



**TSUBAKI KABELSCHLEPP** 

# ISUBAKI KABELSCHLEPP SUSTAINABILITY REPORT 2023

We see it as our ongoing duty to protect the environment, to reduce the environmental impact of our company, to save resources, to reduce emissions, and to generate a positive impact on society.



The electronic version of this report (and more) can be found at: tsubaki-kabelschlepp.com/csr-sustainability



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We are setting out on another stage of our journey towards climate neutrality, which we aim to achieve well before 2045.



# FOREWORD FROM MANAGEMENT

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Sustainable company development costs time and money and requires consideration, long-term planning, and sometimes thinking outside the box. We have started this process, initiating and implementing measures to trigger sustainable developments. This topic is now spreading into all areas of TSUBAKI KABELSCHLEPP, influencing product development, material selection, and service activities as a firm component of our corporate culture.

In 2024, we are already publishing the second edition of our sustainability report. At the same time, we are starting into another stage of our journey towards climate neutrality, which we aim to achieve well before 2045. We are currently on the second third of our route. While many things have already been achieved, there is still some way to go, with many challenges ahead.

We believe that sustainability is based on the three cornerstones of ecology, economy, and social considerations. That means that while firmly pursuing our ambitious objectives regarding climate protection, we have to remain on sound economical footing and – last but not least – make all our decisions with any eye on our social responsibility towards our employees and society.

In 2023, we pushed our ecological objectives further with numerous measures and investments. The focus was on heat recovery from production, on recording, controlling, and reducing our power consumption, on research into sustainable alternative materials, and on the optimization of our recycling processes.

Additional large investments in fundamental improvements are planned for 2024. For one, we will be installing a large PV system which will make us less dependent on external electricity and supply our electric vehicles with energy generated in-house. Secondly, we will be upgrading our heating system to use 100 percent of the waste heat from production for heating our buildings, which will allow us to reduce our consumption of natural gas to almost zero.

It is a long journey. But our past experiences allow us to master the challenges still ahead of us with increasing speed and growing skills – always with the aim of achieving climate-neutral production in the foreseeable future.

Henning Preis President & CEO

*II* The topic is driven by our own motivation to contribute to climate protection.

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# STATEMENT FROM THE SUSTAINABILITY OFFICER

Sustainability is becoming an ever larger part of social discourse. It is clear that sustainability with a focus on climate protection is currently one the top priorities among private citizens and in companies. 7

We as a medium-sized company have been increasingly focusing on sustainability for many years. Our own motivation to contribute to climate protection along with our affiliation with the Japanese parent group TSUBAKIMOTO Chain are driving this topic.

While our actions during the energy crisis of 2022 were still determined by energy efficiency analyses, scopes 1 and 2 faded into the background a little during the past year. One reason for this was that we were able to achieve effective emissions reductions through an uncompromising change to regenerative energy sources.

In 2023, our catalog of measures included energy management in production, preparation for DIN EN ISO 14001 certification, planning of a PV system, and preparation of new heating systems at the Wenden site.

In addition to this, considerations of scope 3 logically determined a substantial part of our documentation. The aspect of "supply chain evaluation" plays an important role in the partial analysis. But we have also initiated waste and vehicle management as well as a number of other topics.

The public is also increasingly taking an interest in our sustainability projects. We regular inform interested parties about our activities through the press and trade publications, also as a way to assess our position. The feedback is clear. The consensus is that we are at the forefront, even in comparison with significantly larger companies. In this case, being at the front means systematically conducting the required analyses and adjustments in order to significantly reduce our CO<sub>2</sub> emissions and to achieve verifiable progress for the 16 other SDGs.

We are also communicating our objectives and results within the company, making our employees feel involved and informed. This strengthens acceptance, including for measures that are sometimes not so pleasant. We believe that we are on the right path and we will continue to pursue it. Where to? That is what we will explain in the next sustainability report.

Frank Springer Vice President Marketing & Innovation



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# **TSUBAKI KABELSCHLEPP**

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# TSUBAKI KABELSCHLEPP Company profile

Cable carriers, cables for cable carriers, conveyor systems and guideway protection – optimizing products and system solutions for sustainable applications. Continuous new developments set trends for forward-thinking applications. TSUBAKI KABELSCHLEPP are specialists for standard products as well as for complex tasks, with decades of experience in hundreds of industries, e.g. the automotive industry, robotics, and the machine tools industry.

The history of cable carrier specialist TSUBAKI KABELSCHLEPP began in 1954 with the invention of the steel cable carrier and the foundation of Kabelschlepp GmbH in Siegen, Germany. Within a short time, the product established itself and successful markets developed out of this idea.

TSUBAKI KABELSCHLEPP are currently a global player with international representatives and subsidiaries in more than 60 countries, and cable carrier systems are an essential component of almost all machines. TSUBAKI KABELSCHLEPP have been part of the TSUBAKI Group since 2010 and took on the worldwide lead in the field of cable carrier systems.

Our innovative solutions have proven themselves worldwide in the most diverse industries – and in fact, no longer just in the classical areas of application such as machine tools, crane systems, washing systems, and medical and laboratory technology, but also for industrial robots, offshore oil platforms, and aerospace. The field of industrial automation would also be inconceivable without moving cable carriers.

