Press Release

Efficiency in food and energy processes

Please do not publish before 17 March 2011, 9:00 a.m.

GEA Press Kit for ISH 2011

1. GEA Delbag filter solution offers microbiological protection
   With SepTex® against bacteria and mold
2. GEA MultiSafe safety filters: the filter solution for clean rooms
   Avoiding contamination
3. GEA Delbag filter solutions for laboratories, hospitals, and industrial applications
   Ceiling air outlets for extra-pure room air
4. Further development of the GEA Fricostar *Micro* dehumidifier for swimming pools
   Better than ever
5. GEA CAIR*plus* air-handling units: additional features
   Adiabatic cooling ex works
6. The GEA ECOFLOW optimized liquid-coupled heat exchanger system
   Optimal exploitation of throughflow area
7. Efficiency increase from EC fans and controlled air outlets
   GEA fan coil units even more energy-efficient
8. Hybrid solution for heating and cooling extended to series production
   GEA *HeaMo* is now even more economical and versatile
9. Central air-handling unit GEA COM4*plus* with direct evaporator
   Saving energy with pre-configured solutions
10. Optimized equipment configuration reduces operational costs
    Energy-efficient HVAC climate control of computer centers, with GEA Ultra-Denco close control systems
11. GEA ammonia chillers achieve ESEER ratings of over 8
    BluAstrum: compact and efficient
12. Heat-exchanger portfolio expanded with the GG range
    Corrosion safety in drinking-water segment
13. Cost-optimized CDH heat-exchanger frame range
    Concentration on the essentials
14. The GEA NT range is rounded off downward
    Heat exchangers for building utilities

The English manuscripts and the images of this press kit are available from the Internet. To download them, go to www.press-n-relations.com and switch the user interface to English. Then select “NEWS” and go to “SEARCH CUSTOMER”. Select “GEA Air Treatment GmbH” and then “Submit”. You can also use “SEARCH FOR” to find text.

In case of any questions, please get in touch with the contact partner given in each of the press releases, or with:

Press’n’Relations II GmbH – Ralf Dunker
Guntherstrasse 19, 80639 Munich, Germany
Phone: +49 (0)89 17 99 92 75 - Fax: +49 (0)89 17 99 92 89
du@press-n-relations.de - www.press-n-relations.de

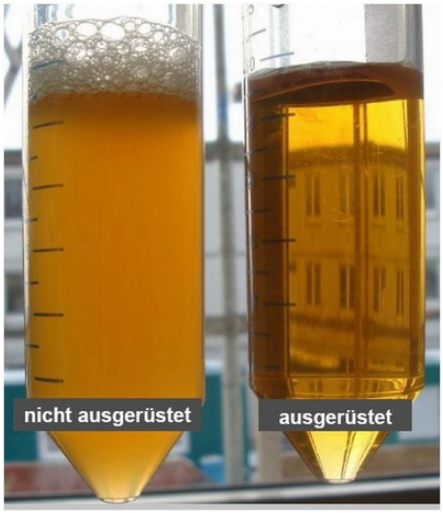
Press Release

Efficiency in food and energy processes

GEA Delbag filter solution offers microbiological protection

SepTex® filters against bacteria and mold

Under the name MULTISACK SepTex®, GEA offers bag filters with antibacteriological properties. A special process provides the filter fleece of these products with antimicrobial protection – which makes them highly effective for hygienically sensitive areas of work such as medical facilities, processing of foods and beverages, as well as the pharmaceutical industry. The German product-testing and industrial-safety institute DEKRA has confirmed the capability of MULTISACK SepTex® to kill pathogens or to inhibit their proliferation. In this testing, DEKRA contaminated test sections of SepTex® filter fleece, 4 cm² in size, with *Candida albicans*, *Staphylococcus aureus*, and *Legionella pneumophila*. After 24 hours, there was no longer evidence of any of these pathogens. After only three hours, the concentration of *Staphylococcus aureus* had already fallen under the limit of detection. MULTISACK SepTex® bag filters are now available in Classes F5 and F7. In addition to its antiseptic action, this filter is also available in a fire-protection model – FireTex® – which does not develop smoke or form droplets. All of this means that these filters are effective for applications in which hygiene and safety are critical.



The hygiene test. Here, in an in-house hygiene test, GEA tested the antibacterial properties of the new filter material SepTex®. The solution at the left shows the effects with *Candida albicans* without the filter material; at the right, with the filter material.

