

MANAGEMENT REPORT

Shareholders' letter	07
Creating together – customer story with Nursan	10
Interview with the Chairman and the CEO	14
Megatrends accelerate growth	18
Strategy 2028	22
Customer proximity – real and digital	32
Markets	38
Market-leading innovative strength	46
Share information	56

DEAR SHAREHOLDER

The 2023 financial year was characterized by a challenging market environment. This was reflected in the order intake and – in the second half of the year – also in revenues, as customers increasingly pushed back investment projects. Thanks to the growth in revenues resulting from the combination with Schleuniger, the Komax Group delivered a revenue result that was significantly higher than in the already very strong previous year. The long-term trend toward automation remains intact, and – with its Strategy 2028 – the Komax Group is ready to harness the opportunities that present themselves and secure further profitable growth.

Economic and geopolitical uncertainties made themselves felt in the Komax Group's 2023 financial year. Among other factors, higher interest rates in key sales markets and the muted development of the market in China impacted on customers' willingness to invest. This reticence became increasingly pronounced as the year went on. Bolstered by the combination with Schleuniger, the result was a 1.3% increase in order intake to CHF 686.5 million (2022: CHF 678.1 million).

Significant increase in revenues

The Komax Group started the reporting year with record order books of CHF 306.3 million. This was due in particular to additional orders resulting from the shift in production capacities

owing to the war in Ukraine. By the end of the year, this figure had been worked down to CHF 208.2 million, a solid order backlog for the Komax Group. A key factor in the marked 24.0% increase in revenues to CHF 752.0 million (2022: CHF 606.3 million) was Schleuniger's first full-year contribution, following a contribution of just four months in the 2022 financial year. Accordingly, the revenue increase consisted of strong acquisition-driven growth of 30.6% and an organic contraction of 3.5%. The foreign currency effect was negative at –3.1%. The one-time effect from the completion of the sale of the building at the Rotkreuz production site in Switzerland in 2023 is not included in this figure. If one-time effects are factored in, revenues increased to CHF 762.9 million.

Revenue development in Asia lower than expected

The trend toward a higher level of automation in wire processing continued in the year under review. The Komax Group is operating in a growth market. Rising wage costs, a shortage of skilled labor, miniaturization in wires, and increasingly stringent quality requirements are encouraging customers to look more and more to automation for solutions. As a consequence of the difficult economic situation, however, market performance varied from region to region in the reporting year. Business activity continued to lag well behind expectations in China in particular. In Asia/Pacific, the Komax Group recorded a contraction of 6.4% in revenues, with its share of revenues generated in this region declining to 16.6% (2022: 22.0%). By contrast, growth in other regions – North/South America (+55.6%), Europe (+29.3%), and Africa (+6.0%) – was substantial in many cases, due above all to the combination with Schleuniger. This was the case in the Americas, too, where the market position in the Industrial & Infrastructure market segment was strengthened significantly through the combination.

Profitability shaped by multiple factors

The deferral of investment decisions by customers primarily affected the Komax Group's high-margin volume business, which explains why the impact on the operating result was significant. Operating profit (EBIT) totaled CHF 67.8 million for full-year 2023, down 5.5% on the previous year (2022: CHF 71.7 million). The EBIT margin stood at 9.0% (2022: 11.8%). If two one-time effects are factored in – the sale of a building in Rotkreuz (EBIT increase of CHF 11.1 million) and the closure of the site in Jettingen (EBIT reduction of CHF 6.1 million) – EBIT rises to CHF 72.8 million. Including the one-time effects, Group earnings after taxes (EAT) amounted to CHF 43.8 million (2022: CHF 51.8 million), corresponding to a year-on-year change of –15.3%.

Structure optimizations and integration of Schleuniger

The companies in the Schleuniger Group were successfully integrated into the Komax Group business units in 2023. The organizational focus in the year under review was on optimizing the global distribution and service network. The Komax and Schleuniger distribution channels

were merged to enable customer needs to be addressed in the best possible way and allow the portfolio to be offered on a one-stop basis from a single source. As part of this, Komax Portugal was sold to distribution partner Estanflux in Spain, which now covers the entire Iberian Peninsula. In addition, the Komax Group acquired the Alcava Group, Schleuniger's distribution partner in France, Morocco, and Tunisia, thereby further strengthening the market position in these growth markets. Optimizations were completed in 2023, with the exception of a few countries. The Komax Group is also working on analyzing its product portfolio and its production locations. In 2023, it ceased operations at Komax Testing Brasil in Colombo, Brazil, and implemented the first steps for the closure of Schleuniger GmbH's branch office in Jettingen, Germany.

Additional service thanks to the acquisition of WUSTEC

To expand its offering in the growing Industrial & Infrastructure market segment, in 2023 the Komax Group acquired German company WUSTEC, a specialist in automated wire prefabrication. WUSTEC operates a digital platform that allows companies active in control cabinet and machine building to order prefabricated, labeled wire sets that will be delivered within 48 hours.

Very high free cash flow

The Komax Group has a solid financial basis that contributes to the further development of the Group as a whole and offers security in a challenging market environment. As at 31 December 2023, shareholders' equity totaled CHF 390.6 million (31 December 2022: CHF 416.6 million), with an equity ratio of 55.1% (2022: 53.2%). Free cash flow rose significantly to CHF 51.7 million (2022: CHF 17.6 million). Net debt decreased from CHF 105.5 million (2022) to CHF 92.9 million, with the debt factor (net debt divided by average EBITDA) still only at 1.00 (31 December 2022: 1.19).

Changes on the Board of Directors

After serving on the Board of Directors for twelve years, Kurt Haerri will not be standing for re-election at the 2024 Annual General Meeting due to term-of-office limitations. The Board of Directors and the Executive Committee wish to thank him most sincerely for his substantial

commitment to the Komax Group. The Board is proposing that Annette Heimlicher be elected as a new member of the Board of Directors. Annette Heimlicher has been CEO of the Contrinex Group since 2012 and has a wealth of business experience at an internationally active industrial company headquartered in Switzerland. The Contrinex Group is a global technology leader in smart sensors for complex automation and Smart Factory applications.

Distribution of CHF 3.00

To take account of the volatile and challenging business environment, the Board of Directors is proposing to the Annual General Meeting a dividend of CHF 3.00 (previous year: CHF 5.50). Half of this amount will be distributed from capital contribution reserves, and will therefore be tax-free for natural persons domiciled in Switzerland who hold the shares as part of their private assets.

Strategy 2028 sets ambitious targets

The Komax Group formulated its Strategy 2028 in the year under review and has set ambitious targets. Its aim is to continue to grow profitably and achieve revenues of CHF 1.0–1.2 billion in 2028, alongside EBIT of CHF 120–160 million. This corresponds to annual average growth in revenues of 6–9%. Given that the level of automation in wire processing has to date not exceeded 20%, there is enormous growth potential, and the Komax Group intends to make full use of this. To do so, it is focusing on expanding business in Asia, extending its service offering, and increasing the proportion of revenues generated by non-automotive business. ESG (Environmental, Social, Governance) is an integral part of the strategy. The Komax Group has set itself 13 non-financial targets that are set out for the first time in an ESG Report in accordance with GRI Standards.

Outlook

The weaker market development that made itself increasingly noticeable toward the end of 2023 is persisting, and the Komax Group started the new financial year with a lower order backlog than in the previous year. It is confident, however, that the trend toward automation will continue unabated, and hence so, too, the demand for its solutions. The Komax Group will continue to drive the integration process forward in 2024, optimizing additional structures so as to be best equipped to implement its 2028 growth strategy.

The market is currently showing signs of extreme volatility, as it is still beset by a number of economic and geopolitical uncertainties. Consequently, visibility in terms of the development of business is very low, and no forecast for the 2024 financial year can be made as yet.

Yours sincerely,



Dr. Beat Kälin
Chairman of the
Board of Directors



Matijas Meyer
CEO

CREATING TOGETHER

Trust-based customer relationships are the key to success for the Komax Group. Together with long-standing customers, such as Turkish automotive supplier Nursan, the Group has been continually driving the advancement of wire processing automation.

Worldwide, the Komax Group has several thousand customers in the three market segments Automotive, Industrial & Infrastructure, and Aerospace & Railway. The automotive market is by far the largest market for the Komax Group, accounting for approximately 75% of revenues. Over decades, it has fostered close relationships with its customers, helping them systematically take the automation of their production processes to the next level and thereby enabling them

to strengthen their competitiveness through greater cost efficiency and quality improvements.

Nursan – a wiring systems expert on a growth trajectory

Founded in 1976 in Güngören near Istanbul in Türkiye, Nursan, with its approximately 8 000 employees, is now a major manufacturer of wiring systems for the automotive industry. Nursan uses, among other things, machines from the



Nursan's "Plant 1" in Tavşanlı, Istanbul, Türkiye.



The biggest manufacturing site, Nursan's "Plant 1" in Tavşanlı, İstanbul, Türkiye, produces wire harnesses for up to 750 000 vehicles each year. Among the machines it uses to do this are Sigma 688 twisting machines, Komax's Alpha series crimp-to-crimp-machines, and the CrimpCenter from Schleuniger.

Komax Group to produce a broad range of wire harnesses, primarily for cars and light commercial vehicles, but also for trucks, buses, and tractors. To this end, there are currently around 170 fully and semi-automatic wire processing machines from Komax und Schleuniger in operation, as well as the 4Wire CAO MES (Manufacturing Execution System) from DiIT GmbH. The company manufactures at nine sites in Türkiye and Bulgaria. Annually, wire harnesses for up to 750 000 vehicles are produced at the Turkish site in Tavşanlı alone.

Nursan increased revenues by more than 35% from 2021 to 2023. The Komax Group worked closely with the company, supporting it in its growth trajectory with its products and services. The wire harness expert is targeting continued strong growth in the future, and can count on the Komax Group as its partner of choice.

Long-term partnership between Nursan and the Komax Group

The trust-based partnership between the Komax Group and Nursan stretches back over three decades and is strengthened by regular exchanges

between the companies and the Komax Group's representative agent in Türkiye. Reliability on deadlines, quality, and service are important pillars of this partnership. In the reporting year, the two former Schleuniger and Komax representative agents together created Binova, a new firm that, going forward, will be Nursan's direct point of contact for all products and services of the Komax Group and will work closely with it.

OVERVIEW OF NURSAN

- Founded in 1976 in Güngören, İstanbul, Türkiye
- Headcount of approximately 8 000
- Revenues of around EUR 338 million in 2023
- Nine production sites in Türkiye and Bulgaria
- Globally active automotive manufacturers as customers
- Around 170 machines from Komax and Schleuniger in operation

Interview with Ahmet Arslan

Deputy General Manager at Nursan Kablo Donanımları & Nursan Otomotiv EOOD.

Ahmet Arslan, how do you see the long-term trend toward automation in wire processing and what do you consider to be the main drivers for this?

The long-term trend toward automation in wire processing is motivated by many factors, such as the need for increased productivity, cost reduction, and quality improvements, as well as customization flexibility, safety, global competition, and supply chain resilience. Sustainability and the challenge of addressing skills shortages are coming on top of these trends. These factors drive industries to adopt automated systems for enhanced efficiency and competitiveness.

What does this mean for the automotive industry specifically?

Increasing use of electrical components and partially autonomously controlled vehicles make wire processing much more complicated. New production methods and the use of advanced technology will become much more important, even inevitable. We believe that we will get the best results with the best partners, so we are planning to continue this journey with the Komax Group in the future, as we have done in the past.

Can you name the biggest challenges in your wire processing business?

The biggest challenges in automated wire processing include high initial investment costs, the adaptation of employees to automated processes, integration complexities, cybersecurity concerns, and maintenance issues. Successfully navigating these challenges while leveraging the opportunities arising from the trends I mentioned above can lead to long-term success in the wire processing business.

What are the advantages of automated wire processing for Nursan compared to manual work?

Solutions for automated wire processing, such as the Komax Group's, provide us with advantages such as enhanced speed, precision, cost reduction, continuous production, improved safety,



Interview with Ahmet Arslan.

flexibility, and data analysis capabilities. They ensure consistent quality and scalability for large-scale production, while minimizing human fatigue. With initial investments and maintenance taken into account, a balanced integration of automated and manual processes can optimize manufacturing efficiency for Nursan.

How relevant is sustainability at Nursan and how do you implement it?

Sustainability is integral for Nursan to ensure environmental responsibility and operational efficiency. Implementation strategies include, among others, investing in energy-efficient machines, selecting sustainable materials, minimizing waste, fostering a green supply chain, conducting life cycle assessments, reducing emissions, engaging employees, and ensuring regulatory compliance. These initiatives collectively position Nursan as a socially responsible and environmentally conscious manufacturing entity.

What do you appreciate most about working with the Komax Group?

The Komax Group delivers the most advanced wire processing technology, and we are eagerly implementing it into our production processes. We get fast and reliable technical support, sufficient spare parts, less waste, and efficient traceability. Together with the long lifetime and durability of the machines and the advanced safety features, we can maintain consistent wire processing, ultimately increasing the satisfaction of our own customers.

How can the Komax Group support Nursan in the future?

We are pleased with the production capacity and quality we have achieved together with the Komax Group and we would like to take this even further in the future. To support Nursan even better, the Komax Group could provide more customized solutions and trainings, enhanced technical support, and implement features like remote monitoring. Frequent updates, more sustainable machines, and Industry 4.0 integration could enhance Nursan's efficiency and success in wire processing.

“The Komax Group’s solutions for automated wire processing provide us with advantages such as enhanced speed, precision, cost reduction, continuous production, improved safety, flexibility, and data analysis capabilities. They ensure consistent quality and scalability for large-scale production, while minimizing human fatigue.”

Ahmet Arslan, Deputy General Manager at Nursan



Komax wire processing machines in operation at Nursan.

Continuous development of customer-oriented solutions

The Komax Group takes feedback from customers very seriously and strives to take quality, productivity, and flexibility in wire processing to new levels at all times. It is constantly improving its customer service with elements such as bespoke Value Creation Packages for customers and the ongoing optimization of its service network. It is also working on the introduction of eco-design checks for all products newly developed as of 2025, so as to ensure greater sustainability in design. With the implementation of its vision of the networked factory, SMART FACTORY by KOMAX (▶ page 48–50), the Komax Group is developing a number of additional solutions and services in various areas, with the aim of generating added value for its customer base across the customer journey.

INTERVIEW

The integration of Schleuniger made very good progress in 2023. Even in the current challenging market situation, the Komax Group remains confident that it can leverage the existing growth potential and achieve its 2028 targets.

Matijas Meyer, the 2023 financial year did not develop as well as had been anticipated at the beginning of the year under review.

Why was that?

Matijas Meyer: We recorded lower revenues in China in particular and received fewer orders than planned. We were on track for much of the year in Europe and North/South America. It was only toward the end of 2023 that our customers became noticeably more reticent about investing. Consequently, we fell just short of our original revenue target by CHF 20 million, or 2.5%.

Why did this shortfall of CHF 20 million reduce the EBIT margin so significantly?

Matijas Meyer: Our EBIT development depends very much on the product mix. Since the losses we sustained were primarily in our volume business, this had a disproportionately high impact on our EBIT figure. The strong appreciation in the Swiss franc in the second half of December was a further negative factor.

In 2023, almost 10% more vehicles were manufactured than in 2022. Why did the Komax Group not benefit even more from this increase in the number of wires needing to be processed?

Matijas Meyer: In 2022, Komax and Schleuniger received extraordinary orders totaling around CHF 100 million due to the outbreak of war in Ukraine. As this is where 7–8% of Europe's wire harnesses are manufactured, the automotive industry needed to protect its supply chain and consequently built up additional production capacities in other countries, in Eastern Europe and North Africa in particular. Over the course of 2023 it became apparent that there was excess capacity, as a large number of wire harn-

esses continued to be manufactured in Ukraine. Our customer base was able to use this to cover part of the growth in the vehicles manufactured without ordering additional machines from us.

Beat Kälin, the automotive market also grew in China, where the war in Ukraine has no direct impact. Is the Komax Group's positioning in China sufficiently strong to participate in this growth?

Beat Kälin: The Komax Group is our industry's number one in terms of revenues in China, too. Our customers there include a number of global and local wire harness manufacturers as well as a few big automotive manufacturers. If you compare the size of the market with our revenues in China, however, then it becomes apparent that our position is much stronger in other regions. This being the case, China is a focus area in our Strategy 2028, which we approved in 2023. We did this for two reasons: first, China offers us a great deal of growth potential and, second, the Chinese competition is becoming increasingly stronger.

