



CORPORATE SUSTAINABILITY

ENVIRONMENTAL STATEMENT 2019

Global Compact Report Wieland Division
Bamberg + Sokolov locations.

HELLO WIELAND ELECTRIC

Over 100 years of safe connections.

As the inventor of safe electrical connection technology, we are committed to individual and safe system solutions.

Together with our broad product portfolio we offer comprehensive services for industry applications as well as building installation and lighting technology. This experience amounts to Wieland being the global market leader for pluggable, electrical installations in commercial buildings and a dependable partner for machine safety. Our solutions are designed for the secure safety of your team, ensuring that integration of our system is fast and easy while saving time and cost. Thanks to our modular solutions your requirements can be satisfied in a fast, flexible, and fail-safe way.

We operate worldwide with subsidiaries, production facilities, and sales partners and have an excellent global network. Our specialist teams are supporting customers and projects across the globe - personally and individually. Our competences in engineering, production, and logistics processes are interlinked with each other for maximum efficiency.

We are looking forward to exploring all partnership opportunities with you.



1910

founded in Bam-
berg



1600+

employees world-
wide



6

production sites



70+

countries
worldwide

CONTENTS

05	The Global Compact – Implemented at Wieland Electric
06	Global Compact
07	The Wieland Group
08	Corporate Sustainability. Mission statement
10	Determined commitment to health + safety
12	Social responsibility to society
14	Responsibility to the future
16	Environmental policy
17	Environmental management
18	Sustainable solutions for wind power plants
20	Sustainable solutions for heating, air conditioning, ventilation
22	Sustainable solutions for smart buildings
24	Sustainable solutions for lighting technology
26	Sustainable solutions in machine building
28	Environmentally friendly production
29	Manufacturing processes
29	Metalworking. Plastics production
30	Electro-plating. Electronics production. Final assembly
32	Facts + figures 2014 – 2018
40	Reporting and targets
40	Environmental targets 2018 – 2021
42	Status table
44	Environmental reporting
45	Certification according to EMAS



”It is important to us that our customers can trust us to provide not only safe but also environmentally friendly and sustainable solutions.“

DR. OLIVER EITRICH + DR. ULRICH SCHAARSCHMIDT

Managing Directors of Wieland Electric

THE GLOBAL COMPACT – IMPLEMENTED AT WIELAND ELECTRIC.

As a global player, we acknowledge the ecological and social responsibilities that we must bear at this time. We have been producing and working with an environmental management system according to ISO 14001 and EMAS for more than 20 years now. Continuous improvements and ongoing investments underline the high level of importance we attach to our endeavors.

Ever since our company was founded, we have been supplying our customers with safe solutions and innovative products for building installation and industrial automation. Alongside the achievement of economic goals, responsible conduct toward mankind and the environment plays a decisive role in our company philosophy.

OUR ENVIRONMENTAL ACTIONS

We base our actions on the environmental policy developed and published by the management and on the manner in which it is implemented in all areas of the company. The selection of ecologically harmless raw materials, the planning and introduction of energy-saving and environmentally friendly production processes, and the recyclability of our products are the result of our efforts.

In our view, safe working conditions, opportunities for training and continuing education, and staff motivation contribute decisively to our success and to securing the future of our company.

This belief is reflected in our support for numerous community projects and social institutions.

We believe that we can achieve great things by working together, and that is why we joined the Global Compact of the United Nations in 2008 and support this in our daily activities.

We have prepared this transparent report to inform our shareholders, customers, employees, and interested members of the general public about the correlations between the principles of the Global Compact, our guidelines, and the resulting objectives, projects, and activities.

WE FOSTER:

- + TRUST
- + OPENNESS
- + TRANSPARENCY
- + SUSTAINABILITY
- + ENVIRONMENTAL FRIENDLINESS
- + ENERGY SAVING
- + RESOURCE CONSERVATION

YOUR CONTACT

DR.-ING. ANDREAS RINN

Head of Quality & Processes | Order Center & Logistics

Phone: +49 951 9324-170

E-mail: andreas.rinn@wieland-electric.com



GLOBAL COMPACT.

As a member of the Global Compact of the United Nations, we have been operating in accordance with the 10 principles of this initiative for more than ten years now:

1. We support and respect the protection of internationally proclaimed human rights in our sphere of influence
2. We make sure that our company is not complicit in human rights abuse
3. We uphold the freedom of association and the effective recognition of the right to collective bargaining
4. We are committed to the elimination of all forms of forced and compulsory labor
5. We are dedicated to the effective abolition of child labor
6. We stand up for the elimination of discrimination in respect of employment and occupation
7. We support a precautionary approach to environmental challenges
8. Within our operations we undertake initiatives to promote greater environmental responsibility
9. We encourage the development and diffusion of environmentally friendly technologies
10. We work against corruption in all its forms, including extortion and bribery

THE WIELAND GROUP.

Wieland Division

Wieland Electric GmbH



SALES



DEVELOPMENT



PLASTICS PRODUCTION



METALWORKING



ELECTRO-PLATING



INSTALLATION



CABLE ASSEMBLY



ELECTRONICS PRODUCTION



**TECHNICAL
TRAINING CENTER**

Wieland Electric International

Wieland Electric Inc.
Oakville, Ontario,
Canada

Wieland Electric Ltd.
Guildford/Surrey,
Great Britain

Wieland Electric SARL.
Cergy-Pontoise Cedex,
France

Wieland Electric S.r.l.
Settimo Milanese,
Italy

Wieland Electric S.L.
Barcelona, **Spain**

Wieland Electric Sp. Zo.o.
Swadzim, **Poland**

ATEM-Wieland Electric NV
Willebroek, **Belgium**

Wieland Electric A/S
Køge, **Denmark**

Wieland Electric AB
Limhamn, **Sweden**

Wieland Electric AG
Winterthur, **Switzerland**

Wieland Electric Trading
Soho City, Shanghai,
China

Wieland Electric Co, Ltd.
Yokohama, **Japan**

Wieland Electric,
Čačak, **Serbia**



Wieland Holding GmbH
Wieland Electric GmbH
PLANT I Brennerstraße 10–14, D-96052 Bamberg



Wieland Electric GmbH
PLANT II Rodezstraße 10, D-96052 Bamberg
PLANT III Neuerstraße 13, D-96052 Bamberg

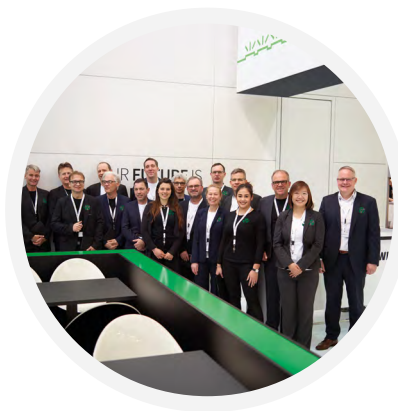


Wieland Electric s.r.o.
PRODUCTION
Nádražní 1557, 356 01 Sokolov, Czech Republic



CORPORATE SUSTAINABILITY. **MISSION STATEMENT.**

Our values and objectives underpin our actions. They serve as our aspiration and yardstick for our interaction with all our employees, customers, and business partners.





OUR IDENTITY

We are a financially independent family-owned company with our headquarters in Bamberg. As the inventor of safe electrical connection technology, we are committed to individual and safe system solutions. Even though we operate worldwide we feel connected to our Franconian roots and therefore engage in many different areas within our region.

OUR VALUES + CULTURE

We have an entrepreneurial mindset and a customer-focused attitude in everything we do, while never losing sight of our employees' needs. We pursue honesty and fairness – in our collaboration with our business partners as well as within the company. We value the diversity of different cultures. Team spirit, mutual trust,

and appreciation determine how we work together. We give employees the freedom to develop new ways of thinking and offer them prospects and opportunities to utilize their full potential.

OUR RESPONSIBILITY

In these times of change and digitization, we ensure sustainable growth and a permanently commensurate profitability. This is how we secure the autonomy and future of our company. Responsible conduct toward mankind and the environment defines our actions. It is only natural for us to observe legal regulations and guidelines. With our sense of social responsibility, we commit to social and humanitarian issues and we promote culture, education, and sport.

OUR ASPIRATION

We inspire customers all over the world with tailor-made solutions and excellent service. Our products and services are innovative, high-quality, and progressive. We take some of the load off our customers so that they can focus entirely on their core business.

We always act in an economically responsible manner as this is the only way we can ensure safety and continuity for customers, business partners, shareholders, and ourselves, while also actively shaping our company's future.



DETERMINED COMMITMENT TO **HEALTH + SAFETY.**

Obviously we are keen to look after and preserve the health of our employees. For this reason, we are committed to good, safe working conditions and a pleasant working atmosphere. We believe that the more motivated employees are, the greater their commitment to their work.





COMPANY HEALTH MANAGEMENT SCHEME

Mens sana in corpore sano – a healthy mind in a healthy body. We support our employees with sustainable projects, like help to quit smoking, or preventive measures, such as running classes or free fruit days once a week. By doing so, we encourage them to adopt a holistic, healthy lifestyle with sufficient movement and a balanced diet, which increases general wellbeing.

Our apprentices are responsible for tending and creating our green “rest islands”, which have become a very welcome place to enjoy lunch out in the fresh air.

Alongside ergonomic office equipment and consultations with our company physicians, we also offer diagnostic back scans, “Rückenfit” (back fit) events, and in-house massages.

To proactively combat the ever-rising number of mental health issues caused by stress in the workplace, we, with the support of our association, vbm bayme, regularly organize workshops for managers. These are intended to raise their awareness of such issues and to teach them how to recognize danger signals within themselves and their staff early.

HIGH OCCUPATIONAL SAFETY

As a responsible company, we feel obliged to ensure the wellbeing of our employees and to provide a safe working environment for them. Our prime objective is to prevent workplace accidents through our numerous preventive measures, such as regular safety training, modernization of protective devices, and a detailed appraisal of any gaps in safety.

ATTENTIVENESS + APPRECIATION FOR EVERY SINGLE PERSON

Looking to the future, we are committed to preserving and promoting the motivation of our employees continuously. Our goal is to assign work to them which they find fulfilling and to provide them with adequate recognition for their performance. This approach is intended to make our entire workforce feel healthier and appreciated, irrespective of the individual's age or stage of career. Not only does this help significantly to strengthen the affiliation with the company, it also keeps the turnover rate low.

Our systematic company reintegration management policy complies with legal requirements while also paying attention to the person so that the reintegration truly works.



SOCIAL RESPONSIBILITY **TO SOCIETY.**

A company cannot exist without a stable social environment, in the same way as a society cannot survive without sound economic foundations. This is why for us economic activity and social commitment go hand in hand.





As a strong partner we are particularly committed to social projects, culture, and sport in the Bamberg region, putting quality before quantity every time. We are always willing to promote new selected projects.

SOCIAL ENGAGEMENT

Via the “Plattform Betreuung” (care platform) run by the employers’ association of the metal and electrical industry in Bavaria we offer help if children or other dependent family members require short-term assistance.

We also sponsor the “Bamberger Ferienabenteuer” (Bamberg vacation adventure). This is a package which enables working parents to balance their family life with their work life during the Bavarian school holidays. Our employees can secure the childcare places they desire on favorable terms before these are offered to the general public.

SUPPORTING DISADVANTAGED PEOPLE

We have also been committed to the association “Lebenshilfe e. V.” for many years.

REWARDING VOLUNTARY WORK

Employees who volunteer privately as labor court judges, firefighters, or in social and charitable institutions can count on us. We support their social engagement financially or in the form of time off work.

CULTURAL SPONSORSHIP

Alongside the world-famous Bamberg Symphony Orchestra, which represents our city as a musical ambassador all over the world, we also sponsor the Bamberg University Association. Our Wieland managers regularly visit universities and other institutions of higher education to bridge the gap between theory and practice and

to fulfill our social and educational responsibility.

SPORTING COMMITMENT

Every two years not only do we get involved in the Bamberg World Heritage Run as a sponsor, we also line up at the start with our own running team. We also support the annual Bamberg inter-company indoor football tournament, both financially and with our skillful Wieland side.



RESPONSIBILITY **TO THE FUTURE.**

As a family company, we are a dependable employer, guiding our protégées along their journey and ensuring that they receive the best possible development opportunities, with the focus not just on purely technical training but also on the development of social and personal skills.



APPRENTICES

Wieland Electric GmbH



The analysis is updated every year with the values from the previous year.
The average number of apprentices in a year is compared to the average workforce according to the personnel statistics.

