



Corporate Responsibility at PHOENIX CONTACT

■ Contact

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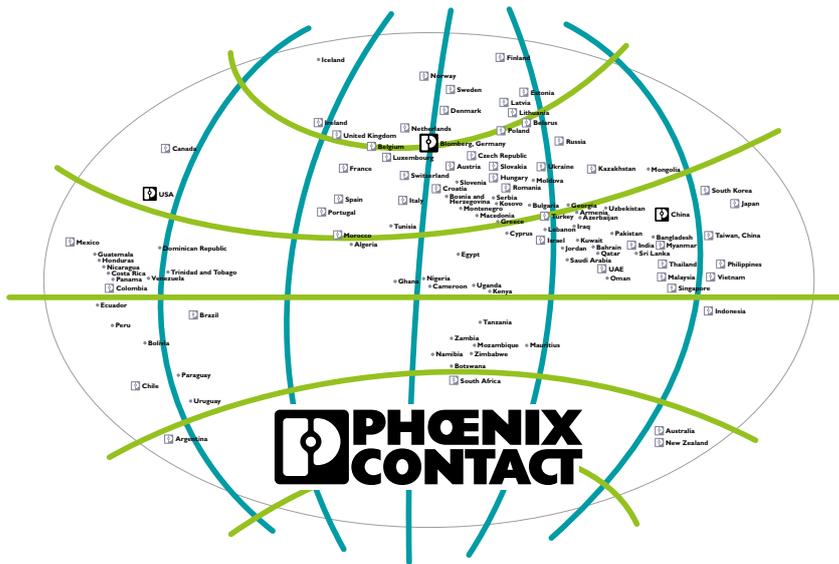
PHOENIX CONTACT Group
Corporate Social Responsibility at PHOENIX CONTACT

■ CSR activities

Economy: Innovative products and solutions
Environment: Conservation of resources at Phoenix Contact
Social responsibility: Commitment to our employees
Social responsibility: Commitment to society

Without any deliberate intention to discriminate, the masculine form is always used in the text.
This text always refers to the feminine form as well.

Phoenix Contact Group 2018



Phoenix Contact is a worldwide market leader for components, systems, and solutions in the fields of electrical engineering, electronics, and automation. Today, the family-owned company employs around 17,400 people worldwide, with sales of € 2.38 billion in 2018. The company headquarters are in Blomberg, Germany. The Phoenix Contact Group includes 14 companies in Germany as well as more than 55 sales subsidiaries throughout the world. The international presence is further strengthened by more than 40 agencies in Europe and overseas.

Phoenix Contact manufactures products with a high level of production depth in 11 countries throughout the world. The product range consists of components and system solutions for energy supply (including wind and solar power), device manufacturing, and machine building, as well as control cabinet manufacturing. A broad product range of innovative components is also available. The range includes terminal strips, special terminal blocks, PCB terminal blocks, and PCB connectors. Cable connection technology and installation accessories are also included. As a provider of comprehensive systems, Phoenix Contact supplies the operators and installers of systems, as well as device manufacturers with the following solutions: electronic interfaces and power supplies, automation systems based on Ethernet and wireless, safety solutions for people, machines, and data, surge protection systems, as well as software programs and tools. Markets within the automotive, renewable energies, and infrastructure industries are supported by means of consistent solution concepts, including engineering, service, and training services, in line with specific needs.

Phoenix Contact supports digital transformation with products, systems, and solutions. Thanks to the experience gained from in-house machine building, the company knows all about the requirements of digitalization. One of these requirements is the continuous data flow throughout the entire product life cycle, from engineering to production and beyond. Product innovations and specific solutions for individual customer requirements are created in the development facilities at our sites in Germany, China, and the USA. Numerous patents emphasize the fact that many developments from Phoenix Contact are unique. Working closely with universities and scientific institutes, technologies of the future such as e-mobility and digitalization are researched and transformed into marketable products, systems, and solutions. The knowledge gained is then transformed into market-oriented products, systems, and solutions.

www.phoenixcontact.com

■ Corporate Responsibility at Phoenix Contact



The company has nearly 100 years of history and acknowledges its corporate responsibility. The Corporate Principles provide Phoenix Contact customers, business partners, and employees with guidelines for sustainable actions and a trusting partner relationship. This includes a value-oriented and appreciative corporate culture, partnership in business relationships, and social engagement in our communities.

