Engineered efficiency – no matter where or what.

The New Standard in Heat Transfer

GEA Heat Exchangers

Entrance to the GEA Group complex in Bochum, Germany

GEA – The strong brand in He

Contents

at Exchange

GEA Group Aktiengesellschaft is one of the largest system providers for food and energy processes, with about EUR 4.4 billion in 2009 revenue. As an internationally operating technology group, the company focuses on process technology and components for demanding production processes in various end markets. The group generates about 70 % of its revenue from the long-term growing food and energy industries. The company's workforce comprised over 20,000 employees worldwide as of December 31, 2009. GEA Group is a market and technology leader in its business areas. GEA Heat Exchangers, which is the largest segment within the Group, focuses all Group heat exchanger activities. For users, this enables access to the entire product portfolio of GEA Heat Exchangers and all its associated services. In this way, and throughout the field of heat transfer, GEA customers also take advantage of the innovation power and the performance depth of leading specialized companies.

Customer proximity

Sustainable solutions for global markets

GEA Heat Exchangers

Global expertise and experience

Global service network

Extensive product portfolio

Our diversity

GEA Heat Exchangers covers the most application areas, extending from air conditioning systems to cooling towers. As a result, the company provides one of the most extensive – if not the most extensive – portfolios of heat exchangers in the world. Finned-tube heat exchangers, single-tube heat exchangers, Heller systems, air-cooled condensers, wet cooling towers, plate heat exchangers, HVAC systems, and all kinds of shell-and-tube heat exchangers: for all feasible applications, the new segment GEA Heat Exchangers offers the best feasible solutions.

In a global, tightly meshed network, our highly qualified staff provide all key processes for industrial production and air treatment. GEA Heat Exchangers has set new standards for efficiency, reliability, and availability in heat exchange.

A key basis for the leading position of GEA Heat Exchangers on the market is its concentration of a great number and diversity of competencies in the field of heat transfer. The GEA lead obtained in this manner likewise results from close interaction among research and development, manufacturing, and sales and service within our corporate network. This configuration ensures access to the latest in know-how and experience that arises daily in worldwide activities and projects involving GEA Heat Exchangers. It also guarantees continuous interchange of such expertise and experience. Supported by its internationally unique product portfolio, GEA Business Units implement exactly customized solutions for the great diversity of application conditions encountered in heat transfer. These tailored solutions take full account of technical, economical, ecological, and geographical conditions.

- One of the world's largest extensive product portfolios for heat exchangers
- Sustainable solutions for the global food, energy, and climate-control markets
- Comprehensive knowledge base in heat transfer
- Expertise and consulting for all technologies encountered on the market
- Customized products and services made and engineered by GEA
- Manufacturing and service located around the world

Unlimited ways to transfer heat. Efficiency, global expertise, and local services included.

is unique

The core competencies of GEA Heat Exchangers include the exact design of heat exchangers in accordance with the user's specifications and the characteristics of his ambient, spatial, and regional surroundings. We have obtained exact understanding of our users' processes and implement these insights in all phases of project realization.

The following applies to both the upgrading of existing systems as well as to initial implementation of new equipment for heat transfer. GEA expertise serves to assure effective inter-coordination of engineering design and application, product and process parameters, installation and initial start-up, as well as operating costs and service concepts. These benefits in turn make sure that heat exchangers operate reliably in their process environment and effectively at their respective individual operating points – and that our users' processes continue to flow smoothly.

The great diversity of heat exchanger types that are characteristic of GEA Heat Exchangers – as well as their maximum standardization and modularity – enables extremely flexible process integration and exact dimensioning of heat exchange performance. The reorganization of all heat exchanger activities into one GEA segment strengthens the market position of GEA Business Units by ensuring the process of standardization to improve their overall competitive position. GEA Heat Exchangers will ultimately emerge as a reliable and powerful global partner for customers.

