













Sustainability Report 2023

KNAUER Wissenschaftliche Geräte GmbH

Period: January 2023-December 2023







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CONTACT

Do you have any questions or suggestions?

Please write to: quality@knauer.net





Welcome to KNAUER Sustainability!

KNAUER is concerned about the changes in the world (marine pollution, climate change, species extinction...) and feels responsible for the environmental impact of the company's business activities. Our policy is to keep the environmental impact as low as reasonable and possible for us.



































KNAUER signed the commitment letter in February 2018 (Figure 1) and is guided by the ten principles of the Global Compact. Every summer, KNAUER prepares "Communication on Progress" report, submits it to Global Compact. It is freely accessible there¹, as well as on the KNAUER website².

The UN Global Compact is the world's largest and most important initiative for responsible corporate governance, involving more than 12,800 companies and organizations from more than 160 countries, including 454 from Germany. The vision of this initiative, led by the United Nations, is a sustainable and inclusive global economy based on ten universal principles, including human rights, labor standards, environmental protection and corruption prevention.



FIGURE **DECLARATION AFFILIATION** 1: OF FEB. 19[™], 2018

We still with vigour support the SDG Nr. 3 GOOD HEALTH AND WELL-BEING, by beeing part of the vaccine production against the corona disease. Last year the focus was on the KNAUER Nano-Scaler, the system for optimization and development of lipid nanoparticle formulations³. With every KNAUER system we contribute to a better health care development concerning vaccine productions. Because of our very innovative and

¹https://unglobalcompact.org/what-is-gc/participants/132742

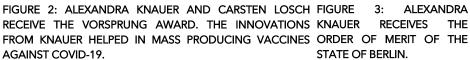
²https://www.knauer.net/de/KNAUER/Soziale-Verantwortung#GC

³https://www.knauer.net/Application/application_notes/VPH0076_Development_and_Optimization_of_LNP.pdf







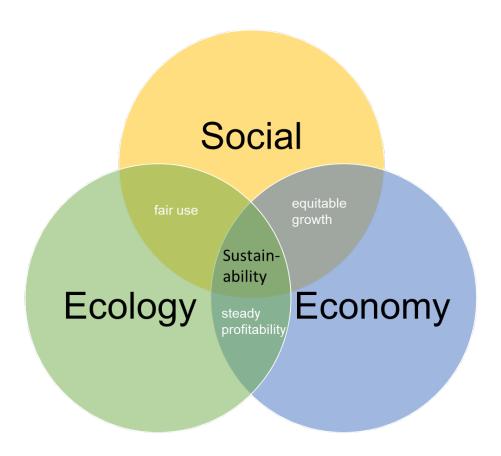




3: **RECEIVES** THE STATE OF BERLIN.

successful effort for the vaccine production during the corona crisis, KNAUER awarded the VORSPRUNG business award.4 In addition our CEO Alexandra Knauer was honored with the order of merit of the state of Berlin for outstanding social her commitment.5

The KNAUER sustainability is divided in three sections which are all interdependent. In the following report the events and actions are sorted after social, ecological and economic sustainability.



⁴https://www.knauer.net/de/laborinstrumente-hersteller-knauer-aus-berlin-im-kanzleramt-mit-vorsprung-preis-geehrt/n45691 5https://www.knauer.net/de/unternehmerin-alexandra-knauer-mit-verdienstorden-des-landes-berlin-geehrt/n46662





Social Sustainability

Summary: Social sustainability is about people! Our goal is to enable all people along our supply chain to live and work in dignity. KNAUER understands its social responsibility, is a signatory of the "Diversity Charter" and a training company. Events and theme days such as "Equal Pay Day" and "Diversity Day" are fixed components of our CSR activities (Corporate Social Responsibility).