With new, innovative products and solutions, Phoenix Contact is engaging with the megatrends of the future. The company is “building a groundbreaking bridge to the future”, for example in the fields of renewable energies and energy-efficient applications. The company has also implemented sustainable actions in its in-house facilities. The preservation of resources and environmental protection are an integral part of our corporate policy.

The Executive Board issued the following statement regarding its position on corporate responsibility: “We feel that we are committed to the positive sustainable development of living and working environments. Phoenix Contact is aware of its role in society and in the environment. As part of our corporate social responsibility and corporate compliance, we take responsibility for adhering to laws, generally applicable values and principles, and the sustainable handling of resources, as well as promoting social commitment, integrity, and professionalism.” Phoenix Contact made this commitment clear in 2005 when it joined the United Nations Global Compact. The company has also been committed to the “ZVEI Code of Conduct for Corporate Social Responsibility”, the code of the German Electrical Engineering and Electronic Manufacturers’ Association, since 2009. This voluntarily commitment includes human rights, work standards, environmental protection, and prevention of corruption.

The following section highlights selected examples of corporate social responsibility activities. The activities cover economic, environmental, and social projects for employees and society.

■ Economy: Innovative products and solutions



Together with its customers and partners, Phoenix Contact is developing pioneering solutions for the world of tomorrow. In this, the company is following its corporate mission: “We create progress with innovative and inspiring solutions”.

In the area of renewable energies, the Radioline wireless system from Phoenix Contact supports simple, rapid, reliable transmission of measurement data from wind turbines.

Phoenix Contact has had an active interest in electromobility for many years. The subsidiary Phoenix Contact E-Mobility GmbH was founded in 2013. The article below highlights the progress of this technology and advances in practical applications.

Examples from the field of building technology and data acquisition provide insight into the implementation of products in existing systems, therefore with limited opportunity for optimization.

High Power Charging becomes practical for everyday use



A vital prerequisite for widespread acceptance of electromobility is the ability to charge a vehicle in just a few minutes. The results of a research project at a service area along the A8 highway in Germany show that charging in minutes is now a practical possibility. The cooled HPC charging system from Phoenix Contact plays an important role in this achievement.

In order for electromobility to be suitable for everyday use, charging times for electric vehicles must be reduced significantly. This means that the electrical and physical limits of all components and systems involved in charging must be explored. For this reason, the FastCharge research project was launched in July 2016. During the project, charging power of up to 450 kW was tested. The goal was that the charging process would be as fast and easy-to-use as the tank filling process.

The joint project focused on exploring all aspects of fast charging with the aim of making the necessary technologies practical for everyday use. The project was planned to take three years and was funded by the German Federal Ministry of Transport and Digital Infrastructure. The consortium was led by the BMW Group and other members included Allego GmbH, Dr. Ing. h.c. F. Porsche AG, Siemens AG, and Phoenix Contact E-Mobility GmbH.



In December 2018, the consortium demonstrated that charging times of less than three minutes for the first 100 km of range are possible in practice. With the inauguration of this high-tech charging system on the A8 freeway in Bavarian Jettingen-Scheppach, Germany, the project participants presented a 15 minute charging process – charging from 10 to 80 percent state of charge (SOC). This is almost a full battery charge. Charging an electric car is becoming increasingly similar to filling the tank of a conventional car.

This powerful charging infrastructure requires vehicles that can handle high currents and store them in their batteries. Two research vehicles were equipped with powerful cooling systems to cool the battery during the charging process. Fast charging is a real challenge, because high charging currents produce a great amount of heat. The vehicles equipped for research purposes are not the only ones that can use the charging stations. All series vehicles with a Type 2 CCS connector can also use them. These vehicles are already well established in Europe and America.

Depending on the vehicle model, the systems can charge both 400 V and 800 V battery systems via the cooled HPC charging cables from Phoenix Contact used in the FastCharge project.

Starting in the HPC technology development phase, Phoenix Contact focused on keeping installation times to a minimum. A special cable feed-through was developed which enables the charging cable to be mounted on the charging station easily. As a result, an HPC charging station can be set up almost as quickly as a conventional electric charging station.

