

Shaping cities Group Review 2019



Urban landscapes – shaped by dedicated people and leading technology.

Schindler moves people and goods, connecting vertical and horizontal transportation systems, enabling the shaping of urban landscapes – now and in the future.

2019

In CHF million

	2019	2018	Δ%	Δ % local currencies
Order intake	12 123	11 669	3.9	5.8
Revenue	11 271	10 879	3.6	5.6
Operating profit (EBIT)	1 258	1 269	-0.9	1.3
in %	11.2	11.7		
Operating profit (EBIT), adjusted	1 314 ¹	1 295 ²	1.5	3.6
in %	11.7	11.9		
Financing and investing activities	-57	-174		
Profit before taxes	1 201	1 252	-4.1	
Income taxes	272	2444		
Net profit	929	1 008	-7.8	
Net profit before tax refund	929	9484	-2.0	
Earnings per share and participation certificate in CHF	8.04	8.79	-8.5	
Cash flow from operating activities	1 185³	1 005	17.9	
Investments in property, plant, and equipment	225	245	-8.2	
As of December 31				
Order backlog	9 042	8 618	4.9	7.6
Net liquidity	2 046	2 231	-8.3	
Net working capital	-600	-518	15.8	
Number of employees	66 306	64 486	2.8	

Dividend per registered share/ participation certificate

Dividends proposed by the Board of Directors

	2019	2018
Registered share	4.00	4.00
Participation certificate	4.00	4.00

Subject to approval by the General Meeting, the dividend will be paid on March 25, 2020

Adjusted for restructuring costs (CHF 38 million) and expenses for BuildingMinds (CHF 18 million)
 Adjusted for restructuring costs (CHF 26 million)
 Before settlement of pension obligations (CHF –157 million) and IFRS 16 – Leases (CHF 118 million) CHF 1224 million
 One-time tax refund CHF 60 million (income taxes CHF 33 million, net interest income CHF 27 million)

Order intake

In CHF million

Revenue

In CHF million

EBIT margin

In %

11.2

Return on equity

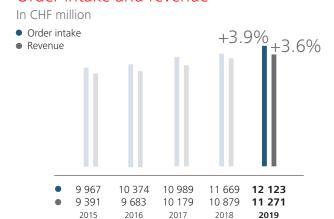
In %

24.4

Number of employees As of December 31

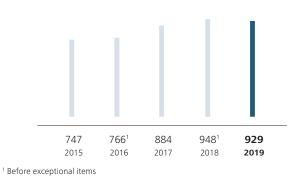
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Order intake and revenue

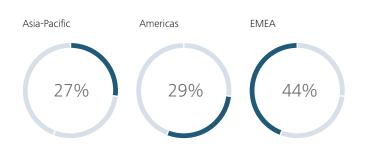


Net profit

In CHF million

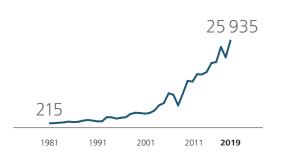


Revenue by region



Market capitalization

In CHF million as of December 31



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Milestones

The past year was another one of political turbulence and global challenges. The macrotrends that drive Schindler's growth, however, remain in place and the company continued to perform well in terms of both revenue and profit expansion. As a family company, Schindler continues to place the company's health first and to nurture the business for future generations. Our financial results are the sequential consequence of this approach. More and more, this view is in contrast with the precipitation with which some companies rush to achieve "growth at all cost", often with investments carrying risk profiles of such magnitude that even today's "cheap money" environment can hardly justify.

Shifting paradigm

The argument most often used by the advocates of this new fashion is the search for scale, a concept that has been central to business since the Industrial Revolution.

"The Digital Revolution is changing the traditional concept of scale."

Today's nascent economic revolution, driven by Artificial Intelligence (AI), is causing even this core concept to be challenged. With digital operating models, "size" does not depend any longer on traditional production volumes. Instead, the value enabled by scale grows exponentially as more data and more digital connections are added. Contrary to classic economic models, "digital scale" is not limited by the law of diminishing returns. Instead it can deliver returns that continue to grow to levels that were unthinkable just a few years ago.

The emergence of this new kind of business can fundamentally alter industries. Corporate history already provides a number of examples where traditional firms have been totally overwhelmed by the collision with Al-driven companies.

Conscious of this historical conjuncture, Schindler has embarked on a digital journey to address the unprecedented challenges and unique opportunities we are confronted with.

We are digitally transforming our products, our services, and the way we work. Connected elevators and escalators across networks create new value for our customers; thereby also expanding and tailoring the passenger experience. Connectivity supports predictive and adaptive maintenance by monitoring and analyzing data, with the ultimate objective to have the equipment serviced before breakdowns can even occur. Value opportunities in Al-enabled service are not constrained by traditional industry boundaries — as exemplified by Schindler's decision to step forward to create the start-up BuildingMinds.

Tapping into the potential of data

To benefit our customers, decisions up and down the value chain will have to be driven by quality data more than ever. That requires new expertise and ways of thinking across the whole organization. The same data that creates a new level of customer engagement will be used to empower our employees, transform our products, and optimize our operations. Al, fueled by structured data, will be the engine at the core of this "digital feedback loop". The journey has started, and we are resolved to make it successful, now and for future generations.

As leaders it is our responsibility to remain alert to the risks such change bears whilst driving it with the speed required for success. It is also our duty to have necessary checks and balances firmly in place, undergirded by Schindler's long-standing values, with particular attention to the aspects of data protection and potential bias in AI algorithms.

The evolution of a global industrial company into a data-driven business model requires courage and persistence to push into the – often uncomfortable – unknown. We aim to build our "Digital Core" on innovative products, integrated data, and structured analytics that are both accessible across the business and duly protected. Our continued investments in the Digital Twin, as well as our multiyear modularization project, are important cornerstones; so are the Schindler Ahead connectivity drive and the BuildingMinds venture. Each of these initiatives reimagines the user experience and the relationship our customers have with our products.

As with any disruptive innovation, financial returns are difficult to grasp in the beginning. Nonetheless, such investments are vital to our survival and success in the future.

Building skills

We are working to develop digital capabilities not only as an organization, but also for each of our employees. Digitalization, machine learning, and AI will change the nature of every job and the way we work across the entire company; indeed, at Schindler this change began years ago, from our technicians servicing units with the assistance of smartphones to the way information is processed across our offices around the globe.



Our workforce is our strongest asset. Their expertise, customer orientation and dedication are the foundation of our success. And we are committed to helping them thrive in the digital era. As part of our transformation, we will continue to foster a culture of lifelong learning and openness to adapt with training programs enabling our employees to leverage their knowledge with new tools and platforms.

Sustainability at the heart

Beyond the digital revolution, our society faces an existential challenge. The way we treat our planet and its resources defines the future of generations to come. Companies need to act now to fully shoulder their responsibility to all their stakeholders.

Schindler has had sustainability as a guiding principle since the inception of our business 145 years ago. Of our own volition, we have always applied the strictest standards, over and above local regulations. However, if our tradition of discretion often led us to extend these efforts regardless of any of public awareness, in today's reality, we must adapt in order to communicate this aspect of our work more actively.

To that end, we built a new framework for our sustainability strategy, which is now driven directly by the Board of Directors. The role of our products in the livability of the modern world becomes ever more critical as the historic benefits of urbanization are tempered by threats of congestion, pollution, and resource depletion in cities around the world. We are resolved to continue these efforts, independent of any external pressure, and to be transparent about our goals and progress.

I would like to take this opportunity to thank all our customers for their continued trust and partnership. Their success is our ultimate objective, and it depends on the dedication and determination of our employees, who make Schindler proud year after year. To our investors, it is a privilege to be entrusted with your capital, which enables us to remain independent, to achieve entrepreneurial progress, and to take on our corporate responsibility to contribute to a more sustainable world. We build on this precious resource for the company and the generations to come.

Silvio Napoli

Chairman of the Board of Directors

Schindler in brief

Every day, Schindler elevators, escalators, and moving walks move more than 1.5 billion people. Through innovation and technological leadership, Schindler develops high-quality mobility solutions and creates smart and sustainable spaces for urban living.

Schindler is committed to deliver on safety, quality, and customer experience. By focusing on these priorities, the company aims to grow faster than the global elevator and escalator market, while at the same time improving results over the long term.

Global presence

Schindler has over 1000 branch offices in more than 100 countries, as well as production sites in nine countries and R&D facilities around the world.

Headquarters Ebikon, Switzerland

Production sites

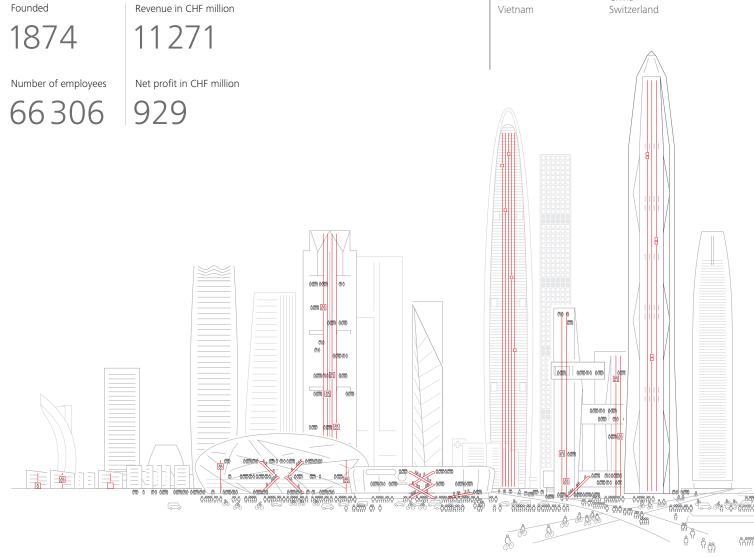
Austria Brazil China India Slovakia

Spain Switzerland USA

R&D, IT, Digital Business

Austria Brazil China Germany India Spain . Switzerland USA

PORT Experience Centers



Innovation

Over the years, Schindler has successfully launched numerous innovations in the market and is expanding intensive research activities. With the advent of artificial intelligence, Schindler has also established itself as a leading company in the development of the Internet of Elevators and Escalators (IoEE). The start-up BuildingMinds develops solutions to optimize the management of entire building portfolios. By investing in Digital Twin technology, Schindler is laying the groundwork to capture the full potential of artificial intelligence across the entire value chain.

Products and services

Schindler offers smart mobility solutions for buildings of all sizes, types and forms across the entire lifecycle of a unit – from planning and installation to maintenance and modernization. State-of-the-art transit management systems complete the offering.







Residential elevators

Commercial elevators

Maintenance

Plan and design

Escalators and moving walks





Modernization



Transit management



Digital solutions

Core values

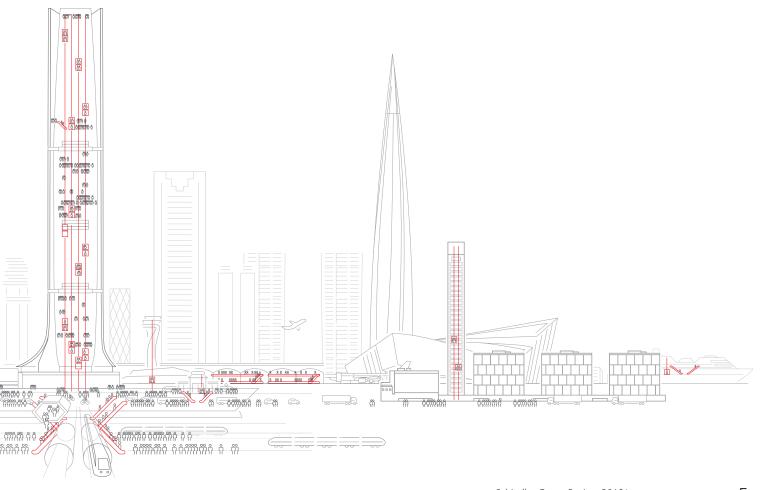
Safety

Quality

Integrity and trust

Value for customers

People development



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Statement of the Board of Directors

Another year of growth

Significant progress in digital transformation

Board of Directors

From left: Erich Ammann, Anthony Nightingale, Tobias B. Staehelin, Carole Vischer, Alfred N. Schindler, Prof. Dr. Pius Baschera, Silvio Napoli, Prof. Dr. Monika Bütler, Luc Bonnard, Patrice Bula, Dr. Rudolf W. Fischer



In 2019, markets faced growing global political and economic uncertainty, protectionism, currency volatility, and rising labor costs. Within this context, Schindler continued to grow while adapting to these changes.

Order intake grew by 3.9% to CHF 12 123 million, corresponding to an increase of 5.8% in local currencies. Revenue rose by 3.6% to CHF 11 271 million, equivalent to a growth of 5.6% in local currencies. Operating profit reached CHF 1 258 million, corresponding to an EBIT margin of 11.2%. Net profit amounted to CHF 929 million, and cash flow from operating activities improved to CHF 1 185 million.

Most importantly, we remained on course with our long-term objectives, kept accelerating innovation and added to our investments in strategic projects.

We made significant progress in transforming our business digitally. We also added new solutions to our digital product offering which were positively received by our customers. Through Schindler Ahead, the pioneering IoT platform in the elevator and escalator industry, we significantly increased the number of connected units, paving our way for the transition to cloud connectivity and functionality. With the same objective in mind, the introduction of the Digital Twin for our elevators and escalators remains a key priority. The related multiyear investment is crucial to bring artificial intelligence to life and enable data-driven insights.

Our modularity program is market-ready. It is the foundation from which we will launch a new generation of elevators in 2020. With that, we provide our clients a seamless product offering and a range of user-friendly design options streamlining component variance and solutions. Thanks to state-of-the-art connectivity, our new elevators offer an enhanced user experience through cloud-enabled digital features such as infotainment. Content like videos or messages can now easily be shared on multifunctional displays in the car — straight from a mobile phone. Most importantly, all these new functionalities are channeled via industry-leading data security standards.

Schindler Group Review 2019 7

We also started to extend digitalization beyond the traditional elevator and escalator business. In March 2019, Schindler launched BuildingMinds, a one-stop "Software as a Service" (SaaS) platform for building owners and operators to centrally manage all their properties and service providers. The Berlin-based start-up has set out to develop a fully integrated, product-agnostic cloud solution that improves transparency and operational efficiency.

Our long-standing commitment to sustainability represents an important cornerstone of Schindler's way of doing business. Last year, we formalized the Schindler Sustainability Strategy focusing on six priorities relating to the environment, to our workforce and to society, each complemented with specific targets for 2022. In the course of 2019, we drove various initiatives to further reduce our carbon footprint, to foster an even safer work environment and to build a more diverse and inclusive workforce.

Schindler's greatest assets are our employees, with their dedication to quality, their expertise, and customer mindset. As of 31 December 2019, Schindler employed more than 66 000 people globally, corresponding to a growth of about 2 000 employees in one year.

Schindler Holding Ltd. closed the fiscal year 2019 with a net profit of CHF 600 million (previous year: CHF 502 million). The Board of Directors will submit a proposal to the forthcoming General Meeting of March 19, 2020, for a dividend of CHF 4.00 per registered share and per participation certificate.

Looking ahead, demographic changes and advancing urbanization – among other global megatrends – continue to be conducive to our business and drive demand for more vertical space to live and work in. At the same time, fast changes on the political, social and economic fronts, underpinned by historically low interest rates, will continue to affect markets. The strengthening of the Swiss Franc constitutes yet another challenge.

With more than 1 000 offices in over 100 countries, Schindler is well positioned to tap into specific market opportunities. At the same time, we now have to recognize that the coronavirus pandemic will have implications on operations and results. Nevertheless, Schindler expects for 2020, excluding any other unforeseeable events, to continue growing faster than the market, with revenue increasing between 0% and 5% in local currencies. As in previous years, the guidance for net profit for 2020 will be provided with the publication of the half-year results.