Press Relations and Public Affairs

GEA Air Treatment GmbH - Carola Wolters
Suedstrasse 48 - 44625 Herne (Germany)
Phone: +49 (0)2325 468 419 - Fax: +49 (0)2325 468 401
carola.wolters@geagroup.com
www.gea-airtreatment.com

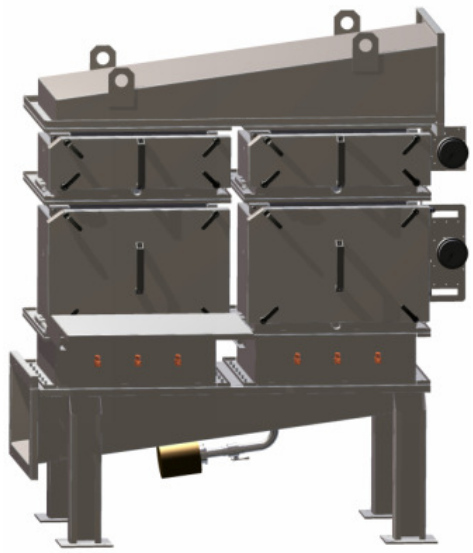
Press Release

Efficiency in food and energy processes

GEA MultiSafe safety filters: the filter solution for clean rooms

Avoiding contamination

The GEA MultiSafe safety filter was developed especially for applications in sectors such as genetic technology, clean room operation, nanotechnology, and nuclear power. It separates viruses, bacteria, as well as toxic and radioactive substances. The GEA MultiSafe provides the required filtration efficiency required of filter systems – with documentation of safety adherence, and even up to operational pressures of 6,000 Pa. The MultiSafe safety filter is provided with a gas-proof, torsionally rigid housing that satisfies tightness class B in accordance with DIN EN13779:2002. It features a pressing device for the filter that requires no maintenance. In addition, the tightness of the filter seating is monitored during filter operation. It is also possible to decontaminate the filter surfaces, and filter exchange takes place without contamination. GEA MultiSafe safety filters are available in powder-coated steel models (RAL 9010) and as versions designed for use in explosion-endangered areas. They can be fitted with a choice of HEPA and activated-charcoal filters.



The GEA MultiSafe safety filter separates viruses, bacteria, as well as radioactive and toxic substances.

Press Relations and Public Affairs

GEA Air Treatment GmbH - Carola Wolters
Suedstrasse 48 - 44625 Herne (Germany)
Phone: +49 (0)2325 468 419 - Fax: +49 (0)2325 468 401
carola.wolters@geagroup.com
www.gea-airtreatment.com

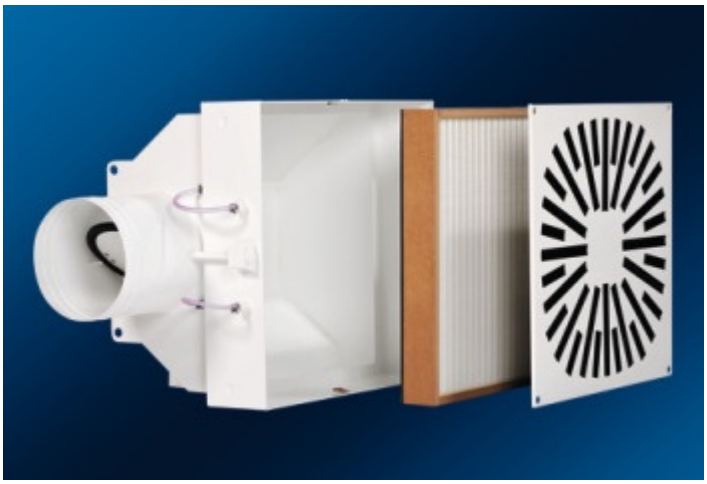
Press Release

Efficiency in food and energy processes

GEA Delbag filter solutions for laboratories, hospitals, and industrial applications

Ceiling air outlets for extra-pure room air

The GEA ceiling air outlets CGF and CGG assure hygienic conditions. They are available with various HEPA filters with proven minipleat design and, as final filter stage, separate particles of all kinds – including viruses and microorganisms – before the air enters the room. They feature effective U-channel seals or fluid seals for optimal filter seating. The air outlets have compact dimensions and allow uncomplicated change of filters. As a result, they are highly effective for laboratories and the pharmaceutical, food and beverage, and semiconductor industries. They are just as well suited for use in hospitals: e.g., in Type-B operating wards, maternity wards, and in intensive care.



GEA ceiling air outlets with minipleat HEPA filters separate particles of all kinds, including microorganisms.