The technology is just as easy to maintain as it is to install. In contrast to conventional charging stations, HPC stations are equipped with an intelligent fluid cooling system to ensure that the charging connector and charging cable do not overheat. Thanks to the use of an environmentally friendly water-glycol mixture as the coolant, it is also much easier to maintain the cooling circuit in this semi-open system.

Charging cables at public electric charging stations are subject to heavy mechanical strain. The HPC connector from Phoenix Contact has therefore been designed such that the mating face frame and power contacts can be replaced quickly. This makes repairs quick and easy, minimizing charging station downtime and eliminating the need for the costly replacement of the entire charging cable. The integrated sensor technology also provides information on the general condition of the HPC connector. The system is also monitored constantly for overheating.

Generating power from trash

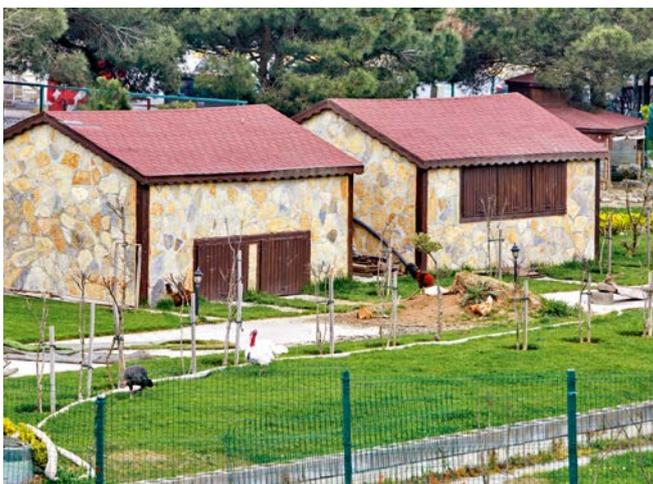


The Turkish energy provider Ortadoğu Enerji is showing how to put trash to good use. The company is generating electricity from the methane gas produced by decomposition. The Radioline wireless system from Phoenix Contact forwards the incoming analog gas pressure and condensate level signals from the individual collection points to the control room. This increases the availability of the system.

Odayeri, the world's second-largest landfill site, opened in Istanbul in 1996 and was decommissioned at the end of 2017. After 21 years of operation, 50 million tons of waste is now stored over an area of 100 hectares (one million square meters).

Power generation began in Odayeri at the end of 2008. It will be possible to produce electricity from the waste stored there for the next 25 years. There are currently 32 gas turbines in use, generating 33 megawatts per hour.

On arrival at the landfill, the household trash is sorted first of all. The creation of an anaerobic environment kick-starts the formation of methane, which results from the bacteriological and chemical decomposition of the organic materials in the trash. The gas is conveyed by vacuum through 437 bore holes from a depth of around 28 meters and transported via separate pipes to gas manifolds, or collection points. Eight to twelve bore holes are connected to each of the 68 collection points. Here, the seepage water is collected in condensate containers and pumped to the biological wastewater treatment facility, while the landfill gas is transported to the processing facility. Once the condensate has been extracted, it is cooled and compressed there. Finally, the processed gas is burned in gas turbines, where it is first converted to mechanical, then to electrical energy. The harmful methane gas must not be allowed to escape into the atmosphere. To prevent this, Ortadoğu Enerji burns off any excess gas that exceeds the combustion capacity of the gas turbines in a process called flaring.



The water that results from the condensation of the gas being transported in the system is disposed of at the collection points. Monitoring the condensate level and gas pressure is important to ensure trouble-free operation. Before the facility was retrofitted with the Phoenix Contact Radioline wireless solution, maintenance staff checked the values daily. Because there were so many collection points, however, it was not possible to check all of them in a timely manner. Errors were only being detected at a late stage. The

result was clogged lines, which led to high service and repair costs and, in turn, to production interruptions. Now that continuous system monitoring is possible via Radioline, staff can take steps early, before any problems and the associated production losses occur.

The distance to be covered between the control room and the most remotely located collection point is around 2.7 kilometers. Using cabling over such a long distance is not an option. In addition, there is an explosion hazard in the area. For that reason, the only option available was a low-power wireless solution that can be supplied using solar cells. Moreover, this wireless system transmits both I/O signals and serial data, making it very versatile and simple to commission. The underlying Trusted Wireless technology ensures reliable communication, even in harsh industrial environments.

