

2022



**CARING FOR  
THE FUTURE.**

What does it take to make  
the future worth living?



# *CARING FOR THE FUTURE*

underscores our commitment to assume responsibility - for our customers, for future generations, as well as for the society we live in. For this reason, we are proud that the different ethnicities, age groups, and talents of our employees give our Group a diverse and colorful face.

# Contents



## Foreword 04

## 1./ A portrait of the Jagenberg Group 06

## 2./ Core Business 08

- 2.1/ Organizational structure and business segments 08
- 2.2/ A responsible approach 15
  - 2.2.1/ Overarching sustainability strategy 17
  - 2.2.2/ Ambitions and goals 18
  - 2.2.3/ ESG governance 20
  - 2.2.4/ Materiality 22

## 3./ CARING FOR PEOPLE Employees and society 26

- 3.1/ Attractive employer: Three reasons that speak in favor of the Jagenberg Group 28
- 3.2/ Health protection 36
  - 3.2.1/ Occupational safety 36
  - 3.2.2/ Health protection and prevention 36
  - 3.2.3/ Transparency concerning qualification and duties 38
  - 3.2.4/ Monitoring our health and safety measures 39
- 3.3/ The Group's social responsibility 39
  - 3.3.1/ QuaKi 39
  - 3.3.2/ Wiehl volunteer fire service 40
  - 3.3.3/ A meeting spot in a natural setting at the Dohr site 40
  - 3.3.4/ Kampf e-racing team sponsorship 40
  - 3.3.5/ Social engagement in Bamangam 43
  - 3.3.6/ Annual blood donation initiative in Spartanburg 43

## 4./ CARING FOR SOLUTIONS Sustainable Business 46

- 4.1/ Responsible procurement 48
  - 4.1.1/ Supply Chain Optimization and Resource Efficiency 48
- 4.2/ Resource-efficient production 52
- 4.3/ Sustainable solutions 54
  - 4.3.1/ Sustainable operation of machinery and plants 55
  - 4.3.2/ Retrofit and upgrade service 56
  - 4.3.3/ Digital solutions 58
  - 4.3.4/ Markets 63

## 5./ CARING FOR THE PLANET Environmental protection and climate action 72

## 6./ CARING FOR LEADERSHIP Good corporate governance 78

- 6.1/ Code of Conduct 80
- 6.2/ Compliance 81
- 6.3/ Human rights 82

## 7./ Appendix 84

- 7.1/ About this report 84
  - 7.1.1/ Selected focus areas - qualitative and quantitative reports 84
  - 7.1.2/ GRI Standards 84
  - 7.1.3/ Terminology 84
- 7.2/ Sustainability KPIs 86
  - 7.2.1/ The environment and energy 86
  - 7.2.2/ Employees 88
- 7.3/ GRI content index 90
- 7.4/ Imprint 93

## Dear Reader,

The Jagenberg Group stands for actively shaping the future and working together to find innovative solutions to new challenges. We are aware of the serious global consequences the unfolding climate change has. Being a global group of companies and a member of society, assuming responsibility for the environment is of great importance to us.

Our Group-wide j-united 2025 strategy illustrates just how important sustainability is to our business success. It is therefore both our ambition and our duty to define our environmental, social, and governance (ESG) agenda and leave behind the best possible world for future generations. With a strategic focus, we are striving to help reduce carbon emissions, to use the resources available to us responsibly, and to be a generally attractive employer.

We record our carbon footprint and are working out specific measures to reduce our business- and production-related emissions by 14% by 2025, using 2021 as the reference year. In addition, as a member of R-Cycle, we are committed to an open digital standard for reliably recycling plastics and we also provide solutions for environmentally friendly battery production.

With the launch of our new career site “Unbox the future with us” and the expansion of Group-wide concepts - including the introduction of hybrid forms of work, the expansion of the company pension scheme, and bike leasing options through JobRad - we are consolidating our market position as an “Employer of Choice.”

A suitable governance structure and clear responsibilities help us throughout the Group to draw up practical measures and implement

### Further information

- [Unbox the future with us](#)  
(see page 30)
- [R-Cycle](#)  
(see page 63)
- [j-united 2025 strategy](#)  
(see page 16)

them in a time-efficient manner in order to meet our strategic requirements. We openly communicate these requirements to our employees and suppliers, especially with regard to observing human rights and averting environmental risks.

We are pleased to present our first sustainability report. In it, we describe what we do, how we do it, and what challenges we face in order to continue to fulfill our responsibility and maintain the highest quality standards.

We are determined to live up to this responsibility and face the associated challenges.

We hope you enjoy reading the report.

*Yours sincerely,*

Values are the driving force behind Jagenberg Group: Trust, a sense of togetherness, integrity, and reliability are not only characteristic of our entrepreneurial spirit - together with our partners, they allow us to continuously develop solutions.



*S. Witt*

**Dr. Stephan Witt**  
Executive Board Jagenberg AG



*C. Jostes*

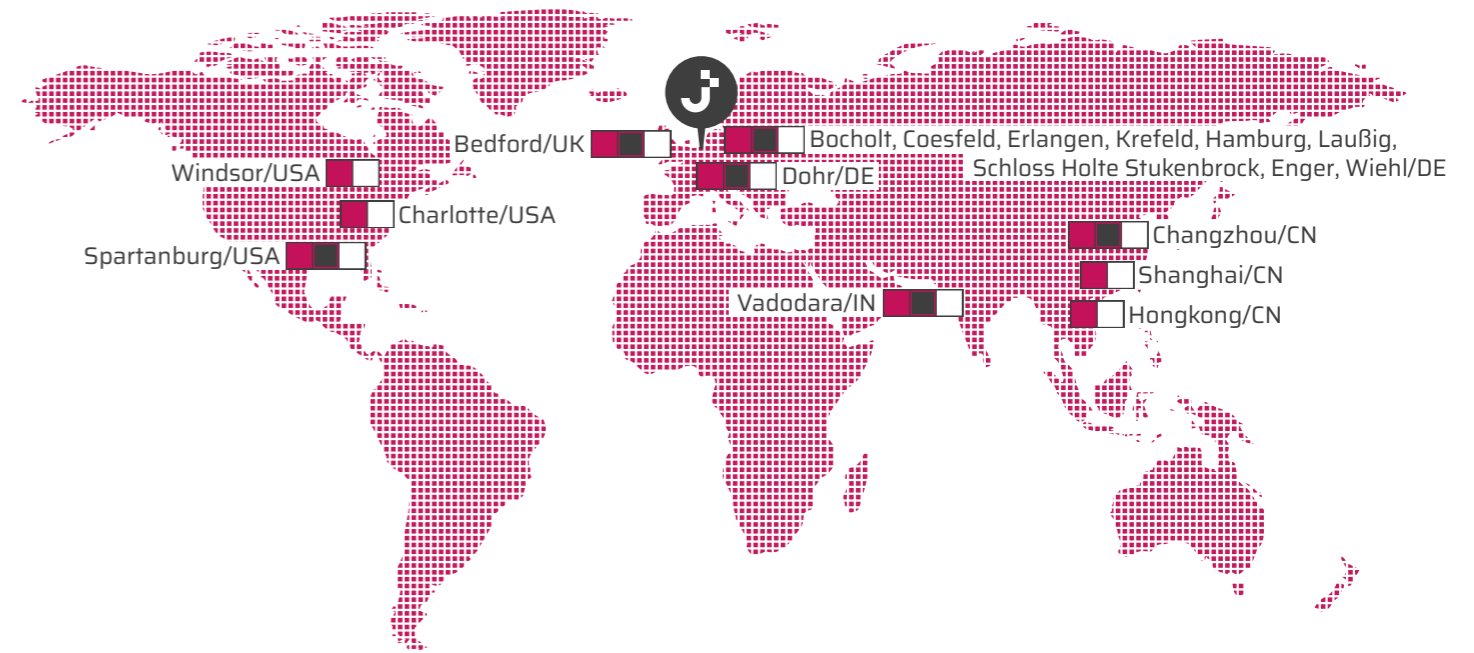
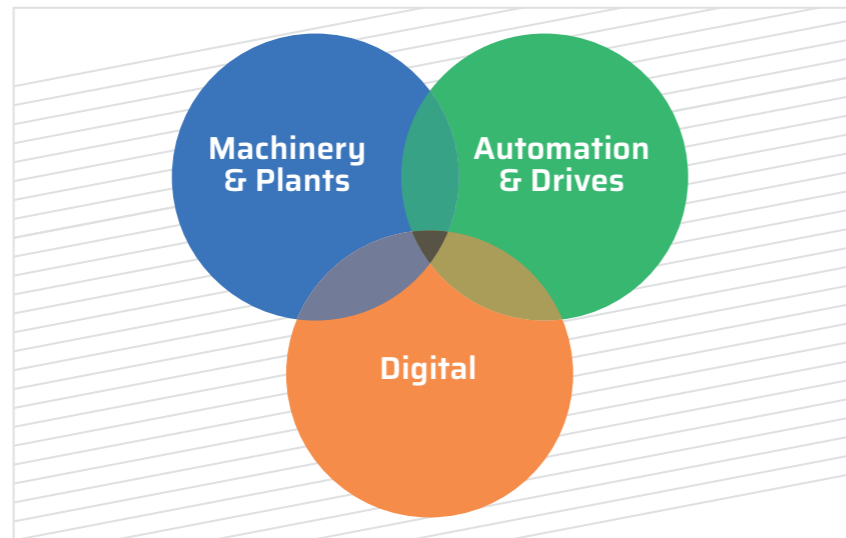
**Dr. Christian Jostes**  
Managing Director Kleinewefers GmbH

<sup>1</sup> GRI 2-22.

# 1. A PORTRAIT OF THE JAGENBERG GROUP<sup>1</sup>

The Jagenberg Group is based in Krefeld and specializes in the area of machinery and plant engineering, employing around 1,300 people worldwide. Over 150 years of experience characterize the Jagenberg Group, which today is a medium-sized group of companies focused on providing innovative solutions for the processing of web-shaped materials.

Our companies have built up a strong and comprehensive portfolio of products and services in their respective business areas: Machinery & Plants, Automation & Drives, and Digital.



In order to be able to offer our customers future-oriented solutions from a single source, we develop integrated turnkey systems for demanding applications.

As an international group of companies with locations across Europe, Asia, and North America and a total of ten production sites, the Jagenberg Group is synonymous with short channels, good accessibility, and fast delivery times. At the same time, the pooling of expertise within our group of companies ensures high performance.

Our corporate culture is the key to our success. A shared, group-wide system of values shapes this. In particular, these values include dealing with each other based on mutual trust, a sense of togetherness, integrity, and reliability - values that drive our continuous development and the close cooperation with our partners.

Group headquarters: Krefeld/DE

- Sales
- Engineering/Manufacturing
- Service

**19** Locations  
**12** Companies

<sup>1</sup> GRI 2-1.

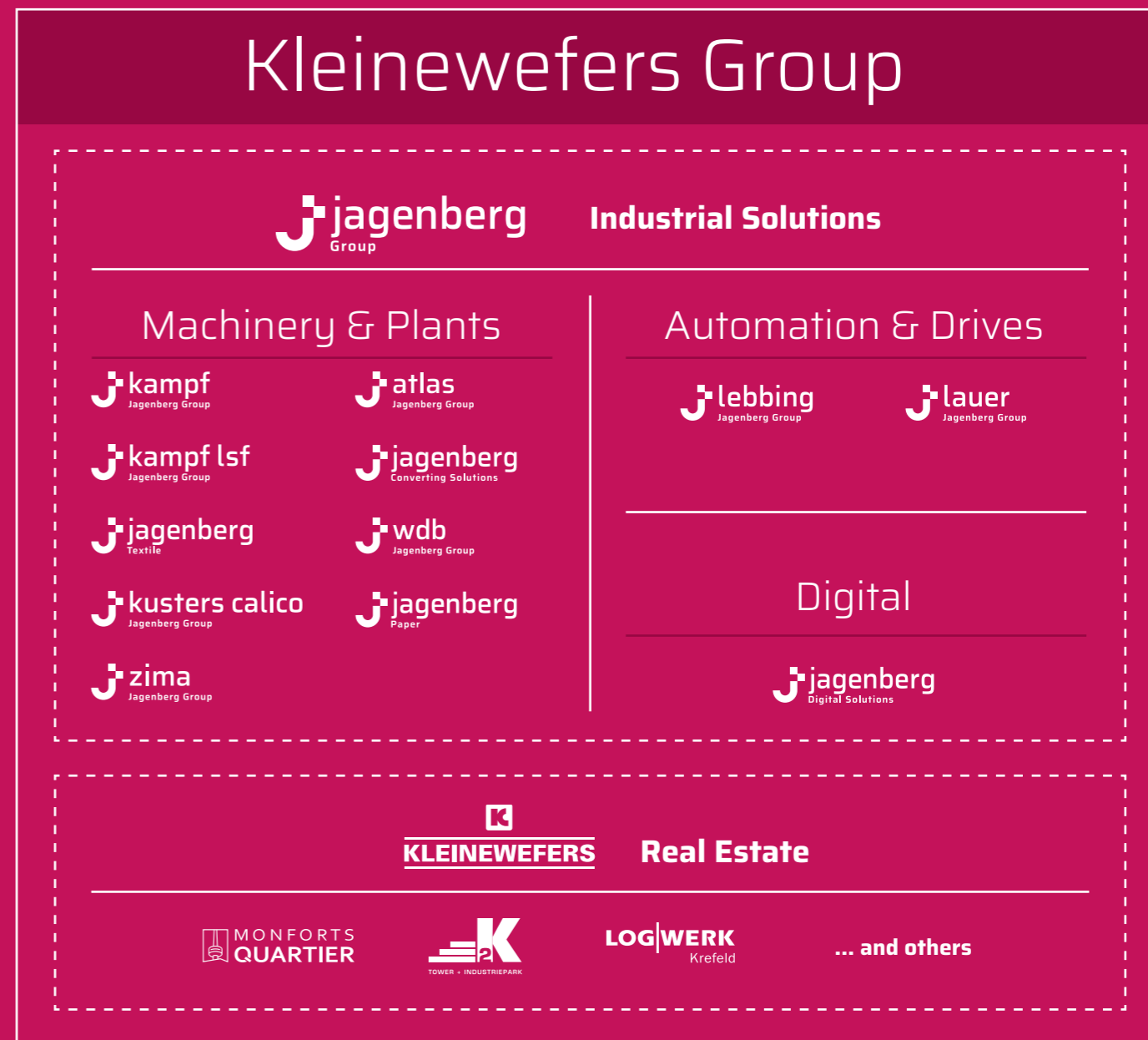
# 2. CORE BUSINESS

## 2.1 Organizational structure and business segments<sup>1</sup>

The year 2003 marked the start of the new Jagenberg era. Kleinewefers GmbH takes over Jagenberg AG and concentrates on establishing and expanding a new medium-sized group of companies. Since then, Jagenberg AG has served as a management holding company for all industrial companies, whereas Kleinewefers GmbH acts as a financial holding company with its own real estate business.

**With three business segments - Machinery & Plants, Automation & Drives, and Digital - the companies within the Jagenberg Group pursue the overarching goal of developing solutions that meet high technological standards.** In doing so, as a group of companies, we are not limited to one specific application area, but instead provide comprehensive solutions for various industries. With our comprehensive range of technologies, services, and expertise covering the processing and finishing of web materials, we supply safe, efficient and, above all, future-proof solutions for both new machines and upgrades.

<sup>1</sup> GRI 2-1 2-2 2-6.



In 2003, Kleinewefers GmbH acquired Jagenberg AG.



Sales in € m

≈ **330** 2022  
2003 ≈ 100

## Machinery & Plants

The historical roots of the Jagenberg Group lie in mechanical engineering and the Machinery & Plants business segment remains the largest in our portfolio. Based on our extensive experience, we develop products and solutions for the processing and finishing of web-shaped materials, tailored to the specific requirements of customers in a wide range of industries – from slitting and winding machines to coating, printing, and dyeing machines.