How did this manifest itself in 2023?

Beat Kälin: Some of our customers are applying a second-source strategy, buying wire processing machines from a number of suppliers. Given that Schleuniger is no longer available as an option in addition to Komax, our customers are increasingly looking to Chinese providers. This intensifies the competitive situation, especially if only prices are being compared. Which all becomes relative as soon as the machines offered by the Komax Group and its competitors are compared in detail. This is why we have considerable challenges to meet in China to enable us to defend our position.



CEO Matijas Meyer (left) and Chairman of the Board of Directors Beat Kälin.

What does this mean in terms of strategy?

Beat Kälin: We have to be even closer to our customers in China, as speed is a key competitive factor. What this means specifically is that we increasingly manufacture the products destined for China and the wider Asian market directly in China and adapt them in line with local requirements. The Komax Group has already been manufacturing products and producing applications in China for years, and so it has the necessary experience. The combination with Schleuniger has also brought us additional expertise, with the manufacturing site in Tianjin. This will be further reinforced in the future. In other words, the localization of machines for the Asian market that I mentioned earlier will take place in Tianjin. The steps to implement this are already underway.

Will this be enough to increase the market share in China?

Beat Kälin: Our strategic focus areas encompass a whole host of measures to enable us to

achieve our targets. Alongside the aforementioned localization, we would be open, for example, to acquisition-driven reinforcement in China if we were convinced that a company could make a material contribution to our sustainable, profitable growth strategy.

How is the integration of Schleuniger progressing?

Matijas Meyer: Overall, I am very satisfied. A number of teams are already so well blended that, for outsiders, it is probably no longer possible in many places to discern whether an individual employee originally came from Komax or Schleuniger. We migrated the Schleuniger companies to the Komax IT environment in 2023, thereby facilitating collaboration among employees.



“The optimization of the product portfolio will help to steadily reduce complexity and bring down maintenance costs.”

Matijas Meyer, CEO

What proved to be particularly important in the integration process in 2023?

Matijas Meyer: The top priority was not to lose any customers. We achieved that. Last year already, we managed to optimize almost the entire distribution network, which was an important factor in this. Prior to the combination, Schleuniger worked with 36 distributors worldwide. Although Komax also works with distributors, it has a far higher number of its own companies that take care of distribution and service locally. Now the focus has shifted to working out a solution for each individual country, so that ultimately all products from the entire Komax Group can be offered on a one-stop basis from a single source. Where there was both a Komax and a Schleuniger distributor in a country, it was

not always easy to find a solution, but we have already come a long way.

Have you so far focused exclusively on distribution structures?

Matijas Meyer: Absolutely not. We also carried out an intensive analysis of the product portfolio, which has become even more comprehensive following the combination with Schleuniger. There is some overlap in individual product segments, and we are working on these. We are applying a "best of" strategy here, which means taking products off the market on a gradual basis. The remaining products will be developed further, some of them incorporating functions from products that have been discontinued. The optimization of the product portfolio will help to steadily reduce complexity and bring down maintenance costs, but it will take a few years before this process is complete.

The Komax Group announced its Strategy 2028 in 2023. Where does the strategy place the focus for achieving the targets set?

Beat Kälin: We want to continue to grow robustly and profitably, achieving revenues of CHF 1.0–1.2 billion in 2028, alongside an operating result of CHF 120–160 million. This corresponds to annual average growth in revenues of 6–9%. To meet this target, we have defined various focus areas. We have to expand the service business, which has consisted primarily of the spare parts business to date. As already mentioned, we also need to extend our business in Asia – in China in particular, but also in India. In addition, there is still considerable automation potential that we could better leverage in the Aerospace & Railway and Industrial & Infrastructure market segments. It is also crucial that we continue to bring onto the market solutions that offer our customers a genuine competitive edge, by – for instance – significantly increasing automation or ensuring quality assurance along the entire value chain.

ESG is an integral component of the new strategy for the first time. Why only now?

Beat Kälin: Environmentally sustainable business practices along with socially oriented and responsible company management have been anchored as core elements in our strategy for a good few years now. What's new is that we are now grouping these concepts together under the umbrella term "ESG" and communicating

more clearly that this forms the framework of our strategy. As part of this, we have defined 13 non-financial targets that we aim to achieve by 2028. We have also significantly expanded our ESG reporting and issued an ESG Report in accordance with GRI Standards.

What topics will be a high priority for you in 2024?

Matijas Meyer: The market situation is very challenging at the moment, as customers continue to be reticent about investing. This means we have to intensify our distribution activities and, wherever possible, reduce costs. We already started to do this in the second half of 2023. Alongside these aspects, a central element in my view is the implementation of our Strategy 2028. We have set ourselves ambitious financial targets and – as I see it – nothing has changed in terms of our ability to achieve them.

What makes you so confident despite the current difficulties in the market situation?

Matijas Meyer: We are operating in a growth market, as the trend toward automation is essentially intact. Since only 20% of wire processing is carried out by machines, there is enormous growth potential for us. The targeted revenues of over one billion Swiss francs in 2028 looks a long way off from where we are standing now, but at no point did we ever expect growth between 2024 and 2028 to be linear. The coming years will bring a number of exciting product launches, and these – coupled with many other strategic initiatives – will help us achieve our targets. On top of this, we will continue to optimize the Komax Group structurally so as to make the best possible use of the potential offered to us through the combination with Schleuniger.

“The Komax Group is our industry’s number one in terms of revenues in China, too.”

**Beat Kälin,
Chairman of the Board of Directors**



MEGATRENDS ACCELERATE GROWTH

Global cross-sectoral megatrends and developments in the Komax Group's principal market, the automotive industry, are accelerating the growth of the company. Changes in the labor market, environmental awareness, and the rising complexity of end products, as well as a corresponding increase in quality requirements, are all fueling a steady rise in demand for automation solutions.

The various megatrends that are becoming increasingly harmonized across the three market segments of the Komax Group stand in contrast to the persistently low level of automation at the factories of wire manufacturers. The lion's share of wire processing (approx. 80%) is still done by hand. Manual production is facing increasing challenges that can be overcome by means of process automation.

Rising wage costs

Due to wage cost considerations, customers currently produce the majority of their wire harnesses in emerging markets. In the long term, however, it is likely that today's low-wage countries will see a further rise in wage costs, prompting a further rise in automation. Geopolitical uncertainties are another factor here. The repercussions of global events of recent years – from the coronavirus pandemic and difficulties in international supply chains to the war in Ukraine and

developments in the Middle East – are prompting a rethink by customers of the Komax Group. They are looking to shorten their supply chains with a view to strengthening security of supply. However, if wire processing were to be repatriated to countries with higher personnel costs, headcount would have to be reduced in order to offset this additional expenditure. And this in turn would only be possible with a significant rise in the degree of production automation.

Growing shortage of skilled labor

For several years now, a growing shortage of skilled personnel has been a feature of the international labor market. Particularly in technical positions and in assembly line work of the kind that plays such an important role for the customers of the Komax Group, finding sufficient personnel to match business growth has become an increasing challenge. This development, too, will prompt investment in automation solutions.

GROWTH DRIVERS OF THE KOMAX GROUP

Automation

Vehicle production

Cross-sectoral drivers

Rising wage costs



Traceability



Lack of skilled workers



Miniaturization



Automotive industry drivers

More wires per vehicle



Simplifying of wire harnesses



Autonomous driving



E-mobility



Rising number of vehicles manufactured



CAGR 5–6%¹

+

CAGR 1–3%¹

CAGR 6–9%¹

¹ Compound annual growth rate of the Komax Group 2023–2028.

Miniaturization continues to make inroads

Another factor driving automation is the ongoing miniaturization of wires. Wire cross-sections are becoming ever smaller, which makes manual processing difficult or even impossible.

Increasing complexity necessitates seamless traceability

Particularly in the sphere of transportation, be it in cars, planes, or public transport, the complexity of systems is on the rise as a result of technological progress. The autonomous driving trend coupled with end customers' needs for greater security, comfort, and entertainment are resulting in an increasing number of wires, as well as new wire types.

The rising complexity of wire harnesses in end products is increasing in step with the quality demands placed on wire manufacturing. The rapid proliferation of the zero-error tolerance principle means there is a growing need for

quality assurance systems. These test systems guarantee the highest possible functionality of wire harnesses and electronic assemblies. Manual processes are increasingly ill-suited to these greater demands, and the potential sources of error are multiplying accordingly. However, defective wire harnesses require considerable time and expense to repair or replace once they have been installed, which inevitably comes at the cost of productivity and profitability. Moreover, functional defects in electronic systems can lead to serious reputational damage.

An important criterion of quality assurance is therefore the seamless traceability of the individual process steps. Only in this way can any flaws at the production stage be rapidly identified and eliminated. Intelligent automation solutions, quality assurance tools, and systems for testing wire harnesses before they are installed in end products help guarantee the efficiency, safety, and consistently high quality of the production

process. This has been widely recognized, not least by automotive manufacturers, which is why they are increasingly calling on their suppliers to increase the degree of automation in their production processes.

Cross-sectoral automation trend

Based on market analysis being gathered for Strategy 2028, the Komax Group is expecting automation alone to lead to an average annual growth rate of 5–6% (➤ page 25). In other words, the cross-sectoral automation trend is going to be by far the most important driver of business in the three market segments of the Komax Group over the next few years.

Growth drivers in the automotive industry

Even after the combination with Schleuniger, the Komax Group generates the bulk of its revenues in the automotive industry (approx. 75%), and therefore benefits from the long-term global megatrends of this industry. These include growing environmental awareness among consumers and the need for greater safety and comfort in vehicles. On top of this, a global megatrend toward affordable vehicles is emerging. Despite the growing complexity of vehicles, individual mobility has to remain within the means of consumers if it is to be a feasible option for as many people as possible.

Rising number of vehicles being manufactured

After the slump of 2019/2020, global automotive manufacturing is back on a growth trajectory. According to S&P Global Mobility analysis, some 90 million cars and light commercial vehicles were manufactured worldwide in 2023. The volume of production has therefore increased significantly (2022: 82 million vehicles). For the next five years (2024–2028), S&P Global Mobility is predicting an average annual growth rate in vehicle production volumes of just over 1% (more on market development: ➤ page 40 onwards).

More wires per vehicle

Innovations in vehicle construction, new functionalities, and an ever-rising fit-out level in all vehicle classes are leading to a further increase in demand for the wires produced for each vehicle. The electrical systems in today's compact passenger cars already comprise as many as 1 300 wires, 2 300 crimp contacts, and 300 plug

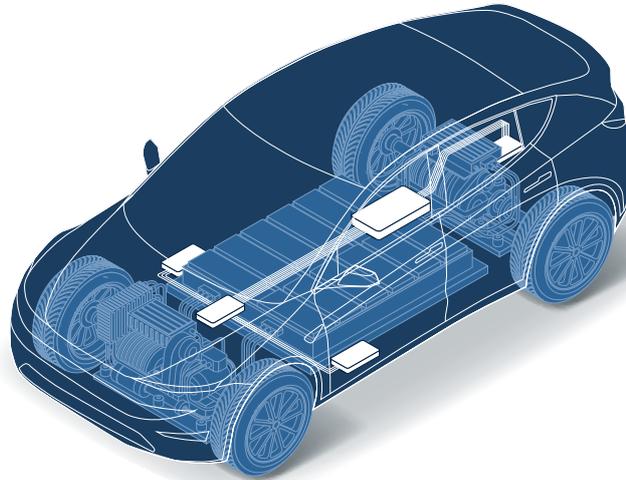
connectors. Premium vehicles require as many as 2 100 wires, up to 4 000 crimp contacts, and over 500 plug connectors. This is several times as many as in vehicles built two decades ago.

E-mobility calls for new wire processing solutions

Growing environmental awareness among consumers and the associated target of emission-free vehicles are some of the megatrends that will underpin the business of the Komax Group in the long term. In addition, the need for a more sustainable approach to the use of the Earth's resources is being increasingly boosted by regulatory measures. For example, from 2035 onwards, no new passenger cars with diesel or petrol engines will be registered in the European Union (➤ page 42). In the most important market segment for the Komax Group – the automotive industry – the shift from combustion engine vehicles to e-mobility plays a key role. New types of high-voltage cables will have to be processed for these hybrid and electric vehicles (➤ page 43). This is an opportunity for the Komax Group to create further unique selling propositions and thus additional sales opportunities.

Simplifying wire harnesses through zonal architecture

The aforementioned cross-sectoral growth drivers (➤ page 19) are leading to specific developments in the automotive industry to facilitate the automated production of wire harnesses. A number of automotive manufacturers and suppliers are seeking to radically simplify the wire harness. The Komax Group is involved in such projects (➤ page 51), and is demonstrating what changes are needed to wire harnesses in order to facilitate a greater degree of automation in the production process. The goal is a zonal electrical system with several smaller wire harnesses rather than one big, complex one. Wire length is reduced overall, but not necessarily the number of wires used, and this is the key element for the Komax Group. Simpler wire harnesses with shorter wires are easier to produce on an automated basis, and will help ramp up the degree of automation. Efforts to simplify wire harnesses should also generate cost savings. Individual mobility has to remain affordable for consumers. This requires greater cost efficiency in manufacturing, which is in turn increasing the pressure to automate wire processing further.

ZONAL ARCHITECTURE OF THE WIRE HARNESS IN THE VEHICLE

The zonal architecture of the wire harness in the vehicle uses zone control units (shown as white boxes in the diagram) to divide the wire harness into several small harnesses with short wires, which are easier to automate.

Autonomous driving

A further trend is the growing degree of interconnectedness. It is not just vehicle infotainment systems that are becoming ever more wide-ranging and complex. Integrated information systems, fed by dozens of sensors, are paving the way for the emergence of autonomous driving. This will further increase the number of wires that have to be produced and installed in vehicles.

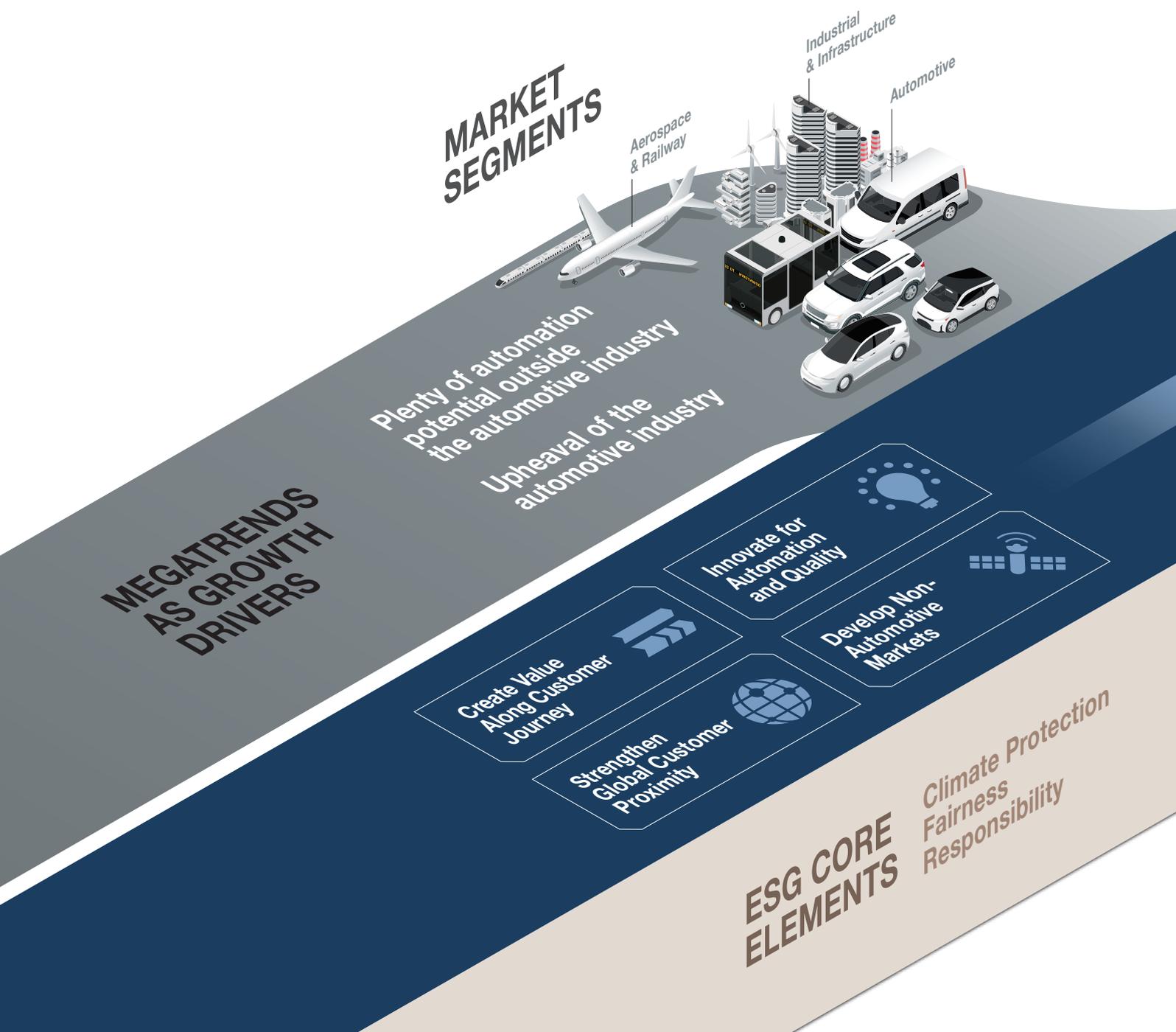
These developments in the automotive industry are opening up significant growth opportunities for the Komax Group, above and beyond the existing cross-sectoral growth drivers. The Group expects to be able to generate an average of 1–3% growth annually over the next five years as a result of the growing number of vehicles produced.