	2014	2015	2016	2017	2018
Average number of apprentices	34	32	28	23	24
Training quota (%)	4.3	4.1	3.6	3.6	3.1

TRAINING

In our in-house training center, experienced trainers are concerned not only with imparting professional knowledge in a practical manner, but also with helping apprentices to find their feet in this new period of their lives. Thanks to our open communication and feedback culture, our apprentices can develop their potential and often really thrive. This relationship of trust with our young employees is a reliable connection to the future. This is because almost 100 percent of our apprentices decide to continue their career with us after successfully completing their training.

GRADUATION WITH DISTINCTION

It goes without saying that we prepare our apprentices well for their exams. The qualifications successfully attained by our apprentices, who regularly receive special distinctions from the Chamber of Commerce and internal awards, speak for themselves.

APPRENTICESHIP PACKAGES

We give our new talent access to attractive offers like apprenticeship film, apprenticeship blog, or health projects. At training fairs they then regularly inspire school leavers and interested parties with their impressions and experience of our company.

STUDIES

Starting in November 2019, we will also offer a dual bachelor's degree in electrical engineering. In addition, we regularly provide exciting and demanding topics for dissertations and theses at all degree levels, for which we provide personalized and comprehensive support.

VOCATIONAL TRAINING

The content of training offers must be aligned with the digital transformation. We offer extensive subject-specific qualification opportunities to meet the rising demands on the capabilities of our employees.

Employees within all areas of the company can book attractive seminars to, for example, improve their linguistic skills, expand their IT knowledge, or learn management tools.

FOSTERING OF LEADERSHIP TALENT

We offer young junior managers and aspiring specialists a personalized sponsorship program via our in-house talent management scheme. Our "Führungskräfte-Werkstatt" (managers' workshop) project combines further training measures for managers, get-togethers, and workshops aimed at improving the corporate culture and strategic focus.

ENVIRONMENTAL POLICY.

Our actions are based on the following rules defined by the management:

1. Protection of the environment is an important mission for our company.
2. All employees are obliged to act in a way that protects the environment. We provide training and information to motivate staff to behave in an eco-friendly manner.
3. Compliance with official and legal requirements as well as our company guidelines underpins our environmental protection measures.
4. We conduct regular reviews to improve our management system continuously and to document our achievements. The defined environmental and energy targets are our benchmark.
5. In the event of deviations from our environmental policy, we intervene with appropriate corrective measures.
6. We plan, set up, operate, and develop our plant technology according to the latest technological advancements with a view to “improving energy efficiency”.
7. We fully utilize technical and economic possibilities in order to avoid waste and emissions and to reduce energy consumption. Where waste is nevertheless produced, we examine recycling and recovery options for these substances. Non-recyclable waste is disposed of in an eco-friendly way.
8. We select, transport, store, use, and dispose of operating and auxiliary materials according to environmental protection measures. If we employ third parties for these purposes, we validate their technical know-how and reliability.
9. We use raw materials and energy in a manner that is as economical and as eco-friendly as possible. We pursue this goal from the development to the disposal of our products.
10. In all matters of environmental protection we cooperate with the public authorities, associations, and other technical institutions. We provide open and objective information on matters of internal environmental protection.
11. We provide our customers with appropriate information on environmental aspects relating to our products.
12. We pursue the target of involving our contract partners in improving our environmental performance.

ENVIRONMENTAL MANAGEMENT.

CLEAR POLICY – PRESERVE VALUES.

Clear guidance for our actions.

Sustainability that takes account of the environment is becoming increasingly important to companies – ourselves included. The journey made by a product usually involves a very high energy expenditure. For this reason, we pay attention as early as the design phase to ensuring that we can save

resources during the subsequent manufacturing process. We use existing raw materials as fully as we can and waste is recycled purposefully. Our solutions and products are used in sustainable forms of energy. We also regularly perform environmental audits to document the effective-

ness of the protective measures for the environment and health. The results help us to reduce stress, to use energy more efficiently, and thereby to save unnecessary costs – for smart sustainability and a greener future.



WIND POWER PLANTS

In the field of renewable energy, we provide efficient electrical installation solutions for wind power and solar plants, among others.



HEATING, AIR CONDITIONING, VENTILATION

In the field of heating, air conditioning, and ventilation, we are a reliable partner for energy-efficient solutions and components as well as environmentally friendly and sustainable installations.



SMART BUILDINGS

In addition to clean energy production, we also promote energy savings in buildings. Through our innovative concepts in room automation, we lower electrical energy demand by 30 % and heating energy demand by 50 %.



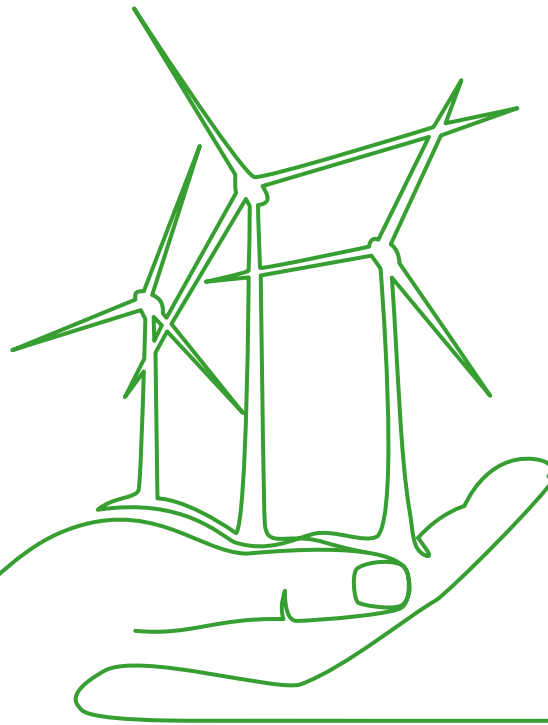
LIGHTING TECHNOLOGY

Our easily pluggable installation solutions are manufactured in compliance with strict environmental standards. They are reusable and enable energy-efficient lighting.



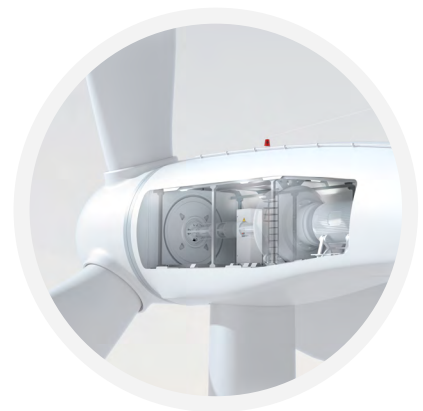
MACHINE BUILDING

Whether safety, connectivity, or communication: Our sustainable solutions create safe connections with smart interfaces to the future.



SUSTAINABLE SOLUTIONS FOR **WIND POWER PLANTS.**

Our smart solutions are used in wind farms and solar farms all over the world.
We are proud to be able to make a contribution in this area to the use of sustainable, clean energy.





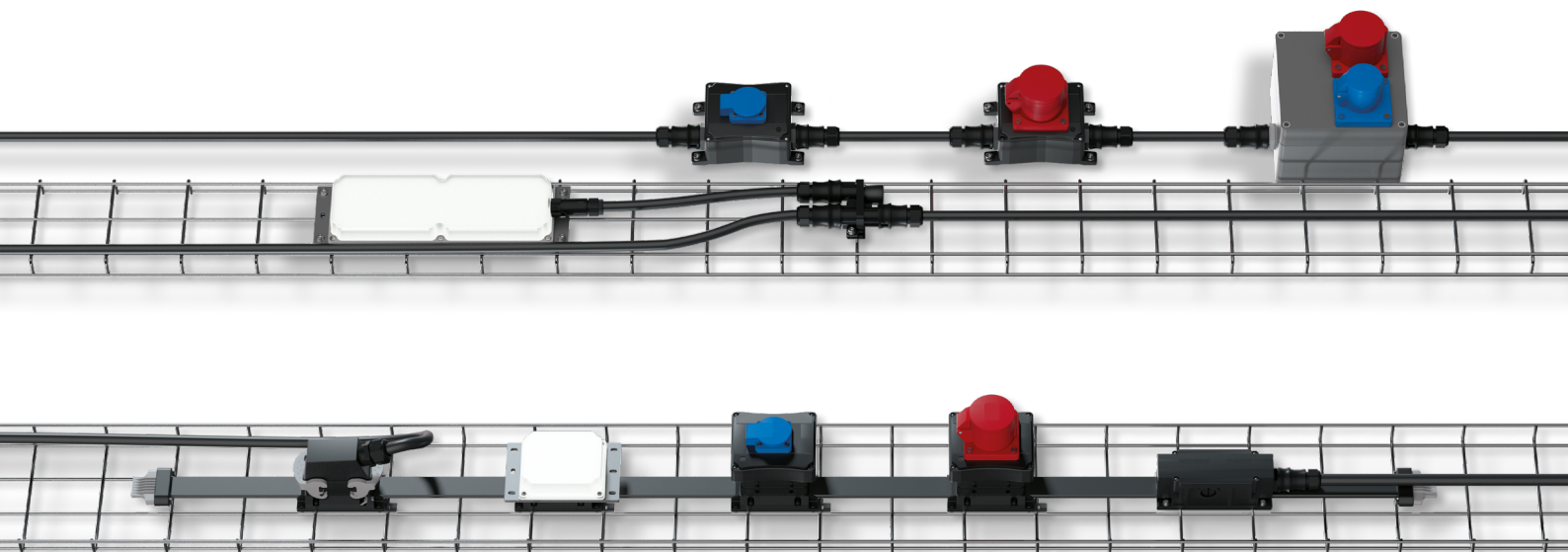
ENERGY DISTRIBUTION

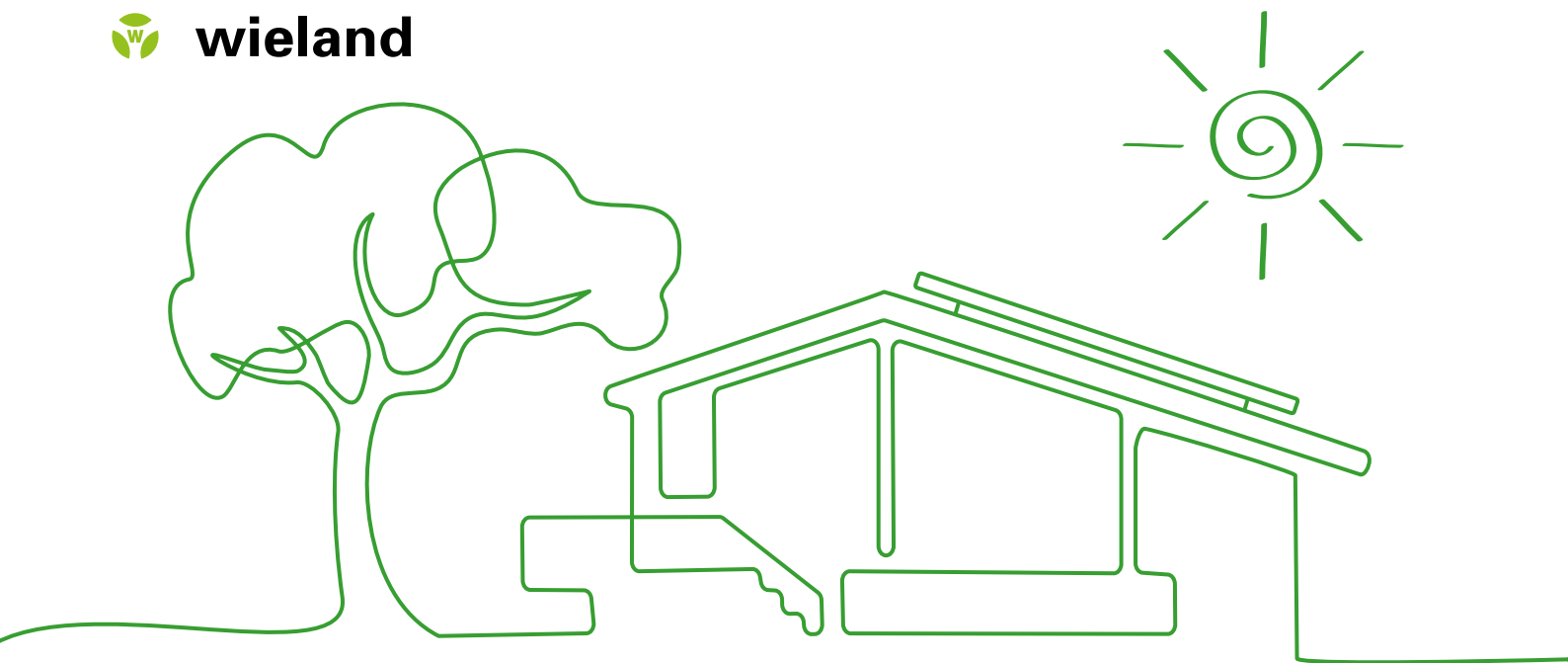
Our podis® and RST® installation systems offer perfect infrastructure cabling for every component of a wind power plant. All the necessary components, such as lighting, maintenance sockets, control cabinet, and service elevator, are plugged together quickly, safely, and flawlessly – before they even leave the factory or on the construction site.