A dashboard installed in the control room shows a live graphic display of the signals. They are also monitored and logged. If a critical value is reached, an alarm signal is issued to the service employees. They then initiate further measures.

Utilizing building technology

In the future, many real estate owners and builders will have to deal with IP-based automation systems. In addition to a number of challenges, these systems present numerous opportunities for the construction of new buildings as well as for the modernization or expansion of existing real estate. The Engelbert Kämpfer high school in Lemgo, Germany, can be used as an example to illustrate just what these are for existing buildings:



The lighting and shading system in one of the buildings at the Engelbert Kämpfer high school was no longer state-of-the-art. For this reason, the operator decided to embark upon a modernization program, with an economical solution that meets the current and future requirements.

The Emalytics building management system from Phoenix Contact forms the heart of the IoT building solution implemented at the Lemgo school. The platform combines

building services management with active energy management. The platform is distinguished among other features by the support of all relevant communication protocols and a multitude of visualization options. In addition, the Emalytics system features comprehensive user management that enables different usage and access options. These options apply to experienced operators, interested observers, and the facility manager, who has to rectify any errors that occur. Furthermore, the management system includes rapid diagnostic tools that can be expanded with a remote maintenance option. This enables access to alarms, report logs, graphics, schedules, and configuration data via a standard web browser.

Previously, it was not possible to provide optimum air conditioning for the light-flooded atrium of the Engelbert Kämpfer high school. The reason for this is that the enormous glass facade would lead to a high heat influx, depending on the weather conditions. When the building was constructed, the shading facilities installed at the time were not included in the room climate regulation system. Phoenix Contact has therefore developed an integral concept that enables needs-based air conditioning and shading control.

The lights can be controlled in accordance with predefined sequences (the calendar or the time of day), but where necessary can also be controlled manually. The same applies to the blind controller that enables energy-optimized heat and light influx management in coordination with the heating and ventilation system. Teaching staff thus have the ability to manually adjust the influx of light to the specific requirements of their lessons via installed key switches.

The Engelbert Kämpfer high school has also invested in a newly installed central weather station which measures the wind strength and intensity of the sun. These values are transmitted to all substations via the Emalytics platform. The system controls the blinds based on this data, for example in stormy weather or after sunset. The calendar and time of day function integrated in the Emalytics system thus supports the building technology controller. Hourly schedules, holidays, and vacation periods are factors used by the controller. On school days, a dimmed orientation light is switched on to prevent accidents even before the building is opened. On non-school days, this function remains unused for energy-saving reasons.



The example of the newly constructed European Training Center for Real Estate and Housing Management (EBZ) demonstrates that controllers and the Emalytics building management system from Phoenix Contact can help in using energy efficiently. One prerequisite is that the current usage of the building is properly matched to the energy-efficient operation of the individual system components. The control systems for the components must also

be integrated into the automation solution. The EBZ goes even further, however, and provides students and employees with a “smart boiler room” in addition to the smart working environment with a high comfort factor. The boiler room is an illustrative research and demonstration tool for the possibilities of building digitalization.

The energy-efficient operation of buildings is only possible if their users make a greater contribution than was previously the case. This is where the concept of the EBZ Real Lab comes in. Among other projects, research is being carried out here into how user behavior affects the efficiency of the building. This includes the design of feedback mechanisms and examining the extent to which the current interior climate influences the performance of users and energy efficiency. The goal is to achieve a high level of satisfaction for all participants with minimal energy usage. Well-structured building technologies that are connected to the Internet are an important prerequisite for developing new functions and services for building operations. The new EBZ building is set up as a research and demonstration platform with this in mind. Because the results obtained here flow into the wide-ranging training and education programs of the EBZ, there is short-term feedback for practitioners. The solutions developed are then spread throughout the real estate market.

One of the first projects involves the digitalization of the boiler room. Efficient heat production and distribution within the building are focal points.

Phoenix Contact was involved right from the initial planning stages for the new EBZ building. Together with the consulting firm Drees & Sommer, a future-oriented automation structure was planned at that time. All of the building services are equipped with smart devices. The smart devices communicate with the Emalytics management platform via the ILC 2050 BI building IoT controller from Phoenix Contact. The platform combines building control technology with active energy management.

Thanks to the protocol-independent integration of the field devices into the IoT-based controller, the engineering and cabling work was simplified considerably.