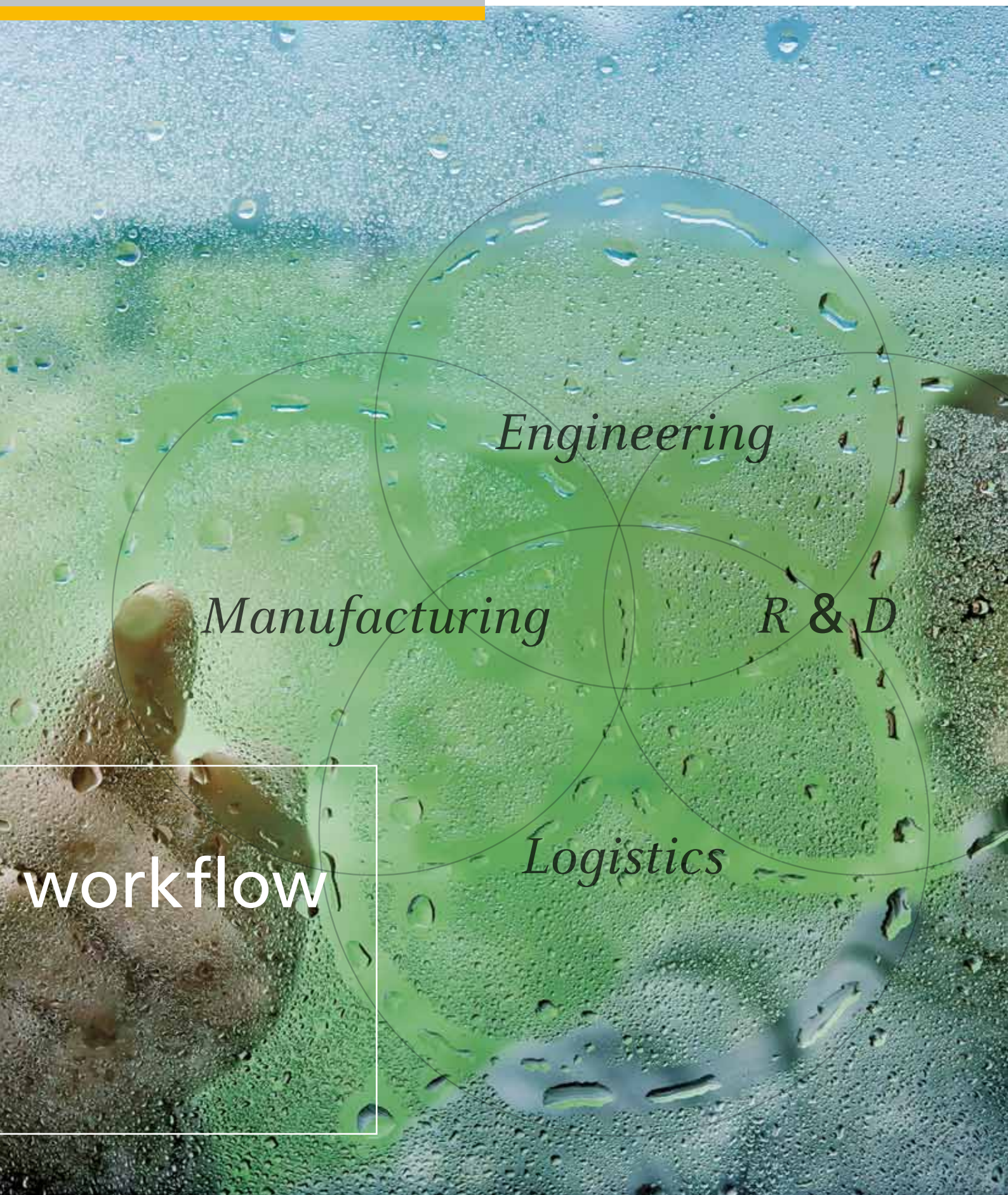
By concentration of various performance fields into a single, one-stop solution, GEA Heat Exchangers especially enables more effective control of the complex processes in heat transfer. It also speeds up order execution and simplifies preventive and remedial maintenance of heat transfer facilities. In this way, GEA Heat Exchangers creates clear and personally addressable responsibility for the entire process of project implementation.

- More effective project-execution procedures by reduction of interfaces
- Faster contract execution
- Great project security in all phases of collaboration
- Great innovation potential by sustainable research and development

Benefit from optimized

Reduced interfaces, continuous workflow, and 24/7 performance. Expect one-stop solutions.

One-stop solutions



AFC Single Tube

AFC Compact Systems

ACC/Heller

Wet Cooling

- Committed and highly competent teams
- Local service and support
- Maximum transparency
- Personal contact partners

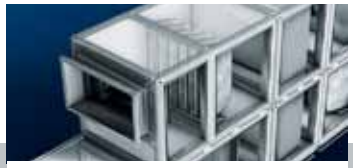
Operative excellence and customer proximity of GEA Heat Exchangers are based on the performance and experience of eight specialized Business Units. They belong to the technology leaders in their respective areas of activities, and are as fast and flexible as their smallest competitors.

Of the eight Business Units, seven Sales Business Units, organized according to product groups, are: AFC Single Tube, AFC Compact Systems, ACC/Heller, Wet Cooling, Shell & Tube, Plate Heat Exchangers, and HVAC Systems. These seven Units are supported by the eighth Business Unit: Manufacturing. This eighth Unit is responsible for all production activities of GEA Heat Exchangers. Above all, it assures simplification of manufacturing processes and consistent achievement of optimal capacity utilization in all projects.

The lean corporate structure of GEA Heat Exchangers, organized according to product groups, enhances the transparency and customer overview of its extensive product portfolio. In addition, this structure facilitates the work of engineers, technicians, and sales and service teams of the respective Business Units. In this way, the Units can focus on the specific circumstances and wishes of their customers and can apply their profound expertise in improving the performance of heat transfer systems. The quality of their work is based on staff who act in the sense of an efficient corporate context, accept responsibility for the results of their efforts, and work toward the objective of achieving success through enthusiastic customers. Each employee of GEA Business Units therefore personally commits himself or herself to the best performance possible in every case. And the entire company provides support and encouragement. The fact that the Business Units have been able to implement customer proximity throughout all dimensions is likewise part of the operative excellence of GEA Heat Exchangers. With production and service locations around the world, GEA Heat Exchangers offers a unique network of local services and comprehensive support for our customers.