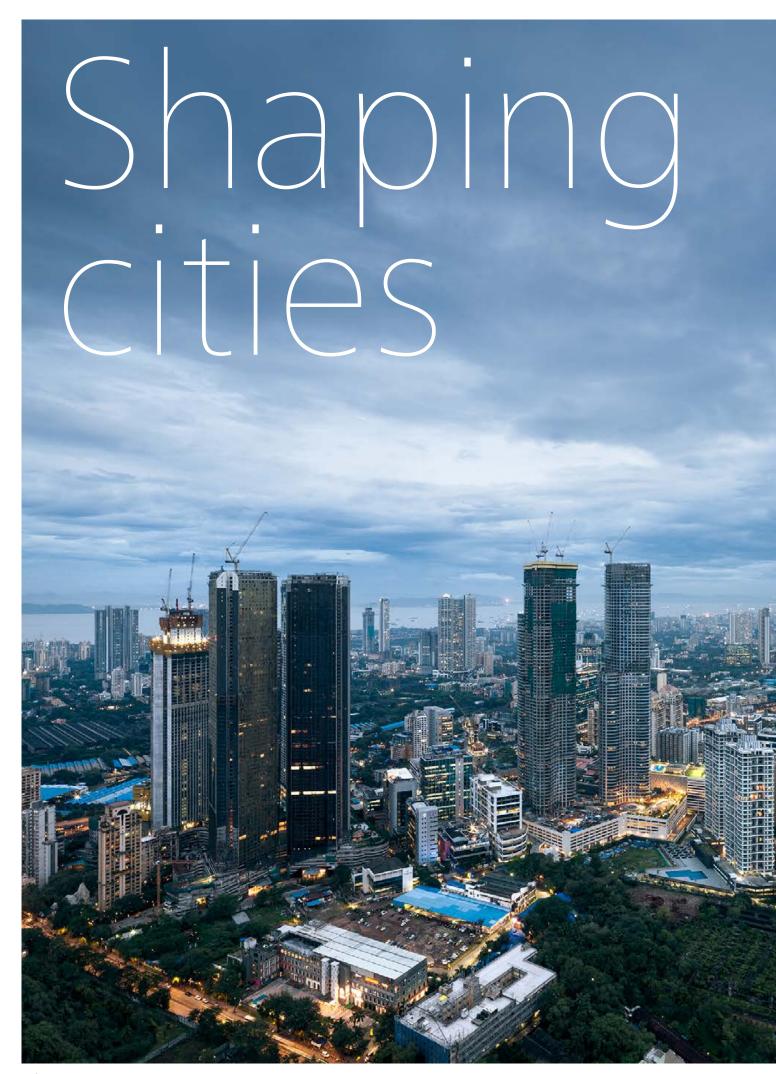
We would like to thank our employees for their outstanding commitment to deliver our products and services. We would also like to express our deepest gratitude and appreciation to our customers for the privilege of their business and for the trust that they continue to place in Schindler. Finally, this message would not be complete without thanking our shareholders, for their trust and for their essential support to the company.

Silvio Napoli

Chairman of the Board of Directors

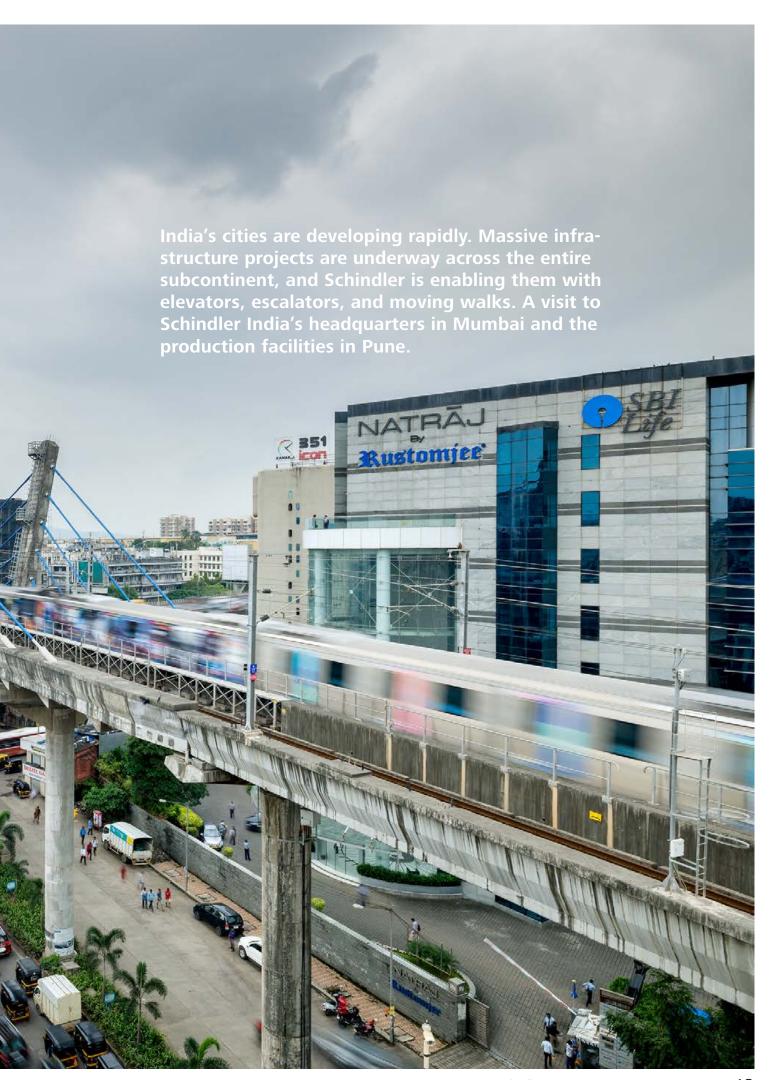
Prof. Dr. Pius Baschera

Vice Chairman of the Board of Directors









Infrastructure projects

Blaring car horns are as much a part of life on India's roads as the three-wheeled tuk-tuks and iconic black taxis with their yellow roofs. However, the soundscape of Indian cities has changed in recent years. Where car horns once signaled overtaking, today they are the soundtrack to traffic jams that seem to stretch into infinity.

Around 25 million people live in the Mumbai Metropolitan Area – one of the world's three largest megacities. Spending three to four hours traveling to work is commonplace. In a car, you spend more time sitting in traffic than moving. To keep pace with rapidly advancing urbanization, the Indian government is investing billions in infrastructure projects. New airports and metro lines are being constructed throughout the country. Schindler is enabling them with elevators, escalators, and moving walks, and most importantly with software that optimizes people traffic, contributing to the effort to render life more sustainable.

In Schindler India's head office in Mumbai, "MIAL" is the order of the day. MIAL is the abbreviation for Mumbai International Airport Limited, and for Schindler employees, those four letters represent a milestone in their company's history – and a huge source of pride. Four years were spent renovating and expanding the airport, with the Schindler team installing 135 units while flight operations continued in parallel. "It was an extremely complex undertaking," recounts Manoj Patil, the Project Manager. "Increased security requirements were in place across the entire construction site - every screw had to pass through security."

The same rule applied to the around 100 Schindler employees working at the airport at peak times. The construction site stretched over 12 kilometers – including navigating runways. Team Leader Trilochan Sahu explains the logistical challenge: "If we wanted to move our products from A to B, we had to plan it very precisely in advance as we could only cross the runways at night. However, we only ever had a small amount of time for planning, since such a major construction site is a very dynamic place where a very wide range of work is carried out in parallel."

Around 50 million passengers now fly to the airport in India's financial metropolis each year. In total, 65 elevators, 44 escalators, and 26 moving walks from Schindler assure mobility to, from, or in between flights. "Airports are demanding but very prestigious projects," says Deepak Jadhav, Vice President, Infrastructure & Top Range Division. "After all, they are the first thing that travelers see when they arrive in a country," he explains.

The team has received various internal and external awards for its work – including a prize for the best-quality work from the customer. "The support and services provided by the Schindler team were excellent," says Shashank Wadibhasme, Deputy General Manager Airport Systems for MIAL.

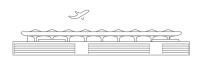




3 Manoj Patil, Project Manager4 External view of Mumbai International Airport

5 Two of a total of 44 Schindler escalators in Mumbai International Airport





Mumbai International Airport

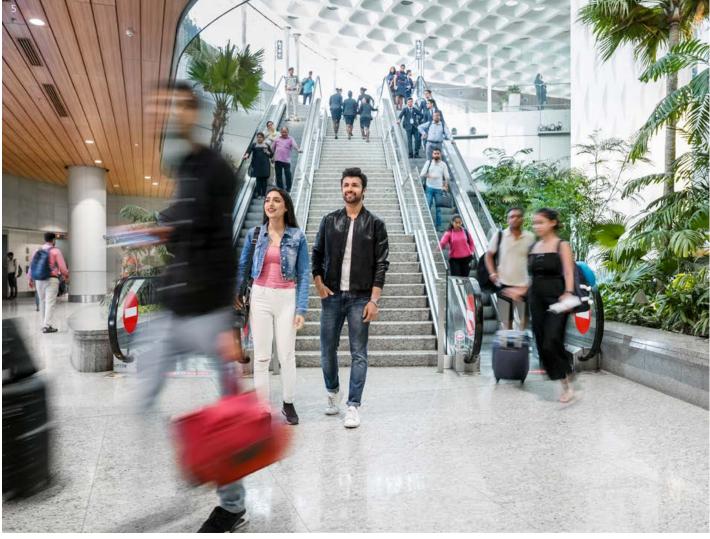
Passengers per year: 50 m





Infrastructure projects





Infrastructure projects



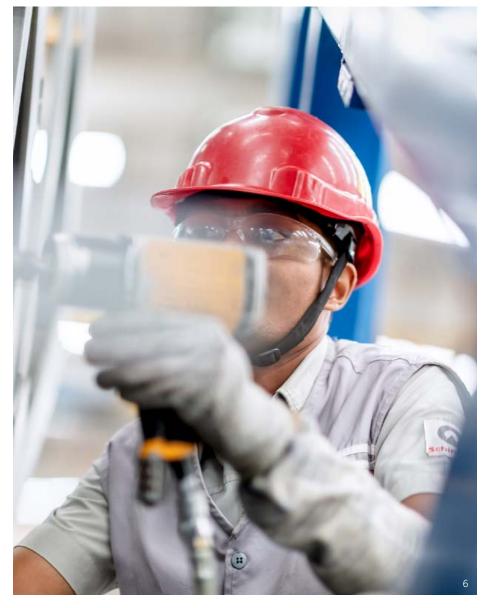








Mumbai & Pune Infrastructure projects



"Many of the orders were awarded to us because we can produce here in India."

Kulbir SinghGeneral Manager Escalator Operations

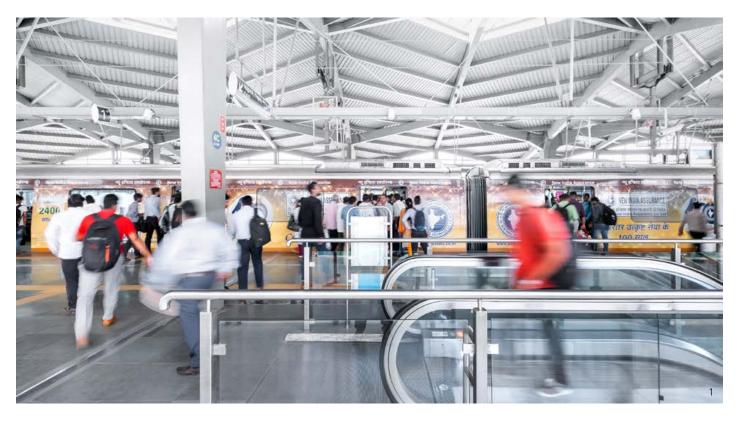


Three hours by car to the south-east of Mumbai, Kulbir Singh puts on his hard hat and enters the bright hangar-like structure. The escalator plant opened in 2018 and is the newest building on the modern Schindler campus in the Chakan district of Pune. The site also includes an elevator plant, a research and development unit, and Schindler's own university. The key factors determining the selection of Pune as a location for the campus were its proximity to Mumbai as well as the well-qualified workforce, which has

developed as a result of the region's car industry. "You can't have good quality without good people. We want to deliver best quality, so we need best talent. Our goal is to offer Swiss quality, made in India," explains Kulbir Singh, General Manager Escalator Operations, on a tour of the plant. Natural skylights illuminate the building — one of the reasons why it was awarded gold certification by the Indian Green Building Council. Singh moves along the eight stages of the production line and talks about the plant's production volumes.

- **1–5** Impressions from inside the state-of-the-art escalator plant that has received green building certification
- 6 It takes four days to assemble an escalator
- Kulbir Singh, General Manager Escalator Operations Schindler Pune, has worked for the Swiss company for 10 years

Infrastructure projects



"The fact that we started domestic elevator and escalator production, places us at a huge advantage today. Many of the orders that we have secured in the recent past were awarded to us because we can produce here in India," says Singh.

India is investing billions in infrastructure projects.

"Schindler was the first multinational company to produce escalators in India," says Kulbir Singh, who has worked for Schindler for a decade. However, the honor of being a pioneer brought with it a burden. "There was no supply chain; we had to start from scratch," he explains. The Indian crew was supported by Schindler's global escalator organization. They trained the Indian engineers and helped them to overcome challenges. Singh describes this collaboration as "a great example within the Schindler universe."

At the plant's exit, a crane lifts an assembled escalator – its white protective shell shining in the light as it awaits transportation. "If our customers find that the best decision of their lives was to purchase a Schindler product, then we are happy. Customer delight is our ultimate target."

"Our goal is to offer Swiss quality made in India."

Kulbir SinghGeneral Manager Escalator Operations

- **1** Schindler supplied escalators for line 1 of the Mumbai metro
- 2 Escalator steps waiting for assembly

Infrastructure projects



Infrastructure projects

Believing in a vision

Heena Tonde, Assistant Manager New Installations, Infrastructure & Top Range Division

"Things happen in life that you couldn't believe until they really occur," says Heena Tonde. For her, this includes her promotion to the rank of Assistant Manager New Installations in 2019. Before joining the project management team, she was troubled by doubts about whether she would be able to assert herself in a male-dominated world.

Even when studying mechanical engineering, she was one of only three women. It took a lot of convincing by Deepak Jadhav, Vice President, Infrastructure & Top Range Division, and Shubha Arora, Chief People Office, before she made this career move. After countless discussions, she told herself: "You should believe in the vision that someone has for you."

Heena Tonde left the Sales and Tendering department – her desk job – behind. After all, as Assistant Manager New Installations, site visits are now part of her daily work, as she checks how the site activities are progressing. She recalls the first time she climbed a ladder wearing safety equipment, she asked herself whether she was really cut out for the job. Today, site visits are just part of the day for her. "I have learned a lot over the last year. One of the most important lessons was to have the courage to ask others for help. Especially as a woman." By doing so, Heena Tonde realized how willing her male colleagues were to support her.



"Things happen in life that you couldn't believe until they really occur."

Heena TondeAssistant Manager New Installations

Infrastructure projects

"Satisfying the appetite of the Indian market"

Schindler entered the Indian market around 20 years ago, when it established its first branch. Today, the subcontinent is one of the Group's most important new installations markets. Ashok Ramachandran was CEO of Schindler India in 2018 and since 2019, he has been the President of Schindler India and South Asia. He wore traditional dress for the interview to mark the festive spirit of Diwali.

How important is the Indian market for Schindler?