Hand in hand with our customers, we develop both standard solutions and customized systems that set standards and form the basis for long-term partnerships. In doing so, we always remain open to the development of new fields of application and possibilities.

### ***Kampf Schneid- und Wickeltechnik GmbH & Co. KG***

Slitting and winding technology from Kampf has been contributing to the high-quality production and processing of web materials for many decades. As a leading expert, the company drives technological developments worldwide and intelligently links its machines with upstream and downstream processes through automation and digitalization.

### ***Atlas Converting Equipment Ltd.***

Atlas Converting was established in 1976 and is a world leading supplier of slitting and rewinding solutions and finished roll handling systems. The Atlas brand is recognized as a global market leader in the production of primary and secondary slitter rewinders with over 4,000 machine installations in over 80 countries around the world.

### ***Kampf LSF GmbH & Co. KG***

As a specialty machine builder with more than 100 years of experience, Kampf LSF develops solutions for processing and finishing web materials. Tailored to meet the high requirements of demanding industries, Kampf LSF develops and adapts both near-standard components and machines as well as individually designed systems.

### ***Jagenberg Converting Solutions GmbH***

Jagenberg Converting Solutions supplies turnkey solutions for finishing demanding web materials from one single source. The portfolio includes solutions for printing, varnishing, and coating. Here, the company focuses on highly demanding applications for technical films in the fields of decorative printing and lithium-ion batteries.

### ***WDB Systemtechnik GmbH***

The company's focus is on mechanical and plant engineering. WDB offers customized solutions for printing, painting, and coating. The company's core business is the construction of plants and machines adapted to the customers' specific requirements.

### ***Jagenberg Textile GmbH & Co. KG***

Jagenberg Textile manufactures and upgrades wet finishing equipment for woven and knitted fabrics and has a first-class reputation among customers in Europe and South America. Now one of the leading suppliers of solutions, Jagenberg Textile's portfolio includes textile dyeing machines as well as bleaching, mercerizing, and washing plants. The special emphasis of Jagenberg Textile is on the Swimming Roll according to Küsters Technology – exclusively Made in Germany for all padders and high-efficiency squeezing devices.

### ***Jagenberg Paper GmbH***

As a specialist in servicing, retrofitting, and mechanical engineering, Jagenberg Paper GmbH is renowned for high-quality, custom-fit solutions in paper finishing. Drawing on decades of experience, the company develops innovative concepts for modernizing winders, calenders, and sheeters. In the new machine segment, the focus is on winders and calenders.

### ***Kusters Calico Machinery Private Ltd.***

The result of an Indo-German joint venture with pooled expertise, Kusters Calico is one of the leading suppliers of machinery and plants for wet finishing involving textiles. Based in Vadodara, India, the company also designs, builds, and sells coating and laminating lines for the packaging industry.

### ***Zima Corporation***

The main focus of the US subsidiary Zima is on equipment for efficient wastewater treatment and textile and carpet finishing. As a high-end developer and manufacturer, the company, which is one of the world's leading producers of dyeing and finishing equipment, particularly specializes in stainless-steel plants.

## Automation & Drives

As a partner to machine builders and operators, our Automation & Drives business segment is characterized by its ability to provide comprehensive advice to customers in a wide range of industries with a focus on solutions. Our core expertise covers drive, control, and automation technology for machinery and plants used to process web materials.

The aim is to develop customized solutions for efficient production processes – including for current and future challenges associated with Industry 4.0. To this end, we support our customers from the conceptual design and project planning stage throughout the entire project life cycle and also provide after-sales service. In addition to solutions for new plants, another focus of our work is on the modernization and optimization of existing machine technology (retrofit) as well as our competence in CE marking.

### ***Lebbing automation & drives GmbH***

The name Lebbing is closely associated with the planning, design, and installation of drive and automation technology as well as data systems. The innovative company's portfolio includes planning and realizing drive and automation technology for new plants as well as modernizing and optimizing (retrofitting) existing machine technology.

### ***Lauer CE-Safety GmbH***

Lauer's range of services is entirely focused on prevention and safety and includes the full preparation of CE markings, safety analyses and assessments, functional safety engineering, the preparation of technical documentation, and the provision of training.

## Digital

The focus of the Digital business segment is on optimizing and increasing the efficiency of companies across the entire production process. As one of the leading providers of digital solutions, we take a holistic approach with the integrative platform we have created, the@vanced. This complements the Jagenberg Group's existing digital offering by catering to the more advanced requirements of our customers as well as new partners from related industries.

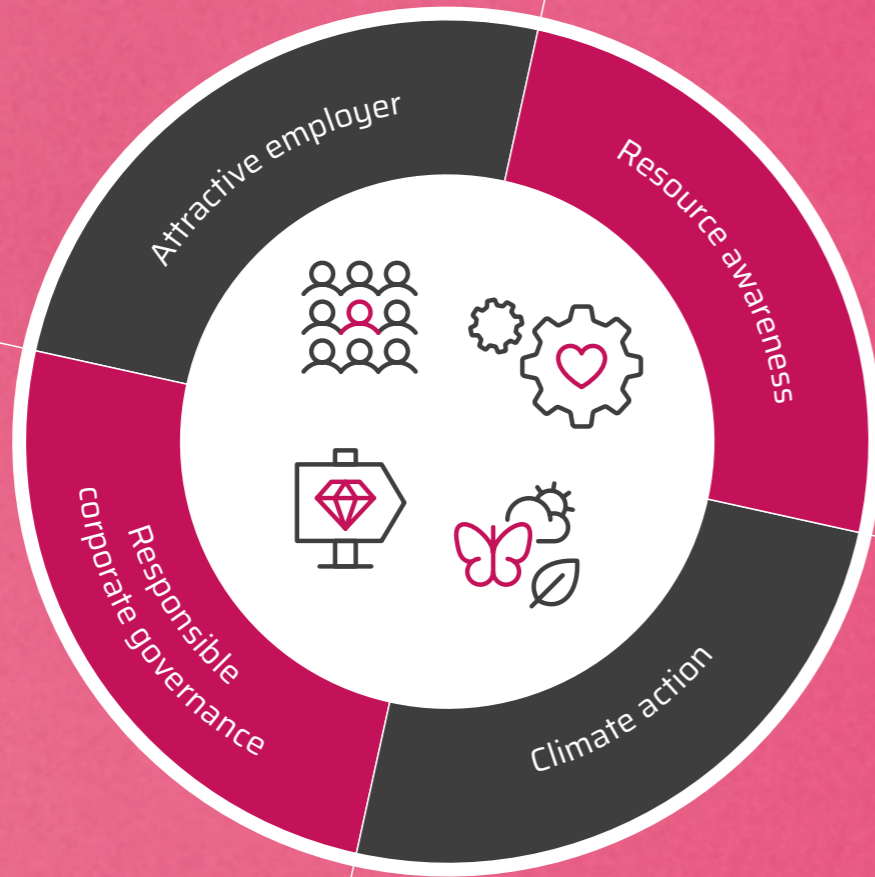
To this end, we are working hard on new digital products covering future areas defined by us. This includes intensive collaboration within the Jagenberg Group as well as partnership with and investment in promising start-ups and cooperation with universities and external partners.

### ***Jagenberg Digital Solutions GmbH***

Jagenberg Digital Solutions adds value in the area of production with digital products and services. The integrative IIOT platform the@vanced offers manufacturers from a wide range of industries a powerful basis for digital communication between machines and planning systems and serves as an enabler for data-based services, thus ensuring efficiency in the manufacturing process.



**Create.Future.Together.**



**The four focus areas  
that shape the sustainability strategy  
of the Jagenberg Group**

## 2.2

### **A responsible approach <sup>1</sup>**

The Jagenberg Group acts with foresight, prudence, and responsibility. That is why sustainability also plays a key role in our j-united 2025 corporate strategy. Its aim is to actively shape the future and work together to find innovative solutions to new challenges. For us, it therefore goes without saying that - in addition to concentrating on future areas with a high technological emphasis, profitable growth, and a global customer focus - sustainability is also given equal strategic attention.

<sup>1</sup> GRI 2-9 2-11 2-12 2-13 2-14 2-23 2-29 3-1 3-2 3-3.

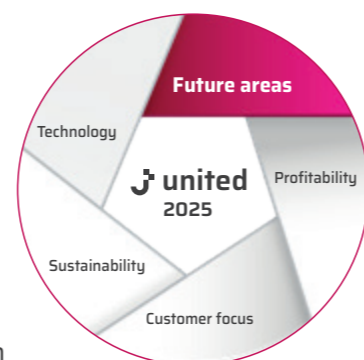
“Integrity, reliability, a sense of togetherness, and relationships based on mutual trust serve as the foundations for everything we do and simultaneously serve as our guiding compass. Fairness, respect, openness, and honesty complete our system of values.”



**Dr. Stephan Witt**  
Executive Board Jagenberg AG

Our j-united 2025 corporate strategy includes a range of ambitious goals that we want to achieve together in the coming years. The maxim “Create.Future.Together.” serves as our guiding principle in this regard. Developing creative, forward-looking solutions has been an essential part of our DNA for 150 years. We face up to the dynamic developments of the future - particularly in the context of technological progress, digitalization, and climate change - and set standards for our industry. **We take on these challenges and embrace opportunities together with a strong team of mechanical engineers, automation specialists, digitizers, and creative minds.**

Ultimately, we focus on future areas with a high technological emphasis and generate new solutions and business models with the aid of digitalization and an extended range of innovative services, creating the basis for tangible customer benefits. This enables us to offer our employees long-term jobs and excellent development opportunities in a digital and highly flexible working environment geared toward qualifications. With the Group's ambitious climate action and environmental protection goals, we are also fulfilling our role as part of society.



## 2.2.1

### Overarching sustainability strategy

#### CARING FOR THE FUTURE

Our sustainability strategy systematically integrates our commitment to take responsibility and minimize negative environmental impacts into our corporate activities. We respond to the associated challenges by making the most of our strengths and skills and sharing our knowledge within the Group and with our suppliers and customers. Our understanding of sustainability-related risks in particular enables us to adopt new perspectives and develop sustainable solutions.

#### We concentrate on the following action areas:



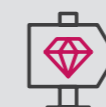
**Climate action**  
We support the Paris Agreement and are actively helping to reduce carbon emissions.



**Resource awareness**  
We establish a responsible approach to the use of resources along the entire value chain.



**Attractive employer**  
As an employer, we attach great importance to treating our employees responsibly and respectfully. We create attractive conditions to promote personal and professional development.



**Responsible corporate governance**  
In line with our value system, we act on the basis of irreproachable conduct from an ethical and legal perspective.

## 2.2.2

### Ambitions and goals

We are continuously working on ways of enhancing how we take corporate responsibility and have therefore set ourselves the following ambitions and goals:

#### Climate action: Making an active contribution to reducing carbon emissions

Our focus is on integrating climate-friendly solutions into our product offering and their manufacturing processes. We take responsibility for climate action and are committed to making a positive and tangible contribution wherever we can.

AMBITIONS AND GOALS	STATUS	PROGRESS IN 2022
Improved efficiency of our products	Ongoing	<ul style="list-style-type: none"> <li>Preparations to introduce energy monitoring solutions to keep track of a machine's energy efficiency</li> <li>Waste reduction</li> </ul>
Recording of emissions generated by operations	Ongoing	<ul style="list-style-type: none"> <li>Processes established to record Scope 1 and Scope 2 emissions and selected Scope 3 emissions</li> <li>Plans to expand the range of Scope 3 emissions recorded for 2023</li> <li>2021 established as the reference year for quantifying the achievement of goals</li> </ul>
Reducing carbon footprint by 14% (2021-2025)	Started	<ul style="list-style-type: none"> <li>Measures established for achievement of goals</li> <li>Purchase of carbon-neutral electricity defined as a key measure</li> </ul>
Neutralization of unavoidable emissions	Started	<ul style="list-style-type: none"> <li>Goal defined: Unavoidable Scope 1 and Scope 2 emissions are to be retrospectively offset from 2023</li> </ul>

#### Resource awareness: A responsible approach to resources along the entire value chain

We take responsibility for environmental protection and are committed to making a positive and tangible contribution wherever we can.

AMBITIONS AND GOALS	STATUS	PROGRESS IN 2022
Commitment to the circular economy	Ongoing	<ul style="list-style-type: none"> <li>Commitment to the R-Cycle community</li> </ul>

[R-Cycle community: www.r-cycle.org](http://www.r-cycle.org)

#### Attractive employer

The people within our group of companies are the key to our success. It is therefore our declared aim to be perceived as an "Employer of Choice" as part of our employee recruitment efforts - not just by our employees, but also on the market.

AMBITIONS AND GOALS	STATUS	PROGRESS IN 2022
Establishment of efficient recruitment and onboarding processes geared toward needs and target groups	Ongoing	<ul style="list-style-type: none"> <li>Launch of the Group-wide career site "Unbox the future with us" in November 2022</li> <li>Introduction of a Group-wide recruitment management system</li> <li>Development of an onboarding site</li> </ul>
Increase staff retention rate and expand staff development across the Group	Ongoing	<ul style="list-style-type: none"> <li>Group-wide introduction (DE) of JobRad bike leasing</li> <li>Group-wide introduction (DE) of a company pension scheme</li> <li>Group-wide introduction of a hybrid working model</li> <li>Group-wide introduction of e-training courses</li> <li>Assignment of a bachelor's thesis to determine measures aimed at decentralized company health promotion</li> </ul>
Measures to enhance the perception of our corporate culture	Ongoing	<ul style="list-style-type: none"> <li>Launch of a process to integrate new group members</li> </ul>

## Responsible corporate governance

Our focus is on integrating ESG (Environmental, Social, and Governance) criteria as part of our corporate culture. As a globally operating group of companies, we are especially concentrating on respecting and observing human rights.

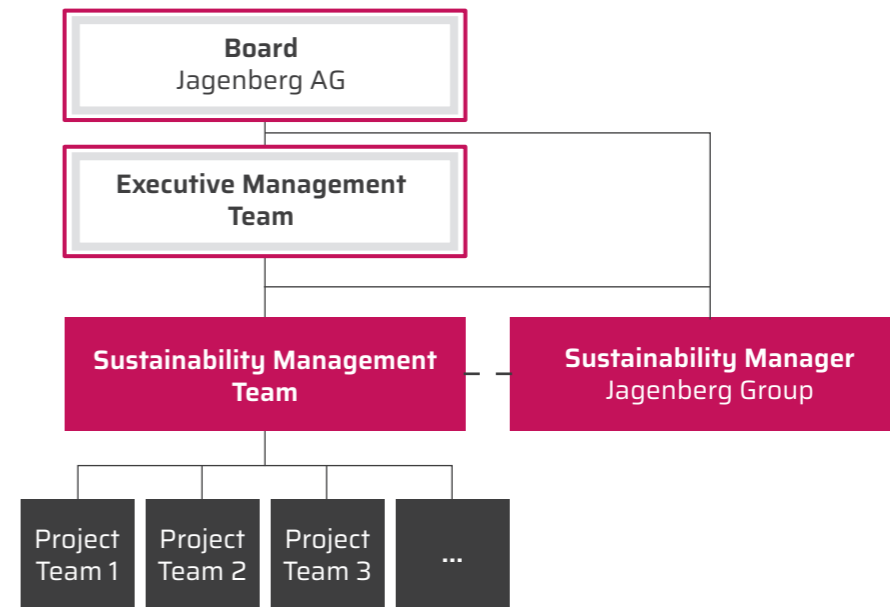
AMBITIONS AND GOALS	STATUS	PROGRESS IN 2022
Establishment of a human rights strategy	Ongoing	<ul style="list-style-type: none"> <li>▶ Group-wide Code of Conduct for Suppliers published</li> <li>▶ Risk assessment conducted for indirect supplier relationships</li> <li>▶ Code of Conduct established for employees by the Kleinewefers Group</li> <li>▶ Declaration of Principles drawn up</li> </ul>
Introduction of ESG governance	Completed	<ul style="list-style-type: none"> <li>▶ Sustainability Management Team installed as a Group-wide management and monitoring organ</li> <li>▶ Group-wide sustainability management established</li> </ul>
Increased transparency for the Group's sustainable activities	Ongoing	<ul style="list-style-type: none"> <li>▶ Sustainability reporting established</li> <li>▶ Information of energy-saving measures shared with employees</li> </ul>
Evaluation and updating of the materiality matrix	Ongoing	<ul style="list-style-type: none"> <li>▶ Limited materiality analysis conducted among management teams</li> </ul>

### 2.2.3 ESG governance<sup>1</sup>

For us, good corporate governance requires efficient collaboration between managers and board members as well as trusting cooperation between both bodies and the employees, who work together in an effective organizational structure. These general conditions help to secure the trust of business partners and employees in the course of our business activities.