Supplier reviews

For years, KNAUER has preferred to purchase the materials regionally. In doing so, we consciously ensure that the majority of deliveries come from Germany and, in the best case, from Berlin (in 2023: 75 % by value). Compared to the last years we stayed relatively constant. A smaller proportion of purchases is made in the EU (18 % by value). At 7 % of deliveries, the proportion of purchases that cannot be procured in the EU and come from third countries such as Switzerland or the USA. In this way, we reduce the likelihood of forced labor, child labor and human rights violations in our supply chain. Figure 4 shows the suppliers with the biggest contribution at KNAUER.

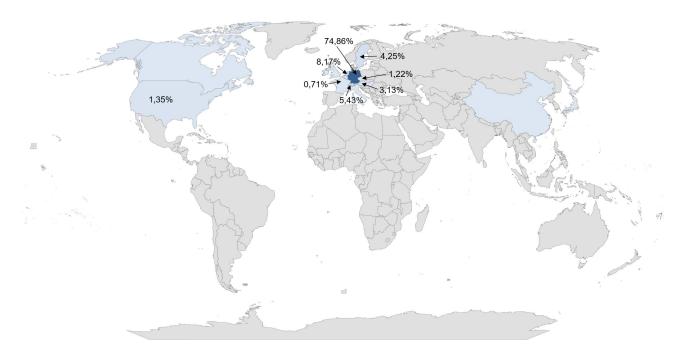


FIGURE 4: KNAUER WORLDWIDE SUPPLIER MANAGMENT





Gender Equality



FIGURE 5: ALEXANDRA KNAUER AND KATHARINA POHL PRESENTING THE PAY GAP

As SDG Nr. 5 ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS we believe in equal opportunities and fair compensation for all our employees, regardless of their gender. We are happy to see that our efforts towards closing the gender pay gap have been successful and that women at our company are being rewarded for their hardwork and dedication. We strive towards a 0% gender pay gap and don't fall into a "reverse discrimination" situation. After we achieved a neglectable gender pay gap of -1,36 % in 2022, we succeeded again in 2023 with a value of 0,3%. We will continue to strive for gender equality in all aspects of our business and to foster a culture of diversity and inclusion. ⁶

Girls Day 27.04.2023

A concept that is urgently needed: Despite better school-leaving qualifications, girls still disproportionately often decide for occupational fields or fields of study in which there is a very high proportion of women. Apprenticeship statistics also show every year that almost half of girls choose just three apprenticeships: Office clerk, retail saleswoman and hairdresser. With this yearly event KNAUER encourage young people to make their first experiences in a scientific working area. Over the day, the kids learn how an HPLC system works, they are allowed to experiment on their own and thus strengthen their self-confidence and trust in their own abilities. KNAUER support the SDG Nr. 5 to achieve gender equality and empower all women and girls with this event. This year we could invite more participants well as abandon FFP2 masks because of the overall better situation with COVID-19.



FIGURE 6: HPLC AND OTHER LAB EQUIPMENT EXPLAINED ON 2023 GIRLS DAY

⁶https://www.linkedin.com/posts/knauer_women-hardwork-diversity-activity-7019593045973073920-nl5V?utm_source=share&utm_medium=member_desktop





Diversity Charter

Over 5000 companies and institutions already signed the "Charta der Vielfalt" for committing, appreciating and prejudicefree working environment. The association thus represents over 15 million employees in Germany. KNAUER celebrated the diversity of the employees this year on the 17.05.2023 to create awareness.



Donations

This year we showed solidarity with the people in Marocco, Turkey and Syria. All three countries were hit by earthquakes in 2023 and needed humanitarian aid. For Marocco KNAUER donated 5.000 € to "Aktion Deutschland Hilft e.V.". For the people in Turkey and Syria KNAUER employees donated 8.155 € and KNAUER doubled that aid to 16.310 €. The money was donated to "Aktion Deutschland Hilft e.V.".

