MANAGEMENT REPORT

DEAR SHAREHOLDER

The Komax Group is looking back on an extremely challenging year. Customers invested less due to excess capacities and geopolitical uncertainties, which led to a significant decline in order intake, revenues, and operating profit. The Komax Group reacted early on, with rigorous cost reductions and structural optimizations that will have a lasting impact. The long-term trend toward automation shows no signs of abating. With streamlined structures and a lower cost base, the Komax Group is well positioned to drive further progress in automation and grow profitably.

Although inflation continued to decline in the key economic regions in 2024, customers' willingness to invest remained low overall, which was primarily attributable to existing excess capacity in Europe, geopolitical uncertainties in a number of regions, and the challenging situation facing European automotive manufacturers. After orders bottomed out in the first half of the year (down 22.1% compared with the previous year), the Komax Group recorded more orders in each of the last six months of 2024 than in the best month of the first half. For the year as a whole, the order intake amounted to CHF 577.2 million, down 15.9% year on year (2023: CHF 686.5 million).

Growth in revenues in non-automotive market segments

Due to a lower level of orders – in volume business in Europe in particular, but also in Asia and in the United States – solid order books of CHF 208.0 million at the end of 2023 declined to CHF 177.1 million over the course of 2024. Revenues were down 16.2% at CHF 630.5 million (2023: CHF 752.0 million). The decline in organic terms worked out at 16.6%, whereas acquisition-related growth was positive at 2.3%. The foreign currency impact amounted to –1.8%. The book-to-bill ratio was 0.9, reaching 1.0 in the second half of the year.

Due to the aforementioned challenges, orders and revenues declined in the Automotive market segment. This contrasted with an increase in the other two market segments, Industrial & Infrastructure and Aerospace & Railway. Consequently, the non-automotive market segments' share of revenues rose from 25% to approximately 35% in 2024.

Regional revenue development

Revenue development presented a very mixed picture across the regions. In particular, the weakness in the European automotive industry led to a drop of 30.0% in revenues compared to 2023. In the Asia/Pacific region, revenues remained stable year on year overall, despite sizeable differences at the regional level. For instance, growth was extremely strong in India. North/South America recorded slight revenue growth of 1.7% overall, with growth higher in South America than in North America. In Africa, revenues recorded a clear drop of 29.4%.

Strengthened market position in China

An area of focus in the year under review was the strengthening of the market position in China, which was achieved inter alia with the acquisition of a majority stake (56%) in Hosver and a 5% stake in E-Plus. While Hosver is the leading manufacturer of machines for processing high-voltage cables for e-vehicles, E-Plus develops and distributes the most widely used manufacturing execution system (MES) in China for the production of wire harnesses. The localization of additional products for the Chinese market made further headway and production was transferred from the Komax site in Shanghai to the Schleuniger site in Tianjin in order to pool capacities and know-how.

Optimization of structures in production and distribution

The Komax Group reacted early to the challenging market situation, initiating numerous structural and product portfolio optimizations as well as cost reductions in 2024, while at the same time driving forward the integration of Schleuniger. As part of this, the streamlining of the distribution and service network, which involved acquisitions in the Czech Republic and Romania and a stake in a distribution partner in Benelux among other things, was practically completed, and there was a clear reduction in distribution channels from 80 to 50. The client base in each country now has one point of contact for all Komax Group products.

The year under review saw the closure of the German production sites in Jettingen and Sömmerda. In Bulgaria, the Komax Testing Bulgaria site was discontinued. Further structural optimizations are being implemented and are expected to be completed in 2025. These include discontinuation of production at three further German sites (Porta Westfalica, Radevormwald, and Wiedensahl) as well as at the site in Tokyo, Japan. In Switzerland, the Komax Group will focus its activities at the sites in Dierikon and Thun. To this end, the Rotkreuz site transferred to the headquarters in Dierikon in 2024, with the Cham site following in early 2025.

Gross profit margin at 63.1%

The rigorous implementation of cost-reduction measures led to savings of around CHF 20 million in the year under review. This enabled the Komax Group to achieve positive operating profit (EBIT) of CHF 16.0 million (2023: CHF 67.8 million) despite the significant decline in the high-margin volume business and the impact of one-time effects. This corresponds to an EBIT margin of 2.5% (2023: 9.0%). The gross profit margin was high at 63.1%. Group earnings after taxes (EAT) were slightly negative at CHF –2.9 million (2023: CHF 43.8 million).

The EBIT figure includes one-off expenses of CHF 11.5 million that are predominantly connected with ongoing structure and portfolio optimizations. Excluding these expenses, the EBIT margin would have amounted to 4.4%. Additional optimizations will be implemented in 2025, for which one-off expenses of around CHF 7 million are expected. Of the cost savings of CHF 20 million achieved in 2024, around half are long-term savings that will take full effect from 2026.

High free cash flow

The Komax Group's financial basis remained stable in 2024. As at 31 December 2024, shareholders' equity totaled CHF 356.6 million (31 December 2023: CHF 390.6 million), with an equity ratio of 51.7% (2023: 55.1%). Free cash flow amounted to CHF 16.1 million (2023: CHF 51.7 million). Despite the Komax Group acquiring a majority stake in Hosver, a stake in E-Plus and other smaller companies, and distributing a

dividend, net debt increased only slightly from CHF 92.9 million (2023) to CHF 97.6 million. A key contributory factor here was the reduction in net working capital of CHF 48.4 million, or 17%.

Changes to the Board of Directors

Beat Kälin has decided to step down as Chairman of the Board of Directors at the upcoming Annual General Meeting. He will, however, continue to serve on the Board as a member. The Board of Directors is proposing Andreas Häberli, member of the Board since 2017, as the new Chairman. In addition, after serving on the Board of Directors for twelve years, Roland Siegwart will not be standing for re-election due to term-of-office limitations. The Board of Directors and the Executive Committee wish to thank him most sincerely for his commitment over the years. The Board is proposing to the Annual General Meeting that Daniel Lippuner be elected as a new member of the Board of Directors. Daniel Lippuner is a business economist with over 25 years' experience in leadership roles with companies such as the Hilti Group, OC Oerlikon, and Rieter Automotive (now Autoneum).

Dividend policy and growth strategy

The Komax Group pursues a result-oriented dividend policy. In light of the negative Group earnings after taxes, the Board of Directors is proposing to the Annual General Meeting of 16 April 2025 that the distribution of a dividend be waived. With this proposal, the Komax Group is safeguarding the entrepreneurial scope necessary for achieving its ambitious growth targets. The aim is to achieve revenues of CHF 1.0–1.2 billion by 2030, with EBIT of CHF 120–160 million. For this to be possible, targeted investments and acquisitions will be needed, along with further optimizations.

Outlook

The long-term trend towards automation shows no signs of abating, and continues to offer attractive growth opportunities for the Komax Group. Currently, however, economic and geopolitical uncertainties are affecting our customers' investment behavior, resulting in high volatility in terms of order intake. In view of this situation, we are refraining from issuing a forecast for the 2025 financial year at this time. The Komax Group has an excellent market position and reinforced it in the year under review with a number of measures. We are confident that our solid financial structure and high degree of innovation constitute a robust foundation for future profitable growth.

The Board of Directors and Executive Committee wish to thank you, our shareholders, and our customers for the trust placed in the Komax Group. Our thanks also go to all our employees, who – with their considerable commitment and flexibility in a very challenging environment – made the results we are presenting in this Annual Report possible.

Yours sincerely,

Dr. Beat Kälin
Chairman of the Board of Directors

Matijas Meyer
CEO

DRIVING AUTOMATION

Increasing the level of automation in wire processing is a joint journey together with the customer. In the industrial market segment, the Komax Group is supporting major players such as Siemens in the US to raise their level of automation for greater efficiency and quality.

The Komax Group has defined the development of non-automotive markets as one of its key strategic priorities. Within this focus, the industrial and infrastructure segment stands out, offering the most substantial contribution and significant growth potential. Over the past two decades, the Komax Group has made great progress in this segment and has taken another major step forward with the combination with Schleuniger in 2022. Today, the Komax Group offers comprehensive digital solutions for control cabinet builders that appeal to major players in the electrical products market. One of them is Siemens.

OVERVIEW OF SIEMENS USA

- 45 000 employees
- 24 manufacturing sites
- Active in all 50 US states and Puerto Rico

SIEMENS IN GRAND PRAIRIE, TEXAS

- Electrical products manufacturing hub
- 25 400-m²-site with 1 100 employees
- Zeta 650 and Omega 750 from Komax, and three Schleuniger MultiStrip 9480 process lines in use

Siemens – a global leader in technology

Siemens Corporation is a US subsidiary of Siemens AG, a leading technology company focused on industry, infrastructure, transport, and healthcare. By combining the real and the digital worlds, Siemens empowers customers to accelerate their digitalization and sustainability transformations, making factories more agile and productive, buildings more efficient, power systems more intelligent, and transportation more sustainable.

Solutions for the Siemens Smart Infrastructure manufacturing hub in Texas

Siemens operates 24 manufacturing plants in the US, such as its electrical products manufacturing hub in Grand Prairie in the Dallas–Fort Worth area, Texas. Siemens has invested USD 650 million in new plants and factory expansions in the United States over the past few years, thereby successively implementing automation solutions from the Komax Group. The over 1 000-person plant manufactures power distribution equipment that supports essential power infrastructure in some of the country's most critical installations, including data centers, industrial sites, and healthcare facilities. This equipment is fitted with immense wiring of very different types, and sizes, that needs to be processed in an increasingly automated way.

Josh Robles, Automation Engineering Lead at Siemens Corporation, shows the Omega 750 at the Siemens site in Grand Prairie, Texas, USA.

From semi-automated to fully automated and digitalized manufacturing

At the Grand Prairie site, Siemens had several Schleuniger and Komax cut & strip machines in use before 2019 to manufacture wiring for low-voltage switchgear in a semi-automated way. Driven by market demand, the location then sought to increase its efficiency in wire processing by further raising the level of automation. One of the first steps was a Zeta 650 harness manufacturing machine. Thanks to its eight process modules, the Zeta 650 can process up to 36 wires without changeover, from batch size 1 and just-in-time (› Zeta 650), which was a huge step forward.

While implementing the Zeta 650, the Siemens site also transitioned to a full digital twin of the wire set. This enables testing and validation in the virtual realm before production, accelerating engineering and production processes. With the digital twin established and its experience with the Zeta 650, the Grand Prairie team quickly committed to further conversion of its processing operations and the implementation of the Omega 750 with increased levels of automation. The Komax machines blend in perfectly as they are fed directly with the manufacturing data from the digital twin and then cut, strip, terminate, label, and bundle the wire harness for the low-voltage switchgear application. This way Siemens created a seamless digitalized and automated manufacturing process, reducing waste, redundancies, and cost.

The Komax Group and Siemens worked closely together in the whole process with the Komax Group addressing the needs and thoughts of its customer with great care, including related service contracts. The close long-term relationship of the two partners paid off and led to a significantly increased level of automation at the Siemens site. Both partners are looking forward to a fruitful continuation in the future.

Interview with Sidra Maryam, Plant Digitalization Manager, and Josh Robles, Automation Engineering Lead at Siemens Grand Prairie, Texas, USA.

Sidra, Josh, what are the biggest challenges in your business?
Josh: The biggest challenge is leveraging fixed-point solutions for dynamic customer requirements at scale. Our team has done a great job of partnering with other internal Siemens teams and external partners like the Komax Group to push solutions to deliver beyond the intended use cases.

Why is it important for you to increase your level of automation in wire processing?
Josh: We service the power distribution market, and one of the megatrends we are supporting is the next generation of transformation in how we live and do business – artificial intelligence (AI). It is important that – as our customers are scaling up and supporting the globe – we match their pace and can deliver high-quality, reliable power distribution systems faster than ever before.

Sidra: At Siemens, we pride ourselves on delivering high-quality products. With the increase in wiring complexity of our designs, it is critical that we have robust and error-proof production processes in place. Automation of wire processing allows us to eliminate quality issues and deliver at speed.

What were the drivers of the decision to implement Komax and Schleuniger machines, and what do you like most about our solutions?
Josh: We started the wire automation journey with Schleuniger back in 2017, then stepped up the discussion with the Komax Group to harness manufacturing around 2019, and then again in 2022 for full harness assemblies. The core point of the discussion was how to drive the digital engineering thread as far as possible to a fully completed wire harness, which was well understood in our industry to be a tedious, time-consuming, and high-focus task. Additionally, customer requirements were driving more and more advanced components like sensors, PLCs, and HMIs into the products which require more wiring. We only see this trend increasing, and with the engineer-to-order customer mix, there is not an easy way to standardize harness designs to meet a large swathe of customer requirements. We needed a solution that could execute thousands of different harness designs a day.

Sidra: The range of options offered by Komax and Schleuniger is comprehensive, so we can find everything we need with the same partner. It makes doing business easier and technology deployments faster.

How did the Komax Group help you in the process of implementing a digital twin and raising automation levels?
Josh: Komax has been a great partner in helping us to fully understand how its machines operate on the software side of things. We had unique requirements that fell outside of Komax's usual use cases for wire list conversion. Configuration of all the machines required a lot of testing and validation and we felt fully supported on our integration journey.

You manufacture wiring for low-voltage switchgear with our machines. In what kind of buildings do these go?
Josh: Our customer range is fairly wide – wherever power is needed to power a commercial building, factory, hospital, or data center, our products are a good fit. I can speak to the greater megatrend of AI requiring a lot of power, which in turn requires a lot more power distribution and monitoring solutions. Siemens has a great portfolio to meet customer requirements and demand.

What do you value most in the relationship with the Komax Group?
Josh: Our engagement with the Komax Group has really been a great partnership – Komax has treated us like more than a customer buying equipment. Any time we have questions or concerns, we are able to connect with our dedicated regional account manager or application engineer.

“With the increase in wiring complexity of our designs, it is critical that we have robust and error-proof production processes in place. Automation of wire processing allows us to eliminate quality issues and deliver at speed.”

Sidra Maryam, Plant Digitalization Manager at Siemens Grand Prairie, Texas, USA.

More recently we were able to also elevate our partnership with Komax company contacts in Switzerland during a factory acceptance test, and the consistency in culture and delivery was a great experience.

Sidra: The people on both our teams share a passion for technological innovation. Komax’s wire processing industry expertise has helped us push our boundaries to reimagine how to build our products.

How support you even better in future?

Josh: Our automation roadmap will require deeper integration into Komax Group portfolio solutions. The goal of driving the full digital thread from customer requirement to fully delivered physical solutions requires completely integrating OEM equipment into our customized, high-end systems.

Sidra: More co-development and incorporating feedback into the roadmap of equipment enhancements would help us stay aligned with the upcoming needs of both our businesses. As Josh mentioned, we need more and more integration across systems, and the current ecosystem could be improved to allow for more openness.

How important is sustainability in your procurement decision process?

Josh: Sustainability is the core of our value proposition. The adoption of all the wire processing solutions from Komax and Schleuniger has substantially reduced our copper scrap related to wire processing and installation in support of this journey.

Sidra: Sustainability is a global need, and it is an integral part of how we do business at Siemens. We have a clear framework for sustainability called DEGREE, which constitutes a 360-degree approach for all stakeholders. We use it to guide us through all processes of the product life cycle management, including procurement decisions.

Siemens Smart Infrastructure manufacturing hub, Grand Prairie, Texas, USA.

INTERVIEW

In a challenging market environment, in 2024 the Komax Group consistently pushed ahead with the implementation of its strategy and introduced measures for sustainable cost reductions. The company is well positioned to benefit from the next upturn.

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

Matijas Meyer, the Komax Group suffered a drop in revenues of 16.2% in the 2024 financial year. What happened?
Matijas Meyer: Toward the end of 2023, it became increasingly apparent that our customers were less willing to invest and that the market was weakening. This trend continued in 2024. There were many different reasons, varying from region to region. A common factor was geopolitical uncertainties, which had a negative impact on the investment climate. In Europe and North Africa, we also had to contend with the weakening European automotive industry and excess capacity for our customers. The excess capacity dates back to 2022, when we received extraordinary orders amounting to around CHF 100 million following the outbreak of the war in Ukraine. At the time, the automotive industry feared that it would no longer be possible to produce wire harnesses in Ukraine, meaning that additional

production capacities would need to be built up in Eastern Europe and North Africa. Ultimately, these were not needed, as many wire harnesses have continued to be manufactured in Ukraine since then.

Is this phase of weakness now over?
Matijas Meyer: We will certainly have overcome the low point in the first half of 2024. Progress has been made since then, even if we are still a long way from our "normal level." Despite all the challenges, there have also been some positive developments.

Which ones are you talking about?
Matijas Meyer: While revenues in Europe and Africa fell by around 30%, we managed to increase revenues slightly in Asia and North/South America. In Asia, the acquisition of a majority stake in Hosver also contributed to this. In the Americas, the positive result is thanks not least to our strong position in the non-automotive markets.