<sup>1</sup> GRI 2-9 2-11 2-12 2-13 2-14 2-23.

## Governance



In general, we establish trusting and sustainable corporate governance at Jagenberg by means of a robust governance framework that clearly defines responsibilities and decision-making powers.

Organizational responsibility for sustainability criteria is regulated in a transparent manner. Fundamental strategic decisions are made by the Executive Board of Jagenberg AG. Every year, the Executive Board is presented with a formal report detailing the Group's sustainability activities and the extent to which targets have been achieved. The overriding aim for the reporting period was to strengthen the strategic importance of sustainability issues for the Group. The Executive Management Team is responsible for the Group-wide sustainability strategy. The managing directors of

the Jagenberg Group's subsidiaries are responsible for implementing strategic measures in their respective areas of responsibility. The Sustainability Manager and his team, who are part of the Executive Management Team, monitor the effectiveness of the implemented sustainability systems and processes. The SMT is composed of employees of the Jagenberg Group and Kleinewefers Group. Project teams nominated by the SMT are formed as cross-functional working groups and implement any sustainability activities. The Group's Sustainability Management Team centrally coordinates the Group-wide sustainability efforts, supporting the management teams and the Executive Board. The Group Sustainability Manager reports directly to the Executive Board of Jagenberg AG.

## 2.2.4 Materiality

In the reporting year, we conducted a limited materiality analysis among the managers of the Jagenberg Group for the first time, thus laying the foundations for our sustainability strategy. The materiality analysis was based on the Global Reporting Initiative (GRI) Standards and the EU Commission's proposal for the Corporate Sustainability Reporting Directive (CSRD).

In the reporting year, the group of stakeholders involved in the analysis was made up solely of the managers of the affiliated subsidiaries as internal stakeholders. The managers evaluated the individual issues on the basis of two aspects: (1) the relevance of the Jagenberg Group's activities to our stakeholders and (2) the impact of the sustainability criteria on the Jagenberg Group. The findings

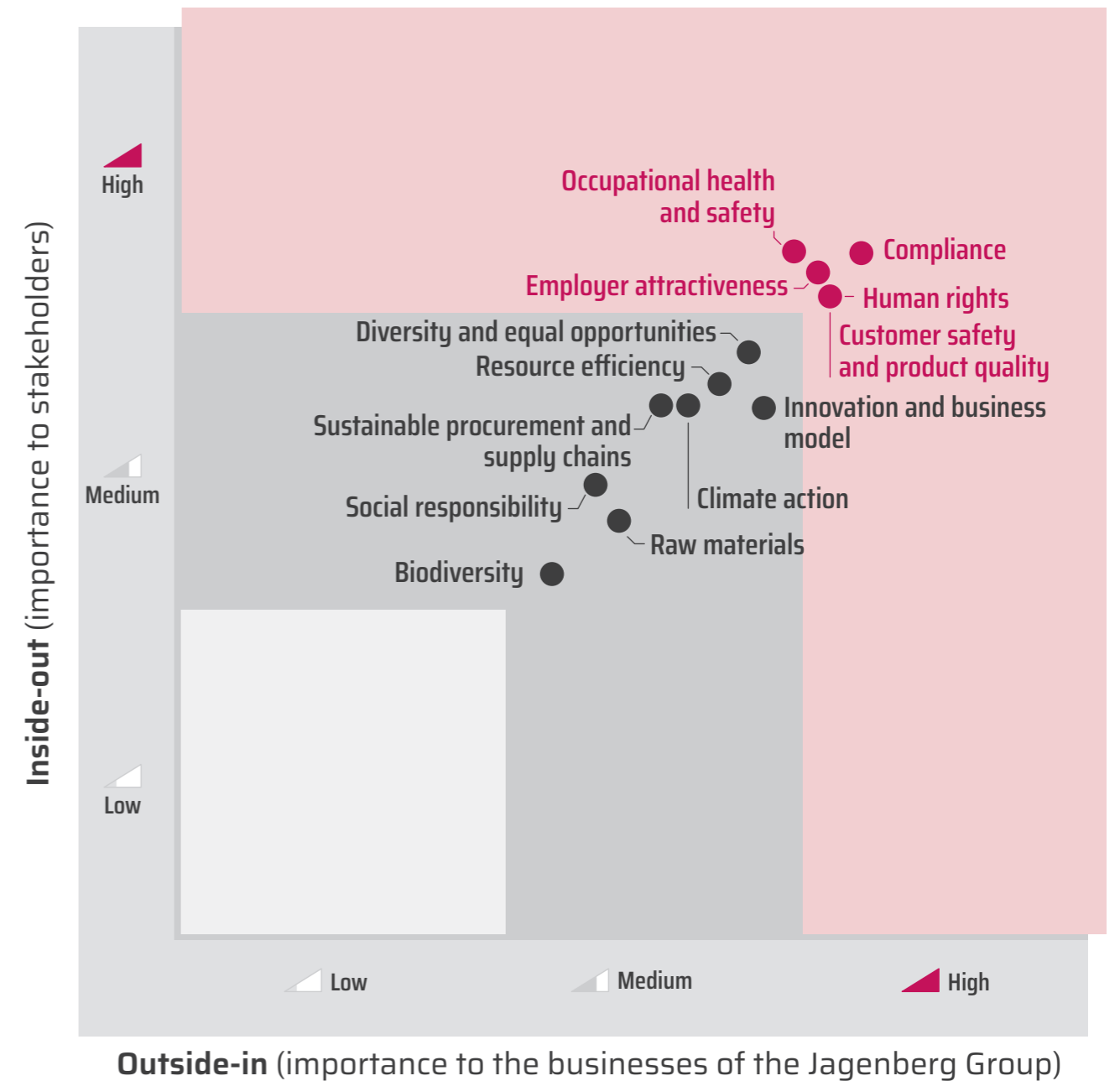
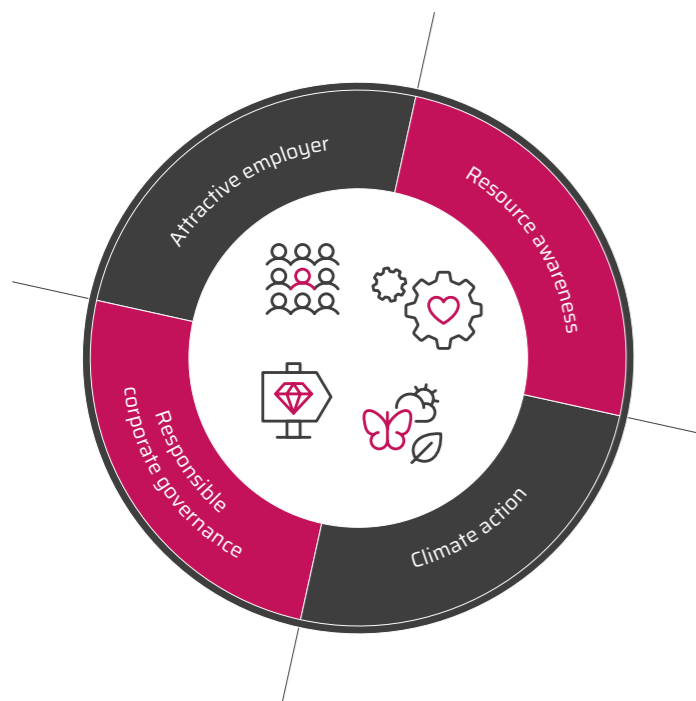
were validated and approved by the Executive Board.

Our materiality matrix shows the findings of our materiality analysis. The horizontal axis shows the business relevance of the individual issues to the Jagenberg Group, while the vertical axis shows the relevance of our activities to our stakeholders.

In future reports, we expect adjustments in the findings as additional stakeholder groups will be taken into consideration.



**Our sustainability strategy** and the goals and ambitions set out therein have been developed with an eye on the key focus areas.



CARING FOR **PEOPLE.**

Advance society - and take everyone  
along. Is that possible?

**Questions that drive us.**



# 3. EMPLOYEES AND SOCIETY<sup>1</sup>

The value of a company is determined by the people who work there as well as their attitude to the job and awareness of how they do it. In keeping with our corporate maxim “Create.Future.Together.”, we offer a working environment characterized by trust, where our employees can contribute their enthusiasm and ideas every day in order to shape the future development of our company in conjunction with innovative products and services.

**Our employees are the most important factor in our success**, which is why they are an integral part of our j-united 2025 corporate strategy.

The focus of our human resources strategy is on further enhancing the positive image of our group of companies and its individual members and consolidating our position as an “Employer of Choice.”

<sup>1</sup>GRI 2-7.

In **five different countries** we have **company headquarters** (USA, UK, Germany, India, and China).

~ **800**  
Employees in Germany



~ **1,300**  
Employees worldwide



We are the **solutions provider** for your roll-to-roll processes.



From 2023, up to **70 children** can use a **sustainable day-care center** in Mönchengladbach to play, learn, and grow. Kleinewefers Group played a key role in its planning and construction.

3.1

## Attractive employer: Three reasons that speak in favor of the Jagenberg Group



REASON  
#1

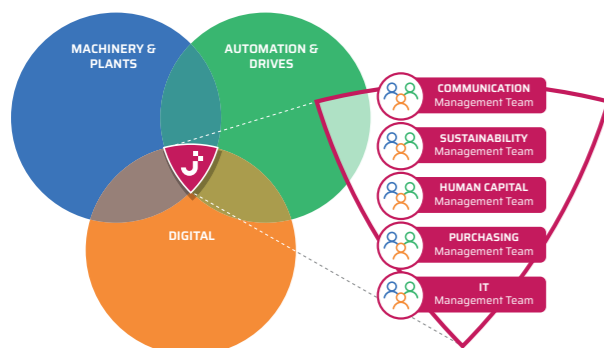
### Together: Team spirit is the recipe for success

Our understanding of team spirit is the sense of togetherness of those working in our Group. For us, it is the element within our teams that yields success.

Everyone within the Jagenberg Group is pursuing one aim: to succeed together. Regardless of whether they have been with us for 30 years or just two months - we see ourselves as a team. And when we say we work with and for one another, it shows that every voice is heard, every idea is given a chance, and every person is respected - always in line with our common values (see also page 78-79):

Different cultures and different backgrounds and talents - diversity makes us strong: as individuals, as a company, and as an international group, in particular.

We consciously keep our organizational structures flat and favor short decision-making channels. That's because we are convinced that a rapidly changing world requires incredibly flexible reaction times as well as joined-up thinking and actions. Accordingly, dialogue within the Jagenberg Group is held across different levels and in an interdisciplinary manner - this manifests itself in the cooperation of the various cross-company management teams.



*Interdisciplinary teams permit comprehensive sharing of knowledge and serve as think tanks to further development in specific focus areas.*



We listen to each other, motivate people to think outside the box, and react quickly to swiftly put new ideas into practice. For new employees, this means they are invited to get involved from the very beginning and shouldn't be afraid to share their ideas and inspire us! We take a professional approach to onboarding in order to make the experience as pleasant as possible for new colleagues. In 2023, we plan to complement our existing onboarding process with a Group-wide online portal for new employees. This option is already being tested actively at Kampf.

### PERFORMANCE INDICATORS EMPLOYEES IN NUMBERS (2022)

#### Number of employees

Group-wide	1,261
In Germany	788

#### Employees by gender (Group)

Male	1,099
Female	162

#### Employees by age (Group)

< 30	237
31-50	550
> 50	474

### PERFORMANCE INDICATORS EMPLOYEES IN PERCENT (2022)

#### Employees by gender (Group)

Male	87%
Female	13%

#### Employees (Group)

Temporary	2%
Permanent	98%
Part-time	8%
Full-time	92%



REASON

#2

## The future and security: Tomorrow is in our hands

We employ people in technical and commercial professions. We offer every target group a wide range of options and development opportunities - at local level as well as abroad. Our range of careers is as diverse as the people who are employed within our Group. In contrast to listed companies, as an owner-managed group of companies, we have the opportunity to think long-term - we plan for the future without any short-term pressure to succeed. If we are certain that we are doing the right thing, then we do it!

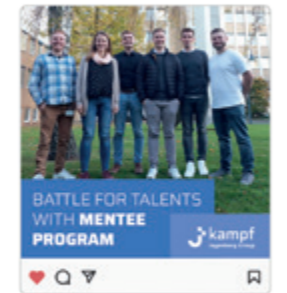


The training we provide is a key aspect of our lasting commercial success - because today's trainees are often our managers of tomorrow. In the reporting year, we launched our Group-wide apprenticeship campaign **#dubistzukunft** - a campaign that

was produced in conjunction with our current apprentices and is now being run.

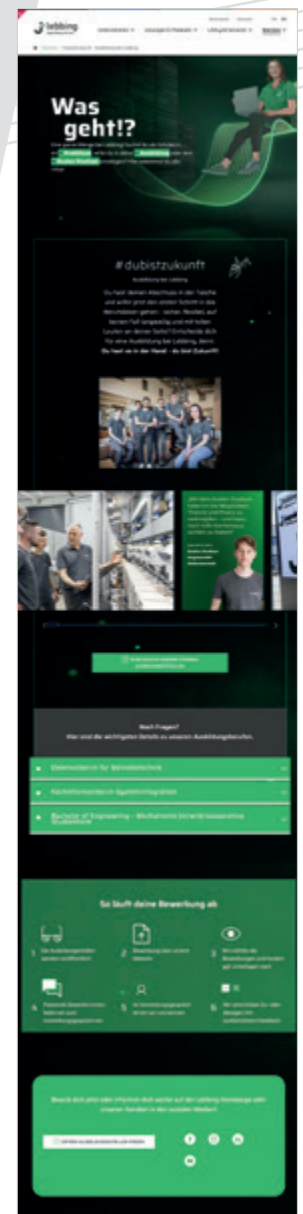
Following the successful completion of the first **mentee program** at Kampf - a talent development program that prepares specialists as well as managers alike for future challenges on both a professional and personal level - a new group of mentees has embarked on the program this year. Our eventual aim is to roll out this program across the Group in the future.

With the launch of our new career site **"Unbox the future with us"** we have been presenting ourselves with a common Group-wide career strategy on our websites. This helps us enhance the positive perception of our group of companies and its individual members.



### APPRENTICES WITHIN THE JAGENBERG GROUP

	2020	2021	2022
Apprentices (German companies)	47	53	52



*The mentee program will continue following a successful launch. Our new career site "Unbox the future with us" is accessible across the Group on our websites. The apprenticeship campaign #dubistzukunft was produced in conjunction with our apprentices.*

# Interview: Vanessa Üffing, Alexander Zeretzke, and Alexander Büdding

## Apprentices at Lebbing

### When you think back to your apprenticeship at Lebbing, what did you especially like about it?

**Vanessa Ü.** / When you are new to a company and start your apprenticeship, you firstly have to see and learn a lot. But that was really easy for me at Lebbing because my colleagues were very happy to invest time in me and were always interested in showing and teaching me as much as possible. As a result, I was quickly able to contribute to the company's success.

