





Air, Space and Time  
125 Years of Zehnder History

# WITHOUT THE PAST THERE IS NO FUTURE

## 125 YEARS OF ZEHNDER HISTORY

*As with my ancestors, it is important to me that we at Zehnder Group know our own history and values. That is because these are the very principles that will guide our actions on our path to the future. Indeed, looking at our past reveals that throughout our 125-year history, we have repeatedly seized new opportunities and overcome crisis. And it is this very insight that should give us confidence and trust throughout this challenging anniversary year, which has been overshadowed by the coronavirus pandemic.*

*On the occasion of our 125th anniversary, we therefore have every reason to look to the future with pride, gratitude and optimism. I am confident that we will emerge even stronger from this crisis.*

*This publication, written by historian and journalist Christoph Kohler, is a continuation of "The Zehnder Story" that was published in 1995 in commemoration of our 100th anniversary. For that reason in "Air, Space and Time – 125 Years of Zehnder", the author has focused on the more recent history of the Zehnder Group up to 2020. This era has been shaped by two strategic crossroads: firstly, our initially rather adventurous entry into the Chinese market, and secondly, the expansion of our business activities from "heating" to "ventilation and cooling". For 20 years now, these developments have been helping us to evolve into a global supplier of comprehensive solutions for healthy and environmentally friendly indoor climates.*

*What I, and perhaps all of us, are missing in this anniversary year is the festive atmosphere and shared celebrations. The COVID-19 virus has not only infected people, but also the economy. This has led to the establishment of rules of conduct and hygiene that make it impossible to enjoy carefree festivities. In light of that, we are commemorating our 125th anniversary with a measure of restraint. Our pride in what we have achieved is necessarily tempered by the humble realisation that humankind is once again confronted with a natural phenomenon that is greater than ourselves and that threatens to undermine all plans and calculations.*

*The full impact of these events cannot yet be foreseen – and will therefore have to be described in our next anniversary book in 2045.*

*Graenichen, September 2020*



*Hans-Peter Zehnder*

## FROM MECHANIC TO MARKET LEADER FOR RADIATORS

*It was not radiators, but motorcycles that first launched the name of Zehnder to fame throughout Switzerland. In the 1920s, the affordably priced light motorcycles from Graenichen became a symbol of motorised transport for the common man. In 1930, prompted by necessity, Zehnder first developed the product that would eventually lead to its long-term success as a business: the first steel tube radiator in Europe.*

The Zehnders' path to entrepreneurship had humble beginnings. After working in a music box factory for 20 years and saving up every penny he could, Jakob Zehnder built himself a small house and workshop in his home village of Graenichen in 1895. From that point on, he worked as a self-employed mechanic, performing all sorts of repairs. He also acted as a local sales representative for the German company Adler, and was occasionally able to sell a bicycle for them. Later, he expanded his product range to include typewriters, sewing machines, washing machines and motorcycles.

Jakob Zehnder had seven sons who were trained as business men and mechanics. They took an increasingly active interest in the business and encouraged their father to enlarge the workshops. This task was completed in the winter of 1911/12, when a small factory building was constructed. On 1 March 1912, Jakob and his three eldest sons founded the general partnership "J. Zehnder & Söhne". From then on, the small factory not only performed repairs and sold products, but also carried out enamelling, nickel plating and copper plating work. During the First World War, which plunged many companies into crisis, the Zehnder company continued to grow, not least thanks to some smaller "armaments orders". In other words, Zehnder occasionally produced ammunition components. Up to 118 people were employed in the workshops.

After the war, the Zehnder brothers attempted to enter the machine-building industry with the design and production of tool-grinding machines. The machines were praised for their precision, and the economic crisis of the following years was the only reason that they did not achieve business success. The brothers managed to keep their heads above water by setting up an electromechanical department that brought several new developments onto the market. The number of employees in the company had decreased to 25 by 1922.

1895 – 1986



The "Velo & Nähmaschinenhandlung" Zehnder around 1905. In the barn part of the small farmer's house the store with the window inscription "Adler-Räder". In front of the gable Jakob and Margaritha Zehnder, further left six of the seven sons.



Lina Dreier from Graenichen, the sister-in-law of Arnold Zehnder, poses behind a 110 cc ladies' model. Like all early "Zehnder", the motorcycle is still equipped with a carbide lamp.