Only a small number of countries around the world are experiencing the same high level of growth as India. We are only just behind China. That makes us one of the leading new installations markets for Schindler.

But India and Schindler have a relatively short shared history.

Our present Chairman Silvio Napoli opened Schindler's first Indian branch in 1998. He started from scratch, working out of a hotel room in Delhi. Today, our fast-growing new installation business combined with our nationwide maintenance base make us a key contributor to the Schindler Group. Employees trained by Schindler India can now be found throughout the global organization and today occupy some of the highest-ranking positions in the company.

What are the biggest challenges in the subcontinent?

You have to work very hard if you are installing thousands of elevators a year. The same applies to building the service business in parallel with our growth.

How important are infrastructure projects in this context?

The Indian government is making substantial investments in infrastructure. There are plans to build 25 airports and



metros over the next five to ten years. Our production plant in Pune allows us to meet the Indian market's huge appetite with our world-class products.

What does Schindler stand for in India?

First and foremost, we stand for quality. We achieve this by giving our employees the best possible training. In each of the country's four major regions, Schindler has its own training center – and we even have our own university in Pune. Our customer service is another Schindler hallmark. In the next five years, we want to rank as one of the top 25 employers in India.



Women occupy various leadership positions within your team. CFO Sandhya Sharma is one example. How important is diversity to you?

For me, diversity is about much more than the titles or positions held by women. Last year, we almost doubled our number of female employees. Our ambition is to ensure that we offer everyone the same opportunities, irrespective of factors such as gender, orientation, beliefs, or age. If we really manage to achieve this, we will be able to accomplish even more as a company.

And what do you like best about your job?

Schindler India is like a child to me. It is growing and I can do a lot to help it thrive. As President, I have the opportunity to create a corporate culture where employees can realize their ambitions. I want to cultivate talents that can spread all over the country to make India and Schindler proud.

Sandhya Sharma, CFO Schindler India





If you stand at the edge of the Huangpu River, you can't fail to see the White Magnolia Tower. Soaring to a height of 320 meters, the elegant and slightly curved structure is the tallest building to the west of the river. Its name was inspired by the top of the tower, whose shape recalls the magnolia – traditionally the favorite flower of the city and its citizens. The 66 storeys leading up to that floral pinnacle depend on Schindler elevators and escalators for sustainable transportation of the building's occupants and visitors.

The glass White Magnolia Tower is part of the Sinar Mas Plaza, which also includes a designer hotel and shopping mall. Securing this project was a huge success that earned Wang Hailiang, Key Account Manager New Installations, Schindler Shanghai office, an internal award at Schindler China.



"Securing this project was a huge success."

Wang Hailiang,

Key Account Manager New Installations Schindler Shanghai office

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Sinar Mas Plaza & Raffles City The Bund

Today, the complex has a total of 144 Schindler units, including 42 high-rise and 6 double-deck elevators. "Technologically, the project was a major challenge, not least due to the height of the building," adds Bao Junqing, who today serves as General Manager Existing Installations of Schindler's Shanghai office, and was Fulfillment Manager 2016 to 2018. The double-deck elevators had to be capable of travelling from the ground floor right to the highest storey in the building. The original plan was different, so the design and the shafts had to be adapted.

"I was impressed with how well the project was organized," says Fan Xiaotong, Vice Managing Director of the Sinar Mas subsidiary Jingang Nord Bund Realty, which manages the building. "Schindler always had everything under control." Key factors determining the awarding of the project to Schindler were the safety of the elevators and the efficiency of the PORT Technology, ensuring that some 10 000 people can reach their offices in the White Magnolia Tower swiftly and safely each day.

"We already began looking for tenants during the construction phase. We wanted premium clients, including at least five international car manufacturers," recounts Fan Xiaotong. "And we succeeded." The complex has received numerous architectural awards. Beyond the aesthetics of the building, sustainability plays a leading role – including aspects such as the use of daylight, waste reduction, heat storage, and the lowest possible level of greenhouse gas emissions. Schindler contributed to this using highly energy-efficient technologies, such as the PORT Technology for efficient transit management, says Bao Junging.

"I was impressed with how well the project was organized."

Fan Xiaotong

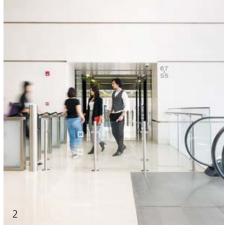
Vice Managing Director of Jingang Nord Bund Realty, which manages Sinar Mas Plaza



Height: 320 m







- 1 Fan Xiaotong in front of the Sinar Mas Plaza
- 2 The PORT Technology an efficient solution
- **3** View of the Sinar Mas Plaza with the Oriental Pearl Tower in the background
- 1 The elevators and interior design form an architectural whole
- **5** Setting the scene: escalators in the shopping mall

Shanghai Sinar Mas Plaza & Raffles City The Bund







Sinar Mas Plaza & Raffles City The Bund

Modern office blocks and residential buildings are now growing alongside old warehouses in the area opposite Sinar Mas Plaza. This is where the past and future collide – where traditional Shanghai meets the international face of the city. In the Hongkou district, the 263-meter twin towers of Raffles City The Bund have been climbing skywards since 2019. This is another major project for Schindler. The towers belong to the development firm CapitaLand and the sovereign wealth fund GIC – both based in Singapore. "This is the largest and tallest Raffles Project in the whole of China," says Ren Guoping, Chief Commander for the project with the main contractor, Shanghai Construction Group. Around 10000 people will work in each tower, spread across 54 storeys. A shopping mall with roof garden will connect them. A total of 62 high-rise Schindler 7000 elevators with the PORT Techology will serve Raffles City.

"We have already tested the installations and they work extremely well," says Ren Guoping. He was also impressed by the smooth execution of the project.

- 1 Bao Junqing in Schindler's Shanghai office
- 2 The twin towers of Raffles City The Bund taper inwards towards the base of the building





Sinar Mas Plaza & Raffles City The Bund



Both the White Magnolia Tower and Raffles City offer views across the Huangpu River, which divides Shanghai into two halves – East and West. Puxi in the West is currently experiencing a second construction boom – and Schindler is present in many of the new buildings. Employees in Schindler's Shanghai office are proud of these prestigious buildings. And they are proud that they can show their children the around 50 high-rise towers equipped with Schindler elevators as they walk around the city.

The next tower – which will, at 370 meters, for a short period be the tallest in Puxi – is now rising from the ground. Xujiahui Center is already under construction and will also be equipped with Schindler elevators. The New Installations Project Manager is Gan Dachun, who already performed this role in Sinar Mas Plaza. "For the first time ever in Shanghai, Schindler will use CLIMB," says Gan Dachun.

Schindler CLIMB is a self-climbing transport concept that substantially shortens installation times for elevators, optimizes building logistics, and thus accelerates the entire construction process — while also further increasing employee safety. "The magnitude of our task is growing in Shanghai with every new building," says Gan Dachun. "They all want to be better and to do something exceptional." He considers this natural. "If I were a developer, I would do exactly the same thing," he adds. It is a trend that can only benefit Schindler.

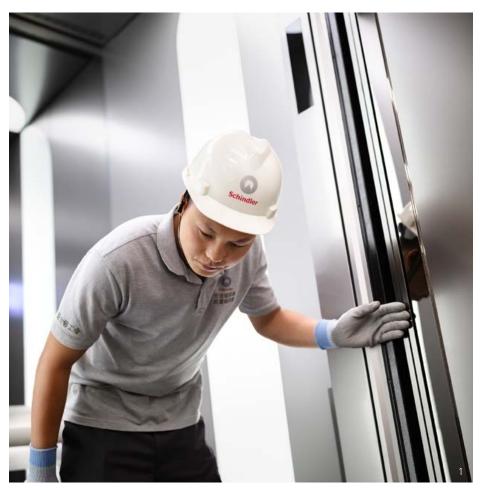
Sinar Mas Plaza & Raffles City The Bund

Around the clock

Liu De, Existing Installations Engineer; Sinar Mas Plaza Team Leader

Liu De moved house to be closer to the Sinar Mas Plaza because of his work. Employees from Liu De's small service team work in pairs at the Sinar Mas Plaza, spending alternate nights in an apartment provided just for that purpose. The Sinar Mas complex is a local landmark, and, says Liu De: "This puts our team under even more pressure than usual to meet the requirements of such a visible project." That includes an extremely quick response time, according to Liu De. The large number of Schindler elevators and escalators in the Sinar Mas Plaza -144 in all – mean that maintenance work continues every day.

The White Magnolia Tower is already Liu De's third major project, although he is only 29 years old. Working in the tower has changed him, says the young engineer: "As a result of the project, I now expect even more of myself."





An extremely fast response time is one of the strict requirements.

- 1 Liu De checks the door mechanism
- **2** Elevators leading to the various restaurants in the Sinar Mas Plaza

Shanghai Sinar Mas Plaza & Raffles City The Bund

High quality elevators are the best selling point

"The quality of the elevators is very, very important when choosing a new office."

Zhou ChunrongProject Manager Raffles City The Bund



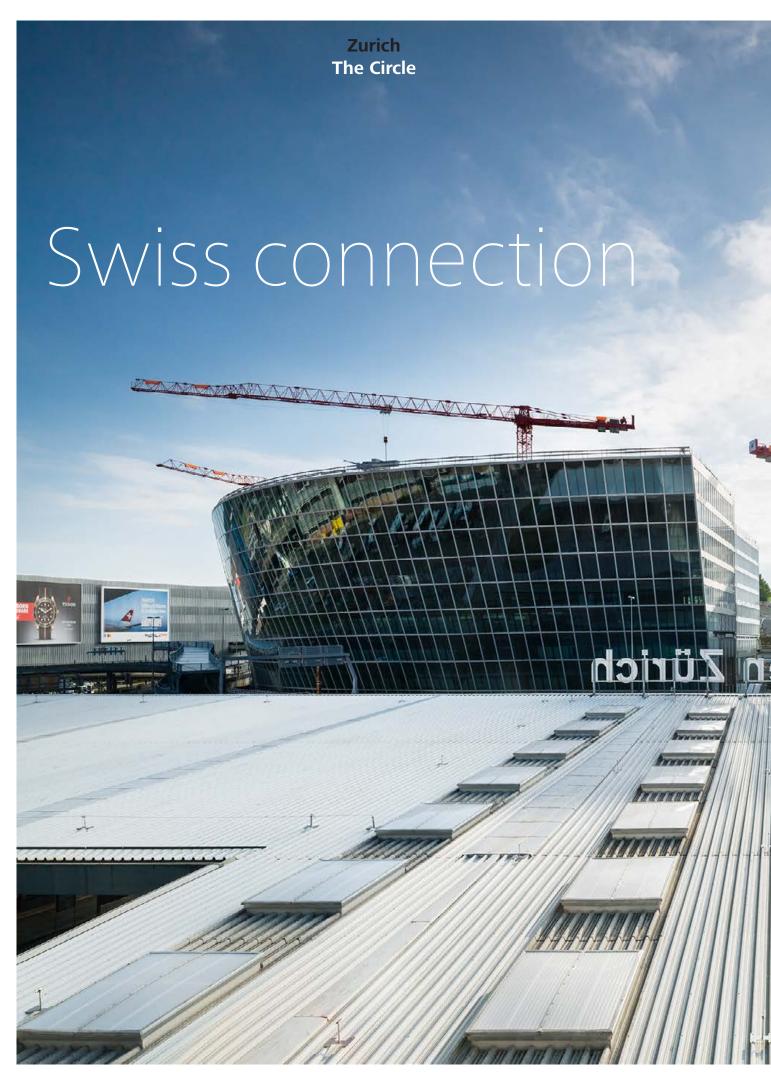
Zhou Chunrong, Project Manager at Raffles City The Bund

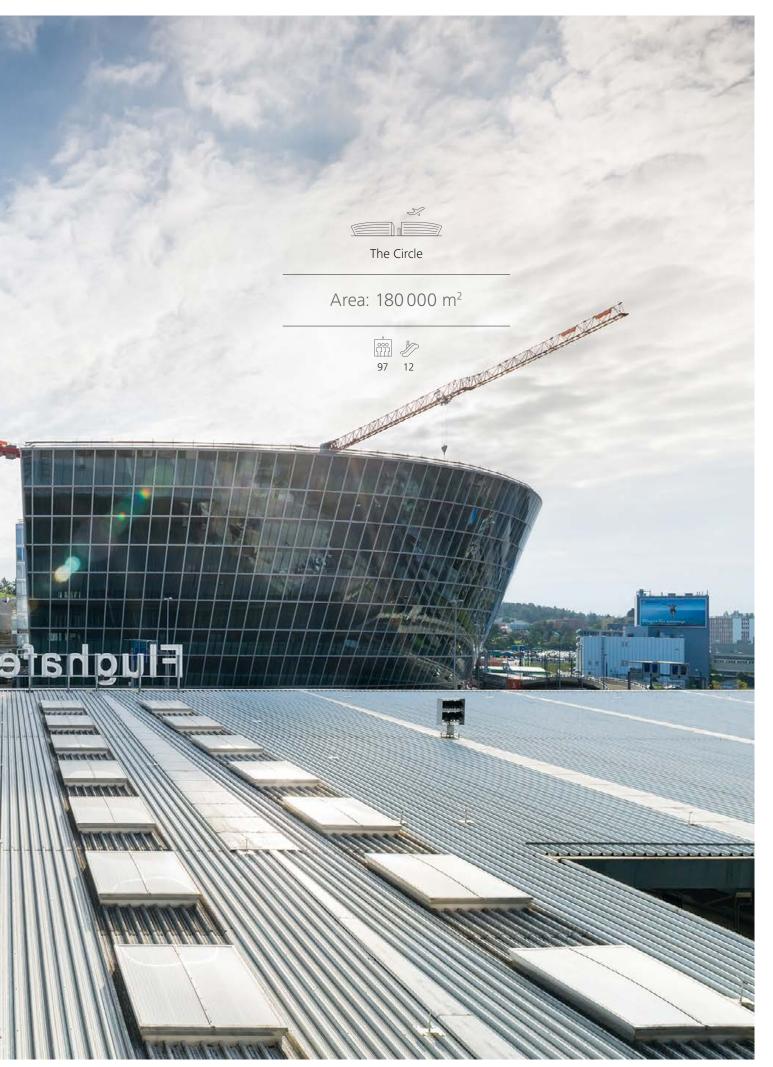
Zhou Chunrong knows that first impressions count. "The companies renting office space in the two towers have clients who visit them. When that visit begins with a journey in one of our elevators, those clients immediately gain a positive impression of that firm."

As New Installations Project Manager, Zhou Chunrong has had an office in Raffles City The Bund for over two years. The buildings are almost ready, meaning that his work is virtually complete. One of his final tasks is to explain the features of Schindler elevators and the PORT Technology to interested tenants – especially when the delegation includes highranking managers. Zhou Chunrong knows every shaft, elevator and machine room like the back of his hand: "The quality of the elevators is very, very important when choosing a new office," he says. According to Zhou Chunrong, there are three main aspects that the representatives of prospective tenants touch on when asking about elevators: "Safety, efficiency, and comfort." These are all integral to Schindler's offering.

Technological innovations such as the PORT Technology have always met with an enthusiastic response in China, according to Zhou Chunrong. Tenants also recognize the importance of the PORT Technology in enhancing employee satisfaction: "Employees like elevators that transport them efficiently when they are hungry and want to take their lunch break." PORT's reduced waiting times win universal approval here!

- **3** Schindler Project Manager Zhou Chunrong
- **4** Elevators also form part of the aesthetic interior design in Raffles City The Bund





Zurich The Circle

The Circle at Zurich-Kloten is Switzerlands's largest construction site. Schindler is playing its part in making it a success.