Let's stay with the non-automotive markets – how have they evolved?
Matijas Meyer: Very encouraging. We were able to increase revenues in the market segments Industrial & Infrastructure as well as Aerospace & Railway by a good 7% overall. As a result, we have increased the share of our non-automotive revenues from 25% to around 35%. This means we have already exceeded our strategic target of 30%, which we were aiming to achieve by 2030. Of course, we are aware that this high percentage in 2024 is attributable to the weakness of the automotive market rather than the strength of other market segments. But not only that, because with our broad product and service portfolio we offer aircraft manufacturers, for example, various solutions for the entire wire harness production process, which were in good demand during the reporting year.

Beat Kälin, has the Komax Group also made progress with other strategic targets?
Beat Kälin: Yes, we are on track. In addition to expanding the non-automotive business, we are focusing in particular on strengthening our market position in Asia and expanding the service business. We have made progress with all these strategic approaches. In 2024, we significantly increased the number of service contracts and exceeded our service budget. We also achieved important milestones in China.

What were these milestones?
Beat Kälin: With the acquisition of a majority stake in Hosver effective 1 July, we have significantly strengthened our position in the growing market for electromobility. Hosver is the clear market leader in China for machines for the processing of high-voltage cables and counts the leading electric vehicle manufacturers and its wire harness manufacturers among customers. Outside Asia, we have already been well positioned for some time with our machines produced in Hungary. However, Hosver does not only play an important role for us in the field of electromobility. With the trend toward autonomous driving, the number of sensors and data wires in vehicles is constantly increasing. Special machines are required to process these data wires, and we have been manufacturing these in Germany for years at Komax SLE. Thanks to its great innovative capacity and the collaboration with Komax SLE, Hosver quickly developed a data wire machine for the Chinese market, which we will be presenting for the first time at productronica in Shanghai at the end of March 2025. This development is important and encouraging, and only part of what we achieved in 2024 in China.

What other progress was made?
Beat Kälin: In order to remain competitive, it is crucial for us to develop and produce not only in Europe, but also to a greater extent in China, so that we can respond even more specifically to requirements in Asia and deliver faster. In addition to Hosver, our Schleuniger site in Tianjin is also important to us. Soon, we will be manufacturing another localized product there – a twisting machine of our Sigma series. We will also be demonstrating these to our customers at productronica for the first time. In addition, I would like to mention our minority stake in E-Plus, acquired at the end of 2024. E-Plus is the largest provider of digital smart factory solutions for the wire processing industry in China. I am confident that the exchange and cooperation with this company will help us progress with the digital transformation.

“We will certainly have overcome the low point in the first half of 2024. Progress has been made since then.”

Matijas Meyer, CEO

Although the Komax Group is basically on track strategically, it postponed its medium-term targets in November. Why is this?
Beat Kälin: In 2024, we took significant steps in implementing our strategy and as a result we are in a better position than we were a year ago. We cannot influence the general market situation. Instead of an average growth of 6% to 9% per year, we had to accept a considerable decline in revenues in 2024, which we do not expect to be able to make up in 2025. We have therefore postponed our 2028 targets to 2030. However, the trend toward automation in wire processing is continuing and we are confident that our flexibility, innovative strength, and the measures we have introduced will help us benefit considerably when the upturn sets in. For this reason, we are convinced that we will be able to achieve revenues of CHF 1.0 to 1.2 billion and EBIT of CHF 120 to 160 million in 2030.

Will the measures introduced also help to achieve a sustained improvement in profitability?
Matijas Meyer: Yes, definitely. There is no doubt that we have done our homework concerning this in 2024. We have been working intensively on our structures and therefore on our cost basis. This includes reducing our global sales channels from 80 to around 50 and working intensively to streamline our product portfolio and reduce the number of our engineering and production sites. We already completed some measures in 2024 and initiated many that will be implemented by the end of 2025 at the latest. At the beginning of 2024, we had 30 such locations. Various measures have been initiated at ten of these locations. These include, for example, discontinuing production and relocating to another production site and/or closing down the site completely. Unfortunately, these structural optimizations also entail job losses, which I very much regret for the employees affected. All the optimization measures that we have been implementing since 2024 will lead to a reduction in our complexity. Our cost basis will be around CHF 3 million lower from 2025 and as much as CHF 10 million lower from 2026.

Were these measures already taking effect in 2024?
Matijas Meyer: Since we had to assume toward the end of 2023 that 2024 would be very challenging, we introduced cost-cutting measures at an early stage. As a result, we realized savings in 2024 of around CHF 20 million, which was crucial in achieving EBIT of CHF 16 million and an EBIT margin of 2.5%. I consider this result to be very respectable, considering that we experienced a 16.2% slump in revenues, which impacted the high-margin volume business in particular. There were also one-off expenses of CHF 11.5 million. Such a result was only possible with the enormous commitment and flexibility of our employees, as well as their understanding of the various measures. I would like to express my sincere thanks to our employees.

Beat Kälin, why will you not be standing for re-election as Chairman of the Board of Directors at the Annual General Meeting in April 2025?
Beat Kälin: After ten years in this position, I believe it is the right time to step down as Chairman. However, I will continue to contribute my almost 20 years of experience in automated wire processing as a member of the Board of Directors. It is particularly encouraging that we are able to appoint Andreas Häberli as a successor, whose experience as a long-standing member of the Board makes him ideally suited to this position. In these times of constant change, it is important to ensure stability and continuity. Andreas Häberli provides this and I look forward to continuing to work together.

What are the priorities in 2025?
Matijas Meyer: As mentioned, there are numerous measures for structural optimization, which we intend to complete in 2025. As we expect 2025 continue to be a challenging market environment, we will continue to attach great importance to cost efficiency. We will also work consistently on implementing our strategy. This also includes the launch of various new innovative products, which I am looking forward to. The integration of Schleuniger has run smoothly over the last two and a half years and we are growing closer together as a group. We will continue to drive this process forward. And finally, I would like to mention the highlight of the year: Both Komax and Schleuniger are celebrating their 50-year anniversaries, which we will of course be celebrating.

“In 2024, we took significant steps in implementing our strategy and as a result we are in a better position than we were a year ago.”

Beat Kälin,
Chairman of the Board of Directors

MEGATRENDS DRIVE GROWTH

Global, cross-sector megatrends such as developments in the automotive industry – the Komax Group's main market – underpin the business model of the Komax Group. They are driving the mid- and long-term growth of the company. Changes in the labor market, environmental awareness, and the growing complexity of end products, combined with a corresponding increase in quality requirements, are fueling a slow but steady rise in demand for automation solutions.

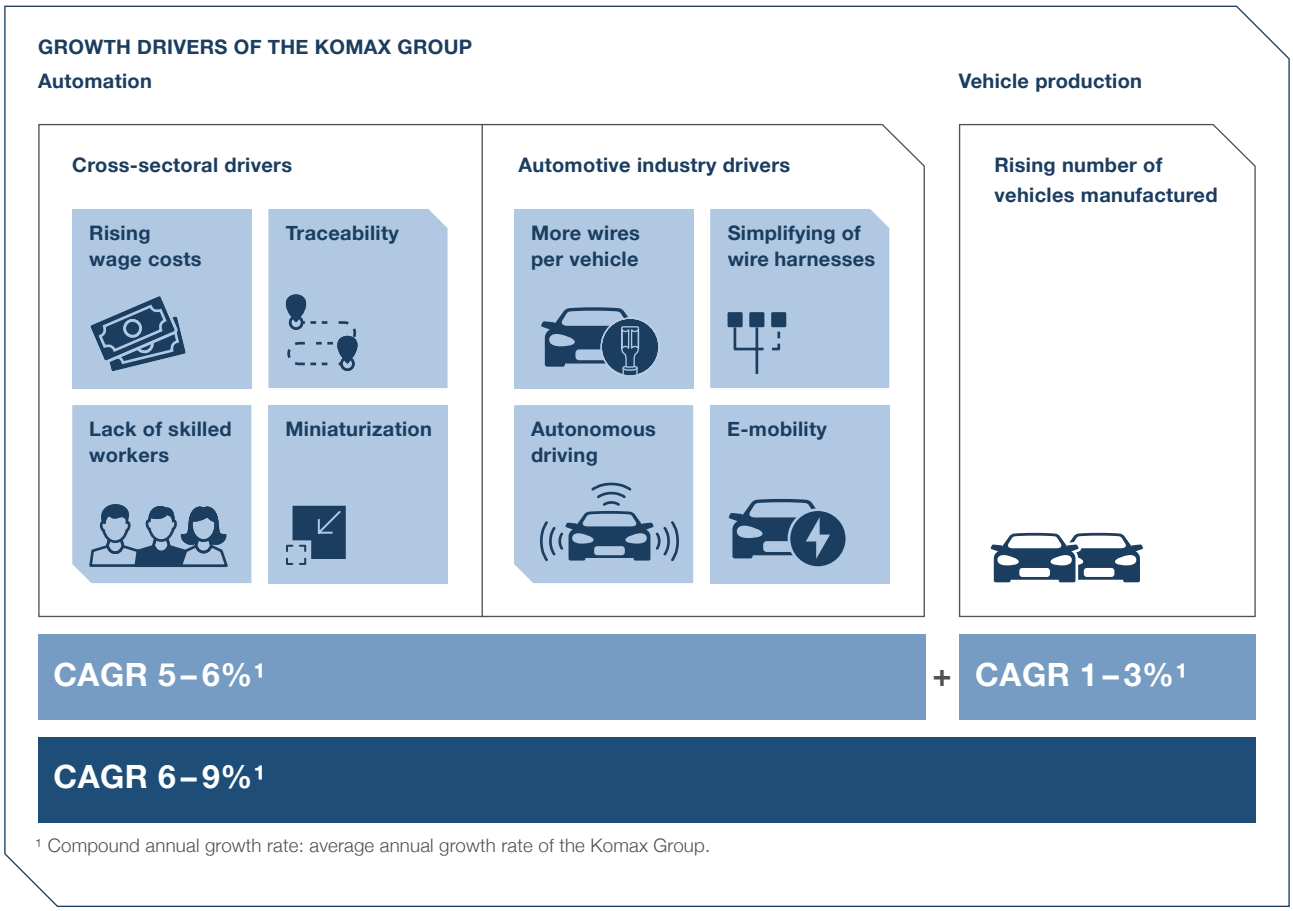
The megatrends in the Komax Group's three market segments are cross-sector trends that are increasingly converging with one another. They are developing against a persistently low level of automation at wire harness manufacturers. The lion's share of wire processing (approximately 80%) is still done by hand. However, manual production is coming up against increasing challenges that can only be overcome with automated processes by using Komax Group solutions.

Continual rise in wage costs

Due to wage-cost considerations, customers currently produce the majority of their wire harnesses in emerging markets. Over the long term, wage costs will continue to rise there too. Between 2021 and 2023, the global rate of inflation was as high as 8.7%, primarily affecting those on low incomes. This increases pressures on companies' personnel costs, which in turn boosts automation. Added to this are the persistent geopolitical uncertainties, such as the war in Ukraine and the conflict in the Middle East. Following the experiences of the coronavirus pandemic and the disruptions to supply chains, the impact of such uncertainties on the global economy will lead to a mind shift among the Komax Group's customer base in the coming years. There is an increasing trend toward shorter supply chains with increased security of supply (nearshoring). As a knock-on effect, wire processing would also be repatriated to countries with higher personnel costs – a move that would need to be offset with a reduction in headcount. With a continued increase in demand for wire processing over the long term due to the drivers set out below, such as more wires per vehicle and a higher number overall of vehicles being produced, this is only feasible if the level of automation in manufacturing is substantially increased.

Acute shortage of skilled labor over several years

For several years now, a growing shortage of skilled personnel has been a feature of the international labor market. According to a study published by the Manpower Group in 2024, the global situation on the labor market eased slightly compared with the prior year, but 75% of the employers surveyed in 41 countries are still reporting difficulties in recruiting new talent. 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 will boost investment in automation solutions.



1 Compound annual growth rate: average annual growth rate of the Komax Group.

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.

Seamless traceability facilitates increasing complexity with consistently high quality
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 growing complexity of wire harnesses means stringent requirements in terms of the quality of wire processing. The zero-error tolerance principle is fueling a further increase in the need for quality assurance systems. These test systems guarantee the highest possible functionality of wire harnesses and electronic assemblies. Error-prone manual processes will be less and less adapted to these increasing requirements, as defective wire harnesses take considerable time and expense to repair or replace once they have been installed, which inevitably comes at the cost of productivity and profitability. Functional defects in electronic systems can lead to serious reputational damage.

Therefore, seamless traceability of the individual process steps is required for optimum quality assurance. 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.

Digitalization of value chains
To satisfy the rising demands in terms of traceability and quality, value chains have to be digitalized. This not only increases efficiencies in cus-

tomers' manufacturing operations but also enables them to address the issue of transparency better, such as in quality audits or ESG topics . Consequently, Komax Group customers are in the process of digitally linking their production processes to steer them and monitor them more efficiently. Digitalization will become significantly easier with increasing levels of automation, as incorporation of manual processes into digital process chains is limited.

Cross-sectoral automation trend
Based on market analysis gathered for its strategy, 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
The Komax Group generates the bulk (approximately 75%) of its revenues in the automotive industry and is benefiting from the global long-term 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, to unlock individual mobility for a great many people.

Increase in number of vehicles being manufactured
According to S&P Global Mobility analyses, around 89 million cars and light commercial vehicles were manufactured worldwide in 2024. The volume of production has therefore declined slightly (2023: 91 million vehicles). For the next five years (2025–2029), S&P Global Mobility is predicting an average annual growth rate in vehicle production volumes of around 1.7% (more on market development › from page 40 onwards).

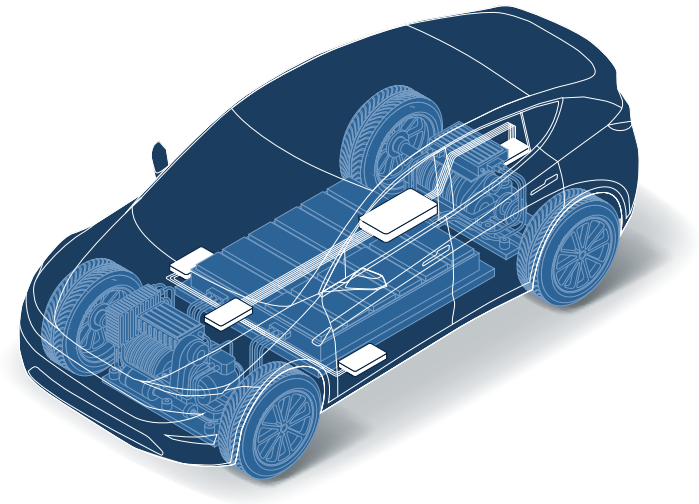
More wires per vehicle
Innovations in vehicle construction, new functionalities, and an ever-rising fit-out level in all vehicle classes are leading to a further increase in demand for the wires produced for each vehicle. The electrical systems in today's compact passenger cars already comprise as many 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 opens up new sales opportunities
Growing environmental awareness among consumers and the associated target of emission-free vehicles are some of the megatrends that will underpin the Komax Group's business in the long term. Climate protection will also be driven by regulatory measures. From 2035 onwards, new passenger cars with diesel or petrol engines will no longer be permitted in the EU (› page 43). New types of high-voltage cables are being developed for hybrid and electric vehicles, which will enable the Komax Group to create further unique selling propositions and – in tandem – additional sales opportunities (› page 44).

Greater automation of wire harness production through zonal architecture
The cross-sectoral growth drivers (› page 19) are leading to specific developments in the automotive industry to facilitate the automated production of wire harnesses. Automotive manufacturers and suppliers are working together to simplify the wire harness. The Komax Group is involved in such projects and, in 2024, worked with partners to publish new industry standard design guidelines (DIN 72036: 2024-06) setting out how the level of automation can be increased in wire harness manufacturing in the automotive industry (› page 55). This standard demonstrates what changes are needed to wire harnesses to facilitate a greater degree of automation in the production process.

The goal is a zonal electrical system with several smaller wiring harnesses supplied by separate control units, instead of one large, complex wiring harness. This reduces the overall wire length 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.

The future – autonomous driving

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.