All event and conference rooms, the foyer, and the assembly room are air-conditioned as needed. The shading and ventilation systems are controlled based on the weather and room usage. The status of individual windows can be viewed at a glance via installed contacts. This eliminates the need for the time-consuming evening tour through the building. All multimedia devices, such as projectors, are also connected to the building management system. This enables the respective usage, runtimes, and statuses to be checked and evaluated. The passenger elevator has also been coupled to the monitoring concept in order that maintenance actions can be needs-based, thus preventing failures. The charging stations for electric vehicles should not be forgotten: the facility manager can use Emalytics to continuously monitor charge levels and energy usage.

The new EBZ building proves that energy efficiency can be sustainably increased through the use of information technology. IoT technology makes the processes transparent in the systems and the building. The data obtained can be used to derive action recommendations for facility management. The goal is to have an assistive building with high levels of acceptance and energy efficiency.

■ Environment: Conservation of resources at Phoenix Contact



In line with the Corporate Mission, “We create progress with innovative and inspiring solutions”, Phoenix Contact develops products and solutions for the challenges of the future. Examples in the field of building management include the projects in the “Economics” section. But of course our own facilities can also be used and managed intelligently.

One defined goal in the field of energy management is to generate savings of eight percent by 2020 (based on 2012 levels) through energy efficiency measures. These savings can be achieved through following measures, among others: replacing air compressors, precise distribution of cooling and heating flows in the computing center, replacing lighting, and using geothermal and other renewable energies.

Intelligent building technology – efficient, cost-effective, and quite green

The following example describes how building automation technology has been implemented. The intention was to increase energy efficiency without making any new investments or new construction work. To achieve this, existing data was to be linked and resources controlled and applied based on demand, not on business hours.

Building technology systems such as ventilation, lighting, cooling, and heating are normally controlled by time. Previously, the production areas of the entire hall were continuously ventilated with the same amount of fresh air. The hall was ventilated with no regard to how many employees were generating waste heat by working on machines. In order to make this more efficient, a solution for automating the ventilation systems was sought.

The hourly consumption of compressed air in the building is strongly correlated to the number of personnel working (as determined by linear regression analysis). This is the basis for a building ventilation system that is precisely controlled to meet demand and save resources, not based on times as was the case before.

The demand is calculated based on the number of personnel present. This calculation is made via an algorithm implemented in the controller. Each employee can only operate a limited number of machines, and therefore only has a certain level of demand for compressed air and electricity.

Using the calculated number of employees present, the ventilation systems are automatically controlled on a needs and user-oriented basis. After the algorithm was implemented, it was clear to see that the energy consumption of the ventilation systems was greatly reduced. Consumption was particularly low on weekends. Over the course of a year, the energy saved on weekends alone was nearly 80,000 kWh.

Such a solution is not readily available on the market. The algorithm can be implemented in almost all other ventilation system controllers. The work lies in developing the algorithm.

What made this project special is that no investment was required whatsoever. The controller for the systems was already in place. The participants had to develop a new algorithm and adjust the system to these new parameters.

The project described here and the savings achieved are based on just one floor in a production hall. With a share of 30 percent of overall energy consumption, however, this building is the main consumer at the site. The regression analyses for other buildings and building areas are now being performed. The goal is to apply a similar algorithm and control the systems based on demand. Therefore, this example is a specific, individual application, because it can be applied to the entire site and to additional sites. This considerably increases the potential for savings.

Sprinkler tanks – energy efficient, thanks to insulation

Sprinkler tanks need to store extinguishing water in case of emergency, but can also be used as a cold reservoir in the meantime.

A pilot project in Blomberg has taken on this idea. Sprinkler tanks with a storage capacity of 540 cubic meters were insulated from the outside. The water normally adjusts to the ambient temperature.

Thanks to the insulation, the water temperature was lowered to 8°C, meaning that the water could be

used as a cold reservoir. Thanks to this additional storage capacity, the life span of absorption refrigerators was extended and the operating hours of the combined heat and power plants increased. This is because the combined heat and power plants must be shut down for ecological reasons when no heat is required. An additional advantage lies in including the sprinkler tanks directly in the planning process in the future. This would mean that the refrigerators do not have to be designed for peak loads, and can therefore be smaller. Using the sprinkler tanks in this way can save 75,000 kWh of electricity per year. This is the equivalent of the power consumption of 20 households. The sprinkler tank can also be charged during periods when energy prices are favorable and used later. It can also be used to manage peak loads.



