

WHAT WE ARE DOING TODAY FOR TOMORROW: SUSTAINABILITY AT KNIPEX







FOR EVERYONE

The subject of sustainability has played an important role throughout the 135-year history of KNIPEX. By establishing the energy cycle in 2009, we took an important step in the direction of conceptual planning and action. Today, sustainable action at KNIPEX runs through most business departments. Along with the "What" (the content) there has been increasing focus on the "How". How will we achieve our objectives? How can we take as many employees as possible with us on this path? These questions drive us forward and ensure the constant further development of our activities.

We are making good progress in turning sustainability from a management issue into something that concerns everyone. This is particularly important to us. The following pages will give you an impression of what KNIPEX is doing today for tomorrow.

company feels a close connection to all our employees and to the region. Having established a sustainable and responsible management structure reflects our core values, principles and commitment."

Ralf Putsch, Managing Partner

"As a company that depends on both social and natural resources, we feel jointly responsible for their preservation and quality. Being deeply rooted in our society and natural environment we believe strongly in actively contributing to their improvement. Our family





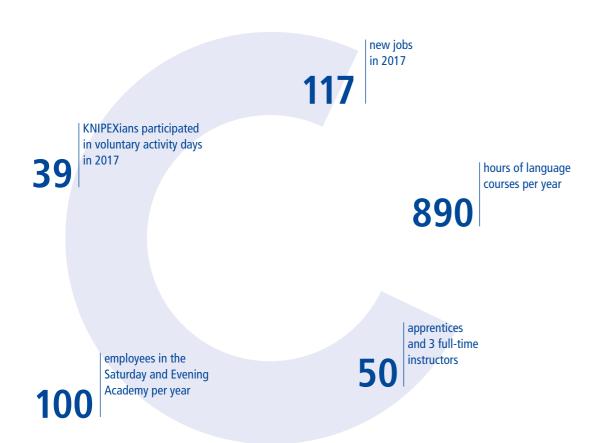


KNIPEX employees achieved excellent results in vocational courses.



STRONG TOGETHER

We believe that social sustainability primarily means creating and maintaining good, secure jobs. This is achieved thorough vocational training, suitable qualification and the continuous further development of our employees. Further key elements are to measure and maintain good health at work and helping to have a balanced work and family life.



Initial and continuous vocational training

We offer good training with three full-time instructors and an ideally equipped training workshop. Our apprentices are regularly among the best performing students in the region. In addition to the technical training, we also promote personal development, for example through social projects, team training or project work with groups of schoolchildren. In the KNIPEX junior company, our apprentices have an opportunity to put their entrepreneurial thoughts and actions to the test.

We were given an award as "Excellent training company – apprenticeship checks 2017" for our training, having already won the "Bergische Training Prize" in 2013. We were also the first company in Germany to have been certified by the TÜV as an "Excellent employer & training company".

Students find ideal conditions in our company. We offer support for bachelor and master dissertations and currently employ 47 masters students and interns.

We are a pioneer in the region when it comes to gaining further qualifications. Over 50 members of staff without qualifications or with different qualifications have successfully completed vocational training as machine and installations operators within the framework of in-service qualification.

Events for employees such as the "Saturday Academy", the "Evening Academy", "Bits of Knowledge" or "KNIPEX gets together" offer possibilities for a factual or interdisciplinary exchange. The intercompany "dreipunkt-null" personnel development programme offers ideal opportunities for professional development beyond our company.

Promoting health

Our health management concept KNIPEXbewegt (KNIPEX moves) informs and motivates our labour force. Several offers on site and directly after work promote the health of our employees. Activities concern health-related subjects such as nutrition, exercise and relaxation, giving up smoking, ergonomics or psychological and physical stress. Our employees benefit from numerous sports and exercise activities, a mobile massage facility as well as regular healthcare measures.

Fresh food is cooked in our canteen every day — using seasonal and local products. Water fountains are provided at 15 central places in the company, and all KNIPEXians can use these to fill their own water bottles. Many employees report that they have adopted a much healthier drinking behaviour because of this.