Press Relations and Public Affairs

GEA Air Treatment GmbH - Carola Wolters
Suedstrasse 48 - 44625 Herne (Germany)
Phone: +49 (0)2325 468 419 - Fax: +49 (0)2325 468 401
carola.wolters@geagroup.com
www.gea-airtreatment.com

Press Release

Efficiency in food and energy processes

Further development of the GEA Fricostar *Micro* dehumidifier for swimming pools

Better than ever

For the new version of the GEA Fricostar *Micro* dehumidifiers for swimming pools, developers at GEA have combined the previous proven basic design with new efficiency technology. One example here is energy recuperation. Thanks to the ECOPLAT2 double-plate heat exchanger, the CWC version offers efficient dual heat recovery. An integrated heat pump circuit means that the CAC version features an additional, third stage of heat recovery. Both versions have built-in, continuously variable EC fans that enable power-saving partial-load operation. The DDC control system also make a contribution to lowering operational costs, since it automatically selects the optimal mode of operation.

GEA engineers have also optimized air routing in accordance with efficiency criteria. The new enclosure concept enables low internal air-flow speed. The interior flat flaps for recirculated air, mixed air, and bypass operations have been optimized in favor of reduced air turbulence – resulting in less air resistance.

The new versions, however, remain as compact as their predecessors. This is evident, for example, in the smallest model for a maximum of 1,500 m^3/h air flow and 5 kg/h dehumidification rating, with dimensions of only 1,700 mm height, 1,640 mm width, and 760 mm depth. The largest model – 1,800 mm high, 2,760 mm wide and 760 mm deep – offers 3,700 m^3/h throughput and removal of 23 kg/h of humidity from the air. Thanks to this small enclosure depth, all models can be delivered into machine rooms through standard-width doors. To save room, connections for outside air and outgoing air can be installed on the top side of the units.

The new GEA Fricostar *Micro* units are fast and convenient to install. The control cabinet with DDC control, for example, is now mounted on the inside of the enclosure, and is completely pre-wired. These units are, in addition, easy to service. They have large doors on the operator-control side, and the heat exchanger units are installed separately from each other, in accordance with hygiene regulations. This makes inspection and cleaning easy. Three model sizes of the GEA Fricostar *Micro* are available, with selection also possible of GEA corrosion-protection Class 2 for salt spa swimming pools.

Press Release

Efficiency in food and energy processes

Energy monitoring with Fricostar

For the first time, GEA Fricostar models offer energy monitoring, for which the future-oriented M bus has been selected as basis. The M bus (meter bus) is internationally standardized and enables values from (for example) meters for heat, electrical power, and water to be read into a higher-level process-control system. In this way, the GEA Fricostar records consumption data for fans and compressors, which can be displayed by the control system. A meter provided on the customer's side for measuring heat volume for the electric heating coil completes the package. These monitoring features in this way allow display or read-off of current power consumption, cumulated consumption values, specific fan power values, or heat-recuperation data. In addition, bar diagrams give the operator the possibility to monitor plots for a week – which enables optimization of system operation on the basis of data on operational time, temperatures, etc. These monitoring systems provide for transmission of all data by bus (BACnet, MOD, LON, KNX, etc.) to a higher-level building management system. For the first time, this allows documentation of energy-saving operations.

Press Relations and Public Affairs

GEA Air Treatment GmbH - Carola Wolters
Suedstrasse 48 - 44625 Herne (Germany)
Phone: +49 (0)2325 468 419 - Fax: +49 (0)2325 468 401
carola.wolters@geagroup.com
www.gea-airtreatment.com