“Mission E” energy efficiency campaign

As a part of the energy management process, Phoenix Contact has been participating in a pilot group since January 2019 in the energy efficiency campaign “mission E” to motivate employees. The “E” stands for energy, efficiency, economy, emissions, and engagement. The goal is to motivate employees working in the businesses and administration departments to help protect the climate. They are being asked to develop ideas and contributions to the reduction of energy consumption and energy costs. To make the successful “mission E” program from the German military applicable to companies and communities systematically, the EnergyAgency.NRW has developed a concept. At Phoenix Contact, this concept is also intended to motivate employees to suggest ways to improve energy efficiency and to collect ideas systematically.

■ Social responsibility: Commitment to our employees



Phoenix Contact has the goal of establishing “trusting partnerships” within the company and with external partners. It is therefore important to the company to support employees and provide a positive working environment. This relates to direct working conditions, qualification, and ongoing education, as well as to opportunities to look beyond immediate work-related areas. Of course, this includes a comprehensive health management program, company sports activities, and running events. These have been reported on numerous times in recent years.

Family festival – 25,000 visitors came, saw, marveled, laughed, and sang in Blomberg

Growth brings growth: ever since the Family Day began, the next one has always been the biggest – for the last 30 years or so. And yet: the first Phoenix Contact Day, as it is now called, still managed to be outstanding in every respect for all Phoenix Contact companies in Germany. Preparations took 18 months, including a concert with a star guest. The company grounds were not big enough to hold all the guests, so the adjacent parking areas had to be used as well.



When star guest Rea Garvey performed in concert, the peak number of guests was 20,000. There was plenty to eat for all the visitors, including 22,000 sausages, 13,000 steaks, and 76,326 liters of beverages.

The identity of the star guest was one of the best kept secrets in the company for months. And it was one of the most frequently asked questions: “Do you know who the star guest is for the Phoenix Contact Day?” The organizers, however, kept the

answer to themselves until the official announcement. The organizers set up a professional stage for Rea Garvey, 32 meters wide, 16 meters deep, 20 meters high, with 46 tonnes of water (as ballast in the base of the stage). This was a technical necessity, because he brought his own equipment, which came with minimum dimensional requirements. But even he was amazed at how big the stage turned out to be. “Actually, we said we were not going to perform at the Rock am Ring festival. And then we come to Blomberg and find our very own Rock am Ring here.”

The Family Day is held every five years and is intended to express appreciation for the employees. It gives employees a chance to show off the company to their families and to celebrate together with colleagues and family members.

Family Day in China

The 25th anniversary of the Chinese subsidiary was celebrated with employees and their families. A total of over 5,000 guests enjoyed the day. Our Chinese subsidiary was founded in 1993 in a small rented facility with the simplest of means. A quarter of a century later, around 2,500 people work at Phoenix Contact in Nanjing. The company has grown into an all-encompassing location with its own logistics center for the Far East. Even during the global recession in 2009, Phoenix Contact maintained this location and secured its jobs.

Qualification

The qualification of young people and continuous education of our own employees is an integral part of the human resources policy at Phoenix Contact.



Once again in 2018, a large number new apprentices and dual students were hired. Their contracts were handed out at a joint celebration with their parents. They expect to receive a solid education starting in the summer, with diverse insights into the company. At Phoenix Contact, they will be thoroughly prepared to enter their careers, just like the many educated apprentices and graduates before them who were hired after their apprenticeships were completed. In previous Communication on

Progress Reports, we have frequently reported on training programs such as the Junior Business Unit. It is a special training concept with the motto “Learning by doing”. The unit is essentially a small company within the Phoenix Contact company. Almost 40 apprentices and dual students in the first and second year of their apprenticeship work on a self-organized basis in five different divisions. Since 2004, they have had responsibility for the budget, and plan and design their own projects. The divisions of the Junior Business Unit are intern support, career orientation, controlling, development, and marketing. Using real orders from the company, the apprentices learn how to think and act like entrepreneurs and to work independently. Two trainers are contact persons for any questions.

For the first time in 2018, there was an Occupational Safety Day for first-year apprentices. This campaign day will also be repeated in the future. A Health Day is planned for the second year, while first aid training will be offered in the final year of apprenticeship.