Long-term trend toward automation intact in all market segments

As a result of these various drivers, the Komax Group finds itself in a growth market in which customers are increasingly investing in automation solutions. These customers are aware that there is no way of side-stepping the trend toward automation. In the coming years, too, global megatrends will contribute to the gradual increase in the automation of wire processing.

STRATEGY 2028

The Komax Group develops state-of-the-art technological solutions for automated wire processing in three market segments. In order to achieve above-average profitability and sustainable growth, it pursues four strategic priorities with its new Strategy 2028. The corporate purpose, the core values, and the ESG approach form the basis of these.



1.0 – 1.2
CHF billion
revenue

120 – 160
CHF million
EBIT

2028
FINANCIAL
TARGETS

Enormous
automation
potential

90%

PURPOSE &
FIVE CORE
VALUES

Innovation
Quality
Customer Focus
Responsibility
Success

“We are looking at an Eldorado scenario in automation. Through the combination with Schleuniger, we have established a market position from which we will be able to best exploit the opportunities that arise in the coming five years and beyond.”

Matijas Meyer, CEO Komax Group

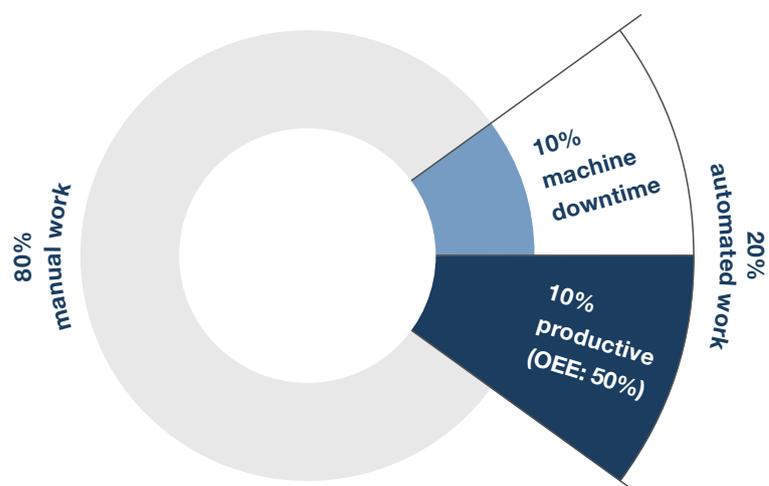
The Komax Group offers its customers cutting-edge technical solutions for automated wire processing in three market segments – Automotive, Aerospace & Railway, and Industrial & Infrastructure – and continuously strives to improve its competitiveness. Above-average profitability and sustainable growth are important objectives in this context. These go hand-in-hand with environmentally conscious, socially aware, and responsible conduct toward all stakeholder groups. In order to achieve its objectives, the Komax Group pursues four market-oriented strategic priorities, which are in turn supported by three strategic initiatives. The Komax Group specializes in innovative solutions for all wire processing applications and for the testing of wire harnesses. The emphasis is on processes such as

measuring, cutting, stripping, crimping, taping wires, and block loading. The Komax Group offers its customers fully automated and semi-automated serial production models as well as customer-specific systems (for all degrees of automation and individualization), which optimize processes while increasing productivity. These are supplemented by an extensive range of quality assurance modules, testing devices, and networking solutions for the reliable and efficient production of wire harnesses. Digital services that increase the availability of installed systems and test their productivity also form part of the range, as does intelligent software. All of this provides ideal conditions for customers of the Komax Group to consolidate and increase their competitive advantage.

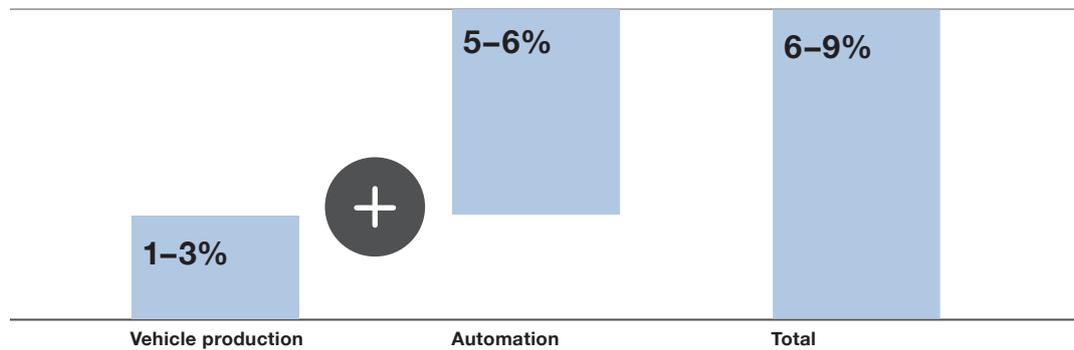
AUTOMATION POTENTIAL IN THE OVERALL MARKET

Automated work vs. manual work

The overall equipment effectiveness (OEE) of customers amounts to just 50%, which provides the Komax Group with a further 10% of automation potential. Thus, the total automation potential in the market is around 90%.



Automation drives the Komax Group's growth



90%
automation
potential

Increasing the degree of automation and overall system effectiveness

The Komax Group has considerable growth potential, as wire processing is currently no more than 20% automated. Manual work, which still accounts for 80% of wire processing, is increasingly losing its commercial viability due to various factors (► pages 18–21). In addition, there is still a significant amount of optimization potential in the work already carried out by machines. Due to time-intensive setup and changeover processes, which are becoming more common due to the persistent decline in batch sizes, the wire processing machines of customers can be inactive for as much as half of the working day. Bearing in mind that their overall equipment effectiveness (OEE) amounts to just 50%, the optimization potential actually works out at 90% rather than just 80%. The Komax Group is keen

to exploit this potential over the longer term, and it is therefore the key driver for the ambitious Strategy 2028.

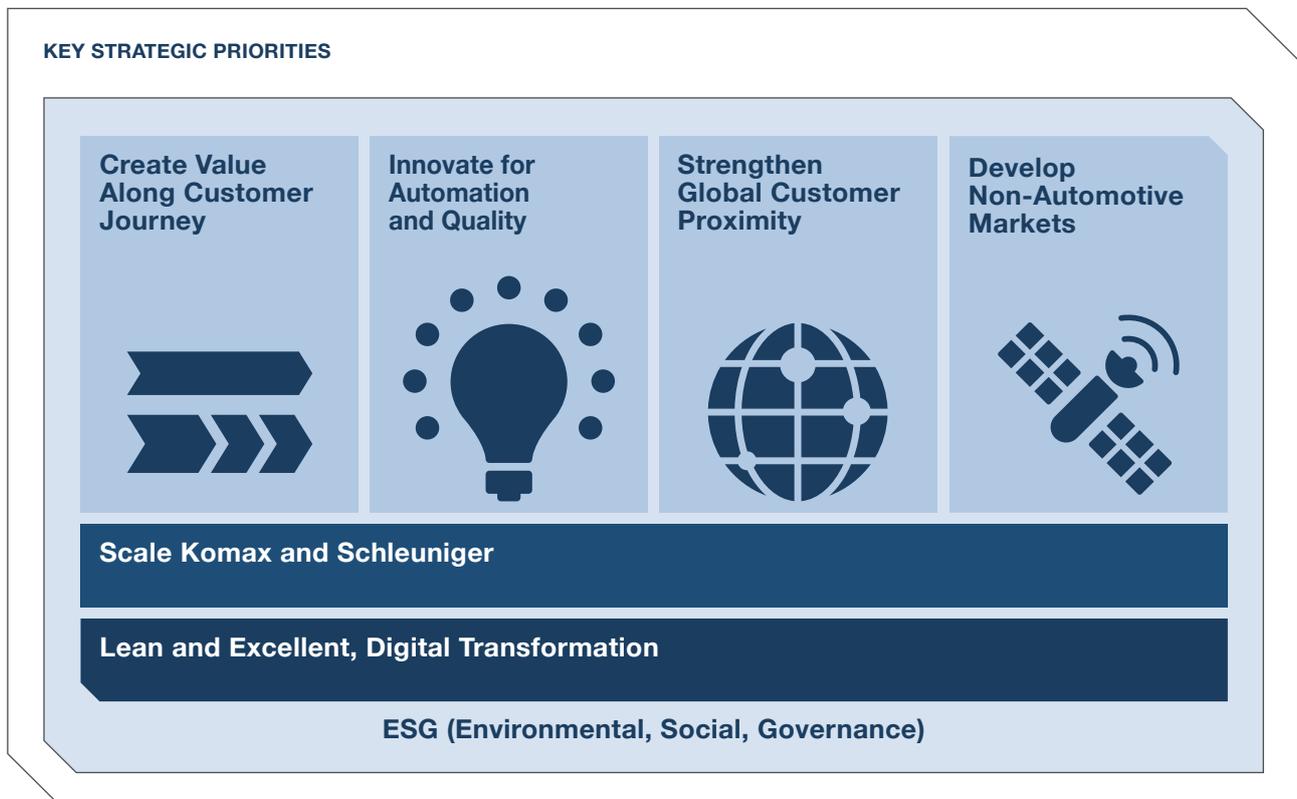
Following the combination with the Schleuniger Group at the end of August 2022, the Komax Group analyzed the new situation in detail. This was necessary, as comprehensive due diligence prior to the combination was impossible due to the competition situation. This analysis formed the starting point for the further development of the existing strategy for the period 2024 to 2028, as well as for the definition of financial targets. In order to achieve its targets, the Komax Group is striving to achieve average annual revenue growth of 6–9%. The trend of automation is the key growth driver, accounting for some 5–6%. The rising number of vehicles manufactured contributes a further 1–3% to growth.

“The Komax Group has the necessary market knowledge, specialist expertise, and resources to successfully implement the defined key strategic priorities. The Board of Directors firmly believes that it has charted the right strategic course for the Komax Group to ensure continued success and the ability to build on its market and technology leadership in the future.”

Beat Kälin, Chairman of the Board of Directors

FOUR KEY STRATEGIC PRIORITIES

In order to achieve its set targets, the Komax Group must grow faster than the market. To this end, the Board of Directors has approved four key strategic priorities for market development: Create Value Along Customer Journey, Innovate for Automation and Quality, Strengthen Global Customer Proximity, and Develop Non-Automotive Markets. In addition, two strategic initiatives address issues that are important to the attainment of profitability targets and the financing of growth: Scale Komax and Schleuniger, and Lean and Excellent, Digital Transformation. The overall picture is complemented by the ESG strategic initiative, which forms a framework for sustainable action by the Komax Group.



Create value along customer journey

The Komax Group is keen to generate value right from the first moment of customer contact. Customer contact starts with the offer phase, encompasses delivery and installation of the machinery, and extends to servicing across the entire life cycles of products. Thanks to many decades of experience and its proximity to its customers (➤ pages 30/31), the Komax Group understands their needs and already offers them a comprehensive range of innovative and reliable automation solutions. The offering covers the most capital-intensive and critical processes of customer value chains – from measuring and cutting wires to the taping process, and finally the testing of the completed wire harness

(➤ page 55). The Komax Group therefore has by far the broadest portfolio of solutions on the market, which means that it can address a whole range of customer needs in a targeted way. The expansion of the service business lies right at the heart of this initiative, as up until now it has been largely limited to the replacement parts business. A key element here is the development of value creation packages – all-encompassing, worry-free packages in which customers receive not just the machinery itself, but also an array of services such as technical support, training, and financing offers (➤ page 33).

8–9%
of revenues
invested in
research and
development

Innovate for automation and quality

The Komax Group is keen to remain innovative, and to achieve and extend a technological edge over its competitors. Here, the focus is on solutions that significantly increase automation while at the same time guaranteeing the utmost quality in all areas of processing. This gives customers the assurance that the quality will be there at the first go if they use Komax machines for their production. But in the event that they have doubts nonetheless, the goal is for them to have full traceability throughout the production process.

The Komax Group invests 8–9% of its revenues in research and development so that it can offer state-of-the-art products and services on an ongoing basis. Together with Schleuniger, the Komax Group therefore possesses a degree of innovative strength that is unique in the market. It uses this to increase the productivity and flexibility of its customers, thereby providing them with additional competitive advantages. The Komax Group will continue to make numerous technological innovations available to its customers, which can often facilitate dramatic efficiency increases in automated wire processing. A good example is the automatic tool changer based on IQC technology in the Alpha 650 crimp-to-crimp machine, which reduces change-over times from around 15 minutes to less than a minute.

Strengthen global customer proximity

The Komax Group has 30 engineering and production sites located in Europe, Asia, North and South America, and Africa. It provides sales and service support in more than 60 countries through its subsidiaries and independent agents, which gives it a unique global presence. The Komax Group has set itself the goal of being close to its customers so that it can provide outstanding service combined with the shortest possible response and supply times. It is therefore determined to expand its global reach in a targeted way – be it through acquisitions, the establishment of new locations, or the expansion of existing sites.

There is a strong focus on Asia, as the Komax Group generates a below-average proportion of revenues in this region given the sheer size of this market, which is the source of more than half of all annual global vehicle production volumes. As a result of a phase of weakness in China,

this region accounted for just 16.6% of Group revenues in the reporting year. The need for automation solutions in Asia is substantial, not least due to the rapid proliferation of e-mobility. This is true not just of China, but also of India and Southeast Asia. The Komax Group possesses the greatest innovative strength in its industry, as well as the resources to harness the opportunities that present themselves in Asia. This also includes the further localization in Asia of products that were originally developed in Switzerland.

Develop non-automotive markets

The Komax Group currently generates some 75% of its revenues with customers active in the automotive industry. Market estimates indicate that some 60% of globally processed wiring is used in automotive manufacturing. This high proportion is explained by the fact that the automotive industry is without equal when it comes to standardization and automation.

However, numerous wires are processed in all sorts of other markets too, which presents considerable automation potential. The Komax Group concentrates most of its efforts on two additional market segments (▶ page 39) that have synergy potential with the core business: Aerospace & Railway and Industrial & Infrastructure. In both segments there is plenty of automation potential that the Komax Group is keen to exploit further in the future. Thanks to its combination with Schleuniger, it has acquired greater opportunities to do just that, by reaching additional customers outside of the automotive industry. Many opportunities can also be found in the industrial and infrastructure area, where the Komax Group offers comprehensive digital solutions for control cabinet builders, for example. As these markets offer attractive longer-term growth potential, the Komax Group is seeking to achieve increasingly greater penetration so that its non-automotive share of revenues can be increased on a step-by-step basis.

25%
revenues with
non-automotive
customers

30
engineering and
production sites
globally

STRATEGIC INITIATIVES

In order to support these four strategic priorities in a targeted way, the Board of Directors has defined three initiatives.

Scale Komax and Schleuniger

Not only does the combination of the Schleuniger Group with the Komax Group generate growth, it also opens up numerous opportunities to design structures and processes more efficiently. The focus is on the targeted exploitation of the respective strengths of Komax and Schleuniger in order to make the best possible use of the potential arising from the combination.