## The Zehnder Light Motorcycle conquers Switzerland

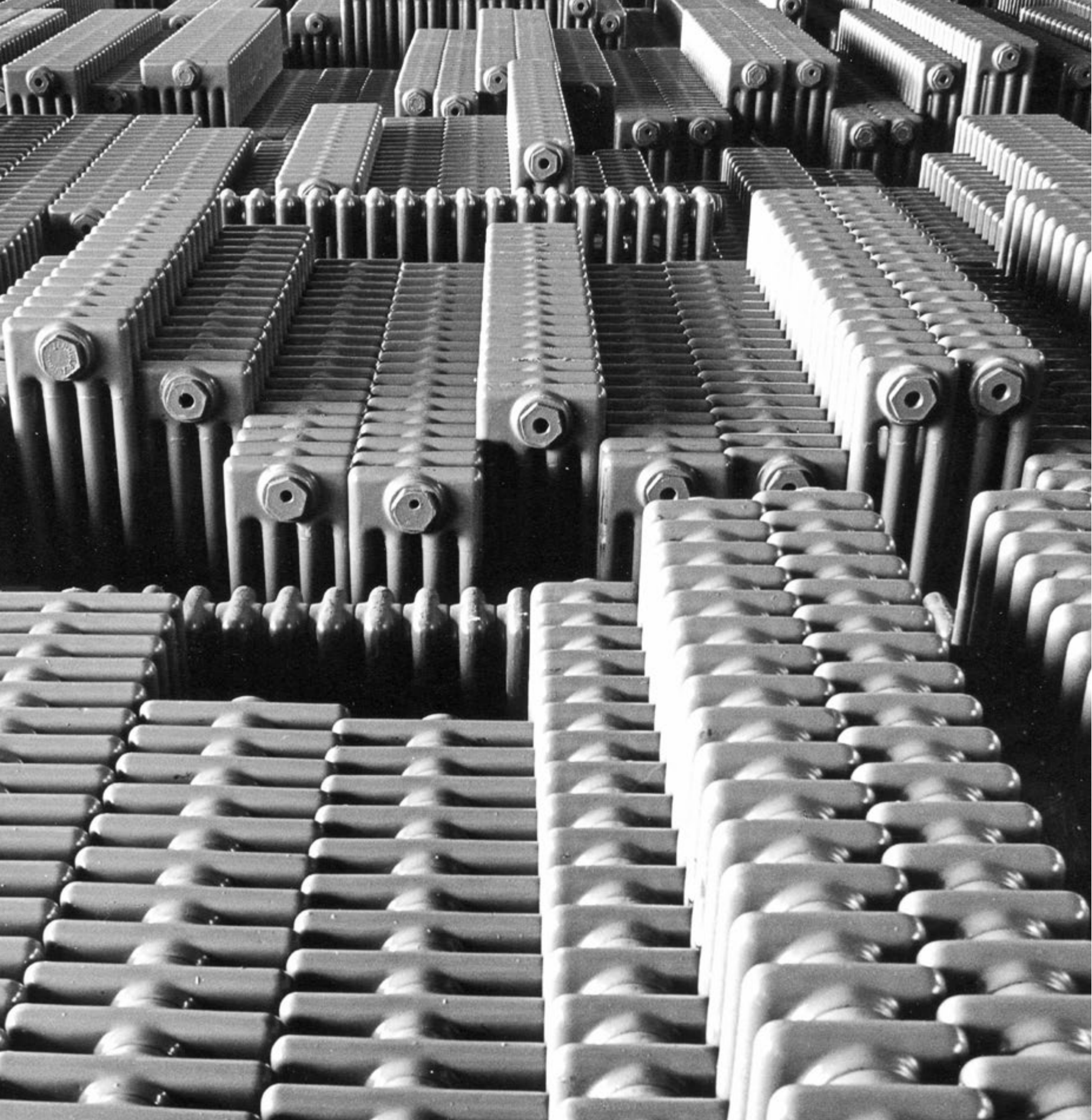
In 1923, Walter and Robert Zehnder travelled to Leipzig to watch the live assembly of a car they had ordered at the "Sphinx" automotive factory. But when they arrived, the car manufacturer was running behind on the delivery - they were missing some of the necessary components. Inflation in Germany was also running rampant, prompting the two brothers to cancel their purchase agreement and immediately set out to find an alternative investment opportunity. A short time later, they bought a light motorcycle from the Munich-based amateur inventor Fritz Cockerell, and tuned its engine once they got back to Switzerland. When the first of the 50-kilogram motorcycles left Zehnder's workshop in the autumn of 1923, they were greeted by a wave of enthusiastic buyers. The popular vehicle was affectionately known as the "Zehnderli" because it was inexpensive and affordable for a broad segment of the population.

Encouraged by this success, the Zehnder brothers started producing their first large series of 1,000 motorcycles. With the help of an investor, they also founded the incorporated company "Aktiengesellschaft J. Zehnder & Söhne" on 1 January 1924. Over the next few years, the approximately 70 company employees worked to their full capacity.

The Zehnder motorcycle even proved its reliability for everyday use and its suitability for motor sport lovers in hill and flat racing events, which were very popular at the time. There was virtually no test where the "Zehnderli" did not triumph in its category. The network of Zehnder sales representatives continued to grow and grow. Enterprising dealers set up Zehnder motorcycle clubs that only owners of a Zehnder model could join. Although countless domestic and foreign motorcycle brands were available in Switzerland at the time, Zehnder achieved a market share of 10 percent. In 1927, the company's sales figures fell again for the first time. Customers had started to demand more powerful machines, so the Zehnder brothers decided to develop a model with more than twice the engine capacity, 250 cc. This model was launched in 1928, but unlike its predecessor, the engine had shortcomings, and the new bike only achieved moderate sales. As a result, "Aktiengesellschaft J. Zehnder & Söhne" ran into cash-flow issues. A large amount of raw materials and small parts had been purchased in order to produce the motorcycles economically. But now this stock was putting more and more pressure on the company. The search for an alternative product to maximise workshop capacity began once again. At the beginning of 1930, the financial situation deteriorated to such an extent that the creditors even forced the



The Zehnder team in the major Swiss reliability race of 1925. Three Zehnder sons were in the team: Walter and Ernst (both on the far left) and Robert on the far right.



Zehnder brothers to resign from management. After that point, the company was managed by its principal creditor, initially under its old name, before being renamed “Maschinenfabrik Graenichen AG” in 1931. In 1932, the new company began producing “Standard” branded motorcycles under licence. Maschinenfabrik Graenichen then began producing Zehnder and Standard motorcycles simultaneously for a time, until it ceased production of the Zehnder models, which had become technically obsolete, in the second half of the 1930s.

