

REGULVAR

Did you know?

Regulvar's clients benefit from the expertise of close to 400 employees.

In memoriam

Pierre Dumoulin
1961 • 2009

It is with sadness that we share today the news of the death of one of ours, Pierre Dumoulin, which occurred December 18th, following a battle with cancer. A Regulvar team member since 1993, he had the company at heart and we are grateful that he so actively contributed to its growth. A refrigerationist by profession, this amiable, helpful, competent and trustworthy man quickly became the backbone of the service team as well as the right-hand man of his colleagues and clients. Greatly appreciated by all those around him, he will be truly missed. It is with great respect that we say goodbye to him and that we offer our sincere condolences to his family and loved ones.



ASHRAE ORLANDO

The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) held its international annual conference from January 23rd to the 27th under the theme of "Building Sustainability from the Inside Out". The president of Regulvar inc., Mr. Marc Dugré, was present and considers the outcome of this event to be very positive.

Among the trends that caught the attention of Mr. Dugré were the ceiling cooling systems, which were presented as an alternative to traditional air conditioning. He believes that this new method provides significant benefits that warrant consideration for its use on the Canadian market. In fact, he has already established contact with a manufacturer whose inductive technology seems to be very promising.

Furthermore, Regulvar's clients will no doubt benefit from the fact that Mr. Dugré

used his time at the conference to forge and renew valuable partnerships that will enable the company to continue to offer top of the line systems that exploit the latest technologies and most effective solutions. Among the agreements that were concluded are those with Triatek (www.triatek.com), a company specializing in laboratory control equipment whose isolation room monitor is of exceptional quality, Dimplex (www.dimplex.com), our supplier of heat accumulators for the control of electric heating during peak hours, and Metal Industries (www.metalair.com) for the development of a flow sensor for terminal air units.

All in all, both Regulvar and its clients will reap the benefits of this conference.

Source • Marc Dugré, président
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A new name

AS MUCH INFORMATION



Dear readers,

You will have noticed that our newsletter has been given a new name. This choice resulted from the team's will improve this information tool. In 2010, *Zone Regulvar* will be published five times and will offer interesting and relevant news concerning projects involving Regulvar, as well as information on various issues related to building automation. We hope this newsletter will spark your interest and we invite you to contact us if you wish to provide us with your feedback at zone@regulvar.com.

Nathalie Fradet • Editor

Regulvar, proud partner of **La Cité Verte**



An ecofriendly project

An initiative of SSQ Financial Group, La Cité Verte is an innovative multi-residential complex unique in Quebec - the second of its kind in Canada - designed as a commitment to sustainable development, energy conservation and respect for the environment.

Thus, many of the latest ecological technologies will be put to use in the construction of this complex of about 800 homes (condominiums, townhouses and social housing), which will also include office and commercial space,

collective equipment, environmental facilities and green areas.

This environmentally friendly project will take several factors into consideration - water, energy, transport, waste and materials - in order to minimize their environmental impacts, and will make the most of many innovative solutions and technologies in order to reduce all forms of consumption. Among the selected solutions are a thermal power plant fuelled by biomass, wind turbines, a rainwater recovery system, charging stations for electric cars and even a street lighting system activated by motion sensors.

It is a well known fact that consumption reduction starts with the awareness of the behaviours that are often associated with overconsumption. Thus, an important element of this project lies in the fact that occupants will be conscious of their electricity, drinking water, hot water and heating energy consumption. They will be given the means to monitor their consumption over a given time period and to compare it to that of other residents. This is a highly beneficial system, since studies have shown that the mere awareness of what one consumes may result in savings of the order of 15%. ►

Regulvar, proud partner of **La Cité Verte** (continued)

A leading edge dashboard

In order to monitor their energy consumption, residents will benefit from a tool that Regulvar had the privilege to develop. Through the 800 innovative touch screen dashboards that will be installed in all units of La Cité Verte, each resident will have access to:

- real-time energy consumption for heating and electricity (in kWh and \$)
- consumption history
- temperature and set points
- outside temperature and weather forecast
- temperature and lighting control
- message board
- camera image of the main entrance

Furthermore, it is interesting to note that the consumption data concerning drinking water, domestic hot water and electricity will come from three meters installed in each unit, and that all information will be transmitted through wireless technology.

A district heating system optimised by Regulvar

The success of that kind of project does not lie only in the energy savings realised by residents; it requires technical solutions that in turn need the input and experience of a large number of experts in very specific fields.