LED LIGHTING

Spaces inside wind power plants have to be fully illuminated in compliance with standards in order to ensure that service personnel can climb up the tower safely, in an emergency as well. For optimum illumination in the tower we offer various LED lights to choose from – pluggable, powerful, and ideal for smooth operation of the plant as they are maintenance-free.

Our components have international approval and are particularly suitable for use in industrial environments worldwide.

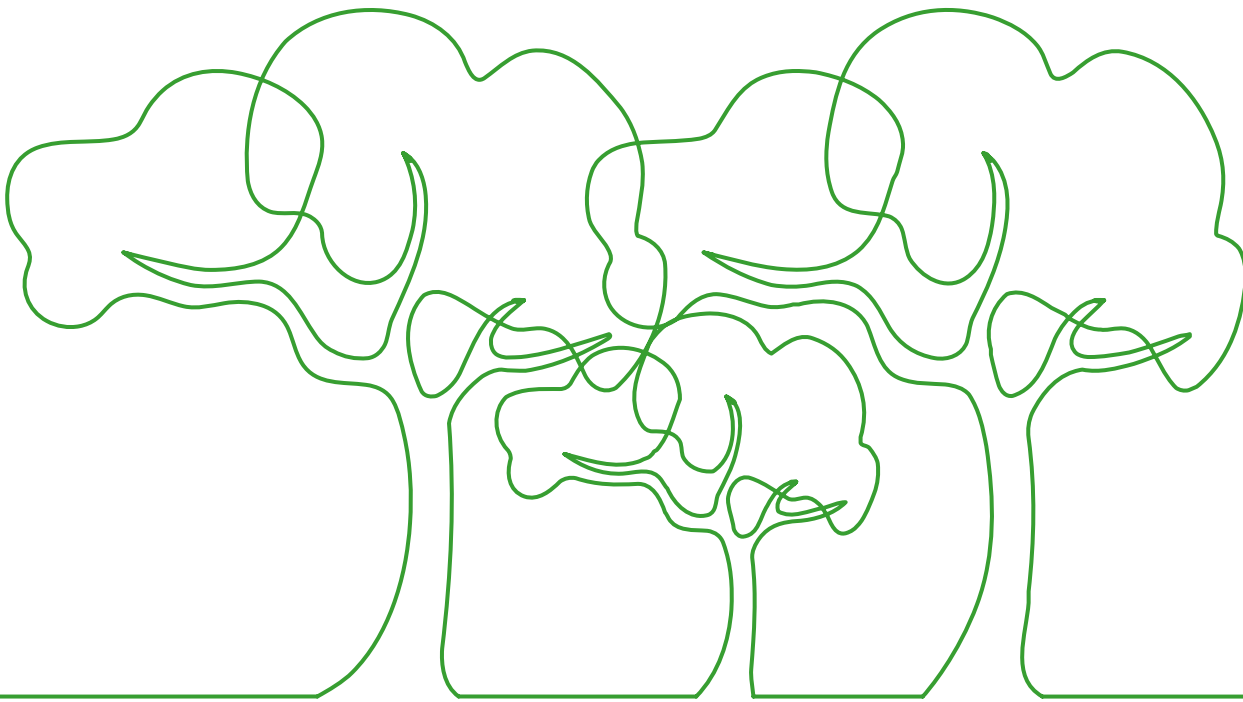




SUSTAINABLE SOLUTIONS FOR **HEATING, AIR CONDITIONING, VENTILATION.**

Today no other industry works with such an efficient mix of different energies as the heating industry. In ventilation and air conditioning, buildings are air conditioned using holistic approaches that avoid the loss of valuable heat to the outside. Our solutions help to make heating and cooling systems more efficient.





TECHNOLOGY FOR THE ENVIRONMENT + FUTURE

We have been one of the main suppliers to this branch of industry for decades now, both with a large number of specific solutions and with innovative product developments. We are always on hand to provide our customers with intensive advice when, for example, industry-specific standards change or when requirements must change due to new equipment concepts.

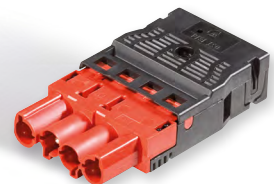
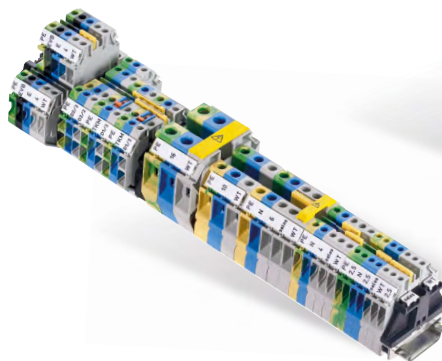
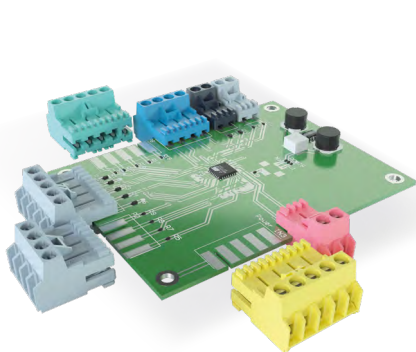
The greatest challenge of our time is to combat global warming. One of the

main tasks is therefore to minimize the increase in energy demand as well as the harmful emissions of CO₂ in the world.

Energy generation from fossil fuels is currently the main pillar of energy production. Given that the combustion of fossil fuels releases CO₂, which is harmful to the environment, it is important that the energy produced is used more efficiently and conserved.

What is more, the fossil fuels available in the future will not be sufficient to cover the increasing energy requirements. For this reason, measures aimed at renewable energy production are being promoted and extended worldwide.

We are a strong partner. To the benefit of all of us – for a green future.





SUSTAINABLE SOLUTIONS FOR SMART BUILDINGS.

We have revolutionized electrical installation with our gesis® installation system. Energy and resource savings and durable components provide for impressive 70 % time and 30 % cost savings and also save space thanks to smaller utility rooms. Our automation solutions also regulate lighting, shade, and temperature, making the system even more sustainable.



Awarded "platinum".
Reference: "An den Brücken",
Munich



Awarded "gold".
Reference: Süddeutscher Verlag,
Munich



Awarded "platinum".
Reference: "The Cube",
new Deutsche Börse building,
Eschborn



ENVIRONMENTAL PRODUCT DECLARATION (EPD)

EPDs represent an ecological assessment of a product with a defined lifecycle in terms of its impact on the environment (e.g. discharge of substances, energy consumption). They serve as evidence of the fulfillment of environmental requirements in public procurement and increasingly for customers. Wieland Electric provides its customers with EPDs (Type II ISO 14021) for building installation products.

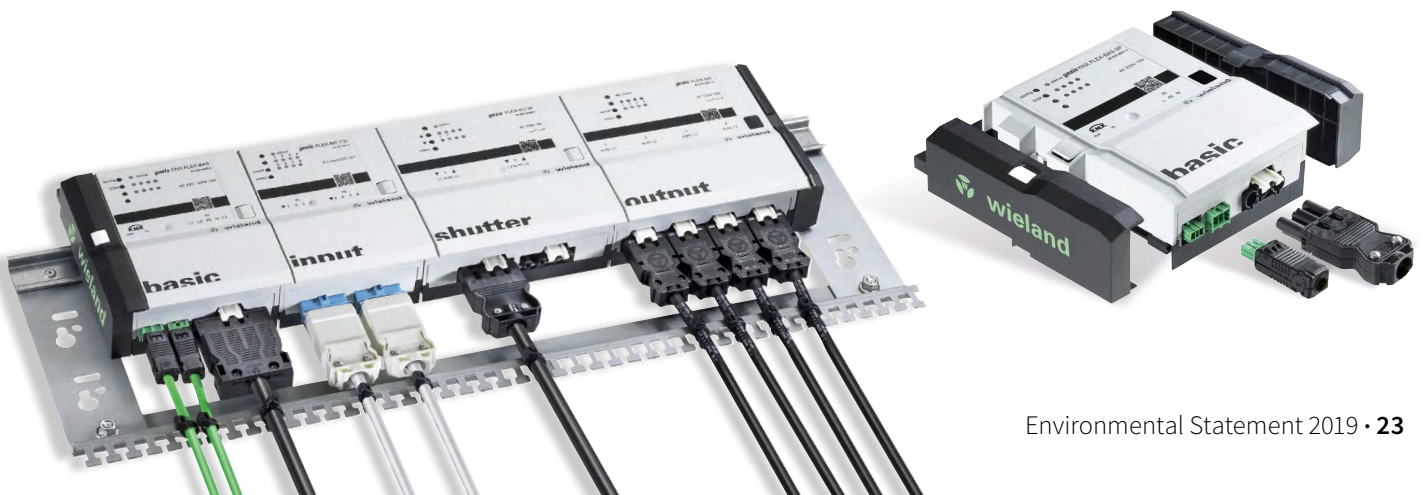
EXAMPLE: WHO IS CERTIFIED, AND HOW?

Green building certification is voluntary, unlike complying with the EnEV and issuing the energy pass.

The project is certified by the respective organization. Generally, construction and renovation projects are already monitored by the organization, which ensures that the targeted certification level is reached. The actual certification is then performed via point systems using checklists. The “smart installation” concept excels here. From simple electrical connection to room automation with presence detectors and room thermostats, Wieland helps to create sustainable buildings. The pluggable electrical installation scores well in all areas, from planning, execution, and operation all the way through to renovation and demolition. Flat cable systems and decentralized automation reduce wiring expenses

considerably. Besides being pluggable, the electrical installation also remains flexible during operation.

The use of room automation devices, especially presence detectors and room thermostats, plays an active role in helping to save energy. The most recent studies by Biberach Technical University produced potential savings in electrical energy of over 30% and in thermal energy of over 50% thanks to room automation. These values were calculated using seminar rooms at the university over two years during ongoing operation – without any structural measures!