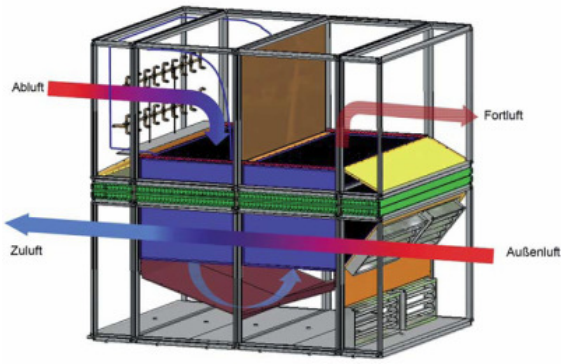
Press Release

Efficiency in food and energy processes

GEA CAIR*plus* air-handling units: additional features

Adiabatic cooling ex works

GEA CAIR*plus* air-handling units for air flow from 3,000 to 23,000 m³/h are now available with adiabatic cooling from the GEA factory. These models cool extracted air up to the point of saturation. The cold produced by evaporation is then transferred to the supply air via energy recuperation. A downstream-installed cooling coil then regulates the temperature of the cooled air supply and its relative humidity to the desired level. The new directly sprayed ECOTWIN*cool* double-plate heat exchangers enable energy-saving adiabatic cooling. Their heat-exchanger surfaces for energy recuperation are also used as evaporation surfaces. The prerequisite here is completely separated flows for supply and extracted air. On the inside of the units, special fine-spray nozzles humidify the exhaust air at a pressure of not more than 4 bar, with the result that the surfaces of the double-plate exchangers are uniformly wetted, and that operation without pressure-increase pumps is possible. Since recirculated water is not used here, operation is hygienically unobjectionable. With efficiency of up to 75 %, GEA developers have achieved very high cooling duty, referenced to saturation temperatures. Since it is not necessary for downstream chillers to run continuously, a reduction of 60 % of annual energy consumption can be expected.



The heat-exchange surfaces of the GEA ECOTWIN*cool* are completely used as evaporation surfaces.

Press Relations and Public Affairs

GEA Air Treatment GmbH - Carola Wolters
Suedstrasse 48 - 44625 Herne (Germany)
Phone: +49 (0)2325 468 419 - Fax: +49 (0)2325 468 401
carola.wolters@geagroup.com
www.gea-airtreatment.com

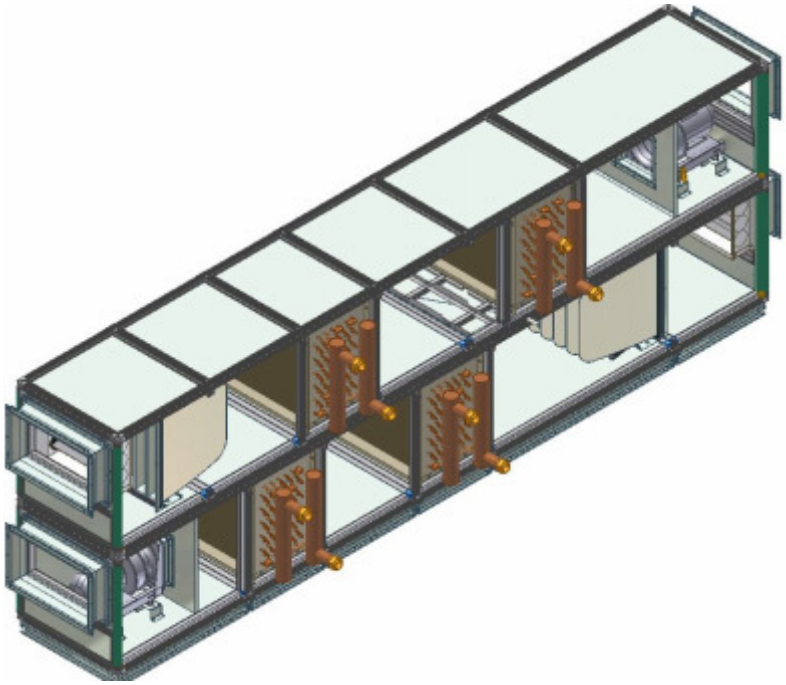
Press Release

Efficiency in food and energy processes

The GEA ECOFLOW optimized liquid-coupled heat exchanger system

Optimal exploitation of throughflow area

If – for employment of a GEA CAIR*plus* air-handling unit – the supply-air and extracted-air flows cannot, as a result of building design, be merged in one unit – or if the application demands complete air-flow separation – the situation calls for liquid-coupled heat exchanger systems such as GEA ECOFLOW for energy recuperation. Finned tube heat exchangers transfer the heat removed from the extracted air, via a brine cycle, to the supply air. The most recent version of the GEA liquid-coupled heat exchanger system can be dimensioned such that the collector pipes of the heat exchanger lie outside the cross-section of the unit. The “fullface” version increases the output and reduces pressure drops, since the unit cross-section in this solution is almost completely available as finned surface for heat exchange. This means lower operating costs. In some cases, if the input of residual heat or cold takes place directly in the brine cycle, it is even possible to eliminate the use of downstream heaters or coolers.



This “fullface” version increases output and reduces pressure drop with the GEA ECOFLOW liquid-coupled heat exchanger system.