Our decades of experience from thousands of successfully implemented projects in a number of industries with different requirements for our cable carrier systems continue to produce new, customized, and application-specific solutions for our customers. Our experts support you from the planning and design phase through installation on site to commissioning of the tested complete system.

# Founded in **1954**

with the invention of the first steel cable carrier in Siegen

# Countries **60**

headquarters, subsidiaries, and international offices Employees **340** 

at the Wenden-Gerlingen site Turnover **51.2 million €** 

at the Wenden-Gerlingen site

# C02 reduction

total savings Scope 1-2 compared to the base year 2018

# THE PATH TO MORE SUSTAINABILITY: TIGHTENING UP FIELDS OF ACTION

In times of climate change, the demand for more sustainability is no longer an option, but a duty. As a medium-sized company, we are following this path with determination. The primary drivers in this process, in addition to the applicable legislation and agreements, are our own high standards and those of our Japanese parent company TSUBAKIMOTO CHAIN.

Our parent group pursues the SBTi targets and has the ambition to use this Science Based Targets initiative to be among the top 500 companies worldwide with regard to sustainability. For the TSUBAKI Group, this results in demanding targets and further tightening of our sustainability targets.

The CO<sub>2</sub> savings required for 2023 were increased and the reference year for these values was moved from 2018 to 2021. For scopes 1, 2, and 3, we now have the following targets in our specification

- » Scopes 1 + 2: 42 % CO<sub>2</sub> reduction by 2030, based on figures from 2021
- » Scope 3: 25 % CO<sub>2</sub> reduction by 2030, based on figures from 2021

We are overcoming these challenges by further tightening up the fields of action that have already been determined and prioritized. In this way, we not only want to harvest low-hanging fruit but also level up the hard-to-achieve savings potentials with the appropriate measures. To do that, we already have a number of other sustainability projects in the pipeline, for which we have planned an investment volume of 500,000 to 600,000 euros for 2024 alone.

While we initially focused primarily on reducing the emissions from scopes 1 and 2, our current step towards climate neutrality centers around scope 3. We already came quite far on this path in 2023. And, the better we know the scope-3 emissions, the closer we get to the truth of what our company does towards sustainability and which tasks are still ahead of us.

# SUSTAINABILITY TARGETS



# EVERYONE ON BOARD - FOR ENVIRONMENT AND SOCIETY

How will this happen? On the one hand, by identifying suitable measures and implementing them, but also by training the team and with in-house information and awareness campaigns. The objective: All employees have to be "on board", because that is the only way to efficiently implement changes.

Sustainability does not only mean environmental protection, though. Responsibility for people also plays an important role – for each individual employee, but also for the region and for society in general. Specifically, we ensure fair and family-friendly working conditions in an environment with a maximum level of safety. In addition, we are supporting regional and national initiatives and organizations that are in line with the values and objectives of TSUBAKI KABELSCHLEPP. Because sustainability requires integrated thinking – for the people and the world that we live in.

#### Find more information here:

tsubaki-kabelschlepp.com/csr-sustainability





Änderungen vorb





# ENVIRONMENT AND CLIMATE PROTECTION

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## PROTECTING THE CLIMATE -DETERMINING, RECORDING, PREPARING, IMPLEMENTING

Determining the carbon footprint of our Wenden-Gerlingen site is teamwork at the highest level: In 2023, the objective was once again to determine the required data for our carbon footprint across departments. The "ecocockpit" recording tool from the Efficiency Agency NRW (EFA) of the state of North-Rhine Westphalia, which we have been using since 2021, proved helpful for this once again.

Based on the current situation, we continuously identify additional potentials for reducing our emissions, prepare solutions, implement targeted measures, and document our achievements. Our objective: using energy and resources efficiently and achieving savings, in all relevant areas.

### ECOCOCKPIT -

ecocockpit is a software for determining the CO<sub>2</sub> footprint and creating CO<sub>2</sub> analyses. Company analyses (site analyses) – the corporate carbon footprint (CCF) – as well as product carbon footprints are possible. The software is free to use, and EFA offer training courses for using the software and are also available to answer questions. ecocockpit is based on the Greenhouse Gas Protocol, a set of standards for measuring and managing greenhouse gases.



ecocockpit - CO<sub>2</sub> analysis for companies can be found here:

https://ecocockpit.de



## **COPORATE CARBON FOOTPRINT**

Thanks to the successful implementation of heat recovery from the waste heat from our injection molding machines and compressor systems since mid 2022, we significantly reduced our energy consumption in the scope-1 field of natural gas by almost 75 % compared to 2021. In addition, we are avoiding large quantities of CO<sub>2</sub> by buying green electricity and air conditioning gas, which enabled us to significantly improve our carbon footprint. The Herculean task still lies in the comprehensive recording of data for scope 3. In the 2022 site analysis, we already showed large parts of the relevant sub-scopes listed in "ecocockpit". We were able to add sub-scope 3H – disposal – in 2023. Determining the equivalent of the semi-finished products, raw materials, packaging materials, and other purchased parts is a focus of the future clarification of our CO<sub>2</sub> balance. Data obtained from suppliers and databases is still an important element on the path to a comprehensive analysis.