Shell & Tube

Plate Heat Exchangers



HVAC Systems

Manufacturing

Implemented by eight Business Units.

Operative excellence

One application area of processed air-cooled heat exchangers manufactured with our single tube system is the oil and gas industry – fluids are condensed and cooled. The heat exchange surface is made of round finned tubes fed by inlet and outlet header boxes.

Solutions based on our worldwide network for design, manufacturing, and provider services

The Business Unit AFC Single Tube with its several international companies is today one of the leading providers in the area of development, production, and implementation of single-tube systems for process cooling.

Our single-tube systems operate safely, efficiently, and reliably throughout the world under the most extreme of application conditions in the petrochemical, oil, gas, and energy industries, in ratings from 200 kW to 200 MW, under operational pressures from 1 to 500 bar. Customer assurance for the quality of our systems – and the basis for the extensively proven excellence of AFC Single Tube products in the implementation of major complex projects – is supported by the world's most highly capable and effectively networked capacities in engineering design, production and services of single-tube systems of all dimensions – as well as concentration on procurement of materials and spare parts.

The products of the Business Unit AFC Single Tube begin on the basis of an optimal design concept that is then precisely tailored to regional circumstances (climate, water, and infrastructure) and the specifications of the user, at any place on the earth and for all specific applications. Based on internationally uniform standards within its production and service network, AFC Single Tube can guarantee performance, efficiency, and safety in heat transfer: comprehensively and throughout the entire life cycle of the single-tube system. In addition to full satisfaction of user specifications, the optimization of existing heat exchange systems and of new technologies and components from our own development is oriented above all to the enhancement of single-tube systems with respect to production costs, maintenance friendliness, and life cycle. Most recent examples include system innovations such as grooved fins, the newest development by AFC Single Tube.

Air Fin Coolers in LNG applications

Air Fin Cooler - Combined Cycle Power Plant in Münster/Germany

Solutions for the global LNG industry

Along with increasing demand for energy worldwide, the construction of natural-gas liquefaction plants has seen an unprecedented growth the recent years. Since most of these gas-liquefaction plants are installed in dry regions or in areas where acceptable cooling water quality is not available, it has made air cooling the preferred method for the initial section of the gas-cascade cooling process: in which the natural gas is cooled to a condensing temperature level and liquified before it enters the subcooling refrigeration process. GEA has gathered vast experience in air cooling and gas and vapor condensation for power plants, as well as in process applications. Companies of the Business Unit AFC Single Tube supply, for example, air coolers to the global LNG industry and have already equipped most existing LNG trains.

Based on its global engineering-design and production network, AFC Single Tube takes full account of customer requirements in its project orientation. With its six product lines, it offers extensively customized work throughout the markets that it serves:

- Air Fin Coolers (Aluminum)
- Air Fin Coolers (Hot-Dip Galvanized)
- Air Dryers (Industrial)
- Transformer Air Coolers
- Air Preheaters
- Machine Cooling Single Tube

The shipbuilding industry is one big application field of the Business Unit AFC Compact Systems – the combined expertise ensures that partners in the marine sector have a key edge in competing for more efficiency, profitability and environmental protection. Several companies offer marine system solutions that makes it possible to achieve strategic improvements and cut costs while optimizing product and process quality.

One single technology for the world's industries

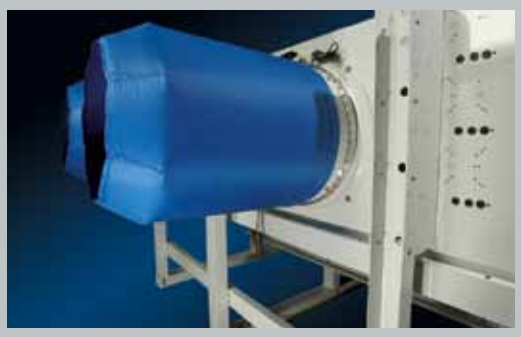
With just one single technology, the Business Unit AFC Compact Systems can offer an adapted solution to a large number of complex end-user requirements.

With a worldwide commercial network to promote this technology, this Business Unit can strengthen its technological leadership in greater customer benefits with products and services, in line with market requirements. AFC Compact Systems can also actively design future technological developments with involvement of our customers and suppliers.

Primary advantages for compact systems are high performance density, minimum footprints, and maximum efficiency with high safety standards. AFC compact technology enables customized engineering solutions for niche market segments.

Our wide range of approved compact finned-tube systems, concepts, and designs is recognized throughout the world. In our research, planning, and production centers, these elements are constantly adapted to latest developments in technology and quality standards. This enables GEA to take any known operational condition into consideration and optimize components.

