to set up and it contributes to promoting the internationalisation of these companies.

<http://www.clusterautomobilite.be>

## ▶▶▶ When Liege's Cars Ruled ...

For several decades from the end of the 19th century to the start of the 20th, the Province of Liege was one of the major European centres for the manufacture of motorcycles and cars. Liegeois technical perfection and know-how, inherited from a long engineering tradition, allowed the emergence of many brands: motorcycles that were famous at the time, the renowned *Demoiselles de Herstal*, FN, Sarolea and Gillet, and cars such as the prestigious *Impéria* and also the FN and Nagant, to mention just a few of the better-known brands.



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©FN



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## ▶▶▶ More Intelligent Vehicles in the Service of Increased Mobility

Liegeois know-how also relates to intangible aspects such as what is nowadays called ITS, Intelligent Transport/Traffic Systems, which is the combination of advanced technologies capable of contributing to a reduction of the problems of mobility. In this regard, the firm ULYCES

Advanced Open Telematics is particularly effective. This young company sells the ULYCES platform, a linked, programmable telematics solution dedicated to fleet managers who wish to establish permanent information exchange between their vehicles

and their fixed infrastructure. ULYCES Advanced Open Telematics is positioned as a one stop shop for telematics capable of offering a global, tailored solution.



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<http://www.ulyces.com>

M3 SYSTEMS is a service company specialising in radio navigation applications that is currently operating in the aeronautics and space sectors. In 2004, M3 Systems also launched the MITRA European project whose aim is to prototype an operating system that allows the transport of hazardous materials (THM) to be monitored in real time. THM, which requires a high level of precision and integrity in the services provided to its users, poses questions associated with the protection of the environment and with the safety of civilian populations. It must be taken into account in the context of GMES (Global Monitoring of Environment and Services) initiatives.



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<http://www.m3systems.net>

It should also be noted that these companies, like about twenty others in the Walloon region, form part of the New Mobility ITS forum, a group set up within the Auto-Mobility Cluster.



## ▶▶▶ University Research in the Service of the Car and Mobility

Many spin-offs of Liege University have developed activities of interest to the automotive sector and which provide solutions to the problems of mobility in general.

GREEN PROPULSION is an independent specialist that develops clean prototype vehicles powered by alternative fuels, electric, hybrid engines or fuel cells. The best leading-edge technologies (engines, batteries etc.) are constantly evaluated thanks to modern test benches that are also directly available to customers. By means of its Metropoli simulation and optimisation software, Green Propulsion allows savings in time and money before an engine is manufactured. This spin-off also offers complete integration of the vehicle : engineering design, thermal management, electrical cabling, electronic cards, development and monitoring in operation.



©TILT-HOUET-ULG

In a different sphere, GDtech produces designs and models of an exceptionally high standard: studies in mechanical engineering as well as advice and expertise in CAD (resistance and fatigue, crash and restraint systems, seals, welding points, vibro-acoustic tests etc.).

V2i offers a complete range of services in the field of vibrations. The company is distinguished by integration and exploitation coupled with experimentation and simulation. This double activity allows, for instance, the improvement of modelling, certification of the functionality of a product under desired vibration conditions and the use of more relevant diagnosis with regard to the effects associated with dynamics. V2i therefore contributes to the improvement of structural design, mechanical reliability and product safety.



©LASEA

LASEA (Laser Engineering Applications), another particularly effective spin-off, designs and develops integrated laser systems for new industrial applications, in particular in the field of glass for cars and for the traceability of products.

Specialising in the exploratory, automatic and intelligent analysis of databases generated mainly by production and manufacturing processes (data mining), PEPITE has developed software products and services that are intended to improve manufacturing procedures of interest to industry in general and the automotive industry in particular.



For all information about the spin-offs of Liege University, about technology transfer in general and about relationships between companies and Liege University in particular :

<http://www.interface.ulg.ac.be>

<http://www.greenpropulsion.be>

<http://www.gdtech.net>

[d.simon@v2i.be](mailto:d.simon@v2i.be)

<http://www.lasea.be>

<http://www.pepите.be>

## ▶▶▶ SPA-Francorchamps : Instruments at your Service

Spa-Francorchamps is not only one of the most beautiful motor racing circuits in the world. It has also become a unique instrument for the companies and the training centre that are based there. In fact direct access to the circuit allows them to run trials and test stages in exceptional conditions.

### A Training Centre to Boost the Skills of Liege, Walloon and Euro-Regional Companies

The automobile Campus of Spa-Francorchamps is a unique professional training centre in the sectors of motor sports and the automotive industry (production and development, design and engineering). It also offers training and R & D in the new methods of propulsion (hybrid engines, fuel cells etc.), in bodywork and the manufacture of chassis (in composites or in aluminum, for example).

This centre, which serves companies and jobseekers, benefits from high quality equipment, in particular high-tech engine benches capable of absorbing power levels of 300 Kw and above, suspension and ABS test benches etc. Workshops for adjusting and renewing engines, sophisticated electronics workshops and metrology workshops also form part of this remarkable equipment.

Set up in a area of 3 acres, the automobile Campus of Spa-Francorchamps benefits from European structural funds and has, among other partners, IKA-RWTH (University of Aachen), a university centre internationally renowned in the automotive sector. This is one way of affirming its role and its extended sphere of activity not only in the Province of Liege and the Walloon Region but also in the whole of Belgium and in the neighbouring countries.



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### Blanchimont, a Business Park Reserved for Companies in the Automobile Sector

With the agreement of local and regional authorities, SPI+, the economic development agency of the Province of Liege, has created a specialised park of 25 acres next to the circuit. The premises will have services laid on in the course of 2006. The plots can be reserved from now on.



©SPI+

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**For any further information, please contact SPI+**  
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