**Alexander Z.** / We were assigned our own projects and thus given responsibility quite quickly. I especially liked our apprentice project. We were given the task of building an exhibition object for trade fairs. It consists of a small control cabinet with sockets on the front to illuminate an LED Lebbing logo. The letters can be controlled individually by plugging in a closed circuit with wires. I really enjoyed it and we were able to manage the planning process from start to finish by ourselves!

### What will you take away from your apprenticeship?

**Alexander Z.** / Well, starting work at 6 a.m. is like the middle of the night, but you also finish work early and can still enjoy the rest of the day. I have always found it particularly nice at the end of the day to see a result in which many hours of work have been invested.

**Alexander B.** / We have always been given the opportunity to work independently and find solutions to problems on our own where appropriate. I have never been afraid of taking responsibility for my own tasks.



Vanessa Ü.



Alexander Z.



Alexander B.

### And now? What would you like to do at Lebbing in the future and what are your prospects?

**Alexander B.** / I would like to work in the software department and write the programs that control the systems. I would also find it interesting to gain an insight into the hardware department and I have always enjoyed working in the workshop. So it is pretty difficult for me to decide between all the possibilities. I am looking forward to seeing what happens next!

**Vanessa Ü.** / The collegial atmosphere and the interesting tasks made it easy for me to opt for a position as an electrical design engineer at Lebbing after successfully completing my apprenticeship. As an engineer, I feel very comfortable here in a profession that is still quite male-dominated, because we all speak on equal terms within the team. Communicating well and sharing experiences with others are indispensable - I will definitely take that away for the future.



## Shaping: We are driving technology

The history of the Jagenberg Group dates back around 150 years. From this experience, we know very well that it takes the courage to change in order to embrace what lies ahead. It is up to us whether we wait for the future - or whether we grasp it now. In order to keep on actively facing the future, our employees are given the trust and freedom they need to develop as individuals and create the logical technologies of tomorrow with their ideas.

Trust and freedom in this sense also mean being able to rely on attractive conditions. We offer our employees competitive salaries, family-friendly, flexible working hours with hybrid working models, company accident insurance, a company pension scheme, employee discounts, bike leasing options through JobRad leasing, active health management, and much more besides. By doing so, we combine the successful methods of the new world of work with the tried-and-tested recipes of a solid, traditional company.

One of the most important future issues that drives us is sustainability. Accordingly, our engineers are constantly striving to optimize the environmental footprint of our machines. In doing so, they look at aspects such as the energy consumption of the machine or the efficient use of materials in order to produce less waste. The motivation for all of this? The future.



Multiple career opportunities



Company pension scheme



Training and continuing education

Even more benefits can be found at: [www.jagenberg.com](http://www.jagenberg.com) (career section)



**“THIS  
ENVIRONMENT**

**INSPIRES,**

*opens up the space for creativity,  
and enables people to make courageous decisions.”*



Image from the campaign  
#dubistzukunft

## Interview: Jan Haase

Group HR, Jagenberg AG



### What makes working within the Jagenberg Group so special?

For me personally, above all else, it is the working atmosphere characterized by trust that I sense every day.

Trust in the capabilities of the individual, the team, and the company forms the basis that unites all of us within the Jagenberg Group. It is precisely this environment that inspires me, opens up the space for creativity, and, in my view, enables people to make courageous decisions – without worrying about having to learn from mistakes.

### What is behind #dubistzukunft?

Every generation has its own needs, its language, and its traits. That is why we decided to launch a Group-wide campaign that is specifically tailored to the needs and expectations of prospective apprentices and students who enroll in work-study programs. The people driving these ideas are our current apprentices and junior staff.

After launching our dedicated Instagram channel [@dubistzukunft\\_jagenberg](#) this year, we have been posting a lot of interesting content with regard to apprenticeship.

### Outlook: What other steps are being planned in the area of staff development?

Besides local staff development measures tailored to company level, we plan to establish a Group-wide range of training measures for our employees that reflects the diversity of activities of our group of companies.

We have started this year by initially devising a cross-company talent development program as well as a dedicated program for managers. To this end, we have also increased the number of people working in the area of staff development at Group level.

## 3.2

### Health protection<sup>1</sup>

At the heart of product development are our employees. In order to support them and provide ideal conditions for them, we rely on modern and innovative equipment, an optimal working environment, and a motivating working atmosphere.

The technical equipment in our workshops and our places of work meets the highest standards and requirements in terms of occupational safety and ergonomics. In order to create the future together within the Jagenberg Group, we use modern IT and an optimal work setting. State-of-the-art software and cloud-based digital tools are just as important to us as staff development and job security. We are committed to ensuring the health, safety, and satisfaction of our employees.

#### 3.2.1 / Occupational safety

We work together with local employee representatives, occupational safety specialists, regional social accident insurance institutions, and regulatory bodies to ensure a safe and pleasant working environment. Our employees in management roles are trained and made aware of their responsibility and duty of care toward their staff. Regular reports are submitted to the respective management teams in order to make sure that the relevant measures are taken in a timely and comprehensive manner.

The workplaces comply with the current safety guidelines, while special personal protective equipment and regular safety inspections of all machines and equipment ensure trouble-free work processes.

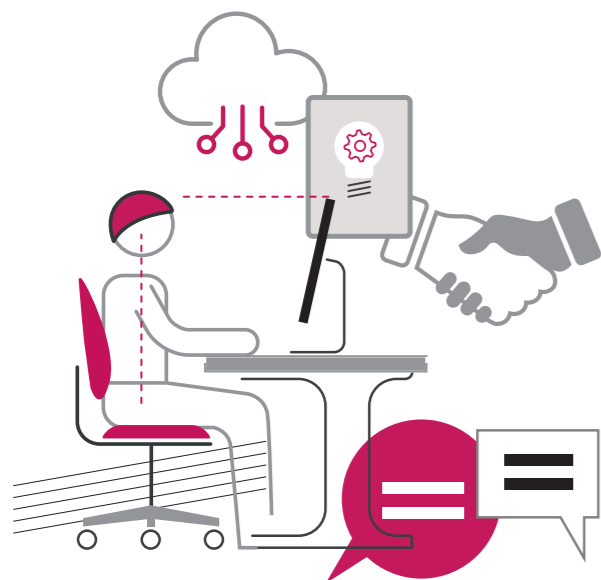
#### 3.2.2 / Health protection and prevention

Our employees are directly involved in the design of workplaces; aspects of the Workplace Ordinance (Arbeitsstättenverordnung - ArbStättV) and workplace ergonomics also have a significant impact on how the respective workplaces are equipped. Our experienced employees assist in the selection of personal protective equipment (PPE) and help to establish efficient work processes.

*At Kampf and Lebbing, there is a wide range of organized activities aimed at health protection and prevention.*



**Yoga at Lebbing.** We offer courses to promote physical and mental health (above).  
**Modern workspaces.** We spend a lot of time at our desks. However, it doesn't necessarily mean that we cannot get enough exercise (below).



<sup>1</sup> GRI 403-1-6.

From self-organized fitness, running, and cycling groups to discounted subscription fees at local gyms, there are numerous opportunities to get active. Organized events featuring professional expertise have a firm place in health management, ranging from **annual health days** to vaccination schemes. Employees are informed about these events on the company's own intranet.

### 3.2.3 / Transparency concerning qualification and duties

Every new employee is given site-specific safety training when they join the Jagenberg Group. Task-related occupational health and safety instructions are given as part of the induction program and repeated at regular intervals.

A digital management system at Kampf provides a high level of transparency for employees as well as managers with regard to the current qualification status. Service employees are prepared for the safety requirements during their worldwide assignments by a certified occupational safety management system.



*QuaKi is the local kindergarten in Monforts Quartier in Mönchengladbach. Our contribution to company childcare in a sustainable setting.*



The operational safety of electrical appliances in all departments is guaranteed within the Jagenberg Group by regular technical inspections. At Kampf, e-learning platforms are used to support the teaching of content related to electrical safety and occupational safety.

### 3.2.4 / Monitoring our health and safety measures

Only employees with access authorization can enter our premises. We use access controls to ensure that only suitably instructed and authorized employees enter the factory site.

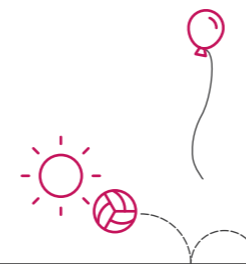
We protect visitors and service providers on our business premises by informing them of the relevant safety measures before they even enter the site. Contracts with service providers are only concluded in due consideration of the company-related safety requirements (work regulations).

## 3.3 The Group's social responsibility

We also want to show our responsibility toward the common good and society at local level. In particular, we use the resources available to us to make a positive contribution to our employees' local area and promote sustainable development at the respective location. The key to the success of the initiatives is the commitment of the employees of each and every Jagenberg company. We are proud of this corporate culture and welcome this commitment.

### 3.3.1 / QuaKi

The real estate management of Kleinewefers GmbH played a key role in the planning and construction of the sustainable "Quartiers-kinder ('Kids from the Quarter' or QuaKi)" day-care center in the traditional Monforts Quartier in Mönchengladbach. From 2023, a total of 70 children will be able to use QuaKi to play, learn, and grow, while their parents will be able to work in the immediate vicinity of the Monforts Quartier. Besides making a significant contribution to company childcare and enabling children to experience Mönchengladbach's industrial history up close, we have also made a conscious effort to embrace environmentally and climate-friendly solutions.



From 2023, in Mönchengladbach

**70 CHILDCARE PLACES** will be created with the support of Kleinewefers Group.



The QuaKi sustainability concept, for example, includes its own photovoltaic system for the power supply, a green roof, and a heat pump for the heating. If the sun doesn't happen to be shining, QuaKi is supplied with renewable electricity from the nearby wind turbine. The concept is rounded off by its timber frame design, creating a healthy indoor climate and thus the ideal conditions for the children's long-term development.

### 3.3.2 / Wiehl volunteer fire service

For many years, Kampf employees have been active in the Wiehl volunteer fire service. With its location on the southern outskirts of Wiehl, Kampf decided to provide space for a daytime unit on the company premises. Construction work began in the reporting year and **is due to be completed in mid-2023**. Kampf is thus supporting the direct expansion of the region's emergency infrastructure. In the future, employees will be able to leave their workplace at Kampf to respond to emergencies in the region and reach locations quickly.

### 3.3.3 / A meeting spot in a natural setting at the Dohr site

Kampf takes responsibility for the local environment, for example, at its production and assembly site in Dohr. Using a state-of-the-art range of machine tools, the employees at the Dohr plant in the Eifel region produce the sophisticated components that contribute to the outstanding quality of the slitting and winding performance of Kampf slitting and winding machines.

A meeting spot in a natural setting has been created on the company premises, which partly helps to promote local biodiversity with an insect hotel and two beehives, but also gives employees the opportunity to relax both physically and mentally by a landscaped pond during their breaks. In addition, schoolchildren are invited to use the location for biology lessons. **The cooperation with schools gives potential future employees a link to the company at an early stage.**

### 3.3.4 / Kampf e-racing team sponsorship

Kampf supports University of Siegen students who compete in Formula Student with e-racing cars they have developed themselves. Under the motto "The future of performance," the students gain practical experience and promote the development of e-mobility and carbon-neutral technology. Kampf provides students with expertise in mechanical and electrical engineering in the hope of attracting the skilled workers of the future. Once again in the 2023 racing season, Kampf will be lending its support.



**A meeting spot in a natural setting** at the Dohr site. Employees and schoolchildren are invited to experience nature in the heart of the factory site (top left).

**A daytime unit** for the volunteer fire service on Kampf's premises: Our contribution to enhancing the emergency infrastructure (top right).

**E-mobility** is the future and we are helping to shape it. Kampf is supporting the University of Siegen's efforts to develop an e-racing car (left).



*Kusters Calico: Social engagement is a matter close to the heart of our company in India.*



### 3.3.5 / Social engagement in Bamangam

Kusters Calico has been working in the local community and boosting social development for a number of years. Its involvement goes beyond the Indian legal requirements linked to corporate social responsibility, because Kusters Calico is always looking for ways to provide the best local support that the situation requires. In addition, local involvement is a matter close to Kusters Calico's heart, which is why its charitable efforts are not only monetary in nature, but are always accompanied by human interactions and efforts. In recent years, for example, Kusters Calico has supported Missionaries of Charity by supplying fitness equipment and helped a state hospital in Vadodara, India, by donating stainless-steel oxygen cylinders during the pandemic.

In the reporting year, Kusters Calico was repeatedly involved in initiatives aimed at providing a good education and supporting local schools. School supplies and desks and chairs were donated for over 120 children. Even the top management of Kusters Calico was present at the handover of the gifts to the girls and boys. "At Kusters Calico, we take our responsibility seriously as a member of society. When we support young generations with a high-quality education, it means that we are working to provide a healthy and rich future for them, for all of us, and for potential future employees of Kusters Calico," said Sushil Verma, Managing Director of Kusters Calico.

### 3.3.6 / Annual blood donation initiative in Spartanburg

Blood donations play an essential role in supporting the resilience of local communities and saving lives. Blood donations are needed, for example, for acute care in the event of accidents. They are also used in cancer therapy, for planned operations, and to treat immune diseases and cannot be replaced by synthetic substitutes. Elderly members of the community in particular rely on blood donations because many diseases become more common with age.



*Donations that save lives: Employees in Bocholt also organized a blood donation campaign. We continued our activities in spring and the German Red Cross was delighted at Lebbing's and neighboring companies' willingness to donate.*

Zima, part of the Jagenberg Group, regularly supports the health and well-being of a sustainable community in Spartanburg, South Carolina (USA). Zima has teamed up with the local blood bank in Spartanburg and organizes an annual blood donation initiative for the company's employees. On these occasions, a mobile blood donation unit with the necessary equipment comes to Zima and gives employees the opportunity to donate blood on a voluntary basis. We are pleased to report that more than 50% of the people at the company generally take advantage of the opportunity to help out and save lives. In 2022, Zima recorded 45 donated units, which produces a total of 135 preparations, providing help for up to 135 people. Ken Kruse, Managing Director at Zima, said: "It is our moral obligation as a company to support the local community. **Organizing the annual blood donation initiative is our opportunity to support the resilience of our community.**"

CARING FOR **SOLUTIONS.**

How do we continue to make more  
from less and less?

**Questions that drive us.**





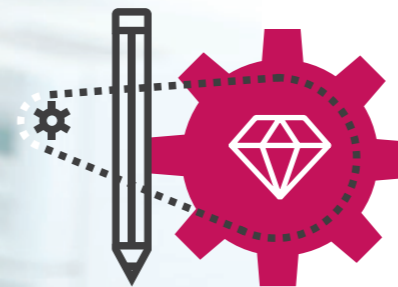


Sustainable business is not possible without a responsible approach to

**PEOPLE,  
MACHINES, AND  
ENVIRONMENT.**

## 4. SUSTAINABLE BUSINESS<sup>1</sup>

Our ambition adheres to two basic principles in particular: 1) **We want to play an active part in reducing carbon emissions** and 2) **We want to use resources responsibly along the entire value chain.** This results in us taking a holistic approach, from the procurement of components used in the manufacturing process to the production of our solutions and the operation of our machinery and plants at our customers' premises. In addition, we offer service solutions aimed at continuously helping our customers to improve their own sustainability performance.



<sup>1</sup> GRI 2-26.

## 4.1 /

**Responsible procurement**

Close cooperation with our suppliers is essential for us to satisfy our ambitions. In our Code of Conduct for Suppliers, we therefore define the basis for sustainable, legally compliant, and responsible cooperation. Together with an established network of experienced suppliers, we want to promote ethical as well as environmentally compatible solutions in order to maintain a responsible supply chain for the long term.

