

efficiency in food and energy processes.

**GEA ammonia chillers are convincing owing to their efficiency**

## **German Refrigeration Prize for Grasso BluAstrum**

**Bochum, Germany, 24 March 2011** – Since very recently, the Grasso BluAstrum from GEA Refrigeration Technologies is considered “distinguished” refrigeration technology: the brand-new GEA ammonia chiller has just received the German Refrigeration Prize in the category “Climate-Friendly Use of Refrigeration Systems in Production of Foods and Beverages”. Katherina Reiche, Parliamentary State Secretary for the German Federal Ministry for Environment, Nature Conservation, and Nuclear Safety, presented this prize on 22 March 2011 in the German capital to Wolfgang Sandkötter, Director of Development for GEA Grasso GmbH (Berlin). This year as an exception, three second prizes were conferred in this category (each with award of EUR 5,000) in order to recognize the great significance of all winning projects and products. For BluAstrum, the jurors praised the operational efficiency of the new chiller: the screw compressor closes the efficiency gap between slide-valve-controlled screw compressors and variable-speed turbocompressors, with application of the natural refrigerant ammonia. The energy efficiency of the BluAstrum is approx. 40 % greater than that of current conventional technology, whereby it appreciably reduces power consumption, operational costs, and the environmental footprint.

### **BluAstrum covers the range from 500 to 2,000 kW cooling duty**

Six Grasso BluAstrum models with cooling duty from 500 to 2,000 kW are being launched on the market. These chillers are designed for coolant outlet temperatures of  $-15$  to  $+15$  °C and operate with an energy efficiency ratio (EER) of approx. 5.5. Even more significant is their partial load efficiency, owing to the achievement of European seasonal energy efficiency ratios (ESEER) of more than 8 as a result of their variable compressor speed (1,000 to 4,500 rpm) and Vi regulation. In addition, BluAstrum speed control, with the aid of gentle machine startup, limits expensive power surges during supply of cooling duty.

### **Compact machine for refrigeration and air conditioning**

To enable as many users as possible to benefit from the Grasso BluAstrum, this chiller is accommodated in an extremely narrow enclosure – which makes it possible to deliver and install it through doors of standard width. As Wolfgang Sandkötter explains, “This also means that our ammonia system, which is designed to ensure only modest maintenance requirements, can easily replace older, inefficient equipment.” In addition to applications in industry, BluAstrum units are also extremely effective for air conditioning: in markets in which conventional refrigerants are very expensive (or even no longer allowed), ammonia has already become well established in comfort air conditioning.

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## **The German Ministry for the Environment promotes advances in refrigeration technology**

The German Prize for Refrigeration Technology recognizes a total of nine projects in three categories: “Environmentally Friendly Climate Control of Commercial Buildings”, “Environmentally Friendly Application of Refrigeration Equipment in Production of Foods and Beverages”, and Environmentally Friendly Special Applications of Refrigeration Technology”. The award of prizes takes place within the context of the specialized trade congress “Refrigeration and Air Conditioning – Environmental Relevance and Challenges”, organized by the German Ministry for the Environment as part of the National Climate Protection Initiative. Together with the Alliance for Refrigeration, the non-profit company co2online GmbH organizes this event. With this competition and these prizes, the organizers hope to establish efficiency technologies within the applications of refrigeration systems, with effective emphasis on public recognition, and to highlight the exemplary character of such advances. After all: year for year in Germany, the operation of around 120 million refrigeration units produces approx. 70 million metric tons of CO<sub>2</sub> – the reduction of which is a high-priority objective.

For more details on the congress and the German Refrigeration Prize, please consult the German website [www.co2online.de/kaelte](http://www.co2online.de/kaelte).

*Picture BluAstrum.jpg*



Great partial-load efficiency, flexible compressor technology without oil pumps, no-maintenance rotor bearings, and many additional structural characteristics of the Grasso BluAstrum ammonia chiller reduce power consumption and operational expenses. (Source: GEA)

## GEA Refrigeration Technologies

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*Pictures Kaeltepeis\_Grasso\_1.jpg and Kaeltepeis\_Grasso\_2.jpg*



Wolfgang Sandkötter, Director of Development at GEA Grasso GmbH in Berlin, received on behalf of his team the German Refrigeration Prize in the category “Climate-Friendly Use of Refrigeration Systems in Production of Foods and Beverages”. The prize was presented to him by Katherina Reiche, Parliamentary State Secretary for the German Federal Ministry for Environment, Nature Conservation, and Nuclear Safety.

(Source: co2online gGmbH / Photographer: Ingo Heine)

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### About GEA

GEA Group Aktiengesellschaft is one of the largest systems providers in the food and beverages industries and in energy production. Group sales in 2010 were more than 4.4 billion euros. As an internationally active technological enterprise, GEA Group has concentrated on process engineering and components for demanding production processes in a wide range of end-user markets. The Group generates around 70 % of its sales in long-term growth industries for food, beverages, and energy. As of 31 December 2010 the Group internationally employed more than 20,000 staff. In its business areas, GEA Group is among the leading companies on the market and in technological developments. GEA Group is listed on the German MDAX stock index (G1A, WKN 660200).

### About co2online GmbH

The non-profit consulting company co2online GmbH is engaged in efforts for the reduction of CO<sub>2</sub> as a climate-endangering emission. With interactive energy-saving consultants, an energy-saving account, public heating reference levels and expert heating studies, the company motivates individuals toward active climate protection – and also toward saving money at the same time. co2online is the supporting and implementing institution for the campaign “Climate needs Protection” ([www.klima-sucht-schutz.de](http://www.klima-sucht-schutz.de)) sponsored by the German Federal Ministry for the Environment, for the “Public Reference Heating Level” ([www.heizspiegel.de](http://www.heizspiegel.de)), and for the German “Energy Saving Club” ([www.energiesparclub.de](http://www.energiesparclub.de)).