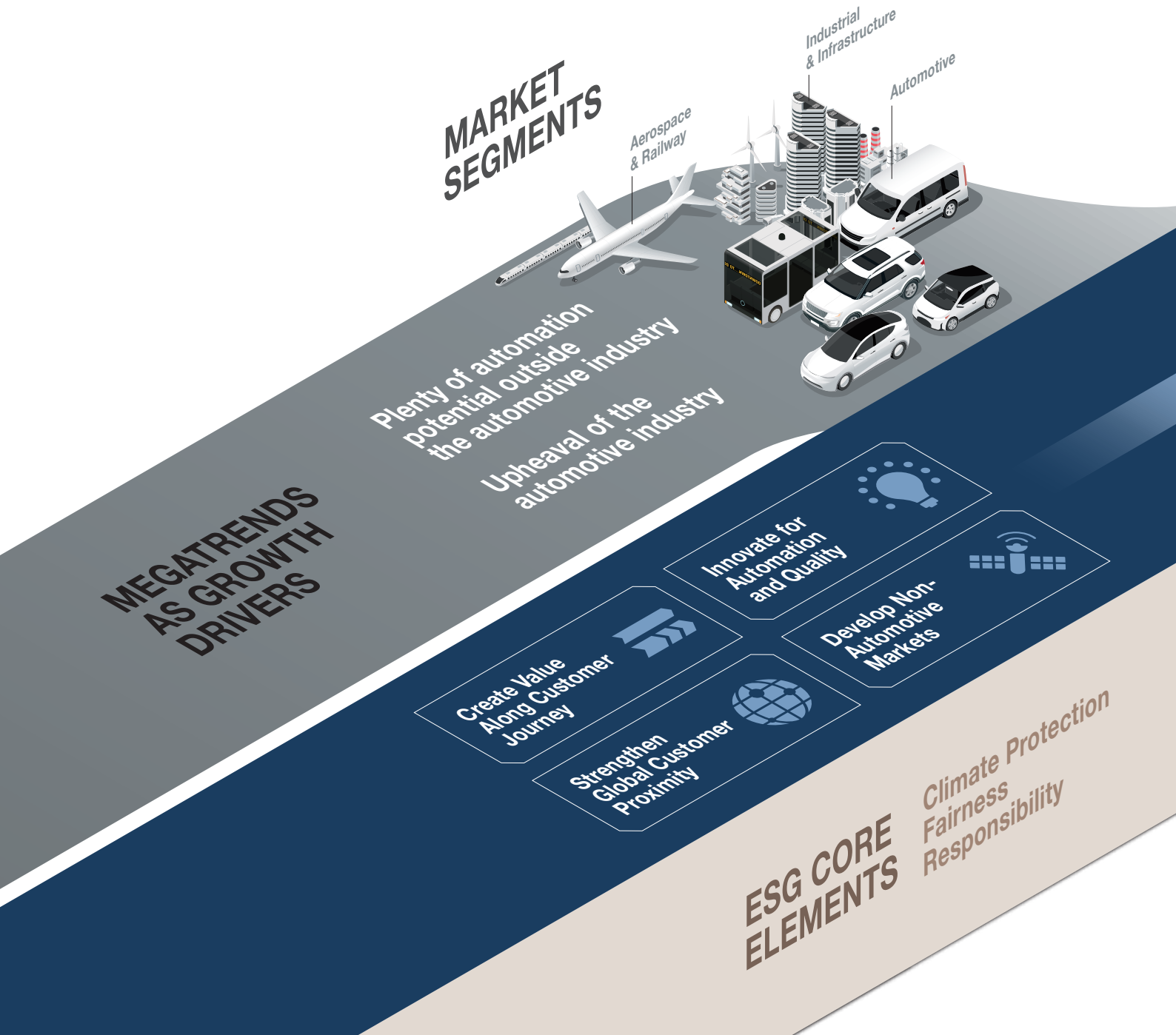
The Group expects to be able to generate an average of 1–3% growth annually over the coming next years as a result of the growing number of vehicles produced.

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. Sooner or later, customers in all market segments will have to invest in automation solutions to remain competitive – regardless of interim economic downturns. These lead to delays, but do not significantly affect the underlying megatrends in the long term. 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

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 key strategic priorities. The corporate purpose, core values, and ESG approach form the basis of these.




1.0–1.2
CHF billion revenues
120–160
CHF million EBIT
2030 FINANCIAL TARGETS
Enormous automation potential
PURPOSE & FIVE CORE VALUES
Innovation
Quality
Customer Focus
Responsibility
Success

“The Komax Group is confident that it will emerge strengthened from the current phase of weakness. It has the necessary market knowledge, specialist expertise, and resources to successfully implement the key strategic priorities it has defined. The trend toward greater automation is very much intact, and the Board of Directors firmly believes the Komax Group can expand its market and technological leadership further.”

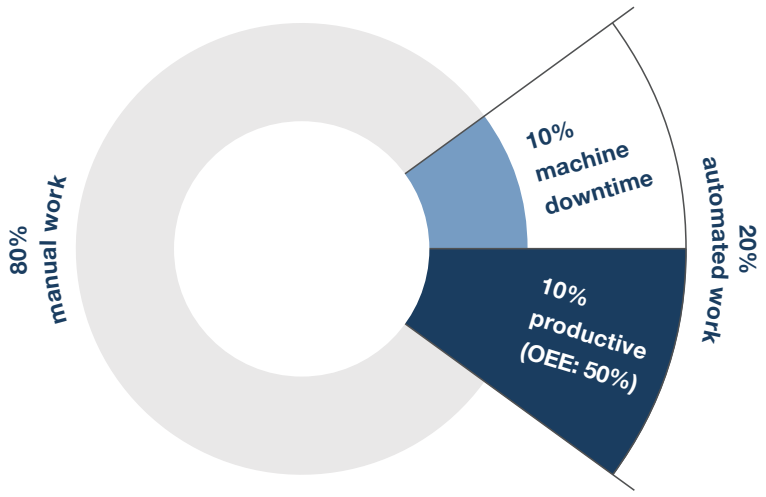
Beat Kälin, Chairman of the Board of Directors

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 various strategic initiatives. The company 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

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%.



customers of the Komax Group to consolidate and increase their competitive advantage further.

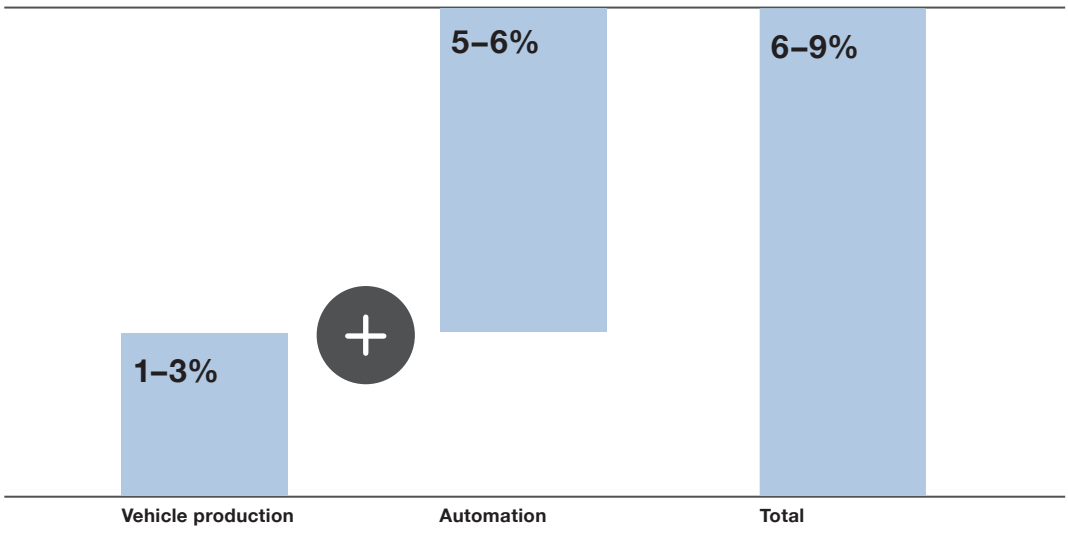
90%
automation potential

Increasing the degree of automation and overall equipment 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.

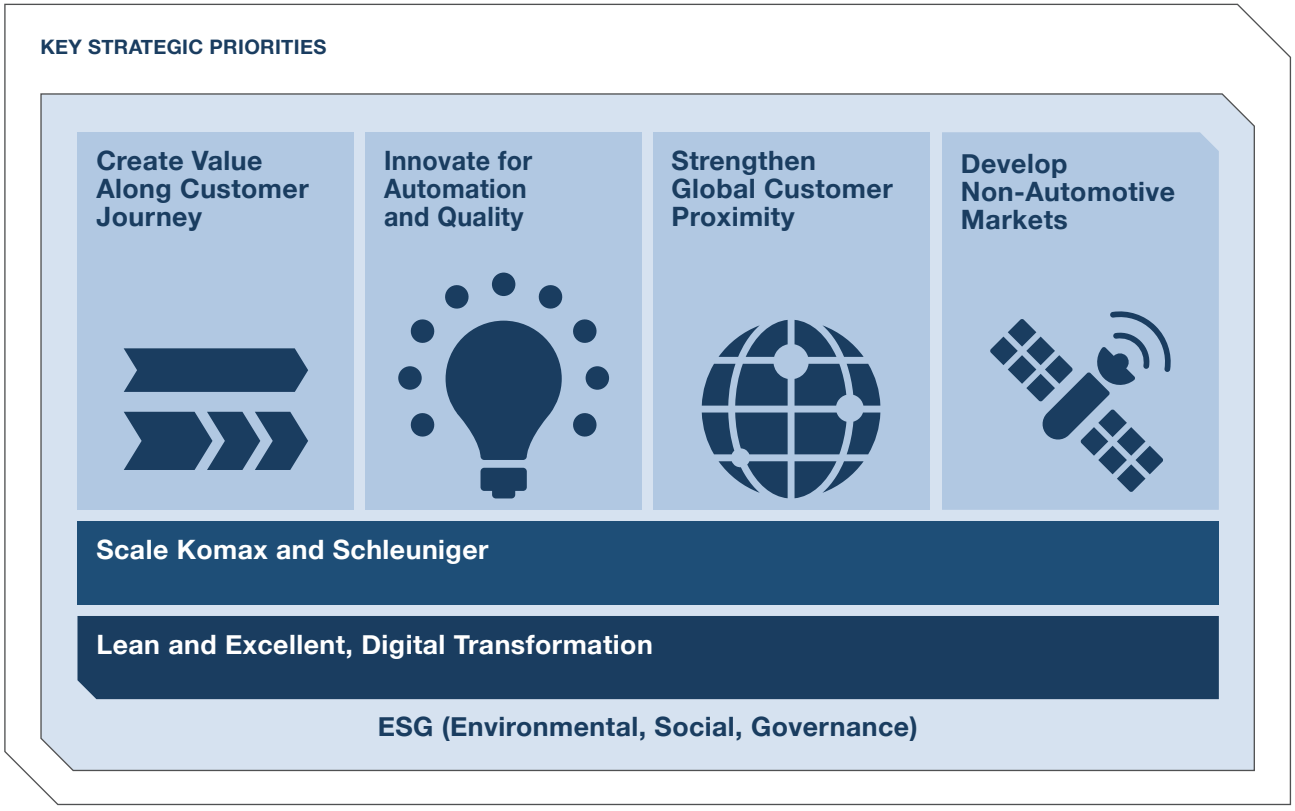
In order to meet the targets set for 2030, the Komax Group is seeking to achieve average annual revenue growth of 6–9%. The key driver of this growth, accounting for 5–6%, is the trend toward automation. The number of vehicles manufactured, which is set to grow over the medium term, will contribute a further 1–3% to growth. Growth is not expected to develop in a linear way over the coming years. Given that it is below average due to the current weak phase in the automotive industry, it is expected to be above 6–9% in the subsequent years of recovery (› page 42).

Automation drives the Komax Group's growth



FOUR KEY STRATEGIC PRIORITIES

In order to achieve its set targets, the Board of Directors of the Komax Group 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, 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 34–39), 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 through to the taping process, and finally the testing of the completed wire harness (› page 59). 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 from 20% to 25% of revenues lies right at the heart of this initiative, as up until now it has been largely limited to the replacement parts business. For this reason, the service concepts were revised in the reporting year and customer management was improved with digital solutions (› page 37). A significant increase in the number of concluded service agreements was already achieved in the 2024 financial year.

8–9%
of revenues invested in research and development

Innovate for Automation and Quality

The Komax Group strives to maintain 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 right from the first go if they use Komax machines for their production. But if 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. It thus possesses a degree of innovative strength that is unique in the market, and it uses this to increase the productivity and flexibility of its customers, thereby providing them with additional competitive advantages. The pipeline is well filled, and over the coming years the Komax Group will continue to provide its customers with numerous technological innovations that will facilitate considerable efficiency increases in automated wire processing.

A good example is the Lambda 5 series – a modular machine for the fully automatic processing of wires that is capable of processing twice as many wires as the previous generation in the same timeframe and with similar space requirements, using significantly less energy. Moreover, with its platform strategy the Komax Group is continuously enhancing the existing installed machinery base of its customers with multifaceted solutions.

25%
revenues from non-automotive customers

28
engineering and production sites globally

Strengthen Global Customer Proximity

The Komax Group has 28 engineering and production sites located in Europe, Asia, North 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 that was strengthened further in 2024. 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 (20%) in the Asia/Pacific region given the sheer size of this market, which is the source of more than half of all annual global vehicle production volumes. 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. Among other things, in the reporting year these enabled it to take a majority stake in Hosver, the leading manufacturer of machinery for the processing of high-voltage cables in China, along with a 5% stake in MES specialist E-Plus. In other regions too, however, the Komax Group has significantly increased its customer proximity through digital solutions and structural optimizations (› pages 29 and 37).

Develop Non-Automotive Markets

The Komax Group generates around 25% of revenues from customers who are not active in the automotive industry, and intends to increase this share to 30% by 2030. The high proportion of revenues generated in the Automotive market segment (75%) is explained by the fact that, according to market estimates, some 60% of globally processed wiring is used in automotive manufacturing, and the automotive industry is without equal when it comes to standardization and automation. 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 that have synergy potential with the core business: Aerospace & Railway and Industrial & Infrastructure (› pages 40/41). In both segments there is plenty of automation potential that the Komax Group is keen to exploit further in the future. In the industrial and infrastructure area, for example, there are comprehensive digital solutions for control cabinet builders. In the aerospace market, the Komax Group offers automated solutions for the entire value chain of aircraft manufacturers (› pages 48/49). As these markets offer attractive longer-term growth potential, the Komax Group is seeking to achieve ever greater penetration so that its non-automotive share of revenues can be gradually increased. Although the non-automotive share of revenues actually rose to around 35% in the 2024 reporting year, this was primarily attributable to the weakness of the automotive industry.

STRATEGIC INITIATIVES

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

Scale Komax and Schleuniger

Not only does the combination of Schleuniger 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 to make the best possible use of the potential arising from the combination.

As part of this strategic initiative, comprehensive progress was made in 2024 in the form of consistent cost and structural adjustments. Among other things, the distribution network in Europe was further optimized for customers, with the number of distribution channels being reduced from 81 to around 50 (› page 34). In addition, various companies and locations were either closed, merged, or sold.

In Switzerland, the Komax Group concentrates its activities in the two sites of Dierikon and Thun. Production operations in Rotkreuz were transferred to the headquarters in Dierikon at the end of 2024. The production site in Cham will follow suit in the first quarter of 2025. This concentration of sites not only reduces costs, including on the logistical side, but also shrinks the company's environmental footprint in Switzerland.

In Germany, the Schleuniger Messtechnik site in Sömmerda was closed, as was the branch of Schleuniger GmbH in Jettingen. In Sömmerda, quality tools were developed and produced. Following the combination of Komax and Schleuniger, these products were being manufactured at two sites in Germany and one in Singapore. In the future, the Komax Group will focus on just two locations in this area – one in Europe and one in Asia. The test automation solutions produced in Jettingen will no longer be offered going forward. The adaptronic site in Wiedensahl, which has up until now been used for the production of hand and special adapters for automotive applications, will be closed in the first half of 2025. As these are niche solutions that do not belong to the core business of the Komax Group, they are being discontinued.

Furthermore, production at the Quality Solutions site in Yambol, Bulgaria, was shut down, with the second Turkish location in Ergene/Tekirdağ being expanded into a production site in order to meet the increasing local need for testing solutions in Türkiye. Komax Testing Bulgaria will continue to exist as a company and focus on the development of software and algorithms for digital solutions at the existing site in Sofia. The production of testing solutions will also be discontinued at the Porta Westfalica site in Germany over the course of 2025.

In Asia, the Komax Group transferred the production and engineering operations of Komax in Shanghai to the existing Schleuniger site in Tianjin, with Shanghai being continued as a company for distribution and service, as well as testing solutions. This will decisively strengthen the production site in Tianjin for the Chinese and wider Asian markets. There are likewise changes in Japan. The product portfolio in the wire stripper area will be streamlined in keeping with a "best of" strategy to reduce complexity and costs here, too (› page 35). This will mean the discontinuation by mid-2025 of the benchtop machines of the Mira type produced in Japan. Going forward, the remaining activities of Komax Japan will be grouped together at the Schleuniger site in Inagi near Tokyo.

In North and South America, the Komax Group currently has a strong market position, which is why there were no significant organizational changes here in the reporting year.

Thanks to these advances in respect of scaling and structural adjustment, the Komax Group was already able to leverage significant optimization potential in the reporting year, which will lead to a lasting cost reduction of around CHF 10 million. Optimizations will be ongoing with a view to equipping the Komax Group for future challenges and attaining its ambitious financial targets.