Press Relations and Public Affairs

GEA Air Treatment GmbH - Carola Wolters
Suedstrasse 48 - 44625 Herne (Germany)
Phone: +49 (0)2325 468 419 - Fax: +49 (0)2325 468 401
carola.wolters@geagroup.com
www.gea-airtreatment.com

Press Release

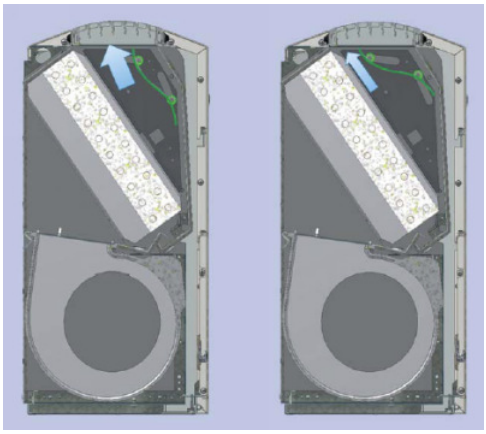
Efficiency in food and energy processes

Efficiency increase as a result of EC fans and controlled air outlets

GEA fan coil units even more energy-efficient

The highly versatile fan coil units from the GEA Cassette Geko and GEA Flex-Geko ranges are now equipped with high-efficiency EC motors that enable continuously variable and quiet operation of the fans. In combination with the GEA MATRIX control system, more exact control of room-air temperature is now possible, since the system can react to temperature deviations with exactly matched fan speeds. In the same way, these systems reliably compensate for fluctuating temperatures in the heating and cooling media. In comparison to conventional AC motors, EC motor technology enables appreciably lower losses. From the standpoint of cost efficiency, this results in reduced heat development and considerably lower electric power consummation by the EC motor (up to 75 % less).

The GEA Flex-Geko furthermore assures comfort-optimized air-outlet speeds as a result of the controlled GEA Drive air outlet. The GEA MATRIX control system uses a special algorithm to make optimal settings for the GEA Drive unit. This enhances air flushing of a room, especially at low fan-speed stages and prevents short-circuit air flow as well as uncomfortable drafts. An additional plus: exploitation of the Coanda effect at the walls and ceiling assures that the system provides a continuous curtain barrier – e.g., in front of windows. Intelligent air guidance enables this effect, even with small air flow.



With GEA Flex Geko fancoil units, GEA Drive assures optimal air flow, even with low air volumes.

Press Relations and Public Affairs

GEA Air Treatment GmbH - Carola Wolters
Suedstrasse 48 - 44625 Herne (Germany)
Phone: +49 (0)2325 468 419 - Fax: +49 (0)2325 468 401
carola.wolters@geagroup.com
www.gea-airtreatment.com

Hybrid solution for heating and cooling extended to series production

The GEA *HeaMo* is now even more economical and versatile

There are many building facilities in which heating and cooling are required a the same time – for example, because the south side becomes hot already in spring, and the north side must still be heated. Or, because server rooms must still be cooled although wintry outdoor temperatures prevail. Most users employ separate systems to provide heat and cooling. But the best equipment cannot prevent the operation of a chiller from producing waste heat. Beneficial use of such heat is the trick with GEA *HeaMo*, the hybrid solution for bivalent heating and cooling of a building complex. *HeaMo* stands for “heat in motion”, since the unit involved can transfer surplus heat from one part of a building facility to another.

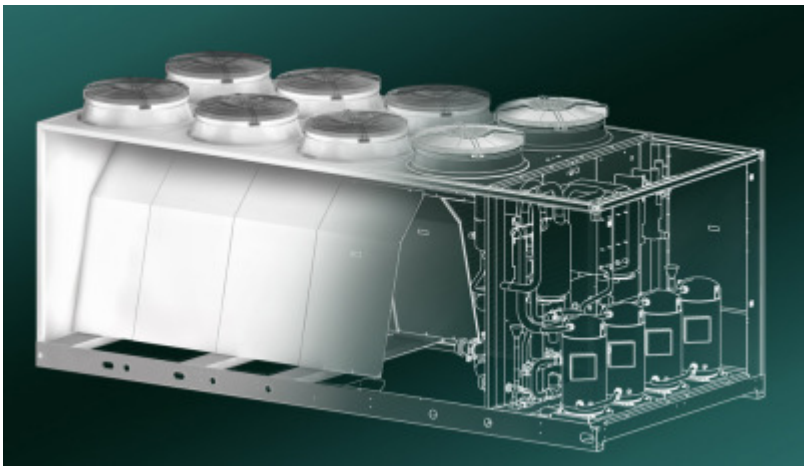
HeaMo is optimally designed such that simultaneous heating and cooling can take place as frequently as possible. One profitable solution here is to use these systems as basic-load machines, which can be complemented for additional demands for heating and cooling, for example, by separate chillers and heat pumps.