Determining scope-3 emitters remains a problem because many suppliers have yet to provide information regarding their products and services, while the databases that we do have access to provide only limited information. One of the challenges of the near future certainly is to complete the databases and to generate product analyses – another task and another target for us.

Nevertheless, we were able to determine a CO<sub>2</sub> equivalent for around 34 % of our purchasing volume – 4 % more than in the previous year. The remaining 66 % were then calculated arithmetically on this basis. A somewhat paradox side effect of an increasingly detailed assessment of our own carbon footprint is that the level of emissions in kg of CO<sub>2</sub>e increases – so the more detailed we are in our work, the poorer the result will be initially. But the knowledge of our own status quo is also becoming more precise. This is the only way for us to define, initiate, and implement projects for reducing emissions.

### View our Coporate carbon footprint here: tsubaki-kabelschlepp.com/ccf

The cradle-to-gate approach is the analysis limit for the data of the  $CO_2$  site analyses. This approach comprises the environmental impact, from extracting the required raw materials to providing the finished products on the company premises. The downstream processes, such as distribution, transport to the customer, usage period, and disposal of the product are not considered.



### SCOPES

### Scope 2

Indirect sources: Emissions from energy/supply

### Scope 1 Direct sources: Emissions from own consumption

### Scope 3

Indirect sources: Emissions of the delivery or service provider chain



### Emitters

0.19% Scope1+2 0.1% Business trips with external means of transport [14,726.63 kg CO<sub>2</sub>e] 3.19 % Packaging, cartons, timber, paper, cardboard [814,350.10 kg CO2e] 20.98 % Plastics [5,606,338.34 kg CO2e] 7.40 % Metals [1,886,397.75 kg CO2e] 64.52 % Other emitters (materials, machines, tools...) [16,454,938.88 kg CO2e] 1.25 % Employee commute [318,281.38 kg CO2e]



### 0.48 %

Disposal of used oil, general waste [122,564.55 kg CO<sub>2</sub>e]

### 0.02 %

Transports with external suppliers/vehicles [4,921.16 kg CO<sub>2</sub>e]



## **DEVELOPMENT FROM 2018 TO 2023**

While we were only able to include data for scopes 1 and 2 in the first CO<sub>2</sub> site analyses, we came quite a lot further in 2022 with the data basis in scope 3. For 2023, we are able to analyze all sub-scopes relevant to the company in "ecocockpit" for the first time.

A comparison of the CO<sub>2</sub> site analyses between the base year 2018 and 2023 only in scopes 1 and 2 and sub-scope 3 (including a 10 % safety margin) shows the following:



This CO<sub>2</sub> emissions reduction was mostly achieved by changing the electricity supply from gray electricity (emissions factor 223 kg CO<sub>2</sub>e) to green electricity (emissions factor 0 kg CO<sub>2</sub>e). But at 3,567,788 kWh, the overall electricity consumption in 2023 is also 17.3 % below the 2018 consumption of 4,314,553 kWh. Decisive factors for this are the implementation of energy saving projects, but also the respective production volume.

A low natural gas consumption is another factor. It is crucially influenced by the climate conditions, i.e. the temperatures of the respective analysis period, but in particular the use of waste heat. In 2018, natural gas consumption was 594,730 kWh, which corresponds to 139,511 kg CO<sub>2</sub>e. By using waste heat, we were able to reduce the natural gas we purchased to 212,762 kWh in 2023. This corresponds to a 61.3 % reduction in emissions in this area of scope 1 compared to the previous year, and 64.2 % compared to 2018. In 2023, water consumption was 2,568 m<sup>3</sup>, which is 33.9 % less than in 2018 (3,883 m<sup>3</sup>) and 15.5 % less than in 2022 (3,040 m<sup>3</sup>).

# INTRODUCTION OF ENVIRONMENTAL STANDARD DIN EN ISO 14001

With our own high standards for sustainability and environmental protection, we decided in 2023 to introduce environmental standard DIN EN ISO 14001. This has been the international standard for environmental management systems since 1996, helping companies and organizations to record and continuously improve their status quo in terms of environmental protection.

An external company is advising us on the introduction of DIN EN ISO 14001. It has proven particularly helpful that we have already initiated or even implemented a number of projects for environmental protection.

### The following measures have been completed to date:



Our comprehensive preparations are now accelerating the processes significantly, making us optimistic that we will obtain the certification in 2024.

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# **KEY PERFORMANCE INDICATORS**

The following lists the key performance indicators for measuring the sustainability performance. All information refers to the Wenden-Gerlingen site. The reference period comprises the financial years 2018, 2022, and 2023. All figures are rounded, which can result in slight deviations in the totals.