Customers of the Business Unit AFC Compact Systems benefit from outstanding service. Our goal is to ensure the service on heat exchangers during operation and to extend their life cycles. Systematic application of the GEA quality management system in all phases of product development and implementation contributes toward strengthening the leading market position of GEA Heat Exchangers.



Make a room temperature of -60 degrees centigrade possible: Industrial Air Coolers

Challenging chilled goods: seafood

Keeping fish fresh

Mass-produced tuna from a can is one thing. Fresh tuna is a completely different matter. Fresh tuna is a great challenge for retailers, since it easily turns brown. The amount of myoglobin in the muscles of a tuna determines its color – the more myoglobin, the redder the fish. The quantity of myoglobin in the muscles depends on the type of tuna, its age, and its physical activity. The problem is: if the fish flesh remains exposed to air, an iron ion in the myoglobin molecule begins to oxidize, which turns the flesh brown. This chemical reaction can be stopped only by storing the tuna at temperatures below - 56 °C. To do this, Kagerer Seafood uses the GEA Super Freezer which makes a room temperature of - 60 °C possible. This requires three industrial SGL Air Coolers with a closer unit and defrosting hood.

Six product lines structure the systems offering of AFC Compact Systems and enable an exceptionally broad, diversified spectrum of industrial applications:

- Closed Circuit Coolers
- Charge Air Coolers
- Radiators – Dry Coolers
- Standard Air Coolers
- Customized Air Coolers
- Air Condensers

Air Cooled Condensers (ACC) and Heller Cooling Systems are GEA's solution for new power generation projects in dry areas of the world.

Sustainable high performance

Dry power cooling systems of GEA (air-cooled condensers and Heller indirect dry cooling systems) allow for setting up power plants based on steam cycle in areas scarce of cooling water. As water availability is becoming an issue, water prices are rising, legislatory restrictions may apply on water usage for power cooling purposes, dry cooling methods are becoming increasingly important.

Ninety years of experience using air cooling for power plants has now been concentrated in the Business Unit ACC / Heller of GEA Heat Exchangers segment. This enables us to offer individual solutions for fossil-fuelled, nuclear, geothermal or solar thermal power plants.

Business Unit ACC / Heller also offers cooling systems to plants with stringent noise restrictions and cooling systems that cope with complex load requirement. Our references include installations located on every continent, operating in various ambient air temperatures ranging from -62 to +50°C. Flue gas discharge via natural draft cooling towers is also an area where Business Unit ACC/Heller excels. If applied with coal fired units, our Heller dry cooling towers lend itself to the integration of wet scrubbers thus reducing investment costs, operation and maintenance costs. Our air-cooled condensers are available with a number of different finned tube systems allowing us to satisfy individual customer requirements.

Innovative engineering solutions optimize our dry cooling installations. Thanks to an improved exhaust steam duct routing for large ACC plants, steam side pressure loss is reduced and the efficiency of the entire installation is increased, resulting in additional savings in equipment and erection costs. Bionic design of the ACC steel substructure reduces the number of foundations and support columns thus saving material costs.

Business Unit ACC / Heller is a reliable partner of the power plant industry. Engineering, project management, delivery, technical assistance during installation and commissioning, delivery of spare parts, expert assistance in operational issues are all in the experienced hands of our companies, providing our customers with the comfort and assurance they need.

Heller Indirect Dry Cooling Systems in a Power Plant in Turkey

Indirect Dry

In a Heller cooling system, power plant steam is initially exchanged in a condenser for a closed cooling-water circuit. The heat absorbed by the water is rejected to the ambient air in fine tube-type heat exchangers. The air can be naturally moved or fan-assisted. Heller cooling systems are applicable for any kind of steam cycles in fossil-fuelled or nuclear power plants, and are capable of application for cooling solar power plants.

Air Cooled Condenser in a Power Plant in China

Air Cooled Condensers

One of our key challenges is to design environmentally friendly plants that conserve precious water resources. At the same time, heat exchange must take place with maximum efficiency, while keeping operating costs at a minimum for the customer. The experience and continuous know-how transfer within the segment GEA Heat Exchangers assure that solutions of the Business Unit ACC/Heller completely satisfy all essential criteria, with optimal results in every category.

Wet cooling towers from GEA Heat Exchangers: From modular cell cooling towers to field-erected cell cooling towers – GEA provides the experience of a global player.

Efficient technology for high-performance solutions

The Business Unit Wet Cooling designs, manufactures, and services cooling towers for energy and processing industries. More than 40 years of experience and success have made this Business Unit a major global players in planning and implementation of wet cooling systems.

GEA Wet Cooling can offer any type of cooling-tower design, including counter flow and cross flow, and with an extensive variety of technologies and concepts. The wide range of designs available from Wet Cooling ensures that its solutions satisfy all cost and environmental requirements, and minimize operational and service costs.

An in-house research and development department guarantees the latest state-of-the-art technology for medium-flow routing, types of filling, drift eliminators, fans, and spray systems.