For this reason, SSQ Real Estate sought the expertise of Genecor and Polynergie for the design of the five megawatts biomass boiler and the district heating network – the first of its kind in North America –, which will serve La Cité Verte. These specialists decided to take advantage of an Austrian technology in order to optimize the network through the use of a large Delta T (temperature difference between supply and return water of 40 °C). This strategy will make it possible to reduce not only the diameter of the pipes used, but also reduce heat loss to the ground and required pumping power. For example, to construct the network linking the 800 residences of La Cité Verte, a pipe diameter of 8 inch will be sufficient.

To further their project, SSQ Real Estate entrusted Regulvar with the

design and commissioning of the district heating control system and the energy consumption measurement system, which includes storage of the measured data, transmission and access to the acquired data through the Web, production of invoices, as well as the creation of the innovative dashboards aforementioned. By bringing into play these optimization solutions, Regulvar and its partners have no doubt helped put performance at the service of ecology.

Future oriented solutions

The technological and ecological solutions developed by Regulvar, like those favoured by La Cité Verte, are resolutely future-oriented. As they gradually transform the way we look at the built environment, they enable us to envision a positive and remarkable future to building automation.

Source ● **Marc Dugré**, président
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UPCOMING TRAINING

ORCAVIEW 3.33 DIGITAL CONTROLLERS INTERMEDIATE LEVEL

The main objective is to familiarize participants with the ORCAview software and with Delta digital controllers.

Laval : April 12-13 (French)

Ottawa : March 8-9 (English)

ORCAVIEW 3.33 DIGITAL CONTROLLERS ADVANCED LEVEL

The purpose of this training is to understand the advanced software functions.

Laval : April 14-15 (French)

Ottawa : March 10-11 (English)

GCL + PROGRAMMING (GENERAL CONTROL LANGUAGE)

The objective of this training is to understand the programming of Delta digital controllers.

Laval : April 19-20-21 (French)

Ottawa : March 15-16-17 (English)

CREATION OF GRAPHIC INTERFACE WITH ILLUSTRATOR

The objective of this training is to create graphic interfaces with the ORCAview 3.33 Illustrator module software.

Laval : April 28-29 (French)

Ottawa : (English)

Depending on enrollment

For more information,
please contact **Mary Atrial**
at 613-565-2129, extension 2100

DHMI control at your fingertips

A controller, since it generally facilitates the centralized and automated management of various systems within a building, is a key component of any building automation project. There are a wide variety of controllers on the market, but some have a higher potential than others. This is the case for the DHMI, a product launched by Delta Controls in 2009.

Although a high performance controller of the same type as the DSC and DSM models of the same company, the DHMI has the advantage of being endowed with a touch screen as well as a fully programmable interface. Because of its color LCD high-resolution screen, its very powerful RISC, ARM 9, 32 bit@230 MHz intelligence, its 256 MB flash memory and the fact that it supports BACnet Ethernet and Zigbee communications, it is an extremely versatile tool.

Contrary to what many people think, the DHMI is much more than a simple display. Its intelligence enables it to perform a large variety of functions: gatekeeper, remote control panel, wireless input and output panel through the Zigbee protocol, interface for upscale hotel rooms and homes, etc. To building managers, it provides a tool to monitor and manage HVAC, lighting and access systems of their buildings, as well as surveillance cameras, all thanks to a real time graphical interface. To the occupants, it offers a way to view floor



plans or access information contained in a message board, make simple changes to occupancy schedules or modify temperature set points.

Little effort is needed to imagine new uses for the DHMI. For example, a conference room can become a model of user-friendliness through the use of this controller. With the touch of a fingertip, the occupant can dim the lights, turn them on or off, open or close the blinds and curtains, lower the screen, adjust the ambient temperature, the ventilation, etc. It's integration at its best.

It is because of the unique features of the DHMI that Regulvar has chosen to make it a part of its building automation systems and decided to create personalized interfaces for its customers, tailored to their needs and objectives. As part of the Cité Verte project in Quebec City (see page 3), the 800 dashboards programmed by Regulvar will allow all residents to access important information and monitor their energy consumption: a major innovation in energy management.

The DHMI can be a powerful ally in the search for advanced solutions in building automation, and it's within your reach.

Source • **Marc Dugré**, président
mdugre@regulvar.com