### Human Resources (without outsourced work)

	2018	2022	2023
Employees	280	285	291
Avg. sickness absence rate (paid + unpaid)	*	8.09%	8.6 %
Home office days	*	5,621	2,417



\* values not determined

### **Employee commute**

	2018*	2022	2023
Employees with a company car	*	23	25
Employees traveling on foot, by bicycle, or by bus	*	5	5
Employees with their own car	*	257	261
Distance to the workplace (both ways)	*	12,500 km/day	12,348 km/day
	*	2.303,967 km/ year**	2,380,375 km/ year**



\* values not determined \*\* depending on the number of days worked

### Turnover

	2018	2022	2023
Turnover	46,714,095.08 €	47,574,698.11€	51,265,071.92 €



51,265,071.92 € (2023)

### **Electricity consumption**

	2018*	2022	2023
Consumption [kWh]	4,314,553	3,722,370	3,567,788
Electricity mixture	Gray electricity	Green electricity	Green electricity
CO <sub>2</sub> factor	223 g/kWh	0 g/kWh	0 g/kWh
Total CO <sub>2</sub> e	962,15 t	0,00 t	0,00 t



\* base year

### Natural gas consumption

	2018*	2022	2023	
onsumption [kWh]	594,730	549,573	212,762	594,730
O <sub>2</sub> factor	220 g/kWh	220 g/kWh	0 g/kWh	549,573
otal CO <sub>2</sub> e	130.840 t	120.906 t	0 t	
otal CO <sub>2</sub> e	130.840 t	120.906 t		0 t

594,730 kWh (2018) 549,573 kWh (2022) 212,762 kWh (2023)

\* base year

### Gasoline/diesel consumption

	2018*	2022	2023
Avg. diesel price**	1.289 €/I	1.973 €/I	1.737 €/I
Consumption	65,242.98 I	52,531.77 I	79,869.00 I
Costs	84,098.20€	103,645.19€	138,732.45 €
Total CO <sub>2</sub> e	172.894 t	163.685 t	211.653 t

65,242.98 I (2018) 52,531.77 I (2022) 79,869.00 I (2023)

\* base year \*\* determined by Statista.com

### Water consumption

	2018*	2022	2023
Consumption	3,883 m <sup>3</sup>	3,040 m <sup>3</sup>	2,568 m <sup>3</sup>
* base year			



## MEASURES ALREADY IMPLEMENTED - EVERYTHING IN FLUX

Sustainability is not a static condition, but a process that is continuously developing while striving for a defined objective, which in turn requires regular verification. In our eyes, there are actually three objectives. Because we believe that a sustainability strategy that deserves this name should always consider ecology, economy, and social aspects in equal measure. For example, we want to not only achieve climate-neutral production well before 2045, but also want to do this with economic success and in keeping with our social responsibility.

In 2023, TSUBAKI KABELSCHLEPP joined the Klimaagentur Olpe climate agency, a non-profit regional cooperation platform that works on the issues of climate change and climate change adaptation locally in close cooperation. On this platform, we are looking for an exchange of experiences with representatives of the region and with other regional companies. We want to share our wealth of experiences to strengthen the region in terms of sustainability.

#### IMPLEMENTATION OF NUMEROUS PROJECTS

2024 is the year when we will complete a number of ongoing projects. Among other things, we will commission a new 3,200 m<sup>2</sup> PV system. A total of 934 PV modules on three workshop roofs will then be supplying up to 380,000 kWh of electricity per year. That corresponds to around 10 % of our current total demand, which we have been meeting fully with green electricity since 2022. The project will further strengthen our energy independence and support the climate-neutral running of a planned charging station for electric vehicles in the medium term.

Furthermore, we are planning to have our environmental management system certified to DIN EN ISO 14001 by 2024, we are testing the efficiency of new fully electric injection molding machines, and we will be commissioning two new frequency-controlled screw compressors with heat recovery. This will not only make our compressed air supply more efficient, but also support our sustainable heating concept.

In addition to this, we will be tightening up our energy monitoring in 2024 in order to obtain the best possible transparency regarding our consumption figures. We want to permanently measure the consumption of all relevant consuming units, identify load peaks, and establish an appropriate load peak management (peak shaving)

### **GREEN GAS AND WASTE HEAT - A SUSTAINABLE HEATING SOLUTION**

In addition to the consumption of electrical energy, we are naturally also keeping an eye on our heat demand and have developed an appropriate sustainability concept. Following a detailed analysis of all heat sources and consuming units in the company, we have already been using the waste heat from our compressors and injection molding machines for heating our buildings since 2022 (also see page 29). In 2023, we quantified the efficiency of these measures and made further improvements, while also buying in green gas to meet the remaining demand.

For 2024, we are planning to modernize our heating system. This will not only reduce gas consumption further, but also ideally adapt the available heat to the demand with the use of buffer tanks



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#### ENERGY AND ENVIRONMENTAL MANAGER

The new position of energy manager was created at the end of 2022 and filled with longstanding employee Thorsten Hamann. As part of the introduction of our environmental management system in line with DIN EN ISO 14001, Thorsten Hamann additionally took on the role as officer for environment and waste management in 2023. Under his management, the following projects were implemented or started in 2023:



- » Introduction of DIN EN ISO 14001
- » Conversion of the central heating system for automated use of waste air
- » Creation of a waste and value stream diagram
- » Green gas generation through expansion of our PV systems
- » Optimized electricity consumption through installation of smart control systems

### **EMPLOYEE MANUAL: ENERGY MOVERS - GETTING TO GRIPS WITH ENERGY PRICES**

Prompted by the strong increase in energy prices since early 2021, an advisory brochure in A5 format was published in January 2022 for all employees on the topics of electricity and the savings potentials.

#energiebewege

En nöchte gene övo Strom Innoche gene Uno-Strom dat bezehen. Worauf mussich dat

zu sparen?

tig tun.