Lean and Excellent, Digital Transformation

As the corporate goals of the Komax Group are geared toward 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. A key element in

STRUCTURAL OPTIMIZATIONS IN EUROPE

Switzerland

- Relocation of Schleuniger's Cham site to Komax headquarters in Dierikon and discontinuation of production
- Relocation of Komax's Rotkreuz site to Komax headquarters in Dierikon

Europe

- Discontinuation of production at Schleuniger's Radevormwald site, Germany
- Discontinuation of production at Komax Testing Germany in Porta Westfalica, Germany
- Closure of adaptronic site in Wiedensahl, Germany
- Closure of Schleuniger site in Jettingen, Germany
- Closure of Schleuniger Messtechnik site, Germany
- Transfer of production from Komax Testing Bulgaria to Komax Testing Türkiye
- Sale of Artos France, France
- Takeover of distribution partner Seno Property, Czech Republic
- Asset deal with distribution partner Seno, Romania
- Minority stake (3%) in distribution partner Smans in Benelux

STRENGTHENING OF MARKET POSITION IN ASIA/CHINA

China

- Localization of twister machines for Asian markets at Tianjin site
- Takeover of majority (56%) in Hosver, Suzhou
- Combination of Komax and Schleuniger sites in Shanghai
- Minority stake (5%) in E-Plus, Changchun
- Transfer of production from Komax Shanghai to Schleuniger Tianjin
- Focus on distribution, service, and testing products at Komax's Shanghai site

Japan

- Discontinuation of production at Komax site in Tokyo
- Combination of Komax and Schleuniger sites in Tokyo

■ Production
■ Production with implementation to be completed in the 2025 financial year
■ Sales and service network

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 aim is to establish comprehensive digital solutions for internal processes of the Komax Group, for interfaces to the customer, and for the SMART FACTORY by KOMAX offering. This should enable the quality of processes, products, and services to be improved, while at the same time facilitating lasting improvements in cost efficiency and accelerating the Komax Group's speed of response to market developments. Driving factors here in 2024 included improved digital customer management, the digitalization of engineering data, and the introduction of a global HR management tool (› page 81). The ongoing optimization of the Komax Group's own processes and supply chains along with internal and external digitalization are key factors in the attainment of the desired level of profitability and efficiency.

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. Sustainability is a fundamental principle at the Komax Group, and one that has been actively put into practice for many decades. This should become even more tangible and visible in the future with the implementation of the ESG strategy and the fulfillment of 13 non-financial targets. The Komax Group is well on track to achieve its ESG targets. More on this can be found in the ESG Report produced in accordance with the international GRI standards, in which the Komax Group discloses comprehensive information and key figures on ecological performance, on risks and opportunities (including a TCFD report), and on social and governance issues (› pages 64–118).

“We reacted early in responding to the challenges, initiating numerous structural and product portfolio optimizations, as well as cost reductions, while at the same time driving forward the integration of Schleuniger in a targeted way. We intend to achieve the financial targets set by 2030.”

Matijas Meyer, CEO Komax Group

MID-TERM TARGETS PUSHED BACK BY TWO YEARS TO 2030

The Komax Group wants to increase its value on an ongoing basis through profitable growth. In 2023, it therefore set itself ambitious targets for growth and profitability to be achieved by 2028. Due to the very challenging market situation in the reporting year, and as the Board of Directors is not expecting any significant improvement over the next few months, in September 2024 it pushed back the mid-term targets by two years to 2030 – without any change in the envisaged key targets themselves.

1.0–1.2
revenues 2030 in CHF billion

120–160
EBIT 2030 in CHF million

By 2030, the Komax Group aims to be generating revenues of CHF 1.0–1.2 billion. With targeted annual average growth in revenues of 6–9%, the Komax Group expects to at least maintain or possibly slightly expand its market share. Significant progress was made in the attainment of these targets in the 2024 reporting year. As set out in the "Scale Komax and Schleuniger" section, the numerous initiated measures – many of which have already been implemented – are leading to efficiency improvements, as well as sustainable cost savings.

Rising revenues figures over the medium term and an advantageous product mix will enable the Komax Group to deliver disproportionately high increases in profitability. It is seeking to achieve EBIT of CHF 120–160 million for 2030.

The Komax Group continues to look at an Eldorado scenario in automation in its markets. Through the combination with Schleuniger in 2022, the acquisitions implemented in the two years thereafter, and the structural and cost optimizations, it is ideally equipped to best exploit the opportunities that arise over the coming years.

Financial stability

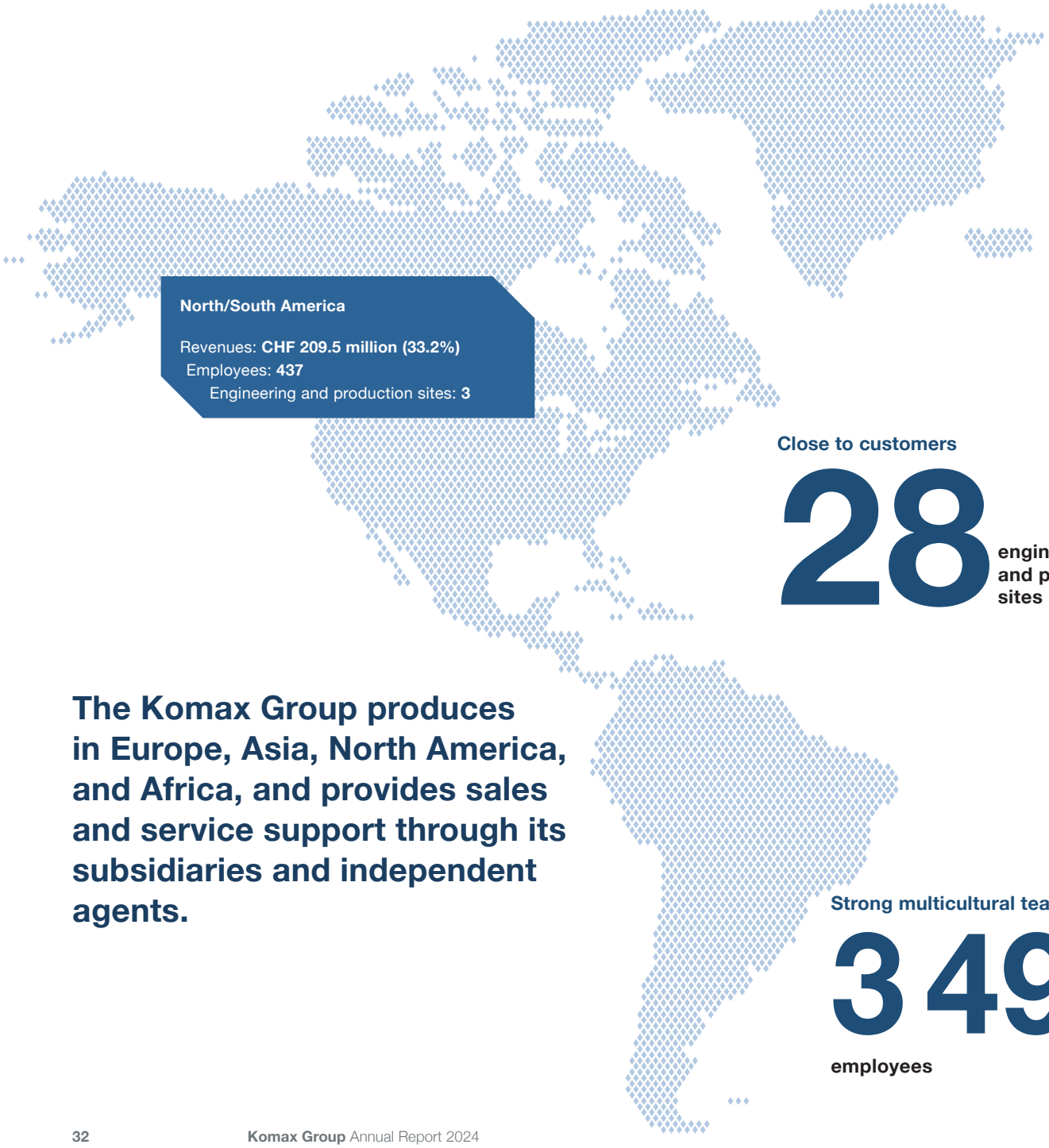
Safeguarding financial stability is a key strategic element for the long-term success of the Komax Group. It is distinguished by its robust equity base and financial room for maneuver. Numerous measures were implemented in the reporting year to sustainably increase the profitability of the Komax Group (› page 28). The equity ratio amounts to 51.7%, while the debt factor (net debt divided by rolling EBITDA) stands at 2.67. This solid foundation enables the Komax Group to systematically pursue opportunities to develop further, and offers security in challenging times.

Komax Group results

in CHF million	2024	2023[1]
Revenues	630.5	752.0
EBIT	16.0	67.8
Payout ratio (in % of EAT)	0.0	35.1

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

AROUND THE WORLD



North/South America

Revenues: **CHF 209.5 million (33.2%)**
Employees: **437**
Engineering and production sites: **3**

Close to customers

28 engineering and production sites

The Komax Group produces in Europe, Asia, North America, and Africa, and provides sales and service support through its subsidiaries and independent agents.

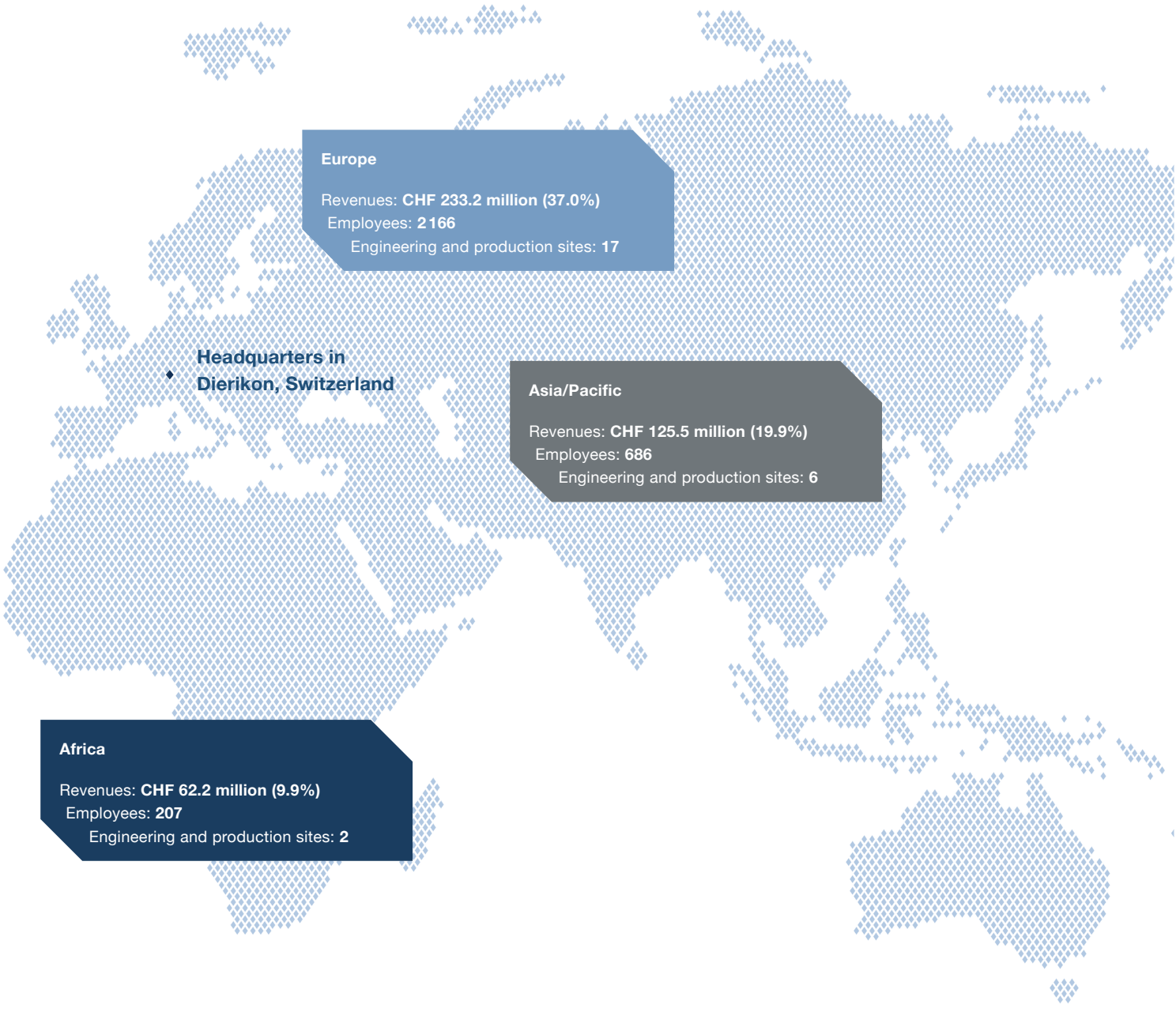
Strong multicultural team

3 496 employees

Unique distribution and service network

60

countries with sales and service support



FOCUS ON CUSTOMER PROXIMITY

Being close to its customers at all times is particularly important to the Komax Group, as this is the only way it can ensure rapid response and delivery times, as well as a comprehensive service offering. For that reason, the Komax Group – in keeping with its motto "global local" – combines global production with a unique local distribution, engineering, and service network across all continents with customized digital offerings.

The Komax Group maintains 28 engineering and production sites in Europe, North, Asia, and Africa, at which 3 496 employees produce standardized products, customer-specific systems, and testing systems (› pages 32/33). The structures are currently being optimized, which will lead to fewer locations. With its unique distribution and service network, the Komax Group can always provide efficient and competent support to both locally and globally active customers. It provides sales and service support via subsidiaries and independent agents in over 60 countries. Around 400 employees work in the company's international service organization. Last year, the Komax Group implemented or initiated numerous projects with the aim of further increasing customer proximity.

Greater customer proximity in distribution and service

Over the last two years, the Komax Group has reduced the number of its global distribution channels from 80 to around 50, thereby further improving customer proximity. Optimization solutions were implemented in countries with parallel distribution channels following the combination of Komax and Schleuniger in 2022, with the aim of offering customers just one single contact partner capable of reacting rapidly to their needs. For example, the distribution service network in Europe was modified over the course of the year in the Benelux, Czech Republic, and Romania markets, in order to eliminate the duplications that arose as a result of the above-mentioned combination. In the Benelux countries (Belgium, the Netherlands, and Luxembourg), Komax and Schleuniger previously had two different organizational structures in place in the distribution area. While Komax has worked with its distribution partner Smans for some 40 years, Schleuniger had been distributing its products itself. In 2024, Smans took over distribution and service for the Komax Group's entire product range. The former Schleuniger employees were transferred to Smans. In return, the Komax Group received a minority stake of 3% in Smans.

In the Czech Republic, too, two distribution channels coexisted previously: Komax Czech Republic Trading sold Komax products, while another company – Seno Property – sold Schleuniger products. Seno Property was taken over in 2024 and integrated into Komax Czech Republic Trading. In addition, in the reporting year an asset deal was concluded with Seno Romania, which

had previously distributed the solutions of Schleuniger in the local market. As a consequence, three Seno employees transferred to either Komax Romania Trading or Komax Testing Romania. Komax Romania Trading will therefore offer the entire portfolio of Komax and Schleuniger solutions from a single source in the future.

The Komax Group is now firmly on the home straight with the optimization of its distribution and service network. There are only a few countries in which solutions are not yet in place – but these are now imminent. To align itself with changing customer needs, the Komax Group will adapt its global distribution and service network further in the future where necessary.

Streamlining of product portfolio

Following its combination with Schleuniger, the Komax Group found itself with a significantly larger product portfolio, with overlaps in certain areas. Following in-depth analysis, work began back in 2023 to streamline the offering in certain product categories by means of a "best of" strategy. This work was consistently pursued in the reporting year with a view to further reducing both complexity and costs. For example, the wire stripper products (Mira series) and the cut & strip products (Kappa series) from Komax were discontinued in favor of the equivalent Schleuniger products (B and E series). In the future, Schleuniger's remaining B and E series will combine the benefits of the existing Schleuniger and Komax series and therefore the best of both worlds. Moreover, in the Quality Tools area, which comprises more than 50 products, the portfolio is being significantly scaled back in phases (› page 28).

"With Hosver we are strengthening our market position in China in the growing area of electromobility, which is one of our key strategic targets."

Matijas Meyer, CEO Komax Group

ACQUISITION OF HOSVER IN CHINA

In the reporting year, the Komax Group took a majority stake in Hosver, the leading manufacturer of machinery for the processing of high-voltage cables in China. It has thereby acquired additional engineering expertise for the Chinese market, while also gaining access to a number of key customers:

– Acquisition of the majority stake (56%) in Hosver as per July 2024
– Founded in 2014 in Suzhou, located to the west of Shanghai
– 190 employees

TECHNOLOGY HOSVER
A KOMAX COMPANY

Market position strengthened in China

Another key area of activity in 2024 was China, where the Komax Group has yet to fully establish the necessary market presence to participate in this growth market to the greatest extent possible in the longer term. An important step toward achieving that goal was the takeover of a majority stake (56%) in Hosver, the leading manufacturer of machinery for the processing of high-voltage cables in China (› infobox). With this

acquisition, the Komax Group has acquired additional engineering expertise for the Chinese market along with access to leading companies in the electric vehicle market. This includes local and global wire harness manufacturers as well as Chinese vehicle manufacturers.