Retirement provision

We at KNAUER value our employees and offer them a company pension since 2022. The purpose is to contribute to securing the livelihoods in old age and to promote the loyalty and motivation of the employees. KNAUER decided to make a contribution to deferred compensation that goes beyond the legal requirements in order to help compensate for possible pension gaps.

Health services

The health of our employees is also important to us. In addition to offered vaccinations against flu and covid-19 at our companies site, we provided the possibility to attend lectures about preventive healthcare as well as a seminar about how to stop smoking. In all cases KNAUER paid the costs of the health services. Furthermore, we offer cooking courses for our employees, that teach how to cook vegetarian or vegan dishes and in general how to eat healthier.

KNAUER is recognized as top employer and decides to reduce working hours along with an increase in paid wages for employees

An employee survey conducted at the beginning of this year confirmed that 93% of our employees are very satisfied with KNAUER.⁷ On top of that, we were recognized as one of the top 1% attractive employers in

⁷https://www.knauer.net/de/laborinstrumente-hersteller-knauer-aus-berlin-im-kanzleramt-mit-vorsprung-preis-geehrt/n45691







FIGURE 7: KNAUER IS RECOGNIZED A TOP EMPLOYER

Germany.⁸ SQC-QualityCert evaluated 74.000 employers using 55 independent data sources. "We are delighted that KNAUER has now been awarded the "World's Best Employer Germany 2023" seal. This is very pleasing feedback for me and my team. It confirms that we are right to focus on a trusting working atmosphere and attractive working conditions," said a satisfied Katharina Pohl, Head of HR Management at KNAUER.

Because the year 2023 was very successful for KNAUER, the management decided a general reduction of working hours

from 40 h to 38 h from 2024 on without reducing the wages - as well as a general raise in wages for full time employees by 3%. Part-time employees will receive no reduction in working hours but instead an increase in wages by 8%. We continue to grow and encourage people of all genders to join our professional team. In case of equal qualification, we favour applications from severely disabled persons.

Go Green Ghana



FIGURE 8: KNAUER CONTINUES THE SUPPORT FOR GO GREEN GHANA IN THE BINDURI DISTRICT

Farmer Managed Natural Regeneration (FMNR) is a reforestation technique and was discovered by Australian agricultural economist Tony Rinaudo and developed in West Africa in the 1980s and 1990s. It is practiced in Niger, Chad, Burkina Faso, Ethiopia, Kenya, and Mali, among other countries. The technique is simple, inexpensive, and has the potential to re-green entire regions and improve the standard of living for the local population. In 2023 KNAUER continues to support this mission by donating money and the attendance of lectures. We are proud to contribute to this project and also

by support SDG Nr. 15 "Life on Land". Examples of the activities of FMNR are: conducting educational events about the consequences of soil depletion and possible countermeasures, training of 900 farmers to set up FMNR demonstration field in 30 municipalities, support of 750 farmers with FMNR logistics (loppers, rubber boots, cutting torches, gloves and sickles) and training of 300 fire wardens for the prevention and suppression of bushfires in 30 communities.

⁸https://worlds-best-employer.com/de/knauer-wissenschaftliche-geraete-gmbh

⁹https://www.knauer.net/de/berliner-firma-knauer-optimistisch-fuer-2024/n47212





Ecological Sustainability

Summary: Our policy is to keep a burden on the environment as low as possible and feasible for us. It is our concern to contribute to an improvement of the environmental situation. We are concerned about climate change, dwindling biodiversity and, for example, the pollution of the oceans. The most extensive reduction of CO₂ emissions ("reduction of emissions according to the 1.5 °C path") and of the resulting waste ("no waste") as well as the avoidance of environmentally hazardous substances and hazardous materials, are part of the core of our efforts.

CO₂ Emission

The basis for an efficient climate protection strategy is the precise calculation of the CO_2 emissions and a precise understanding of the various emission sources. Because what is not recorded, localized and measured, will not be able to steer.