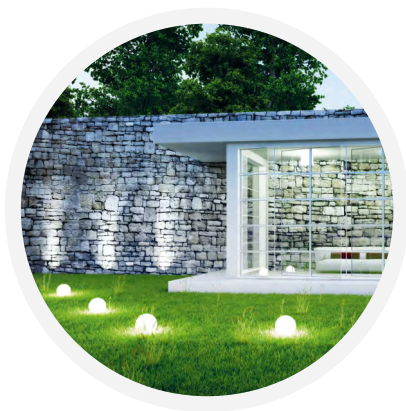


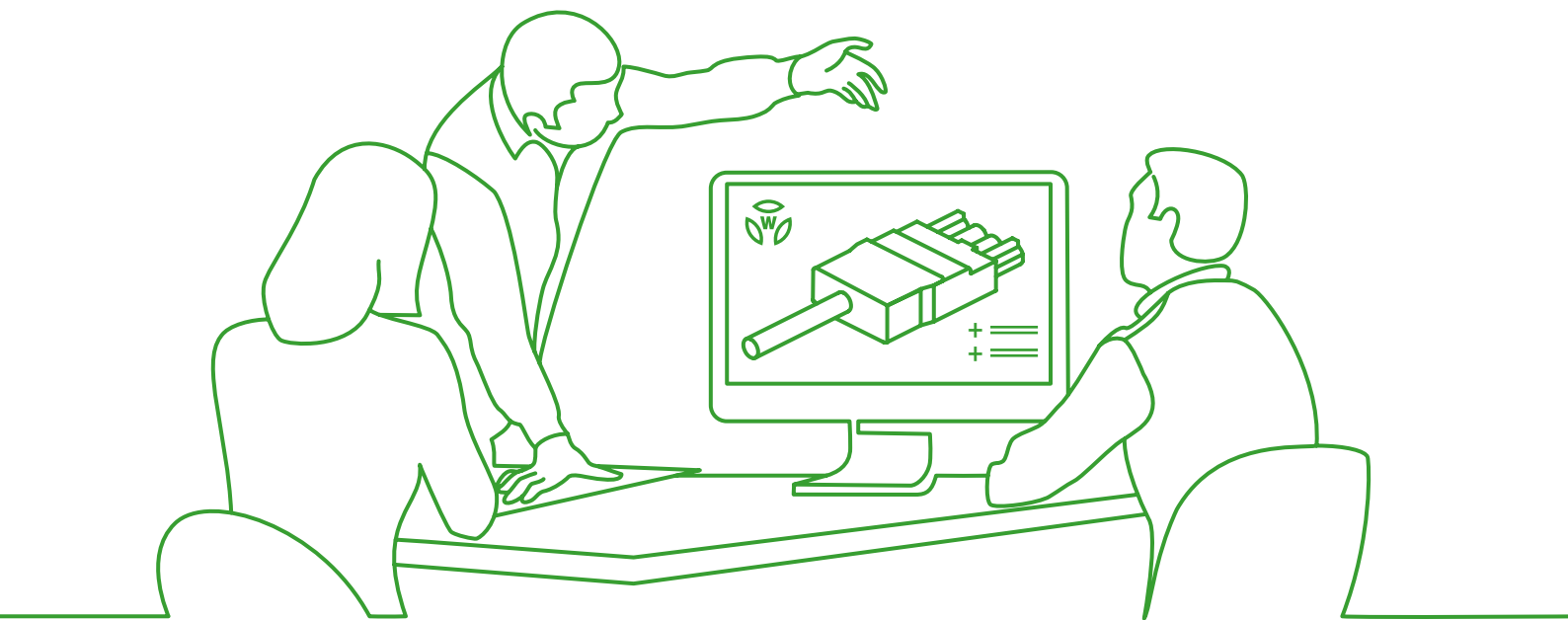


SUSTAINABLE SOLUTIONS FOR **LIGHTING TECHNOLOGY.**

We see ourselves as a specialist solution provider for buildings. We enable our customers to add value sustainably thanks to the energy efficiency of our products and solutions.

Luminaire manufacturers also use our components for their LED lights and drivers or complete solutions.





SAFE INSTALLATION – QUICK + EASY WITH A COHESIVE CONCEPT

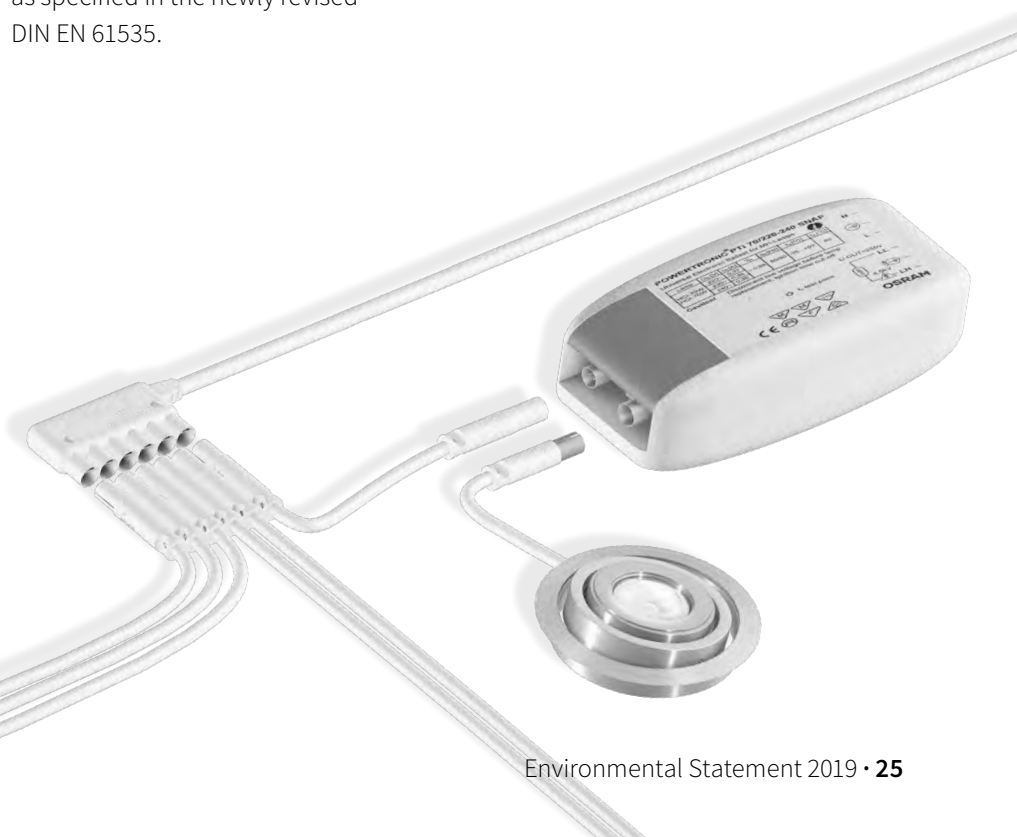
The plug & play philosophy paved the way for the revolution in entertainment electronics and the introduction of IT into all areas of life. With the gesis® connector system, Wieland has been enabling the realization of customized plug & play concepts for the electrical installation of lighting systems in offices, stores, industry, and the outdoor world for the last 40 years.

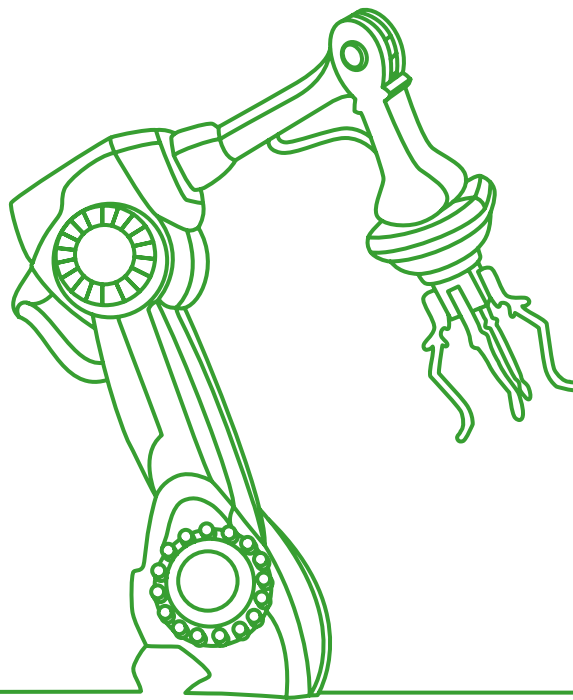
Professional lighting solutions benefit from all the advantages that plug-gability has to offer. The huge range of special components has been tailored to the requirements of our partners in the lighting industry. Fitters benefit from a time saving of 70% and

30% lower costs when using Wieland connectors. Luminaire manufacturers benefit from a smaller inventory, quick response time for variants, and simplified assembly.

Colored markings and mechanical codings enable clear assignments and prevent mismatching. With gesis® system plugs, the electrical connection meets the requirements for a permanent connection in fixed installations as specified in the newly revised DIN EN 61535.

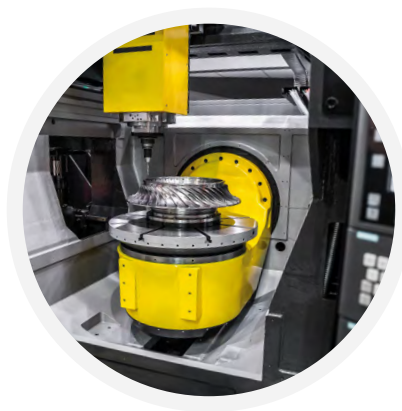
From the flexible distribution of power to the luminaire through to effective DALI control solutions for both indoors and outdoors, Wieland offers cohesive concepts and pluggable solutions that are optimized for the application in question. At the heart of the system lie our plug connectors and device connectors, supplemented with distribution elements, cable assemblies, and accessories.





SUSTAINABLE SOLUTIONS IN **MACHINE BUILDING.**

Globalization and digital competition pose ever-increasing requirements for cost efficiency and time savings. At the same time, statutory health protection requirements have to be met. We help our customers to be successful and to remain so.





EFFICIENCY AND SAFETY

Wieland Electric is not just one of the leading suppliers of safety technology and electrical connection technology, it is also a trend-setting innovator and industry expert. Thanks to in-house machine building and the operation of production lines at home and abroad, we have extensive experience and great industry expertise dating back many decades. We have detec-

ted and solved typical problems on the market. These include the many technical details that significantly improve the availability of a machine and IoT solutions that keep pace with digitization. Aside from this, the fulfillment of logistical needs and wholly individual customer requirements also makes Wieland Electric a strong and proficient partner in machine building.

FROM SUPPORT AND ADVICE TO COMPONENTS

Safety is increasingly the focus of the machine builder, driven partly by a rising awareness of responsibility in every one of us. Safety includes minimizing the risk of workplace accidents. We help others to comply with legal regulations, such as the Machinery Directive and the Ordinance on Occupational Health and Safety.



ENVIRONMENTALLY FRIENDLY PRODUCTION.

Acceptable material usage, take-back + circular economy



METALWORKING

All aspects of environmental protection and health & safety are considered right from the start with the selection of the copper, steel, and aluminum alloys used.



PLASTICS PRODUCTION

The sprue material accrued in plastics production is recycled and integrated into the production process again in compliance with all the regulations.



ELECTRO-PLATING

Water is needed as process water in our electro-plating. As a valuable resource it is recycled using the very latest waste water technology.



ELECTRONICS PRODUCTION

Right from the development of new products we attach importance to the use of eco-friendly, RoHS-compliant components and resource-efficient plant technology. All our welding processes are lead-free.

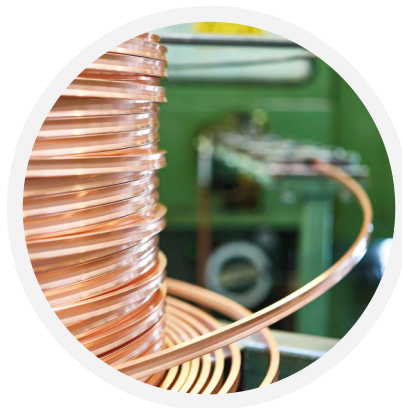


FINAL ASSEMBLY

Wherever possible, production waste in final assembly is sorted and recycled.

MANUFACTURING PROCESSES.

In our production we use numerous materials which, in terms of their procurement, transport, use, and disposal, affect people and the environment. We ensure that valuable raw materials are recycled, negative impacts on the environment are reduced or avoided altogether, wherever possible, and our reputation is protected in this manner.



METALWORKING

We manufacture our metal components in very close proximity to residential areas, nature, and water, so we bear special responsibility for providing protection against noise as well as for keeping water, air, and soil clean. The cutting and non-cutting production technologies we use, such as stamping, stamp-bending, drilling, milling, and turning, are reviewed and optimized continuously to minimize their impact on the environment and on health and safety. Electricity and compressed air are used efficiently; the oil-based coolants we use are treated and recycled.

The filings and punching scrap accrued are all sorted, de-oiled, and recycled as raw materials.



PLASTICS PRODUCTION

Thermoplastics are processed on fully automated injection molding machines. Mechanical, electrical, and fire-protection properties are taken into account when selecting the plastics used, as are all environmental aspects. The priority is given to halogen-free flame-retardant plastics that exhibit an extremely low smoke density and toxicity during a fire. This aspect is becoming increasingly important.

The heat generated while processing plastics is extracted via plate heat exchangers and cooling towers. Energy input is minimized by using closed cooling systems to cool both the tools and the machines. This measure means that refrigerating units to cool the machines can be dispensed with all year round, thereby saving energy and resources.



ELECTRO-PLATING

Our in-house electro-plating corresponds to the latest standards in production and environmental technology.

Tin, zinc, copper, nickel, and silver surfaces are applied on six lines of baths.

The waste water treatment facility processes the waste water generated from electro-plating in streams using electrolytic cells, heavy metal precipitation, and ion exchangers. The galvanic sludge accrued is recycled.



ELECTRONICS PRODUCTION

Modules are made in electronics production, from PCB assembly through to final device assembly.

Right from the development of new products as well as the implementation of production processes, attention is paid to the use of eco-friendly, RoHS-compliant components and resource-efficient plant technology. We identify energy-saving potentials and realize them, for example, by feeding the waste heat generated by equipment back into the heating system.