We select optimal solutions from extensive possibilities of configuration such as natural-draft cooling towers and cell cooling towers made of engineered composites, concrete, or wood. Standardized-design solutions for power and industrial markets have been applied to low-plume abated cooling towers, with increased efficiency by retrofitting existing towers with a combined wet-dry cooling system (PAC-system). System technology means that GEA offers complete turnkey systems with carefully selected and effectively coordinated components. The GEA scope of supply includes pumps, fittings, pipework, heat exchangers, electrical systems, measuring and control technology, and chemical/mechanical water-treatment systems.

The constant optimization and product development undertaken by GEA enable us to supply extremely diverse types of filling-material structures and surfaces. We provide solutions for all fields of cooling-tower operation, from high cooling capacities to high levels of operating reliability.

Our GEA 2H products also make a decisive contribution to environmental protection with such products as PLASdek® drift eliminators, which eliminate tower emissions. The innovative SANIPACKING® equipment in 2H components provides added security with microbiological activities in cooling cycles.

Flue Gas Duct in a Power Plant in Germany

Water distribution in a cooling tower

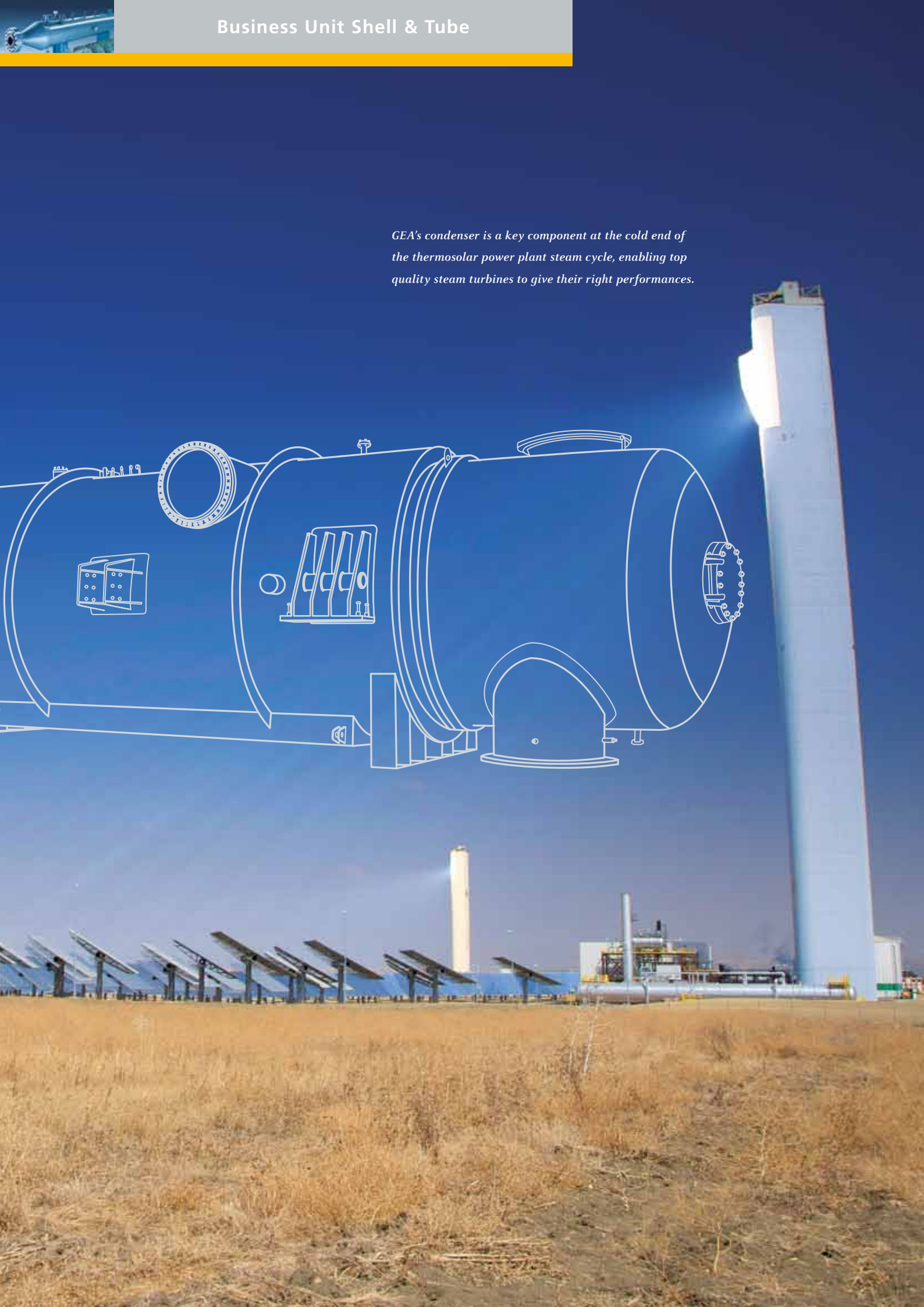
New records by the power station in Neurath, Germany

With grid power-output ratings of 1050 MW each, electrical efficiency of more than 43 %, and up to 6 million metric tonnes less CO_2 emissions per year (compared to old plants), the two new BOA units of the Neurath power station set new records for lignite-fired plants.