Scope 1 emissions are emissions from sources for which KNAUER is directly responsible or in control. These include emissions from energy sources at your site, such as natural gas and fuels for example.

Scope 2 emissions are indirect greenhouse gas emissions from purchased energy, such as electricity, steam, district heating or cooling, that is generated outside the KNAUER system boundaries but consumed by it.

Scope 3 includes all indirect emissions that occur along your value chain which can be described as emissions as "the result of activities from facilities that KNAUER does not own or control, but directly impacts those activities within its own value chain." The following tables and figures show the different scopes and their emissions for the year 2023.

Scope 1	t CO₂e	Share	t CO₂e	Share
Heating oil	87,78	67,08%	87,78	67,0%
Fleet (Diesel)	43,08	32,92%	43,08	32,92%
Rental cars (Benzin)	0,00	0,00%	0,00	0%
Emissions Scope1	<u>130,87</u>	<u>100,00%</u>	<u>130,87</u>	<u>38,9%</u>

	Market Based		Location Based	
Scope 2	t CO₂e	Share	t CO₂e	Share
Eco power	0,00	100,00%	205,61	100,00%
Emissions Scope 2	<u>0,00</u>	<u>0,00 %</u>	<u>205,61</u>	<u>61,11%</u>

Emissions Scope 1+2 <u>130,87</u> <u>t CO₂e</u> <u>336,47</u> <u>t CO₂e</u>





Scope 3	t CO₂e	Share
Paper consumption	0,67	0,24%
Employee emissions: Public transport	22,67	8,11%
Employee emissions: Bicycle/walking	0,00	0,00%
Employee emissions: car	140,71	50,31%
Employee emissions: e-car	0,06	0,02%
Emissions from business trips - hotel	12,94	4,63%
Emissions from business trips - car	2,06	0,74%
Emissions from business trips - flight	97,57	34,89%
Emissions from business trips - public	1,00	0,36%
transport		
Waste water	1,06	0,38%
Water	0,45	0,16%
Paper waste	0,2	0,07%
Residual waste/bulk waste/construction waste	0,3	0,11%
Hazardous waste		

Emissions Scope 3

279,68 t CO2e

Packaging impact

18.8 million tons of packaging waste was generated in Germany in 2020, according to the Federal Environment Agency (UBA). In 2023 59% of the packaging used at KNAUER is paper and cardboard. The other 41% is composed of plastics (12,27%) and other materials such as wood for the pallet transportation (28%). In 2023 projects for reduction of packaging were continued at KNAUER. One project is to completely be plastic free with the KNAUER supplementary packs or the overall reduction of packaging materials. In 2023 we could again lower our consumption of plastic per 10T€ turnover from 0,66 kg to 0,57 kg. To ensure safe delivery of our products these plastics were substituted with paper/cardboard, which can be better recycled.

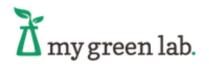
Absolute values	2021	2022	2023
Plastic	2,416 kg	2,943 kg	2,570 kg
Other	4,456 kg	5,652 kg	5,959 kg
Paper/Cardboard	9,175 kg	11,443 kg	12,334 kg
Composite material	86 kg	85 kg	86 kg
Relative values per € 10,000 turnover	2021	2022	2023
Plastic	0,68 kg/10T€	0,66 kg/10T€	0,57 kg/10T€
	1 2/ L = /10TC	1 2/ kg/10T6	1 22 L /10T6
Other	1,26 kg/10T€	1,26 kg/10T€	1,32 kg/10T€
Otner Paper/Cardboard	1,26 kg/101€ 2,59 kg/10T€	1,26 kg/10T€ 2,56 kg/10T€	1,32 kg/101€ 2,73 kg/10T€





My Green Lab

In 2022, KNAUER signed the ACT Label Certification Proposal with My Green Lab (MGL) for two analytical systems to provide more transparent and independent information to customers.