**We mainly procure design and manufacturing parts for our machine production. In addition, more than 90% of the associated supplier network comes from EU member states.**

This enables us to remain in close contact with our suppliers, meet our quality standards, and actively manage risks relating to our human rights due diligence work (see also chapter 6.3 "Human rights"). Supplier self-declaration and regular visits to our suppliers support our purchasing managers in their decision-making processes. Furthermore, shorter journeys are made using our supplier network, which ultimately also improves our environmental footprint.

#### 4.1.1 / Supply Chain Optimization and Resource Efficiency

A core element of many winding and slitting machines is the winding lever unit. At Kampf, the large slitting machines, such as those in the PrimeSlitter series, are equipped with several winding lever units. These are used to rewind the slit material into a roll, which we call the roll-to-roll principle. A winding lever unit consists of a right and a left winding lever design and is manufactured in four different sizes (2, 3, 4, and 6 tons). Kampf winding levers are high-tech and consist of several precisely manufactured components to enable our customers to achieve the highest level of production quality.

Up until 2020, a long process and supply chain required complex control and supplier management to guarantee that the winding lever units were fitted onto our machines on schedule at Kampf's headquarters. In particular, the geographical spread of the supplier network and the different batch sizes and associated packaging sizes revealed considerable potential for improving our environmental footprint.



**We manufacture in-house,** boosting our site in Dohr and significantly reducing our environmental footprint.



Embracing a holistic concept, Kampf has integrated much of the production chain for winding levers into its own production process. Since then, the Dohr production site in the Eifel region has been machining and assembling the winding levers and has been equipped with a machining center, complete with workpiece handling and fixture system.

### The main elements of the concept are:

*The installation of a machining center in Dohr and  
The integration of the Dohr site into the value chain and a circular logistics operation*



*The Dohr site currently employs around 80 people.  
Transport-related emissions have been cut by 70%.*

**-70%** 

**Kampf currently employs around 80 people at the Dohr site.** A manufacturing center of expertise has been set up at the site in the Eifel region in order to improve the future viability of the site, enhance our core skills, and train future generations of employees on state-of-the-art machines. Besides economic and process-related considerations, sustainable factors were also taken into account when procuring the necessary machine tools. A decision was thus made to opt for a manufacturer that takes a climate-neutral approach to producing its machines. The established solution makes efficient use of resources and includes an ergonomically designed workstation to minimize negative health consequences for our employees.

The integration of the site into the value chain meant a reduction in the number of suppliers involved. Transport-related emissions alone generated by deliveries to Kampf's headquarters in Wiehl have been cut by approx. 70% as a result of reorganizing the value chain.

Then there is the circular logistics operation, which in particular embraces the use of reusable transport boxes. Before the reorganization, one or two winding lever units could fit onto a Euro pallet and were wrapped in plastic film, whereas up to four winding lever units can now be transported in a reusable box. **The transport boxes have a number of advantages.** Firstly, several winding levers can be transported per specific loading space because the boxes can be stacked in the truck. Secondly, there is no longer any need to wrap the winding lever units in plastic film because the components are protected in the box during transportation. Kampf uses the transport boxes along



**The reusable transport boxes** are used to transport the winding lever units. They save approx. 800 kg of plastic film per year.

the value chain of the winding lever units – in other words, not just between the company locations in Dohr and Wiehl, but also when transporting them to and from suppliers. From a sustainability perspective, this saves around 800 kg of plastic film from being used each year, which would otherwise end up as waste due to the fact that it cannot be reused.

Another positive effect of not using plastic film to pack the winding lever units for transportation is the significant amount of time saved packing and unpacking the components. Since the concept was introduced, Kampf employees have been able to use their working hours much more efficiently. Random checks have shown that approximately 1,450 working hours per year can be saved as a result of using the transport boxes and adopting the new process. These working hours can now be additionally used to assemble slitting and winding machines.

**Overall, the introduction of the concept can be regarded as a complete success.** Kampf has been able to take sustainability aspects into account in decision-making processes and use them to optimize manufacturing processes. With machine procurement from a climate-neutral manufacturing operation, the ergonomic workstations, the optimized transport routes, the discontinued use of certain packaging materials, and the more efficient use of resources, the concept is satisfying in every way.



**1,450**

Working hours per year used more effectively

## 4.2

## Resource-efficient production

In order to continuously improve the sustainability performance of all production sites in a structured manner, the Jagenberg Group takes a systematic approach to recording and controlling emissions generated by its operations. The starting point for our “Strategic Emission Steering” concept is a transparent assessment of the emissions resulting from business processes. An individual profile of carbon emissions based on consumption data is available for each production site in order to be able to draw up targeted measures with maximum efficiency. Key indicators include electricity and natural gas consumption as well as the amount of fuel needed for company cars. However, water use, waste generation, and business travel activities are also assessed with regard to their carbon emissions.

For the first time, this approach allows the relevant management teams to assess where they stand. The overview and the ability to draw comparisons also enable the different sites to learn from each other. As a means of support, we have created a best-practice concept that summarizes projects and measures that have already been implemented within the Jagenberg Group and serves as a decision-making aid on the basis of environmental and economic assessment criteria. **There is a particular focus here on measures that address the following principles: decarbonization, electrification, and continuously improved efficiency.**

All companies conducted an initial assessment in the reporting year. With subsequent assessments conducted annually, the sustainability performance can be tracked and, where necessary, managed.

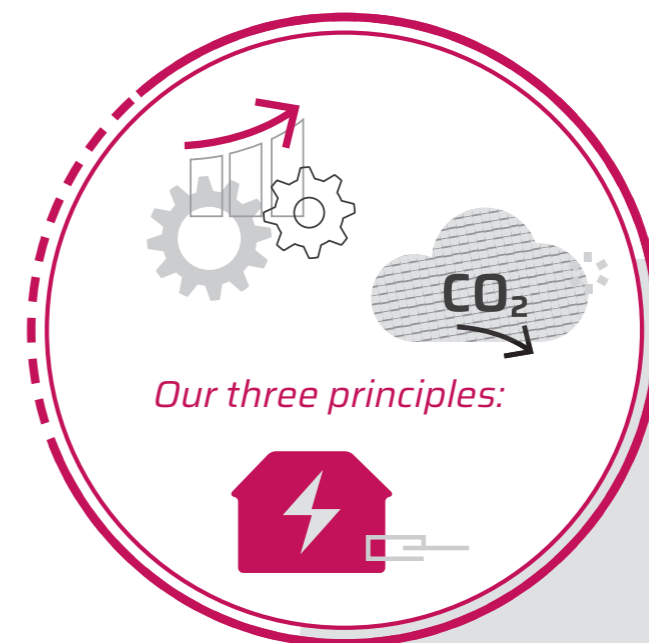
The main projects were identified and launched in 2022 on the basis of the initial assessment. These are focusing on the purchase of renewable electricity across the entire the Group, for example, and the use of heat pump technology.

### Energy efficiency and renewable electricity in practice

In the reporting year, a new building complex was commissioned at Kampf’s main site in Wiehl. The focus of the building concept is on the energy-efficient operation of the 2,500-square-meter assembly hall and the adjoining offices. Features such as a geothermal heat pump with heat recovery, a building envelope with an external thermal insulation composite system, and energy-saving LED lighting with motion sensors help to keep energy consumption to a minimum and achieve a high degree of energy efficiency.

Furthermore, **in Bocholt and Enger**, our group companies Jagenberg Converting Solutions, Lebbing, and WDB generate their own **carbon-neutral electricity from the photovoltaic system** installed at each site. In addition, there are already plans to expand the photovoltaic system at the Kusters Calico site **in Vadodara (India)** to cover **up to 70% of its electricity needs**.

The Jagenberg Group is seeking to significantly reduce its negative climate impact. **We are set to reduce our carbon footprint by 14% by 2025, using 2021 as the reference year.** Moreover, we will retrospectively neutralize our production-related and unavoidable Scope 1 and Scope 2 emissions in order to play our part in combating climate change.



*Our three principles:*



*Our three principles:  
Decarbonization, electrification, and continuously improved efficiency.*

*At the Mühlen site a lighting concept in the assembly hall and the offices help to improve energy efficiency.*

*Lebbing’s headquarters in Bocholt is supplied with carbon-neutral electricity from the photovoltaic system (below right).*

*By 2025, we are set to reduce our carbon footprint by 14%, using 2021 as the reference year.*



**14%**

*less CO<sub>2</sub> by 2025*



## 4.3

**Sustainable solutions**

The Jagenberg Group develops innovative product solutions used to process web materials. In doing so, we always face up to the dynamic changes that the future holds. Our solutions ultimately play their part in ensuring that businesses operate in an economically and environmentally sustainable manner in the future. Our machines are optimized to save resources and we use our expertise in the field of drive and automation systems to increase performance and reduce maintenance and change-over work. This applies not only to new systems,

but also to the modernization and optimization (retrofit) of existing machine technology as well as safety upgrades. We also supply innovative digital products and services that increase manufacturing efficiency and thus help manufacturers in various industries to achieve their environmental and climate ambitions. In addition, we specifically use our skills to promote the recyclability of plastic products and the use of sustainable battery technologies.

4.3.1 / **Sustainable operation of machinery and plants**

The companies of the Jagenberg Group offer their customers a wide range of systems and machines for manufacturing and processing various web materials, such as films, paper, or textiles.

When starting up production and calibrating the manufacturing parameters, the machinery and plants not only require a great deal of energy – to get the carrier material rotating, for example – but may also produce rejects in some circumstances. We address these circumstances in the product de-

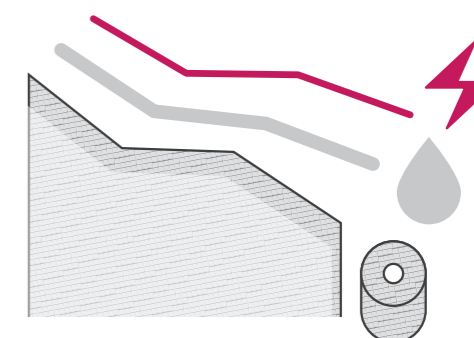
sign stage and come up with solutions that improve productivity while making efficient use of energy and raw materials.

We take into account recuperation options, for example, and high-quality and energy-efficient drive systems for energy-saving operation. Containers for liquids such as dyes, bleaching agents, or water are sized according to requirements, reducing the specific amount of raw materials used. Optimized control systems, programmable logic controllers, and process visualizations also make production processes more efficient and transparent, which ultimately increases profitability and minimizes rejects.

Jagenberg Textile's solutions, for example, remove water from materials in a highly efficient manner by means of deflector-controlled squeeze rolls, making the drying process less energy-intensive. Kusters Calico's solutions also have a lower environmental impact by reducing water consumption by up to 15%.



Among other things, **energy efficiency, resource conservation, energy recovery, waste reduction, and digital monitoring** enable us to operate our machinery and plants more sustainably. Pictured left: Modern technology with recuperation for energy recycling – the **winder from Jagenberg Paper GmbH**.



## 4.3.2

**Retrofit and upgrade service**

Our retrofit solutions represent a cost-efficient alternative to new acquisitions. We ensure system availability, for example, by replacing the electric drive and automation components. Among other things, this can improve production output, capacity utilization, and energy consumption figures.

**The advantages of retrofits are clear:**

- › Extended service life of existing systems in line with the latest technology and less waste
- › Process optimization and control combined with the potential for energy savings in the production environment
- › Compliance with the latest occupational safety standards

Among other services, Jagenberg Paper provides retrofit solutions for winders. The range of modernization measures includes recuperation options for recovering braking energy and energy-efficient hydraulic systems featuring the latest safety standards. Jagenberg Paper also provides retrofit solutions for roll handling, sheeters, and calenders in order to extend the life cycle of such products and conserve resources.

Lebbing also provides retrofit services. One cost-effective and efficient solution involves the modernization of gravure printing presses in order to make them fit for the future. All over the world, experienced engineers as well as fitters modernize such systems where the drive control system is not fit for the future due to a lack of manufacturer support and spare parts. In such instances, our customers benefit from having the drive control system upgraded in line with the latest

technology as well as a reliable supply of spare parts. This avoids waste and significantly saves resources, which in turn has a positive impact on our environmental footprint.

Kampf also offers a comprehensive portfolio that supports our customers as partners throughout the entire life cycle of their machines. Service technicians and competence centers all over the world cater to our customers' concerns on location. Upgrade Services safeguard the value of the machine base invested in and ensure the reliability of processes for the time to come. In addition, the 24/7 online remote service, which is available to our customers, lets us provide assistance quickly and without the need for environmentally harmful travel.



**Retrofit at Jagenberg Paper:**  
State-of-the-art safety and technology (top and middle).

**Retrofit at Lebbing:**  
Making machinery fit for the future by installing the latest drive control system (bottom).



## 4.3.3

**Digital solutions**

Sustainability without digitalization is inconceivable to us. Digitalization provides many opportunities to reduce energy demand, negative environmental impacts, and greenhouse gas emissions. With the@vanced, an integrative IIOT platform, we offer manufacturers from various industries a highly efficient basis for enabling digital communication between machines, components, and planning systems, thus adding value in the area of production.

Essentially, we want to help manufacturers to improve production processes and optimize the efficiency of companies across the entire value chain. Our integrative platform the@vanced provides a holistic solution that ensures connectivity and usability for the various systems of our customers and partners, generates synergy effects, and allows new potential to be exploited on the basis of aggregated data. By connecting machines, the production area, and companies as well as pooling all relevant information, the@vanced promotes high production quality, increases resource efficiency, and reduces possible downtimes.

Jagenberg Digital Solutions delivers added value by digitalizing manufacturing processes and thus embraces efficiency from different perspectives. "Smart Production" boosts efficiency by providing production data and machine status information in real time and sharing the data with other systems and processes. To ensure that this remains the case, the "Smart Maintenance" aspect provides easy access to spare parts information and maintenance videos and provides an overview of maintenance conditions and cycles. Finally, "Smart Operation" further improves efficiency through big data, opening up new potential. In addition, the@dge unit enables the acquisition of data relating to environmental factors such as temperature, humidity, or vibration level, providing an important building block on the way to predictive maintenance, machine learning, and artificial intelligence.

Digitalizing the processing of web materials: Embrace next-generation production with the@vanced IIoT platform and stay connected at all times with the my@vanced customer portal!

the @vanced  
integrative platform

my @vanced  
customer portal

→  
DIGITAL  
CUSTOMER  
SOLUTIONS

## Interview: Dr. Donatus Weber

Managing Director, Jagenberg Digital Solutions GmbH



*is the key to  
technological progress.*

### **What does “digital” mean within the Jagenberg Group?**

Jagenberg Digital Solutions represents the digital standard within the Jagenberg Group. Our aim is to improve production processes and optimize efficiency for customers of the Jagenberg Group along the entire value chain. It helps a great deal that the Digital segment is one of the three main business areas of the Jagenberg Group – along with Machinery & Plants and Automation & Drives. In our view, digitalization is the key to technological progress, which is also essential for tackling global challenges such as climate change. In short, digitalization plays a major part in helping us shape the future.