Work and family

Our day care centre, the KNIPSKISTE, not only offers set places to employees' children aged 1 and above, but also to former KNIPEXians, for example as a story-reading grandma. We also make it easier to reconcile work and family life with flexible working time models or parental leave, which senior management at the company also take advantage of. By looking after the children of employees all-day with activities during the holidays, we help parents hold onto their vacation days. We support our staff with counselling services during difficult phases in their personal lives or at work.

Transparency and participation

We are making KNIPEX fit for the future with the help of regular employee surveys which are evaluated by external parties. With our employee newspaper we give our staff regular insights into what we do, and with the newly developed KNIPEX smartphone app we encourage them to interact.

Voluntary work

Many of our employees are involved in voluntary work. With our newly created programme KNIPEX engagiert (KNIPEX gets involved), we support and encourage this commitment, for example with donations in kind or financial donations, or by giving special leave. Staff experience that involvement in a group is particularly enjoyable during activity days organised by KNIPEX. On such occasions we give a hand to local or regional facilities, for example.

Last Cents campaign

Everybody at KNIPEX can donate the residual cent amounts on their wage or salary statement to the "Last cents" campaign. More than a third of KNIPEXians take part. Lots of small amounts add up, producing a proud total – which is then doubled by KNIPEX. The money is donated once a year to a charitable project in the region. Since the programme began, € 11,237 of last cents have been collected.





ECOLOGY

As a production company, our consumption of primary energy and raw materials is high. Using various measures, we work continuously on our objective of consistently reducing our energy use and waste. At the same time, we take numerous measures to increase ecological stability and to reduce our impact on the environment.



We recover the waste heat from our heat treatment shop using this plant and feed it to our heating system. Using these heat recovery plants at the boiler house, on our air compressors, the ventilation, the hardening plant and the heat treatment shop, we recover over 10 percent of the total energy used at KNIPEX.

SPECIFIC ENERGY CONSUMPTION PER PAIR OF PLIERS (IN KWH)



ENERGY: LESS IS MORE

Efficiency and monitoring

We have made it our objective to reduce the specific energy consumed by 20 percent by 2020. Our energy group has been identifying savings potential since 2009 and is systematically putting this into practice. In addition to technical and organisational measures aimed at energy saving and increasing efficiency, we also rely on the transparent monitoring of our energy flows.

We have already introduced the following measures to reduce energy consumption:

- Modernisation of the heating system (condensing boiler technology, building management system)
- Extensive use of heat recovery plants
- Energy-optimised temperature control in heating systems
- Insulation of heat-carrying parts of systems and aggregates
- Use of highly efficient motors
- Suitable hydraulic control system

- Substitution electromechanical power instead of hydraulic power
- Modern lighting as well as motion and presence detectors
- Energy-efficient compressor management
- Suitable compressed air control and monitoring

Transparency for systematic improvement

Knowledge of consumption and the parameters influencing it is required in order to identify savings potential and measure success. For this reason, we have developed and introduced a database to record and offset energy data. Our load management gives us important insights into the energy flows at KNIPEX. We check and control gas consumption for the heating system using an intelligent building management system. For consumption in production, we have installed a metering system throughout to keep our major consumers in view at all times. Today, the two systems not only facilitate control in line with requirements, but also provide a good foundation for identifying new savings potential.

Since 2014 we have been working with an energy management system in accordance with DIN EN ISO 50001.



RECYCLABLE MATERIALS: RESOURCE CYCLE

Recycling management

By 2020 we want to reduce production-related waste by 15 percent. To systematically identify reduction potential, we evaluate our waste materials according to waste codes and the degree of danger. By checking steel scrap cycles, for example, we have been able to achieve a much greater degree of recycling of our dies.

We additionally conduct regular meetings with suppliers, recycling merchants and disposal companies, always with the aim of creating closed circuits or increasing recycling options by further separation of waste materials. What used to be classed as waste has now become a recyclable material. We are supporting this transition with the building of a new, large, centrally positioned and open recycling depot in the spring of 2017.

