Lab-Volt: Technology Secret Well-Kept

(Québec) If Lab-Volt is well known in the world for their educational and training systems since established 53 years ago, only few people of Quebec, outside of the industry and educational field know that 220 people work in the Industrial Park located in Charlesbourg and sixty are stationed at their headquarters in New Jersey.

Michel Lessard, engineer and executive vice president of operations at Lab-Volt, underlines that the company has added several strings to its bow since its beginning with electromechanical systems in 1959.
In addition to the electro-mechanics with the motors and generators, there is also telecommunications, radar systems, microwaves and radio communications. The manufacture of training modules was consolidated from the New Jersey plant to Quebec. Another U.S. company which specializes in hydraulic modules has seen their products transferred to Quebec. Same applied for an Ontario company, specializing in refrigeration. M. Lessard states «Today, we have a product line on renewable energy with wind turbine, solar, batteries and electric vehicles.

In Quebec, we oversee the training of teachers and also the trainees for the usage of the modules. "Basically, all modules and training workstation have been designed much like LEGO blocks to adapt quickly to different situations for practical teaching, states Mr. Lessard. Depending on requirements, the workstation can be reconfigured with parts that are added on a perforated board while others may be stacked on top of each other."

The different elements are scaled down allowing the training to be done in the laboratory environment. For example, the radar system has a range of three to six meters for learning and experimentation. Same for systems like the wind turbines that you see in the picture above.

**Standardized production**

The training modules come with learning manuals, which include hand-on exercises and tests in the customer's language. These manuals are also available in electronic format for distance learning (e-learning).

“If the language of communication in most universities and business is English, manuals and modules are translated as customer needs, adds M. Lessard.

Many instructors from Lab-Volt are comfortable in several languages. Other than English and French, there is Spanish and Arabic. Sometimes when trainers or engineers must go overseas, the direction of Lab-Volt must take into consideration what is happening in the country. This recently occurred with a person who had to visit Cairo in Egypt. It had to choose a moment when there was less tension to send the instructor. For the future years, Lab-Volt has a few innovations which are being developed in the greatest secrecy. However, collaboration with educational institutions around the world continues. At the same time, the company is considering strategic alliances in the industry. Peter Schluter, the present owner, on the eve of his 80th birthday, is not talking of retirement yet. "He always has a very lively spirit,” says Mr. Lessard.

**Lab-Volt’s history**

The company was established in 1959 by Professor Theodore Wildi, professor in the Department of Electrical Engineering, Laval University, under the name Gentec.

The initial project to build this business was first seen in the university laboratories where the professor Wildi had to invent electromechanical modules for teaching and practical work.
The modules were so successful, that he founded a company to manufacture and market this product. He had developed a load stabilizer to reduce the costs associated with industrial electricity consumption.

Since he was a professor and researcher and not an entrepreneur, he sold the educational division of Gentec in 1969 to David T. Buck, from Buck Engineering Company of New Jersey. Lab-Volt was then established and M. Wildi held the presidency. The industrial division Gentec was sold to his partner Jean-Marie Langevin, a Quebec ownership which still exists.