### **What role can digitalization already play in terms of sustainable development and what is the potential of the@vanced in this regard?**

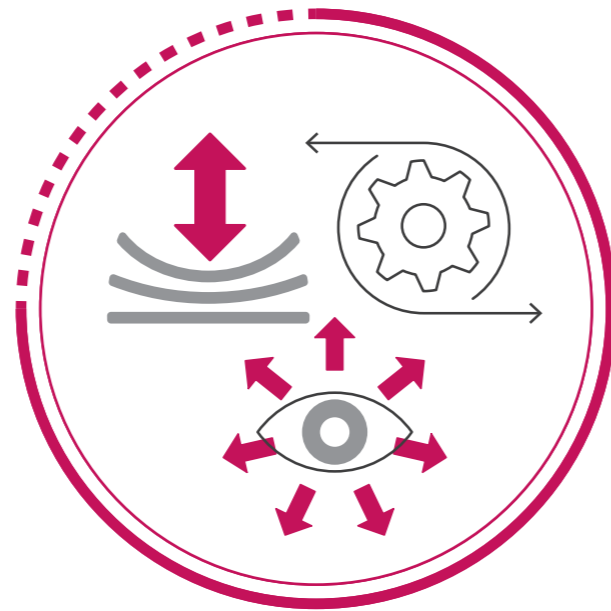
Sustainable production benefits considerably from well-coordinated processes. Digitalization of machines, components, and planning systems does precisely this – it enables digital communication and even allows the sharing of information involving a number of attributes. For example, the digital link between machine, production area, and company makes it possible to increase manufacturing quality by providing detailed operating and process reports or gain an overview of the batch status and obtain information on spare parts. Our IIOT platform the@vanced delivers precisely this. It is our answer to what is required of digital intelligence for manufacturing. With this platform, we offer our customers the opportunity to run a safe and efficient production operation around the clock and make important decisions quickly and objectively based on data.





**A look into the crystal ball: What kind of interesting things can we still expect?**

In the future, a company's success will be determined to an even greater extent by **agility, flexibility, and resilient operations**. In addition, companies are making greater efforts to achieve environmental sustainability, while also strengthening their own operations and striving to make a generally positive impact on society. On the whole, companies must continue to enhance their productivity and efficiency. New technologies will help them to reduce their carbon footprint and bolster the said resilience vis-à-vis their operations and employees.



These new technologies will be characterized by buzzwords such as big data, artificial intelligence, augmented reality, and so on, which are generally covered by the terms Industry 4.0 or the Fourth Industrial Revolution. Such buzzwords have already been with us for some time and are opening up completely new horizons for us and our customers. The associated data-based services will significantly shape the automation strategies that are needed to allow employees to concentrate on demanding tasks and enable decision-making processes to be completed quickly and insightfully in response to increasing volatility. Within the Jagenberg Group, we are looking forward to the opportunities that will present themselves to us in this regard. On a personal level, however, I am even more excited about the fact that we at Jagenberg Digital Solutions are directly involved in the development of these possibilities.

**Artificial Intelligence**  
**Industry 4.0**  
**Augmented Reality**      **Big Data**

**4.3.4 Markets**

We use our market leadership and digital skills to close plastic circularity gaps.

Our solutions are used globally in different markets. In the plastics industry, among others, our winders and slitting machines set the benchmark for meeting the highest production standards required of modern and flexible packaging materials and films.

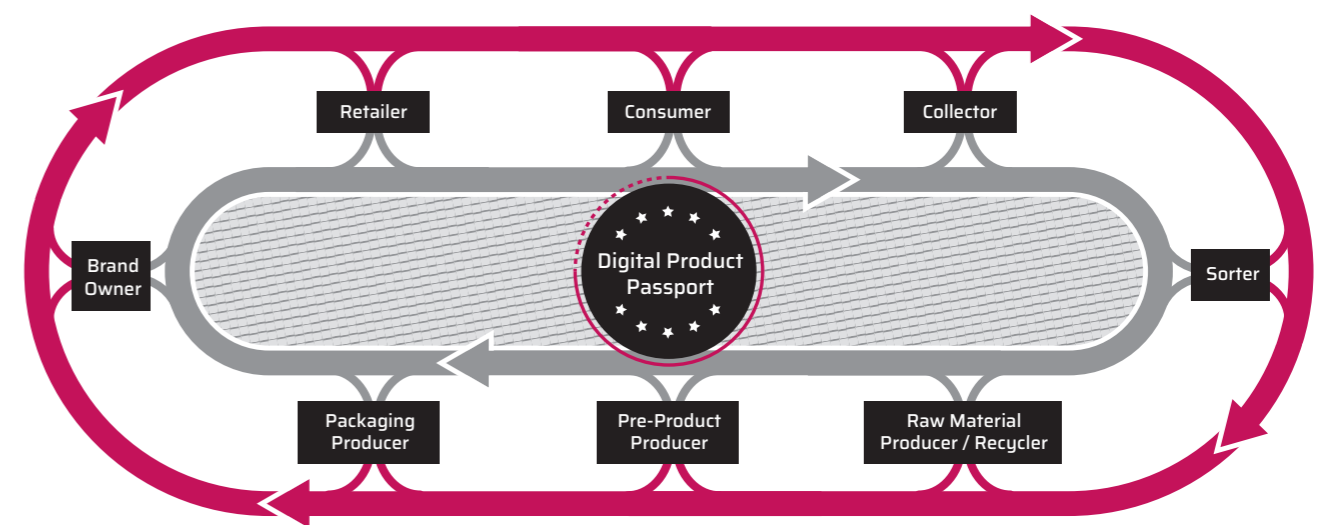
Plastic is a very good material and is critical to promoting sustainable development. The right packaging helps to prevent food loss (including drinking water) by extending its shelf life, for example, and enables medical goods to be kept sterile during transportation. Against the backdrop of an ever-growing population and the associated need to strengthen local sections of society from a social perspective, meeting these requirements will be of vital importance.

On the other hand, plastic packaging unfortunately poses a significant environmental risk at the end of its life cycle. Plastic waste in the world's oceans is an environmental disaster that we have to confront as a society, as part of the value chain, and especially as a company. Non-recycled waste is disposed of at landfill sites and indirectly ends up in the sea.

As part of the Jagenberg Group, Kampf is helping to address the root cause of the problem within the R-Cycle community, which aims to increase the recyclability of plastics around the world with the aid of an open digital standard. Kampf is using its market leadership in specific parts of the value chain and its digital skills to provide significant support in documenting packaging properties during production. The properties can be scanned during the sorting process at the end of the product's life cycle, thereby making an important contribution to the circular economy.



*The R-Cycle principle aims to increase the recyclability of plastics with the aid of an open digital standard.*



## Interview: Maik Krüger

Head of Business Development,  
Kampf Schneid- und Wickeltechnik GmbH & Co. KG

# CIRCULAR ECONOMY POTENTIAL



### What is the aim of R-Cycle?

We want to play an active part in creating a truly circular economy. As a cross-industry consortium, we are therefore working on an open and globally usable data standard that ensures complete documentation of recycling information from the production process and records it in the form of a digital product passport.

**Using a cloud-based infrastructure, the entire value chain can be traced back to a product's raw materials.**

### What is the challenge of using plastics in a circular economy?

In most cases, rather than having a homogeneous structure, plastics consist of a wide variety of components. It is therefore difficult to distinguish recyclable plastics from non-recyclable plastics in the sorting process. As a consequence, today's sorting processes can only recover low-grade recyclates, which are only suitable for a narrow range of applications.

However, demanding applications like food packaging require a pure and high-quality recyclate. Documented and accessible traceability of the plastic product's origin is essential for guaranteeing this quality.

### What characterizes R-Cycle?

Individual players will not be able to solve the current challenges in the areas of sustainability and digitalization.

R-Cycle is characterized by a special community organization and a culture of active collaboration across competitive divides. This forms the basis for successful, open, and solution-focused cooperation between different companies in the various lines of work and fields of application.

### What are the requirements for a digital product passport and how do we prepare for them?

It quickly became clear to Kampf that we wanted to become an active part of the R-Cycle initiative. We are always part of different areas of the value chain with our products and services and we share our customers' production environment with other manufacturers. A circumstance that motivated us to develop the@vanced, our IIOT platform for making connectivity and interoperability a reality. Now the@vanced provides the basis that enables our customers to take advantage of the digital product passport. We provide the functionality for the Kampf and Atlas portfolios.

### How do our customers benefit from our work in the R-Cycle community?

We are raising awareness and providing concrete solutions for current and future requirements in line with political developments. This enables us to enhance our expertise and use it for the benefit of the customer.

For example, product- and process-related data can also be shared along with recycling data and used to optimize production.

### Our expertise supports the future energy supply.

Energy production from fossil fuels is a significant driver of global greenhouse gas emissions. In order to facilitate the transition to a decarbonized energy supply, it is essential to store electricity generated from renewable sources and make it available at any time. Lithium-ion cells, for example, are currently playing a key role here, with their wide range of applications ranging from e-mobility to battery storage power plants.

We are supporting the energy and mobility transition when it comes to the production of high-performance batteries. In Jagenberg Converting Solutions, we offer companies a reliable and expert partner for all inquiries relating to the coating of innovative films for decorative applications, electronics, batteries, and fuel cells from one single source. Jagenberg Converting Solutions pools expertise within the Jagenberg Group and complements it with solutions from strategic partners depending on what is required. The total solutions supplied by Jagenberg Converting Solutions include coating and printing equipment as well as drying technologies for producing high-quality finishes for sophisticated web materials used in surface and energy applications.

“We add value to your production. Our innovative and sustainable solutions improve your productivity, make costs more predictable over the entire life cycle, cut production waste, and reduce your carbon footprint.”

**Thomas Lebbing,**  
Managing Director,  
Jagenberg Converting Solutions GmbH

As a general contractor, Jagenberg Converting Solutions combines all the skills needed for state-of-the-art roll-to-roll production. This covers all the essential manufacturing steps, including material processing and handling, high-speed coating, innovative drying, packaging, and rewinding. The turnkey system features advanced drive and automation technology, meets the necessary safety requirements, and supports production efficiency through the use of digital solutions. By way of example, a turnkey system for high-quality cathode and anode production with solvent recovery can be designed and built, helping battery manufacturers to produce their products quickly and reliably for their respective markets.

## Interview: Steffen Heckmann, Guido Lebbing, Thomas Lebbing

Managing Directors, Jagenberg Converting Solutions GmbH

### What characterizes Jagenberg Converting Solutions GmbH?

**Steffen Heckmann** / We are reconceiving plant engineering by pooling the expertise of the companies within the Jagenberg Group to create a complete solution and contributing our own expertise in the areas of energy and surfaces. In doing so, we can offer our customers a broad portfolio that draws on the products and services of our established and innovative sister companies. It includes solutions ranging from winding technology, coating and drying technology, slitting machines, and automation and control solutions to machine safety and risk assessments. Together with our customers, our team develops tailored concepts and oversees them from the project planning stage to the successful commissioning process. Our expert contact persons from within the Group also provide the subsequent service so that the customers' system is always in the best hands. We call this “Integrate.Converting. Competences.”

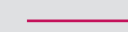
**RECON  
CEIVING  
PLANT  
ENGINEER  
ING**



Steffen Heckmann

### For which particular market requirements does Jagenberg Converting Solutions offer innovative products and services?

**Thomas Lebbing** / In the Energy business unit, we focus on electrode production for battery cells, which are mainly used in the automotive industry. Battery technology is developing at a rapid pace, and with it the manufacturing technologies. Accordingly, our customers also need advice on the mechanical engineering side. Our role therefore goes way beyond pure mechanical engineering because we see ourselves as a development partner helping to meet the demanding challenges of our customers.





## PROVIDING INNOVATIVE SOLUTIONS

Guido Lebbing

### What form do these solutions take?

*Guido Lebbing* / When designing our systems, we listen carefully to our customers in order to make sure we understand their needs as precisely as possible. In doing so, we draw on our knowledge from various fields of expertise. Thanks to many years of close market support, we are familiar with various innovative solutions, enabling us to come up with an optimal design for the system. Our focus here is on increasing productivity, reducing the total cost of ownership, and reducing waste and our carbon footprint. Specific solutions include converting conventional gas-powered drying technologies to innovative electronically operated or even hybrid models. In combination with corresponding adjustments to the control systems, this can produce significant energy savings and thus cut carbon emissions.

*Guido Lebbing* / Our customers in the business unit Surface are mainly involved in the decor printing industry. Together with our sister company WDB Systemtechnik GmbH and Jagenberg Elrond GmbH, we provide innovative solutions for various application areas, printing processes, and substrates. Everyone in our large team uses their many years of experience to find the optimal technical solution. We not only produce classic decor printing systems, but also work with our customers to develop them and adapt them to their individual needs.

## SHARING KNOWLEDGE

**Battery technology is an essential element of the future energy system. What developments can be expected here in the coming years and how is Jagenberg Converting Solutions preparing for them?**

*Thomas Lebbing* / Battery technology will play an important role in the mobility of the future, even though there are likely to be other parallel technologies. The mobility transition is presenting car manufacturers with major challenges, not least because they now have to deal with new drive technologies beyond conventional combustion engines. Efficient production of high-performance batteries will therefore be the backbone of e-mobility.

Due to changing customer behavior and technological progress, but also regulatory requirements, the production of high-performance batteries in Europe will increasingly come to the fore. Based on the EU's plans, a 20-fold increase in battery production capacity in Europe is expected by 2030. In some cases, battery cell production is also moving physically closer to the vehicle assembly plants to ensure security of supply. From our location in Hamburg, we are already helping a number of battery manufacturers to manage these developments.

True to our maxim "Create.Future.Together.", we are working together as a community with our sister companies Kampf, Kampf LSF, Lebbing, Lauer, and Jagenberg Digital Solutions and actively shaping economically viable and environmentally compatible battery production in cooperation with our customers. **We are looking forward to taking on the challenges of the future.**

## FACING UP TO THE CHALLENGES

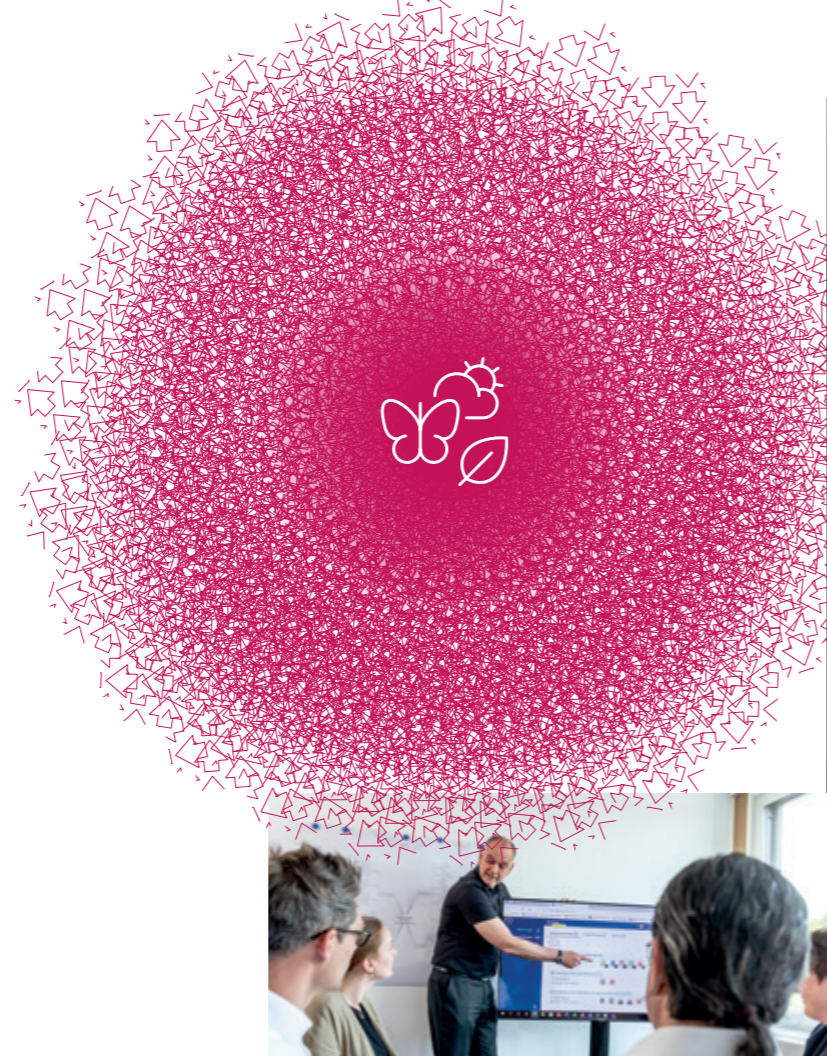


Thomas Lebbing

# CARING FOR THE PLANET.

How can climate protection  
and progress go hand in hand  
**Questions that drive us.**





*Specially assembled teams work together across different locations to sustainably reduce the entire Group's carbon footprint and cut emissions to net zero in the medium-term.*

## 5. ENVIRONMENTAL PROTECTION AND CLIMATE ACTION<sup>1</sup>

When it comes to its activities at its various sites around the world, the Jagenberg Group takes its responsibility for the environment very seriously. Accordingly, we calculated our production-related carbon footprint for the first time in the reporting year and defined targets in line with the Paris Agreement.