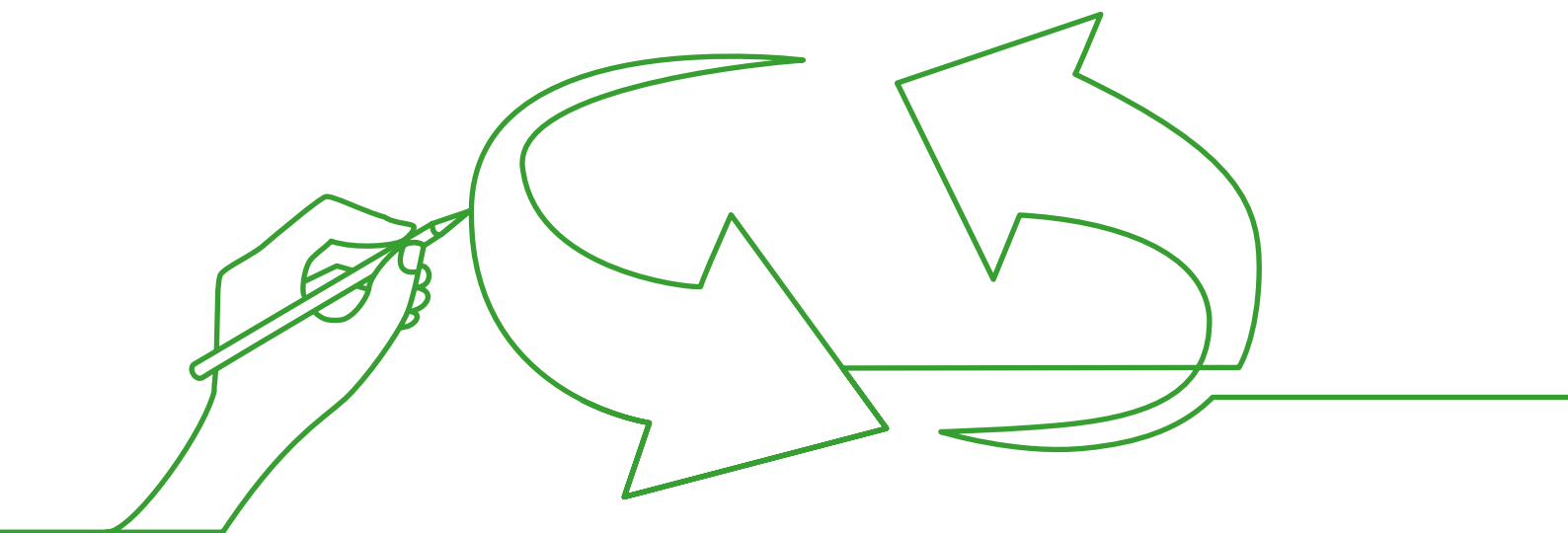


FINAL ASSEMBLY

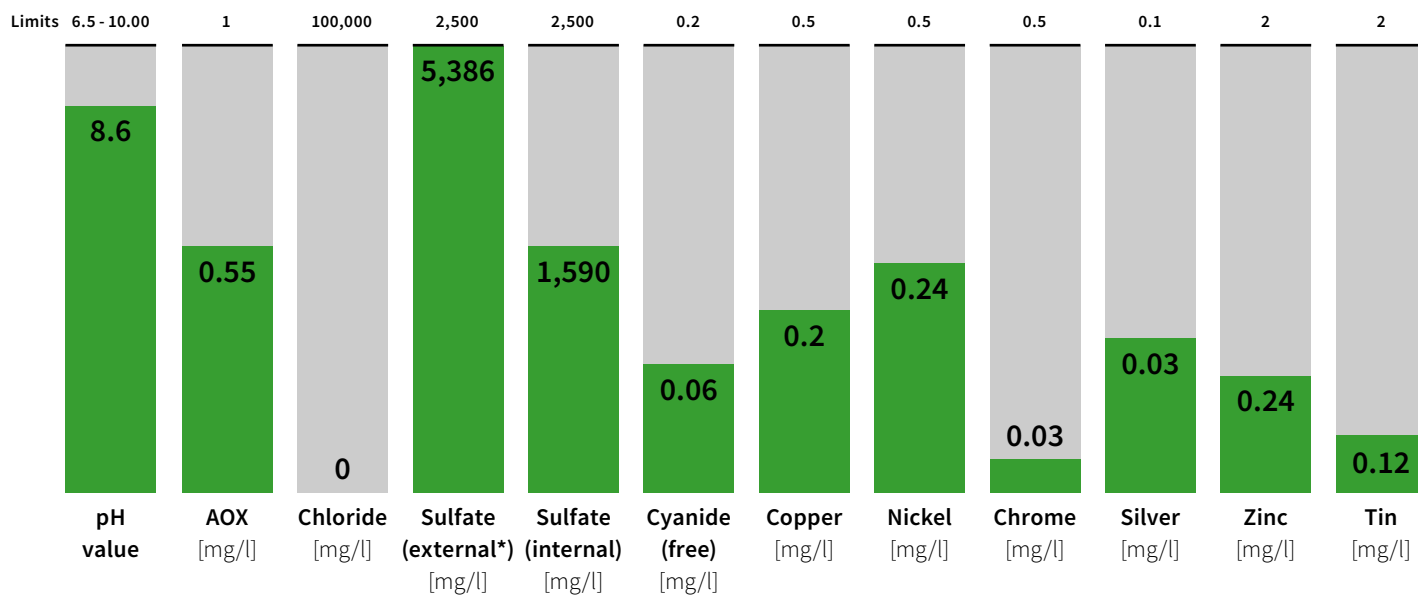
The entire final assembly section is highly automated. Equipping the automatic assembly machines with integrated inspection and monitoring systems ensures extremely low reject rates and, as a result, low quantities of production waste.

Wherever possible, production waste is sorted and recycled.

The use of ultrasonic welding technology in housing assembly minimizes the consumption of adhesives.



AVERAGE CONCENTRATION OF THE CONSTITUENTS OF PROCESSED WASTE WATER FROM THE WASTE WATER TREATMENT FACILITY



* Average based on the annual measurement by the city of Bamberg for determining waste water levies.

Source: Annual report on the Waste Water Self-Monitoring Ordinance (AbwEV) pursuant to §5 of the Self-Monitoring Ordinance (EÜV), year under review: 2018

FACTS + FIGURES

Efficient environmental management by all areas



ENERGY SAVING

As a company with energy-intensive production processes, energy saving has become a top priority at Wieland, as also reflected in our environmental targets and program.



EMISSIONS CONTROL

The conversion to 100 % renewable energies by our power provider at the Bamberg site allowed a reduction of the total emissions of CO₂ by 60 % and of SO₂, NOX, and dust by 80 %.



WATER CONSUMPTION

We feel obliged to use the resource water in a sustainable manner. We have therefore put a halt to the consumption of water for cooling purposes by switching to closed circulation cooling systems.



LAND USE

To keep as much falling rainwater in the natural water cycle as possible, our traffic areas and car parks are covered with grass pavers and paving with gaps. Despite increasing sales and production, we are using less land.



WASTE AVOIDANCE

The avoidance of waste is a top priority for Wieland. Where waste cannot be avoided, we look to recycle it using methods that are as high-quality as possible. The last resort is the disposal of waste in an environmentally sound manner.

ENERGY INPUT.

We exploit existing savings potentials by investing purposefully in energy-saving operating and production technology. Since absolute consumption quantities depend heavily on the utilization of production capacity and on climatic fluctuations, the indicator

for energy consumption/manufactured product was introduced so the current values do not necessarily represent the savings in this area.

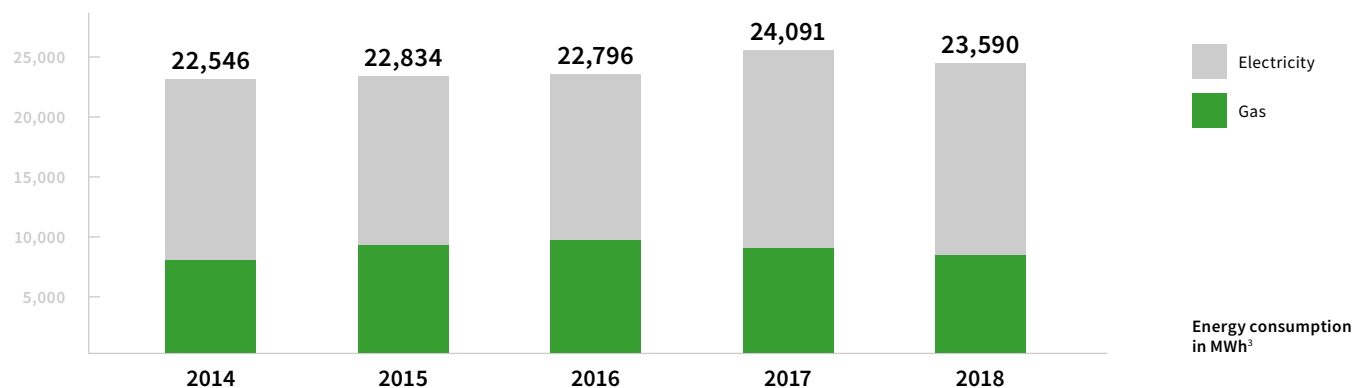
Through investment in modern heating systems and renovation measures, the thermal energy consumption of the location has not risen in recent years despite significant sales growth and an increase in the production area.

ENERGY CONSUMPTION IN 2018 BY PLANT

Total energy consumption	Plant I	Plant II	Plant III	Wieland s.r.o.	Total
Electricity (MWh)	2.871	10.096	644	1.609	15.221
Gas (MWh)	2.073	4.654	505	1.136	8.369
Total energy (MWh)	4.944	14.751	1.149	2.745	23.589

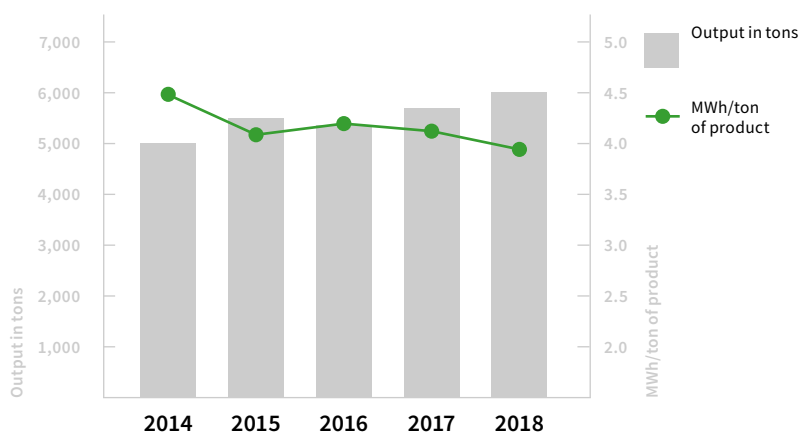
TOTAL ENERGY CONSUMPTION (MWh)

Bamberg and Wieland Sokolov locations



ENERGY CONSUMPTION INDICATOR

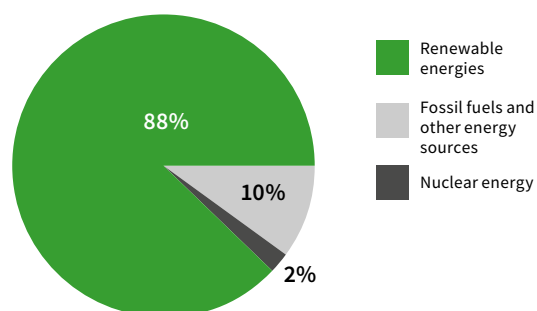
Plant I, Plant II, Plant III, Wieland s.r.o.



The energy consumption indicator shows the relationship between the total consumption of the individual energy sources (electricity, natural gas, heating oil) and the total output of products.

ENERGY SOURCE MIX IN 2018

Bamberg and Sokolov locations



Year 2018	CO ₂ emissions (g/kWh)	Radioactive waste (g/kWh)	Source
Bamberg	20	0	STWB
Sokolov	308	0.0009	EPET

EMISSIONS.

