



# Distributor News No. 5 - Standard Sales

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## The Management's column



By Per Albæk, Managing Director

A new year is approaching. Among the different events in 2005, a few important ones are worth mentioning.

First of all the change of name to Dantherm Air Handling and the launch of our new propelled logo. The main reason why we changed our name or rather added an identification line was to further emphasize the core competence of our company: Air handling. And our new symbol - the propel - perfectly symbolizes what we stand for: air and drive.

Another important event in 2005 was the pre-launch of a power backup system using the fuel cell technology. Next step is that these new fuel cell power backup systems will be tested by some of our close partners, especially within the telecom industry. We shall keep you informed about the progress on this new and promising business area.

The latest stock exchange information and key figures are now available from our parent company, A/S Dantherm Holding's website: www.dantherm-holding.com.

Finally we wish you a Merry Christmas and a Happy New Year. As you may have noticed, we have not sent you any Christmas card this year. Instead, we have donated a sum to UNICEF and their work for better living conditions for children in the earthquake stricken Pakistan.

# Dantherm 21st sets the agenda!



By Flemming Smith, Area Sales Manager

At Tetra World Congress 2005 Dantherm Air Handling promoted the new Power Backup system Dantherm 21<sup>st</sup> for TETRA and Telecom networks.

Dantherm 21<sup>st</sup> is a revolution within power backup solutions, and we promote it to the Tetra operators, as it has the following advantages against traditional battery packs:

- Increased redundancy
- Compact design
- Low maintenance costs
- Superior technology
- Reliability
- Light weight
- Green power and no waste
- Extremely large temperature range
- Low cost for long back-up capacities
- Can be combined with power management
- Can replace both batteries and a generator



From the TETRA World Congress 2005



The Tetra World Congress was very successful and the interest in our solutions was bigger than ever expected. Especially our new Power Backup System for TETRA and Telecom networks was in the visitors' focus. This was also one of the reasons why Dantherm Air Handling was nominated among the 4 most innovative companies at the whole fair.

## **Nordic Days in Croatia**



By Niels Erik Larsen, Sales Manager

21 - 22 November Dantherm participated in a seminar in Zagreb, Croatia: Nordic Days.

The Nordic Days was originated from the Trade Commission of The Danish Embassy in Croatia. The main purpose was to create a forum to bring Croatian and Scandinavian companies together.



From Nordic Days in Zagreb

The purpose was definitely met as a number of Scandinavian companies were represented at the seminar and the interest from Croatian companies was very high.

We are convinced that the investment of bringing this seminar together will give a good return as many good relations were created between Croatian and Danish companies among others Dantherm.

There is no doubt that this beautiful region of the world is facing a bright future. We experienced a remarkable willingness and desire to invest in development of business.

## Fuel Cell technology



By Flemming Smith, Area Sales Manager

As mentioned before, a new power backup system was introduced at the Tetra World Congress. In the following we bring a translation of an article which has been printed in our Danish customer magazine VisionAIR:

In 2006 Dantherm Air Handling launches a 1 kW power backup unit for telecom base stations. This backup system is the result of a successful development work, where the fuel cell technology has been developed in cooperation with some of the most important players in the market.

#### Compact plants:

"Already several years ago we saw a number of benefits in using fuel cells as an alternative to the conventional batteries in power backup systems," says Jesper Themsen, R&D Manager at Dantherm Air Handling. "Especially because the hydrogen storage and the fuel cell module only take up half as much space as conventional battery packages. This is an important argument because the square meter hire for radio base stations is a heavy expense for telecom companies".

#### Market-driven development:

The backup system is based on hydrogen fuelled polymer electrolyte membrane (PEM) fuel cell stacks. It has a lifetime of 10 years and is fully competitive with corresponding battery backup solutions.

"We have been supplying heat management solutions for telecom base stations for many years now, and our customers within the telecom industry have often asked for alternatives to the traditional battery back-up systems, which are too expensive, too big, too unreliable and have a too short lifetime. Therefore we are positive that our efforts will bear fruit within a short time."

#### Fuel cells everywhere:

Dantherm Air Handling is now ready to take the next step with the new technology. "We contemplate building fuel cells into our mobile power generating and heating units which are used by military and relief agencies, says Jesper Them-

### Heat and power plants for residential homes:

The R&D department has developed a 5 kW combined heat and power plant, based on a compact PEM fuel cell stack and a combined heat and power plant fuelled by methanol and natural gas. These plants have been tested with PEM as well as Solid Oxide fuel cells. "It is obvious to make combined heat and power plants to provide residential homes with electricity and heat but the market is still very difficult for reasons of legislation and taxes. We think it is extremely important for Dantherm Air Handling to be first mover in this specific field. The market may suddenly jump forward and then we have to be ready with competitive and reliable solutions", finishes Jesper Themsen.



Four generations of fuel cell power backup units

#### Fuel cells in brief:

Fuel cells are electrochemical units, producing electricity and heat from hydrogen fuel and oxygen. Instead of hydrogen they can operate on reformed fossil fuels like oil and natural gas.

#### Environmental and efficiency advantages:

Fuel cells present a number of potential environmental and efficiency advantages. The oxygen is taken from the air and water is the only by-product. There is no pollution and no harmful substances from this technology and therefore fuel cells are a very clean, environmentally-friendly source of energy. At the same time fuel cells are super-efficient and noiseless.