### Strategic environmental management

In setting our targets, we have taken into account scientific findings on climate change and explicitly initiated steps to decarbonize our operating processes. As part of these strategic commitments, we support international efforts to limit the increase in the global average temperature to well below 2 °C above pre-industrial levels, thus mitigating the negative effects of climate change. In order to achieve this goal, people's carbon emissions must be significantly reduced and as quickly as possible. However, high energy efficiency and lower greenhouse gas emissions alone will not be enough to support sustainable economic activity on our planet. It is therefore necessary to actively remove unavoidable carbon emissions from the atmosphere in equal measure so that they fall to net zero.

<sup>1</sup> GRI 2-12 2-13 2-23.

That is why the Jagenberg Group plans to invest in suitable projects as part of its **“Caring for the Future” sustainability strategy**. In all, this means that we want to reduce our gross carbon footprint by 14% by 2025 (using 2021 as the reference year) and support suitable projects to offset the unavoidable annual emissions. Suitable projects for us in this context are those that compensate for carbon emissions in the atmosphere using natural and/or technical processes. We are planning to put this compensation for our unavoidable Scope 1 and Scope 2 emissions into effect as early as 2023.

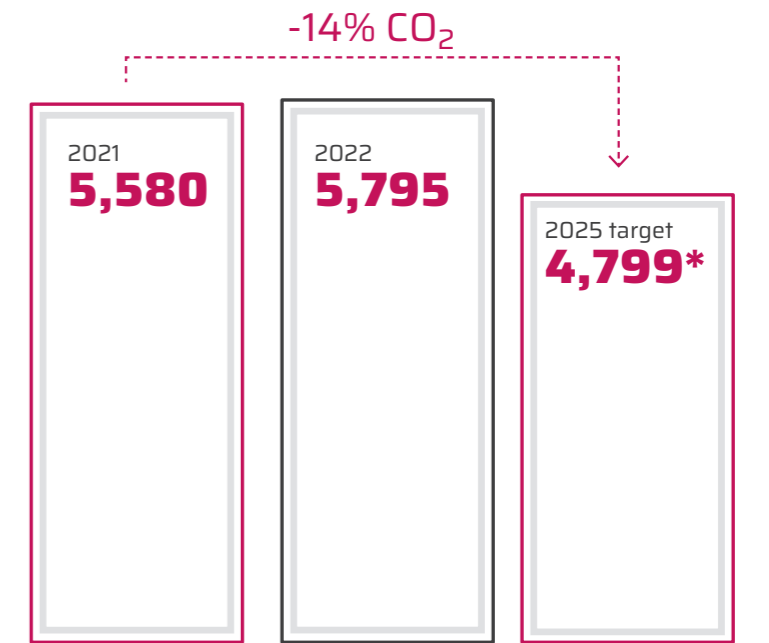
*In order to achieve these targets, our activities in this context are focused on using fewer resources and cutting the associated carbon emissions. General opportunities for achieving the targets present themselves to us in the form of **increased energy efficiency, electrification, a power supply from renewable sources, and environmentally compatible business trips**. Other options include **reducing waste and using recyclable materials**. In the reporting year, we also began to raise awareness of our new sustainability strategy among our employees. Our Code of Conduct, for example, sets out the kind of environmentally friendly behavior we expect and provides information on corresponding activities.*

### Governance concerning environmental matters

The Executive Board of Jagenberg AG decides on the Group’s environmental and climate action strategy. The Group Sustainability Manager and the associated headship of the Sustainability Management Team reports directly to the Executive Board of Jagenberg AG. The Sustainability Management

Team is made up of employees of the Jagenberg Group and advises the Executive Board in the decision-making process. It is down to the respective management teams to implement any measures. This creates clear responsibilities, reporting channels, and opportunities for internal dialogue within the Group.

**2025 target:** Sustainably reduce our annual global carbon footprint by 14%, using 2021 as the reference year.



\* Using the same data collection basis (such as locations).

### Achieving our environmental and climate targets

Our carbon footprint is the key indicator for assessing our environmental performance. We therefore began to record our direct and indirect emissions in the reporting year. Based on consumption data, we calculate the Scope 1 and Scope 2 emissions produced, as well as selected Scope 3 emissions. We eventually want to expand how we measure and report Scope 3 emissions – and particularly include data relating to procured goods used in production processes. Consumption data is recorded and translated into carbon equivalents using suitable emission factors (e.g. DEFRA) as well as the internationally accepted methods set out in the Greenhouse Gas Protocol (GHG Protocol).

Compared to the reference year of 2021, emissions were 3.8% higher in the reporting year. This is due in particular to the increase in travel following the coronavirus pandemic. We also expect an increase

in travel activities and the associated emissions in 2023, but we want to offset them by taking further measures. Our aim is to reduce our carbon emissions by 14% compared to the reference year. The greatest potential in this regard lies in electrifying our processes and procuring our power supply from renewable sources. We are therefore particularly focusing our measures on significantly increasing our quota in terms of the supply of carbon-neutral electricity, supplying all European locations with green electricity, and electrifying our building technology and vehicle fleets. In the reporting year, 6% of our electricity needs were covered by renewable energy.

In addition, we are taking measures to reduce our final energy consumption. Such measures especially include involving every single person and raising awareness. Employees are encouraged to keep their eyes open as they move around the production halls and offices and share ideas on how to optimize our energy efficiency.

## CARING FOR LEADERSHIP.

Leading the way responsibly - how  
does that work?

**Questions that drive us.**





## 6.

GOOD  
CORPORATE GOVERNANCE<sup>1</sup>

Integrity, reliability, a sense of togetherness, and relationships based on mutual trust serve as the foundations for everything we do and simultaneously serve as our guiding compass. Fairness, respect, openness, and honesty complete our system of values. Our values not only define our ideals, but also our sense of responsibility. As part of our corporate success and sustainable growth, we gear our activities toward maintaining high ethical and legal standards and expect the same from our suppliers.

<sup>1</sup> GRI 2-23.

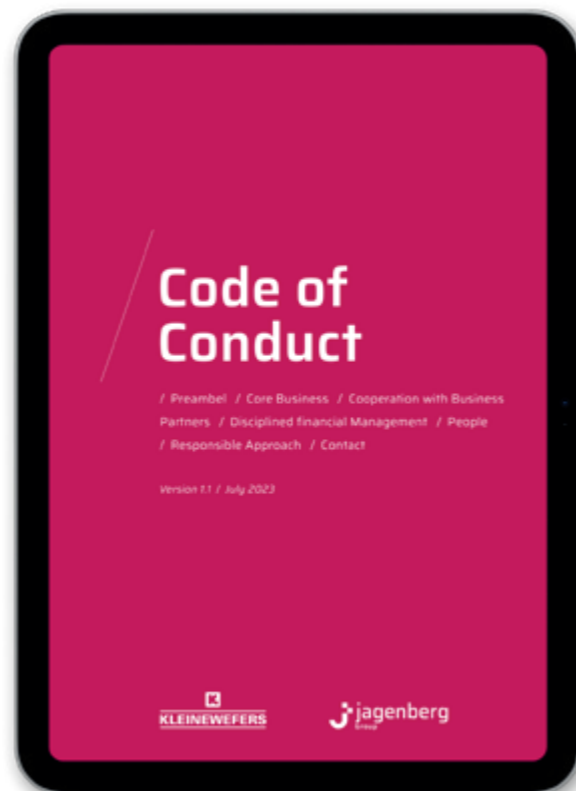
Our values.  
What is important to us.

Trust.	Integrity.	
Reliability.	Fairness.	Respect.
	Openness.	Honesty.



## 6.1 Code of Conduct<sup>1</sup>

How the Jagenberg Group is perceived by the public, employees, and business partners depends to a large extent on each individual member of our Group. As a kind of support, our Code of Conduct translates our corporate values into principles that guide our actions and enable us to maintain trust in our Group and protect our reputation. We can thus promote conduct that adheres to the rules, in particular with regard to legal and ethical regulations and standards, especially in connection with our core activities in the Machinery & Plants and Automation & Drives business segments.



Our Code of Conduct conveys our shared understanding of values across the Group. It is equally binding for all affiliated companies and, together with other guidelines and work instructions, guides our daily actions. We do not tolerate any white-collar crime, such as corruption, embezzlement, fraud, tax evasion, false accounting, and subsidy fraud. We respect human rights and also stress to our suppliers that our strict standards must be observed along the entire value chain. All new employees are automatically informed of the Jagenberg Group's Code of Conduct and must demonstrate their knowledge of the Code of Conduct and its contents in a mandatory online training course. Knowledge of the Code of Conduct is recertified on a regular basis, usually annually. The Code of Conduct is available in English and German.



<sup>1</sup> GRI 2-23 205-1 3-3.

## 6.2 Compliance<sup>1</sup>

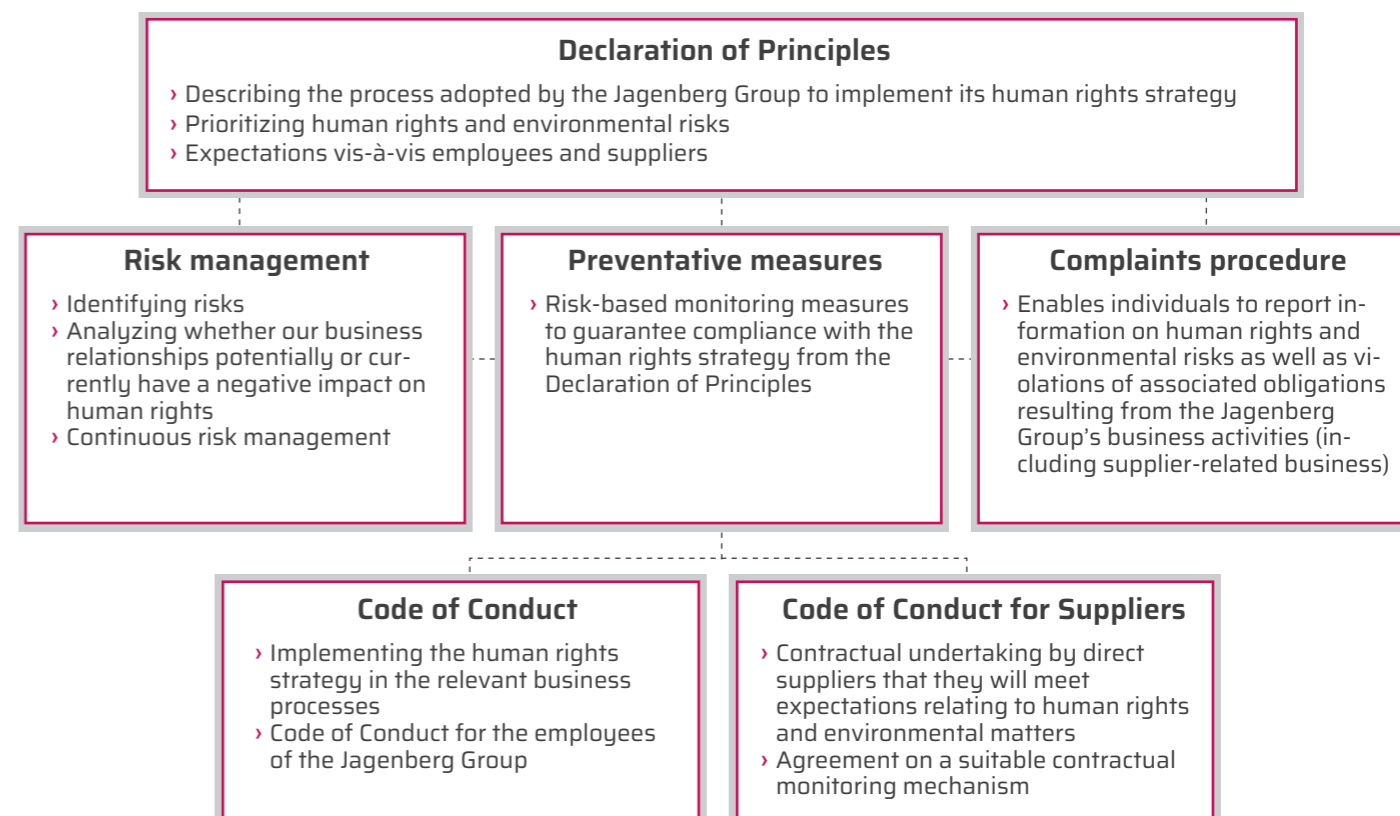
In the broadest sense, we interpret compliance not only as adhering to laws and internal regulations (in particular the Code of Conduct), but also taking these rules and regulations into account in our decision-making processes. Compliance is therefore a key element of our business processes and enables us to live up to our responsibility and our commitment to integrity.

With respect to our Code of Conduct, all employees are committed to acting with integrity and reliability. Our Executive Board, the management teams of the affiliated companies, and our senior executives and authorized signatories bear a special responsibility for upholding compliance as an integral

part of our business processes. They serve as role models for their employees and are required to comply with laws and internal regulations in their particular area of responsibility.

Significant compliance risks are identified and monitored across the Group. Information about possible violations can be reported to the Group General Counsel in various ways (including anonymously). If individuals have any information about violations of the regulations and standards set out in our Code of Conduct for Suppliers, they can also inform the Group Sustainability Manager. We investigate cases where there is reasonable suspicion of a violation by conducting (internal) audits and informing the relevant management team within the Jagenberg Group. There were no suspected cases in the reporting year.

### Risk management approach



<sup>1</sup> GRI 2-23 2-26 2-27 3-3.

## 6.3

### Human rights<sup>1</sup>

At the Jagenberg Group, we are convinced that people make our success possible along the entire value chain. Accordingly, we have a special duty to protect human rights – and we wish to discharge this duty in accordance with the internationally recognized principles of human rights. In line with this, we have set out our expectations relating to compliance with human rights in our Code of Conduct and in our Code of Conduct for Suppliers. With the Jagenberg Group's Declaration of Principles on Human Rights, the Executive Board has made a clear commitment.

#### Obligations

The Jagenberg Group is committed to complying with its obligations in relation to human rights due diligence along the entire value chain and respecting internationally recognized human rights, as defined in particular in the following specific principles:

- › United Nations Global Compact
- › International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work
- › ILO Basic Terms and Conditions of Employment
- › United Nations Guiding Principles on Business and Human Rights

#### Key aspects of our human rights strategy

The Jagenberg Group is committed to fulfilling its duty of care with regard to human rights along its value chain and respecting internationally recognized human rights. To this end, we have devised the following elements in order to comply with our obligations in relation to human rights due diligence:

- › Risk management
- › Preventative measures
- › Complaints procedure

#### Risk management

We endeavor to avoid any potential negative human rights impact resulting from our business activities. In order to identify potential risks, we use the following sources:

Mandatory risks listed in the Act on Corporate Due Diligence Obligations to Prevent Human Rights Violations in Supply Chains ("Supply Chain Due Diligence Act")

- › Common industry risks within the mechanical and plant engineering sector worldwide
- › Common risks in the countries where we and our suppliers operate
- › Risks identified from self-declarations submitted by our suppliers
- › Risks identified from information supplied via our complaints mechanism

We assess potential risks according to the likelihood of them occurring and their seriousness in order to identify the risks that are relevant to us. Due to its global prevalence, we have identified discrimination in general as the most significant risk to us. We conduct this assessment on an annual basis.