In the GEA *HeaMo*, heat pumps and chillers are combined with respect to their hydraulic and their control systems, and use three heat exchangers in one refrigerant cycle. When heating and cooling are simultaneously required, cooling is produced on one side and transferred via a heat exchanger to the cold-water network. The heat produced there is fed by the system on the other side into the heating network. In this optimal case – if heating and cooling demands are approximately equal – only two heat exchangers are active and the efficiency is far more than 7 (as per ITEE, the index of total energy efficiency). Since, however, heating and cooling demand is not always equal, GEA engineers have provided a third heat exchanger. If cooling demand is greater than heating needs, the surplus energy will be passed out to the environment. If heating requirements are greater than cooling demand, the third heat exchanger is used to remove energy from the environment and to transport it into the building.

GEA developers have now enhanced system design and have reduced its installation size. The result is two complete GEA *HeaMo* ranges with a broad output spectrum: the AIR versions for outdoor installation, which transport surplus energy to the outdoor air, or remove this energy from the outside air. The models in the GEO version are intended for indoor installation and use a water cycle – for example, a geothermal system – for release or capture of heat.

Both of these ranges are available in finely graduated model sizes. The maximum heating duty of the 16 AIR models ranges from approx. 35 to 350 kW, and the cooling duty from about 30 to 310 kW. To achieve a high number of operating hours even in winter months, the AIR version is available for an extended area of operation. It allows

pure heating operation down to -10 °C outside temperature, while the standard version can be used down to -5 °C. The entire scope of 18 GEO models covers the range from 50 to 550 kW cooling or heating duty.



GEA *HeaMo* – here in an AIR version – a combined heat pump and chiller to provide an efficient hybrid solution.

Press Relations and Public Affairs

GEA Air Treatment GmbH - Carola Wolters
Suedstrasse 48 - 44625 Herne (Germany)
Phone: +49 (0)2325 468 419 - Fax: +49 (0)2325 468 401
carola.wolters@geagroup.com
www.gea-airtreatment.com

Press Release

Efficiency in food and energy processes

Central air-handling unit GEA COM4*plus* with direct evaporator

Saving energy with pre-configured solutions

Wherever partial climate-control solutions are called for, demand is rising for pre-configured equipment with integrated system control and efficient energy recuperation. The GEA COM4*plus* range of systems provides a ready-to-connect compact solution for the output range from 2,000 to 30,000 m³/h output – with models that combine all required HVAC functions in one enclosure. These include continuously variable air-flow control via directly driven fans and integrated energy recuperation. Selection is possible between plate and rotary heat exchangers, depending on requirements. These models capture up to 90 % of thermal energy contained in extracted air, to be used again inside the building.

GEA COM4*plus* can be effectively combined with other components such as chillers and heat pumps. As a result, GEA offers ventilation units for indoor or outdoor installation, with air flow up to 7,000 m³/h, now combined with inverter-controlled compressor-condenser units by Mitsubishi – an equipment combination with extremely great system efficiency. Heat pumps from the Mr. Slim range provide cooling duty up to 42 kW and heating up to 43 kW. They are controlled by constant evaporation temperature or via an external 0...10-V signal (e.g., GEA MATRIX 4700), on the basis of supply-air temperature control. Hot-gas bypass control with high energy consumption is not necessary. The quietly operating unit features coated copper-aluminum condensers and an integrated electronically-controlled expansion valve.

Press Relations and Public Affairs

GEA Air Treatment GmbH - Carola Wolters
Suedstrasse 48 - 44625 Herne (Germany)
Phone: +49 (0)2325 468 419 - Fax: +49 (0)2325 468 401
carola.wolters@geagroup.com
www.gea-airtreatment.com

Optimized equipment configuration reduces operational costs

Energy-efficient HVAC climate control of computer centers, with GEA Ultra-Denco close control systems

The new GEA Ultra-Denco Close Control HVAC systems ensure exact temperatures and humidity in climate control. They were especially designed for employment in computer centers. This equipment range includes three sizes with a maximum cooling duty of 50 to 150 kW. New configuration and optimization of components – heat exchangers, filters, valves, and especially fans – have enabled GEA experts to minimize air- and water-side pressure drops and consequently to reduce power consumption by more than 50 %. Further savings potential is offered by the combination of systems with chillers that offer free-cooling functions: for example, GEA GLFC.