Throughout 2023, KNAUER collected the necessary data within the company and supply chain to complete the initial assessment. We look forward to receiving the final results in 2024. The results as well as the information and understanding gained through this project will help KNAUER to further develop its sustainable goal setting and supply chain management.



FIGURE 9: EXAMPLE FOR AN ACT LABEL

Climate Actions at KNAUER

Mobility Survey

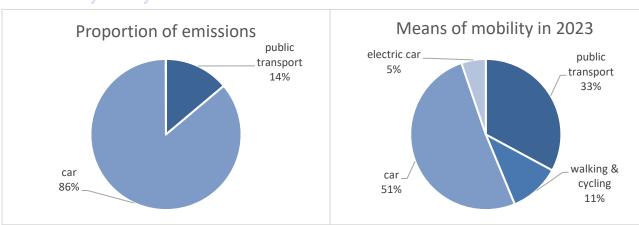


FIGURE 10: PROPORTION OF EMISSIONS AND MEANS OF MOBILITY IN 2023

A mobility survey was made in 2022 as part of the annual projects "Expansion to Scope 3 and first reduction projects are defined" and "We are reducing our eCO2 emissions at the site by 25% by 2025 and are known for our diverse commitment to sustainability". A report was made and showed that a positive trend was noted towards the data in 2017. The use of less combustion engines and increase of electromobility as well

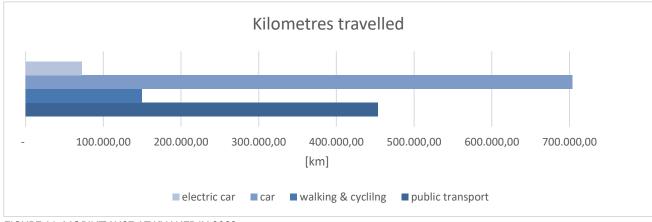


FIGURE 11: MOBILITY USE AT KNAUER IN 2023





as bikes/public transports. The overall distance driven by the KNAUER employees was extrapolated for the current headcount. The report can be seen here <u>Mobility Survey 2022</u>.

From this survey, actions for 2023 were made. For example, the increase of charging station at KNAUER, or the purchase of company bikes is now pursued.

The KNAUER Garden

The ecologically managed and award-winning company garden is an oasis for bees (since 2018) and other insects. This year we were again proud to host a bee colony. The garden was awarded the special prize "Biodiversity" in the competition "Berlin's most beautiful company garden ¹⁰. In 2021, for the first time, there are 2

FIGURE 13: KNAUER GARDEN

bee colonies on the property. Not only that: the near-natural and extensive



FIGURE 12: BEE HIVE

organic garden on the company's property is a place where people, plants and animals feel at home. No use of pesticides or insecticides and only selective intervention. We see the garden as a model for a sustainable circular economy and are committed to reusing a greater proportion of materials wherever possible in the future. In new

plantings, preference is given to both insect-friendly plants and plants with higher resistance to heat and drought.

KNAUER Sustainable Week



FIGURE 14: ALEXANDRA KNAUER AND KNAUER EMPLOYEES HELP IN CREATING A FLOWERING MEADOW WITH AN AREA OF 5500 M² CLOSE TO THE SCHWIELOWSEE

In September 2023 we again celebrated the sustainable week with a presentation from BUND-Berlin about zero-waste concepts and the initiative remap-berlin.de, a workshop about sustainability for our suppliers, a cooking course and the creation of a flowering meadow with an area of 5500 m² close to the Schwielowsee. 11 During the workshop with our suppliers we further worked on projects to reduce packaging waste. The week is yearly repeated with different topics to create awareness for sustainability. Friday of this week,

¹⁰https://www.knauer.net/en/the-knauer-ecological-garden-a-place-where-fox-and-hedgehog-meet/n19873