The Circle in Zurich-Kloten is a large development with massive and imposing overhanging glass facades. Despite this, the lasting impression visitors take with them is one of elegance.

Here at Switzerland's largest construction site, where operations began in early 2015, up to 1 200 people are working on seven office space modules, two hotels plus a convention center, a medical center, as well as shops and showrooms.

The builders constructed 14 000 high-strength concrete columns, each of which can bear a huge load. This new city on a site covering 180 000 square meters — complete with its own airport and connections to the Swiss rail and motorway networks — will open in 2020. The Circle will cost approximately CHF 1.2 billion by the time it is completed.

- 1 Schindler installations have to be transported along narrow routes
- 2 The Circle is right next to the airport
- 3 Rows of buildings with a view of the wider world
- 4 The curved exterior is a landmark
- **5** Every evening, the cranes are perfectly aligned to avoid any interference with the radar











The person managing this major project for Schindler is Mirko Apel. From his lookout at the top of the building, he looks down on the massive construction site below. Apel is proud of what he, his project team, and 20 elevator installation engineers have achieved: "The Circle has one of the highest densities of Schindler installations anywhere in the world!"

There will be a total of 97 Schindler elevators and 12 escalators by the time The Circle opens its doors. Of the 79 Schindler 5500 elevators, 24 will serve as firefighting elevators that can be immediately unlocked by the fire service and used when combating a blaze.

A Schindler service technician is already on site during the construction phase, ensuring the smooth operation of the builders' elevators that are already in use. Mirko Apel has been on board since the pre-project and tendering phase in 2015, before the planning phase started in 2017. In mid-2018, together with his Chief Installation Engineer and Installation Supervisor, he moved his office into a container next to the construction site. Apel has been with Schindler for 14 years now, and, as a qualified electrician, was installing elevators himself before working his way up first to installations manager and then finally to major projects manager. His is the life of a long-distance runner who faces new barriers every day. On a record day in August 2018, his app counted 17 000 steps, 13 kilometers covered, and 39 floors climbed!



"The Circle has one of the highest densities of Schindler installations anywhere in the world!"

Mirko Apel Major Projects Manager The Circle presents two main logistical challenges: limited space, with virtually no storage space; and a large number of other suppliers, installation engineers and construction workers. Coordinating the transportation and installation of elevators and escalators on a large construction site cannot be done with magic – but a few tricks, good negotiating skills, and a lot of experience certainly help.

¹ Schindler squad with Yannik Albrecht, Samuel Ruckstuhl, Mirko Apel, and Fabian Fischer





The Circle is also a place of innovation, where theory is put into practice.

How else can you move six tons of heavy escalators into a building when the situation on site is changing daily? What do you do if a glass roof is suddenly installed where it shouldn't be — blocking access to the crane? "It is all a question of coordination," says Mirko Apel. "We had to adjust our planning five times, but I enjoy working with the site managers, the structural engineers, and the main contractor HRS to find solutions."



The components are transported to site from Schindler's production sites in Europe. One single elevator can need up to 45 boxes, which then have to be lifted by crane through a hole with a diameter of just five meters into the basement, and then moved through the building complex to the elevator shafts. Collaboration is the magic word on a site like The Circle. You have to anticipate problems and keep the right people informed about them in good time. And smooth project execution is essential when working under immense time pressure. Thanks to the technical checks carried out immediately after an elevator or escalator is installed, the units can later be put into operation within half a day once all the work on site is completed.

- **2** Simone Heller takes care of tenants in The Circle
- **3** Service Technician Lukas Cimburek checks a newly installed elevator
- 4 Digitalized processes

For Schindler, The Circle is much more than major logistics; it is also a place of innovation, where theory is put into practice. The building silhouette of The Circle must not exceed a defined height to ensure that the flight operations radar from the neighboring airport is not affected. Schindler had to reduce the standard headroom height on 61 of The Circle's elevators so that they did not rise above the roof of the building. All these factors had to be taken into account when the team from the Modernization and Design Center in Ebikon designed a reduced catch frame and an Extendable Safety Module specially for The Circle. The Extendable Safety Module was even patented and can be used now throughout Europe.

A second revolutionary Schindler innovation, the Robotic Installation System for Elevators (Schindler R.I.S.E), was also put to work for the first time under routine conditions in The Circle. The autonomous, self-climbing robot assists in the safe and precise installation of elevators. It drills holes in concrete walls and sets anchor bolts that provide greater precision when installing guide rails. One of the challenges was to transport the heavy robot to the elevator shafts as efficiently as possible. From an economic perspective, it is important for the robot to be deployed as rapidly as possible once it arrives on the construction site. And how did it perform in The Circle? Project Leader Oliver Simmonds says: "We are very satisfied. A robot that can operate autonomously is a fascinating thing."

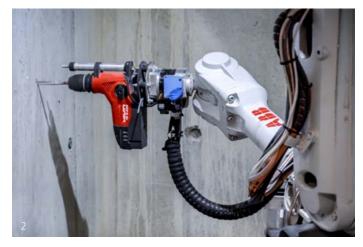
Every elevator shaft has its own layout. By scanning its environment, the robot can accurately apply theoretical data within the actual shaft. So what do people think about the robot? At first, the installation engineers were skeptical – but they soon became enthusiastic about the precision with which it works – relieving them of strenuous, dusty, and noisy tasks.

For Schindler, The Circle is a great project all round – but work on it has not yet been completed. In addition to the installations in the basic structure, the tenants' wishes for elevators and escalators are now also being met.

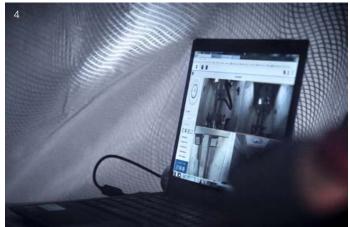
Simone Heller is responsible for this area. The sub-project leader in Mirko Apel's team focuses on the interface between the customers, the technical team, and the installations team – answering questions from future tenants and helping to ensure that future visitors to The Circle will experience Schindler quality as they move from one floor to the next. "We have a small but highly efficient team," says Major Projects Manager Mirko Apel. "Otherwise it would never work. The job is too big for that."

- 1 Installing the Schindler R.I.S.E robot
- 2 Fully automated drilling
- **3** Anchor bolts are fitted with the highest level of precision
- **4** The robot works autonomously and is controlled and monitored from outside the shaft









"I want to understand the elevators"

There are 24 firefighting Schindler elevators in The Circle. In the event of a fire, only these special elevators keep operating. David Nicollier programs and inspects them. With 30 years of professional experience, he knows exactly what is important.

David Nicollier, what is special about a firefighting elevator?

It must continue working in the event of a fire. Other elevators are locked electronically, but firefighting elevators travel to the ground floor of the building and stand there waiting so that firefighting crews can use them.

Are these elevators constructed differently?

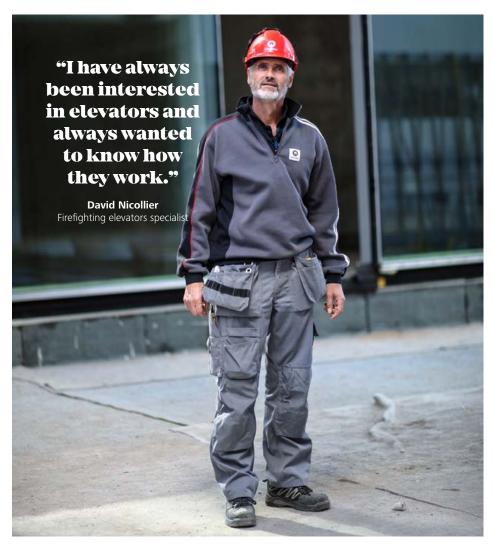
There are significant differences in terms of the elevator equipment and controls. For example, firefighting elevators have a hidden ladder and a roof hatch to allow firefighters to escape to the next highest storey if the elevator gets stuck while they are working to extinguish the fire and they are unable to exit the cabin via the doors. The unit itself and the shaft are also protected against the water used to extinguish fires.

Can I use this elevator as a customer?

Yes. The only visible difference between this elevator and passenger elevators are various signs for firefighters. A layperson would barely notice the difference.

Why do you specialize in firefighting elevators?

I have worked for Schindler for 30 years. I know all of the different models and how they work. When it comes to fire-fighting elevators, what is needed is an allrounder who can install them and put them into operation.



What do you need to be good at?

You can't be afraid of physical work but you also need to be able to program the computer on an elevator. And you need to be highly conscientious. I have always been interested in elevators and always wanted to know how they work. I want to understand them.

So, you are not afraid of heights?

Fortunately no – although there is no harm in a little rush of adrenalin now and again. You cannot take your eye off the ball; the work is too demanding for that. If you feel overly confident, that is when mistakes happen.

How have you found the experience of working on The Circle?

Everyone knows what they must do. I can count on each member of the team. The way we work together is fantastic. That really is Schindler teamwork!

"It is like a good marriage"

The Circle is being constructed by sole contractor HRS Real Estate AG. This is not the first construction project on this scale for Claudio Zanella, Project Manager for Execution. But it is certainly the most spectacular.

Mr Zanella, why did HRS decide to work with Schindler?

Because the company was on board from the start and had done good groundwork. We were impressed by its offering and were happy to start the project with Schindler.

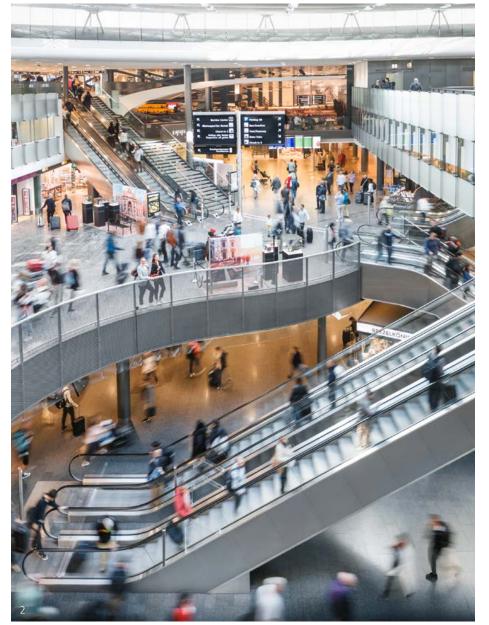
Why did you decide to work with Schindler as a single supplier?

What was most important to us was that Schindler's safe, high-quality products are already installed in the airport – and our experience of using them was good. The airport is a strong partner, so it made sense to award the contract to the same elevator company; this generated a lot of synergies. The processes are simpler, and the project schedule also spoke in favor of it. Schindler was able to deliver in full on all our wishes. When you are dealing with just one partner, you only have to explain things once. The inspection and approval of elevators is also simpler. I am convinced that we made the right decision.





- 1 Effective cooperation: Claudio Zanella (left) and Mirko Apel
- 2 Schindler escalators in Zurich Airport
- **3** Perfect design in Shopping Paradise Zurich Airport



3

Coordinating all the different stakeholders on an enormous construction site like this is a Herculean task. How do you do it?

Everything depends on having good logistics and processes. Our construction site had only one entrance, and cranes whose booms do not reach everywhere. A logistics team assigns slots that have to be complied with. If the construction site can only be reached via a highway access road, any large-scale movements of machines or materials have to be carried out between midnight and 5.00 a.m. We mustn't cause any traffic jams or hinder flight operations.

How important is The Circle for HRS?

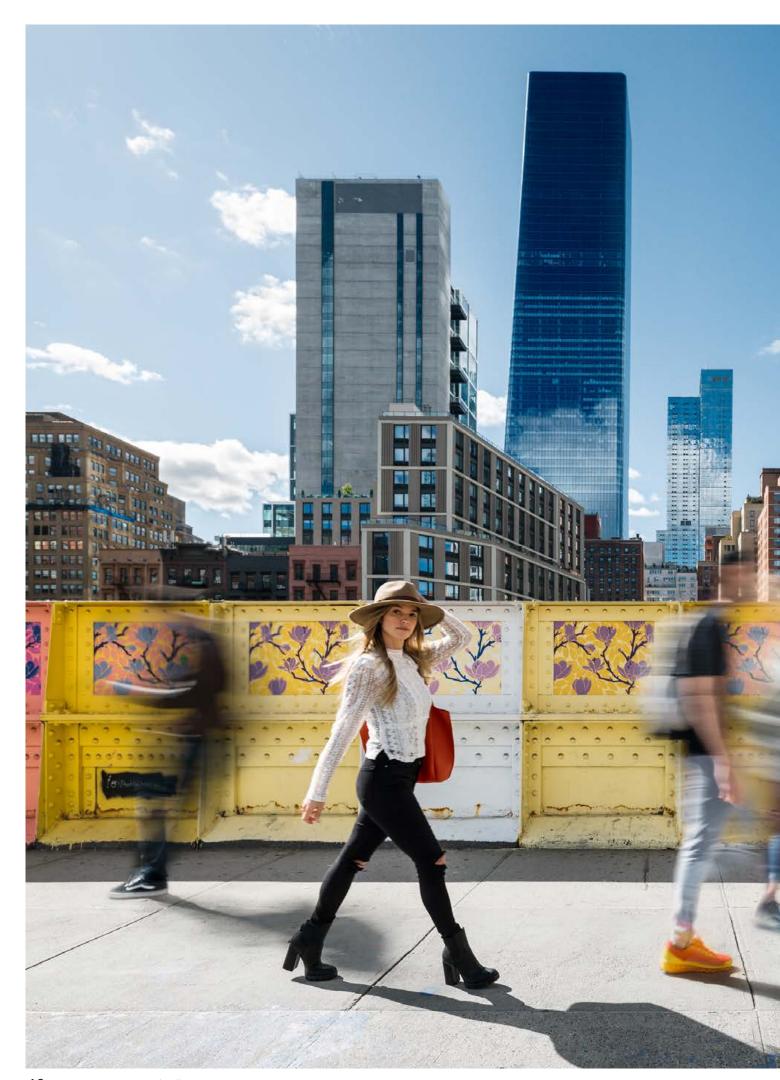
Very. It is the largest project we have ever worked on. We have 50 employees on site, and this requires good internal organization. The Circle will be a success, and we'll make it one together with Flughafen AG and Swiss Life.

Is Schindler a good partner?

Yes, very – even if voices are raised from time to time. As long as everyone shows the necessary tolerance, the cooperation between us is not a problem. After all, HRS is a family business like Schindler. It is like a good marriage – it always takes two to succeed.

"What was most important was that we already had very good experience of working with Schindler."

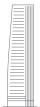
Claudio ZanellaProject Manager HRS Real Estate AG





The new west side story

Where abandoned rail tracks once lay overgrown with weeds, today New York City's newest skyscrapers compete for prominence.



One Manhattan West

Height: 303 m Storeys: 67



hese towering office and residential buildings, with their shopping malls, cultural institutions, and restaurants, have grown into a new West Manhattan neighborhood over the past eight years. And Schindler is at the heart of it.

A total of 27 energy-efficient Schindler high-rise elevators equipped with The PORT Technology have been serving one of the most prominent addresses in this new downtown hub in New York City since 2016: 10 Hudson Yards. The 52-storey commercial building, with its striking glass tower and suspension bridges, was the first of its kind in New York to be awarded the highest sustainability rating by the U.S. Green Building Council – Platinum.

New York City One Manhattan West



New York City

One Manhattan West

And right next door is Schindler's next project: One Manhattan West. This stunning 67-storey structure, rising to a height of 303 meters, is constructed of glass, steel, travertine, wood, and granite. The 39 Schindler 7000 elevators with The PORT Technology are already up and running.