The Komax Group has integrated all companies of the Schleuniger Group into its existing business unit structure, and has restructured its organization to some extent in order to be ideally positioned to implement Strategy 2028. This will enable the Komax Group to further develop over the coming years by ensuring the best of both worlds. Among other things, this includes the further optimization and adjustment of both the distribution and service network and the product portfolio, as well as the exploitation of countless newly acquired cross-selling opportunities thanks to the much larger customer base.

Lean and Excellent, Digital Transformation

As the corporate goals of the Komax Group are geared around both longevity and sustainability, streamlined organizational and process structures are needed, as well as the determination to improve these continuously. The efficient design of the entire value chain can reduce the use of valuable resources such as materials, energy, innovative output, and time. As the commercial

environment of the Komax Group is subject to continuous change, it must adjust to this development and deliver the corresponding improvements on an ongoing basis. A key element in increasing efficiency in this area is digital transformation. The Komax Group is currently in the process of building up a digital twin of its value chain – from procurement to assembly, delivery, and service. The transparency that results will enable further improvement potential to be identified and the reaction speed of the Komax Group in the market to be increased. The ongoing optimization of proprietary processes and supply chains as well as internal and external digitalization are therefore key factors in safeguarding high profitability and financing growth going forward.

Environmental, Social, Governance (ESG)

ESG – environmentally sustainable business practices along with socially oriented and responsible corporate governance – forms the framework for the Komax Group's strategy. This should become even more tangible and visible in the future with the implementation of the newly developed ESG strategy and the fulfillment of various non-financial targets. More on this can be found in the ESG report, in which the Komax Group discloses comprehensive key figures on consumption levels, emissions, and social issues in accordance with the international GRI standard (► pages 60–101).

MID-TERM TARGETS

The Komax Group wants to increase its value on an ongoing basis through profitable growth. It has therefore set itself ambitious targets for growth and profitability by 2028.

1.0–1.2

revenues 2028 in CHF billion

120–160

EBIT 2028 in CHF million

By 2028, the Komax Group aims to be generating revenues of CHF 1.0–1.2 billion. The extent to which the lower end of this bandwidth can be exceeded will primarily depend on any acquisition activities, which will be focused on Asia and the optimization of the distribution and service network. With targeted annual average revenue growth of 6–9%, the Komax Group will be able to at least maintain its market share and possibly expand it further.

The Komax Group has a broad portfolio of innovative solutions. In addition, the combination with Schleuniger and the optimizations of corporate processes (either planned or already implemented) will facilitate additional efficiency increases. Rising revenue figures and an advantageous product mix will enable the Komax Group to deliver disproportionately high increa-

ses in profitability. It is therefore seeking to achieve EBIT of CHF 120–160 million for the 2028 fiscal year. Thanks to a business strategy that is geared toward long-term success, the Komax Group creates sustainable value that will benefit investors too.

Financial stability

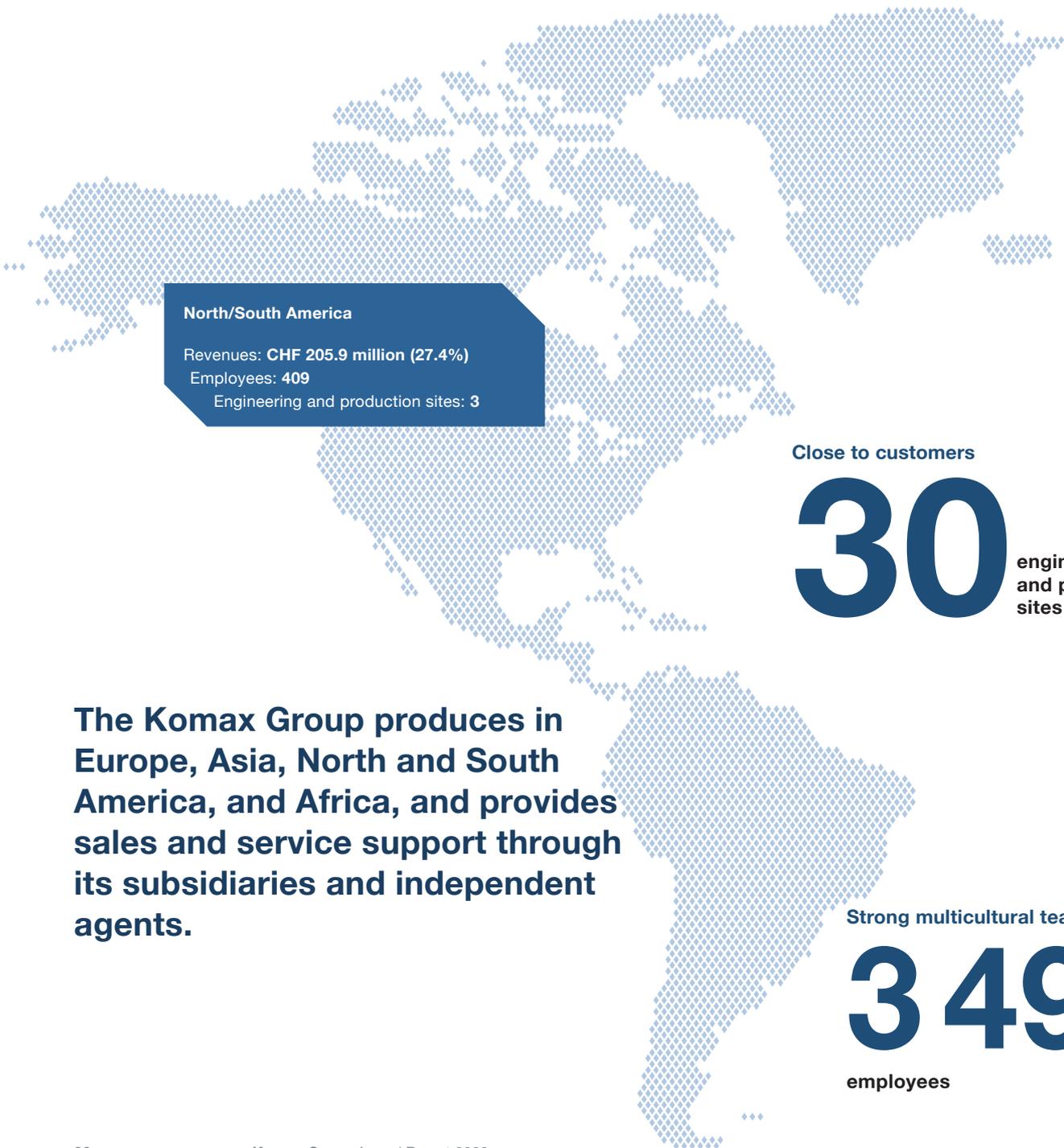
Safeguarding financial stability is a further key strategic element for the long-term success of the Komax Group. It is distinguished by its robust equity base and strong profitability. The equity ratio amounts to 55.1% while the debt factor (net debt divided by average EBITDA) stands at 1.00. This solid foundation enables the Komax Group to systematically pursue opportunities to develop further, and offers security in challenging times.

Komax Group key figures

in CHF million	2023 ¹	2022
Revenues	752.0	606.3
EBIT	67.8	71.7
Payout ratio (in % of EAT)	35.1	54.5

¹ Excluding one-time effects (revenues: CHF +10.9 million; EBIT: CHF +5.0 million).

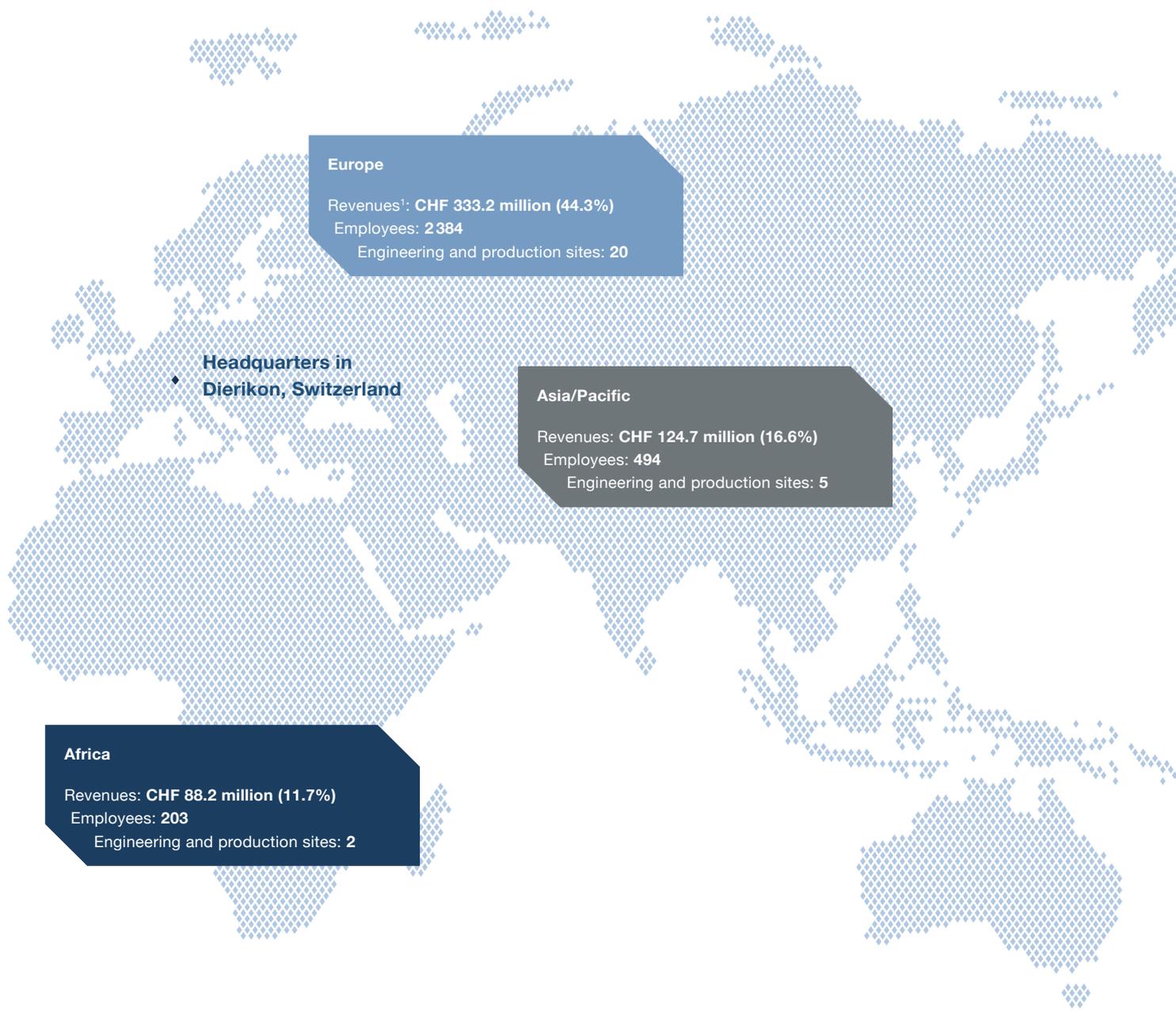
AROUND THE WORLD



Unique distribution and service network

60

countries with sales
and service support



¹ Excluding one-time effect (CHF +10.9 million).

CUSTOMER PROXIMITY – REAL AND DIGITAL

Being close to customers in both the real and digital sense is crucial to the success of the Komax Group. This is the only way to facilitate short response and supply times, as well as comprehensive service. This is why the Komax Group combines, true to its motto “global local” – global production with a unique local distribution, engineering, and service network across all continents –, with its tailored digital offerings.

The Komax Group has 30 engineering and production sites across the continents of Europe, North and South America, Asia, and Africa, at which 3 490 employees produce standardized products, customer-specific systems, and testing systems (► pages 30/31). With its unique sales and service network, the Komax Group can always provide efficient and competent support to its locally and globally active customers. It provides sales and service support via subsidiaries and independent agents in over 60 countries. Around 380 employees work in the international service organization.

The Komax Group expanded its presence in the markets of Europe, North America, and Asia through its combination with Schleuniger in 2022, acquiring eleven additional companies and numerous distribution partners spread across all continents. In addition, it strengthened its distribution and service activities in the reporting year with the acquisitions of WUSTEC and the Alcava Group.

In order to properly service its much larger customer base and offer the right solutions from a single source, the focus in the reporting year

lay on the analysis and optimization of the distribution and service network. This involved reviewing local market strategies and eliminating cases of overlap in distribution structures. It included situations where a country had both a Komax distribution partner and a Schleuniger distribution partner, but also where a Schleuniger distribution partner joined a market area with a local Komax company. The optimization of the structure of the distribution service network was completed by the end of 2023 – with the exception of just a few countries where negotiations are still being finalized. Individual solutions were arrived at for each individual country, for example the combination of Schleuniger and Komax distribution partners, the spin-off of a distribution partner, or the acquisition of such a partner.

The latter was the case for the Alcava Group, with its companies Lintech, Malintech, and Tulin-tech. Thanks to this acquisition, which took effect on 1 October 2023, the Komax Group has expanded its distribution and service network in France, Morocco, and Tunisia. Alcava has been distributing the products of the Schleuniger Group in these countries for more than 15 years.

A different solution was found for the Iberian Peninsula (Spain and Portugal): Here, the Komax Group sold its company Komax Portugal to Estanflux, Komax's long-time representative in Spain. This had the effect of strengthening this proven distribution partner, as Estanflux will now cover the entire Iberian Peninsula and thus ensure that customers receive even more flexible and focused support in these markets.

The optimization of the service and distribution network will be completed in 2024, with the aim of ensuring a dedicated contact partner in every country capable of offering solutions of the Komax Group from a single source. In order to ensure alignment with changing customer needs, the Komax Group also regularly scrutinizes its global production structure and under-

takes modifications where necessary. For example, in the reporting year this resulted in the closure of Komax Testing Brasil and the Jettinigen site of Schleuniger GmbH in Germany.

Further development of digital customer proximity

In addition to personal contact with the employees of the Komax Group, customers also want to be able to call up product information, put service requests or place an order swiftly, simply, and digitally. The Komax Group helps them to do just that, providing them with a number of digital solutions. In order to meet customer needs in both the digital and the real world, the Komax Group has adopted an omnichannel approach.

“We pursue an omnichannel approach so that we can offer all our customers the best possible customer experience. We serve them personally and digitally across all channels so as to be able to generate genuine added value at all times.”

Tobias Rölz, Executive Vice President, Market & Digital Services

The Komax Group laid the foundations for the improvement of the digital customer experience the previous year with its new website (www.komaxgroup.com). This forms the basis for its 24/7 online service in the form of a self-service platform. Another key milestone was reached in 2023 with the online service ticketing system on the new “myKomax” customer portal, which was developed on the basis of customer feedback. This enables customers to log in to their customer area via the website in order to deal with maintenance orders or warranty cases, for example. A pilot phase is currently running with a handful of specially selected customers. This customer portal offers greater transparency, accelerates processing times of orders and inquiries, and helps further increase customer satisfaction. This is an important step on the road to the self-service boutique of the SMART FACTORY by KOMAX (▶ page 49). The new online service ticketing system and the “myKomax” customer portal will be continuously expanded over the coming years.

Thanks to its customer proximity, the Komax Group has its finger on the pulse of industry. This

is crucial for the Group if it is to deploy its experience of almost 50 years to develop high-quality, innovative automation solutions for local needs in global markets. In addition, international orientation also helps mitigate the repercussions of currency fluctuations. The Komax Group seeks to ensure that costs and revenues are generated in the same currencies to the greatest extent possible.

Value Creation Packages – comprehensive worry-free packages for customers

The Komax Group partners its customers across the entire product life cycle. To this end, it offers them all-encompassing solution concepts known as Value Creation Packages. In addition to the machines themselves, these provide customers with service agreements for individual machines or entire production sites, technical support, training, digital solutions, and financing offers such as leasing or pay-per-use concepts.

A key element here is the “Komax Care” service agreement concept. This offers a broad-based spectrum of services comprising advice,

installation, training, maintenance, repairs, and the renovation or expansion of customer systems, thereby helping them to get the very best from their machinery investments when it comes to productivity, availability, and quality. The concept was fine-tuned in 2023 to align it even more closely with different customer needs.

Digital products and services – such as the MES (Manufacturing Execution System) 4Wire Px from DiIT or Komax Connect – can likewise be incorporated into the Value Creation Packages. These enable customers to create additional value across the entire life cycle of their machines through efficient production planning and monitoring.

Moreover, the recycling of machinery is also to be enabled in the future so that customers can be offered services across the whole product life cycle, in keeping with the circular economy concept.