¹¹ https://www.knauer.net/de/berliner-unternehmen-knauer-packt-nachhaltigkeit-an/n46623





the world car-free day, was used to support KNAUER employees who use CO_2 neutral means of transportation or public transport. An overview of that topic is given in the report section "Mobility Survey".¹²

Clean Energy

KNAUER has been using green electricity (water, wind, sun) for several years. In addition, the company's own photovoltaic system was expanded this year, raising our yearly production capacity of solar power by 13,030 kWh. The motivation to change not only the energy source of the company but also the energy source of all employees to green energy was a topic in 2021/22. For this reason, a presentation by Simone Schütz from Greenplanet Energy was held in 2021 to inform employees about good energy alternatives. In 2022 KNAUER provided



FIGURE 15: EXAMPLE FOR GREEN ENERGY: WIND POWER

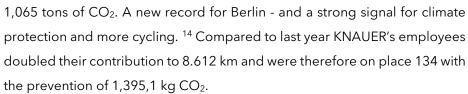
each employee with $50 \in$ to change their current electricity provider to a greener version and we decided to continue the program in 2023 in order to support the transition towards green energy. ¹³

Stadtradeln



FIGURE 16: STADTRADELN CERTIFICATE

Rediscover the city, do something for your health and protect the climate at the same time: That is the idea behind STADTRADELN. In June 2023, the campaign entered its seventh round in Berlin. This time, 27,943 Berliners got on their bikes for a climate-friendly Berlin - more than ever before. With a total of 6,572,435 kilometres, they avoided



¹²https://www.linkedin.com/posts/knauer_nachhaltigkeitswoche-nachhaltigkeit-thinklc-activity-6983421639401029632-q10J?utm_source=share&utm_medium=member_desktop

¹³https://knauerberlin.sharepoint.com/sites/KNAUERinsight/SitePages/Aktion-%C3%96kostrom-Bonus-wird-verl%C3%A4ngert!.aspx

¹⁴https://www.berlin.de/sen/uvk/verkehr/verkehrsplanung/radverkehr/radprojekte/stadtradeln/







FIGURE 17: ALEXANDRA AND MELINA KNAUER PLANT TREES AT KLIMAWALD BERLIN

Every tree counts: to support an investigation project the copper beech, KNAUER has taken sponsorship of 62 copper beeches. 15 The project "Klimawald Berlin" of the Freie Universität Berlin investigates which species of copper beech are more resistant to heat and drought. As one of the most important tree species in Europe, the copper beech plays a crucial role in preserving biodiversity. Recognized by UNESCO as a World Heritage Site, copper beech forests are indispensable for the ecosystem.

Economic Sustainability

Summary: KNAUER is convinced that economic activity will no longer be separable from ecological and social aspects in the future. Economic sustainability and frugality help to limit the negative impact on the environment and society. KNAUER is committed to sustainable investment, considerate use of resources, sustainable supplier management and regional purchasing.

In order to be economically successful in the long term, it is important to combine economic, social and environmental aspects. In order to make this possible and to be able to track it better, KNAUER had an EcoVadis 16 assessment carried out for the first time in 2023. The EcoVadis assessment covers 4 main areas of sustainability: the environment, labour and human rights, ethics, and sustainable procurement.

The EcoVadis assessment has been completed with a pleasing silver rating and this has been shared with key business partners. The Silver rating is awarded to companies that are in the top 15% of all evaluated companies at the time of the assessment. KNAUER scored particularly high in the areas of environment and ethics.

¹⁵https://www.fu-berlin.de/campusleben/campus/2023/231219-Klimawald/index.html

¹⁶ https://ecovadis.com/de/





KNAUER chooses a sustainable way to expand the working place and storage capacity



FIGURE 18: SOLAR PANELS ARE INSTALLED AT THE NEW KNAUER BUILDING IN HEGAUER WEG 37

Due to the high quality of our innovative products, we are acquiring more and more customers. To supply the growing demand the number of our employees has grown again in 2023. Therefore, we required more capacity for working places. KNAUER has chosen a sustainable way to acquire more place: instead of setting up a new building we refurbished an old building in our neighbourhood and created room for 21 working places. By refurbishing the old building, we saved about 100,000 kg CO₂, because the old building substance was reused. Furthermore, solar panels with a yearly capacity of 13,030 kWh were installed and the

old oil heater was exchanged with a heat pump. This allows us to substitute about 5,000 l of heating oil per year.