The elevator car glides silently up to the 58th floor, where you don't just enter a room, but find yourself facing a blue expanse so bright that it takes your breath away: the sky above New York and its two rivers – the Hudson to your left and the East River to your right. You are standing level with the Empire State Building and can look down on Madison Square Garden, with the Statue of Liberty on watch in New York Harbor. One World Trade Center, the Chrysler Building, Rockefeller Plaza, 432 Park Avenue, and much more – the iconic buildings of this metropolis stand in a line leading to the new tower, where Schindler elevators will transport 8 000 passengers daily in the future.

Andy Werkhoven understands the power of images: "For almost 40 years I have been fascinated by the sight of the skyline on my way to work in the morning," says the General Manager of Schindler's New York office, who grew up in the Bronx and has been helping shape Manhattan's profile on behalf of Schindler since 1980.

He started out as a temporary worker on construction sites before becoming a mechanic, foreman and then site manager. In 1998, he moved into an office and climbed the career ladder. Commenting on his more than 39 years of loyal service to the firm, he says: "Schindler gave me the opportunity to grow."





"For almost 40 years I have been fascinated by the sight of the skyline on my way to work in the morning."

Andy Werkhoven

General Manager Schindler office New York

¹ One Manhattan West with the Hudson River in the background

² The view from One Manhattan West across the Midtown skyline

³ Andy Werkhoven in the offices of Schindler New York

New York City

One Manhattan West



He is not alone: Sula Moudakis has been at Schindler for 34 years. She was the first woman in the US to be made a Director back in 2004, at the US headquarters in Morristown, New Jersey. She had joined the company 19 years earlier as a young engineer. "I was put to the test but also given the opportunity to develop – so Schindler gave me the best reasons to stay," says Moudakis. She confidently confirms that more and more women are joining Schindler and proudly recalls the moment several years ago when a young female colleague named her as a role model, saying it was "the best compliment I ever received."

Moudakis says just as proudly: "We deliver what we promise" – and she is right: Brookfield Properties, the real estate developer behind the new neighborhood on the west side of Manhattan, was so satisfied that it awarded Schindler the contract for the second tower, Two Manhattan West. The more southerly of the two towers, it will also contain offices. From 2022, the firms leasing space in the building will experience the benefits of intelligent mobility thanks to Schindler.

Schindler is playing a central role in an historic urban development.

Through its involvement in numerous projects, Schindler is also playing a central role in an historic urban development underway in Manhattan. And it is working hard every day to ensure this remains the case. Moudakis' morning ritual includes analyzing the latest market data, while Werkhoven goes out and about on foot as much as possible to see what is happening – and where. Trying to stand out from the competition is a daily mission for Werkhoven, who focuses on building relationships with clients. "Elevators are our business – but it is really all about people," he says.

 Sula Moudakis was the first female Director at Schindler USA

Local and personal

Chindler offers an impressive package in terms of the team, equipment, delivery schedules, and execution," says Christian Heimple, Vice President, Construction, at Brookfield Properties – describing the collaboration with Schindler as "a great partnership." This success story began four years ago with a tendering process, which Sula Moudakis, Andy Werkhoven, Nicholas Seidel, and Jerry Piserchia worked on intensively. Heimple's office is only a couple of minutes away from that of Seidel, a project manager at Schindler. That is no coincidence. Both parties want to be close to

the action – the site where One Manhattan West has been rising towards the sky for the last two years. According to Heimple, a new neighborhood is emerging that will create indoor and outdoor spaces that connect people. "Live, Work, Play" is Manhattan West's motto – but for Heimple and Seidel, the focus is still primarily on "Work." Seidel works in a portable office in the new skyscraper, swiftly relocating when new tenants move into their respective floors. "It is impressive to see a project being completed," says Seidel, whose local presence ensures that the client's expectations are fulfilled on site.



- 2 Christian Heimple and Andy Werkhoven in the lobby of One Manhattan West
- **3** Project Manager Nicholas Seidel in his mobile Schindler office



New York City

Success depends on teamwork

Patrick Dineen is responsible for every new installations worker who wears a Schindler safety helmet in New York. That includes the team of some 50 installation engineers at One Vanderbilt. Only two kilometers from the One Manhattan West complex, this is the construction site for the city's second-tallest building. The One Vanderbilt tower will reach a height of 427 meters, in reach of the clouds above Manhattan.

Schindler will install a total of 44 elevators and escalators in this iconic new sky-scraper by the end of 2020. Lead Field Superintendent Patrick Dineen visits the construction site in Midtown every day. "Distributing and securing the materials on site is the greatest challenge with projects like this," he says. The materials are delivered by freighter up to four times per week and have to be transported swiftly and securely from the harbor to the construction site.

Multitasking is a must for Dineen as he coordinates this process, since he is dealing with the busy roads of Manhattan in the most densely populated city in the USA. Precise inventories, labelling, and detailed schedules are therefore vital. But for Dineen – who himself spent 25 years working in construction – what is even more important is teamwork: "Projects of this size can't be achieved if people don't all work together."

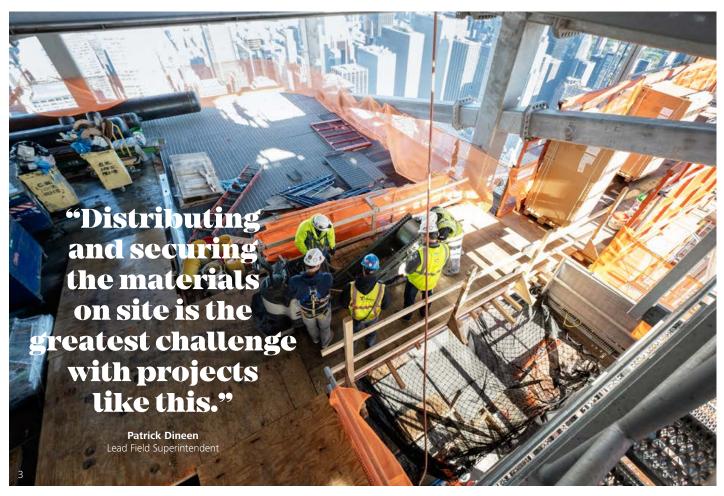




- Patrick Dineen is responsible for around 50 Schindler employees on the One Vanderbilt construction site
- 2 Trolleys are used to transport heavy components
- **3–5** Working at lofty heights the Schindler crew

New York City

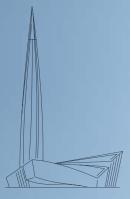
One Manhattan West











Lakhta Center

Height: 462 m Foundations: 264 concrete pillars



High in the North

The Lakhta Tower soars upwards from the ground like a climbing rocket. Up to 12 000 people are working to complete this new St. Petersburg landmark. There is no taller building in Europe, and of the world's true skyscrapers, this is the most northerly of them all.



St. Petersburg Lakhta Center

The 462-meter high Lakhta Tower is majestic in its domain beyond the city center, outshining all around it, and consigning everything – sometimes literally – to its shadow. With its curved, spaceship-like elegance, it is the new star of St. Petersburg. The tower is built on marshy soil, but it stands on 264 concrete pillars that are driven into the ground to a depth of 80 meters – so far beneath the surface that they finally meet Vendian clay. The building's exterior is covered in thousands of panes of glass, each weighing 800 kilos and marked with a code in case they need to be replaced.

The Lakhta Tower, which is being built on a site covering 400 000 square meters, will host the new headquarters of one of the largest Russian companies. It will also be a visitor attraction with viewing platform that should help draw a million visitors each year.

This prestigious building boasts 40 elevators, including 26 high-rise Schindler 7000 units, and four escalators. "Thanks to the great work done here and in Switzerland, Schindler's global reputation has received another major boost – you can impress any future client with a project like this," says Project Leader Donald John, speaking from the workers' village at the foot of the tower.



St. Petersburg Lakhta Center

John is an experienced professional with a proven track record. He has worked for Schindler since 1972, managing major projects in Germany, the Netherlands, India, Azerbaijan, and Algeria. He has been leading the Lakhta project for four years and work will be completed in a year's time. Donald John received an internal Schindler Award in 2018 in recognition of the project management and leadership skills he has demonstrated in Russia. This is an additional motivation on this massive construction site, which brings surprises every day and where organizing is synonymous with improvising.

John's experience is needed if things stop working. The main person at his side is Oleg Mayninger, a Russian engineer who uses his expertise to make an important contribution to the successful execution of the project and also acts as a translator for John. "My Russian is still terrible," admits the project leader.



"You can impress any future client with a project like this."

Donald JohnProject Leader Schindler





- 1 A vast construction site right next to the Gulf of Finland
- 2 Donald John, Schindler Project Leader
- **3** Installation engineers fitting panes of glass in an elevator
- 4 Oleg Mayninger, Schindler Engineer

St. Petersburg

Lakhta Center

Schindler had to transport a total of 2 000 tons of material from a storage site 70 kilometers away. The key material came mainly from Europe at the request of the building's owner. A total of 40 installation engineers were engaged on the project, with a further 50 assistants solely responsible for operating the elevators to transport people and machine components to the right floors.

"With a project of this scale, the most exciting parts are always the start and the finish," says John. At the end, you are simply happy that the project has been successful.

It is time for a tour of the building. The wind whips across the site. The tender explicitly stated that applicants wanting to work on the Lakhta Tower would have to cope with the St. Petersburg climate. Work doesn't stop, even at dramatically low temperatures.

"With a project of this scale, the most exciting parts are always the start and the finish."

Donald JohnProject Leader Schindler

- 1 Cold temperatures can't stop the work from proceeding
- **2** A drive motor for the Schindler 7000 elevator weighs 12 tons
- 3 Safety at work is taken very seriously
- **4** Engineers working in elevator shafts are never without their protective glasses and safety harnesses
- **5** The colossal 462-meter structure casts a massive shadow
- 6 An elevator shaft extending into the void

The drive motor weighs 12 tons.



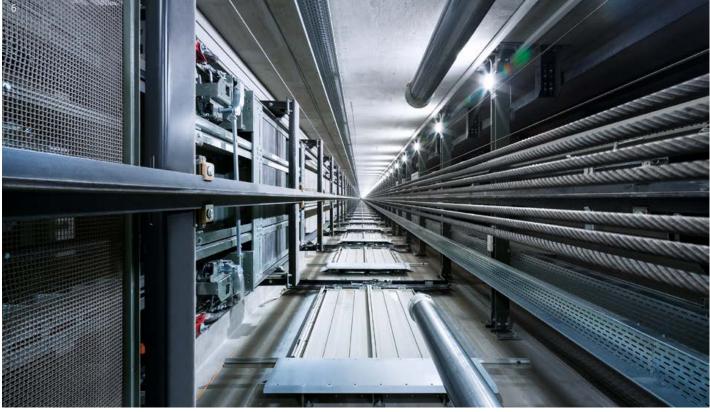






St. Petersburg Lakhta Center





St. Petersburg

Lakhta Center



The top of the tower itself is a visual reference to St. Petersburg's many cathedrals.

In the first year, the workers laid concrete when the outside temperature was minus 30 degrees – using special technologies and chemical additives. Hundreds of workers march to the provisional entrance of the tower, hundreds meet them to form a crowd of red and yellow protective vests. Strict safety regulations apply, and access to the site is also tightly controlled. Throughout the four years that Schindler has been working at this massive construction site, not one of Donald John's employees or subcontractors has had an accident. "I am very proud of that!" he says.

Work on the Lakhta Tower is carried out 24 hours a day, 7 days a week. Donald John walks through the lobby past what will later be the planetarium, and on to the elevators. Hammering and welding can be heard all around as units are installed. He takes the elevator to the top of the building. Schindler's top model travels at a speed of 8 meters per second.

The drive motor weighs 12 tons. It was lifted by cranes and then suspended on steel girders and rolled into position. The walls had not even been erected at that time.



The top of the tower itself is a visual reference to St. Petersburg's many cathedrals. At 462 meters, the wind whistles through the grating – the view is breathtaking. There is nothing to compete with the Lakhta Tower in the flat landscape around St. Petersberg. And after the tour, you are left with the pleasant feeling of being able to glide back down to earth, in a Schindler elevator.

- **1** The future planetarium in the final stages of installation
- **2** Future and history side by side: landmarks of St. Petersburg
- **3** Sergey Nikiforov in his office on the vast Lakhta construction site

"Creating a new postcard view of the city"

The building owner awarded the contract for 44 installations to Schindler. Sergey Nikiforov, Chief Engineer and Project Leader of the Lakhta Center project, explained the background to the order and his perception of Swiss quality.

Mr Nikiforov, how important is the Lakhta Tower for Gazprom?

This is where Gazprom will have the headquarters – but we are also building St. Petersburg's new landmark from the side of Gulf of Finland. Together with the new highway bridge and the stadium, we are creating a picture postcard view and giving new meaning to this part of the city. Until now, the Peter and Paul Fortress and the cathedrals were the symbols of St. Petersburg. We are bringing the new symbols to this great city.

Are you proud of what has been achieved?

We are part of the enormous transformation taking place before our eyes. Yes, of course we are proud – but we are also in a challenging phase of the project and need to do a good job.

What was your experience of working with Schindler as a partner?

They were very proactive and showed initiative. We discussed technical requirements such as the elevators' noise level, configuration, and fittings, and were able to reach some good decisions. That said, the decision-making process was not all that easy — but we are now very happy with the result.

How important is the elevator speed?

That was part of the contract. We had an exact idea of how long visitors and employees should have to wait for an elevator and how long the journey in the elevator should take.

Where does Schindler excel?

We were impressed by the PORT Technology. It is a good system to meet the needs of a skyscraper. It is not just about the elevators themselves. What matters is how the supplier's systems can be integrated into the tower's sophisticated structure. There were no unpleasant surprises with Schindler – and its handbooks and instruction manuals were in line with our expectations.

"We were impressed by the PORT Technology."

Sergey Nikiforov

Chief Engineer of Gazprom and Project Leader of the Lakhta Center project

What is your perception of Swiss quality?

It is a hallmark of quality. Globally – not just in Russia. We wanted to have that level of quality and checked that it was what we were getting each time a component was delivered.

How well did the Russian-Swiss collaboration work?

Together, we found a good approach. There was a steep learning curve for both sides. We formulated our wishes and always found solutions rapidly. I was pleased by what I saw.

What does the Lakhta project mean to you personally?

It is both a big challenge and a new experience. I have been involved since 2012 and have been able to gain a lot of experience in that time. Once this job is successfully completed, I look forward to embarking on a major new project. (laughs)



Business review

60 Markets

66 Examples of significant orders

Global position strengthened

Growth across all product lines and regions

Group Executive Committee

Standing, from left: Daryoush Ziai, Andre Inserra, Julio Arce, David Clymo, Thomas Oetterli, Carlos Guembe, Karl-Heinz Bauer, Christian Schulz, Egbert Weisshaar Seated, from left: Urs Scheidegger, Paolo Compagna, Robert Seakins



Advancing urbanization is the main global driver of Schindler's business. Studies by the United Nations show that the proportion of the world's population living in cities has already reached more than 55% and is expected to increase to two-thirds by the middle of the 21st century. New cities are emerging. Forecasts show that in ten years, 43 cities will have more than ten million inhabitants. These megacities will be home to around 10% of the global population.

The result of this trend is dense urban developments and taller buildings in metropolitan areas. At the same time, the flow of people moving around cities is increasing. There is a growing need for secure, effective urban mobility solutions that help move people efficiently in rapidly expanding cities and make high-rise buildings easily accessible and pleasant places to live.

A growing middle class and aging populations in industrialized nations and emerging markets, as well as the continuing trend towards one-person households, are generating additional demand for elevators and escalators. At the same time, the use of energy-efficient and user-friendly technologies in buildings is increasing, and the need to modernize outdated units is growing globally. As one of the leading providers of elevators and escalators, Schindler is part of this development and is committed to shaping a sustainable future.