### Europe’s first Steel Tube Radiators

The departure, or rather the expulsion, of the Zehnder brothers from their former family business J. Zehnder & Söhne only served to further spur on their ambitions. By chance, one of the brothers, Robert, learned from a heating engineer that the delivery times for radiators were unusually long. The installer suggested that he considered manufacturing cast iron radiators, the only type of radiator in use at the time. However, the Zehnders lacked the necessary expertise in cast iron technology. But Robert remembered that many lorries were equipped with a set of steel tubes that acted as a cooler when exposed to the air stream during transport. If you simply reversed this principle, he thought to himself, you could generate heat from steel tubes as well! And thanks to their motorcycle manufacturing experience, the Zehnder brothers were already well acquainted with steel tubes.

Their first attempts to weld steel tubes together to form sets gave the brothers cause for optimism. The prototypes held firm, even under pressure. Once series production was within reach, six of the seven brothers once again joined forces to start production of the steel tube radiators, having already applied for the patent for the device. On 15 October 1930, they set up the general partnership “Gebrüder Zehnder”.

Heating installers throughout Switzerland were quickly won over by the advantages of the Zehnder radiator. This was because, unlike cast iron radiators, which were only available in a few standard sizes, the steel tube radiator gave architects and engineers the freedom to specify the dimensions they needed. There were also added logistical advantages: The Zehnder radiator was only one third of the weight of a conventional cast iron radiator. On top of that, Zehnder’s multi-column radiator was very impressive on an aesthetic level. Its even, unobtrusive, functional shape was a perfect match for modern architecture, so much so that this timeless classic has hardly changed to this day.



*The adaptability of Zehnder radiators makes them suitable for special applications (example from the 1950s: Zurich fire station).*

*Opposite page:  
Steel tube radiators in the shipping department: By choosing a radiator with two, three, four, five or six columns, the customer decided on one of five installation depths. Each of these five basic models was available in twenty standard heights, and with the freely selectable number of elements the length of the radiator could also vary.*

The established manufacturers of cast iron radiators responded to the Zehnder brothers' success with a fierce price war. But it was to no avail, as the Zehnder radiator quickly established itself on the market. And no one could copy the patented design. Although the Zehnder brothers had to cope with a drop in sales during the Second World War due to the crisis in the construction industry, the company experienced a long period of growth after 1945. Sales figures and revenue grew at double-digit levels year after year, which meant that the management primarily had to deal with the problems of success: How can we expand our factory facilities to meet demand? Where do we find sufficiently well-trained workers?



*An image often used in Zehnder advertisement at the time: the departure hall of Zurich Kloten airport, completed in 1953. Six-column Zehnder radiators were mounted in front of the glass front.*

### Expanding abroad

The first radiators were manufactured entirely by hand. In 1934/35, the brothers invested in machines that connected the precision steel tubes to the pressed headers. Nevertheless, production still required a large staff. On the whole, very little changed in the manufacturing process between 1935 and 1965 and productivity increased only marginally.

While 50 to 60 employees worked in the workshop during the Second World War, the number of employees exceeded 100 by 1950. In the early 1960s, the number of employees reached its highest point thus far with just under 300. Subsequently, technical advances allowed for increased streamlining.

After the Second World War, the patent for the steel tube radiator expired. Now the competition was free to copy the principle of the steel tube radiator invented by Zehnder. It was not until 1956, however, that other radiator manufacturers in Switzerland started making steel tube radiators, thus becoming direct competitors of Zehnder. At the same time, a new generation was poised to take over the Zehnder family business. Two of the six general partners had already passed away when the company was converted into a public limited company in 1959. Two members of the younger, third Zehnder generation, Hans-Jakob Zehnder as delegate of the Board of Directors and his cousin Otto, were to take over the management.

In comparison to the first and second generations, who had always sought and found entrepreneurial success in Switzerland, a more open and worldly generation was now at the helm. Hans-Jakob Zehnder attended secondary school in Neuchâtel and spoke

fluent French. After studying economics at the internationally renowned University of St. Gallen, he lived in the USA for three years. There, in what was then considered the most innovative economy in the world, he aimed to perfect his English and gain experience working in a variety of companies and functions. Shortly before the death of his father Robert, he returned to Switzerland and joined Zehnder on 1 October 1953, at the age of 30 – at a monthly salary of 1,000 Swiss francs, which was quite modest even at that time.

Thus it is no surprise that the new management team dared to look beyond the country's own borders, particularly since a competitor in Germany had started production of steel tube radiators and was even planning to export them to Switzerland. Zehnder's own knowledge advantage in this important market was in danger of being lost without a fight. For Hans-Jakob and Otto Zehnder it was clear: Zehnder had to expand abroad!

However, the four of the original six second-generation brothers that still served on the Board of Directors put the brakes on the bold plans of the new management to set up their own factory in Germany. The risks seemed too great – at least if taken on their own. A trust company was commissioned to search for a financial partner in Germany to develop Zehnder's foreign business. They found what they were looking for in the southern German town of Giengen an der Brenz, home to the Steiffs, a family of entrepreneurs with a rich tradition. By the 1980s, the Steiff family had invested a 50% share in Zehnder's foreign activities.