The Close Control HVAC units in the GEA Ultra-Denco Range are available, as standard, with 6-row high-capacity cooling banks and with modulating 3-point servovalves in 2- or 3-way versions – and with EC free-running (plug) fans. As a result of their efficiency of more than 90 %, EC fans – especially in partial-load mode as, for example, with standby redundant features – enable reduction of power consumption by up to 45 % in comparison to systems with AC fans in full-load mode. Location of the fans in a raised floor radically reduces flow reversal losses and thereby reduces power consumption of the overall unit by more than 50 %.

Enlarged filter surfaces – with the resulting reduction in pressure drop – lead to longer maintenance intervals. The large heavy-duty heat exchanger with 6-tube rows is designed for greater output: or for operation with more energy-efficient media temperature while enabling the same output. By optimization of the components through which water flows – such as heat exchangers, valves, and piping – GEA Denco has succeeded in extremely reducing water-side pressure drop.

Since the fans in this configuration pull in air only through the unit itself, the enclosure is not under pressure and is characterized by great air tightness. This prevents leaks. Service staff has simple access from the front to maintain the system.

When used in high-capacity server environments, a control-system combination with an automatic pressure-controlled system (APC) provides exact monitoring and optimization of the pressure prevailing in the raised floor. This configuration always supplies the correct amount of air that is momentarily required. Pressure-dependent control allows further reduction of power consumption by the fans. These solutions also minimize the risk of so-called hot spots: i.e., areas in which high temperatures can develop in small areas. This GEA system operates particularly effectively in combination with cold- and hot-aisle containment.

With cooling requirements over the entire year, one highly recommended solution is the combination of GEA Ultra-Denco Close

Press Release

Efficiency in food and energy processes

Control HVAC units and chillers with free-cooling functions. As soon as these free-cooling systems can provide the water (or water-glycol mixture) 1 K below the required return-flow temperature, mixed operation is possible. At low air temperatures, it is often possible to switch off the compressor entirely: for example, during winter operation. This reduces compressor operation time and lowers power costs.

The GEA Ultra-Denco Range assures exact temperatures and humidity.

Press Relations and Public Affairs

GEA Air Treatment GmbH - Carola Wolters
Suedstrasse 48 - 44625 Herne (Germany)
Phone: +49 (0)2325 468 419 - Fax: +49 (0)2325 468 401
carola.wolters@geagroup.com
www.gea-airtreatment.com

Press Release

Efficiency in food and energy processes

GEA ammonia chillers achieve ESEER ratings of over 8

BluAstrum: compact and efficient

GEA created a new chiller design that sets new standards in energy efficiency and compactness. For the heart of the completely new chiller range, the development team has designed a high-efficiency compressor series with speed control, frequency inverter, and variable Vi for maximum partial-load efficiency. The new Grasso chiller BluAstrum sets a new benchmark for ESEER ratings (ESEER ratings of over 8). Its compactness enables customers to easily replace older chillers with this high-efficiency ammonia chiller range. As an option, a new housing is available to reduce noise levels even further, allowing the chiller to be used over a wide range of operating conditions. The final series of the new design will comprise six chiller types with a capacity range from 500 kW to 2,000 kW.

With its new Grasso BluAstrum Range, GEA is offering a compact liquid chiller that operates at great efficiency. Its compact design allows it to be taken into the installation site through standard doors. It is therefore not only ideally suited for new buildings, but also for replacement of older chillers that operate with the refrigerant R22.

Press Relations and Public Affairs

GEA Refrigeration Technologies GmbH - Annette Wille
Dorstener Strasse 484 - 44809 Bochum (Germany)
Phone: +49 (0)234 91534 206
annette.wille@geagroup.com
www.gearefrigeration.com

Press Release

Efficiency in food and energy processes

Heat-exchanger portfolio expanded with the GG range

Corrosion safety in drinking-water segment

Drinking water is not all the same – hardness varies, and the content of trace elements differs. Above all, salts play a major role. They corrode, and they can – depending on their content – cause the seams of brazed plate heat exchangers to deteriorate. GEA offers, in its newly developed GG range, an effective alternative. These plate heat exchangers contain no non-ferrous metals and are therefore not subject to corrosion. They combine the benefits of sealed and brazed equipment.

The GG range features the innovative BoxFrame concept. This involves a closed box frame made of steel that does not come into contact with the medium. The direct introduction of forces by the clamping bolts enables small profile cross-sections to be constructed. This plate heat exchanger is fitted with a stainless-steel plate package combined with FDA-listed NBR seals. These seals provide dual separation of the port area and prevent a mixture of the media that flow toward each other.