Of the greenhouse gases (CO₂, CH₄, N₂O, HFC, PFC, SF₆) only the CO₂ emissions from the consumption of electricity and thermal energy (natural gas, heating oil) are regarded as having significant environmental impacts. The other greenhouse gases are also created during the combustion of fossil fuels, but the characteristic emission values are not known

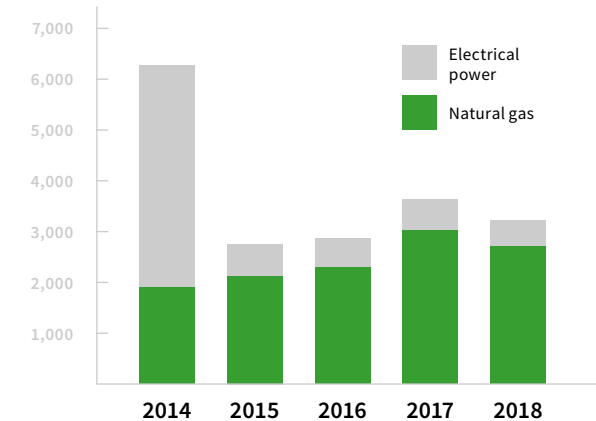
or are not measured and involve negligible quantities compared to CO₂. There are no direct greenhouse gas emissions or other emissions from our production processes. The conversion to 100% renewable energies by our power provider at the Bamberg site allowed a reduction of the total emissions of CO₂ by 60% and of SO₂, NO_x, and dust by 80%

(per ton of product) as compared to 2014.

- Sources:**
- CO₂, SO₂, NO_x emissions of electrical energy: EnBW sustainability report 2008/09 + information from individual calculations
 - Information according to Energy Act §42 from the energy suppliers STWB, CEZ
 - Characteristic emission values: GEMIS (Global Emission Model for Integrated Systems V 4.5, 2009), Institute for Applied Ecology in Freiburg
 - Federal Environment Agency 2010

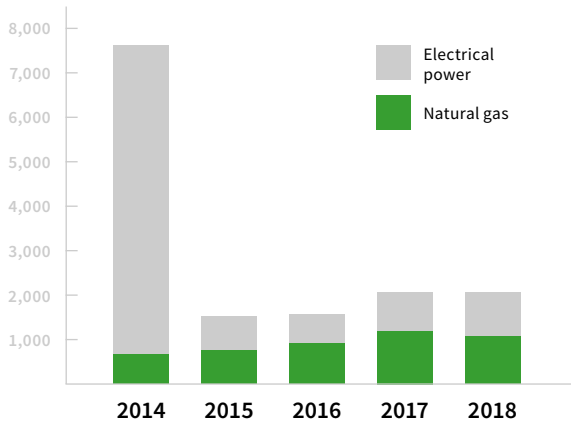
CARBON DIOXIDE EMISSIONS CO₂ (t)

Bamberg and Sokolov locations



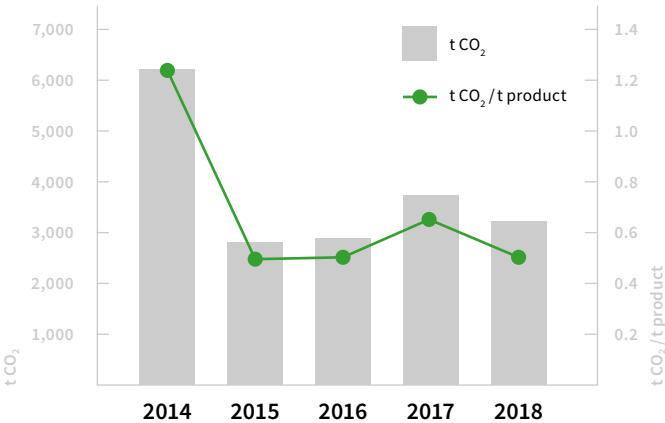
TOTAL EMISSIONS FOR SO₂, NO_x, DUST (kg)

Bamberg and Sokolov locations



EMISSIONS INDICATOR FOR CO₂

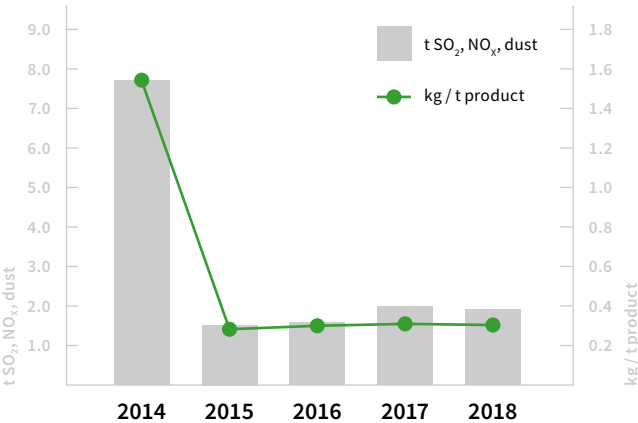
Bamberg and Sokolov locations



The emissions indicator for CO₂ shows the relationship between the total output of CO₂ of the individual energy sources (electricity, natural gas, heating oil) and the total output of products.

EMISSIONS INDICATOR Σ FOR SO₂, NO_x, DUST

Bamberg and Sokolov locations



The emissions indicator for SO₂, NO_x, and dust shows the relationship between the total output of these emissions and the total output of products.

WATER.

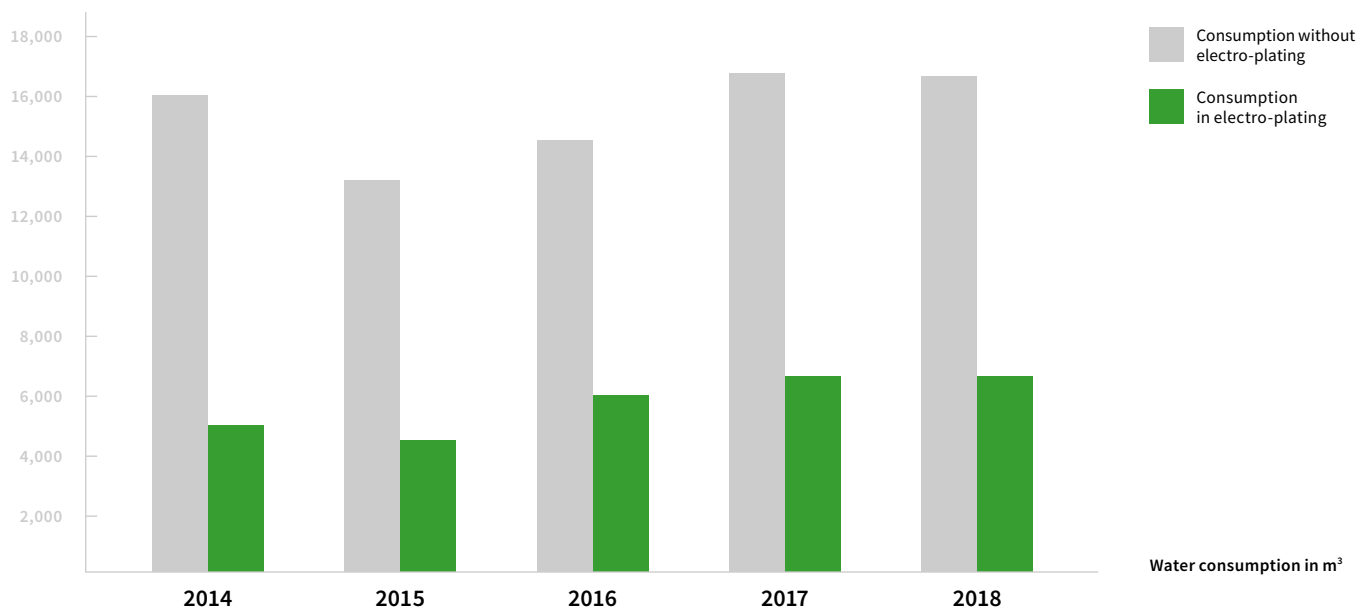
Water is an important resource and is needed as process water in our electro-plating. We are constantly trying to reduce our consumption.

The process water is processed in separate streams in the waste water treatment facility using the very latest waste water technology and fed into

the sewer system, but only once the contents have been analyzed.

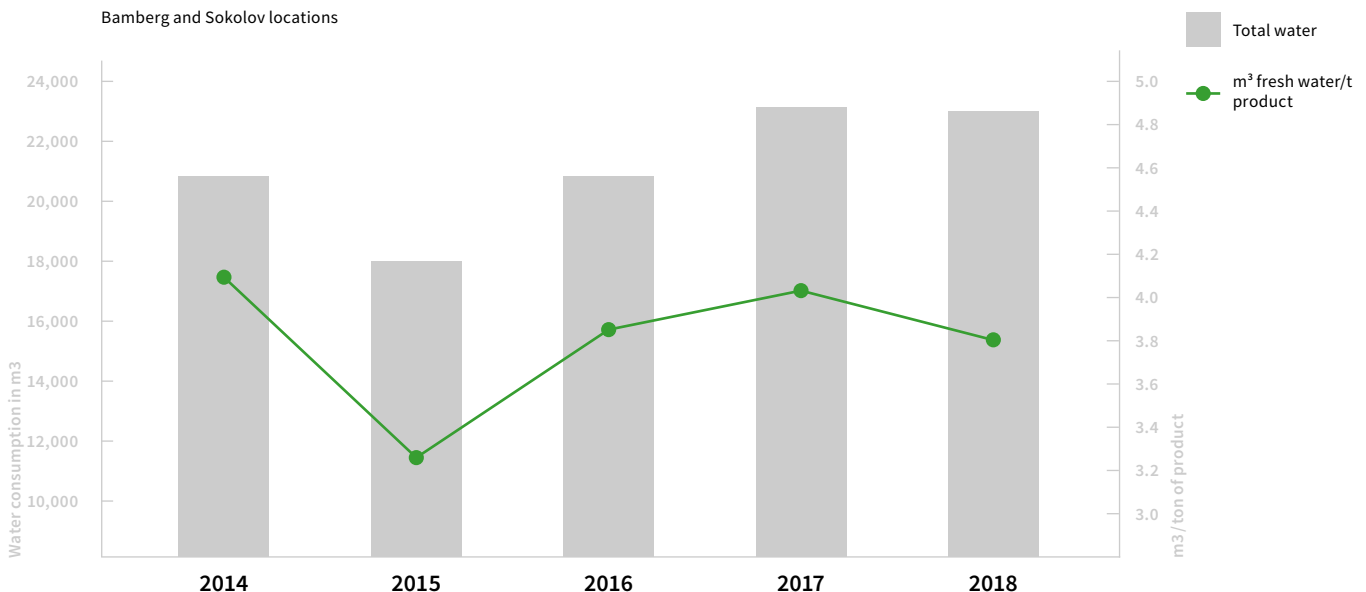
TOTAL WATER CONSUMPTION

Bamberg and Sokolov locations



WATER INDICATOR

Bamberg and Sokolov locations



The water indicator shows the relationship between the total consumption of water and the total output of products.

LAND USE.

BUILDINGS AND INFRASTRUCTURE

Required traffic areas and car parks are not fully sealed but covered with grass

pavers and paving with gaps to keep as much falling rainwater in the natural water cycle as possible.

Despite increasing sales and production, we are reducing our land use all the time.

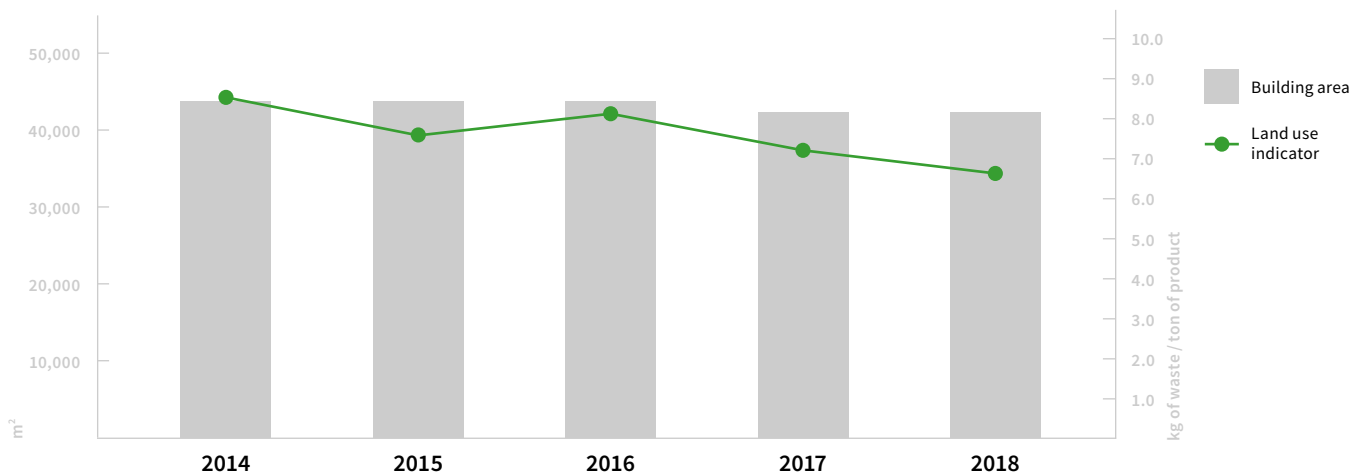
AREA DATA FOR 2018

Plant I	Plant II	Plant III	Wieland s.r.o. Solokov	Wieland s.r.o. Lomnize	Total
39,700	40,860	8,229	7,040	1,436	Size of site 97,265 m²
17,400	16,315	3,900	2,979	880	Built-over area 41,474 m²
25,500	18,725	7,700	4,061	556	Fortified area 56,542 m²
176,900	163,830	27,800	N/A	N/A	Enclosed space 368,530 m²

Plant I	Plant III
<ul style="list-style-type: none"> Administrative areas Installation Dispatch 	<ul style="list-style-type: none"> Cable assembly
Plant II	Wieland s.r.o. Solokov
<ul style="list-style-type: none"> Plastics production Metal production Surface finishing Technical training center 	<ul style="list-style-type: none"> Cable assembly Installation
	Wieland s.r.o. Lomnize
	<ul style="list-style-type: none"> Warehouse

LAND USE INDICATOR

Bamberg and Sokolov locations



The land use indicator shows the relationship between the built-over area and the total output of products.