### **EXPANSION OF WASTE HEAT RECOVERY**

Since 2022, we have been heating our entire administration building with waste heat from production all year round. This measure has enabled us to reduce natural gas consumption by around 75 %.

During the transition months, we actually generate more waste heat on weekdays then we need, while on production-free weekends we have to activate the gas heating to achieve the required temperature level.

In future, we want to use the excess waste heat from production to heat the buildings on the weekend. We are therefore modernizing our heating system and are adding buffer tanks.



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### LED LIGHTING

The lighting of the entire production area was converted to LEDs in 2019. Overall, 255 fluorescent tubes were replaced with 214 LED light strips on an area of around 4000 m<sup>2</sup>. Motion sensors are installed in areas that are not lit continuously. They automatically shut off the lighting when no movements are detected. The illuminance was increased to 800 lux. These measures save approx. 60,000 kWh per year, which corresponds to approx. 30,000 €/year.

The color temperature was selected based primarily on health aspects to support more comfortable working in these rooms. The LED lighting therefore saves not only electricity and money, but is also brighter and healthier.

#### **ENERGY-EFFICIENT INJECTION MOLDING MACHINES**

A third of the injection molding machines at TSUBAKI KABELSCHLEPP are already frequency controlled and therefore energy efficient. Some background information: Conventional machines are equipped with a fixed displacement pump, i.e. the pump runs even when no hydraulic pressure is required. Frequency controlled injection molding machines have a pump where a frequency controller adjusts the speed to the actually required hydraulic energy. That makes these machines significantly more energy efficient: Up to 50 % electricity can be saved, depending on the machine size and the manufactured item. Another advantage is that the hydraulic oil in the machine is not heated as much, requiring less cooling energy. In addition to this, the oil change interval can be extended because the hydraulic oil is under less strain. As part of the standard replacement cycle, we will be exchanging all conventional injection molding machines for energy optimized models in the coming years. These purchases are financially supported by the German Federal Office for Economic Affairs and Export Control (BAFA).

### FULLY ELECTRIC INJECTION MOLDING MACHINES

We ordered our first fully electric injection molding machine in 2023. In conjunction with our planned new measuring equipment, we want to compare the efficiency of this new machine with the existing machines with servo drives. It is our aim to find out which type of injection molding machine offers the greatest system benefit for our company.

# UPCYCLING: FROM EXHIBITION BANNERS TO STYLISH ACCESSORIES

Exhibition booths and sustainability are still difficult to reconcile. After all, short-lived trade fair booths have little in common with the sustainable use of raw materials. Together with our long-standing trade fair partner, Heines Messebau GmbH in Willich, we have made it our mission to resolve this issue. We have jointly developed modules that can be used on large exhibition stands in different ways in order to utilize the material as many times as possible. Since 2013, we have also been using wall systems with fabric banners. These save 99 % of material volume compared with wood as a material, while also minimizing transport and storage costs. Nevertheless, the design of exhibition booths constantly requires new items, which produce waste. So what can we do about that? Heines Messebau GmbH found another answer to this question in 2023. Using the principle of upcycling, we now have our old fabric banners turned in to bags. Made in the sewing shop of the non-profit German Caritas Association in Cologne, the first 100 m<sup>2</sup> of fabric found



a new life as 200 bags in 2023. We use these to hand over presents, brochures, or other documents to friends and business partners. Versatile and individual with a unique design, these trendsetting accessories are very popular and both their owners and us appreciate the sustainability aspect.



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## INFORMATION ON SUSTAINABILITY

In January 2022, TSUBAKI KABELSCHLEPP integrated the topics CSR and sustainability into the main navigation of the website as a separate menu item. The content and information on these topics were significantly expanded to reflect their importance and to make the corresponding communication publicly accessible.

### Find more information here:

tsubaki-kabelschlepp.com/csr-sustainability





### THE WILD MEADOW: A SPECIAL RESTORATION PROJECT

The new test and development center in Wenden-Gerlingen was completed in mid-2020. The construction work, however, had created compacted brownfield areas where hardly anything grew. TSUBAKI KABELSCHLEPP consequently restored this 5,100 m<sup>2</sup> area affected by the building work: Native plants were established, as well as a meadow with fruit trees, a pond, and a green rooftop. The "wild meadow" is also home to beehives: In the summer, four colonies with up to 160,000 bees in total moved in. Zones with park benches and paths for strolling were created for the TSUBAKI KABELSCHLEPP employees. The objective of maintaining biodiversity in connection with a high recreational value was achieved in full.



# **CO<sub>2</sub> INFORMATION CDP**

Our parent company TSUBAKIMOTO CHAIN have already been publishing environmental data on the CDP portal since 2013. Since 2021, TSUBAKI KABELSCHLEPP have also been submitting figures to TSUBAKIMOTO CHAIN.



CDP stands for Carbon Disclosure Project, a non-profit organization founded in London in 2000. Its objective is that companies as well as communities publish their environmental data, for example climate-damaging greenhouse gas emissions and water consumption. The data can be viewed on the CDP website free of charge.



More information on the non-profit organization CDP can be found here:

https://www.cdp.net







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# **HUMAN RESOURCES**

At TSUBAKI KABELSCHLEPP, we want to be a good employer and we work on many fronts to achieve that.