Expansion of value chain in the industrial area with WUSTEC

With its acquisition of WUSTEC at the beginning of 2023, the Komax Group acquired a specialist in automated wire prefabrication, particularly for the industrial sphere. WUSTEC, which is head-



The Value Creation Packages of the Komax Group.

quartered in Germany's Black Forest region, has developed a digital platform that, among other things, enables companies active in control cabinet and machine building to order prefabricated wire sets in any quantity online. In other words, the Komax Group can offer its customers a rapid and efficient service with a digital solution that can speed up production.

“With WUSTEC’s cloud-based Wiremaster software, we can significantly streamline data transmission and requirements matching between us and our customers. This enables us to adhere to the tightest possible delivery times and respond flexibly to customer wishes.”

Matijas Meyer, CEO Komax Group

Training to boost productivity

A well-trained workforce can help to minimize outages through user or maintenance error and shorten machinery configuration times. This translates into increased productivity as well as goods of higher and more consistent quality. Through the Komax Academy and the Schleuniger University, the Komax Group empowers its customers to operate and maintain their machines and testing systems flawlessly. For many years

now, the Komax Academy and Schleuniger University have offered on-site teaching at numerous locations of the Komax Group, tailored to different customer needs and levels of experience. In addition, customers have the option of attending more than 360 training modules online in up to 13 languages. Every year, hundreds of customers make use of this offering to increase their specialist skills.

Products and services from a single source – experienced locally

The Komax Group enhances customer proximity through its presence at trade fairs and events throughout the world. Here, it presents its latest developments in automated wire processing and actively fosters exchange of ideas in respect of key themes in the industry.

In 2023, for example, customers had the opportunity to attend live demonstrations by the Komax Group at WirePro Expo in Shanghai, China, in March and at the leading US trade fair EWPTC in Milwaukee, Wisconsin, in July. Moreover, the US Komax company, based in Brookfield, Wisconsin, embarked on a roadshow with a pickup truck and trailer. This drove across the country, making numerous stops at customer locations. Among other things, it exhibited the new Alpha 520 (▶ page 53). In numerous discussions, the Komax team was able to present to its customers the vision of the SMART FACTORY by KOMAX and unveil various innovations and digital solutions.

In November, Komax and Schleuniger staged a shared presence at trade fairs in Germany for the first time – namely productronica in Munich, SPS in Nuremberg, and Komax SLE's In-House Show in Grafenau. Thousands of visitors explored the worlds of innovation and technology on these trade fair days. Whole value chains rather than just individual products were under the spotlight. By joining forces with Schleuniger, the Komax Group now boasts a uniquely wide range of products and services spanning the Komax, Schleuniger, adaptronic, Cirris, DiIT, and WUSTEC brands. Customers thus benefit from all solutions right across the value chain from a single source. Other trade fairs at which the Komax Group will exhibit can be found at www.komaxgroup.com/en/trade-fairs.

Visitors to the trade fair were able to experience first-hand how solutions from the Komax Group increase productivity and flexibility and deliver quality at the first go.





The Komax Group presented its product brands at the productronica trade fair in November 2023 in Munich, Germany.



The Komax Group's automation solutions were presented to an enthusiastic international audience.

THE BRAND WORLD OF THE KOMAX GROUP

komax

komax ■ **Schleuniger** ■ **adaptronic** **CIRRIS** **Di.IT** **WUSTEC** ■ **LINTECH**

The brand world of the Komax Group

A key success factor for the Komax Group is its strong brand. The brand strategy is therefore a vital element in the implementation of Strategy 2028. As an innovative market leader, the Komax Group is confident and performance-oriented. The Komax brand stands for competence, quality, and functionality, and represents the company as a reliable and enthusiastic partner and a pioneer for a shared voyage of discovery with its stakeholder groups. The Komax Group pursues a multi-brand strategy. In addition to the Komax brand, the portfolio also includes the product brands Schleuniger, adaptronic, Cirris, DiIT, and (since 2023) WUSTEC. The Lintech brand of the newly acquired distribution organization Alcava SAS has likewise been part of the Komax Group since 2023.

The overall brand identity is characterized by pioneering spirit, technological leadership, a

commitment to high quality, and a partner-based relationship with customers. The presentation of the individual product brands is uniformly modern across all product groups, with a high recognition factor.

The company's consistent implementation of clear product design with an emphasis on user-friendliness and a first-class customer experience has won the Komax Group multiple awards over the years. The conferral of the 2023 Red Dot Design Award for the Schleuniger Strip Series B300 is just the latest example.

In order to facilitate uniform treatment of the individual brands for both internal and external stakeholder groups, the Komax Group created a brand portal in the reporting year (www.komaxgroup.com/en/brands).



Strip Series B300 wins Red Dot Design Award 2023

The portable Strip Series B300 stripping machine was singled out for the 2023 Red Dot Award for product design. In addition to its intuitive functionality, the stylish look of the B300 also caught the eye of the jury.



reddot winner 2023

MARKETS

The Komax Group primarily focuses on three market segments. The core business is the Automotive market segment, which accounts for some 75% of revenues. In the Aerospace & Railway and Industrial & Infrastructure market segments, the Komax Group is continuously strengthening its presence and exploiting the synergy potential with the core business. All segments benefit from the global service network and the services of the Komax Group.

Following the combination with the Schleuniger Group, the Komax Group analyzed the four market segments in place at the time – Automotive, Aerospace, Industrial, and Data/Telecom – in considerable detail for the elaboration of the new Strategy 2028, tightening the focus of its segmentation. The Automotive market segment remained unchanged. Also unaffected was the objective of further strengthening the non-automotive market segments, particularly in cases where developments in these areas might be valuable for the evolution of the automotive portfolio. The analysis showed that trends in the automotive and non-automotive markets are increasingly overlapping.

In order to address these markets in an even more targeted way, the Komax Group optimized the focus of its market segments, including their sub-segments. This involved expansion of the Aerospace market segment to cover rail transportation (“Railway”) and a broadening of the Industrial market segment to include the Infrastructure area. Among other things, this encompasses the infrastructures of energy provider networks and those required for e-mobility, such as charging stations for electric vehicles. The Data/Telecom market is now covered by the Industrial & Infrastructure market segment, and no longer addressed through its own segment.

Automotive

The automotive segment is by far the most important market segment for the Komax Group. There are a number of reasons for this. In no other industry is the volume of wires to be processed so large. With a production output of around 90 million vehicles per year, each containing on average some 1 700 wires with 3 200 crimp contacts, the demand for automation solutions is enormous. This is because the number of wires per vehicle is continually rising owing to an increase in electrical functions. Although the automotive industry has no peer when it comes to the degree of standardization and automation in the production process, there is still plenty of potential for additional automation steps, as around 80% of wire harnesses are still manufactured by hand.



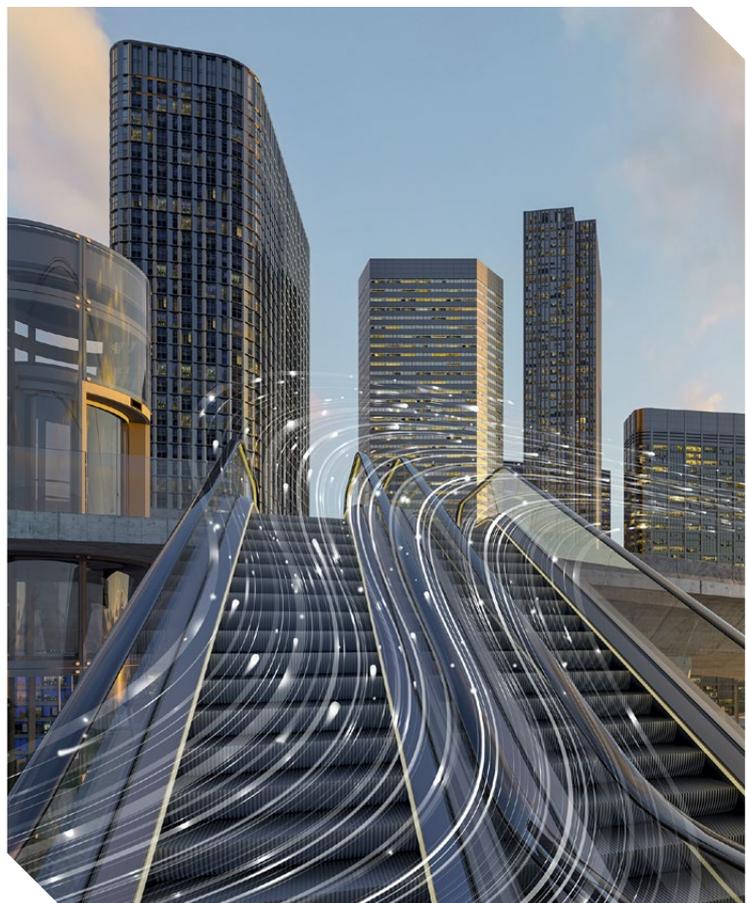


Aerospace & Railway

Issues such as safety, lightweight construction, and lower emissions have been at the forefront of developments in aerospace for many years. The Komax Group can draw on the experience acquired in these areas when it comes to its core business too, as these themes continue to grow in importance in the automotive industry. Thanks to the companies Komax France, adaptronic, and Cirris, the Komax Group possesses a great deal of aerospace expertise. There is very little automation of wire processing in the aerospace industry, and the entry barriers for suppliers are very high. This market segment also now includes the Railway area, as the level of automation is low here, too, and the corresponding need for automated wire processing is rising steadily. Compared to Aerospace, the cables processed here are simpler and lend themselves more easily to automation. The Komax Group would like to expand its market share further in this area.

Industrial & Infrastructure

The experience gained in the automotive industry can be put to good use by the Komax Group in all sorts of other markets. For example, the trend toward increasing automation of wire processing is evident in industrial areas such as energy infrastructure (e.g. e-mobility and renewable energies), building automation, robotics, and mechanical engineering. The processing of wires for industrial and infrastructure applications such as electric control cabinets often involves working with very small batches. In order for automation to nevertheless be commercially viable in this context, the Komax Group offers its customers a broad selection of products from its various brands. These include specific machines such as the Zeta, which manufacture all the various wires that are needed automatically, ensuring that they are in the right sequence and of the right length. This has the effect of reducing manual labor to a minimum. Manual processes such as cutting, stripping, marking, and sleeve insertion are rendered obsolete. Automation of this kind has proven its worth in the area of wire processing in the automotive industry for many years, and is now increasingly finding its way into industrial applications.



Automotive production grows sharply in 2023

The largest sales market of the Komax Group continued its recovery in 2023. Global vehicle production increased significantly. Difficulties in connection with supply bottlenecks were for the most part overcome. The long-term trends of growing numbers of vehicles, e-mobility, and rising automation in the wire processing business remained intact. This was evident from the growing number of vehicles manufactured – an important growth driver for the Komax Group. According to analysis conducted by S&P Global Mobility, around 90 million cars and light commercial vehicles were manufactured worldwide in 2023. Production volumes were well above the level recorded in 2022 (82 million vehicles), and also slightly above the pre-pandemic figure recorded in 2019. However, volumes were still well below the peak figure achieved in 2017, when 95 million vehicles were produced.

Increase in vehicle production in all regions

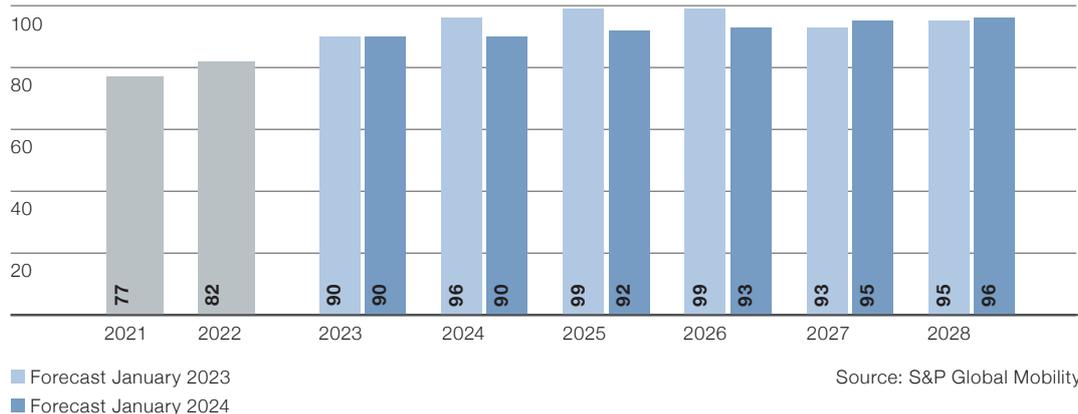
Compared with the previous year, all regions saw growth in the number of vehicles manufactured in 2023. In Europe, 17.8 million vehicles were manufactured, representing an increase of 2.0 million vehicles, or 12.5%. Asia recorded a similar development, with 51.4 million vehicles manufactured (4.3 million vehicles or 9.0% more than in 2022), with the relative growth of Japan and Korea combined (14.5%) working out significantly greater than that of China (9.4%). In North/South America, production volumes came in at 18.6 mil-

lion vehicles, a rise of 8.4% or 1.4 million vehicles. China remains by far the world's biggest automotive producer. In the year under review, 28.9 million vehicles were manufactured in China, corresponding to 32.1% of global vehicle production. A further 22.5 million vehicles were produced in other Asian countries, which means that some 57% of total vehicle production took place in Asia. Vehicle production has been steadily shifting to Asia since 2019, when 52% of all cars and light commercial vehicles were manufactured there.

Growth forecasts point to investment restraint in key markets

Inflation remained at a high level in key markets, which explains why leading central banks such as the Fed, the ECB, and the SNB once again pushed through several rises in their key interest rates in the reporting year following 2022. The rises in interest rates in the key sales markets for the Komax Group were significant in some cases, and duly weighed on customers' willingness to invest. This, together with the geopolitical uncertainties in Eastern Europe, the Middle East, and Asia, cast a cloud over the outlook for the global economy. In the automotive market, growth forecasts for the next few years were significantly scaled back over the course of the year due to the expected economic slowdown. For the next five years (2024–2028), S&P Global Mobility is predicting an average annual growth rate in vehicle production volumes of just over 1%.

Number of passenger cars and light commercial vehicles produced
in millions



The analysts at S&P Global Mobility are expecting diverging regional developments in 2024 in terms of production volumes. While no growth is expected from China, in large parts of the world, the factors referred to above are expected to lead to slight declines (Europe –2.0%, South-east Asia –1.4%). These dips will only be partly offset by the American markets (North America +1.1%, South America +3.0%), meaning that S&P Global Mobility is expecting global production volumes to come in at around 90 million vehicles. Therefore, the analysts are not expecting global growth in production volumes before 2025. China is regarded as the key driver.

Subdued investment activity

Over the course of 2023, the Komax Group increasingly felt a general reticence to invest as a result of the above-mentioned factors. Whereas in EMEA and North/South America this tendency did not become apparent until the end of the year, the world's largest automotive market – China – lagged well behind expectations for a period of several months. As a consequence, the Komax Group started 2024 with a significantly lower order backlog than at the beginning of 2023. The focus is now on further increasing efficiency in the company and achieving even greater customer proximity to give extra impetus to the implementation of Strategy 2028. With the optimizations achieved in 2023, the Komax Group has already taken the first important steps in this regard.

Step-by-step normalization of the supply chain situation

Difficulties in supply chains – a key negative factor in the automotive industry in past years – increasingly normalized over the course of 2023. Automotive manufacturers made adjustments to their supply chains. According to a study produced by the Capgemini Research Institute, they were able to reduce their order backlogs dating from the coronavirus crisis period by around 60%. The war in Ukraine exacerbated the situation in the automotive industry temporarily, as this country is responsible for around 7–8% of all wire harnesses produced in Europe. However, the problem was largely defused over the course of 2022 through the establishment of additional capacity in other countries, particularly in Eastern Europe and North Africa, and the fact that production in Ukraine

did not collapse. The Komax Group started 2023 with a number of the resulting extraordinary orders on its books, which enabled it to post a record order backlog figure at the start of the reporting year. Thanks to the improvement in supply chain reliability, the company was able to work through its order book steadily over the first half of the year, bringing it back down to a level in keeping with that of prior years.

Increasing resilience of supply chains

Strengthening the resilience of supply chains in the face of unforeseeable external factors will remain an important theme in the industry over the coming years. One strategy is the phenomenon of “nearshoring”, in which automotive manufacturers and suppliers relocate their supply chains closer to their sources of production in order to minimize risks. According to the Capgemini Research Institute study, procurement from distant lands (offshoring) has declined by 22% since 2021. This development is also accelerating the trend toward the automation of wire processing, and will therefore drive the Komax Group's business forward in the medium term. An example of how the Komax Group is supporting this trend is its involvement in the Next2OEM project together with automotive manufacturers and partners (▶ page 48).