The solutions offered by Dantherm in 2006 are fuelled with hydrogen which is stored in pressurized bottles just like any other industrial gas.

5% of turnover dedicated to research and development: 5% of the turnover in Dantherm Air Handling is spent in the development departments where 13 out of a total of 45 employees are working on fuel cell research & development.



The R&D fuel cell team

The fuel cell R&D department is not a closed, secret world. On the contrary, Dantherm Air Handling works closely together with scientists and students from Aalborg University and other scientific societies, private companies, specialized in each their specific technology.

#### Why start from zero each time:

The aim of the research & development department is to find and apply new technologies and concepts into Dantherm products. "We are not afraid of demanding and theoretic challenges. But why start from zero each time? It is our mission to pinpoint interesting technologies and research achievements matching Dantherm core competencies and which can be used in new beneficial solutions for our customers".

New trails have been blazed not only in the practical use of fuel cells. In cooperation with external partners Dantherm Air Handling has developed the most silent and highly efficient dehumidifiers, air conditioners and ventilation units on the market.

### 40% less energy for cooling:

Also in cooling and dehumidification remarkable results have been achieved. "In cooperation with a small innovative Danish company we are working on a new patented cooling solution with big potentials of reducing cooling power consumption by approx. 40%. This solution is expected to get a decisive breakthrough in cooling and dehumidification at very short sight."

The 45 employees in the development departments are working on a number of other projects which are, however, still hidden behind a veil of secrecy.

## Meet the new silent partner of Mobilkom Austria



By Jane L. Rasmussen, Area Sales Manager

Silencio is Dantherm's new low-noise outdoor air conditioner, which is specifically designed to control the interior of communication shelters. Apart from the neighbour-friendly noise level, one of the key features of Silencio is its ability to reduce the cost of ownership to a minimum.

Our Austrian partner, MS-KlimaTechnik convinced Mobilkom Austria about the numerous advantages of the solution, and Silencio is now the preferred cooling solution in the Mobilkom networks in connection with the UMTS network in Austria. The solution will be installed from December 2005 to August 2006. We are very enthusiastic about this situation and look forward to selling the solution to operators through our worldwide sales channel.

The Silencio distinguishes itself from other products on the market by helping the operators create stable temperatures and at the same time offering:

- an extreme low sound level
- reliability with redundancy
- unique service friendliness
- low running cost
- minimum cost of ownership



More information about Silencio at our Distributors' Portal at www.dantherm-air-handling.com.

#### Christmas Eve in Denmark

Traditions vary a bit from one part of the country to the other, but generally we on the 24th December start celebrating by having a small Christmas lunch (striving not to spoil the appetite by eating too much) consisting of pickled herring and a few warm dishes. After lunch we start preparing stuffing for our turkey, duck, goose or whatever we choose to prepare for dinner. Once the meat is in the oven, many Danes go to church (once a year cannot hurt anybody...), go for a walk or just relax. In the evening we enjoy a good dinner, which ends with Risalamande, a Danish Christmas pudding. It is also traditional to "hide" one or more almonds in the pudding and those who find one, get a small present.

When we are all overfed, we get some exercise by dancing around the Christmas tree hand in hand while singing Christmas hymns.



Thereafter we start opening presents and we spend the rest of the evening enjoying ourselves and our presents.

# **Dantherm Day in Bucharest**



By Per B. Martensen, Area Sales Manager

Wednesday 23<sup>rd</sup> November our Rumanian dealer CON-SULT MOB srl had arranged a Dantherm Day in Bucharest. Totally 42 persons took part in the event. Participants were dealers, installers, consultants, architects and teachers at Technical University of Civil Engineering Bucharest (UTCB), Faculty of Building Services and Equipment. The sales staff from Consult Mob was present.

## The program was the following:

Presentation of Dantherm Air Handling/CDP pool dehumidifiers and dehumidifying principles by Per Martensen.





DanX was presented by Adrian Beraru, Key Account Manager, Consult Mob



DanX installation presented by Prof. Dr. Iolanda Colda, Bucharest University

Prof. Dr. Iolanda Colda presented a DanX installation in an old application, the effectiveness of the new installation was very high, and the installation had a pay back time of less than 2 years mainly due to less fuel consumption than by the 20 years old installation.



Managing Director Viorel Tanacescu, Consult Mob

The event was very well organized and gave a good possibility for discussion between all parties involved in pool projects.

# 2006 - a new challenging year is approaching



By Niels Erik Larsen

Year 2005 is at its end and we are now facing the challenges of a brand new year 2006 including all the goals and objectives we are going to achieve together with you.

Let me mention a few highlights planned for 2006:

Sales Development Seminar (September, 2006) here in Skive. We hope you will find the time to participate, and we will forward further information in good time.

As usual we will be at the next IKK exhibition in Nürnberg from 18th to 20th October 2006.

For the first time we will attend the Mostra Convegno in Milan in the period 28<sup>th</sup> February to 4<sup>th</sup> March 2006. Our stand is located in Hall 22 – stand U51.

We do hope to count you among our visitors as it is always delightful and a very special pleasure for us to meet you when we are participating in these exhibitions. Please make reservations in your calendar already now.

Please let us know if you want our assistance in participating in local exhibitions.

We look forward to continuing the good cooperation and wish you all a Merry Christmas and a Happy New Year.





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