With its risk reduced to half, Zehnder decided to build a factory in Riegel in the Breisgau region in the autumn of 1963. The step was overdue, but not too late. Sales of radiators in Germany were developing brilliantly, resulting in the factory being expanded over the course of several stages. By 1970, it had already surpassed the main factory in Graenichen both in terms of revenue and number of employees.

Emboldened by its success in Germany, Zehnder also ventured into France in 1967 – initially in the form of a dedicated sales company, confidently located on the Champs-Élysées. Five years later, Zehnder opened its second factory abroad in Châlons-sur-Marne. However, business in France proved more difficult than in Germany. The market leader Acova, which itself had made several attempts to acquire the French Zehnder company, proved to be too strong. Only after a consolidation of the sales and production company under the leadership of Philippe Nicolas



would Zehnder become profitable in France. Nicolas himself rose from factory manager in Châlons to the new CEO of Zehnder SA in France.

### New Radiator Types

During the 1950s, a major competitor began to emerge in Switzerland: the Runtal company from the city of Wil, which was also launching innovative steel radiators, such as convectors and panel radiators on the market. Through an effective advertising strategy aimed specifically at architects and developers, Runtal soon won a significant share of the market.

At that point, most other manufacturers also began including convectors or panel radiators in their product range. Zehnder, however, remained so convinced of the market success of its own steel tubular radiators that it preferred to invest in a new one, the single-column radiator. This was launched on the market in 1967. In the meantime however, the demand for panel radiators and convectors continued to rise, and Zehnder had to make the somewhat belated decision to include such models in its range. By 1972, Zehnder had caught up with the competition in terms of product diversity.

### Recession as the Spur for Diversification

The post-war years were characterised by an unprecedented and virtually unstoppable economic upswing. This made the abrupt end of the economic boom even more dramatic, when in October 1973, as a result of the Yom Kippur War, the oil-exporting Arab countries triggered an oil crisis by halting deliveries, thus accelerating the looming economic downturn.

As a supplier for the construction industry, which was particularly severely affected by the recession, the crisis also hit Zehnder with full force. The Swiss production company's sales plummeted by 30 percent in both 1974 and 1975. For the first time in decades, Zehnder was forced to lay off employees, 30 in total. "For me, this was the most difficult decision, and one that weighed most heavily on me", wrote Hans-Jakob Zehnder in his memoirs. But while other domestic manufacturers were completely abandoning radiator production, Zehnder remained determined to hold

on and defend its position as the Swiss market leader. However, in order to reduce its unbalanced dependency on the construction industry, the management made a landmark decision following an intense strategy discussion. In 1975, while still in the midst of the recession and with financial support from its bank, Zehnder acquired a stake in the measuring instrument manufacturer Haenni, a group of companies each with a factory near Bern and near Stuttgart. This marked the step towards the diversification they sought.

Over the next few years, this new measuring instrument division accounted for roughly one third of the Zehnder Group's turnover. A further 6 to 10 percent could be attributed to activities in the machine building industry, divided between a machine factory purchased back in 1963 and a mechanical engineering department at Gebrüder Zehnder. However, more than half of the Group's revenue was still being generated by the radiator business.

This area received a major boost in 1980 when Zehnder's German subsidiary merged with radiator manufacturer Beutler to form Zehnder-Beutler. Although Zehnder and Beutler were both successful mid-size businesses, they both faced major competition from other radiator companies that had already claimed significant shares of the market. The merger therefore constituted a marriage of convenience, which made all the more sense given that the two factories were situated only 30 kilometres apart and that their production facilities complemented each other perfectly.

At the same time, Zehnder succeeded in developing the most significant product innovation since its "invention" of the steel tube radiator: the towel radiator. The idea, which originated with the Sales Manager of Zehnder SA in France, was as simple as it was clever. The towel radiator allowed to heat the bathroom and dry the bath towels at the same time. This type of radiator, which would soon be copied by numerous competitors, would develop into a mainstay of sales for Zehnder over the coming decades. Since the towel radiator is ideally suited for retrofitting, Zehnder then also became increasingly active in the renovation market, which became more important during the 1980s.



*Single-column radiator as a pillar cladding around 1970. The single-column combined the modern, timeless form in an advantageous way with a low overall depth.*



*Zehnder convectors are radiators of low height (7 to 35 cm). Between the water-carrying flat tubes, fins are spot-welded to increase the surface area, which causes convection (chimney effect) of the heated air.*



*On request, the Zehnder radiator was also available bent or angled. The picture from the Lavey-les-Bains school near St-Maurice shows the radiator in an architectural function as a railing.*

Despite its growth and internationalisation, the Zehnder company remained a strictly family business. This had both its advantages and disadvantages. Zehnder faced two challenges: The first was the growing need for innovation and investment in order to survive in an increasingly international business world. That took money. The second challenge was the increasing fragmentation of the shareholder base, since the number of family members involved naturally grew with each generation. By the beginning of the 1980s, only two of the original six branches of the family were still involved in company operations at Zehnder.

After much careful consideration, the family council finally decided to open the business up to a wider public. To make this possible, Zehnder Holding AG was founded in 1984, uniting the formerly complex shareholdings structure under its umbrella. So, what next?