According to the Capgemini Research Institute, the proportion of a vehicle's value accounted for by semiconductors and sensors has increased by some 50% over the last two years on the back of increasing demand for software-based functions and services. Moreover, this figure is expected to rise further between 2023 and 2025. While this is positive for automated wire processing, it also entails increased demand for semiconductors. Although the availability of semiconductors continued to improve in 2023, this issue can be expected to have an impact on the automotive industry in 2024, too. A number of manufacturers are still confronted by shortages that cannot be fully resolved in the short term.

Overcoming supply chain difficulties was also a challenge for the Komax Group in 2023. However, it dealt with this problem very successfully overall thanks to careful planning and professional supplier management, and was able to make its supply chains significantly more robust.

Accelerated trend toward automation

The various geopolitical and macroeconomic factors have in no way changed the trend toward greater automation in wire processing. This trend continued in 2023. The lion's share of wire processing continues to be done by hand, particularly in low-wage countries in Eastern Europe, North Africa, Central America, and Asia. Geopolitical uncertainties, rising wage costs in the medium term, and an increasing shortage of skilled labor provide wire manufacturers with strong incentives to invest in automation.

In addition, the above-mentioned trend toward shortening supply chains is having the effect of bringing automotive suppliers closer to manufacturers. This is only possible by increasing the degree of automation, as wages in countries where automotive production takes place tend to be higher than those at the production sites of wire manufacturers. The Komax Group is observing this trend toward shorter supply chains not just in the automotive industry, but also in the Industrial & Infrastructure market segment in the US, for example.

Automotive industry undergoing radical change

The automotive industry has been going through a process of radical change for a number of years now. Alternative drivetrains, digitalization, and autonomous driving are playing a key role, which in turn necessitates very sizeable investments from automotive manufacturers. The modern driver has attractive alternatives to diesel and petrol engines, with electric, hybrid, and plug-in hybrid vehicles. In particular, automotive groups have communicated ambitious multi-billion plans in the e-mobility sector, announcing a number of further new electric vehicles in the coming years.

This is in line with national plans to reduce greenhouse gas emissions, an essential step if the targets of initiatives such as the Paris Agreement on climate change and the European Green Deal launched by the EU Commission are to be achieved. In the reporting year, the EU reaffirmed its ban on newly registered cars and light commercial vehicles powered by petrol or diesel from 2035. The only exemption in this regard is for vehicles powered by climate-neutral, synthetically produced fuels ("e-fuels"). EU legislation to tighten the CO₂ fleet reduction target is forcing automotive manufacturers to

bring down the entire CO₂ output of all cars sold by them within a single year – i.e. for the complete fleet – on a step-by-step basis. From 2035, CO₂ emissions for new passenger cars and light commercial vehicles will have to be reduced to zero. The mid-term emission reduction targets for 2030 were set at 55% for cars and 50% for light commercial vehicles.

In 2022, California – the largest automotive market in the US – likewise issued a ban on the sale of new petrol cars from 2035. A number of other federal states have since announced similar plans. The Biden Administration has set the target of ensuring that 50% of all new vehicle sales in the United States are electric from 2030 onward. China likewise wants to increase the proportion of electric cars to 50% of all newly sold vehicles by 2035. In other words, the drive toward emission-free mobility is in full swing.

The Komax Group is supporting the transition to e-mobility

Numerous automotive manufacturers have now set a date from which they intend to cease production of combustion-powered vehicles in Europe: Opel from 2028, Ford, Volvo, and Fiat from 2030, and Hyundai from 2035. In Norway, VW will be selling exclusively electric cars from 2024. In the US, GM has announced its intention to eliminate the emissions of pickup trucks – highly popular vehicles among the US public – by 2035.

Of the approximately 90 million vehicles produced in 2023, no fewer than 14.3 million were electric, i.e. pure battery electric vehicles (BEVs) or plug-in hybrid electric vehicles (PHEVs). The biggest player here is China, which accounts for more than 60% of overall production. Compared with the prior year, in which 10.8 million electric vehicles (BEVs and PHEVs) were produced, this represents an increase of around 32%. Electric vehicles increased their share of overall automotive production from 13.2% to 16.0% in 2023, almost double the proportion achieved in 2021 (8.5%). Growth recorded a slight year-on-year dip in 2023, among other things due to the end of subsidies for electric vehicles in certain countries, and accordingly fell just short of the forecasts published by S&P Global Mobility a year ago. Nonetheless, the upward trend remains unmistakable.

Given the impending bans on combustion engines and the plans of major automotive manufacturers, this development is set to continue

over the coming years. S&P Global Mobility expects almost 19 million plug-in hybrid and electric vehicles to be produced in 2024, which would equate to 21% of global vehicle production. By 2028 this figure is set to rise to more than 41 million, or some 43% of global vehicle production. This would equate to an annual average growth rate in electric vehicle production of more than 20% between 2024 and 2028.

The Komax Group is well positioned to accompany this transition. It will participate in growth on the one hand thanks to its portfolio of solutions for the processing and testing of high-voltage cables, and on the other because new electric vehicle models frequently have state-of-the-art assistance and infotainment systems. All these systems require a large number of special cables, creating additional sales opportunities for the Komax Group. China is by far the largest and fastest-growing market for electric vehicles. With its Strategy 2028, the Komax Group is sharpening its focus on targeted growth in this market.

Automation trend in the Industrial & Infrastructure market segment

Thanks to the strong positioning of Schleuniger in the Industrial & Infrastructure market segment, the business combination has significantly expanded the customer base of the Komax Group in this area. With the new Strategy 2028, the Industrial & Infrastructure and Aerospace & Railway market segments aim to drive forward strategic development, thereby cushioning the volatility of business in the Automotive segment to some extent.

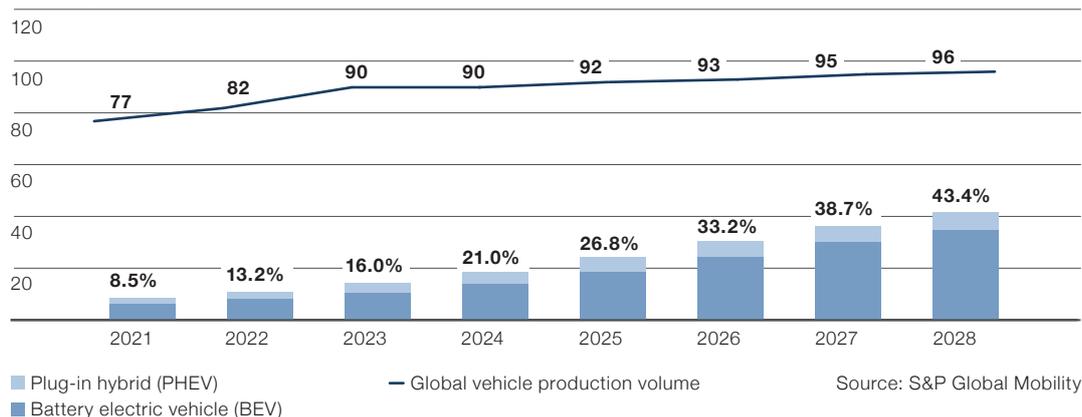
In the Industrial & Infrastructure market segment, the need for automation remains considerable and business is less volatile. This was already apparent in the difficult years following 2020, when this market segment experienced a drop in revenues that was much less pronounced than for customers in the automotive industry. Industrial customers such as control cabinet manufacturers, for instance, are seeking to enhance productivity through increased automation. Back in 2020, the Komax Group launched the Smart Cabinet Building Initiative together with other leading technology companies with a view to optimally harnessing automation potential in the area of control cabinet construction (▶ page 52).

One important factor in this market segment is the shortage of qualified personnel. In the industrial sector, production is typically based close to the relevant OEMs, and thus also in high-price countries. The sharp spike in inflation has led to significant cost pressure here, and automation is the obvious solution. Moreover, automation is also being accelerated in the industrial area by energy transition, such as through projects in the context of the Green New Deal (USA) and European Green Deal. Funding programs and subsidies in infrastructure for renewable energies – such as photovoltaic and wind power, heat pumps, and charging stations for electric vehicles – are supporting growth.

Growth potential in Aerospace & Railway

The Aerospace market segment continued to recover in 2023. According to the International

Proportion of global vehicle production volume accounted for by electric vehicles
in millions



Air Transport Association (IATA), total air traffic, measured in revenue passenger kilometers (RPK), increased by 36.9% compared to 2022. Worldwide, air traffic in 2023 was thus only slightly below the level of 2019 before the Covid-19 pandemic. This phenomenon is also being accompanied by an ongoing rise in global aircraft deliveries. For example, Airbus delivered 611 aircraft in 2021, 661 in 2022, and 735 in 2023, an industry record. The automation of wire processing is still not particularly advanced in this market segment, and this opens up opportunities for the Komax Group that it will put to good use.

The Railway market has been volatile in recent years according to the Global Rail Index. A sharp slowdown in demand was observed in 2023. However, the degree of automation in this market, too, is comparatively low, and the necessary applications lend themselves much more easily to automation here than in the aerospace segment. In this market, the Komax Group has opened up new opportunities in the Quality Solutions area with Cirris and adaptronic, and sees good growth potential here.

Challenging market environment in 2023

The 2023 financial year was characterized by a challenging environment. Among other things, economic and geopolitical uncertainties, interest rate rises in key sales markets, and the muted development of the Chinese market impacted on the willingness of customers to invest. The overall order intake amounted to CHF 686.5 million, or +1.3% compared with the strong previous year (CHF 678.1 million), with organic growth clearly in negative territory.

Significant increase in revenues

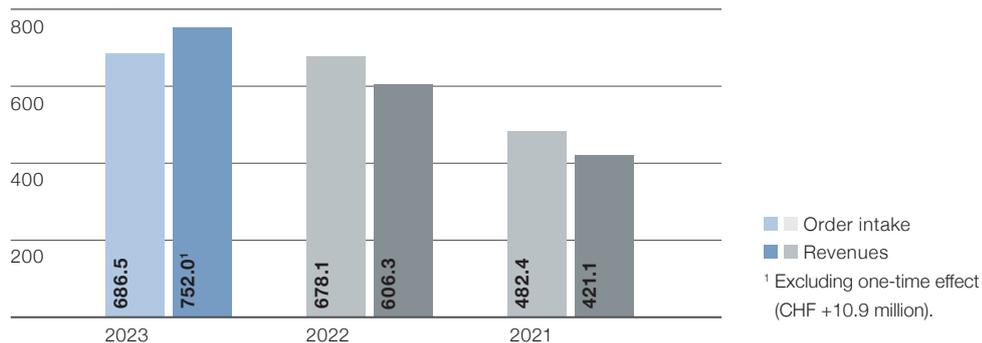
Thanks to revenue growth from the combination with Schleuniger, the Komax Group delivered a significant year-on-year rise in revenues of 24.0% to CHF 752.0 million (2022: CHF 606.3 million). Schleuniger contributed to revenues for the full year for the first time (2022: four months). The one-time effect from the completion of the sale of the building at the Rotkreuz production site in Switzerland in 2023 is not included in this figure. If one-time effects are factored in, revenues increased to CHF 762.9 million.

As a consequence of the difficult economic situation, market performance varied from region to region in the reporting year. Business activity continued to lag well below expectations in China in particular. In Asia/Pacific, the Komax Group recorded a contraction of 6.4% in revenues, with its share of revenues generated in this region declining to 16.6% (2022: 22.0%). By contrast, growth in other regions – North/South America (+55.6%), Europe (+29.3%), and Africa (+6.0%) – was substantial in many cases, due above all to the combination with Schleuniger. In the Americas it was significantly greater than the organic contribution, resulting in a stronger market position in the Industrial & Infrastructure market segment.

The breakdown of revenues by currency changed as follows between 2022 and 2023: The proportion of revenues in EUR declined from 47.0% to 45.1%, but still represents the highest share of Group revenues. The revenue share booked in USD rose significantly to 25.3% (2022: 18.8%), whereas the proportion accounted for by CNY declined from 13.6% to 9.9% due to the weak Chinese market. The share of revenues

Order intake and revenues

in CHF million



booked in other currencies declined slightly to 19.7% (changes and sensitivities of key currencies: ► page 166, Financial Report).

Outlook 2024

The weaker market development that made itself increasingly noticeable toward the end of 2023 is persisting, and the Komax Group started the new year with a lower order level than in the previous year. It is confident, however, that the trend towards automation will continue unabated,

and hence so, too, the demand for its solutions. The Komax Group will continue to drive the integration process forward in 2024, optimizing additional structures so as to be best equipped to implement its 2028 growth strategy.

The market is currently showing signs of extreme volatility, as it is still beset by a number of economic and geopolitical uncertainties. Consequently, visibility in terms of the development of business is very low, and no forecast for the 2024 financial year can be made as yet.

Revenues by region¹

in TCHF	2023	2022	+/- in %
Europe	333 188 ²	257 641	29.3
Asia/Pacific	124 670	133 157	-6.4
North/South America	205 956	132 364	55.6
Africa	88 174	83 170	6.0
Total	751 988²	606 332	24.0

¹ A percentage breakdown of revenues by region can be found on pages 30/31.

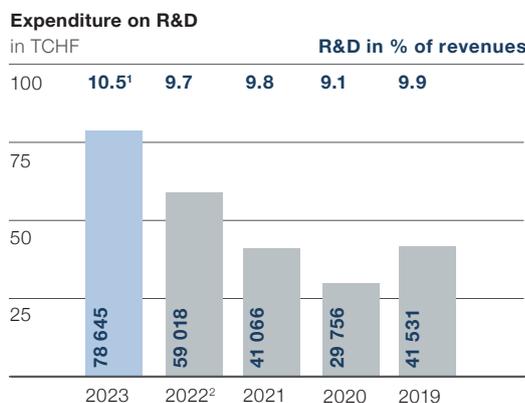
² Excluding one-time effect (CHF +10.9 million).

MARKET-LEADING INNOVATIVE STRENGTH

As the market leader in automated wire processing, the Komax Group possesses unparalleled innovative strength in the industry. Continuously bringing innovations to the market and thus helping its customers gain genuine competitive advantages is of paramount strategic importance. For that reason, the Komax Group channels some 8–9% of its revenues into research & development every year.

10.5%
of 2023 revenues
invested in
research and
development

There is enormous growth potential for the Komax Group in the markets for automated wire processing (► page 24). Long-term megatrends such as e-mobility and autonomous driving along with growth drivers such as miniaturization, rising wage costs, and a shortage of specialist personnel offer numerous opportunities. What's more, the further automation of processes along the value chain and of digital services can significantly improve the efficiency of the machinery bases customers already have installed.



¹ Excluding one-time effect on revenues.

² The Schleuniger Group was consolidated as of 1 September 2022. Accordingly, four months of Schleuniger's R&D expenditure are included in the financial year 2022.

In order to exploit these opportunities and offer its customers innovative solutions on an ongoing basis, the Komax Group has for many years been investing above-average sums in new developments, the optimization of the existing portfolio, and the expansion of its service spectrum. It has channeled CHF 250.0 million into this activity since 2019, thereby cementing its leading position in the automation of wire processing and helping to actively shape the radical transition in its key market, the automotive industry. In 2023, the Komax Group invested a total of CHF 78.6 million or 10.5%¹ (2022: CHF 59.0 million or 9.7%) of revenues in research and development. This amount comprises both investment in internal development services (CHF 67.4 million) and in the development services of third parties (CHF 11.2 million). As a consequence of the combination of Komax and Schleuniger and the commitment to driving forward various innovation projects, more than the targeted 8–9% of revenues was invested in research and development in 2023. These are crucial upstream investments that will allow the Komax Group to leverage additional unique selling propositions and secure competitiveness. The innovative output of the Komax Group was recognized in the form of multiple awards in 2023.

2023 AWARDS FOR INNOVATION

**Komax Group wins Swiss Manufacturing Award 2023**

Since 2019, the Institute of Technology Management of the University of St.Gallen has recognized the innovative achievement of a successful industrial company in Switzerland each year with the Swiss Manufacturing Award. In 2023, the Komax Group was selected from a large number of candidates.

**Komax Group recognized as one of the most innovative companies in Switzerland**

In conjunction with the market research company Statista, in September 2023 the Swiss business magazines Bilanz and PME ranked the Komax Group as one of the 30 most innovative companies in Switzerland.