WASTE.

Responsible conduct toward mankind and the environment is an integral component of our company philosophy. For this reason it is important to us that waste is always handled according to the basic principles of “avoidance before reduction, reduction before recycling, recycling before disposal”. In our adherence to this guideline, we collaborate exclusively

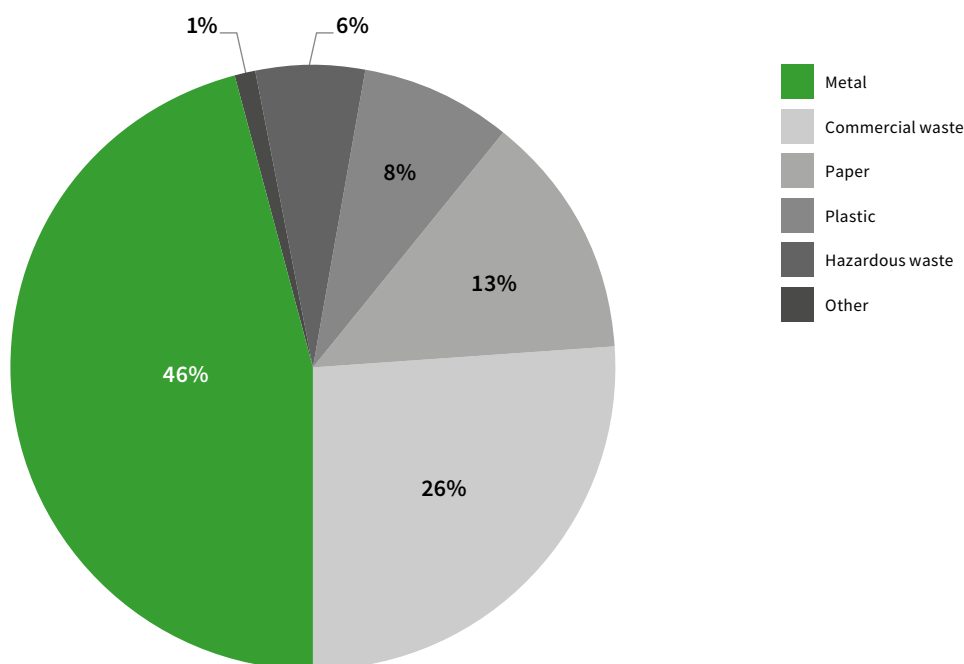
with qualified waste disposal companies. The total volume of waste consists mostly of metals in the form of filings and punching scrap. These metal fractions are processed and collected by sort and then recycled as raw materials via metal traders or directly at the producer. In our handling of hazardous waste we attach special importance

to compatibility with the environment and try to minimize or even prevent such waste through substitution and further development of our processes. The indicator for quantity of waste/ manufactured product was introduced to enable an objective evaluation of the trend in this area. This evaluation revealed a clear reduction in the share of waste.

Hazardous waste (t)	2014	2015	2016	2017	2018
Hazardous waste (t)	93.3	64.9	67	50.8	54.1
Non-hazardous waste (t)	479	540	560	742	566
Total waste	572.3	604.9	627	792.8	620.1
Metals for recovery	1257	1279	1275	1306	1370

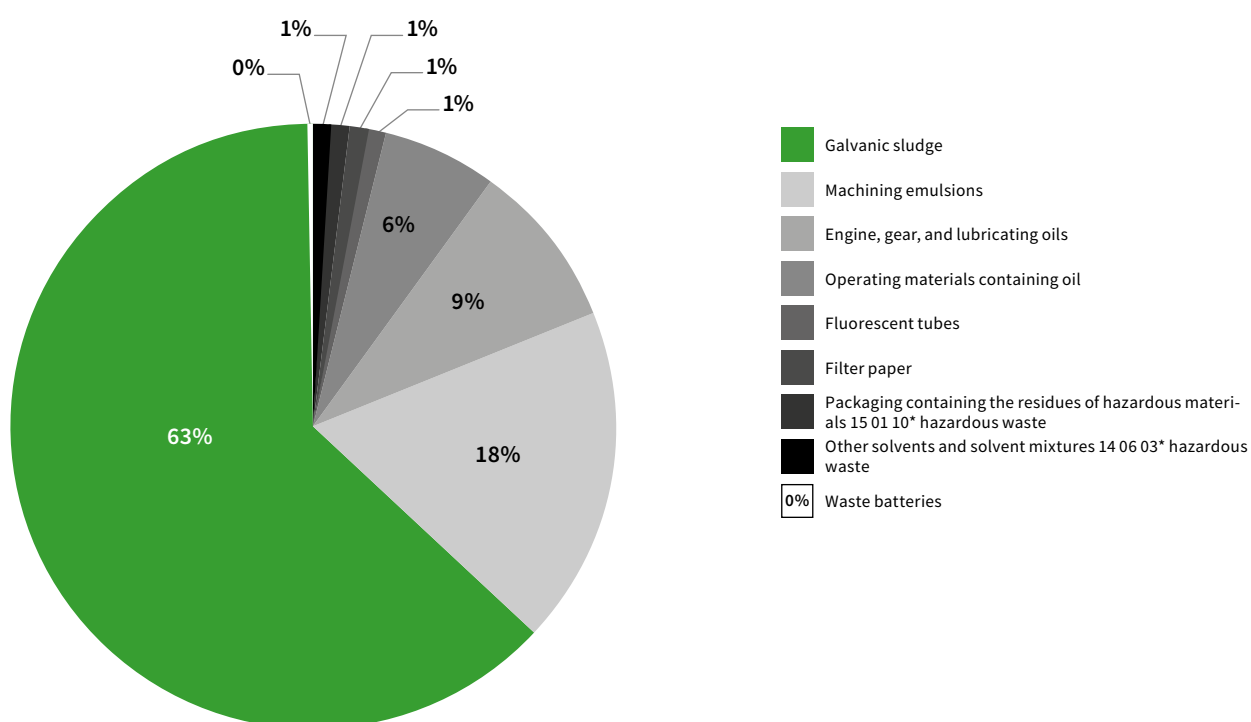
TOTAL WASTE QUANTITIES 2018

Bamberg and Sokolov locations

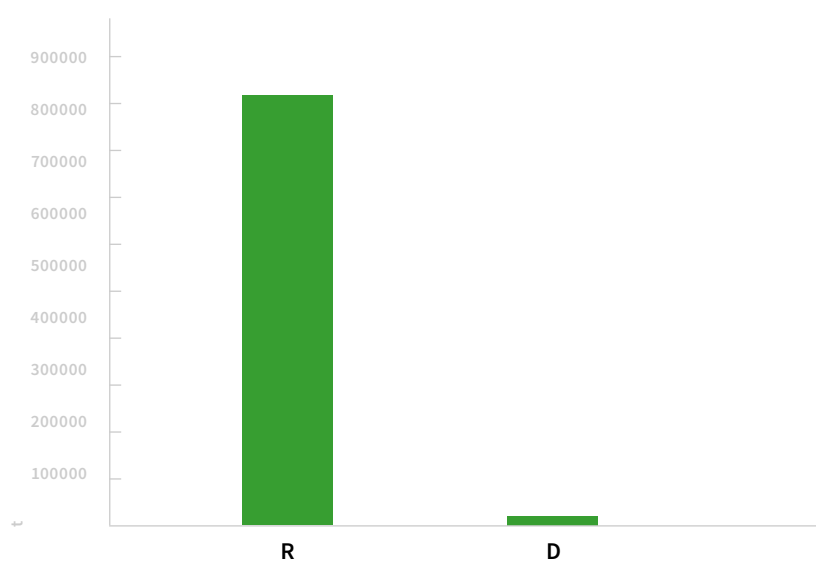


HAZARDOUS WASTE 2018

Bamberg and Sokolov locations



RECYCLING QUOTA



Result

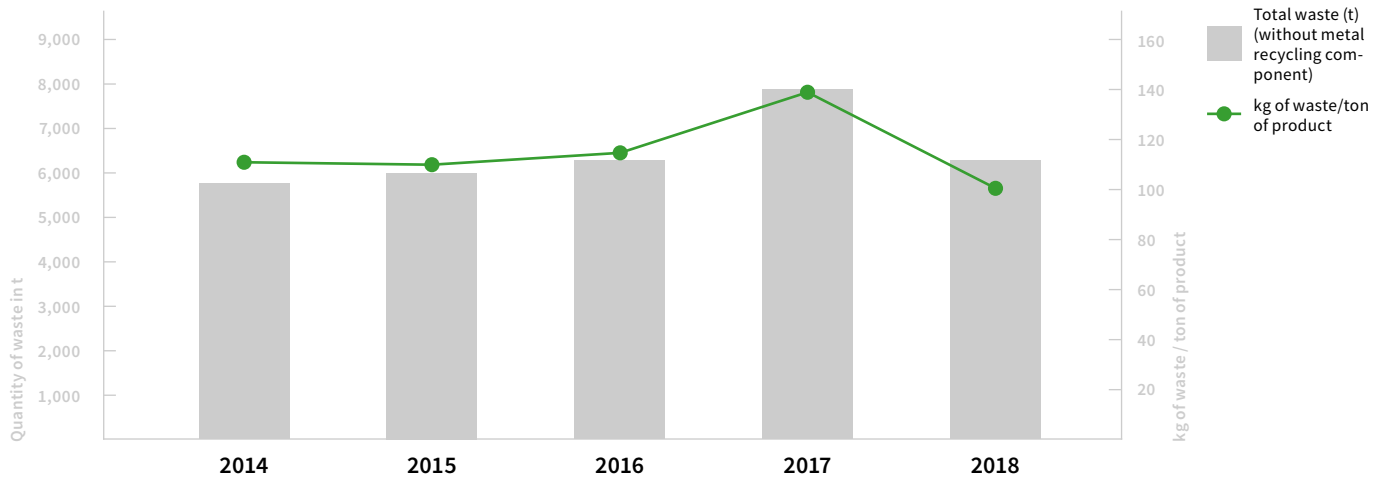
Starting in the 2018 year under review, the waste treatment processes will be reported in accordance with the Closed Substance Cycle and Waste Management Act.