Use of resources

Resources that are not used at all require no disposal. Through targeted measures we are reducing consumption and increasing the awareness of it. Thanks to the printer modification and digitalisation of invoices, we have been able to make a 35 percent savings in the paper used. Furthermore, we are trying to stop unnecessary paper ever reaching the company – for example by cancelling unwanted postal items and catalogues.

OUR SUCCESS IN FIGURES



litres of cooling lubricant saved per year

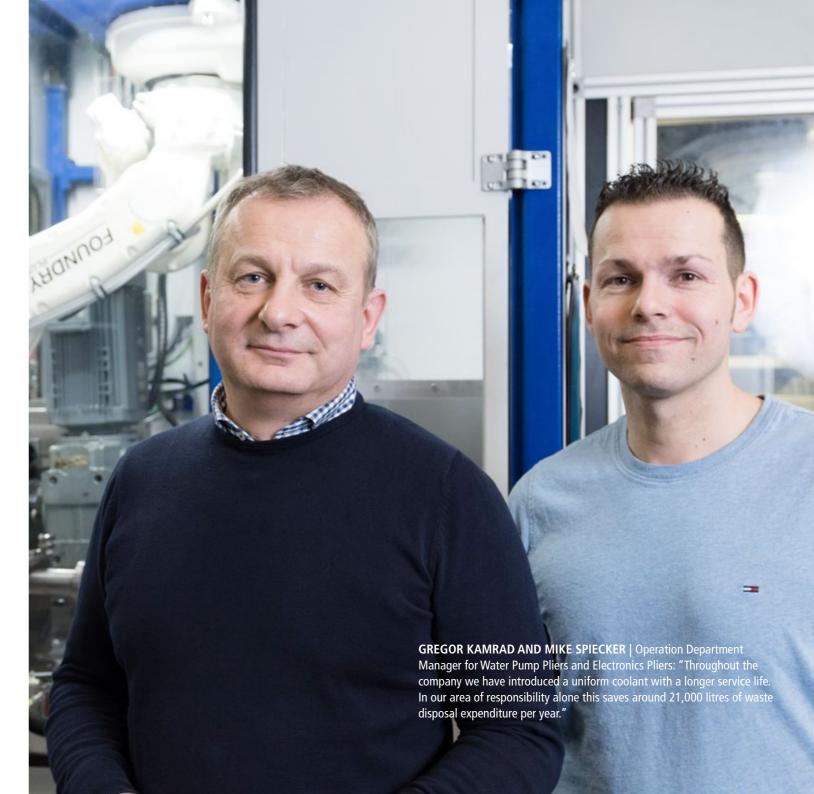
sation of supplier

degree of digitali-

recycled

tonnes of **2,455** steel scrap

Since 2014, we have been using an environmental management system that has been certified in accordance with DIN EN ISO 14001.





LESS CO₂: **TEAMWORK FOR OUR CLIMATE**

E-mobility

The company's two E-Golfs are regularly used for short journeys in the region and as company cars. This promotes environmentally friendly mobility and enables our employees to experience an electric vehicle (EV) in practice. The vehicles are charged at our public E-filling station, that is operated by solar energy generated at KNIPEX.

Thanks in part to the steep hills, cycling in Wuppertal is a real sporting activity, and therefore not an option for the daily journey to work for many employees. We therefore offer the leasing of E-bikes paid for with deferred compensation. A total of 54 bikes have already been bought in this way.

Travelling together

One of our objectives is to motivate employees to form car pools when travelling to work. For this reason, we have also developed a smartphone app which KNIPEXians can use to organise such car pools.

Active climate protection

In Egypt, we are taking part in the revegetation of desert areas jointly with SEKEM, the partner with whom we are collaborating. 32,700 young trees have been grown here and planted in the Libyan desert. With the reforestation project we want to contribute to improving the global CO, balance; in addition, this develops more areas for agricultural use. In the year they are planted, the newly planted trees capture 2.4 tonnes of carbon dioxide. Within the first five years this will be 2,000 tonnes.