The plate design creates a highly turbulent flow pattern and increases the pressure resistance of the units. This leads to optimal heat transfer, even with low volume levels. The extremely compact design and the low weight of these units reduce the material required, as well as costs and footprint. These plate heat exchangers are designed for a temperature range of -20 to +110 °C, and are available in the two model sizes GG 240H and GG 500H, as well as in the two pressure stages 10 and 16 bar.

The new GGT range was developed especially for drinking-water applications and features the innovative BoxFrame concept.

Press Relations and Public Affairs

GEA PHE Systems - Michael Schuette
Karl-Schiller-Str. 1-3 - 31157 Sarstedt (Germany)
Phone: +49 (0)5066 601 180 - Fax: +49 (0)5066 601 105
presse@gea-phe.com
www.gea-phe.com

Press Release

Efficiency in food and energy processes

Cost-optimized CDH heat-exchanger frame range

Concentration on the essentials

The new EcoFlex CDH frame range features frame plates that have been considerably reduced in thickness. The cross-section reduction in the clamping bolts has been compensated for by a greater number of bolts, which in turn leads to uniform pre-tensioning of the plate package. The frame concept is especially effective in building utilities, where pressures of up to 10 bar are the rule, and where the costly safety reserves necessary in other application areas are not necessary.

The CDH frame range is offered in two model sizes: NT 50 CDH and NT 100 CDH. NBR is used as sealing material. The plates are made of stainless steel (AISI 316/1.4401). The units here are designed for temperatures up to +100 °C and for a maximum pressure of 10 bar. The plate heat exchangers are available in two support lengths (60 and 120 plates). They have nipple fittings.

The concept of the CDH frame range was optimized technically and economically for building utilities.

Press Relations and Public Affairs

GEA PHE Systems - Michael Schuette
Karl-Schiller-Str. 1-3 - 31157 Sarstedt (Germany)
Phone: +49 (0)5066 601 180 - Fax: +49 (0)5066 601 105
presse@gea-phe.com
www.gea-phe.com

Press Release

Efficiency in food and energy processes

The GEA NT range is rounded off downward

Heat exchangers for building utilities

With its new NT 30, GEA completes the well-established EcoFlex NT product family and rounds off this range downward. This compact plate heat exchanger is equipped with stainless-steel plates and nipple connections (DIN 2999, 1.4571) and can therefore be easily integrated into existing systems. EPDM and NB Rare used as sealing material. The maximum flow rating is 16 m³/h.

This NT range was developed especially for building services. Its sealed plate heat exchangers are highly appealing owing to their OptiWave plate design: this reduces the heat-transfer area, increases output at the same time, and lowers investment and maintenance costs for the customer. The compact units are simple to install and offer the innovative EcoLoc sealing technology. Thanks to EcoLoc, the plates are exactly joined, so that the plate package is highly stable and perfectly aligned in all situations. In addition, the seals remain fully functional longer.

Press Relations and Public Affairs

GEA PHE Systems - Michael Schuette
Karl-Schiller-Str. 1-3 - 31157 Sarstedt (Germany)
Phone: +49 (0)5066 601 180 - Fax: +49 (0)5066 601 105
presse@gea-phe.com
www.gea-phe.com

Press Release

Efficiency in food and energy processes

Press Relations and Public Affairs

HVAC:
GEA Air Treatment GmbH - Carola Wolters
Suedstrasse 48 - 44625 Herne (Germany)
Phone: +49 (0)2325 468 419 - Fax: +49 (0)2325 468 401
carola.wolters@geagroup.com
www.gea-airtreatment.com

Refrigeration Technology:
GEA Refrigeration Technologies GmbH - Annette Wille
Dorstener Strasse 484 - 44809 Bochum (Germany)
Phone: +49 (0)234 91534 206
annette.wille@geagroup.com
www.gearefrigeration.com

Heat Exchangers:
GEA PHE Systems - Michael Schuette
Karl-Schiller-Str. 1-3 - 31157 Sarstedt (Germany)
Phone: +49 (0)5066 601 180 - Fax: +49 (0)5066 601 105
presse@gea-phe.com
www.gea-phe.com

Journalist enquiries:
Press'n'Relations II GmbH - Ralf Dunker
Guntherstrasse 19 - 80639 Munich (Germany)
Phone: +49 (0)89 17 99 92 75 - Fax: +49 (0)89 17 99 92 89
du@press-n-relations.de
www.press-n-relations.de

In case of publication, please submit two copies of each of the published items to us for our archives.

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).