

# FLUX Magazine

Key words: Busbar Design, CIVA<sup>nde</sup>, Ecodesign, InCa, Induction Heating, FLUX, Mechatronics, Portunus, PSCAD,...

## Editorial

Commercial Team - Cedrat.

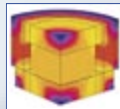
### Best Wishes for 2007...

The whole team of CEDRAT is happy to wish you a Very Happy New Year 2007. May it bring you joy and prosperity in your individual and professional life.

2006 was the year of the twentieth anniversary of Magsoft. It ended with a joint agreement between CEDRAT and Adapted Solutions, company specialised in software solutions for mechatronics and electrical systems. This strategic partnership allows CEDRAT to further its presence in the market of simulation software and ADAPTED SOLUTIONS strengthen its international activities. More information are given in this issue.

Besides Portunus, that completes brilliantly our software solutions catalogue, other new products or versions will highlight the coming year. Motor overlays (now for Brushless PM and Induction machines, and soon for DC machines) are among the key simulation solutions for motor design and analysis. InCa also is a promising new package for electrical connection simulation: the application for busbars design for power electronics is very significant. All this opens widely new doors for our close and long term future and strengthen our position as a leading provider of a complete range of software solutions for electrical and mechatronic engineering.

## Magnetic actuators.



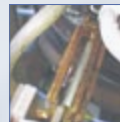
The magnetic circuit of magnetic or linear actuators... (pages 14-16)

## Bus transfer with PSCAD.



Performing a fast bus transfer study... (pages 2-3).

## Induction heating.



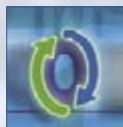
State of the art of numerical simulation with Inova (pages 6-7).

## Busbar design.



How to spare Nanohenries with InCa (pages 8-9).

## Systems simulation.



Newest solution for simulation of power electronics and mechatronic systems (pages 4-5).

## CEDRAT and Ecodesign.



Partnership with CODDE for electric and electronic equipments ecodesign (page 12).

### LINKS to the following articles

#### >> Software:

- Portunus for simulation of power electronics and mechatronic systems.
- Busbar design: how to spare Nanohenries.
- 2006 Flux Users Conference Padova, Italy.
- New version of CIVA<sup>nde</sup>.
- Ecodesign: CEDRAT and CODDE partners.

#### >> Industrial applications:

- Induction heating: state of the art of numerical simulation with Inova.
- Using PSCAD for studying bus transfer transients in a nuclear power plant.
- Soft Magnetic Composite (SMC) and design of magnetic actuators.

#### >> Corporate:

- CEDRAT and ADAPTED SOLUTIONS agreement.

#### >> Agenda:

- Having troubles with electrical motor heating ? Get trained !
- IEMDC 2007
- Training courses.
- Dates to remember.



15, Ch. de Malacher - Inovallée 38246 MEYLAN Cedex FRANCE  
Tel. : +33 (0)4.76.90.50.45 - Fax : +33 (0)4.56.38.08.30  
Email: cedrat@cedrat.com - Web: www.cedrat.com  
Editing manager : B. Ribard, Managing Director of CEDRAT and CEDRAT TECHNOLOGIES