LESS CO, BY kWh solar power

106,287

drinks bottles 1,097

32,700



saplings in Egypt

drinking water

fountains









ECOLOGICAL STABILITY: GREATER DIVERSITY

Increasing biodiversity

We want to increase the ecological stability on our premises, in other words the ability of an ecosystem to compensate for pollution or damage. With the support of the Heinz-Sielmann-Foundation, we have developed and largely implemented a concept for boosting the diversity of habitats and increasing the biodiversity of flora and fauna.

In our holiday activities for employees' children, we talk about the impact of our actions on the living conditions of plants and animals. While building bird feeding boxes, nesting boxes, seed balls or insect hotels, the children learn that they themselves can make a effective contribution to sustainability.

The following measures have been implemented to date:

- Habitat of flower meadow instead of monotonous areas of lawn
- Seed balls and planting of shrubs to increase plant diversity
- Habitat of the meadow orchard 20 native types of fruit trees over 2,000 square metres
- KNIBees with their pollination, 8 colonies of bees guarantee greater biodiversity of flowering plants and counteract bee mortality
- Sealed surfaces have been returned to native flowers and field grass
- Safe havens and new habitats through facade greening, dead wood, melliferous plants and hedges to protect birds
- Transformation of existing areas into biologically diversified areas
- Biological pond filtering to conserve flora & fauna
- Return of wild ducks
- Bat boxes, bird nesting boxes and insect hotels







Measures for ecological sustainability

LESS ENERGY

Computer-controlled heating systems

Low energy boiler technology

Building management system

Energy-optimised temperature control

Air compressor management

Heat recovery

LED + motion sensors

Suitable hydraulics

Highly efficient motors

Mechanical power instead of hydraulic power

Use of multi-circuit hydraulics

LESS CO,

Drinking water fountains

E-charging station

Photovoltaic systems

Places to park E-bikes



LESS WASTE

Uniform coolants

Recycling of dies

Own bee colonies, wild ducks,

Meadow orchard

Meadow of flowers

Dead wood

Bat boxes

Shrub slope

Insect hotel

Lawn with gravel



ROOTS IN THE BERGISCH REGION

We feel a close connection to our region and the people who live here, and as a company want to actively contribute to the general well-being of the community. For this reason, we support several local institutions and projects, especially those involved in educational, cultural and social activities.

Commitment to education

Good contact between educational institutions and business can provide useful vocational guidance for young people, while enabling us, as a company, to find out about the expectations and needs of the future generation. We look for co-operations, partnerships, sponsorships or projects that offer contact to schoolchildren and students from educational institutions in Wuppertal and neighbouring Bergische towns.

For example, we sponsor the "Junior Uni Wuppertal" university for children and young people, which is unique in Germany; we have a cooperation with the Bergisches Schul-Technikum — a technical school project for the Bergisches Land region that offers courses for occupations and degrees in the areas of science and technology — and we are a founding and project partner of the "Strahlemann Talent Company" at the Erich-Fried comprehensive school in Wuppertal which is concerned with the area of career guidance. Since the introduction in 2011 of the Germany-wide bursary at the Bergische University, KNIPEX has been an active sponsor of students in various subject areas.

International commitment

Over the past three years we have expanded our international commitment, because we believe that, as a company that operates internationally, we have extensive responsibilities. With the aim of promoting education and health in Ugandan Kitamba, we have built a secondary school in co-operation with the "Our Children and our Future e. V" Remscheid friends' association, which opened in July 2017. 80 boys and girls can achieve higher school-leaving qualifications there.





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With the Singpause project sponsored by KNIPEX, the Wuppertal Bergische Music School is able to reach 2,650 children at twelve primary schools.





Cultural commitment

Our support in the area of art and culture ranges from individual artistic or musical sponsorship, the sponsoring of concerts, choirs, theatres and productions, through to the company's own museum which charts the history of tool manufacture. We believe that a stimulating artistic and cultural landscape presents a valuable basis for future generations.