R = Waste for recycling

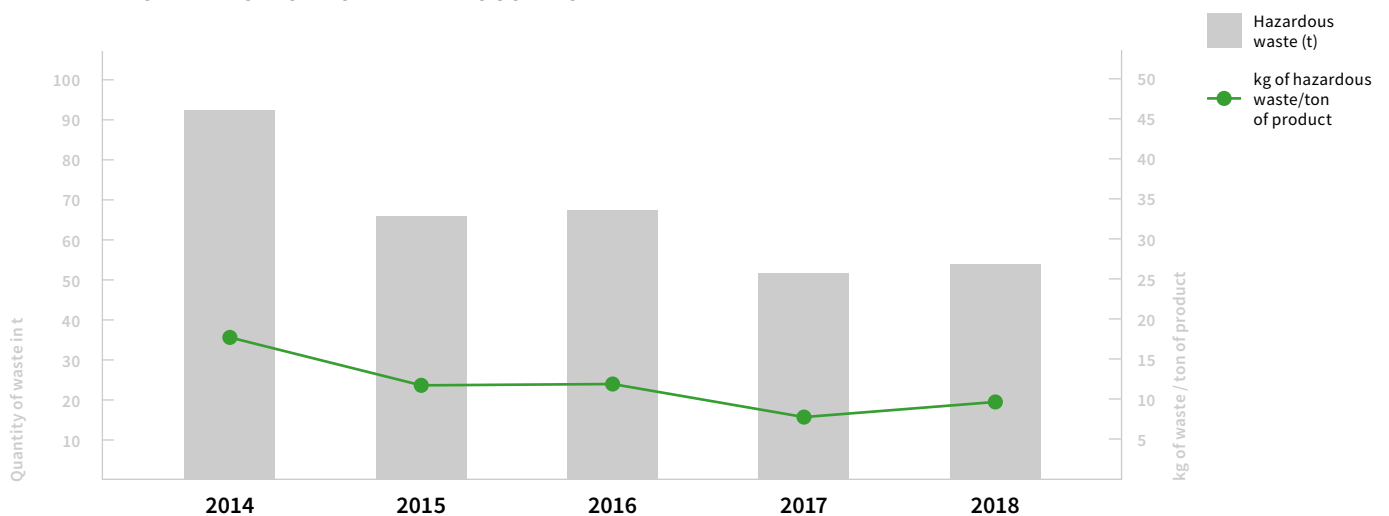
D = Waste for disposal



WASTE INDICATOR



WASTE INDICATOR FOR HAZARDOUS WASTE



The waste indicator shows the relationship between the total quantity of waste/quantity of hazardous waste and the total output of products.

REPORTING AND TARGETS.

ENVIRONMENTAL TARGETS 2018 – 2021.

Environmental target	Project	Initial situation	Project data	
			Measure	Date of completion Measure planned
Energy saving/ Reduction of CO₂ emissions	Optimization of pressurized air system, Plant I	4 compressors, energy consumption 730,000 kWh/a	Replacement of one compressor with 132 kW output and 120,000 operating hours with 2 devices, each with 76 kW output and load-dependent cut-in/cut-out	March 17
	Exchange of lighting system in production, Plant II	T8 electronic ballast technology 50 kW	Replacement of T8 electronic ballast technology with LED technology with daylight control (20 kW)	Dec 20
	Use of waste heat from compressors in Plant II for backup heating		Implementation of concept and performance audit	Dec 18
	Increase in CHP service life due to use of waste heat for adsorbent refrigerating unit for Plant II, plastic injection molding plant	CHP service life limited due to lack of waste heat usage	Replacement of R22 refrigerating unit with adsorbent plant Implementation of performance audit	Dec 20
	Upgrading of drying facility for Plant II, plastic injection molding plant	Facility is exclusively temperature-regulated	Integration of a facility with consumption-dependent regulation and temperature reduction	May 19
Reduction of hazardous substances	Reduction of solvent consumption in the Sokolov plant	Use of solvents containing VOC for cleaning parts	Replacement of solvents containing VOC with solvent-free, biodegradable detergents. Use of plasma for surface treatment.	Jan 18
		2017: 627 kg VOC		Jan 19
Waste reduction	Introduction of system for separate collection in the Sokolov plastic injection molding plant and facilitation of waste recycling.	Sprues and rejected parts are not separated according to type of plastic; no recycling possible.	Introduction of separation of materials; homogeneous material is recycled in the form of clean ground material as regranulate (sent back to Bbg.)	Jan 18
Optimization of all environmental aspects	Sokolov plant		All relevant environmental aspects are considered and corresponding measures are specified in the project	July 19

Planned savings			Measure completed	Actual savings		
Energy savings [kWh/a]	Reduction of CO ₂ emissions [t]	Reduction of waste quantity		Energy savings [kWh/a]	Reduction of CO ₂ emissions [t]	Reduction of waste quantity
110,000	2.2		Apr 17	104000	2.1	
198,000	3.96		Dec. 18 Exchange in metal production warehouse completed			
			Not cost-effective, will not be continued			
320000	6.4		Facility installed in CW 18/2019			
		10%	Jan 18			-5.6%
		(from 2016)	Jan 19	Additional consumption depending on orders		+ 11%
		3% (from 2017)	Jan 19	2018: 2 t		
			Energy audit carried out in 2018			

REPORTING AND TARGETS. STATUS TABLE*.

  Partially
  Comprehensive

GRI indicator	Description	Covered by CSR report
Economic performance indicators		
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	 
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation	
Environmental performance indicators		
EN1	Materials used by weight or volume	 
EN2	Percentage of materials used that are recycled input materials	 
EN3	Direct energy consumption by primary energy source	 
EN6	Initiatives to provide highly energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives	 
EN7	Initiatives to reduce indirect energy consumption and reductions achieved	 
EN8	Total water withdrawal by source	 
EN16	Total direct and indirect greenhouse gas emissions by weight	 
EN20	NOx, SOx, and other significant air emissions by type and weight	 
EN21	Total water discharge by quality and destination	 
EN22	Total weight of waste by type and disposal method	 
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	 
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	 
Labor practices and decent work		
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	 
LA12	Percentage of employees receiving regular performance and career development reviews	 
Human rights		
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights	
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor	
HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor	
Society		
SO2	Percentage and total number of business units analyzed for risks related to corruption	
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	 
SO4	Actions taken in response to incidents of corruption	 
Product responsibility		
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	 

*) Year under review: 2018.

Answer/reference to report	Explanation	Targets
Page 17 – 27	New products for use in the generation of “green” energy and in energy management inside buildings	
The management of each international location is made up solely of people of the nationality concerned; the employees come almost exclusively from the local area.		
Internal report	All indicators relate to the unit “ton of product”.	
Internal report	Recycling quota for Cu alloys approx. 50%.	
Page 33	Energy consumption by energy source for the Bamberg and Sokolov locations	
Page 40-41	Environmental targets	Energy saving CO ₂ reduction
Page 40-41	Environmental targets	Energy saving through building management and use of energy-saving lighting
Page 35	Water consumption of the Bamberg and Sokolov locations	
Page 34	Indicators of the Bamberg and Sokolov locations	
Page 34	Indicators of the Bamberg and Sokolov locations	
Internal report	Indicators of the Bamberg and Sokolov locations	
Page 37 – 39	Indicators of the Bamberg and Sokolov locations	
Page 40	Avoidance of prohibited and restricted substances	
No reclaiming of packaging, participation in Interseroh GmbH's Dual System		
Page 10 – 15		
100% at the Bamberg location		
		Supplier policy has been introduced.
Annual management training on issues, such as equality		Training for managers on how to work with the company guideline “Legal matters”
		Extension of supplier audits to include Global Compact aspects
		Extension of supplier audits to include Global Compact aspects
		Extension of supplier audits to include Global Compact aspects
		All locations were examined.
Annual management training		All managers
No incidents in 2018		
Monthly analysis of incoming customers' assessments by the head of Quality & Testing		

ENVIRONMENTAL REPORTING.

We are working to create uniform environmental management standards at all Wieland Electric locations.

CERTIFICATION OF THE SOKOLOV LOCATION ACCORDING TO ISO 14001

The Sokolov location is Wieland's largest production site. The environmental aspects that are relevant in Sokolov – waste, water, emissions, handling of hazardous substances, emergency management, and energy consumption – are subject to similar statutory regulations based on EU requirements, though with partly divergent implementing rules.

Back in 2017, the Wieland Sokolov location was successfully certified by DQS according to ISO 14001.

As a responsible company that takes its obligation of prudent environmental management seriously in the interests of future generations, we are absolutely committed to applying the same environmental standards at the locations. This also sends out an important signal to all employees and customers about the value that is placed on environmental protection as well as health and safety within our company.

MATERIAL EFFICIENCY

Wieland Electric currently produces and markets some 30,000 electromechanical and electronic products for industrial automation and building system technology in a wide variety of product groups. The input of feed materials is fully recorded and managed in the SAP system in the relevant quantity units (piece, kilogram, meter, liter, etc.).

ENVIRONMENTAL PERFORMANCE INDICATORS

The total output volume is recorded and managed as a quantity. All indicators are related to the total production volume in tons.

COMPLIANCE WITH LEGAL REGULATIONS

Information

An online environmental law database is used as a source of information on changes to environment-related laws and regulations that concern the company. Responsibility for observing

these changes has been allocated to members of the environment team on the basis of the classification of the legal areas set out in this database. The scope of the team member's responsibility within the company is taken into account. Relevant legal changes are discussed at meetings of the environment team and any necessary measures are initiated for implementation.

Review of compliance

Compliance with the legal regulations is reviewed by the regular internal audits and environmental inspections. The auditors used have the necessary expertise and qualifications.

The measurements, operating tests, and function checks for our electroplating waste water treatment facility, as required under the Self-Monitoring Ordinance, are carried out by qualified staff. In addition, regular measurements are taken by an accredited environmental laboratory commissioned by the company as well as by the relevant environment agencies.

CERTIFICATION ACCORDING TO EMAS.

Gültigkeitserklärung

SCC 832-19

der

Umwelterklärung

nach der

EG-Öko-Audit-Verordnung / EMAS

für die

Wieland Electric GmbH

Standort Bamberg



wieland

Erklärung des Umweltgutachters zu den Begutachtungs- und Validierungstätigkeiten

Der unterzeichnende EMAS-Umweltgutachter Dipl.-Ing. (FH) Jürgen Schmallenbach (Registrierungs-Nr.: DE-V-0036), akkreditiert oder zugelassen für den Bereich Herstellung von elektronischen Bauelementen (NACE-Code 26.11) und Herstellung von Elektrizitätsverteilungs- und -schaltanlagen (NACE-Code 27.12), bestätigt, begutachtet zu haben, ob der Standort bzw. die gesamte Organisation, wie in der Umwelterklärung der Wieland Electric GmbH (Registrierungsnummer D-106-00012) angegeben, alle Anforderungen der Verordnung (EG) Nr. 1221/2009 des Europäischen Parlaments und des Rates vom 25. Nov. 2009 und der Verordnung (EU) 2017/1505 der Kommission vom 28. August 2017 über die freiwillige Teilnahme von Organisationen an einem Gemeinschaftssystem für Umweltmanagement und Umweltbetriebsprüfung (EMAS) erfüllt.

Mit der Unterzeichnung dieser Erklärung wird bestätigt, dass

- die Begutachtung und Validierung in voller Übereinstimmung mit den Anforderungen der Verordnung (EG) Nr. 1221/2009 und der Verordnung (EU) 2017/1505 durchgeführt wurde,
- das Ergebnis der Begutachtung und Validierung bestätigt, dass keine Belege für die Nichteinhaltung der geltenden Umweltvorschriften vorliegen,
- die Daten und Angaben der Umwelterklärung der Wieland Electric GmbH am Standort Bamberg ein verlässliches, glaubhaftes und wahrheitsgetreues Bild sämtlicher Tätigkeiten der Wieland Electric GmbH innerhalb des in der Umwelterklärung angegebenen Bereichs geben.

Diese Erklärung kann nicht mit einer EMAS-Registrierung gleichgesetzt werden. Die EMAS-Registrierung kann nur durch eine zuständige Stelle gemäß der Verordnung (EG) Nr. 1221/2009 erfolgen. Diese Erklärung darf nicht als eigenständige Grundlage für die Unterrichtung der Öffentlichkeit verwendet werden.

Jährlich werden aktualisierte Umwelterklärungen veröffentlicht.

Die nächste konsolidierte Umwelterklärung wird im Juni / Juli 2021 veröffentlicht.

Bamberg, Maselheim den 26. Juni 2019

Dipl.-Ing. (FH) Jürgen Schmallenbach
Umweltgutachter DAU-Reg.-Nr.: DE-V-0036

SCHMALLENBACH
CONSULTING & CERTIFICATION

Schmallenbach
Consulting & Certification
Äpfinger Berg 3
88437 Maselheim



EMAS



wieland

HEADQUARTERS

Wieland Electric GmbH
Brennerstraße 10 – 14
96052 Bamberg · Germany

Phone +49 951 9324-0
Fax +49 951 9324-198
info@wieland-electric.com



0910.1 MC 08/19

Legal notice: Subject to change without notice; errors excepted. Photos from: © Wieland Electric, stock.adobe.com

Represented in over 70 countries worldwide:

www.wieland-electric.com