Long-term strategic focus

Schindler's long-term strategy is focused on generating sustained value for all the company's stakeholders. The aim is to grow faster than the global elevator and escalator market and to build on a strong culture of innovation to continuously improve operating results.

To support the realization of these objectives, Schindler is implementing operational measures to increase customer satisfaction and operational efficiency, as well as strategic initiatives to promote innovation and enhance quality. The main focus is on the modularization of the product portfolio and the digitalization of the business.

Modularity for elevators is at the core of Schindler's efforts to enhance its competitiveness. By substantially reducing the range of components used, the product range gets far less complex. Furthermore, modular product platforms and compatible components seamlessly close the gap between different product lines. The standardization of key components leads to economies of scale, lower raw material costs, and higher quality. It will also make the installation process and the service business more efficient in the medium term.

Schindler Group Review 2019 57

In its efforts to digitalize the business, Schindler is expanding its digital product range, increasing the number of connected units, and focusing on the Digital Twin for elevators and escalators to tap into the full potential of digitalization across the entire value chain. The Digital Twin is a multiyear investment that enables the use of artificial intelligence and data-driven analytics. With BuildingMinds, Schindler is also driving digitalization beyond traditional vertical mobility solutions. Launched in March 2019, the start-up is developing a "Software as a Service" (SaaS) platform that allows building owners and operators to centrally manage and control real estate portfolios and service providers.

Another year of growth

In 2019, markets faced growing global political and economic uncertainty, protectionism, currency volatility, and rising labor costs. Within this context, Schindler continued to grow while adapting to these changes, and strengthened its market position.

Order intake and order backlog

Despite the above-mentioned challenges, global demand in the new installations business increased slightly in the reporting year. This development was driven by the Asia-Pacific region, particularly China.

Schindler further increased order intake, which rose by 3.9% to CHF 12 123 million (previous year: CHF 11 669 million), corresponding to a growth of 5.8% in local currencies. In addition to the positive development of the volume business, there was solid new installations demand in major infrastructure and commercial building projects in North America and Asia-Pacific. All product lines and regions generated growth compared to the previous year. Asia-Pacific grew the most, followed by the Americas and EMEA regions. The service and modernization business recorded solid growth, both in volume and value.

As of December 31, 2019, the order backlog reached CHF 9 042 million (previous year: CHF 8 618 million), corresponding to an increase of 4.9%, respectively 7.6% in local currencies.

Revenue

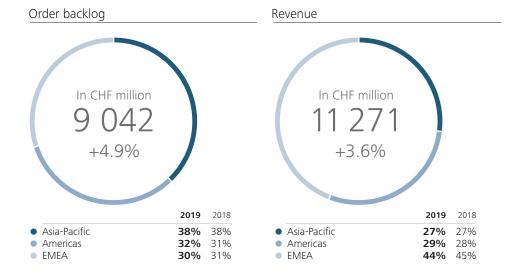
Schindler generated revenue of CHF 11 271 million in 2019 (previous year: CHF 10 879 million), corresponding to a growth of 3.6%, or 5.6% in local currencies. The Americas region achieved the highest growth, followed by the Asia-Pacific and EMEA regions.

Operating profit (EBIT)

Operating profit (EBIT) reached CHF 1258 million (previous year: CHF 1269 million), which corresponds to a decrease of 0.9% (+1.3% in local currencies). EBIT margin was 11.2% (previous year: 11.7%). Operational progress and price adjustments could not fully offset higher material costs and wage inflation, as well as the higher spend on strategic investments, compared to the previous year. Before restructuring costs of CHF 38 million (previous year: CHF 26 million) and expenses for BuildingMinds of CHF 18 million, EBIT margin was 11.7% (previous year: 11.9%).

Net profit and cash flow from operating activities

Net profit totaled CHF 929 million compared to the previous year's result of CHF 1 008 million, which included a one-time tax refund of CHF 60 million. Cash flow from operating activities was CHF 1 185 million (previous year: CHF 1 005 million).



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Markets

Asia-Pacific

The Chinese new installations market was positive, contrary to expectations. The development of other markets in the region varied and was slightly positive overall.

China

In the reporting year, China experienced its lowest rate of economic growth since the early 1990s – partly as a result of the ongoing trade dispute with the USA. The construction sector continued to be impacted by measures to prevent real estate speculation in several cities. Despite this, the world's most important elevator and escalator market grew – primarily in the residential construction segment. In contrast, the commercial sector saw a decline in unit sales.

Schindler pursued its growth strategy and, thanks to its competitive solutions and geographical expansion, was able to achieve above-market growth in the new installations business. It secured orders for numerous major projects. The service and modernization businesses generated strong growth.

India

With its expansionary fiscal policy and economic stimulus measures, the Indian government supported the national economy in the course of 2019. The construction industry was mainly supported by continued urbanization. In the second half of the year, the sector gained additional momentum as a result of investments in infrastructure and in residential construction. Commercial real estate also experienced growth.

Schindler was able to benefit from its strong market position and its local production capabilities. The new installations business, as well as the service and modernization businesses, recorded robust growth.

Southeast Asia and Australia

Markets in Southeast Asia displayed differing trends and were partly affected by political and social uncertainties. Continued urbanization and investments in infrastructure and social housing supported markets, while the commercial real estate sector declined slightly.

Schindler outperformed the market in the new installations business and grew in the service and modernization businesses.

Order backlog in CHF million

Revenue in CHF million

Headcount

as of December 31

3 4 3 0

3 0 5 5

25842



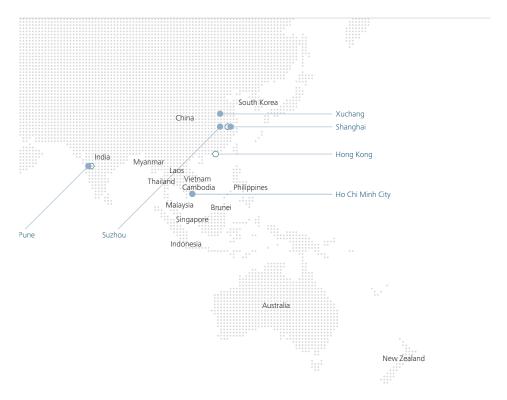




	2019	2018	Δ%	In local currencies
Revenue (in CHF million)	3 055	2 935	4.1	6.1
Number of employees	25 842	24 594	5.1	

- Production sites
- O R&D, IT Services, Digital Business Hub

Countries with Schindler Group companies are shown below



The Americas

After years of strong growth, the US new installations market began to cool. In Brazil there were increasing signs of recovery.

North America

The US economy continued to grow in 2019 but felt the effects of the trade dispute. The US construction industry showed a slight slowdown – especially in commercial real estate and multifamily homes. Activities in the infrastructure and institutional buildings sectors remained robust. The shortage of skilled workers, especially in construction, created capacity bottlenecks, and delayed construction projects in cities with the strongest growth.

In the new installations market, which experienced a slight decline overall, Schindler maintained its position and secured orders for numerous major projects. The service and modernization businesses grew strongly. The shortage of skilled workers presented a challenge also for Schindler.

Latin America

In the reporting year, most markets in Latin America saw higher demand in the new installations business despite unrest in several countries. In Brazil, the largest market in the region, demand remained stable at a low level. With the upturn in residential construction activity in the second half of the year, there were growing signs of a recovery in the real estate market.

Schindler achieved a positive performance. The order intake grew across all product lines compared to the previous year.

Order backlog in CHF million Headcount Revenue as of December 31 in CHF million 3274 14 939 2901 32% 29% 23% of the Group of the Group of the Group

	2019	2018	Δ%	In local currencies
Revenue (in CHF million)	3 274	3 047	7.4	8.1
Number of employees	14 939	14 600	2.3	

- Production sites
- O R&D, IT Services, Digital Business Hub

Countries with Schindler Group companies are shown below



FMFA

On the one hand, the new installations market in Northern Europe developed slightly positively at a high level. On the other, unit sales in Southern Europe declined compared to the previous year.

In Europe, high levels of employment and the shortage of skilled workers on construction sites led to some challenges in the execution of projects. In Northern Europe, the new installations market developed slightly positively at a high level. Residential construction and infrastructure kept momentum. Commercial real estate was more subdued, with differing trends across the region. After years of strong growth, the German market did not expand further. Most markets in Eastern Europe achieved growth compared to the previous year. In the UK, uncertainty surrounding Brexit persisted. Overall, new installations markets in Southern Europe saw declines, mainly driven by the still weak Turkish market. In the Middle East, the new installations markets were impacted by the low level of activity in residential and commercial construction, which fell below that of the previous year.

In Europe, Schindler benefited from solid growth in the service business, which was supported by several acquisitions of small and mid-sized service companies. The new installations business reached the same high level of growth as in the previous year. The shortage of skilled workers repeatedly led to delays on construction sites. In the Middle East, Schindler saw a slight downward trend in the new installations business. The service business continued to grow.

Order backlog in CHF million 2 7 1 1 30% of the Group Revenue in CHF million 4 9 4 2 38% of the Group Headcount as of December 31 4 9 4 2 38% of the Group

In local 2019 2018 Δ% currencies Revenue (in CHF million) 4 942 4 897 0.9 3.7 Number of employees 25 525 25 292 0.9 Production sites O R&D, IT Services, Digital Business Hub Headquarters, Holding Countries with Schindler Group companies are shown below



Examples of significant orders

Further significant orders by regions/territories in Asia-Pacific

Australia

Brisbane

- 80 Ann Street, office building

Parramatta

- 6 Parramatta Square, office building **Perth**
- Elizabeth Quay, lot 7, office building Sydney
- Salesforce Tower, office building

Cambodia

Phnom Penh

- CA&SA Serviced Apartment, residential building
- Flatiron by Meridian, hotel, apartments, office buildings
- Morgan Tower, commercial building



Aviva-COFCO Qianhai Towers, office buildings, Shenzhen, China 31 elevators Schindler 7000, including 27 with PORT Technology

China

Beiiina

- Beijing Metro, line 17, various stations
- Tongzhou Sino-Ocean, shopping mall, office buildings

Chengdu

- Chengdu Metro, line 3, various stations
- Chengdu Zhonggang CC Park, shopping mall, office buildings

Chongging

 Guangkong Chaotianmen Center, shopping mall, office building

Guangzhou

- GDH Zhujiang New Town, office buildings
- TCL, headquarters, office building

Guiyang

- Guiyang Metro, line 2, various stations

Harbin

- Harbin railway station Jinan
- Lunan Railway, various stations
- National Supercomputer Center, office buildings

Kunming

- Harmony Century Plaza, shopping mall, office building

Nanchang

- Changhan Railway, Ganzhou West station
- Zhengsheng Taikoo Complex, hotel, residential buildings

Qingdao

Qingdao Hetao, residential buildings

Shanghai

- Far Eastern Horizon, headquarters. commercial building
- Xujiahui Center, office and commercial buildings

Shenzhen

- Aviva-COFCO Qianhai Towers, office buildings
- Shenzhen Minsheng Internet Mansion, office building Suzhou

- Suzhou Metro, line 5,

various stations Taiyuan – Taiyuan Metro, line 2,

various stations Tangshan Tangshan Wuyue

Plaza, shopping mall

- Xiamen – Xiamen Railway, line 3,
- various stations Xi'An

- Silu Convention Center

Zhengzhou

- Wanzhou Railway, various stations

Hong Kong SAR

- Flora Garden. residential building, modernization
- Island Shangri-La Hotel, modernization
- Jat Min Chuen, residential building, modernization
- Kowloon Investment Company Limited Buildina. commercial building, modernization
- Lotus Tower 1 and 4, residential buildings, modernization
- New Kowloon Inland. lot 6562, lot 6556, residential and commercial buildings
- Princess Margaret Hospital. modernization
- Sha Tin Town, lot 609, residential building
- Skycity,
- commercial building
- Two Taikoo Place, commercial building
- -98 How Ming Street, commercial building
- 139-147 Argyle Street, commercial building

Macau SAR

– The St. Regis Macao,

Taiwan region

- Far Eastern New Shopping Mall, commercial building, Hsinchu
- Far East Plaza, hotel, commercial building, modernization, Taipei
- Xin Fu Fa Bundle, residential buildings, Taichung, Tainan, Kaohsiung
- YeaShin International Development. residential building, Taipei

India

Delhi

- Green Court, residential buildings
- M3M Corner Walk and International Financial Center, commercial building

Hyderabad

- KBR Infratech, residential buildings
- Unique Infra, residential buildings

Lucknow

- Mall by Shalimar, shopping mall

Mumbai

- Mumbai Metro, line 2A, various stations
- D Mart, shopping mall
- Lodha, tower 4, commercial building Noida
- Supertech North Eve, residential buildings

Indonesia

Jakarta

- Ginza Jababeka, commercial building
- Shabu Hachi, restaurant, commercial building – North Point at
- Nava Park BSD City, commercial building
- Urban Signature LRT City, residential building

Mandani Bay Quay Towers, residential buildings, Mandaue, Philippines 30 elevators, including 15 Schindler 7000 and 15 Schindler 5500



Malaysia

Batu

- The Netizen, residential building **Bayan**
- Pengerang Eco-Industrial Park (PEIP),
 Pengerang International Commercial Centre (PICC), residential and commercial developments

Johor Bahru

 Menara Landmark, commercial building, modernization

Kuala Lumpur

- Agile Bukit Bintang, residential building
- Duta Park, residential building
- Gem Residences,
- residential building
 Pavilion Ceylon Hill,
- residential building

 Petronas Podium,
 commercial building
- Senada Residence, residential building

Penang

 Batu Kawan SME Factory, residential buildings

New Zealand

Auckland

- 135 Albert Street, office building, modernization
- Britomart TrainStation, modernization
- Holiday Inn Express, hotel

Philippines

Mandaue

 Mandani Bay Quay Towers, residential building

Singapore

- Bank of Singapore Centre, commercial building, modernization
- Costa Del Sol, condominium, modernization
- OCBC Centre, commercial building, modernization
- Punggol Town Hub, commercial building
- Silat Avenue,
 residential building
- Singapore General Hospital H9A, plot 1 and 2, commercial building
- Singapore Institute of Technology, plot 1 and 2, commercial building
 Surbana Jurong
- Campus, commercial building
- 79 Anson Road, commercial building, modernization

Thailand

Bangkok

- Courtyard by Marriott
 Suvarnabhumi, hotel
- Krungsri Rama 3 Tower, commercial building
- Park Origin Thonglor, residential building
- Pink Line, mass transit system, various stations
- The Marq 2, residential buildings
- The Matt,
 residential building
- The Unicorn Hotel
- UOB, headquarters, Sukhumvit 26, commercial building

Krabi

Intercontinental Yao
 Yai Resort, hotel

Phuket

- Big V International City, residential building
- Holiday Inn Vana Nava Hotel
- S Oasis bundle projects, commercial and residential buildings

Landmark 81, commercial building Ho Chi Minh City, Vietnam 28 elevators, including 22 Schindler 7000 and 5 Schindler 5500, as well as 18 Schindler 9300 escalators



Jewel Changi Airport, Singapore

Elevator World 2020 project, 69 Schindler 9300 escalators, 62 Schindler 9500 moving walks,

and 50 elevators, including 38 Schindler 5500

Vietnam

Hanoi

- Vinhomes Metropolis, commercial buildingVinhomes West Point,
- residential buildings **Ho Chi Minh City**
- Co.op Mart, shopping mall
- Gem RiversideApartments,residential buildings
- The Grand Manhattan, residential building
- Swan Bay Dai Phuoc Island, residential building
- Vimedimex Villa, phase 1, residential buildings
- Water Bay Residence, residential building

Further significant orders in the Americas

Brazil

Rio de Janeiro

- ParkJacarepaguá, shopping mall
- Academia Brasileira de Letras, office building, modernization

EZ Parque da Cidade,

residential buildings,

commercial building,

Toronto, Canada

São Paulo, Brazil

The Well.