#### Preventative measures

To support decision-making processes with conscientious corporate governance in mind, we have created basic tools for two stakeholder groups:

#### Employees

As an employer, we are committed to complying with international human rights standards and creating decent working conditions for our employees. We also expressly state in our Code of Conduct that the companies of the Jagenberg Group do not tolerate any form of discrimination. Further information on occupational health and safety can be found in chapter 3 of this report. In order to raise awareness of human rights among employees, familiarize them with the most important compliance rules, and spell out just how important it is to follow these rules at all times at work, their knowledge of the Code of Conduct is refreshed at regular intervals. The Code of Conduct explicitly includes information and instructions on matters such as equal treatment, reporting of violations, data protection, and corruption.

#### Suppliers

When it comes to our procurement decisions and activities, we endeavor to adhere to compliance principles, thereby taking corporate responsibility along the value chain. Environmental, social, and governance (ESG) criteria play an important role for us in the procurement of goods and services. Our Code of Conduct for Suppliers clearly sets out what we expect of our suppliers in terms of complying with human rights. Furthermore, we encourage our suppliers to play their part in environmental protection and climate action and work with us to minimize any adverse impact along our value chain.

#### Complaints procedure

We encourage our employees, customers, suppliers, and other business partners to inform us of potential or actual human rights violations. If necessary, whistleblowers can also contact the relevant departments of the Jagenberg Group anonymously (by sending an anonymous e-mail, for example). We have defined the following positions as relevant contacts:

#### General Counsel – Kleinewefers GmbH

Dr. Christian Jostes  
Managing Director / General Counsel  
Telephone: +49 2151 9340 9982  
E-mail: jostes@kleinewefers.de

#### Sustainability Manager – Kleinewefers GmbH

Dr. Sascha Schneiderwind  
Telephone: +49 2151 9340 9948  
E-mail: schneiderwind@kleinewefers.de

**Employees can also report incidents to their line managers.**

<sup>1</sup> GRI 2-12 2-23 406-1.

## 7

## APPENDIX

## 7.1

**About this report<sup>1</sup>**

This is the first sustainability report for Kleinewefers GmbH, which will be published annually in the future. Our sustainability report sets out how we embrace sustainability in our day-to-day work activities. In addition, we provide an overview of our Machinery & Plants, Automation & Drives, and Digital business segments with regard to the targets we have set, the measures taken last year, and the successes achieved.

There has been no auditing process by external third parties.

#### 7.1.1 / Selected focus areas - qualitative and quantitative reports

In order to ensure that the sustainability report provides a comprehensive picture of our performance, the focus areas and content have been selected according to their significance to our business activities, their impact on environmental, economic, and social factors, and their relevance to our stakeholders.

#### 7.1.2 / GRI Standards

Kleinewefers GmbH has reported the information cited in this GRI content index for the period from January 1 to December 31, 2022 in reference to the GRI Standards.

The GRI Sector Standards are not applicable.

#### 7.1.3 / Terminology

This document contains a general report on the "Jagenberg Group" because Jagenberg AG oversees the operational industrial business of Kleinewefers GmbH. Accordingly, the term "Jagenberg Group" includes Kleinewefers GmbH and Jagenberg AG, as well as all companies affiliated with them.

<sup>1</sup> GRI 2-2 2-3 2-5.

**90%** of suppliers  
in our network come from EU member states.

- ✓ Close contact with suppliers
- ✓ Maintaining quality standards
- ✓ Human rights due diligence

Further details: 4.1 Responsible procurement, page 48



Using our **Strategic Emission Steering** concept, we record and manage emissions generated by our operations, including electricity and gas consumption, water use, and waste generation.

Further details:  
4.2 Resource-efficient production, page 52

Our target:  
**14% lower**  
**carbon footprint**  
in 2025, compared to 2021

Further details:  
4.2 Resource-efficient production, page 52

Approx. **70%** reduction in  
**emissions** attributable to transport by  
reorganizing the value chain at Kampf in Dohr.

Further details: 4.1.1 Excursus: winding lever, page 48



We want to play an active part in creating a **truly circular economy**. As a cross-industry consortium, we are therefore working on an open and globally usable data standard.

Full interview with **Maik Krüger** on page 64

## 7.2

## Sustainability KPIs

Non-financial KPIs for measuring sustainability performance are presented on the following pages.

Unless otherwise stated, the figures refer to the Jagenberg Group's operating and manufacturing companies. The reference period relates to the 2022 financial year.

### 7.2.1 / The environment and energy<sup>1</sup>

A key element of our Group-wide environmental protection and climate action strategy is the continuous reduction in our resource consumption and the resulting carbon emissions.

Our reporting covers the direct material impact of our business activities on the environment and climate. This includes the consumption of energy and travel activities as well as waste production, process-related resource consumption of paper and water, and the commuting activities of employees. The resulting carbon emissions are derived from the consumption data. A continuous reduction in these emissions is the most important indicator of the success of our environmental performance.

The Jagenberg Group's emissions are calculated using the current conversion factors. The DEFRA 2021 and ecoinvent v3.7.1 databases serve as sources for this purpose. A market-based approach is used to calculate Scope 2 emissions from electricity consumption, which takes into account the percentage attributable to renewable electricity in the figures. Country-specific conversion factors are used for the remaining electricity consumption, which are derived from the average local electricity mix.

#### Recorded sources of carbon emissions as per the Greenhouse Gas Protocol:

**Scope 1:** Direct emissions from the consumption of primary energy sources (natural gas, heating oil, and fuel for company vehicles)

**Scope 2:** Indirect emissions from purchased electricity

**Scope 3:** Other indirect emissions (the purchase of paper and water, waste, business trips, and the commuting activities of employees)

### THE ENVIRONMENT AND ENERGY

		2021	2022	Change vs. previous year
<b>Total energy consumption</b>	kWh	11,557,377	10,333,248	-11%
of which electricity consumption	kWh	5,400,348	5,277,787	-2%
of which electricity generated from renewable sources (externally procured)	kWh	132,419	99,459	-25%
of which gas consumption	kWh	5,558,769	4,487,083	-19%
of which heating oil consumption	kWh	598,260	568,378	-5%
<b>Company vehicle fuel</b>	l	173,140	185,061	+7%
of which diesel	l	130,377	130,635	+0%
of which gasoline	l	42,762	54,426	+27%
<b>Greenhouse gas emissions, total</b>	t CO <sub>2</sub> e	5,580	5,795	+4%
<i>Own greenhouse gas emissions, total (Scope 1 + 2 market-based)</i>	t CO <sub>2</sub> e	3,842	3,895	+1%
Greenhouse gas emissions (Scope 1)	t CO <sub>2</sub> e	1,685	1,602	-5%
Greenhouse gas emissions total (Scope 2 market-based)	t CO <sub>2</sub> e	2,158	2,293	+6%
Greenhouse gas emissions total (Scope 2 location-based)	t CO <sub>2</sub> e	2,204	2,335	+6%
<i>Own greenhouse gas emissions, total (Scope 3)</i>	t CO <sub>2</sub> e	1,738	1,900	+9%
Greenhouse gas emissions (Scope 3.1) Purchased goods and services	t CO <sub>2</sub> e	14	13	-8%
Greenhouse gas emissions (Scope 3.5) Waste treatment and disposal	t CO <sub>2</sub> e	307	345	+13%
Greenhouse gas emissions (Scope 3.6) Business trips	t CO <sub>2</sub> e	427	821	+92%
Greenhouse gas emissions (Scope 3.7) Commuting activities	t CO <sub>2</sub> e	990	720	-27%
Water withdrawal, total	m <sup>3</sup>	9,598	8,798	-42%
Waste generation, total	t	934	2,185	+134%
of which hazardous waste	t	55	63	+15%
of which waste for disposal	t	185	194	+5%
of which waste for recycling	t	695	1,929	+178%

<sup>1</sup> GRI 2-7 2-8 302-1-4 303-3 305-1-4 306-3 306-5 401-1 401-3 403-9.

## 7.2.2 / Employees

Our employees are the basis of our success and an integral part of the j-united 2025 corporate strategy. In line with the GRI Standard - besides the KPIs already mentioned in chapter 3 - the following information includes further significant developments in 2022 concerning our employees.

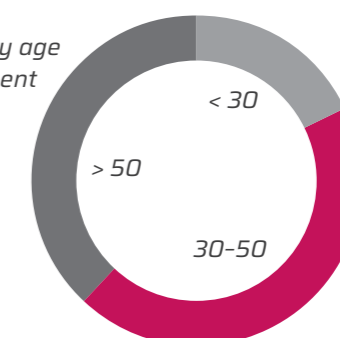
**EMPLOYEES WITHIN THE JAGENBERG GROUP**

Employees	By gender				Total	By age group		
	Female	Male	Other	Not stated		< 30	30-50	> 50
Number of employees	162	1,099	0	0	1,261	237	550	474
Full-time 40-hour week	137	1,055	0	0	1,193	210	535	448
Permanent contract	158	1,072	0	0	1,230	226	533	472
Fixed-term contract	5	26	0	0	31	13	15	2
On-demand employees	0	0	0	0	0	0	0	0
Part-time	51	45	0	0	96	10	45	41
Full-time	111	1,054	0	0	1,165	226	509	430

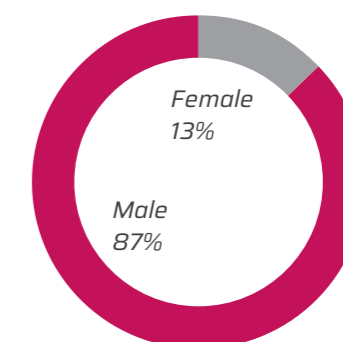
New appointments	By gender				Total	By age group		
	Female	Male	Other	Not stated		< 30	30-50	> 50
Number of employees	31	157	0	0	188	69	94	24
Full-time 40-hour week	28	157	0	0	185	65	95	25
Permanent contract	29	145	0	0	173	60	89	24
Fixed-term contract	2	12	0	0	14	9	5	0
On-demand employees	0	0	0	0	0	0	0	0
Part-time	8	3	0	0	11	3	7	1
Full-time	23	154	0	0	177	66	88	23

Departures	By gender				Total	By age group		
	Female	Male	Other	Not stated		< 30	30-50	> 50
Number of employees	11	105	0	0	116	27	58	31
Full-time 40-hour week	9	107	0	0	116	28	59	28
Permanent contract	11	104	0	0	115	27	57	31
Fixed-term contract	0	1	0	0	1	0	1	0
On-demand employees	0	0	0	0	0	0	0	0
Part-time	3	0	0	0	3	1	1	1
Full-time	8	105	0	0	113	26	57	30

Employees by age group in percent



Employees by gender in percent

**Agency workers**

Number of workers	231
FTE*	230
Average HC 2022 (01-12)	173

**Employees on or returning from parental leave**

	By gender				
	Female	Male	Other	Not stated	Total
Number of employees					
Entitled to parental leave	16	7	0	0	23
on parental leave	3	6	0	0	9
returned after parental leave	1	5	0	0	6
not returned and left the company	0	0	0	0	0

**Work-related injuries**

	Employees	Non-employed workers
Number of working hours	2,139,924	21,392
Number of fatalities due to work-related injuries	0	0
Number of serious work-related injuries (no rehabilitation within six months)	1	0
Number of recorded work-related injuries	19	1

## 7.3

## GRI content index

GRI Standard	Disclosure	Location	Page
<b>General Disclosures 2021</b>			
2-1	Organizational details	1 A portrait of the Jagenberg Group	06
		2.1 Organizational structure and business segments	08
2-2*	Entities included in the organization's sustainability reporting	2.1 Organizational structure and business segments	08
		7.1 About this report	84
2-3	Reporting period, frequency, and contact	7.1 About this report	84
		7.4 Imprint	93
2-5	External assurance	7.1 About this report	84
2-6	Activities, value chain, and other business relationships	2.1 Organizational structure and business segments	08
2-7	Employees	3 Employees and society	26
		7.2 Sustainability KPIs	86-89
2-8	Workers who are not employees	7.2 Sustainability KPIs	86-89
2-9	Governance structure and composition	2.2 A responsible approach	15-23
2-11	Chair of the highest governance body	2.2 A responsible approach	15-23
2-12	Role of the highest governance body in overseeing the management of impacts	2.2 A responsible approach	15-23
		5 Environmental protection and climate action	72
		6.3 Human rights	82
2-13	Delegation of responsibility for managing impacts	2.2 A responsible approach	15-23
		5 Environmental protection and climate action	72
2-14	Role of the highest governance body in sustainability reporting	2.2 A responsible approach	15-23
2-22	Statement on sustainable development strategy	Foreword	04
2-23	Policy commitments	2.2 A responsible approach	15-23
		5 Environmental protection and climate action	72
		6 Good corporate governance	78
		6.1 Code of Conduct	80
		6.2 Compliance	81
		6.3 Human rights	82
2-26	Mechanisms for seeking advice and raising concerns	4 Sustainable business	46
		6.2 Compliance	81
2-27	Compliance with laws and regulations	6.2 Compliance	81
2-29	Approach to stakeholder engagement	2.2 A responsible approach	15-23

GRI Standard	Disclosure	Location	Page
<b>Material Topics 2021</b>			
3-1	Process to determine material topics	2.2 A responsible approach	15-23
3-2	List of material topics	2.2 A responsible approach	15-23
3-3	Management of material topics	2.2 A responsible approach	15-23
		6.1 Code of Conduct	80
		6.2 Compliance	81
<b>Anti-corruption 2016</b>			
205-1	Operations assessed for risks related to corruption	6.1 Code of Conduct	80
<b>Energy 2016</b>			
302-1	Energy consumption within the organization	7.2 Sustainability KPIs	86-89
302-2	Energy consumption outside of the organization	7.2 Sustainability KPIs	86-89
302-3	Energy intensity	7.2 Sustainability KPIs	86-89
302-4	Reduction of energy consumption	7.2 Sustainability KPIs	86-89
<b>Water and Effluents 2018</b>			
303-3	Water withdrawal	7.2 Sustainability KPIs	86-89
<b>Emissions 2016</b>			
305-1	Direct (Scope 1) GHG emissions	7.2 Sustainability KPIs	86-89
305-2	Energy indirect (Scope 2) GHG emissions	7.2 Sustainability KPIs	86-89
305-3	Other indirect (Scope 3) GHG emissions	7.2 Sustainability KPIs	86-89
305-4	GHG emissions intensity	7.2 Sustainability KPIs	86-89

\* Not every OE must meet certain non-financial KPIs. The data is based on meter readings or invoice amounts (where available) and the units' own estimates.  
Where the required data cannot be determined in this way using reasonable effort, it is projected - either for entire units or parts thereof - based on the respective number of employees.

<b>GRI Standard</b>	<b>Disclosure</b>	<b>Location</b>	<b>Page</b>
<b>Waste 2020</b>			
306-3	Waste generated	7.2 Sustainability KPIs	86-89
306-5	Waste directed to disposal	7.2 Sustainability KPIs	86-89
<b>Employment 2016</b>			
401-1	New employee hires and employee turnover	7.2 Sustainability KPIs	86-89
401-3	Parental leave	7.2 Sustainability KPIs	86-89
<b>Occupational Health and Safety 2018</b>			
403-1	Occupational health and safety management system	3.2 Health protection	36
403-4	Worker participation, consultation, and communication on occupational health and safety	3.2 Health protection	36
403-5	Worker training on occupational health and safety	3.2 Health protection	36
403-6	Promotion of worker health	3.2 Health protection	36
403-9	Work-related injuries	7.2 Sustainability KPIs	86-89
<b>Non-discrimination 2016</b>			
406-1	Incidents of discrimination and corrective actions taken	6.3 Human rights	82

## 7.4

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