The natural-draft cooling towers of the GEA Business Unit Wet Cooling contribute decisively to the low requirements for power consumed by the power station itself. No power is required for transport of air, and only the cooling-water pumps require energy. A total of 23.3 m^3/s of water is discharged per second to transfer away the thermal energy produced by the unit in the respective cooling tower. With a height of 172 m – and with ground diameter of 144 m, midsection diameter of 66 m, and discharge diameter of 70 m – only 10,500 cubic metres of acid-resistant concrete and 1500 metric tons of reinforcing steel were required. The installed polypropylene filling elements enhance the efficiency of the cooling towers and thereby enable compact physical designs. The pipe for the clean-gas outgoing feed is 154 m long and has an internal diameter of 10 m.

The bypass – through which up to 100 % of the cooling-water flow can be branched off – enables the towers to operate without icing, even at outdoor temperatures of - 26 °C and a heat load of only 30 %.

GEA's condenser is a key component at the cold end of the thermosolar power plant steam cycle, enabling top quality steam turbines to give their right performances.



Consulting, engineering, and manufacturing from a single source

The services and systems of this Business Unit include all business and engineering efforts undertaken within the area of shell-and-tube heat exchangers. These systems consist – expressed in simplified form – of a shell and a bundle of tubes in their interior. There is a large field of application for these heat exchangers, including energy generation and supply, oil and gas applications, the processing industries, and maritime applications.

As a one-stop supplier, the Business Unit Shell & Tube has access to the capacities and expertise of a large international organization, and offers long experience in a wide range of industrial applications. A strong installed base confirms the high quality and durability of our products. Twys material globally and uses cost-effective, state-of-the-art production technology and powerful computer software for thermal-rating and mechanical design.

Customers benefit from the maintenance-friendly, compact, modular and robust design of our products as well as from proven, corrosion-resistant materials that are carefully selected on technical and economical criteria.

Our continuous optimization and development of new products is primarily focused on extending applications by applying new materials and designs to resist corrosive fluids, high temperatures, and pressures – and by enhancing the safety of heat transfer.

The majority of our after-sales and service are offered on an in-house basis and are coordinated with efficient supply of spare parts, re-tubing, upgrading, refurbishment of old equipment, cleaning of heat exchangers, control of capacity, and other such functions.

Pump storage plant, Schluchsee, Germany

Transformer-oil water cooler with double-tube safety technology

The pump storage plant Schluchseewerk AG, Germany, operates with GEA transformer-oil water coolers with double-tube safety technology

This cooler version is used for specific types of systems such as furnace transformers and rectifier transformers. A further application is machine transformer cooling at hydraulic power plants. Unlike single-tube transformer-oil water coolers, the tube bundle of the double tube design consists of concentrically arranged double tubes instead of single tubes and two tube sheets at each end. If one tube is damaged, the water will not contaminate the transformer oil and oil will not contaminate the environment, since the media remain separate. The leakage indicator will trigger an alarm signal. Even if tubes become defective, the cooler can be still operated until the next inspection, without downtime. This safety technology enables higher water operating pressure than the pressure at the oil side and therefore requires no additional control instruments. The cooler can also be adapted to the given water quality on site, due to the selection offered of various materials for the water-side tubes.

Our portfolio is broken down into six product lines for major applications:

- Transformer Coolers
- Steam Power Systems
- Double-Tube Systems
- Petrochemical Systems
- Machine Coolers
- Desublimators

Food and Beverage, Energy, HVAC, and many other industries: Our plate heat exchangers are the first choice due to their thermal efficiency and their flexible modular design.

Efficiency is our business

Within the Segment GEA Heat Exchangers, the Business Unit Plate Heat Exchangers focuses international competence for development, manufacturing, and after-sales and service for plate heat exchangers of all types and sizes.

The product portfolio includes gasketed, fully welded and brazed plate heat exchangers whose specific characteristics make them highly efficiently suited for virtually all industrial and commercial applications.

The core of the plate heat exchanger consists of pressed and profiled plates. Different types, sizes and corrugations lead to a wide and flexible product range and the use in virtually all applications.

Your application, your processes, and your media are the decisive parameters for us. The extensive selection of the product range – either gasketed, fully welded, or brazed – and of the materials and the sizes of your plate heat exchangers enables us to exceed your expectations with respect to performance parameters and quality characteristics. For new and further-developed processes, we remain up with the latest in our innovations.

Competence and availability are the two main pillars of the service organization of the Business Unit Plate Heat Exchangers. To assure optimal operation, you need to rely on experienced experts 24/7. With our international network of after-sales and service centers, we accordingly offer around-the-clock services for all brands of plate heat exchangers, 365 days a year. After all: the objective of our work is your satisfaction.