Based on the collective labor agreement of the metal and electrical engineering industry in North-Rhine Westphalia, we offer our employees fair wages and salaries and regular wage rate increases. Our employees also benefit from flexible working hours, fundamentally a 35-hour working week, 30 vacation days, and continued training. Support from the occupational health service and a health day promote physical wellbeing. We take the work-life balance of our employees seriously because we know that the equilibrium between work and relaxation has to be right in order to achieve commitment and productivity in the long term. A safe and pleasant work environment is also important. We accordingly focus on contemporary, modern, and clean equipment and furniture in our offices and production buildings while ensuring the highest safety standards.

In 2023, TSUBAKI KABELSCHLEPP employed 340 people in total, including 10 apprentices and 26 contracted workers. 8 employees have a disability in accordance with the German Social Security Statutes.

### THE KABELSCHLEPP TRAINEE PROGRAM -OFF TO JAPAN FOR 3 - 12 MONTHS

The application phase for the trainee program has been under way for a while and we have received some promising applications – after all, it is a very attractive offer. Trainees can get a placement to stay and learn at our parent company TSUBAKIMOTO Chain in Japan, at the state-of-the-art facility in Kyotonabe, for between 3 and 12 months depending on the department.

KABELSCHLEPP covers the costs arising as part of the trainee placement, allowing the trainees to fully focus on their interesting tasks. The program offers not only professional learning, but also an opportunity for the trainees to learn and improve their Japanese and English language skills and to gain a better understanding of the Japanese culture.

### NUMEROUS SUPPORT SERVICES

To bind our employees to the company in the long term, we not only want to make their working environment as safe and pleasant as possible, but also strive to set positive impulses where work is not the primary focus. Social interactions in the company are important to us, as are the promotion and support of sports activities or volunteering outside of everyday work. For emissions-free commuting, we offer our employees a leasing bicycle. We also subsidize a membership for Urban Sports, which offers a network of 50 different types of sports, online and offline.

Team building also plays an important role at TSUBAKI KABELSCHLEPP. To strengthen cooperation in the teams and to promote social contact between employees, we regularly organize celebrations and events, like our annual summer party in August or the traditional company run in June. We acknowledge weddings and births and also look after our employees children (up to the age of 12): Each year, they can look forward to a Christmas present from TSUBAKI KABELSCHLEPP.

Of course we grant special leave for certain events such as weddings, funerals, births, or house moves. In addition to this, we grant temporary release for employees who volunteer for fire brigades, rescue services, or similar causes.

# TRAINING, RECRUITING, AND EMPLOYEE DEVELOPMENT

There is a strong focus on training at TSUBAKI KABELSCHLEPP. We offer apprenticeships in eight administrative and technical professions, always with the objective of keeping our motivated young employees in the company in the long term. Around 95 % of apprentices remain with us after completing their training. In the period afterwards, we give them the opportunity to continuously develop and move up to management positions in the medium or long term.

Together with our employees, we use the annual performance reviews to identify any training requirements. This includes training measures in the field of personal development as well as training required due to new technologies, software, etc.

Also in light of the current skills shortage, we want to increasingly move towards discovering and developing the talent for our company ourselves instead of recruiting managers from outside. When looking for staff, we want to focus less on specific knowledge and skills and more on the people themselves. We are looking for employees who are a good fit for our company and who are looking for long term development together with us.

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## MOBILE WORKING AND Scheduling

In many areas, working hours can be scheduled freely within a certain time window, so that there are no fixed working hours (administration, technical departments). In the manufacturing departments, employees can also use flexitime to adjust their working hours to private needs or necessities. Anything is possible, as long as the job and the contact hours permit it.

In administrative departments, our employees have the opportunity to work from home on 5 days per month. In addition to this, flexitime can be used to allow for private appointments or looking after family members.

Mobile working in figures:

- » Our employees spent around **18,242 hours** in mobile working in 2023.
- » As this means they do not have to commute, it results in approx. **2,061 hours** of added free time.
- » Overall, our employees traveled 123,289 fewer km in their cars, saving 24.41 t CO<sub>2</sub> in emissions.
- Mobile working was used on 2,606 days: 2,606 days × 7 h working time = 18,242 h
  The average commuting time per employee is 47.46 min per day: 2,606 days × 47.46 min = 2,061.35 h
- 2 The average commuting time per employee is 47.46 min per day: 2,606 days × 47.46 min = 2,061.35 h
  3 The average commuting distance per employee is 47.31 km per day: 2,606 days × 47.31 km = 123,289 km
- The average emissions per kilometer are 0.19803 kgC02e: = 0.19803 kgC02e/km × 123,289 km = 24.41 tC02e

18,242 h Mobile working

123,289 km fewer km traveled

2,061 h free time gained

> 24.41 t CO<sub>2</sub> saved

## WE ARE #ENERGIEBEWEGER

A good employer also needs a successful employer brand.

That sounds so easy and is so right. The idea is to have a selection of suitable applicants and to convince them of our own company skills in order to inspire them, employ them, and keep them in the company in the long term.

Once again: Sounds so simple, but in reality it is not. In times of a skills shortage, a number of companies compete for the same talented candidates, especially in industrial conurbations.