Social commitment

KNIPEX is a reliable sponsorship partner to sports, cultural and church institutions in the region. Many KNIPEXians are additionally involved as volunteers in a wide range of charitable and ecological organisations. As part of KNIPEXengagiert (KNIPEX gets involved), members of staff have, for example, renovated the "Kinderhaus Luise Winnacker" - an educational institution for disadvantaged children and young people. Our apprentices also do their bit. On two days a year they support a charitable institution in the region.

Regional commitment

KNIPEX is a founding and project partner of the Bergische Gesellschaft für Ressourceneffizienz mbH (Bergische company for resource efficiency). We are a partner of the Technologiezentrums Wuppertal W-tec (technology centre), which in particular offers a point of contact for new enterprises. Additionally, we are a partner of Wuppertal-Marketing GmbH, which works to boost the attraction and awareness of the city.



GIVING THOUGHT TO TOMORROW TODAY

Under the "economy" aspect of sustainability, we combine a stable, future-oriented and financially solid business model, as well as the constant development and maintenance of the basis for our success.

Sound business management

KNIPEX relies on a proven and systematically implemented business model, together with a high equity ratio to retain economic independence, scope for investment and provisions for the future. As a matter of principle, we maintain good and long-term relations with our customers and suppliers. We also consider the continuous improvement of products and processes to be important. By consistently

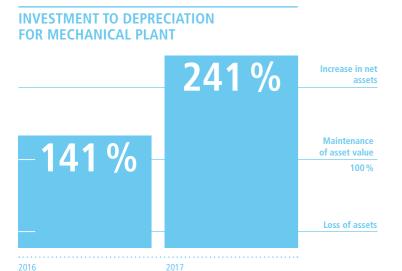
expanding our international sales system, we are ensuring the long-term development of sales in new markets.

Investments

We are convinced that a good asset base constitutes the foundation for successful business. We see that having a qualified and dedicated labour force and modern production facilities are all essential for consistent production of quality products. Therefore we do not simply focus our investments on maintenance but on increasing the net assets of the business by reinvesting into our production facilities. Extensive investments are also planned over the coming years to further strengthen the future viability of KNIPEX.

Digitalisation

In addition to the continuous expansion of our international activities, the acquisition of a majority stake in LMIS, an IT company in Osnabrück, has enabled us to procure an experienced partner for digitalisation, a key subject for the future. In this respect we are focusing on the entire value added chain — from our suppliers, development and production, through to the customers and users of our products.







Sustainability at KNIPEX

THIS IS WHAT OUR EMPLOYEES SAY



JENS KALLMERTEN | Head of Mechanical Engineering: "We always keep our eye on energy consumption when designing our plant and machinery. We take care to restrict the amount of energy used to what is absolutely necessary. Where possible, we substitute energy-intensive work with more economical methods — one example is the use of electromechanical power in place of hydraulic power."





CHRISTINA FORST | Customer Manager, France: "We have established that the subject of sustainability is gaining ever more traction in the French market. Our key accounts in France are even required by law to document their — and therefore also our - sustainability measures. They are extremely interested in our activities and encourage us to invest further in these values."







THOMAS FUJIMOTO | International Sales Manager: "My two children loved building an insect hotel in the holiday activity, and proudly tell us step by step how they built the insect hotel out of wood, screws and straw. I am equally thrilled by how much we can all

do for the well-being of our insects if we choose to."



KATHRIN SCHÄFER | Purchasing:

"We ensure that when a pool car is needed the E-Golf is used for journeys around Wuppertal and the surrounding area. The positive feedback and demand for the E-Golf has meant that several times a day on 17 out of 22 working days the vehicles is in use."



ANDREAS SCHWINNING | Head of Factory Planning and Technology:

"Losses in the form of waste heat occur during many of our production processes and key operating technologies. This offers us considerable potential to save energy, which we take advantage of through heat recovery. Using modern plant technology and smart connection enables us to reduce the supply of primary energy required."

KNIPEX-Werk

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