An additional step came at the end of 2024 with the acquisition of a minority stake of 5% in E-Plus (Changchun E-Plus Technology Co., Ltd.). The Komax Group has therefore entered into a partnership with the biggest provider of digital smart factory solutions for the wire processing industry in China. E-Plus, which is based in Changchun in the north-east of the country, develops and sells the most widely used manufacturing execution system (MES) in China for the production of wire harnesses. Wire harness manufacturers use this MES to monitor, control, optimize, and track their production processes – regardless of whether they use wire processing machines from Komax and/or other providers. In addition, Komax's production in Shanghai was relocated to the Schleuniger site in Tianjin, thereby combining both capacity and expertise at a single production site. Work also started in Tianjin on the process of localizing the production of wire twisting machines for the Chinese market, which previously took place at the headquarters in Switzerland. Thanks to this development, the Komax Group has strengthened its position in the important growth market of China. The company is working intensively on achieving success in this market in the future too and will be analyzing and exploiting further optimization potential.

"Our aim is to offer comprehensive service across the entire product life cycles of our solutions. For a high level of production automation, we are involved with our client base from an early stage in design and planning. The subsequent support we provide spans the whole production process, ensuring that we generate real added value at all times."

Tobias Rölz, Executive Vice President Market & Digital Services

Comprehensive service concepts

The Komax Group is supporting its customers with a comprehensive service offering that encompasses the entire product life cycle. To provide the best possible support to customers' ongoing production operations, the service offering is being continuously developed. A particular focus here is the expansion of intelligent digital solutions that complement the service portfolio, thereby helping customers to solve any challenges rapidly and effectively. The Komax Group has made significant progress in this respect over the last two years. For example, with its CARE Service Agreements, the company now offers comprehensive carefree packages for customers, thereby helping them get the best out of their machinery investments when it comes to productivity, availability, and quality. As a result, in addition to the machines themselves, customers can also obtain service agreements for individual machines or entire production sites, covering calibration, maintenance, technical support, training, and digital solutions. In 2024, agreements for service packages were concluded with various customers in the different regions, covering the entire portfolio of Komax and/or Schleuniger machines within a factory.

In addition to its CARE Service Agreements, the Komax Group also offers a broad-based service offering of on-demand services such as advice, installation, and repair, as well as renovation or extension of customer systems. Appropriate financing solutions offer attractive alternatives to the traditional purchase of machinery. Digital products and services along with the MES (Manufacturing Execution System) solutions 4WIRE Px and 4WIRE CAO complete the offering. These allow customers to create additional added value across the entire life cycles of their machines thanks to efficient production planning and monitoring.

Digitalized customer management

In addition to having personal contact with the employees of the Komax Group, customers also want to be able to call up product information, submit service queries, and initiate their orders rapidly, simply, and digitally. The Komax Group is helping them do just that, supporting them with various digital solutions. The company is increasingly using an omni-channel approach in this respect, i. e. facilitating contact through all sorts of different channels.

Over the course of 2024, the Komax Group rolled out a Group-wide, standardized, new digital customer management tool (› page 111, ESG Report) and carried out further work on the customer portal "myKomax." This portal enables customers to log into their own customer area via the website. Here they can find, for example, digital services such as WIRE Flow, and further services are to be made available in 2025 so that customers have access to a comprehensive digital offering in the future with just a single sign-on.

With this system, the Komax Group is tracking customer needs across different areas. The local service team can inform customers transparently at any time about the status of their respective issues.

These are implementation steps on the road to the self-service boutique of the SMART FACTORY by KOMAX (› pages 52/53). The "myKomax" customer portal will be continuously expanded over the coming years. Moreover, in 2024 the Komax Group carried out a comprehensive customer satisfaction survey to improve its service levels further (› page 110, ESG Report).

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 half a century to develop high-quality, innovative automation solutions for local needs in global markets. In addition, the company's international orientation helps mitigate the repercussions of currency fluctuations. The Komax Group seeks to ensure that costs and revenues are generated/incurred in the same currencies to the greatest extent possible.

Expansion of value chain with WUSTEC

Thanks to its Germany-based company WUSTEC, the Komax Group offers automated wire prefabrication for control cabinet construction. WUSTEC is thus offering its customers a "virtual machine" with which wire sets can be ordered online in any quantity and then manufactured and delivered within the shortest of timeframes. This is particularly attractive to customers who have no interest in setting up their own production process for certain projects. In the reporting year, this offering was rolled out for the distribution network in the DACH region, as well as in France. Moreover, this concept was expanded through the "physical machine," whereby the digital platform WIRE Mind was impressively developed further and prepared for market launch in 2025. Customers with in-house production will be able to optimize their production planning in future thanks to WIRE Mind. The corresponding production data can be uploaded to the WIRE Mind platform from any ECAD system. The Komax Group is thereby offering its customers maximum flexibility and a rapid and efficient service, and hence enabling them to accelerate production. They can either use the "virtual machine" to order their prefabricated wire sets through WUSTEC online and/or work with their own "physical machines" in their factories and use WIRE Mind for the purposes of production optimization.

Education and training to boost productivity

A well-trained workforce can help minimize outages through user or maintenance error, and can 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 has been offering on-site instruction at numerous locations of the Komax Group in a way that is tailored to different customer needs and levels of experience. Furthermore, customers have the option of completing some 220 training modules online in up to twelve languages. Every year, hundreds of customers make use of this offering to expand their specialist knowledge. This is on top of the numerous in-person training sessions on the use and installation of machinery given by the Komax Academy and the various Sales and Service teams. The Komax Academy and the Schleuniger University will be amalgamated in 2025 to create the new "Komax Campus" learning management system.

Explanation of the Schleuniger cut & strip portfolio for customers in March 2024 at productronica in Shanghai.

Products and services on tap locally for customers

The Komax Group enhances its 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 encourages exchange of ideas in respect of key themes in the industry. In the reporting year, companies of the Komax Group were present with their products and services at around 50 trade fairs and events.

Among other events, in March 2024 customers were given the opportunity to experience “live” the breadth of solutions available for wire processing along entire value chains at productronica in Shanghai, China. In May, the Komax Group presented a broad portfolio of solutions for wire processing to its customers at EWPTE, a key US trade fair held in Milwaukee, Wisconsin. Of particular interest to attendees was the Group’s range of machinery for the fully automatic processing of wire harnesses. Also in the US, the Komax Group embarked on a roadshow between June and December with its Komax, Schleuniger, and Cirris brands, traveling all around the country to give on-site presentations to its customers on the latest products and services from the cut & strip, crimping, and testing areas. A similar roadshow was also carried out in Thailand in the fall of 2024. This additional layer of proximity was particularly valued by customers.

In November, the Komax Group presented numerous products from its various brands at its proprietary trade fair WirePro Expo in Lucerne, an event in which various other exhibitors also participated. Spread over three days, this fair gave more than 1 000 customers and partners of the Komax Group a clear insight into the company’s latest products and services. The trend toward greater automation was very much in evidence. Among other things, the key points of focus encompassed the themes of sequential production, solutions for small batches, control cabinet construction, efficiency improvements through IQC technology, as well as the numerous service offerings of the Komax Group. The company presented various solutions relating to the five elements of the SMART FACTORY by KOMAX, which is now evolving from vision into reality (› pages 52/53).

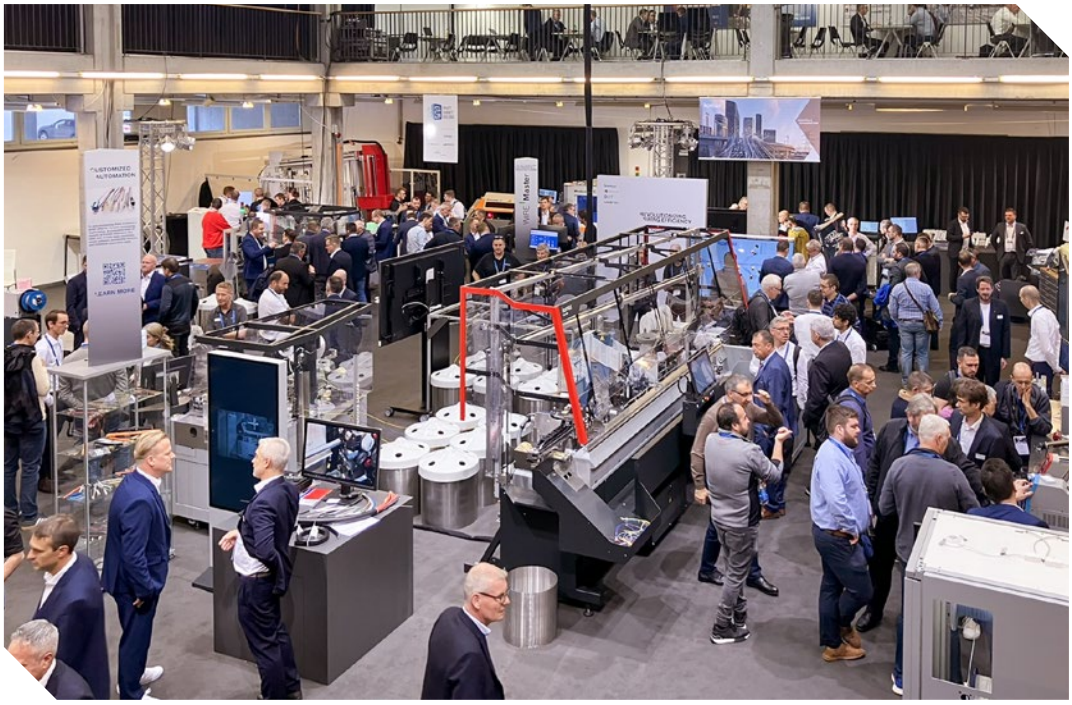
At various other events around the globe, the Komax team presented both its product portfolio and the SMART FACTORY by KOMAX to customers, along with various innovations and digital solutions. Trade fairs at which the Komax Group is set to exhibit over the coming months can be found at www.komaxgroup.com/trade-fairs.

THE BRAND WORLD OF THE KOMAX GROUP

The brand world of the Komax Group

Strong brands are a key driver of the success of the Komax Group. Brand strategy is therefore a vital element in the implementation of corporate strategy. For this reason, the Komax Group relies on a multi-brand strategy. In addition to the Komax brand itself, the portfolio includes the product brands Schleuniger, adaptronic, Cirris, DiIT, WUSTEC, and – as of 2024 – Hosver. Furthermore, the Lintech brand (as the distribution company for France and North Africa) has been part of the Komax Group since 2023. The Group's corporate image is characterized by pioneering spirit, technological leadership, insistence on high quality, and partner-based relations with customers. The presentation of the individual product brands is modern and standardized across all product groups, with high recognition value. The Komax Group has received many awards in the past for its consistent implementation of a clear product design that stands for customer friendliness and an unparalleled customer experience.

In order to simplify the process of dealing with individual brands for both internal and external stakeholders, the Komax Group created a brand portal in 2023 (www.komaxgroup.com/brands).



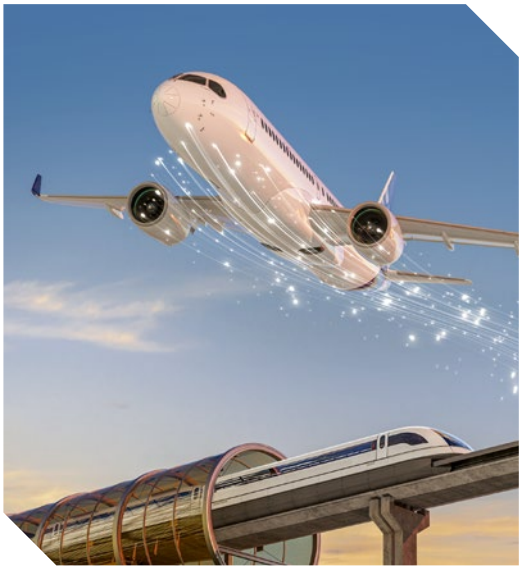
More than 1 000 people attended the Komax Group's three-day WirePro Expo in Lucerne, Switzerland.

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.

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 89 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 plenty of potential for additional automation steps, as around 80% of wire harnesses are still manufactured by hand.

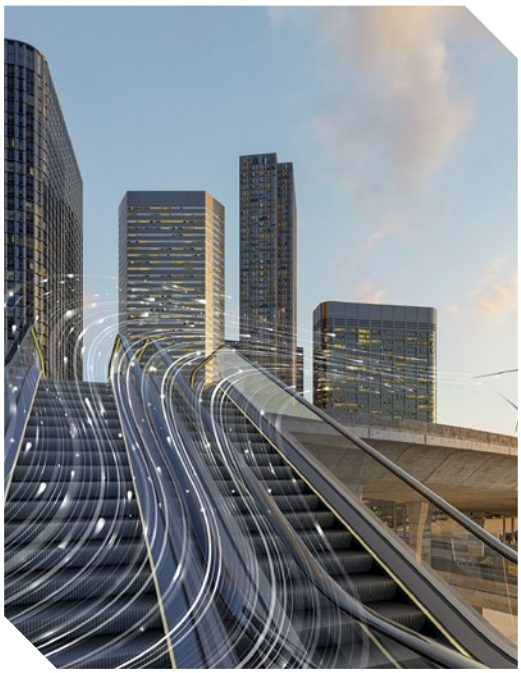


Aerospace & Railway

Issues such as safety, lightweight construction, and lower emissions have been at the forefront of developments in aerospace for many years. 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. The Komax Group negotiated these hurdles several years ago and is now looking to achieve continuous growth in this area. This market segment also includes the Railway area. The level of automation is still low here, too, and the corresponding need for automated wire processing is rising steadily. Compared to Aerospace, the wires processed here are simpler and lend themselves more easily to automation. The Komax Group is seeking to further expand its market share in both these areas. In addition, it can also leverage the experience gained in these areas in the core business for the automotive industry.

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.



Slowing growth in core markets

In the world's key economic regions, inflation continued to decline and/or stabilize in 2024. This trend toward stable price developments is expected to persist in 2025, which is likely to be beneficial to global vehicle production. That said, customers' willingness to invest remained generally low in 2024, attributable above all to existing surplus capacity in Europe, geopolitical uncertainties in Eastern Europe, the Middle East, and other regions, and the challenging situation facing European automotive manufacturers. For the next two years the International Monetary Fund (IMF) is expecting a modest development in global economic growth, namely at a rate below the long-term average of 3.7%. It attributes this, in particular, to the above-mentioned uncertainties as well as monetary policy decisions.

Automotive production stagnates in 2024

The automotive industry experienced a challenging year in 2024 with production numbers exhibiting a slight decline, particularly in Europe and Southeast Asia. According to analysis conducted by S&P Global Mobility, around 89 million cars and light commercial vehicles were manufactured worldwide in the year under review. At –1.6%, this figure is slightly below the level recorded in 2023 (almost 91 million vehicles). The long-term trends that are leading to a greater number of vehicles and rising automation in the wire processing business nevertheless remained intact, and in 2024 there was only sporadic evidence of the supply chain difficulties that have dogged the industry in recent years. This is also reflected in the outlook published by S&P Global Mobility, which is expecting volumes to grow to around 96 million vehicles by 2029, a level that is on a par with the previous peak figure achieved in 2017. The rising number of vehicles manufactured is one of the key growth drivers of the Komax Group.

Regional variation in vehicle production

The production of cars and light commercial vehicles varied significantly from region to region in the reporting year. A difficult economic situation and geopolitical uncertainties weighed on Europe in particular, with this region recording a decline of 5.2% to 17.0 million vehicles. This is almost 1 million fewer vehicles than in the prior-year period.

At 51.4 million vehicles manufactured, Asia proved stable overall, although Southeast Asia recorded negative growth with 21.5 million vehicles manufactured. This was 1.1 million vehicles fewer than in 2023 – a decline of 4.8%. However, the development in South-east Asia

was almost wholly compensated for by China. In Japan, a sharp drop of 8.3% was observed.

With a share of 33.6% of global production, China remains by far the world's biggest automotive producer, and recorded significant growth in production figures in 2024. A further contributory factor here was the fast-growing segment of electric vehicles. At 29.9 million, China manufactured almost 1 million more vehicles than in the previous year, which corresponds to an increase of around 3%. This is even more pronounced in the segment for pure electric vehicles (BEV), where China is the global market leader. Here, for example, the Chinese company BYD has been the biggest manufacturer of electric vehicles worldwide since 2023. Various Chinese automotive manufacturers saw double-digit growth in their BEV production figures in 2024, much of which is attributable to customers being offered local trade-in bonuses when switching to emission-free vehicles. In addition, a market shift is evident in the domestic market – foreign manufacturers in China are losing market share, while local automotive producers are gaining. Due to the differences in regional development, Asia's share of global vehicle production was stable overall in 2024 at 57.7% (2023: 57.1%).

In North and South America, S&P Global Mobility likewise identified contrasting developments in production volumes in 2024. Compared with the previous year, North America recorded a slightly negative development (15.5 million vehicles, –1.2%), whereas South America saw growth of 1.6%, driven by a strong Brazilian market, among other things. Just under 3 million vehicles were produced in South America. A total of 18.4 million vehicles were produced across the two continents in 2024 – more or less the same figure as the previous year.

Africa recorded a slight dip of around 1% in production volumes.