São Paulo

- Faria Lima Plaza, office buildings
- EZ Parque da Cidade, residential buildings
- Edifício Neroni Maiolino Jr., residential buildings
- Banco Citibank S.Ā., commercial building, modernization

14 elevators, including

12 Schindler 5500 and

23 elevators, including

18 with PORT Technology –

as well as 3 Schindler 9300

19 Schindler 7000 -

and 4 Schindler 5500,

escalators

2 Schindler 3300

Canada

Montreal

National Bank, office building, maintenance contract

Colombia

Barranquilla

- Bogotá
- office building, modernization
- modernization
- Policía, modernization
- residential buildings, maintenance contract
- Tintal III, phase 2, residential buildings
- Reserva del Lago, residential buildings
- office building

Marriott Hotel

- Avianca,
- Banco Agrario, office building,
- Calima, shopping mall – Hospital Central De La
- Parque Tintal, phase 3,
- Parque Central

Cajica

Gobernación del Valle,

Mexico

- Be Grand Downtown Reforma
- Cero5Cien,
- residential complex

Mexico City

- mixed-use building

USA

Boston, MA

- Atlantic Wharf, office building, modernization, maintenance contract
- John Hancock Tower, office building, maintenance contract
- Prudential Center, office building, modernization
- 1 Winthrop Square, shopping mall, office building



Bay Area Rapid Transit (BART), Embarcadero Station. San Francisco, USA 29 escalators, including 20 Schindler 9700

New York, NY

- Manhattan West,

South Tower 2, office building

- 825 Third Avenue,

office building, modernization

- Hard Rock Hotel, hotel,

residential building

- 100 Federal Street, office building, maintenance contract

Charlotte, NC

- Charlotte Douglas International Airport
- Honeywell, headquarters, office building
- Two Legacy Union, office building

Chicago, IL

The National Chicago. office building, modernization

Cleveland, OH

- MetroHealth
- Transformation, hospital Progressive Field, stadium

Columbus, OH

- Three Nationwide Plaza, office building, modernization

Detroit, MI

- Renaissance Center, office buildings, maintenance contract
- Southfield Town Center, office buildings, maintenance contract

Jersey City, NJ

- 101 Hudson Street, office building, modernization
- Harborside Plaza, office building, modernization

Kansas City, MS

- Kansas City International Airport

Las Vegas, NV - Golden Nugget, hotel,

casino, modernization – Regional Justice Center, office building,

modernization Los Angeles, CA

Los Angeles International Airport, Terminal 4.5, American Airlines

Los Angeles International Airport, ConRAC

Miami, FL

– Port Everglades, seaport

Minneapolis, MN

- Fairview Health, hospital. maintenance contract
- Government Center, office building, new installation, modernization
- New Public Service Building, office building
- Two22, office building, modernization

Two22, office building

Minneapolis, USA

Modernization of

19 elevators with

PORT Technology

- 1100 Avenue of – Hennepin County Americas. office building

- 1241 Broadway, office building
- 14th @ Irving, office building

Philadelphia, PA

- Live! Hotel and Casino Salt Lake City, UT
- Salt Lake City International Airport.

phase III San Francisco, CA

- Bay Area Rapid Transit, Market Street station, new installation and modernization
- Stonestown Galleria, shopping mall

Seattle, WA

- Sound Transit, various stations. maintenance contract University of
- Washington Station, maintenance contract

Tampa, FL

- Tampa International Airport, SkyCenter development

Washington, D.C.

- 2121 Pennsylvania Avenue NW, office building, modernization

Nationwide

 Regal cinemas, maintenance contract



Further significant orders in EMEA

Austria

Vienna

Wiener Linien, various stations

France

Bezons

– Paris Bords de la Seine. office buildings **Paris**

- Centre Beaubourg
- Tour Saint-Gobain, office building

Valmeinier

- Skiing station

Germany

Frankfurt

- The Spin, hotel, office building Berlin

- Am Tacheles, office, commercial, and residential buildings
- Quartier Heidestrasse, QH Core, office, commercial, and residential building
- STREAM. office building Munich
- Die Macherei, hotel, office, and commercial buildings

Italy

Milan

Corso Como Place, office building Rome

- Rome-Fiumicino International Airport "Leonardo da Vinci"
- Metro, underground network. various stations. maintenance and modernization

Cruise ships

11 cruise ships for Norwegian Cruise Line, Seabourn Cruise Line, Disney Cruise Line, Cunard Line, Oceania Cruises



Casablanca Financial City Casablanca, Morocco 9 elevators with PORT Technology, including 4 Schindler 7000 and 3 Schindler 5500, as well as 2 Schindler 9300 escalators

Norway

Bergen

- Haukeland Sykehus, hospital, modernization

Oslo

- Oslo Airport, Non-Schengen expansion
- Økern Portal, office building

Metro Prague, Karlovo Náměstí station, Prague, Czech Republic 3 Schindler 9700 escalators

Poland

Cracow

- High5ive, office buildings Gdańsk
- Wave, office buildings Szczecin

– Hanza Tower, residential building

Warsaw

– Metro, line 2 new installation, and line 1 modernization



Hanza Tower, commercial and residential building, Szczecin, Poland 12 elevators, including 6 Schindler 5500 -5 with PORT Technology - and 6 Schindler 3300

Portugal

Setúbal

- Tagus Bay, residential building
- One River Seixal, residential building

Romania

Bucharest

- Globalworth Campus, phase 3. office building
- One United Tower, office building
- One Mircea Eliade, residential buildings
- The Bridge, phase 3, office building

South Africa

Pretoria

- South African Reserve Bank, office buildings Witbank
- Kendal Power Station

Spain

Barcelona

- Porta Firal T1-T2, Iberdrola, office building
- KKH Residential and Casa Seat, commercial building
- Torre Glòries, office building, modernization

Benidorm

- Altamar, shopping mall Madrid
- La Hermandad Nacional de Arquitectos, office building

Switzerland

Aarau

- Aarauer Telli, residential buildings. modernization

Arlesheim

 Kompetenzzentrum Industrie 4.0, commercial building

Geneva

- Quartier de l'Étang, residential building Renens

– Parc du Simplon, office, commercial, and residential buildings

Zermatt

Cable car valley station to the Kleinmatterhorn, modernization

Turkey

Ankara

- Sukent, residential buildings
- Subayevleri AVM, shopping mall

Istanbul

- Capitol Shopping Center, modernization
- Kalyon Üsküdar AVM, shopping mall

United Arab Emirates

Abu Dhabi

– Etihad Airways Headquarters, office building, modernization

Dubai

- Aykon City, tower B and C, hotel, residential buildings
- UAE pavilion at EXPO 2020
- Vida Dubai Marina. hotel, residential building

United Kingdom

London

- Soho Place, office buildings



Savoy Palace, hotel Funchal (Madeira), Portugal 25 elevators, including 16 Schindler 5500 and 9 Schindler 3300 © Savoy Palace

Vida Dubai Marina, hotel, residential building, Dubai, UAE 15 elevators, including 6 Schindler 7000 and 9 Schindler 5500

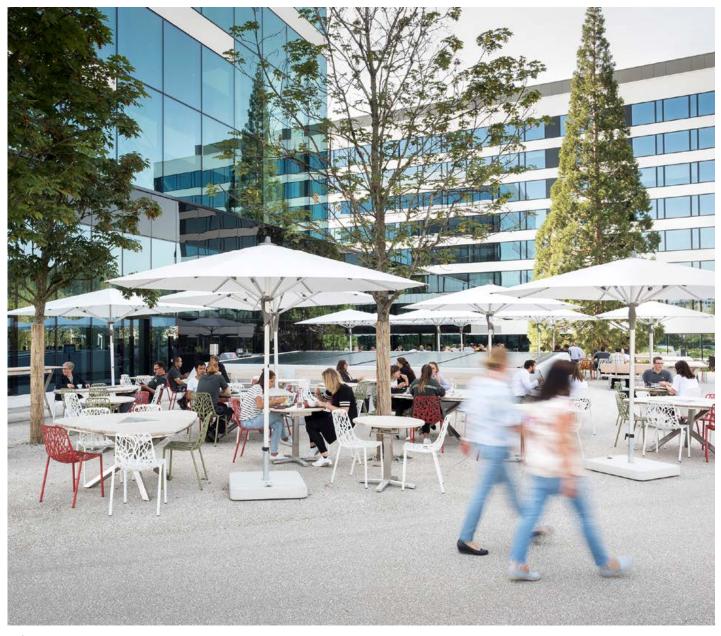


The new way of working

Schindler is building the future for employees. From workspaces and training facilities to sustainability, energy consumption, and biodiversity – the new campuses in Switzerland, China, and India are examples of the evolving workplace environment.



The company is committed to Switzerland and to the Ebikon head-quarters. The head office was built there in 1957 and remains a landmark from afar due to the Schindler test tower. Sixty years later, Schindler once again had development plans for Ebikon and set about implementing them.



In 2012, the company began developing ideas for the new Schindler campus in Ebikon. This was followed by a four-year construction phase. Herbert Stadelmann has been with the company for 30 years. The Head of Facility Management was responsible for the execution of the campus plans. "What we have realized here is first class!" he says enthusiastically, adding: "We looked for the best solution in every area."

The transformation from an industrial site to a future-oriented campus was based on plans drawn up by architects Burckhardt+Partner AG. The result was a collection of buildings including a visitor center, an employee restaurant and cafeteria, an auditorium, and management buildings whose design quality will still be appreciated in another 60 years.



"We don't waste a single kilowatt hour of energy!"

Herbert Stadelmann Head of Facility Management





People are at the heart of the campus. The employee restaurant has little resemblance to a traditional canteen, and the focus is on cooking with regional and seasonal produce. As many as 1 000 meals are now consumed by employees each day, nearly double the capacity of the old canteen. One of the most important decisions that goes against the mainstream was reached at an early stage: Every employee would continue to have their own fixed workspace rather than following a "smart working" model. The dark corridors of the 1950s have been replaced by a generous, multispace concept that provides employees with quiet zones for tasks requiring concentration, phone calls, or discussions. Schindler discovered its own new way of working, and collaboration became more important than the hierarchies reflected in the size of an employee's office. The light in the buildings is aligned with the time of day and thus with the biorhythms of the people who work there.

The park on campus was created with the utmost care, taking account of the natural surroundings. Employees can sit and relax on benches between the newly planted flower meadows and clusters of trees, comprising native species. Visitors to the park will discover drinking fountains, sports facilities and even several homes for wild bees. The paths were laid with a special light-colored asphalt surface that minimizes contribution to atmospheric heat.

Ensuring the efficient use of energy and resources was a major driver behind the transformation of the site and new buildings. Schindler wants to meet the highest environmental standards. As Herbert Stadelmann explains: "We don't waste a single kilowatt hour of energy!" The roofs of the car parks and the exterior of the building are fitted with powerful photovoltaic cells, which produce 40% of the





electricity required for the new buildings. Total energy consumption today is 35% lower than it was a decade ago, while water consumption has been reduced by as much as 60%.

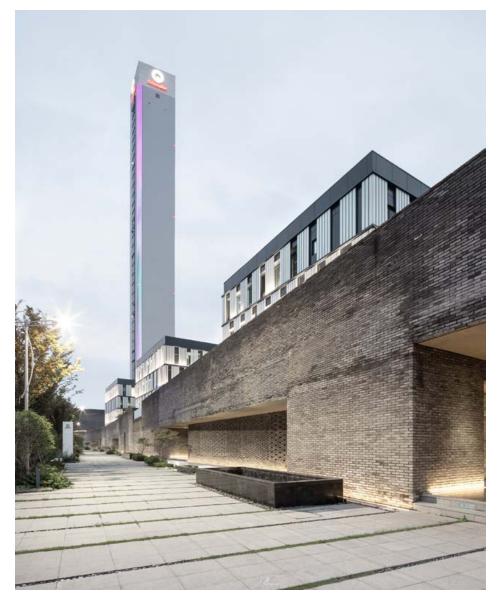
The entire campus is carbon neutral because it relies exclusively on electricity generated using Swiss hydropower. The ambient temperature within the buildings is maintained through a combined system of heat pumps and cooling units as well as thermal storage facilities in the basement. These environmental efforts earned the campus the internationally recognized Gold LEED certification at the end of 2019.

The generous, multispace concept provides employees with quiet zones.





S chindler knows that employee engagement is the key to its future growth. The company is therefore proud to be able to offer employees in Jiading (Shanghai) a modern, representative workplace that is recognized for its sustainability credentials. Built from two million reclaimed bricks, "Schindler City" was completed in 2016. The campus was designed to lead to spontaneous social interactions between employees and covers 325 000 square meters – or the equivalent to 45 football pitches.









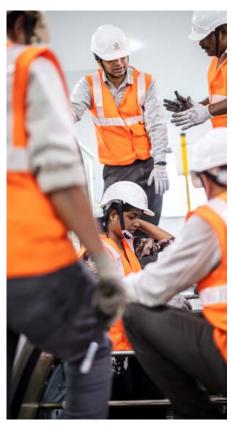
The most striking building on the campus is the 200-meter test tower, which is surrounded by an R&D center, a training center, and escalator and elevator plants. Multiple restaurants and recreation areas are available for employees. The campus was awarded the LEED Gold environmental standard and offers employees an enjoyable and productive working environment.

The campus was awarded the LEED Gold environmental standard.



Pune campus and university India

E very employee is an ambassador for the Schindler brand. This belief marked the starting point for the idea of creating a Schindler university. "The demands placed on us have changed. We recognized that it is no longer enough to train our people in the way we did before. We want to be a best-in-class learning organization which acts as a differentiator to build competitive advantage through people," says Uday Kulkarni. He was President of Schindler India for 12 years and is the inspiration behind the university, which opened in spring 2018. "In the past, our engineers received technical training and our salespeople were given commercial training," says Kulkarni.













"We want to be a best-in-class learning organization which acts as a differentiator to build competitive advantage through people."

Uday KulkarniFounder of the
Schindler University Pune

Today, they complete interdisciplinary training, since an engineer needs to be able to interact with clients and, equally, every member of the sales staff needs to have some basic technical knowledge in order to understand what the customer wants. Sales employees are therefore sent to the training shafts alongside the engineers on the Pune campus.

"The greatest challenge at the beginning was to change the mindset of employees. Since we already had a training system, they asked why we wanted to alter it," Kulkarni recalls. Today, however, all Schindler employees from India, Nepal, Sri Lanka, and Bangladesh would be pleased to receive an invitation from Pune. The modules, which take between 3 and 15 days to complete, instruct employees across all functions and levels of seniority. This is a revolutionary approach that goes beyond traditional hierarchies.







Innovation and technology

Schindler has been a pioneer in vertical transportation since the company's founding in 1874.

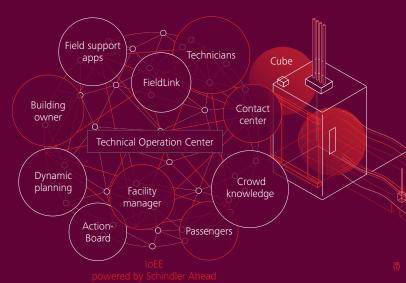
Drawing on this strong culture and legacy of innovation, Schindler continues to drive forward new systems and technologies aimed at anticipating the world's needs for future mobility and improving the quality of life in cities. Schindler has found solutions for five interrelated challenges to create benefits for customers and passengers alike in the ever-expanding urban world.



Unique user experience

The Challenge How can Schindler give customers access to relevant real-time information, increase elevator availability by detecting problems before they occur, and provide a responsive and personalized service to customers?