*Chapter 1 is based on an abridged version of "The Zehnder Story" by Andreas Steigmeier, Graenichen 1995.*

## STRATEGIC REORIENTATION

*The Zehnder Group was at a turning point. Not only was the family business daring to go public, but the fourth generation was also taking over the reins, with Hans-Peter Zehnder at the helm. Under his leadership, this industrial powerhouse rose to become the European market leader for custom-made radiators, bathroom radiators and radiant ceiling panels. The key factors in this success included sound finances, strategic vision and a high regard for its employees.*

Everything was in place. A full-page advertising campaign had been running for weeks in the Swiss national newspaper, the NZZ, introducing the Zehnder Group to a large, potentially investment-friendly audience. External financial experts had conducted a thorough audit of the company and all of its key business figures had been published. The time had now come. On 23 October 1986, at 9 a.m., Zehnder shares were traded for the first time on the Zurich stock exchange.

There is never any certainty when launching an initial public offering. Investors have often been known to punish seemingly airtight portfolios, causing the issue price to soon tumble to rock bottom. Nevertheless, Hans-Peter Zehnder remained calm. In the lead up to the initial public offering, the business journal "Finanz und Wirtschaft" estimated the intrinsic value of the traditional family-owned company to be two and a half times the issue price of 2000 Swiss francs per share in view of its assets and profitability. Investors showed a corresponding interest in the period preceding the IPO. And indeed, Hans-Peter Zehnder and his family members and employees would be delighted to see the price of Zehnder bearer shares soar by 20 percent over the next few days.

1986 – 1999

### The Initial Public Offering as Security

This spectacular start was the reward for months of meticulous preparations. The management was tasked with transforming what was previously a virtually unknown industrial enterprise into a modern public company. To achieve this, it first combined the former Gebrüder Zehnder AG and all its domestic and foreign holdings under the umbrella of a holding company. When this stage was completed on schedule in May 1985, the representative of the Credit Suisse, who was on the Board of Directors of Zehnder Holding AG, Kurt Widmer, recommended that stock certificates be issued as soon as possible. It was also a good time to make a public offering like this. IPOs had been a rarity in Switzerland until the 1980s. Since then, however, a veritable stock market fever had taken hold, and many formerly private companies wanted to profit from the rising share prices. In 1986, for example, another 25 companies ventured going public alongside Zehnder.

The Zehnders' decision to expose themselves to the ups and downs of the stock market and to commit themselves to extensive disclosure was by no means profit-driven. For example, the registered shares that allowed the two family members Robert and Erwin Zehnder, who were actively involved in the company, to continue to hold the majority of votes, were not included in the package of tradable securities. Rather, the IPO was intended to create the financial latitude needed for investments, or to cite the words of the NZZ advertisement, "The newly accrued funds will be used to strategically further the thriving development of the companies that make up Zehnder Holding AG".

In fact, the public offering more than doubled the equity capital and Zehnder accrued 55 million Swiss francs. At the same time, the IPO gave members of the family the opportunity to sell their holdings on the stock exchange at any time without jeopardising the liquidity of the company.

### The fourth Generation takes over

The IPO was a watershed moment for the company, which had previously kept its business so private. Much of what had previously been considered trade secrets now required periodic publication, such as consolidated financial statements, information on issuers and securities such as dividends, and the remuneration of the Board



Bearer share number 1 of Zehnder Holding AG, Graenichen October 1, 1986.



*In 1892 Jakob Zehnder had this picture taken of his family. Next to him and his wife Margaritha it shows the five oldest sons: from left to right Jakob (1883), Arnold (1888), Robert (1890), Otto (1884), Erwin (1886). Walter was born in the year of the photograph, eight years later Ernst. Two other boys died as infants.*



*Hans-Jakob Zehnder  
(1923 to 2018)*

*Hans-Peter Zehnder  
(1954)*



of Directors and the executive management. In addition, all events relevant to the share price, such as changes in profits, purchase offers or restructuring, had to be published concurrently. And last but not least, Zehnder's management now had to constantly work to assure shareholders, institutional investors and financial analysts. After all, share price largely reflects expectations. If investors had confidence in Zehnder's plans, the share price would rise. If they were sceptical, it would go downhill.

In day-to-day operations themselves, however, the ups and downs of the stock market were hardly noticeable. Zehnder remained Zehnder, with its focus on continuity. This was also underscored by the upcoming handover to the fourth generation of the family.

The accomplishments of Hans-Jakob Zehnder were beyond dispute. As delegate to the Board of Directors and Chairman of the Group Executive Committee, he had successfully established Zehnder in two important markets abroad: Germany and France. He never sought out the limelight, but was also not afraid to take on responsibility when the time came to make far-reaching decisions. Transparency was always something Hans-Jakob Zehnder strived to achieve. With this in mind, he informed the executive management and his family at an early stage that he would gradually relinquish his responsibilities as Chairman of the Group Executive Committee and Board of Directors in 1988 and 1993 – just in time for his 65th and 70th birthdays respectively.

Thanks to this early notification, the family council did not need to spend any great length of time discussing Hans-Jakob's successor. After all, among their own three children, two of them had chosen careers that hardly suggested that they would join their parents' company. Their son Thomas had become a medical doctor and their daughter Elisabeth a specialist in international human resources management. Only the eldest son, Hans-Peter, was qualified to take on a senior role in the family business due to his education and career: He had studied business administration at the University of St. Gallen, followed by a doctorate. Afterwards he went on to hold various management positions at the Bühler Technology Group in Uzwil, before finally joining the family business as head of the Measuring Instruments business unit, where he successfully pushed ahead with product development and market expansion. In 1988, Hans-Jakob Zehnder could therefore proudly and confidently place the operational management of the family business in the hands of his eldest child

and retire to the Board of Directors, where he would continue to support his son with advice and assistance as Chairman for another five years, helping to shape the strategic direction of the Group.