**Zeta 620 wins the SBB Innovation Award 2023**

The magazine SCHALTSCHRANKBAU gave its Innovation Award to the Zeta 620 wire assembly machine in March 2023. The decision was made by an independent jury consisting of representatives of the control cabinet construction business, teaching and research, and the trade press.

**B340 strip series takes podium place at productronica**

In November 2023, Schleuniger's B340 stripping machine series was ranked in third place for the 2023 productronica innovation award at productronica in Munich, the leading European trade fair for automation.

724
employees in
R&D and
engineering

Unparalleled innovative strength

As at 31 December 2023, the Komax Group had a workforce of 368 employees (2022: 360 employees) working in research and development, the majority of whom (220 employees) were based in Switzerland. The lion's share of R&D expenditure is therefore incurred in this country. In addition, the Komax Group has development units in Belgium, China, Germany, France, Japan, Singapore, Hungary, and the US. There are also 356 engineers (2022: 353) who make an important contribution through the development of

customer-specific applications. The personnel costs of these engineering employees are not included in research and development expenses where these individuals have worked directly on customer projects.

The Komax Group continues to seek to invest 8–9% of revenues in research and development. Since the combination of Komax and Schleuniger, it enjoys even greater innovative strength. This enables market opportunities to be better exploited, while customers can be provided with innovative solutions for their needs more swiftly.

“Together with Schleuniger we possess a degree of innovative strength that is unique in the market, which we use to support our customers with new products and services to facilitate the ongoing increase in the level of automation.”

Matijas Meyer, CEO Komax Group

Bundling of skills and overhaul of product portfolio

As part of the integration of the Schleuniger Group into the Komax Group, the heavily expanded product portfolio as well as all development projects were subjected to analysis in the reporting year. This focused on areas where there is overlap and how the different skills of both companies can be optimally exploited. Moreover, progress already made in ongoing projects was amalgamated in 2023. The key strategic objectives of Komax and Schleuniger are now the further bundling of skills and resources in research and development, as well as the overhaul and optimization of the product portfolio.

For example, the analysis revealed some overlap in the area of smaller benchtop cutting and stripping machinery. The Schleuniger Group has traditionally been strong in this area, but Komax, too, has a competitive market offering with its Mira range. In keeping with a “best of both worlds” strategy, only the products that best meet requirements will be continued in the future. Innovations contained in the other machines will likewise be taken over to ensure that the entire body of expertise of Schleuniger and Komax is incorporated into future generations of benchtop machinery. Another example is the fast-growing high-voltage area, where the Komax Group pursues a similar strategy and is merging product groups to create new and even better solutions.

Integration processes of this kind will have the effect of improving innovative strength and efficiency significantly, while at the same time freeing up capacity. The competitiveness of the Komax Group will be elevated to a new level in the longer term. This will enable the company to offer technologically leading products and services on an ongoing basis, increase the efficiency and reliability of customer processes, and thereby create additional competitive advantages for these customers.

SMART FACTORY by KOMAX

The trend towards digitalization is in full swing, particularly in the automotive industry. More digitalization also means more data, more electrification, and more wiring and cabling. This is good for the business of the Komax Group, but presents its customers with growing challenges. A wide range of components and products are becoming increasingly intelligent and, at the same

time, more complex on the electronic side. The miniaturization of contact systems is continuing, adding a further layer of complication to manual production steps. Compounding this problem are ever-rising personnel costs along with a global shortage of skilled labor.

Customers of the Komax Group have to deliver consistently high quality and reliability despite rising complexity and higher personnel expenses, while the same time keeping costs as low as possible. The Komax Group helps them to meet these growing challenges. Specifically, the Komax Group has developed a vision for how wire manufacturing can be optimized in the future – the SMART FACTORY by KOMAX. It features five components (► page 49).

Greater productivity and flexibility for customers

When developing new products and services, the Komax Group focuses on the optimization of various value chains. With its solutions, the Komax Group can increase the degree of automation of its customers, which in turn has the effect of increasing their productivity and flexibility, while at the same time maintaining quality at the first go.

Actively driving forward industry trends

As the technology leader in automated wire processing, the Komax Group strives to actively shape key developments in its three market segments and thereby advance automation further. To this end, it partners with other leading companies in various organizations and initiatives.

Next2OEM – development of a digitalized, automatic value chain

The range of functions available in modern vehicles is continually expanding: driver assistance systems, comfort functions, infotainment packages, and new powertrains are well-known examples of this. What this in turn means for the wire harness is an increase in weight, cost, and complexity. The share of work undertaken manually in the production of wire harnesses stands at more than 80%, hence production is only commercially viable in low-wage countries, which means long transport routes. An additional complication here is the rise in supply chain uncertainties. Safeguarding these rather unsustainable value chains is a further challenge for automotive manufacturers. ►

next2OEM

THE FIVE COMPONENTS OF THE SMART FACTORY BY KOMAX – OUR VISION OF WIRE PROCESSING IN THE FUTURE

Real-Time Quality Audits

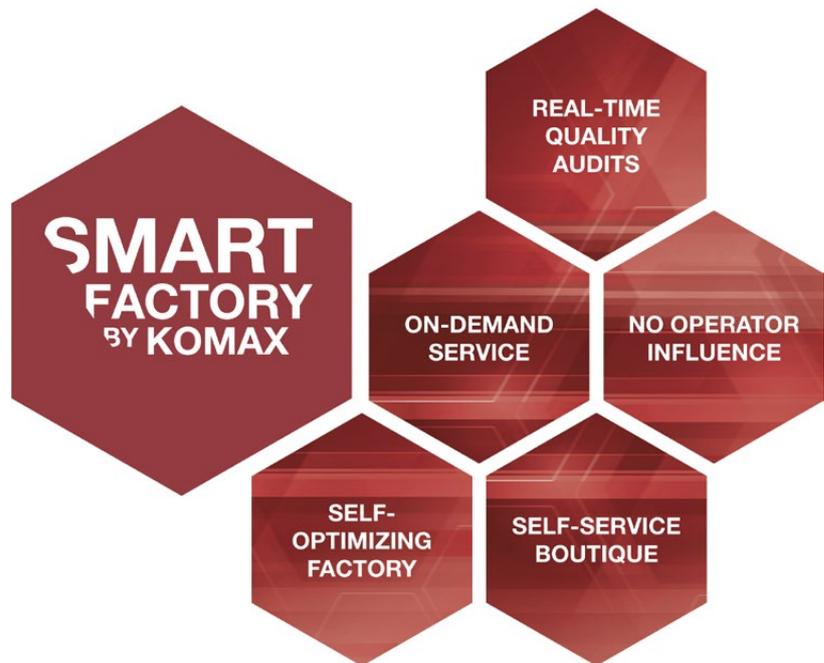
The Komax Group enables real-time quality audits. Quality data is collected using IoT technology, stored in the cloud, and processed in a user-friendly manner. This means that customers can produce quality reports immediately and easily, and thereby demonstrate compliance with quality requirements at any time and trace processes.

No Operator Influence

The Komax Group develops fully automatic, networked solutions in order to minimize operator influence. For customers this means a reduction in both personnel costs and dependency on labor. Moreover, productivity and transparency are improved while quality remains consistently high.

On-Demand Service

The Komax Group offers solutions and services on demand. These include performance- or usage-based payment for systems, financing and leasing services, and procurement of production capacities to handle production peaks, for example. This enables customers to reduce their capital requirement and increase flexibility, stability, and responsiveness.



Self-Optimizing Factory

The self-optimizing factory improves productivity while also reducing quality costs. To achieve this, the Komax Group provides cloud-based algorithms based on production and behavioral data. Customers therefore significantly improve machine utilization while at the same time reducing their quality costs.

Self-Service Boutique

The Komax Group offers access to a digital self-service boutique. Customers benefit from services such as product and spare parts ordering, web-based training, software downloads and upgrades, license management, plus analysis and optimization tools. This means they can access the services of the Komax Group at any time, from anywhere, and get a customized picture of their business.



More information on the SMART FACTORY by KOMAX can be found in this video:
komaxgroup.com/en/expertise/smart-factory

In all five components, the Komax Group is working continuously on implementing the vision of the SMART FACTORY by KOMAX. After the first steps were taken in previous years, 2023 then saw further developments in all areas:

**NO OPERATOR
INFLUENCE**

Operator influence in wire processing must be kept to a minimum if the goal is to achieve the ultimate in precision and process quality. For example, in addition to the development of fully automatic tooling change systems (Alpha 650), the new Sigma 438 twisting machine allows UTP wires to be produced in sequence. A variety of different wire bundles can be produced successively with no tooling changes, which significantly reduces manual changeover times, particularly in the case of small batches. Pre-assembly stages such as the taping of the wires and the assembly of fixing clips can likewise be automated with the use of robots.

**SELF-
OPTIMIZING
FACTORY**

Software plays a crucial role in the improvement of productivity and quality in wire processing. The MES solutions 4Wire CAO (cutting area optimization) and 4Wire Px from DiIT were specially developed for the wire-processing industry. These control and optimize complex assembly processes in customer cutting areas, thereby improving OEE (overall equipment effectiveness). Moreover, they can be easily integrated into existing IT infrastructures through variable interfaces. When these are combined with Komax Connect, customers can further increase productivity on the basis of comprehensive real-time information.

**SELF-SERVICE
BOUTIQUE**

With the launch of its new website (www.komaxgroup.com), the Komax Group laid the basis in the previous year for its 24/7 online service offering in the form of a self-service platform. A further milestone was reached in 2023 with the online service ticketing system on the new “myKomax” customer portal. This offers greater transparency, accelerates processing times of orders and inquiries, and helps to further increase customer satisfaction. A pilot phase is currently underway with a few customers.

**ON-DEMAND
SERVICE**

The Komax Group offers not just machinery and software but also holistic solution concepts. In addition to the machines themselves, new value creation packages encompass service agreements for individual machines or entire production sites, technical support, training, and financing offers such as leasing or pay-per-use concepts. In addition, the digital platform of the firm WUSTEC, which was acquired in 2023, enables companies active in control cabinet and machine building to order prefabricated wire sets in any quantity online. In this way, the Komax Group offers convenient solutions for all customer requirements.

**REAL-TIME
QUALITY
AUDITS**

For customers of the Komax Group, documenting production and quality information seamlessly is becoming ever more important. With the software solutions 4Wire Px, 4Wire CAO, and Komax Connect, comprehensive product data can be captured, stored, and analyzed in order to guarantee complete traceability at all times, which is of huge assistance in quality audits. The Komax Group's broad spectrum of quality solutions and the multitude of data that these generate form the basis for real-time quality audits.

As a driver of innovation and market leader in automated wire processing, the Komax Group is implementing its vision of the SMART FACTORY by KOMAX on an ongoing basis. In doing so, it is raising the quality, productivity, and flexibility of wire processing to a new level. This helps to open up optimization potential and minimize risks. Together with its customers, the Komax Group works intensively on making life simpler, more convenient, and safer.

SOLUTIONS TO INCREASE PRODUCTIVITY AND FLEXIBILITY IN DIFFERENT VALUE CHAINS

Batch production with IQC Technology

With crimping machines, changing crimp applicator, terminal, and contacts for a new order is time-consuming. The revolutionary IQC technology massively simplifies and accelerates set-up and changeover. The error rate drops drastically, while productivity increases by up to 50%.

Sequence production of different wire harness variants

Using a one-piece flow approach, different wire harness variants can be produced sequentially on the same machine without any changeover, which facilitates lower inventories, more rapid delivery times, and simple design alterations, with all the key steps in wire harness production optimized.

Data wire – processing solutions

Data wires are playing an increasingly important role in vehicles, given the focus on driving safety. This being the case, ensuring a high quality in wire processing is also extremely important. Thanks to its innovative solutions, the Komax Group offers the quality that is needed, at the first go – with a minimized level of material waste.

Scalable platforms for high-voltage applications

The Komax Group develops scalable platforms (including the Lambda series) to meet the rising demand for high-voltage applications in e-mobility and the non-automotive area. These cover all key process steps from cutting to testing, and can service high production volumes.

High mix – low volume: variable solutions for small batches

The Komax Group's broad product portfolio offers cost-efficient automation solutions for high-quality production of multiple-variant applications in small batches. This is part and parcel of the day-to-day work of small and mid-sized wire harness manufacturers, in particular.

Digital solutions for control cabinet construction

Digital, fully automated workflow systems cut production times by up to 80% for customers in the industrial segment. This results in a substantial reduction in costs and an increase in efficiency. Just as valuable is WUSTEC's service for the external production of wire sets.

Production planning – software solutions for all customer needs that steer processes in all areas of production, from cutting to testing.

Service – comprehensive service offerings such as Komax Care and Komax Connect help to create added value across the entire life cycle of the machines.

› The Next2OEM project, which was sponsored by BMWK (German Federal Ministry for Economic Affairs and Climate Action, economic package 35c, www.bmwk.de) on the basis of a resolution by the German parliament, is now developing a digitalized and automated value chain, extending from the development of the wire harness and its production through to assembly in the vehicle bodywork. The aim here is to promote “nearshoring”, i.e. the repatriation of wire harness production back to Germany. As part of this project, the Komax Group has been working since 2023 with Audi and a number of other partners, namely Artiminds, Bär, Kostal, Kromberg & Schubert, Semantic PDM, Stefani, TE Connectivity, and the Friedrich Alexander University of Erlangen-

Nuremberg. The project is designed to show how a high level of automation can master the various challenges, increase quality at a low cost, and design value chains in a more sustainable way.



VWS4LS – making wire harness production fit for the future

Another project sponsored by the BMWK on the basis of a resolution of the German parliament is the so-called asset administration shell for the wire harness (VWS4LS). The Komax Group in Germany has been collaborating since 2021 with its partners Coroplast, Dräxlmaier, Festo, Kostal Kontaktsysteme, Kromberg & Schubert, Kuka, Mercedes-Benz, Siemens, and Wezag on this project. VWS4LS implements the administration

shell as a digital twin across the entire product life cycle of the wire harness in a vehicle – from cross-company collaborative development through to final removal. Among other things, this results in an OPC UA Companion Specification, which creates a standardized interface for the wire processing industry. This is designed to facilitate the communication of machines with a manufacturing execution system (MES) and thereby simplify the interaction of various production processes. In a first step, the partners agreed on standardized cutting room processes. In the future, a shared digital twin will be created to allow all sorts of different machines to be operated with standardized digital processes.

ARENA2036

ARENA 2036 – zonal architecture for the wire harness

The wire harness is currently one of the most laborious, complex, and expensive individual components in any vehicle, and is therefore of crucial importance to the entire automotive industry. The move to e-mobility and autonomous driving is changing the requirements for the design and manufacture of the wire harness. For automotive groups this means significant investment. Their suppliers must develop solutions for new customer needs. In keeping with the zonal approaches that apply in wire harness architecture, the wire harnesses of the future need to be designed in a modular way, with the smallest possible component diversity. Several compact wire harnesses with shorter wires are less complex, more cost-efficient to produce, and above all more conducive to automation than one large wire bundle. And this is what the Komax Group is committed to.

In ARENA2036 (www.arena2036.de), various interdisciplinary teams are researching how automotive production might work in the future. As part of the wire harness standardization initiative, the Komax Group is working with leading-name automotive manufacturers and their suppliers to draw up design guidelines for wire harnesses that lend themselves easily to automation. The goal is to enshrine these design guidelines in a newly created DIN norm together with Germany's Automotive Industry Association (VDA). These recommendations should help automotive manufacturers to develop wire harnesses that can be assembled in a highly automated, process-secure, and commercially viable way.

Digitalization with Industry 4.0 and the Industrial Ethernet of Things

In the Open Industry 4.0 Alliance, the Single Pair Ethernet System Alliance, and the SPE Industrial Partner Network, the Komax Group is driving forward digitalization together with renowned partners from various sectors. The Open Industry 4.0 Alliance works in a specifically targeted way on a framework for communication between different machines. This could see the likes of digital interfaces and remote monitoring feed through into the development of new solutions for the Komax Group, which is particularly important for the SMART FACTORY by KOMAX. Single Pair Ethernet (SPE) is the infrastructure basis that facilitates the Industrial Ethernet of Things and Industry 4.0. Together with its partners, the Komax Group wants to promote SPE technology and create a common market standard. To this end, it cultivates a lively exchange of views and benefits from the transfer of expertise.