Growth forecasts for 2025 slightly lowered

Growth forecasts for the automotive market in 2025 were trimmed slightly. At the start of the 2024 financial year, the analysis team at S&P Global Mobility had been anticipating production of 90 million vehicles, but revised that figure downward to just under 89 million cars and light commercial vehicles. A somewhat speedier recovery is predicted from 2026, with the result that by 2029 production figures are expected to almost reach the level of the prior-year forecast. For the period 2025–2029, this equates to a compound annual growth rate for vehicle production volumes of around 1.7%, which is a slight increase of around 0.4 percentage points over a five-year horizon compared to last year's forecast. The analysts at S&P Global Mobility continue to expect diverging regional developments in 2025 in terms of production volumes.

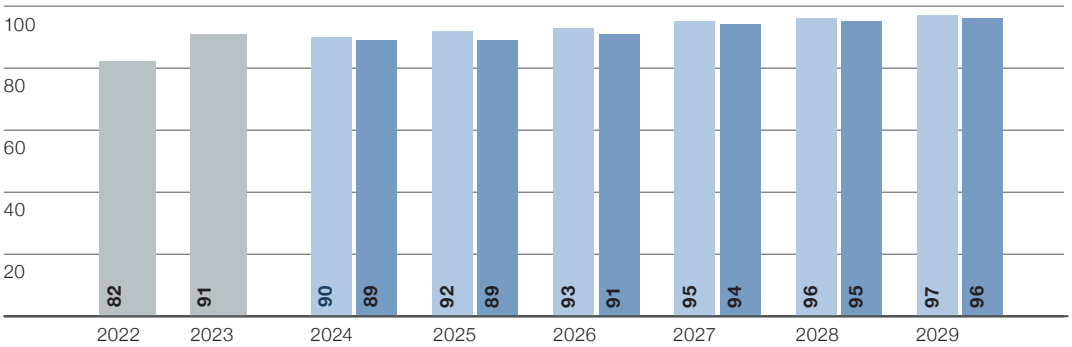
No growth is predicted for China in 2025, whereas Southeast Asia is expected to record growth of +1.3%. While North America is set to remain negative (–2.4%) according to the analysts, significant growth of 5.7% is expected in South America. S&P Global Mobility continues to expect production volumes to decline in both Europe and Africa in the new financial year.

Increasing resilience of supply chains

The supply chain situation normalized for the Komax Group in 2024 thanks to careful planning and professional supplier management. Lower demand also played a part in this. Strengthening

Number of passenger cars and light commercial vehicles produced

in millions



Source: S&P Global Mobility

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 here is the phenomenon of "nearshoring," or "reshoring," in which manufacturers and suppliers relocate their manufacturing and their supply chains closer to their sources of production to minimize risks. According to the Capgemini Research Institute, procurement from distant lands (offshoring) declined by 22% between 2021 and 2023. Analysts estimate that large companies in Europe and the US will be investing around USD 3.4 trillion over the next three years with a view to increasing production capacity closer to their homeland. This development is accelerating the trend toward the automation of wire processing and will therefore drive forward the Komax Group's business in the medium term. In the Next2OEM project, the Komax Group is actively working on solutions with automotive manufacturers and partners, and made very good progress in the reporting year (› page 54).

The German Association of the Automotive Industry (VDA) is expecting global demand for semiconductors for the automotive industry to triple by 2030. While this is positive for automated wire processing, since increased electronics also means more wires, bottlenecks in supply chains could have a negative impact overall on the number of vehicles manufactured. For some manufacturers, therefore, the risk of bottlenecks remains.

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 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 sizable investments from automotive manufacturers. The modern driver has attractive alternatives to diesel and petrol engines, with electric, hybrid, and plug-in hybrid vehicles. For many years now, automotive groups have been implementing ambitious multi-billion-dollar plans, particularly in the area of e-mobility, with a view to reducing the global CO_2 emissions in individual mobility. 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 2023, 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 energy fuels ("e-fuels"). EU legislation to tighten the CO_2 fleet reduction target is forcing automotive manufacturers to bring down the entire CO_2 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, CO_2 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 announced similar plans. China likewise wants to increase the proportion of electric cars to 50% of all newly sold vehicles by 2035. In 2024, China already managed to exceed the threshold of 50% of overall vehicles sold with alternative-drive vehicles over several months in 2024. Viewed in global terms, the process of transformation to e-mobility slowed slightly in 2024. First, certain

markets were already showing tentative signs of saturation, which in some cases led to a rethink on the part of OEMs. Second, the debate surrounding the EU's "combustion engine ban," for example, became increasingly heated during the reporting year. In the United States, questions are being asked about what influence Donald Trump's second presidency will have on the plans of individual federal states and on the development of e-mobility in the US overall. The fundamental shift toward openness to technologies and greater diversity in vehicle drive forms is nevertheless ongoing irrespective of this debate, and is opening up additional market opportunities for the Komax Group. Wires will be required in all vehicles, irrespective of the type of drivetrain.

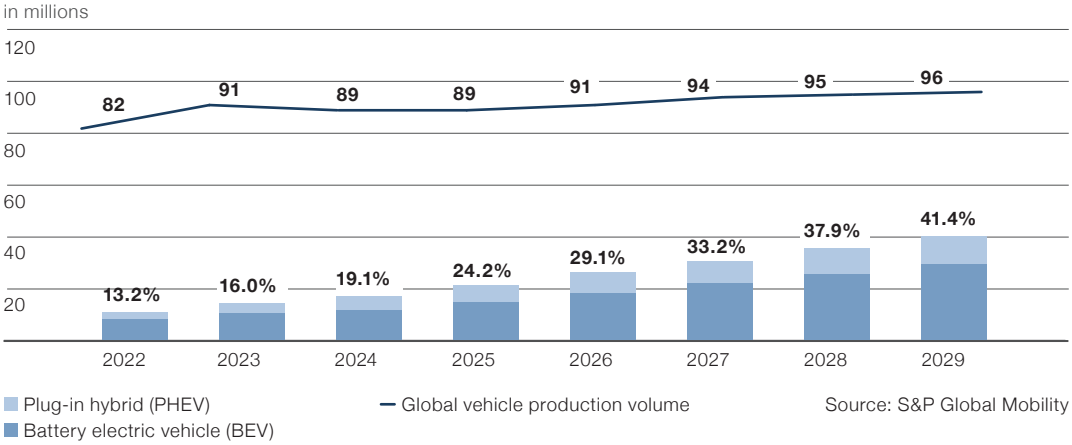
The Komax Group is supporting the transition to e-mobility

According to S&P Global Mobility, of the 89 million vehicles produced in 2024 as many as around 17 million were electric, i. e. pure battery electric vehicles (BEVs) or plug-in hybrid electric vehicles (PHEVs). This is some 2.5 million more than in the previous year (2023: 14.5 million vehicles). The biggest player here is China, which accounts for some 67% of overall production. Global growth amounted to 17.9% in 2024, roughly half of the prior-year figure (2023: 34.3%). Among other things, demand for electric vehicles suffered from the end of government subsidies in a number of countries, as well as from insufficient progress in the development of charging infrastructures.

Driven by upcoming guidelines on CO_2 emission reductions and the plans of automotive manufacturers, growth in the area of e-mobility will continue over the coming years. However, due to the factors cited above, S&P Global Mobility has revised its forecasts for growth in e-mobility downward compared with the previous year. It now expects that almost 22 million plug-in hybrid and electric vehicles will be produced in 2025, which would equate to 24% of global vehicle production. By 2029, this figure is set to rise to around 40 million electric cars. This would correspond to 41% of global vehicle production. This in turn would equate to an annual average growth rate in electric vehicle production of around 13% between 2025 and 2029. In the prior year, S&P Global Mobility was expecting growth of almost 14% for this time frame.

The Komax Group is very 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, the Komax Group is focusing on targeted growth in this market, such as with its 2024 acquisition of a majority stake in Hosver, China's leading manufacturer of machinery for the processing of high-voltage cables.

Proportion of global vehicle production volume accounted for by electric vehicles



Source: S&P Global Mobility

Automation trend in the Industrial & Infrastructure market segment

With its strategy, the Komax Group is seeking to drive forward the strategic development of its Industrial & Infrastructure and Aerospace & Railway market segments, thereby cushioning the volatility of business in the Automotive segment to some extent. The plan is to increase the corresponding share of Group revenues from the current level of around 25% to 30% by 2030 (› page 27). Schleuniger's strong positioning in these markets will offer a further boost here.

In the Industrial & Infrastructure market segment, the need for automation remains considerable and business is less volatile. This has been apparent since 2020. In challenging years, this market segment has experienced a drop in revenues that has been much less pronounced than in the Automotive market segment. Industrial customers such as control cabinet manufacturers, for instance, are seeking to enhance productivity through increased automation. 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. High inflation here has led to significant cost pressure, 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 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 likewise supporting growth.

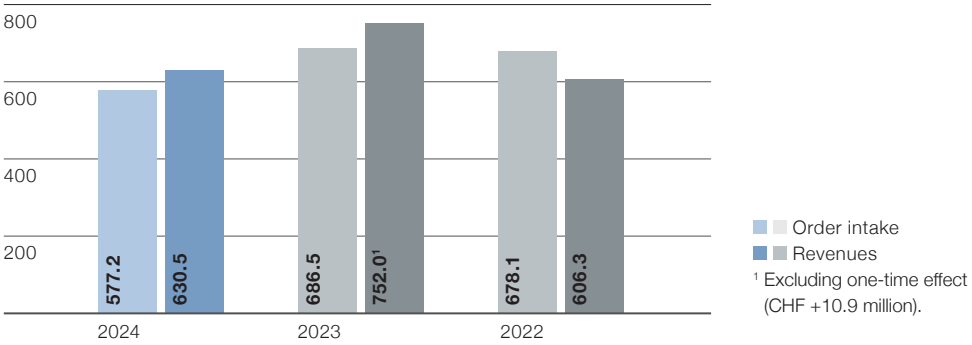
Railway market showing growth potential

According to the SCI Global Rail Index, in the year under review the railway market was impacted by weak economies, structural transformation, and geopolitical shifts, leading to a decline in demand. The degree of automation in this market remains comparatively low, and the necessary applications lend themselves much more easily to automation here than in the Aerospace segment. In addition, a recent study by the European Rail Supply Industry Association (UNIFE) predicts that the global rail market will record annual growth of 3% up to 2029. This equates to a global market volume of EUR 241 billion in 2029. There is therefore significant growth potential for the Komax Group. With the products of adaptronic, Cirris, and Komax, as well as the services from WUSTEC, it offers numerous possibilities for wire processing and testing in this market. Moreover, with its DLW software solution (Komax Digital Lean Wiring), the Komax Group has a very efficient solution for preparing data for wire processing in connection with control cabinets, for which there is demand in the Railway segment. In the reporting year, the Komax Group acquired, inter alia, two large suppliers of rail vehicles in the UK and Switzerland thanks to its solutions.

Continuous growth in the aerospace area

For around ten years now, the Komax Group has been working with manufacturers of aircraft, helicopters, and vertical take-off and landing aircraft (eVTOL) to develop production platforms for semi-automated and fully automated EWIS production (› pages 48/49). The Aerospace market segment developed well in 2024. Contributory factors here included declining inflation and a falling oil price. According to the International Air

Order intake and revenues
in CHF million



Transport Association (IATA), total air traffic as measured in revenue passenger kilometers (RPK) was more than 10% higher than in 2023. Worldwide, aviation traffic in 2024 was thus already well above the levels recorded in 2019 before the Covid-19 pandemic. The growth was driven above all by the regions of Asia-Pacific (+19.9% year-on-year) and the Middle East (+8.7% year-on-year). This phenomenon is also being accompanied by an ongoing rise in global aircraft deliveries. For example, Airbus – the global market leader in commercial aviation – delivered 661 aircraft in 2022, 735 in 2023, and as many as 766 in 2024, with the two latter figures both setting industry records. A greater number of aircraft also means more wires to be processed. The automation of wire processing is still not particularly advanced in this market segment, and the requirements in terms of quality and traceability are particularly high. Moreover, the aerospace industry is also confronted by shortages of skilled labor, rising wages, and increasing ESG requirements, which opens up opportunities for further automation.

With the advent of Advanced Air Mobility (AAM), air transport systems are continually expanding, which is why the need for electric cabling systems for drive systems and flight cabins is likewise growing. The aim of AAM is to revolutionize urban and regional air transport by facilitating mobility that is more efficient, more environmentally friendly, and more flexible. This encompasses advanced systems that can be both manned and unmanned, such as radio-controlled, autonomous, or vertically starting and landing aircraft, or those with electric or hybrid-electric drivetrains. Together with increasing demands for emission-free and quieter aviation, these developments call for significantly higher productivity on account of rising demand. This in turn requires the step-by-step automation of wire processing, from which the Komax Group can increasingly benefit from.

Thanks to the combination of digital data management and the offering to increase automation in wire harness production on a step-by-step basis, the Komax Group can meet the stringent requirements of its customers when it comes to the electrical wiring interconnection systems (EWIS) fitted into aircraft. This includes installation, assembly, and quality assurance in respect of the wire harnesses in aviation components and aircraft sections – from final assembly right through to maintenance, repair, and overhaul (MRO). This is where the testing technology solutions of the Komax Group's subsidiaries adaptronic and Cirris come into play. The Komax Group therefore offers flexible solutions along the value chain for all key EWIS production steps.

Extremely challenging year

Customers' willingness to invest remained low overall in 2024, which was primarily attributable to existing excess capacity in Europe, geopolitical uncertainties in a number of regions, and the challenging situation facing European automotive manufacturers. This led to a significant decline in order intake, revenues, and operating profit. After orders bottomed out in the first half of the year (down 22.1% compared with the previous year), the Komax Group recorded more orders in each of the last six months of 2024 than in the best month of the first half. For the year as a whole, the order intake amounted to CHF 577.2 million, down 15.9% year on year (2023: CHF 686.5 million).

Mixed development of revenues in various regions and market segments

Due to a lower level of orders – in volume business in Europe in particular, but also in Asia and in the United States – solid order books of CHF 208.0 million at the end of 2023 declined to CHF 177.1 million over the course of 2024. Revenues were down 16.2% at CHF 630.5 million (2023: CHF 752.0 million). The decline in organic terms worked out at 16.6%, whereas acquisition-related growth was positive at 2.3%. The foreign currency impact amounted to –1.8%.

Due to the aforementioned challenges, orders and revenues declined in the Automotive market segment. This contrasted with an increase in the other two market segments, Industrial & Infrastructure and Aerospace & Railway. Consequently, the non-automotive market segments' share of revenues rose from 25% to approximately 35% in 2024.

Revenue development presented a very mixed picture across the regions. In particular, the weakness in the European automotive industry led to a drop of 30.0% in revenues compared to 2023. In the Asia/Pacific region, revenues remained stable year on year overall, despite sizeable differences at the regional level. For instance, growth was extremely strong in India. North/South America recorded slight

revenue growth of 1.7% overall, with growth higher in South America than in North America. In Africa, revenues recorded a clear drop of 29.4%. The breakdown of revenues by currency changed as follows between 2023 and 2024: The proportion of revenues in EUR declined from 45.1% to 40.0%, but still represents the highest share of Group revenues. The revenue share booked in USD rose significantly from 25.3% to 30.1%. The proportion accounted for by CNY increased slightly from 9.9% to 10.5%. The share of revenues booked in other currencies decreased slightly to 19.4% (changes and sensitivities of key currencies: › page 185, Financial Report).

Outlook

The long-term trend towards automation shows no signs of abating, and continues to offer attractive growth opportunities for the Komax Group. Currently, however, economic and geopolitical uncertainties are affecting customers' investment behavior, resulting in high volatility in terms of order intake. In view of this situation, the Komax Group is refraining from issuing a forecast for the 2025 financial year at this time. The company has an excellent market position and reinforced it in the year under review with a number of measures. The Komax Group is confident that its solid financial structure and high degree of innovation constitute a solid foundation for future profitable growth.

Revenues by region[1]

in TCHF	2024	2023	+/– in %
Europe	233 158	333 188[2]	–30.0
Asia/Pacific	125 526	124 670	0.7
North/South America	209 533	205 956	1.7
Africa	62 235	88 174	–29.4
Total	**630 452**	**751 988[2]**	**–16.2**

[1] A percentage breakdown of revenues by region can be found on pages 32/33.
[2] Excluding one-time effect (CHF +10.9 million).

CONTINUOUS GROWTH IN AEROSPACE

1 Zone 1 – Engineering and data preparation

Wire harness projection and preparation of data for the production stage with data flow on an end-to-end basis to ensure transparent processes, reduced cost and scheduling risks, and increased productivity and quality.

2 Zone 2 – Marking and cutting

Cutting the wire material to the desired length and designation as per the requirements of the aerospace industry by means of UV laser or sleeving, e. g. with the fully automated machines of the Optima series to ensure seamless traceability.

3 Zone 3 – Wire end processing and quality control

Semi-automatic wire end processing for a broad spectrum of wires and cables, e. g. with the Schleuniger B-series, as well as various solutions for monitoring and measuring crimp strength, crimp height, and the pull force of open and closed contacts.