KNAUER goes medical - EN ISO 13485



FIGURE 19: KNAUER IS CERTIFIED AFTER EN ISO 13485:2016 BY TÜV RHEINLAND We are thrilled to announce that we have officially received the prestigious ISO 13485:2016 certification in 2023 for our dedication.¹⁷ EN ISO 13485 is an ISO standard that represents the requirements for a comprehensive quality management system for the design and manufacture of medical devices. The standard falls within the legally regulated area and is used to demonstrate conformity with the current European Medical Device Regulation.

KNAUER visited by Fransiziska Giffey



In 2023 Franzsika Giffey visited KNAUER to learn more about the innovations of our company. ¹⁸ We were very honoured about her visit and showed her our most recent system for the production of vaccines. Our solution helped in producing high amounts of vaccines in a short time to fight the corona crisis. Franziska Giffey is Berlin's Senator for economic affairs.

¹⁷https://www.knauer.net/de/labormessinstrumente-hersteller-knauer-jetzt-en-iso-13485-zertifiziert/n45818

¹⁸https://www.knauer.net/de/berlins-wirtschaftssenatorin-franziska-giffey-und-staatssekretaer-michael-biel-besuchen-high-tech-unternehmen-knauer/n45932





FIGURE 20: KNAUER IS VISITED BY FRANZISKA GIFFEY

Tonka Wojahn and Nina Stahr visit KNAUER

Tonka Wojahn and Nina Stahr from BÜNDNIS 90/DIE GRÜNEN visited us to get an insight into our facilities. ¹⁹ We engaged in meaningful discussions about crucial topics like sustainability, finding employees, education, and more. Their visit provided an excellent opportunity to exchange ideas on how businesses like ours can further contribute to a sustainable future. We delved into the importance of ecofriendly practices within the industry and the pivotal role education plays in fostering innovation and growth.



FIGURE 21: TONKA WOJAHN AND NINA STAHR VISIT KNAUER

Repair & Sale





At KNAUER, we try to repair our systems as long as possible instead of replacing them completely. We have established processes (K150 Produkt Rücknahme) where old systems from customers are refurbished or used as spare parts. A good example is a customer who has been using his well working Chrom K-120 pump for about 13 years.²⁰ In addition, old systems that can no longer be repaired are handed over to the certified recycling company

Electrocycling GmbH - this ensures optimum reuse of resources and is essential for the establishment of a circular economy.

Certification





Economic sustainability means using strategic approaches. We at KNAUER are certified after ISO 9001/13485/14001. This is regularly reviewed by an independent certification body in addition to our internal reviews. With this continuous monitoring we ensure to optimize our processes on bases of sustainability and effectiveness.

¹⁹https://www.linkedin.com/feed/update/urn:li:activity:7133739205628719104?updateEntityUrn=urn%3Ali%3Afs_feedUpdate%3A%2 8V2%2Curn%3Ali%3Aactivity%3A7133739205628719104%29

²⁰ Reference: Customer Support KNAUER, eWay File 22137, Serial No. 67056





Outlook

The year 2023 had many sustainable focuses. In 2024, many of these projects will be continued and improved, in particular, the collaboration with our business partners is to be improved in order to strengthen our joint efforts to achieve more sustainable business practices along the entire value chain. The company KNAUER cares about Planet Earth and is committed to combining social, environmental and economic aspects in order to create a future worth living for the people of the world. Creating awareness and acting sustainably together.

KNAUER Science and Sustainability with Passion.