Plate heat exchanger for pasteurization of milk

Our contribution to good, healthy milk

Louis Pasteur discovered in the middle of the nineteenth century that heat eliminates microorganisms and can preserve food and beverages as a result. Pasteurization of milk is a form of heat treatment that ensures safe eliminations of pathogens. In earlier times, the process of pasteurization was only imperfectly controlled. As a result, milk was over- or underheated, and often tasted as though it had been boiled – or still contained pathogens. Typical modern pasteurization processes apply heat of 72 to 75 °C for 15 to 30 seconds. This completely eliminates pathogens and drastically reduces microorganisms responsible for spoilage – but without noticeably impairing the physical or chemical properties of the milk. All around the world our plate heat exchangers fulfil stringent requirements regarding health, hygiene, and protective product treatment in milk processing – and at the same time enable users to enjoy a maximum of flexibility, cost-effective production, and saving in space.

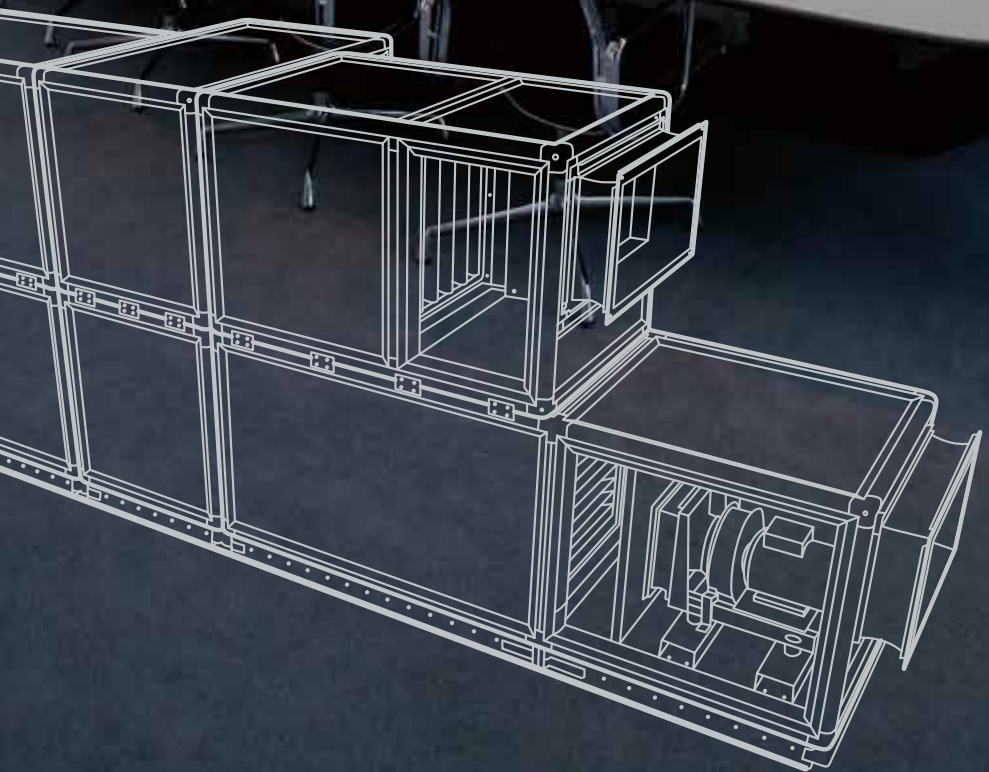
Tailor-made solutions for the widest range of media, demands, and production processes:

- Gasketed plate heat exchangers, which represent our easy-maintenance, all-around systems
- Fully welded plate heat exchangers, which offer higher operation conditions and provide large heat transfer areas especially for gas/gas heat recovery applications
- Brazed plate heat exchangers, which are appealing with their compact design and simple installation with individually designed connections

[24 °C]

[50 – 200 kW]

45 %



We offer HVAC solutions in which we precisely match equipment, duct cross-sections, room-ventilation concepts, and temperature control to the individual requirements of our customers. GEA air-handling units enable air transport with power-saving drives, effective air filtration, and efficient heat recovery.

Customized solutions for air cooling and conditioning

Where heating, cooling, purification, humidification, and dehumidification of air are required, HVAC Systems makes its contribution to progress. This includes customized climate control and air treatment, with the maximum-possible reduction of energy consumption over the entire life cycle of the facilities.

Solutions by HVAC Systems reliably comply with all international standards in highly sensitive areas such as hospitals and clean-room applications – and they have attained a leading rank in the strict classification of the Eurovent Compliance Committee for Air Handling Units.

They likewise set new standards for sustainability and flawless system integration in advanced sports arenas, production facilities, airport buildings and swimming pools – as well as in offices, museums, and hotels.