### New Building in Graenichen

Hans-Peter Zehnder found himself at the head of a company that stood on solid economic foundations and whose capital base had been further expanded as a result of the IPO. He had scope for investment, whether in terms of internal corporate development or for strategic acquisitions. The first task calling for his attention was the main factory in Graenichen, which, along with Lahr in southern Germany and Châlons-sur-Marne in Champagne, was Zehnder's most important and largest production site. The factory required an additional production line as well as a painting facility.

As the existing site was too small for this kind of expansion, Zehnder had a brand new factory built just across the road. At over 30 million Swiss francs, this was the largest investment project in the history of Zehnder. The new building not only increased capacity, but also enabled the individual production steps to be better coordinated – from the manufacture, priming and application of the coloured paint finish to the radiators to the packaging process. Operating efficiency increased considerably.



*An investment in Switzerland as a workplace: Zehnder's production plant in Graenichen as it presents itself today.*

### Market Leader

The sophisticated and ultra-modern main factory served as a signal to the competition. However, the next achievement announced by Hans-Jakob and Hans-Peter Zehnder at the beginning of 1988 was met with even greater acclaim: the acquisition of their Swiss competitor Runtal, which, with sales of 40 million Swiss francs, was roughly one-third the size of Zehnder.

Egon Runte, the founder and owner of Runtal, and Hans-Jakob Zehnder had enjoyed a friendly relationship for years. It was an open secret that Zehnder had expressed an interest in buying Runtal. Runtal was a great match for Zehnder for two reasons. Firstly, the company's beautifully designed panel radiators and convectors had an

excellent reputation among architects and planners worldwide. Secondly, Egon Runte had built up a network of licensees that stretched from North America and Europe to Japan. With its product range and international network, Runtal appeared to be a perfect match for Zehnder. But it was only after the death of Egon Runte that the first signs of progress were made. At the end of 1987 the heir, André Runte, visited Zehnder Senior and Junior in Graenichen, carrying with him all of Runtal's key figures and business documents. He wanted to sell. There was only one condition: no negotiating over the asking price. As this corresponded to the market valuation, an agreement was quickly reached after the usual legal clarifications. In January 1988, the two parties signed the acquisition agreement. It was half an A4 page long.

With the acquisition of Runtal, other Runtal holdings such as Fael SA in St-Blaise on Lake Neuchâtel joined the Zehnder Group in addition to the Wil factory. Fael SA was active in the machine-building industry, manufacturing production equipment for radiators, among other things. However, Runtal's foreign licensees were not included in the acquisition. Some of these companies were struggling with management problems and operating in the red. Nevertheless, they held enormous potential for Zehnder: direct access to new, as yet untapped markets in Europe and overseas. As a result, Hans-Peter Zehnder and his management team worked towards their goal of gradually integrating the licensees into the Zehnder Group with single-minded persistence. In 1992, the multi-year marathon of negotiations finally came to an end, leaving Zehnder in possession of all of the Runtal licences in the USA, Italy, Spain, the UK and Ireland. This made the Zehnder Group the European market leader in special radiators.



Products from Haenni: Thermometers, hygrometers and manometers.

### Measuring Instruments under Pressure

Measuring instruments were becoming a cause for concern. The division, which was much smaller when compared to the core business, was in the midst of a period of upheaval when Peter Wiesendanger took over leadership in 1988. Consequently, the engineer, economist and graduate of the prestigious ETH institute of technology was faced with several challenges at once. Modernising the product range was a particularly strenuous task. Almost two thirds of the thermometers, manometers and hygrometers produced by Haenni were still based on mechanical measuring devices. More and more customers in Switzerland and Germany, where Haenni had an excellent reputation, wanted to be able to take their readings electronically. The incorporation of suitable silicon chips represented an unavoidable technological leap forward that required long-term, capital-intensive investments.

In addition, the US business, which was crucial for measuring instruments, was dwindling. Due to the strong franc - or the weak dollar - margins had been shrinking to a barely economic level since 1985. Zehnder went on the offensive: In order to improve earnings and simultaneously expand its technical expertise, Zehnder acquired a majority stake in Viatran Corporation Inc, an American specialist in electronic pressure measurement, in 1989. In addition, manufacturing costs were expected to be reduced with the aid of new production facilities in Stuttgart and Malaysia. But the turnaround required a great deal of patience.

### Between Boom and Bust

Time is a precious resource in the private sector. If the economy deteriorates - as it did in the early 1990s - it becomes all the more valuable. After years of economic growth, the central banks in North America, Europe and Japan had to contend with rising inflation and higher interest rates. Restrictive monetary policies made investments more expensive and plunged the global economy into a crisis. In Switzerland, the construction industry slid into a deep recession. And what about Zehnder? Zehnder was able to cope with and even go beyond compensating for the downturn in its domestic market, although that accounted for one third of the Group's sales. In total, between 1990 and 1994, the Group's turnover grew by an average of 11 percent - per year! The Zehnder Group's costly geographical diversification was paying off.

