

# ENGLISH SUMMARY OF CONTENTS

## PROFESSION Tribune

### How to approach professional insurance for energy performance renovation

> by Catherine CHAUVIN

The French authorities announced ambitious objectives for the energy performance of buildings, which will require new ways of design, construction and renovation. Professional insurance companies are also involved as they will have to respond to demand for coverage of contractually specified energy performance results. Also analysed are the conditions for providing professional insurance when using innovative designs or products in advance of their full certification.

p 12

### Profession, Water conditioner

> by Henri VACHER

SYPRODEAU (Union of manufacturers of water treatment and disinfection products) expressed the desire to present its activity and motivations in this article.

p 14

## ROUNDTABLE

### Environment Grenelle Conference:

#### Which follow-up for building industry?

On last January 9th, CVC convened for its bimestrial roundtable meeting: Emmanuelle Bertho (Effinergie), Raphaël Claustre (CLER), Roland Fauconnier (FFB), Éric Lagandré (ANAH) et Alain Maugard (CGEDD). After a little more than one year since the "Grenelle" Environment conference, the agenda was to take stock of the resulting laws and actions.

p 16

## DOSSIER New electric motors

> Dossier coordinated by Franck BENASSIS

### Energy efficiency of electric motors

> by Franck BENASSIS

High efficiency electric motors may provide significant savings. The importance of savings depends on the yearly operation time and on the percentage of maximum power at nominal load.

p 21

### Which new facts in the field of HVAC actuators

> by Fabien DELVAUX

About the history of electric control drives, the new servomotors and their most recent innovations.

p 25

### A technological concentrate for a new generation of motors

> by Philippe FAYE

Advances in the field of induction asynchronous motors, new motors with permanent magnets, together with the benefits of speed variation, lead to energy savings, increased productivity, smooth running, simpler installation and operation and management connection facilities.

p 27

### A technological concentrate to increase energy performance

> by Philippe FAYE

About new synchronous motor with permanent magnets, which give higher energy efficiencies, require less space and provide more reliability and serviceability.

p 31

### Water-cooled motor: an adequate solution

> by Philippe FAYE

Water cooling of electric motors is more efficient than usual air circulation cooling. It also reduces drastically noise emission, requires less weight and space and brings additional advantages which are detailed in the article.

p 33

## DOSSIER Heat pumps

> Dossier coordinated by Jean PRADERE

### A positive year with important advances

> by Didier RYS

The year 2008 has been quite important for heat pumps with regard to many aspects, among which the doubling of sales in France compared to those in 2007, the quality process now in place for products and installation, and the recognition by French and European authorities of heat pumps as equipment for the use of renewable energy sources.

p II

### Renovation : the winning card of high temperature heat pumps

> by Bernard KARPP

Heat pumps producing hot water at 60 °C or higher, which may replace boilers, offer large opportunities for energy renovation in existing buildings. The obtaining of such water temperatures require specific techniques and designs, an overview of which is given in the article.

p IX

### Carbon dioxide as coolant

> by Florence MOULINS

About the reasons in favour of choosing carbon dioxide as coolant and the distinctiveness of design and operation of CO<sub>2</sub> heat pumps.

p XIV

### Water-bearing source heat pumps: help to decision tools

> by Alain DESPLAN

In order to facilitate the planning of geothermal heat pumps using underground waters, the geological data collected during various studies and through different bodies are now accessible via internet to assist owners and planners in assessing feasibility for geothermal water heat pumps.

p XVIII

### Heat pumps - Good practice and precautions for installation

> by Emmanuel LAURENTIN

About the essential questions and precautions at the planning and contracting phases in order to reach an adapted solution and the client's satisfaction.

p XX

### Energy performance and sustainable development at swimming leisure centre in Moulins

> by José NAVETEUR, A.ROUSSET, V.TORRI, G.LASSIMONNE & J.-P. THIERRY

The water sports and leisure centre in Moulins (France) has been equipped with a geothermal heat pump using the water resource of low-depth watertable aquifer for heating and dehumidification; the energy monitoring, realised by EDF, demonstrates a remarkable energy performance of this installation.

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Carole Le Gall, directrice du CSTB

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## TABLE RONDE

### Grenelle de l'environnement : quelles suites pour le Bâtiment ?

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## DOSSIER I

### Les nouveaux moteurs électriques

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## DOSSIER II

### Pompes à chaleur : la confirmation

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