That means we have to set ourselves apart, sharpen our profile, and show a clear edge.

But it is important here to be authentic in-house and to the outside. After all, we want the first impression of an applicant to be confirmed and strengthened later on.

An employer brand is important, but by far not the only success factor. We also need a clever recruiting strategy with forward looking and long term personnel planning and development, and we have to offer talent a suitable perspective in the company, and challenge and support them along the way. That is the second cornerstone of successful, long term personnel planning.

This bundle of measures is initiated and supported by the #ENERGIEBEWEGER at TSUBAKI KABELSCHLEPP. With the slogan "We are Energiebeweger", this concept embodies the in-house and external measures in our HR policy.



More information on the entrepreneur award 2020 can be found here:

tsubaki-kabelschlepp.com/unternehmerpreis









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# FROM WASTE TO NEW PRODUCTS

### Plastic

133 tons of plastic waste were generated from current production in 2023. Careful separation of materials enabled us to reuse a large part of this plastic waste in production.

Our recycling system is based on 3 aspects:

- » Prevention: We use modern technologies and clever designs to keep the scrap rate as low as possible.
- » **Separation:** Thorough separation into material types enables us to reuse up to 35 % regranulate in our products.
- » Reuse: Already during the development phase, we ensure that the products are designed to allow for the highest possible regranulate content. We also regularly conduct tests with existing products to increase the regranulate content in these as well.

The result of this strategy is that we were able to reuse 112 t of our plastic waste in 2023. This corresponds to a rate of around 85 %.

### Metal and electrical scrap

40 tons of metal and electrical waste were generated in current production in 2023. We also separate these into the different material types.

We sort the following:

- » Aluminum » Stainless steel
- » Steel » Cables

Sorting by type allows us to have 100 % of these materials recycled.



### WASTE RECYCLING

- » Injection molding scrap is processed into regranulate.
- » Metal is separated into stainless steel, aluminum, and iron and sent for recycling.
- » Packaging waste like wood, cardboard, and film is collected and also sent for recycling.
- » All harmful substances such as electrical waste are disposed of in line with the applicable recycling legislation, battery recycling legislation, waste electrical and electronic equipment regulations, etc.

# **PRODUCT RESPONSIBILITY**

Did you know that cable carriers from TSUBAKI KABELSCHLEPP have always been sustainable? Steel cable carriers are not only very durable – they can last for decades – but can also be 100 % recycled at the end of their service life. That conserves resources and protects the environment: Using one ton of steel in recycling saves one ton of CO<sub>2</sub> emissions and avoids mining of 1.5 tons of iron ore.

And still, we are working on the cable carriers of the future: Among other things, we currently have development projects for cable carriers made of alternative, particularly sustainable materials. Suitability is assessed based on factors such as the mechanical strain for the respective cable carrier type.

But optimization potential can also be found in the process control and monitoring of cable carriers: A standardized DIN rail module can be used to regulate the push/pull forces acting on the cable carrier systems or to generate a wear prognosis for glide shoes. To do this, a target/actual comparison with reference to wear and push/pull forces is conducted in real time based on test data. This allows our customers to save energy during operation and to avoid failures. Other modules for monitoring and forecast tasks are currently being developed.





### VALUE CHAIN



# STEEL CABLE CARRIERS IN USE FOR OVER 50 YEARS

A case at a longstanding TSUBAKI KABELSCHLEPP customer shows just how extremely durable steel cable carriers are: This customers have been running a boring mill since 1969, equipped with steel cable carriers from TSUBAKI KABELSCHLEPP from the outset – which still work perfectly fine.

The boring mill runs for around eight hours a day on five working days on average. It uses the first steel cable carriers manufactured and sold by KABELSCHLEPP. The cable carriers for the X and Z direction are in constant motion and also exposed to the generated chips and cooling agents. Despite these rough conditions, the steel cable carriers have been supplying the machining table with all required fluids and coolants for over 50 years, while also guiding all required cables to the table drive.



### FROM ECO TO SDG PRODUCTS

TSUBAKI KABELSCHLEPP was already focused on its environment in the past, developing products with a longer service life, energy efficient functions, and compact design. In 2011, we introduced the "Tsubaki Eco Link": Assessment criteria to support product developments that help our customers reduce their environmental impact (ecology) while improving their economic performance (economy). Products that meet this standard are certified as "eco products" and bear the Tsubaki Eco Link Logo.

From the perspective of ecological, social, and economic sustainability, which TSUBAKI are striving for with their long term targets for 2030, we will strengthen the development of SDG-oriented products and marketing activities in addition to those that refer to our conventional eco products.