The German market, which was experiencing a unique growth spurt as a result of reunification, made a significant contribution to this success. The pent-up demand for construction in the new federal states triggered a genuine investment mania. Everyone wanted to profit from this trend, but only those who were able to act quickly could gain crucial market shares. As a result, Zehnder rapidly expanded its sales organisation in Germany towards the East, simultaneously launching a marketing campaign that was unprecedented at the time. At great expense, Zehnder ran several TV commercials on German channels in 1992. For a relatively modest sum, Zehnder also became the main sponsor and jersey sponsor of SC Freiburg, which at the time was still playing second division Bundesliga football. A year later, the team climbed to the top tier under legendary coach Volker Finke. Now the Zehnder logo beamed through the television to millions of spectators every week during sporting events. The advertising campaign began to have an impact. By 1992, Germany had already accounted for more than half of the total Group turnover, and in the following years, the neighbouring country remained the Group's top performer.



In order to increase awareness in the growth market of Germany, Zehnder becomes the main sponsor of SC Freiburg in 1992, which plays football just a few kilometres away from the two production sites in Lahr and Riegel and is promoted to the 1st Bundesliga in 1993. In the picture: Wolfgang Fiedler, Managing Director of Zehnder Germany, Uwe Spies, SC Freiburg striker, and Achim Stocker, the legendary president of SC Freiburg.

## A Unique Opportunity

The company's success continued to stem from its exclusive range of radiators, which then consisted of 16 basic products under the two brands of Zehnder and Runtal. In addition to the classic multi-column radiators, the most important sales contributors included panel radiators, convectors, bathroom radiators, flat tube radiators and radiant ceiling panels. The Zehnder Group became one of the market leaders in the medium to high price segment – not only in Germany and Switzerland, but throughout Europe. Nevertheless there was still room for improvement, particularly in France. There, the market was dominated by Acova, which was about four times the size of the second contender in the industry, Zehnder France. The dilemma was clear: Acova generated nearly 70 percent of its total revenue in France through licensed products – from Runtal! Gaining market share seemed impossible under those circumstances.



*Zehnder Nova Neo, heating panel  
with fan for cooling and heating.*

However, in 1990 a scandal shook Acova's parent company, the mineral water producer Perrier. During a routine investigation, a laboratory in North Carolina, USA, found traces of the carcinogenic compound benzene in several Perrier bottles. As a result, the company withdrew 280 million bottles from the worldwide market and sales collapsed. In order to avoid endangering the liquidity of its core business, Perrier was forced to divest a number of subsidiaries as quickly as possible. Even Acova landed on the sales list.

In 1991, the information memorandum found its way to Hans-Peter Zehnder's desk. This was a massive opportunity. Acquiring Acova would not only make Zehnder the undisputed market leader in France, but would also resolve the complicated situation with the licensed products. But there were some critical voices on the Board of Directors. With the additional 650 employees and a sales revenue of 95 million Swiss francs from Acova, the balance within the Group would shift to the radiator business. Radiators would increase to nearly 80 percent of total sales, while other branches of the business, such as measuring instruments, would be further marginalised. Such an imbalance would undermine the diversification strategy that the company had employed so far. The risk buffer that measuring instruments and other investments had been able to offer so far would simply be too small.

Management is all about choosing what's worth more: risk or opportunity? The opportunity to become the undisputed leader in one of the world's largest markets for radiators? Or the cluster risk of an unbalanced dependence on the economically

vulnerable radiator business? The Board of Directors ultimately prioritised the opportunity over the risk and unanimously approved a change in strategy. In the future, Zehnder would focus on its core business with radiators and enter the bidding race for Acova.

## Restructuring the Group

However, the international tender specification attracted not only the attention of the competition, but also that of investment companies from outside the industry. Their aim: Buy Acova, upgrade it and sell it on again later – at a big profit, of course. To Zehnder's disappointment, one such private equity firm from England won the bid. What now?

The general expectation was that, rather than continuing to run Acova forever, the new owners would play for time in order to drive up the price, so Zehnder did not give up hope: it continued to pursue its change in strategy by focusing on the core business. In 1991, the Group sold its stake in the Swiss packaging specialist Walke. The proceeds from the sale could be used to improve the bid for Acova. But it was in vain. It was only when the British owners put Acova up for public tender again in 1994 that Zehnder got its chance. The purchase: 120 million Swiss francs.

The restructuring of the Group that the Board of Directors had agreed on began to take shape more clearly. The top priority was to achieve even greater market presence and open up new sales territories in the core business in order to expand market leadership in the three segments of custom radiators, towel radiators and radiant ceiling panels. Geographical latitude with strong market roots as protection against economic risk became the Group's main aim.

This change in strategy called for a further consolidation of resources. Consequently, the Zehnder Group gradually divested all of its holdings outside of the radiator market, starting with Fael SA in 1994 and its own battery division in 1995. It also succeeded in finding buyers for the electronic measuring instruments sector, consisting of the factory in Malaysia and the shares in Viatran, by 1996. Only the Haenni Group, with its sites in Switzerland, Germany, France and the USA proved challenging to sell, partly as Zehnder only intended to sell it to an investor or competitor as a whole. Again, patience was required.



## A Misunderstanding over the Joint Venture in China

In the middle of this restructuring process, a high-profile visit was announced in Lahr. In the spring of 1995, Baden-Württemberg's Minister of Economic Affairs, Walter Döring, wanted to present the local model company Zehnder as a potential business partner to a Chinese delegation of representatives of a large state-owned company. However, it soon became clear that the factory tour was a misunderstanding. The Chinese had come to Germany to visit state-of-the-art energy companies, and by this they meant nuclear power stations, not radiator factories.