4 Zone 4 – Wire harness forming and assembly

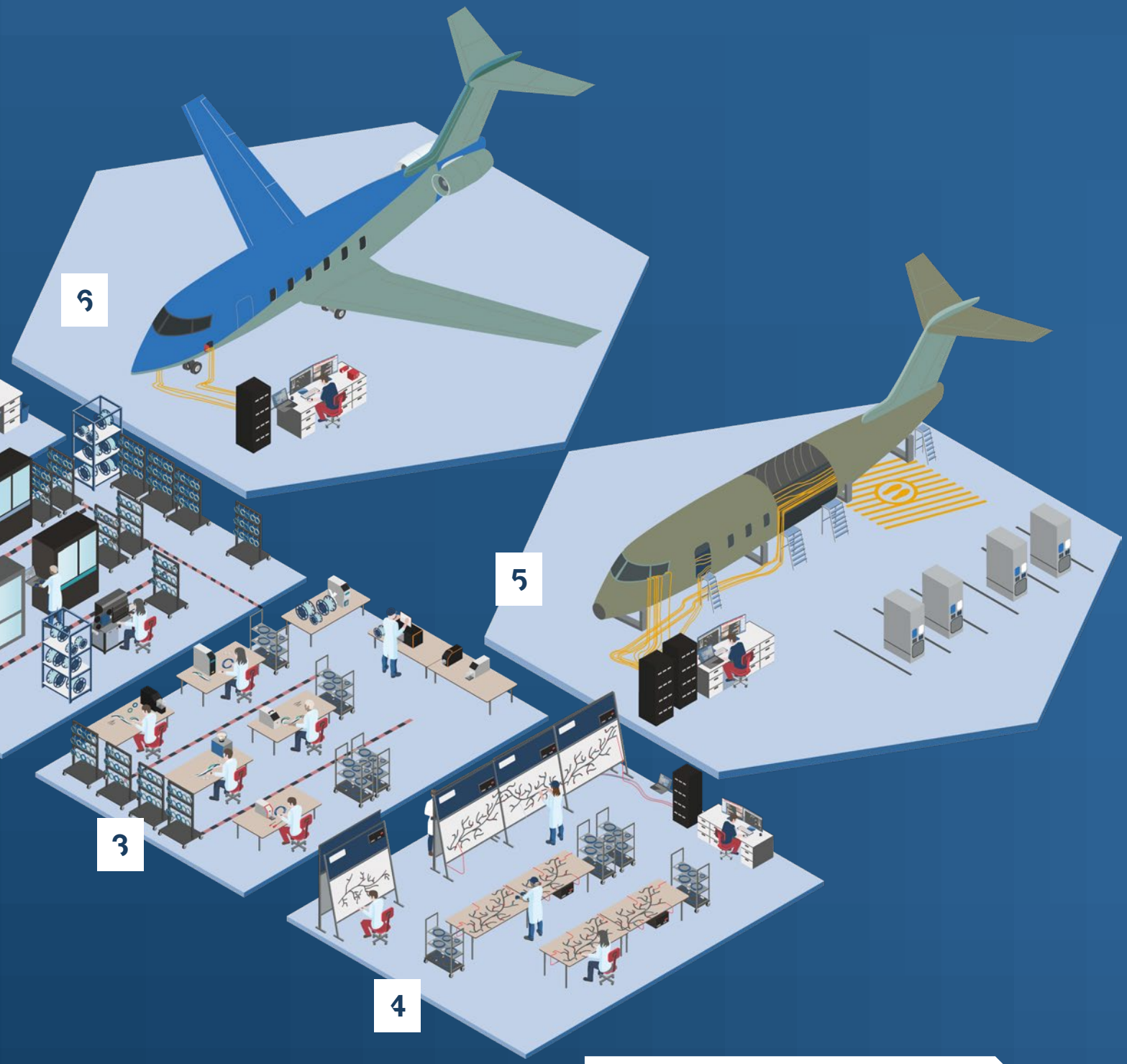
Rapid, error-free wire harness forming and assembly on the interactive EasyWiring harness assembly board with support from the software-controlled assembly assistant for rapid updates and a high level of flexibility with small batches; subsequent testing of connections with Cirris testing systems.

5 Zone 5 – Section assembly

Installation of prefabricated wire harnesses in the envisaged components (e. g. doors) of the aircraft sections (cockpit, fuselage, wings), including manual post-processing and further subsequent testing with intelligent, automated measuring and testing systems such as the NT800 solutions from adaptronic.

6 Zone 6 – Final assembly

EWIS final assembly and completion of the electrical system, including final testing with various intelligent tools from the Komax Group that support the creation of the testing program and guarantee the complete and correct installation of the electrical wiring system through multifaceted tests.



MRO

All maintenance, repair, and overhaul processes (MRO) require the electrical wiring system to undergo definitive function and safety tests. Software-based testing programs from the Komax Group allow for automated quality assurance, including archived results documentation for the purposes of traceability.

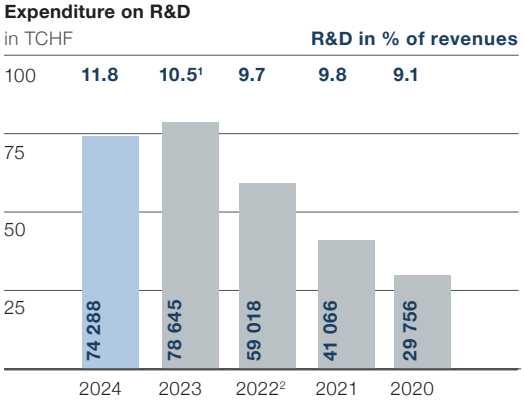
MARKET-LEADING INNOVATIVE STRENGTH

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.

11.8%
of 2024 revenues were invested in research and development

There is huge potential for the Komax Group in the markets for automated wire processing. Long-term megatrends such as e-mobility and autonomous driving offer numerous opportunities, as do growth drivers such as miniaturization, rising personnel costs, and shortages of skilled labor (› page 18). With further automation of processes along the value chain and expanded digital services, the efficiency of the existing machinery base already installed in customers' factories can be significantly increased. To exploit these opportunities for additional unique selling propositions and offer 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 product portfolio, and the expansion of its service offering. Even in challenging years – such as 2024 – this has remained a firm focus of the company. It has spent a total of CHF 282.8 million in this area since 2020, thereby cementing its leading position in the automation of wire processing. In 2024, the Komax Group invested a total of CHF 74.3 million or 11.8% (2023: CHF 78.6 million or 10.5%) of revenues in research and development. This figure comprises expenditure on internal development services (CHF 65.2 million) and the development services of third parties (CHF 9.1 million).

Expenditure on R&D



[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.

Awards for innovation achievements

The Komax Group proved itself to be one of the most innovative companies in Switzerland once again in 2024. Together with market and opinion research company Statista, the Swiss business magazine Bilanz and PME added the Komax Group to their list of the 75 most innovative companies in Switzerland in September 2024. Furthermore, Komax received the UNMEXAR Award at the WireTech Expo in Mexico. This is awarded

by UNMEXAR, the leading industry association of the wire harness business in Mexico in recognition of outstanding contributions made to the wire harness industry as well as the promotion of innovation and quality in the sector.

724
employees in R&D and engineering

Unparalleled innovative strength

As at 31 December 2023, the Komax Group had a workforce of 724 employees (2023: 724 employees) working in research and development, as well as in engineering. The employees in engineering 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. A large part of R&D and engineering employees (275 employees) is 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. The Komax Group continues to seek to invest 8–9% of revenues in research and development. Due to the slump in revenues, the percentage rate in 2024 worked out significantly higher.

SMART FACTORY by KOMAX

The trend toward 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. The customers of the Komax Group have to deliver consistently high quality and reliability despite rising complexity and higher personnel expenses, while at the same time keeping costs as low as possible. The Komax Group is helping them to meet these growing challenges. Specifically, the Komax Group is developing a solution package with which wire manufacturing can be optimized in the future – the SMART FACTORY by KOMAX. It features five components (› pages 52/53). 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, safer, and more convenient.

Higher 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, it can increase the degree of automation at its customers' factories, which allows them to increase productivity and flexibility while at the same time maintaining high quality right from the start. For example, customers with the cloud-based solution WIRE Insights (formerly Komax Connect) receive comprehensive production data for their machines in real time and can therefore initiate optimizations immediately. Among other things, reject rates in production can be massively reduced. For example, as a customer of the Komax Group, the PKC Group has equipped various machines with WIRE Insights at four locations, which led to a reduction of the reject rate by more than 36% (› see Komax Stories, www.komaxgroup.com/stories).

WIRE Flow – user-friendly wire processing software with a subscription model

With WIRE Flow, the Komax Group further developed Schleuniger's existing machine control system for cut & strip machines into a particularly user-friendly overall package. In addition to allowing the programming of machine orders during operation, the software also offers more functions thanks to complete order management and a traceability option. It can be easily and intuitively operated via the user interface, and can be implemented without any significant investment in training. This software is now being offered as SaaS (software-as-a-service) in a subscription model for the first time, which means it can be rapidly used by customers without requiring any major upfront investment. This also makes it interesting for small and medium-sized companies. ›

SMART FACTORY BY KOMAX

NO OPERATOR INFLUENCE

The Komax Group develops fully automated, networked solutions to minimize operator influence. This facilitates highest precision and process quality together with lower costs and fewer rejects. Furthermore, both productivity and transparency are improved.

Q1250 – scalable quality testing modules for the testing of stripping, of crimp and seal, and – depending on selected configuration – further quality features.

IQC Technology – fully automatic changeover system delivering a massive increase in productivity for Alpha series machines (www.iqc-technology.com).

Sigma 438 twisting machine – sequential production of various wire harness variants.

Adaptive Incision Control (AIC) – production of the highest quality without manual configuration of production parameters, including automatic compensation of wire tolerances and significant reduction of rejects.

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.

WIRE Insights – increasing productivity on the basis of comprehensive real-time information.

Possibility of integrating variable machine interfaces, such as OPC-UA, MIKO, and WPCS, into customers' existing IT infrastructures.

MES solutions 4WIRE CAO and 4WIRE Px from DiIT, and now also WIRE Flow – improvement of overall equipment effectiveness (OEE).

With its five components, the SMART FACTORY by KOMAX offers solutions for the wire processing of the future. The aim is to make customer production processes simpler, thereby elevating the quality, productivity, and flexibility of wire processing to a new level. The Komax Group is further developing all five components on an ongoing basis.

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.

- CARE – service agreements for individual machines or entire production sites, including technical support, training, and financing offers.
- WIRE Mind from WUSTEC – digital platform for control cabinet and machine manufacturers for the online ordering of any amount of prefabricated wire sets.
- CARE Services – selection of various service products such as warranties, repairs, installations, updates, and support in product optimizations with WIRE Insights.
- WIRE Flow – user-friendly wire processing software with a subscription model for cut & strip machines.

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.

- Redesigned website (www.komaxgroup.com) as the basis for future online services.
- myKomax Online service portal – for direct customer contact as well as subscriptions to services.

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 trace processes and demonstrate compliance with quality requirements at any time.

- 4WIRE Px, 4WIRE CAO, and WIRE Insights – software solutions that gather, save, and analyze comprehensive production data, including full traceability.

Selection of existing solutions
New solutions added in 2024

More information on the SMART FACTORY by KOMAX can be found in this video:
komaxgroup.com/smartfactory

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 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 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 varying 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 WIRE Mind 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.

› WIRE Flow will be introduced over the course of 2025, initially for the Schleuniger cut & strip machines of the E series. Further models will follow at a later stage. As WIRE Flow is based on the manufacturing execution system 4Wire Px from DilT, customers can later upgrade it to a fully functional MES. The Komax Group thus offers a bespoke, cost-optimized, and flexible solution for various customer groups.

next2OEM

Actively shaping the future of automotive production

As the technology leader in automated wire processing, the Komax Group is determined to actively shape key developments in its three markets and thereby drive forward the automation trend. To this end, it partners with other leading companies in various organizations and on various initiatives. Among other things, the Komax Group is currently involved in three interlinked projects in the automotive sphere, which have the common aim of improving the automotive production of the future.

Project Next2OEM – the digitalized, automated value chain

The range of functions offered by modern vehicles is continuously expanding thanks to new driver assistance systems, comfort functions, and infotainment solutions. This inevitably means more weight, higher costs, and rising complexity when it comes to the corresponding

wire harnesses. With manual labor accounting for more than 80% of the work process, wire harness production has so far only been economically viable in low-wage countries, which means long transport routes. Furthermore, the increase in supply chain uncertainty that we have seen in recent years harbors not inconsiderable risks. The Next2OEM project, which is supported by the BMWK (Federal Ministry for Economic Affairs and Climate Action of Germany, funding program module 35c, www.bmwk.de) on the basis of a resolution passed by the Federal Parliament, is now developing a digitalized and automated value chain, covering wire harness development, production, and assembly in vehicle bodywork. Part of this initiative is to encourage "nearshoring," i. e. the repatriation of wire harness production back to Germany. However, the high wage costs associated with nearshoring can only be reduced to an economically feasible level if the degree of automation is significantly increased.

As part of this project, the Komax Group has been working with the Friedrich Alexander University of Erlangen-Nuremberg as well as various partners along the entire value chain: Audi, Artiminds, Bär, Kostal, Kromberg & Schubert, Semantic PDM, Stefani, and TE Connectivity. The project is designed to demonstrate how a high level of automation can overcome the challenges described above, increase quality while at the same time reducing costs, and shape the value chain in a lasting way. The necessary machine parts were developed and constructed by the various partners in 2024. For its part, the Komax Group is contributing the Omega 840, a fully automatic wire processing machine, as well as robot-supported taping technology. Furthermore, the assembly of the wire harness in the project is visually and electronically monitored during the production process by Komax Testing's in-line testing systems.

In 2025, the plan is to install a complete pilot installation at automotive manufacturer Audi in Ingolstadt, Germany. The expected benefits of nearshoring in respect of production efficiency, logistics, and costs will then be put to the test in practice with a view to delivering new findings. Ultimately this should give a huge boost to the automation of the value chain, which will open up additional growth potential for the Komax Group.

VWS4LS – making wire harness production fit for the future

Another project supported by the BMWK on the basis of a resolution of the German Federal Parliament is the "asset administration shell" for wire harnesses (VWS4LS). The Komax Group in Germany has been working on this project since 2021 in collaboration with partners Coroplast, Dräxlmaier, Festo, Kostal Kontaktsysteme, Kromberg & Schubert, Mercedes-Benz, Siemens, and Wezag. The objective is to develop a standardized digital twin for the entire product life cycle of vehicle wire harnesses – from collaborative development involving different parts of a company through to final dismantling. This initiative resulted in an OPC UA Companion Specification in 2024. This industry standard creates a uniform interface for the wire-processing industry by describing various aspects – including machine statuses, production orders, parameters in the production process, and materials – in a uniform way. In other words, production processes are clearly defined for all customers, suppliers, and partners, including within the various companies of the Komax Group. This facilitates communication between machines within a manufacturing execution system (MES) and significantly simplifies the interplay of the various production processes. Furthermore, thanks to standardized specifications, automotive manufacturers can make the requirements they submit to their suppliers for wire harness production clear and easy to transmit. The OPC UA Companion Specification was published in December 2024 and is now available to all market participants. The project will be continued in 2025 with a view to addressing further processes such as the testing of wire harnesses.

ARENA2036 – Automation in wire harness production – sign-off of DIN 72036

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 shift to electromobility and autonomous driving is changing the requirements for wire harness design and manufacturing. For car manufacturers 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 easier to produce in an automated way than one large wire bundle. And the Komax Group is committed to this.

In ARENA2036 (www.arena2036.de), interdisciplinary teams are working on the automotive production of the future. As part of the Wire Harness Standardization Initiative (SILS), the Komax Group is working with leading automotive manufacturers and their suppliers to draw up design guidelines for wire harnesses that lend themselves to automation. The aim was to enshrine these in a new DIN norm together with the German Automobile Industry Association (VDA). Following the sign-off of the industry norm DIN 72036 in June 2024, 60 design guidelines have now been published. These describe the most important aspects that need to be taken into consideration to achieve an increase in the degree of automation in production. As a result, following four years of work, the first German industry norm for the automation of wire harness production is now in place. The corresponding recommendations help automotive manufacturers to develop wire harnesses that can be put together in a highly automated and commercially feasible way, while at the same time guaranteeing process security. These guidelines are now being expanded in a follow-up project to include specific recommendations for the high-voltage area (electric vehicles) and the processing of data cables.

In the VWD4LS project the OPC UA standard was defined, whereas in the Wire Harness Standardization Initiative the degree of detail in the shared approach of OEMs and suppliers was increased with the corresponding design guidelines. These guidelines will now be implemented and tested in practice in the Next2OEM nearshoring project. Accordingly, these three projects are very much interlinked, and are taking the automotive value chain in the automation of wire processing to a whole new level thanks to standardization.