### **CREATION OF SDG-ORIENTED PRODUCTS (CSV)**

Product development always also takes sustainability criteria into account. These include:

- » recyclable products, ROHS compliance, REACH conformity, no use of conflict materials, use of lead free material, surface coating without Chromium IV.
- » Easily disassembled products
- » Reduced environmental contamination
- » Development of durable products
- » High wear resistance to increase durability and avoid microplastics
- » Market oriented product development with best possible sales opportunities to maintain the economic viability of the company

### THE MOST SUSTAINABLE **PRODUCT IS THE ONE THAT LASTS** THE LONGEST

Sustainability and reduction of emissions are important issues already at the start of a new development. How fit for use a cable carrier system is depends primarily on wear. The lower the wear, the longer the service life. We therefore focus on the following aspects in the requirements specifications when we develop a cable carrier system:

- » Longer service life -> fewer replacements » Lower wear on the cable carrier means -> fewer new products (cable carriers)
- » Minimized mechanical influences, e.g. vibrations during cable carrier movements, through polygon optimization -> reduced wear
- » Reduced wear on the cable carrier also means reduced wear emissions (avoiding particulates)
- less elongation during operation -> reduced strain on cables -> longer service life of all cables -> fewer cable replacements -> fewer new products (cable carriers)
- » Optimization of the individual part physiognomy -> improved production processes and reduced energy input for injection molding.

By taking into account the above aspects, we can ensure the following:

- » Systems with a long service life
- » Fewer parts replacements
- » Sustainable production quantity
- » Reduced particulate emissions
- » Optimized energy input during the production process

We also consider the following during the subsequent production process:

- tion (injection molding) by optimizing the cycle times
- » Lowering energy consumption in produc- » Continuous increase in the recycled materials content in all our products there are cable carrier series where it is possible to use 100 % recycled plastic.

Generally, it can be said: The longer a cable carrier system with all its components lasts, the lower the carbon footprint resulting from its production.

The TKHD-R type is an excellent example of a modern, sustainable cable carrier, from development and production to the end customer:



1

- » For use in heavy-duty applications (cranes, bulk goods, metallurgy, etc.)
- » For long to very long travel lengths (1,000 m and more)
- » At 10 years service life
- » Low wear throughout the entire life cycle
- » Optimum protection for cables and hoses

### Production phase

- » Use of up to 40 % recycled granulate
- Optimized production processes and cycle times to reduce the energy input

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» Optimized assembly to reduce assembly times and the associated energy input

4

» Sustainable storage concept

### Development phase

- » Heavy-duty design
- » Polygon-optimized for low-vibration operation

2

- Integration of rollers, including roller damping, to reduce
- drive forces
- particulate
- wear
- emission
- cable wear
- mechanical strain
- noise emission
- » Development of a coordinated guide channel that meets the requirements (smooth running and low wear) from the specifications

### Use phase / customer phase

- » Reduced drive forces through integrated rollers: up to 75 % energy saving
- » Reduced noise emission through integrated rollers and roller damping
- » Reduced wear thanks to heavy-duty design and integrated rollers and roller damping
- » Reduced cable wear from optimized cable carrier interior, aluminum frame stays, and reduced cable carrier elongation
- » At least 10 years service life for cable carrier, cables, and guide channel
- » Reduced maintenance required for the complete system
- » Minimal spare parts for the complete system

From development to use, sustainability and an optimized carbon footprint are the key aspects of this cable carrier, and – as already mentioned at the start – the most sustainable product is the one that lasts the longest.

# 05

# APPENDIX

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## **ABOUT THIS REPORT**

With this sustainability report, TSUBAKI Kabelschlepp GmbH document the ecological and social achievements and the progress achieved with the implementation of their sustainability targets for the Wenden-Gerlingen site for the reporting year 2023. It was published on April 26, 2024 as the company's second sustainability report. All information, unless indicated otherwise, refers to the reporting period from January 1, 2023 to December 31, 2023.

All statements that do not refer to historical facts are statements as to the future and do not constitute any warranty regarding future performance. They involve risks, uncertainties, and other factors that are outside of the company's control.



## SUSTAINABILITY REPORT: ANNOYING DUTY OR AN OPPORTUNITY FOR OUR COMPANY?

The answer is easy – it is a great opportunity, because the cost-benefit ratio of the sustainability report is very positive. It demonstrates to our customers, employees, and the regions where we work what we have done in terms of sustainability and what we are planning for the future. It is a transparent analysis of what has been achieved and also an open assessment of our position.

Judge for yourself. It has shown us that we are on a good path, but also how long the way to a balanced climate footprint still is. The strategy and the measures for 2024 have been defined.

That is what drives us for the next sustainability report.

# YOUR OPINION MATTERS TO US

Maybe you thought something was missing when you were reading our sustainability report, or you have ideas and suggestions for how we can improve the report in the future. We are always open to criticism, requests, or questions and of course praise, and we are looking forward to hearing from you. Please write to us:

nachhaltigkeit@kabelschlepp.de

## IMPRINT

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# **ONE MORE THING**

Sustainability initiative as a credible instrument of public relations

Public relations have always been one of the mainstays of TSUBAKI KABELSCHLEPP corporate communications. From this variety of topics, sustainability has emerged as a core issue.

In the past year, we used press releases, articles in trade magazines, and talks to inform the public, communities, local government, and our customers about the measures, objectives, and progress of our sustainability work.

Our reports receive a broad media response that initially surprised us in its variety. It seems that we have set our focus correctly. We were often approached for an exchange of experiences from our activities with companies from the industry and from the region.

This was supported by the first edition of the KABELSCHLEPP sustainability report.

It drew the attention of a number of people and institutions and we have kept these exchanges going. The second edition with the current developments is the logical consequence of the successful start.







Tsubaki Kabelschlepp forscht an den Energieketten von morgen Die legette Liewett und Nachtaligkeit alerken is der Eres

Das Irda

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