Smart Cabinet Building Initiative – comprehensive solutions for control cabinet construction

In the Industrial & Infrastructure market segment, the Komax Group is active in the control cabinet construction area, among others. There is plenty of automation potential here, which the Komax Group – together with four other technology companies, namely Armbruster Engineering, nVent Hoffman, Weidmüller, and Zuken – is keen to exploit through the Smart Cabinet Building Initiative (www.smart-cabinet-building.com). The aim of this initiative is to network technology and expertise across all process steps to deliver comprehensive solutions for control cabinet construction. This would enable working stages that have so far taken place chronologically to be executed in parallel, thereby saving both time and costs. The Komax Group and its partners will further increase automation and therefore the efficiency of control cabinet construction so that customers can remain productive despite the shortage of skilled personnel.

EXAMPLES OF CURRENT INNOVATIONS

Thanks to its targeted investment in research and development, the Komax Group succeeds in bringing a variety of new products, product enhancements, and services to market every year. It demonstrated its technological leadership in 2023, unveiling numerous new products at various trade fairs (► page 35).



Alpha 520 – a crimp-to-crimp machine optimized for high-mix production

The Komax Group presented its fully automatic Alpha 520 wire processing machine directly to customers right across the US as part of its Komax Roadshow 2023. This machine is optimized for high-mix production, and its pronounced flexibility makes it ideally suited to customers who produce a variety of batch sizes with a wide spectrum of wire lengths, cross-sections, and end designs. The simple setup and changeover process guarantees economically viable production even with small batches. Integrated monitoring and verification functions improve productivity and simplify operation. Even non-standardized modules can be integrated without impairing the underlying software structure, which allows for further standard software upgrades.



Lambda 141 – compact, high-quality processing of high-voltage cables

With the Lambda 141 the Komax Group has expanded its portfolio for the high-voltage sphere with a compact and multifaceted machine at entry level. It features quick-change tooling and three cable processing modules with an integrated cleaning unit, and can execute tasks such as cutting, shield folding, and rotary stripping of insulation. At around 20 seconds, the production time per wire is very low. Operating the Lambda 141 is simple and involves a 10-inch touchscreen. Its MES interface allows seamless integration into manufacturing systems, while the swift tooling changeover ensures minimal downtime and flexibility of production. The Lambda 141 therefore delivers decisive added value for customers in the high-voltage area.



Sigma 688 LTT – perfect twisting of even the smallest wire cross-sections

The twisting of pairs of wires, e.g. for vehicle sensors and infotainment, is the simplest, most cost-effective way of reducing electromagnetic interference. In order to save weight, wires are becoming ever thinner. With the new Sigma 688 LTT (low torsion twisting), the Komax Group introduced a new automatic machine in 2023 that can perfectly twist two individual wires with small cross-sections measuring as little as 0.13 mm² to create unshielded twisted pairs (UTP). The Sigma 688 LTT features an innovative reverse torque unit, whereby small grippers at the respective wire end reverse the rotation that occurs in the individual wire during twisting. The result is a compactly twisted wire with exceptionally stable geometric properties that customers can produce at a consistently high level of quality.



New cutting and stripping machine series E300/E400

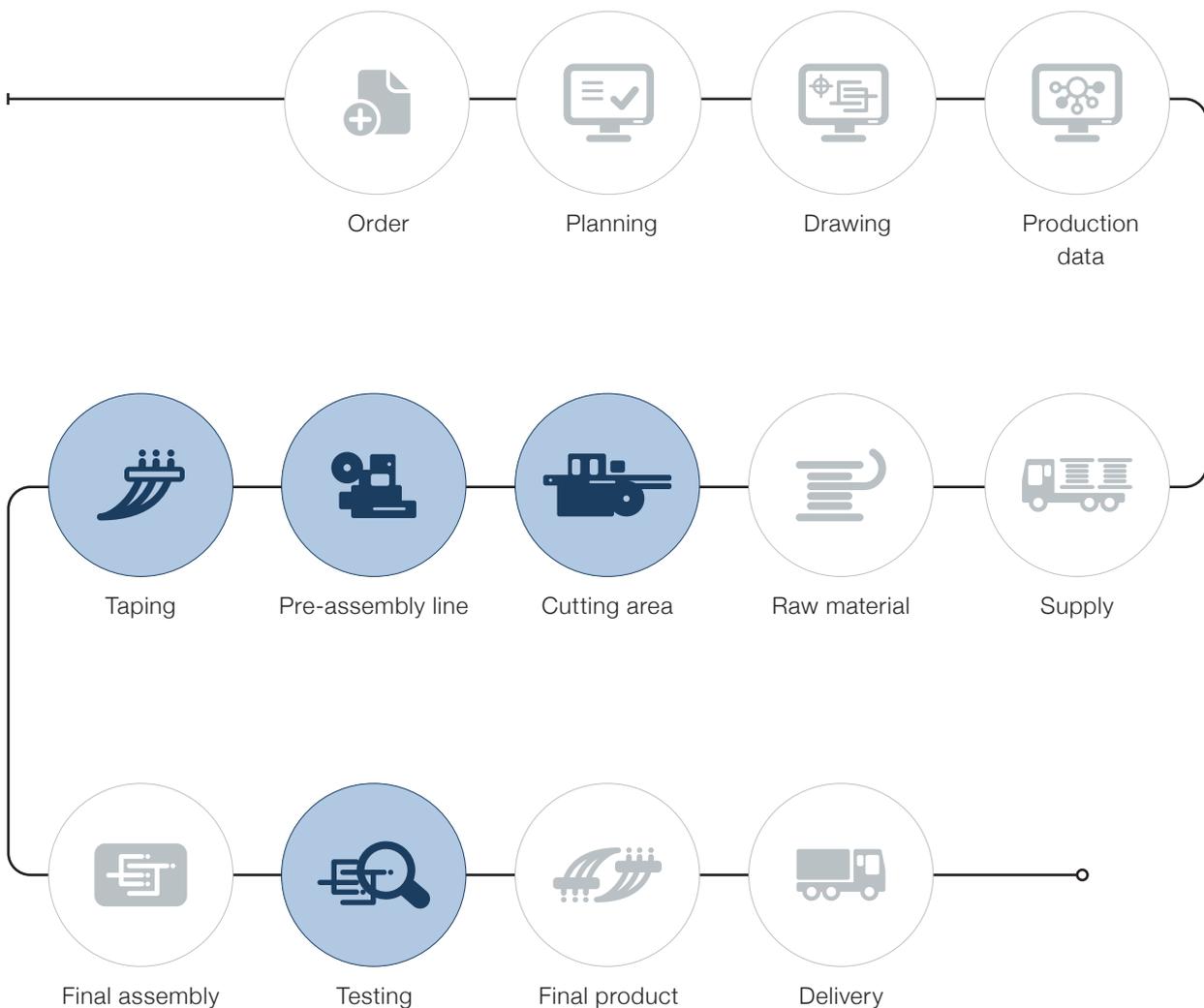
In 2023, Schleuniger introduced a new generation of cutting and stripping machines for smaller wire diameters with its E300 and E400 series. The E300 processes diameters of 0.3 mm up to 8.0 mm, while the E400 works with diameters up to 12.5 mm. Both machines can be used in all sorts of ways – such as with industrial applications, control cabinets, household devices, in the automotive and aviation industries, telecommunications, and consumer electronics. Operation is intuitive and involves a 10-inch touchscreen interface. What's more, the setup process is short thanks to pre-set standard values for the most common wire types. The actively guided software support for eliminating errors minimizes downtime and increases process reliability. The Cut & Strip Family E300 and E400 process stranded wires, tubing, ribbon and multiconductor cables, and insulation such as PVC (polyvinylchloride), PUR (polyurethane), and Teflon in high-precision quality.

In the 2023 financial year, the Komax Group continuously rolled out innovations, presenting the numerous solutions of the Komax, Schleuniger, adaptronic, Cirris, DiIT, and WUSTEC brands simultaneously in Munich, Nuremberg, and Grafenau. Customers of the Komax Group will be able to benefit from this increase in innovative strength with further new products over the coming years.

SOLUTIONS ALONG THE VALUE CHAIN

The majority of customers of the Komax Group are wire harness manufacturers whose business consists of processing individual wires – predominantly by hand – into wire harnesses and delivering these to vehicle manufacturers (OEMs). The Komax Group offers its customers a wide range of solutions and systems for the automated and efficient processing of wires and for the taping and testing of wire harnesses. These are used in the cutting room, at the pre-assembly stage, and when taping and testing.

In addition, the Komax Group supports its customers throughout the value chain – from planning through to delivery – with its Manufacturing Execution System (MES) solutions. This software automates the planning, controlling, monitoring, and analysis of all resources and production processes. This has the effect of optimally deploying machines, materials, and employees, so that wire harnesses can be completed to deadline, as well as to the requisite quality.



- Komax Group automation solutions
- MES – Manufacturing Execution System

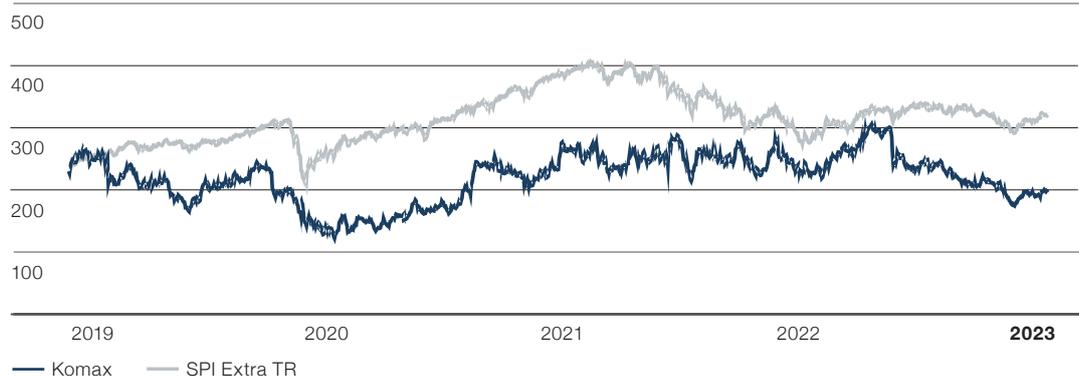
SHARE INFORMATION

The Komax Group cultivates a policy of open and transparent communication with its investors. It allows shareholders to participate in the company's success through its sustainable dividend policy.

Over the course of 2023, the daily closing price of the Komax share ranged between CHF 174.40 and CHF 305.50. At year end the share price closed at CHF 200.50, a substantial –22.1% below the prior-year level (closing price previous year: CHF 257.50). Over the same period, the SPI Extra rose by 6.5%. In a five-year comparison over the period 2018–2023, the SPI Extra recorded strong growth of 39.4%, whereas the Komax share recorded a decline of 12.8%.

Share price development (31 December 2018 – 31 December 2023)

in CHF



LISTING

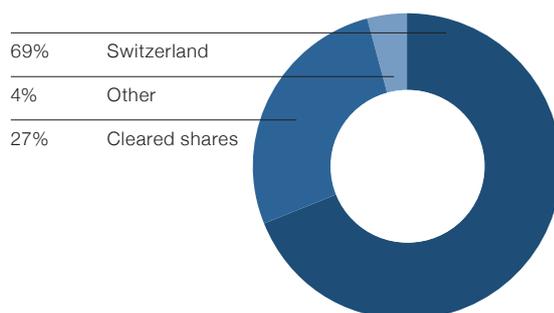
Komax Holding AG is listed on SIX Swiss Exchange. The market capitalization of the Komax Group at the end of 2023 was CHF 1.0 billion (31.12.2022: CHF 1.3 billion).

ISIN	CH0010702154
Security number	1070215
Bloomberg code	KOMN SW
Thomson Reuters code	KOMN.S

GEOGRAPHICAL DISTRIBUTION OF SHAREHOLDINGS

The majority of shares not held in Switzerland are held in Germany, the United Kingdom, and the United States.

As at 31 December 2023



BREAKDOWN OF SHAREHOLDERS BY NUMBER OF REGISTERED SHARES HELD

	31.12.2023	31.12.2022
1-100	3 960	3 469
101-1 000	1 775	1 600
1 001-10 000	227	218
10 001-100 000	29	29
> 100 000	3	4
Total shareholders	5 994	5 320

The shareholder base increased significantly by 674 persons to 5 994 shareholders in 2023. Over the last five years, however, the shareholder base has remained broadly the same size (-0.5%).

Free float

The free float as defined by SIX Swiss Exchange stands at 75% (31 December 2022: 75%).

DISCLOSURE OF SHAREHOLDINGS / SIGNIFICANT SHAREHOLDERS

Under Art. 120 of the Financial Market Infrastructure Act (FinMIA) anyone who acquires or sells equity securities on their own account and thereby attains, falls below, or exceeds the threshold of 3, 5, 10, 15, 20, 25, 33 1/3, 50, or 66 2/3% of the voting rights in a company (whether or not such rights may be exercised) is subject to a reporting obligation. Information on these significant shareholders: > page 104.

The reporting obligation applies to anyone who directly, indirectly, or in concert with third parties acquires or disposes of shares in a company incorporated in Switzerland whose equity securities are listed in whole or in part in Switzerland. It also applies to anyone who can exercise the voting rights attached to such equity securities at their own discretion. Disclosure must be made to the company and stock exchanges on which the equity securities in question are listed.

DIVIDEND POLICY

3.00
CHF dividend

The Board of Directors pursues a sustainable dividend policy that takes account of the ambitious growth targets of the Komax Group. The implementation of Strategy 2028 requires substantial investment, such as in acquisitions, for example. In order to drive forward this investment and to take account of the volatile and challenging business environment, the Board of Directors is recommending a break from the very high payout ratios of recent years for the time being (2022 financial year: 54.5%). It is proposing to the Annual General Meeting of 17 April 2024 distribution of a dividend of CHF 3.00 per share (2022: CHF 5.50), corresponding to a payout ratio of 35.1%. Of this amount, CHF 1.50 will be distributed from capital contribution reserves, and will therefore be tax-free for natural persons domiciled in Switzerland who hold the shares as part of their private assets. Due to a statutory requirement, a maximum of half of the total distribution may take place from capital contribution reserves.

FINANCIAL CALENDAR

Annual General Meeting	17 April 2024
Half-year results 2024	13 August 2024
Investor Day	22 November 2024
Preliminary information on 2024 financial year	21 January 2025

KOMAX REGISTERED SHARE: KEY DATA

		2023	2022	2021	2020	2019
Share capital as at 31 Dec.	in TCHF	513	513	385	385	385
Number of shares as at 31 Dec.	No.	5 133 333	5 133 333 ¹	3 850 000	3 850 000	3 850 000
Average number of outstanding shares	No.	5 124 960	4 273 799	3 843 440	3 845 655	3 843 352
Key data per share						
Par value	CHF	0.10	0.10	0.10	0.10	0.10
Basic earnings	CHF	8.55	12.11	7.90	-0.34	3.44
EBITDA	CHF	18.14	20.81	15.70	6.85	9.58
EBIT	CHF	14.21	16.78	11.65	2.93	6.25
Shareholders' equity	CHF	76.09	81.15	68.81	61.42	63.53
Distribution	CHF	3.00 ²	5.50	4.50	0.00	0.00
Payout ratio	%	35.1 ²	54.5	57.0	0.0	0.0
Dividend yield as at 31 Dec.	%	1.5 ²	2.1	1.8	0.0	0.0
Share price development						
Highest price	CHF	305.50	288.00	276.60	238.80	264.00
Lowest price	CHF	174.40	214.00	177.30	122.00	165.10
Closing price as at 31 Dec.	CHF	200.50	257.50	253.00	176.30	236.40
Average daily trading volume	No.	6 968	6 419	8 846	15 809	16 802
P/E (price-earnings ratio) as at 31 Dec.		23.5	21.3	32.0	-518.5	68.7
Total return per share						
Distribution from prior-year profit	CHF	5.50	4.50	0.00	0.00	7.00
Change in value	CHF	-57.00	4.50	76.70	-60.10	6.40
Total (total return)	CHF	-51.50	9.00	76.70	-60.10	13.40
Annual return ³	%	-20.00	3.56	43.51	-25.42	5.83

¹ A capital increase for 1 283 333 shares took place within the framework of the combination between Komax and Schleuniger in 2022. Following an exchange of shares, Metall Zug AG became the Komax Group's single biggest shareholder (see page 105).

² Proposal of Board of Directors of Komax Holding AG: distribution of CHF 3.00 per registered share.

³ Versus prior-year end closing price.

Further information on the Komax registered share can be found at www.komaxgroup.com.