The Solution With Schindler's ActionBoard, customers have full transparency on every unit in their portfolio, which leads to a more seamless journey for users. The real-time support comes from Schindler's Technical Operation Centers (TOCs) – a global, interconnected network of technical specialists and data analysts working side by side to turn data analytics into tailored, concrete actions that benefit the customer. The TOCs monitor units, analyze inputs as they receive them, and close the loop between data and action whenever the system flags an irregularity.





BuildingMinds

The Challenge How can building managers and operators extract the insights they need from the multiple platforms of suppliers and service providers? The Solution A startup launched in 2019 by Schindler, BuildingMinds, aims to lay the foundation for the adoption of artificial intelligence in smart buildings. Using a one-stop "Software as a Service" (SaaS) platform, BuildingMinds enables building owners and operators to manage all their properties and service providers centrally. The company is developing a fully integrated, product-agnostic cloud solution to give real estate owners and operators greater transparency on their portfolios, and help them make decisions faster, more accurately, and more sustainably.





Transit management

The Challenge How can Schindler support the sustainable development of cities when congestion in buildings is growing worldwide?

The Solution Schindler's PORT Technology has created a suite of mobile apps and services that enable smoother traffic management in buildings by reducing waiting times and congestion. Authorized users and robots can navigate entire building complexes to personalized destinations using only a smartphone, badge, or simple IT interface (API).

The modularity program

The Challenge How can Schindler offer a seamless range of product solutions to its customers, as opposed to traditional product platform segmentation?

The Solution The modularity program is Schindler's unified product concept for the future — a fully modular — and global — elevator platform with harmonized development and production processes providing customers with a seamless product offering. The new platform is structured on modular components and subsystems linked through a new single elevator control system covering all product configurations.

The Digital Twin

The Challenge How can Schindler accelerate time to market and dramatically expand equipment data quality to prepare for artificial intelligence applications relevant to its customers?

The Solution Schindler's Digital Twin accelerates every stage of the value chain of elevators and escalators – from planning to operation and maintenance – through digital modelling and simulations. Virtual prototyping and analytics are applied in every phase of the product development, enabling continuously improving quality and safety for passengers and technicians alike. A next stage will include using Digital Twin for data insight collection and realizing the full potential of artificial intelligence within the portfolio.

Schindler Group Review 2019

Sustainability

In over 145 years of history, Schindler has grown around the world while being recognized as a responsible corporate citizen in each country where the company operates.

Global workforce conditions, the safety and engagement of our employees and passengers, the sustainable use of energy and materials, as well as improving the carbon footprint of our activities are tangible drivers of Schindler's growth. Equally important is the value of our innovations in meeting critical societal needs at a time when new transport capabilities are needed to meet the challenges of cities that are growing ever taller, denser, and more hectic.

Schindler's Sustainability Strategy 2022 was launched in 2018, reflecting Schindler's consciousness of the role it can and must play in order for the growth of cities to be sustainable. It establishes a clear framework for action on six strategic priorities that capture our most important sustainability challenges and opportunities.

Progress in meeting our sustainability goals contributes to the achievement of our corporate strategic targets. We have therefore clearly defined accountabilities and selected performance indicators to measure our progress. Our focus is to integrate these as much as possible into existing policies, management systems, and ongoing technical, business and leadership trainings. Our annual Sustainability Report provides more details on our program and discloses progress updates based on independently validated data.

Priority	Goals (2018–2022)
Enhance safety	Reduce the number of employee incidents and injuries by improving our Total Case Rate (TCR) by 20% compared to 2017
Attract diverse talent	Increase the number of women in the succession pipeline for leadership roles to 25% and promote an inclusive work culture
Create value in communities	Develop our vocational education programs to support communities.
Pioneer smart urban mobility	Increase to over half a billion people per day the number of passengers using Schindler's digitally connected elevators and escalators
Lower vehicle fleet emissions	Reduce CO_2 intensity of our global vehicle fleet by 25% compared to 2017
Increase sustainability in our supply chain	Perform independent sustainability assessments for 75% of manufacturing purchases

How our strategy relates to the United Nations Sustainable Development Goals:













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Five-year overview

In CHF million	2019	Δ%	2018	Δ%	2017	Δ%	2016	Δ%	2015	Δ%
Order intake and order backlog										
Order intake	12 123	3.9	11 669	6.2	10 989	5.9	10 374	4.1	9 967	-0.1
Δ % in local currencies	5.8		6.6		5.5		4.6		4.6	
Order backlog	9 042	4.9	8 618	6.3	8 1064		10 004	6.8	9 364	1.1
Δ % in local currencies	7.6		9.7				6.5		7.9	
Income statement										
Revenue	11 271	3.6	10 879	6.9	10 179	5.1	9 683	3.1	9 391	1.6
Δ % in local currencies	5.6		7.3		4.6		3.6		6.7	
Operating profit (EBIT)	1 258	-0.9	1 269	6.9	1 187	4.8	1 1335	13.1	1 002	-12.0
in %	11.2		11.7		11.7		11.7		10.7	
Operating profit (EBIT), adjusted	1 314	1.5	1 295	6.0	1 222	5.3	1 160	12.5	1 031	10.6
in %	11.7		11.9		12.0		12.0		11.0	
Net profit	929		1 008		884		823		747	
Net profit before exceptional items	929		948³		884		766 ^{5,6}		747	
Research and development cost	196		178		170		148		138	
Balance sheet										
Net liquidity	2 0461		2 231		2 147		2 455		1 935	
Net working capital	-600		-518		-467		-776		-791	
Total equity	3 883		3 743		3 268		2 847		2 357	
in % of total assets	36.6		37.5		37.9		34.3		28.5	
Return on equity (in %)	24.4		28.8		28.9		31.6		28.0	
Return on equity before exceptional items (in %)	24.4		27.0		28.9		29.4		28.0	
Cash flow statement										
Cash flow from operating activities	1 185 ²		1 005		810		929		1 076	
Investments in property, plant, and equipment	225		245		227		189		183	
Number of employees	66 306		64 486		61 019		58 271		56 762	

¹ Implementation of IFRS 16 – Leases as of January 1, 2019: Net liquidity is reported including lease liabilities

² Before settlement of pension obligations (CHF –157 million) and IFRS 16 – Leases (CHF 118 million) CHF 1224 million

³ One-time tax refund CHF 60 million

⁴ Implementation of IFRS 15 – Revenue from Contracts with Customers as of January 1, 2018: Order backlog is reported net of already recognized revenue for contracts with customers. Order backlog as of December 31, 2017 has been restated accordingly.

⁵ Gain on sale of operations in Japan: CHF 50 million (CHF 31 million after taxes)

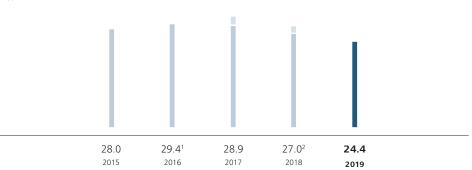
⁶ Revaluation gain ALSO participation: CHF 26 million

	2019	In %	2018	In %	2017	In %	2016	In %	2015	In %
Revenue by region (in CHF million)										
Asia-Pacific	3 055	27	2 935	27	2 769	27	2 788	29	2 756	29
Americas	3 274	29	3 047	28	2 927	29	2 726	28	2 636	28
EMEA	4 942	44	4 897	45	4 483	44	4 169	43	3 999	43
Total	11 271	100	10 879	100	10 179	100	9 683	100	9 391	100
Number of employees by region										
Asia-Pacific	25 842	39	24 594	38	22 998	38	21 480	37	20 754	37
Americas	14 939	23	14 600	23	14 186	23	13 801	24	13 728	24
EMEA	25 525	38	25 292	39	23 835	39	22 990	39	22 280	39
thereof Switzerland	4 992	8	4 812	7	4 711	8	4 741	8	4 716	8
Total	66 306	100	64 486	100	61 019	100	58 271	100	56 762	100
Number of employees by business area										
Production	4 702	7	4 798	7	4 489	7	4 321	7	4 342	8
Installation and maintenance	38 903	59	37 581	59	35 670	59	33 679	58	32 578	57
Engineering, Sales, Administration	22 701	34	22 107	34	20 860	34	20 271	35	19 842	35
Total	66 306	100	64 486	100	61 019	100	58 271	100	56 762	100
Allocation of added value (in CHF million)										
to the employees (salaries, social benefits)	4 250	78	4 021	77	3 776	77	3 516	77	3 320	77
to the shareholders (dividends)	491	9	487	9	585	12	344	7	408	9
to the company (reserves)	438	8	521	10	299	6	479	10	339	8
to the public (taxes)	291	5	268	5	246	5	251	6	267	6
to the creditors (net interest charges)	5	_	-44	-1	-10	_	-11	_	-9	_
Total added value by the Group	5 475	100	5 253	100	4 896	100	4 579	100	4 325	100

The Group's value added is defined as revenue less cost of materials, other operating expenses and charges for depreciation, amortization, and impairments. The allocation of the Group's added value shows the extent to which the above stakeholders participate in this economically relevant amount.

Return on equity before exceptional items





¹ After exceptional items: 31.6%

² After exceptional items: 28.8%

Definition of non-GAAP measures used in this report

The financial information included in the Group Review comprise certain non-GAAP measures, which are not defined by IFRS. They are used by management for the purpose of defining targets and measuring the Group's performance. These non-GAAP measures may not be comparable to similar measures at other companies and should not be viewed as a substitute for IFRS measures.

Number of employees	The number of employees is defined as full-time equivalent employees (FTE).
Order intake	Order intake is defined as the total value of orders received in the reporting period for all product lines, new installations, modernization, maintenance, and repairs.
Order backlog	Order backlog is defined as the value of all open customer contracts, net of revenue from contracts with customers that was already recognized.
Operating profit (EBIT), adjusted	Operating profit (EBIT), adjusted, is defined as earnings before interest and taxes (EBIT) in the reporting period, excluding restructuring costs and expenses for BuildingMinds.
Return on equity (RoE)	RoE is defined as net profit divided by the average total equity.
Net liquidity	Net liquidity is defined as follows: + Cash and cash equivalents + Current financial assets + Non-current financial assets (excluding the investment in Hyundai Elevator Co. Ltd.) - Current financial debts - Current lease liabilities - Non-current financial debts - Non-current lease liabilities
Net working capital	Net working capital is defined as follows: + Accounts receivable + Income tax receivable + Contract assets + Inventories + Prepaid expenses - Accounts payable - Income tax payable - Contract liabilities - Accrued expenses
Restructuring costs	Restructuring costs are defined as costs related to strategic restructuring measures.
Exceptional items	Exceptional items are defined as significant costs and income which, because of their exceptional nature, cannot be viewed as inherent to the Group's ongoing performance They include revaluation gains, disposals of Group companies, and impairments.
Changes in local currencies	Changes in local currencies are defined as impacts calculated using constant exchange rates. The change is calculated by converting the figures for the current period at the previous year's average rates and comparing the result with the figures for the previous year.

Key figures registered share/ participation certificate

	Registered share					
	2019	2018	2017	2016	2015	
Number of shares/participation certificates outstanding	67 077 452	67 077 452	67 077 452	67 077 452	68 061 802	
thereof treasury shares	328 508	370 846	489 174	556 115	1 513 747	
Nominal value in CHF	0.10	0.10	0.10	0.10	0.10	
High in CHF	244.00	238.80	224.00	193.50	171.00	
Low in CHF	184.10	183.00	176.90	147.80	125.10	
Year-end rate in CHF	237.20	190.60	220.50	177.90	169.00	
P/E ratio December 31	29.50	21.70	28.60	24.90	26.90	
P/E ratio December 31 before exceptional items	29.50	23.20	28.60	26.90	26.90	
Earnings per share/participation certificate in CHF	8.04	8.79	7.70	7.14	6.28	
Earnings before exceptional items per share/participation certificate in CHF	8.04	8.23	7.70	6.61	6.28	
Cash flow from operating activities per share/participation certificate in CHF	11.03	9.37	7.56	8.69	10.07	
Gross dividend per share/participation certificate in CHF	4.00	4.00	4.00	5.00	2.70	
ordinary in CHF	4.00	4.00	4.00	3.00	2.70	
extraordinary in CHF				2.00		
Pay-out ratio in %	49.8	45.5	52.0	70.0	41.9	

¹ Proposal by the Board of Directors

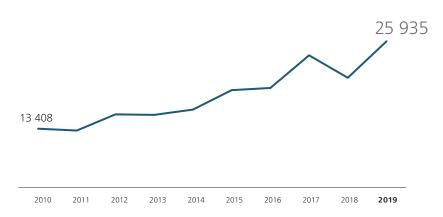
Additional information

in CHF million	2019 ¹	2018	2017	2016	2015
Total dividend					
Shares	268	267	266	333	180
Participation certificates	163	162	162	202	109
Total	431	429	428	535	289

¹ Proposal by the Board of Directors

Market capitalization 2010 to 2019 (as of December 31)

In CHF million



	Participation certificate								
	2019	2018	2017	2016	2015				
40	716 831	40 716 831	40 716 831	40 716 831	44 236 311				
	52 034	142 434	211 740	299 649	3 907 999				
	0.10	0.10	0.10	0.10	0.10				
	253.50	246.40	229.70	197.50	171.10				
	188.50	188.90	177.30	147.10	124.90				
	246.20	194.70	224.30	179.60	168.00				
	30.60	22.20	29.10	25.20	26.80				
	30.60	23.70	29.10	27.20	26.80				
	8.04	8.79	7.70	7.14	6.28				
	8.04	8.23	7.70	6.61	6.28				
	11.03	9.37	7.56	8.69	10.07				
	4.00	4.00	4.00	5.00	2.70				
	4.00	4.00	4.00	3.00	2.70				
				2.00					
	49.8	45.5	52.0	70.0	41.9				

Ticker and security number

Both the registered shares and the participation certificates are traded on the SIX Swiss Exchange. Holders of participation certificates have the same rights as holders of registered shares with the exception of attendance at the Annual General Meeting and voting rights.

	Registered share I	Participation certificate
Bloomberg	SCHN SW	SCHP SW
Reuters	SCHN.S	SCHP.S
Valor	002463821	002463819
ISIN	CH0024638212	CH0024638196

Shareholders

At the end of 2019, registered shares of Schindler Holding Ltd. were held by 8782 shareholders (previous year: 8312).

On the same date, the Schindler and Bonnard families – within the scope of shareholder agreements – and parties related to these families held 47 631 495 registered shares (previous year: 47 662 664) of Schindler Holding Ltd., corresponding to 71.0% (previous year: 71.1%) of the voting rights of the share capital entered in the Commercial Register.

Dividend policy

The dividend policy is earnings-related and provides for a payout ratio of 35% to 65% of net profit attributable to shareholders of Schindler Holding Ltd.

Financial calendar

	2020	2021
Annual results media conference	February 14	February
Ordinary General Meeting Schindler Holding Ltd.	March 19	March 23
First trading date ex-dividend	March 23 ¹	
Date of Schindler Holding Ltd. dividend payment	March 25 ¹	
Publication of key figures as of March 31	April 22	April
Publication of Interim Report as of June 30	July 24	July
Publication of key figures as of September 30	October 23	October

¹ Subject to approval of a dividend payment by the General Meeting of Schindler Holding Ltd.

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The Annual Report of the Schindler Group for 2019 consists of the Group Review and the Financial Statements.

The original German version is binding. English and Chinese translations of the Group Review are available. The Financial Statements are published in German and English.

Overall responsibility, concept, and text

Schindler Management Ltd. Corporate Communications Ebikon, Switzerland

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Christoph Stalder, Zurich, Switzerland

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Printing

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