As summarized by the motto Air Eco_2nomy, this quality level represents the basis for the technological edge of HVAC Systems. Air Eco_2nomy is more than technology: it is an attitude which creates values for the future, including enhanced quality of life for users and residents in the vicinity. Air Eco_2nomy also assures conservation of energy resources and our climate, which means security for investors and planners. In the course of its growing system responsibility, the Business Unit HVAC Systems covers the entire process chain of air-treatment functions: from intake of outdoor air to supply of treated air into a room. It therefore includes the engineering concept and the design of air-treatment facilities. If called in at an early stage of a project, this Business Unit can exploit prepared and globally accessible knowledge within the GEA Heat Exchangers Segment – and can, already in the planning stage lead successfully to an air-treatment system optimized for energy consumption and cost effectiveness.

GEA Denco precision climate-control units are especially designed for all operations in which constant temperature, humidity, and air quality are essential.

HVAC solutions for information technology – Precisely controlled climate for reliable processes

The growing number of sophisticated computers and servers, limited space, and highly climate-sensitive technology – and above all the avoidance of malfunctions and the consequences they produce – set standards for the climate control of computer centers. This means that top performance must remain constant and efficiently available. GEA Close Control systems, especially designed for this demanding field of application, circulate more than 39.000 m^3 of air per hour and provide up to 150 kW of cooling duty. Their performance also includes infinitely variable free cooling, which – under central European conditions – contributes to room cooling up to 70 % of the year. Since the compressors often remain switched off during such operations, these systems appreciably reduce power requirements – while providing at the same time greater and absolutely reliable cooling duty. For energy-saving operation, GEA Close Control systems can also be equipped with freecooling units.

For computer systems we offer fast service that is matched to the equipment – and that guarantees the availability of Close Control HVAC systems around the clock, everywhere in Europe.

Consistent high manufacturing standards worldwide – made by GEA

GEA Heat Exchangers provides the delivery of top-quality products and solutions worldwide – corresponding to international standards and the requirements of our customers.

In order to fulfill this task within our global manufacturing network, production, procurement, and logistics processes must be continuously developed and improved. The Business Unit Manufacturing satisfies this core task of the Segment GEA Heat Exchangers by concentration of production activities in the geographical vicinity of its customers, and by standardization of its production processes.

In these efforts, the Business Unit Manufacturing especially works on optimization of manufacturing processes and deliverability. In this way, the Business Unit Manufacturing supports the activities of the client- and sales-focused Business Units of the Segment and ensures globally high quality standards for our customers.

Highly standardized manufacturing site for Alex air-cooled condenser bundles

Manufacturing of plate heat exchangers for various industries and applications

Compact Air Fin Coolers

In order to assure top quality standards throughout all plant locations in the world, to continuously improve the productivity of manufacturing processes, and to quickly integrate new developments into products manufactured for the market, we have established Competence Centers and Expert Teams throughout the world. They work intensively on the standardization of manufacturing processes and products, develop Best Practices, and realize them in the form of sustainable solutions for heat transfer.

The concentration of our capacities for heat transfer enables more intensive efforts in engineering design and production, energy consumption, materials costs, logistics, and cost structures for heat exchanger production. The subsequent optimization takes such forms as extensive standardization and location-independent engineering, as well as creation of a high-performance network for design, production, and services. This optimization likewise opens up continuous potentials for energy, material, and time savings in production of our heat exchangers, for improvement of logistics processes and services, and for development of new and more efficient systems of heat transfer.

AFC Single Tube

- Air Fin Coolers (Aluminum)
- Air Fin Coolers (Hot-Dip Galvanized)
- Air Dryers (Industrial)
- Transformer Air Coolers
- Air Preheaters
- Machine Cooling Single Tube

AFC Compact Systems

- Closed Circuit Coolers
- Charge Air Coolers
- Radiator – Dry Coolers
- Standard Air Coolers
- Customized Air Coolers
- Air Condensers

ACC/Heller

- ACC/PAC Alex (Hot-Dip Galvanized)
- ACC/PAC Mash
- Heller dry and dry/wet systems
- Wet-to-dry conversion ACC
- Wet-to-dry Heller systems
- Auxiliary Coolers for power
- Balance of plant systems

Our way to excellence

Wet Cooling

- Natural-Draft, Hybrid, Fan-Assisted Cooling Towers
- Customized Cell Cooling Towers
- Modular Cell Cooling Towers
- Fill Business
- Closed Loop Cooling Towers
- Water Business

Shell & Tube

- Transformer Coolers
- Steam Power Systems
- Double-Tube Systems
- Petrochemical Systems
- Machine Cooler
- Desublimators

Plate Heat Exchangers

- Gasketed Plate Heat Exchangers
- Fully Welded Plate Heat Exchangers
- Brazed Plate Heat Exchangers

HVAC Systems

- Air-handling units
- Decentralized systems
- Close Control
- Chiller/Heat pumps
- Filters
- Controls

Manufacturing/After Sales and Service

Leadership and excellence do not constitute a program. They are a process that encompasses our entire company – a process that has a beginning but no end.

Engineered efficiency – no matter where or what.

GEA Heat Exchangers
www.gea-heatexchangers.com