Around 90 apprentices and dual students have registered for various workshops on occupational safety. Aspects of traveling accidents, tripping, slipping, and falling were taught. Distractions caused by mobile phones and a fire extinguisher training course were also focal points. The aim of the event was to sensitize the trainees to watch out for themselves and others during work. This prevents potential hazards.

■ Social responsibility: Commitment to society



Phoenix Contact views social responsibility as an integral component and wishes to take responsibility for the locations where the company operates. The Phoenix Contact Arena in Lemgo is definitely a great symbol of connectedness to the area. The company has also underwritten cultural highlights, such as the European Street Theater Festival in Detmold. A Phoenix Contact soccer team took part in an artificially distorted match with four goals and four teams. The company has also supported a project by the artist Marco Barotti, who recreated very special flock of birds. Robot woodpeckers were spread out at various points in the city of Detmold that received mobile signals and converted them into knocking patterns. This project combined technology and art and demonstrated the playful application of electrical engineering outside of industry.

Blueprint for a hospital



This project takes us to the Ukraine, in the city of Kharkov. Because Ukrainian hospitals are still not equipped to EU standards, a pilot project was started. As part of the project, hospital equipment was digitalized. A modern database was set up for this purpose, known as an ERP system. Among other initiatives, this upgrade includes documenting every single drug via a QR code. Patients receive an armband showing all important information. A Phoenix Contact employee with contacts in his old homeland also wanted to support the hospital with Phoenix Contact printers.

This resulted in a win-win situation for both sides. The hospital received equipment and Phoenix Contact had the opportunity to introduce its products to the Ukrainian market. In addition to the donated equipment, our Ukrainian subsidiary is supporting the hospital with technical expertise. And when the pilot project is a success, it will serve as a blueprint for other hospitals.

Decoration event with Phoenix Contact cutlery

On Phoenix Contact Day, special decorations were sold to raise money for a good cause. Proceeds from the sale of cutlery embossed with the Phoenix Contact logo were donated to the children's clinic in Bethel. The money is intended for the new Pediatric Hospital building. Half of the estimated € 70 million needed to cover construction costs must be financed through donations. Phoenix Contact wanted to help and found a great partner for the project in the Bad Driburg artist Iris Sickart. She made 600 pieces at no charge, since all of the proceeds were intended for a good cause. More than € 3,000 were raised on Phoenix Contact Day. Another € 1,000 were raised from additional Internet sales. The head of the clinic is very pleased with the donation and the fact that construction plans have moved a small step forward.

Lean and training



In recent years, the Phoenix Contact Lean Lab has become a desired location for internal employee workshops. Teams can work together there to develop efficient processes at specially designed workstations.

Last fall, an external team learned about this program as well. A group of prospective industrial engineers from the FH Bielefeld University of Applied Sciences and its Belgian partner university, PXL Tech in Hasselt, took a cue from the Lean Lab concept. Their

project objective was to develop a lean methods workshop with two training workstations. A colleague from the Lean Lab and one from Corporate Human Resources Solutions supported the project. The HR colleague had originated the project. During the workshop, the students learned about what lean methods mean to a company such as Phoenix Contact. They were thus able to experience the theory from their seminars in practice. Everyone then worked together to develop and implement the project. The result was two training workstations and a complete concept for a workshop. This concept includes an effectiveness analysis, a model manual, and posters to illustrate the results. In order to be well equipped for process improvements in their future careers, students are given the opportunity to learn lean methodologies as close to actual practice as possible. The project will be continued as part of a bachelor's thesis.

In cooperation with the Bielefeld University of Applied Sciences and Phoenix Contact, two final dissertations from the Belgian project team are also making use of the project.

After-work concerts

In addition to the annual colloquium, regular after-work concerts have been held since 2017 in the Schieder Training Center, to which employees and guests are cordially invited. The fourth concert in this series was held at the end of 2018. Before a sold-out audience, 28 music students entertained visitors with pop hits, melancholy ballads critical of the times, and German folk songs, all without any instrumental accompaniment. The latest after-work concert at the end of the year was under the influence of the tango. Visitors were excited about the musical selections, including “Winter” from Vivaldi’s Four Seasons, which was played in a whole new way in a tango rhythm. This concert series has been well received by visitors and Phoenix Contact wants to give a different impression with this cultural offering, something far removed from electrical engineering.