Digitalization with Industry 4.0 and the Industrial Ethernet of Things

The Komax Group is a member of the Open Industry 4.0 Alliance, the Single Pair Ethernet System Alliance, and the SPE Industrial Partner Network, in which partners from various industry sectors are driving forward digitalization. The Open Industry 4.0 Alliance focuses specifically on a framework for communication between machines. Thanks to this initiative, digital interfaces and remote monitoring can be incorporated into the development of new Komax Group solutions, for example, which is particularly important for the SMART FACTORY by KOMAX. Single Pair Ethernet (SPE) is the infrastructure basis that facilitates the Industrial Internet of Things and Industry 4.0. The aim of this initiative is to support SPE technology and thereby permit creation of a common market standard.

Smart Cabinet Building Initiative – comprehensive solutions for control cabinet construction

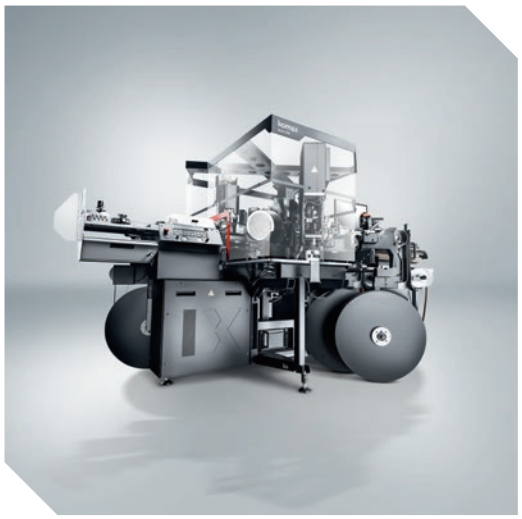
In the Industrial & Infrastructure market segment, the Komax Group is active in the control cabinet construction area, among others. There is considerable automation potential here, which the company is keen to exploit together with four other technology companies – Armbruster Engineering, nVent Hoffman, Weidmüller, and Zuken – through the Smart Cabinet Building Initiative (www.smart-cabinet-building.com) (› see video here). The aim is to use the networking of technology and expertise across all process steps to deliver comprehensive solutions for control cabinet construction. This will enable working stages that have so far taken place sequentially to be executed in parallel, thereby saving both time and costs. In the reporting year, new testing solutions of adaptronic were incorporated into the initiative. As a result, the entire value chain in control cabinet construction – from the digital twin through to the fully tested final product – can now be replicated for both large and small batches.

The Komax Group will further increase the degree of automation and therefore efficiency in control cabinet construction so that customers can remain productive despite shortages of specialist labor.

EXAMPLES OF CURRENT INNOVATIONS

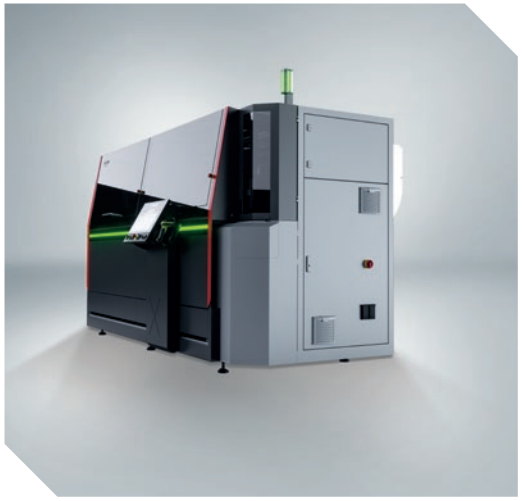
Thanks to its targeted investment in research & development, the Komax Group succeeds in bringing a variety of new products, product enhancements, and services to market every year. It demonstrated its technological leadership impressively in the 2024 reporting year with several significant product innovations.

The Komax Group is working intensively on developing intelligent, networked solutions for the further automation of processes, such as wire changeovers, seal changeovers, and batch handling. In addition, the ongoing reduction of operator influence and the shortening of setup times are high on the agenda. In the future, the machines of the Komax Group will adjust multifaceted settings and make corrections in a fully automatic way. The objectives of further automation solutions include even greater quality and enhanced flexibility together with lower costs and emissions.



Alpha 550 G2 – modular platform for high volumes and small batch sizes

This fully automatic crimping machine was designed specifically for efficient automotive batch production and delivers reliable performance at foreseeable costs, even with very high volumes. The new, automated, and deeply integrated quality control system significantly reduces operator influence and ensures excellent results along with minimal reject rates. Thanks to the inbuilt control system, the machine can be fully configured during batch switches without the safety cover having to be opened, which helps to protect personnel from accidents. A unique feature is the adaptive incision control (AIC), which ensures high quality, automatically compensates for wire tolerances, and massively reduces rejects right from the start, without any need for manual configuration of the production parameters. The MES-compatible Alpha 550 G2 can be continuously adjusted to individual production needs thanks to freely selectable process and quality modules.



Lambda 5 – up to 100% faster processing of data wires

The Lambda 5 modular machine platform processes data wires for the Automotive and Industrial market segments, achieving maximum throughput with minimum space requirements. Here, the workpiece carriers are moved not in a circular manner as previously, but back and forth. This means that up to seven workpieces can be implemented in almost exactly the same space, compared to four with its predecessor, the Lambda 4. This increases the throughput of the processed wires by up to 100%, making production with this machine significantly more profitable for the customer. Moreover, thanks to significantly lower cycle times and the predominant absence of active suction and blowing air, the CO_2 footprint has been reduced by up to 82% compared to the Lambda 4 series. This calculation is based on a sample production volume of 5 million wires. The modular construction of the Lambda 5 makes it possible to expand the platform flexibly at a later stage.

Sigma 438 – sequential production of UTP wires

The sequential production of various wire harness variants on a single machine is a key technological advance when it comes to increasing efficiency in wire processing. The Sigma 438 is the first machine on the market to allow unshielded twisted wire pairs (UTP) to be produced in sequence. To achieve this, two individual wires are pre-fabricated on the machine from the Zeta 6XX series and then automatically transferred to the Sigma 438. This machine then twists the wire pair and automatically places it in a set of carriers that can then be transferred to an Omega 840 or 850 machine for the fully automated processing of a wire harness. This enables customers to produce sequentially twisted wires and process these further in a highly automated way, thereby facilitating lower inventory levels and simple design changes to wire harnesses.

Rotar 300 – compact and flexible benchtop taping machine

With the programmable Rotar 300, the Komax Group presented the market with a compact and flexible benchtop taping machine. This machine can tape wire harnesses with up to ten branches in order to protect the wires and create a structure for the wire harness. Thanks to its modular design, up to seven machine variants are possible. The MES-compatible Rotar 300 ensures outstanding process quality and reproducibility. Production is made significantly easier thanks to the visualization of the individual process steps. The Rotar 300 series meets the highest safety requirements and reduces machine downtime by up to 45% thanks to the use of tape rolls with a diameter of up to 220 mm. Moreover, it results in adhesive tape savings of up to 25% compared with manual production.

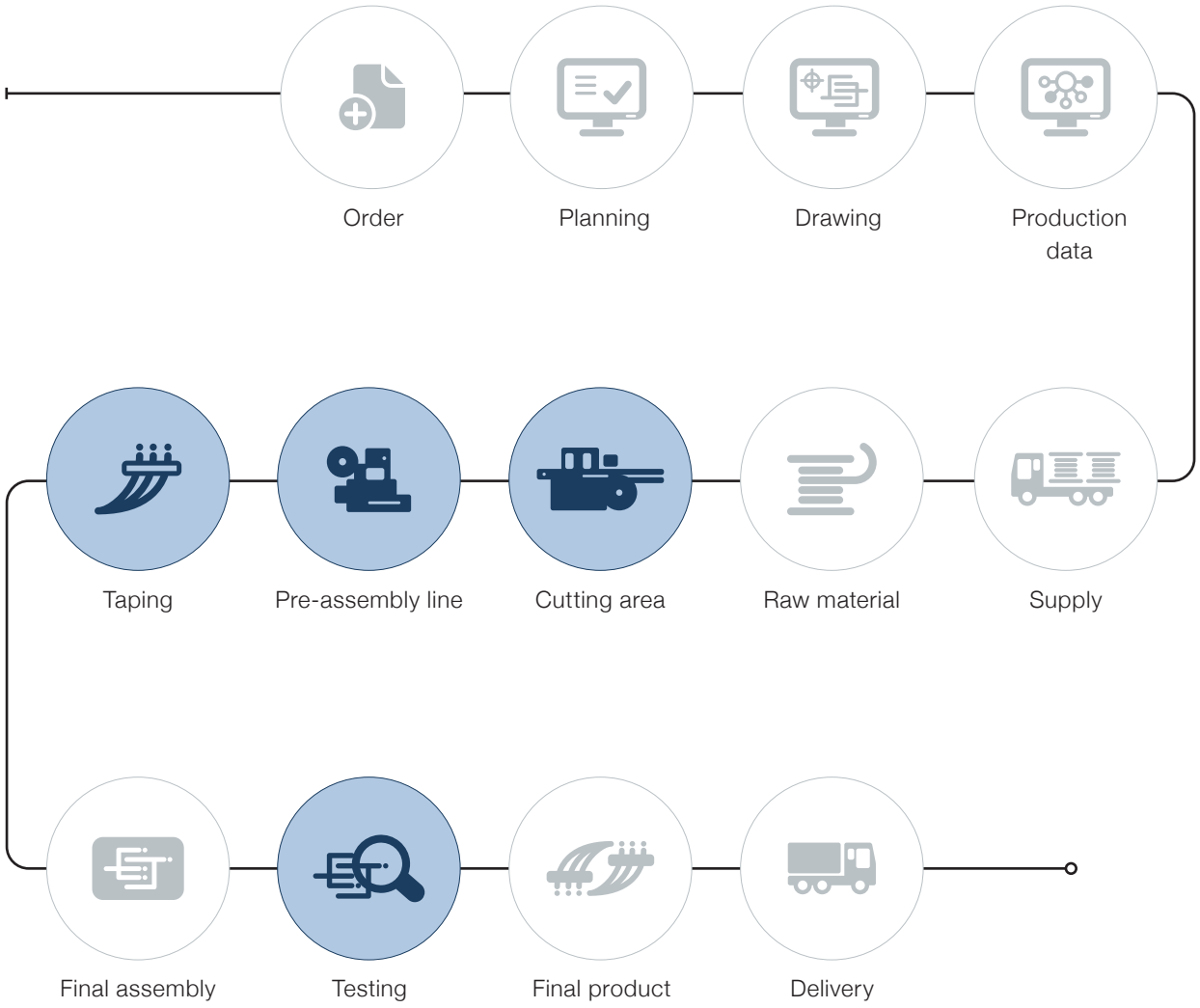
Cirris 5150 Tester – flexible testing and controlling for automation processes

The new 5150 Tester from Cirris combines the functionalities of an electrical tester with a purpose-built application controller. Designed as a machine controller, its touchscreen is connected to a built-in computer that provides all relevant communication cards, digital inputs and outputs, as well as connectivity using industry standard communication protocols such as ProfiNET, Modbus, TCP/IP, Ethernet, TwinCAT, and OPC-UA. In addition, it can be used as a standalone low-voltage and Hipot tester for small harness testing. This allows a wide spectrum of customers, especially in the mechanical engineering industry, to use just one device for multiple testing and controlling purposes in their automated processes, thus saving time and costs.

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.



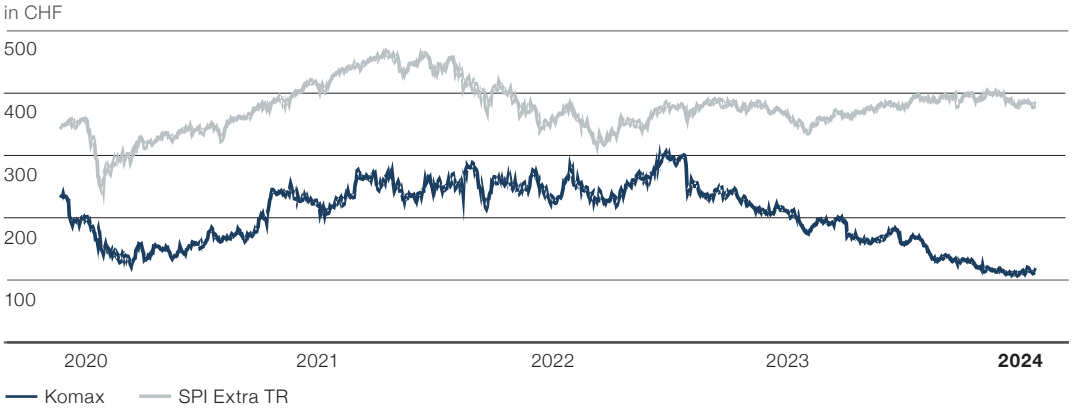
● Komax Group automation solutions
— MES – manufacturing execution system

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 result-oriented dividend policy.

Over the course of 2024, the daily closing price of the Komax share ranged between CHF 107.00 and CHF 195.40. At year end, the share price closed at CHF 115.00, a substantial –42.6% below the prior-year level (closing price for the previous year: CHF 200.50). Over the same period, the SPI Extra rose by 3.8%. In a five-year comparison over the period 2019–2024, the SPI Extra recorded growth of 11.0%, whereas the Komax share recorded a decline of 51.4%.

Share price development (31 December 2019 – 31 December 2024)



LISTING

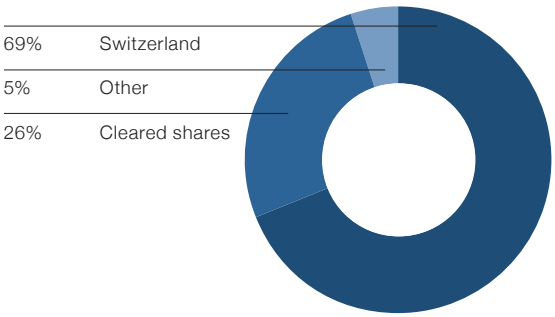
Komax Holding AG is listed on the SIX Swiss Exchange. The market capitalization of the Komax Group at the end of 2024 was CHF 590.3 million (31.12.2023: CHF 1.0 billion).

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 2024



BREAKDOWN OF SHAREHOLDERS BY NUMBER OF REGISTERED SHARES HELD

	31.12.2024	31.12.2023
1–100	3 994	3 960
101–1 000	2 111	1 775
1 001–10 000	225	227
10 001–100 000	34	29
> 100 000	2	3
Total shareholders	**6 366**	**5 994**

The shareholder base increased by 372 persons to 6366 shareholders in 2024. Over the last five years, however, the shareholder base has declined (–10.6%).

Free float

The free float as defined by SIX Swiss Exchange stands at 75% (31 December 2023: 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 121.

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

The Board of Directors pursues a result-oriented dividend policy that takes account of the strategy and the corresponding ambitious growth targets of the Komax Group. In light of the negative Group earnings after taxes, the Board of Directors is proposing to the Annual General Meeting of 16 April 2025 that the distribution of a dividend be waived (2023 financial year: dividend of CHF 3.00). With this proposal, the Komax Group is safeguarding the entrepreneurial scope for the continued rigorous pursuit of the strategic initiatives that are connected with investments, and thus coming closer to achieving its objectives on a step-by-step basis.

FINANCIAL CALENDAR

Annual General Meeting	16 April 2025
Half-year results 2025	12 August 2025
Preliminary information on 2025 financial year	20 January 2026

KOMAX REGISTERED SHARE: KEY DATA

		2024	2023	2022	2021	2020
Share capital as at 31 Dec.	in TCHF	513	513	513	385	385
Number of shares as at 31 Dec.	No.	5 133 333	5 133 333	5 133 333[1]	3 850 000	3 850 000
Average number of outstanding shares	No.	5 125 381	5 124 960	4 273 799	3 843 440	3 845 655
Key data per share						
Par value	CHF	0.10	0.10	0.10	0.10	0.10
Basic earnings	CHF	–0.63	8.55	12.11	7.90	–0.34
EBITDA	CHF	7.12	18.14	20.81	15.70	6.85
EBIT	CHF	3.13	14.21	16.78	11.65	2.93
Shareholders' equity	CHF	69.47	76.09	81.15	68.81	61.42
Distribution	CHF	0.00[2]	3.00	5.50	4.50	0.00
Payout ratio	%	0.0[2]	35.1	54.5	57.0	0.0
Dividend yield as at 31 Dec.	%	0.0[2]	1.5	2.1	1.8	0.0
Share price development						
Highest price	CHF	195.40	305.50	288.00	276.60	238.80
Lowest price	CHF	107.00	174.40	214.00	177.30	122.00
Closing price as at 31 Dec.	CHF	115.00	200.50	257.50	253.00	176.30
Average daily trading volume	No.	12 079	6 968	6 419	8 846	15 809
P/E (price-earnings ratio) as at 31 Dec.		n. s.	23.5	21.3	32.0	n. s.
Total return per share						
Distribution from prior-year profit	CHF	3.00	5.50	4.50	0.00	0.00
Change in value	CHF	–85.50	–57.00	4.50	76.70	–60.10
Total (total return)	CHF	–82.50	–51.50	9.00	76.70	–60.10
Annual return[3]	%	–41.15	–20.00	3.56	43.51	–25.42

[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 121).
[2] Proposal of the Board of Directors of Komax Holding AG: waiver of distribution.
[3] Versus prior-year end closing price.

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