Nevertheless, the visit still had its consequences for Zehnder. The CEO of Zehnder GmbH in Germany, Wolfgang Fiedler, managed to reverse the disappointing visit from China to a certain extent and headed off to China to look for opportunities. Was there not a sales market for Zehnder in this up-and-coming country? If so, then the distance would necessitate building a production site there. In China, such businesses could only be set up as a joint venture with Chinese state-owned companies – just as Schindler, the first Western company in the world to establish a presence in China, had been doing successfully since 1980.

Schindler provided Zehnder with important contacts in Chinese state-owned enterprises – for example to Schindler's joint venture partner, the China National Construction Machinery Corporation (CCMC). And indeed, the state-affiliated company, together with the Beijing General Corporation of Building Materials Group (BGCB-MG) of the Beijing Municipal Construction Department, was interested in cooperating with Zehnder. The aim of the cooperation was to set up production facilities for multi-column radiators near Beijing. In addition to land, the Chinese state-owned companies would contribute 40 percent of the share capital of 24.5 million US dollars, while Zehnder would contribute the expertise and the remaining 60 percent of the share capital.

Zehnder's multi-column radiators would gradually replace the heavy cast iron radiators commonly used in China in the booming city of Beijing – according to the planning specifications of the Chinese company. Zehnder's initial feasibility study was impressive. A city with practically as many inhabitants as the whole of Switzerland, with annual double-digit growth rates and an unfettered construction industry was waiting to be developed as a potential market – and what was more, no foreign competitor for steel radiators had established a presence in that market as yet. It was a

win-win situation. Zehnder would supply the technology, while the Chinese partners would secure a purchase and profit guarantee for the newly founded Beijing Zehnder Radiators Company Ltd (BZR). Zehnder would be investing approximately 50 million Swiss francs in funding and machinery in this project: a factory which was to be built in Beijing, 8,000 kilometres away and infinitely alien. If only it would all go well ...

## New Labor Markets in the East

While Zehnder was still opening up the Chinese market, it had to maintain or ideally expand its first-class market position in Europe. A market segment in which Zehnder once played a pioneering role was becoming pressurised: towel radiators. First launched by Zehnder in 1979, the "Universal" had become a timeless classic thanks to its slim design. However, its success had attracted copycats who created cheap imitations. They benefited from the fact that, unlike other special radiators, towel radiators are not made to measure, but sold from stock. Regardless of the sales market, this allowed them to produce large-scale series at low-cost locations, and the stock could later be supplied to large regional warehouses.

A geopolitical turning point exacerbated the issue: the collapse of the Soviet Union. After 1991, the former communist satellite states in Eastern and Central Europe were transforming into liberal market economies at record speeds, attracting foreign investors – including competitors of Zehnder – with their large workforces. A destructive price competition was looming, posing a threat first and foremost to Zehnder's expensive Swiss production sites: Graenichen and Wil.



*In the famous Great Hall of the People, Hans-Peter Zehnder signs the joint venture contract with two Chinese companies associated with the state in 1996. The pompous staging is no coincidence: after years without foreign investment, Zehnder is the first Western company to invest in Beijing again.*



*Ground-breaking ceremony on a green field in Polish Silesia. Here, in Boleslawiec, Zehnder towel radiators will be manufactured from 1998 on.*



In order not to completely jeopardise Switzerland as a production site, the Group Executive Committee and Board of Directors under Hans-Peter Zehnder adopted on a cost-cutting programme. There was no way of avoiding a relocation. Even extensive automation of the main factory in Graenichen would not be enough to keep pace with the prices of the competition. And the leeway for internal optimisation had been exhausted, as Zehnder and Runtal in Switzerland had already merged at an organisational level. The question was no longer if, but where production would be relocated.

Locations in the Czech Republic, Slovakia and Poland were all being considered. The choice went to the Polish city of Boleslawiec, a town with approximately 40,000 inhabitants in western Silesia. In addition to the favourable labour costs, the location was attractive due to its excellent transport connections. From 1998 onwards, the majority of Zehnder's towel radiators were manufactured in the ultra-modern factory there.

#### Closure of the Runtal Factory

As necessary as the relocation was for the long-term survival of the company as a whole, it was also going to affect every single employee – including Hans-Peter Zehnder, who was responsible for the restructuring. One January morning in 1996, he personally stepped in front of the 110 employees of the Runtal factory in Wil to announce that the production site would be shut down – as of March 1997. His aim was to provide transparency at an early stage so that every employee would be able to change direction in their career. Nevertheless, the shock went deep. At least some of the workforce from Wil accepted Zehnder's offer and found new employment in Graenichen.

Even the two factories in Lahr and Riegel in southern Germany, which had been working at full capacity for years, were unable to escape the general economic situation. After the building boom in Germany reached its peak in 1995 with over 600,000 newly built apartments, the brief flash sparked by reunification had extinguished. A deep structural crisis hit the construction industry; hundreds of companies went under and hundreds of thousands of jobs were lost. The struggle for survival drove prices to an all-time low, while Zehnder's competitors were throwing their multi-column radiators onto the market at rock-bottom prices. Once again Zehnder had to react quickly to defend the Germany site. Here the Board of Directors of the Zehnder Group launched a counter-attack and invested several million Swiss francs in the German factory.

*Opposite page:  
Zehnder Toga with lateral  
connections.*

## Geographical Risk Diversification

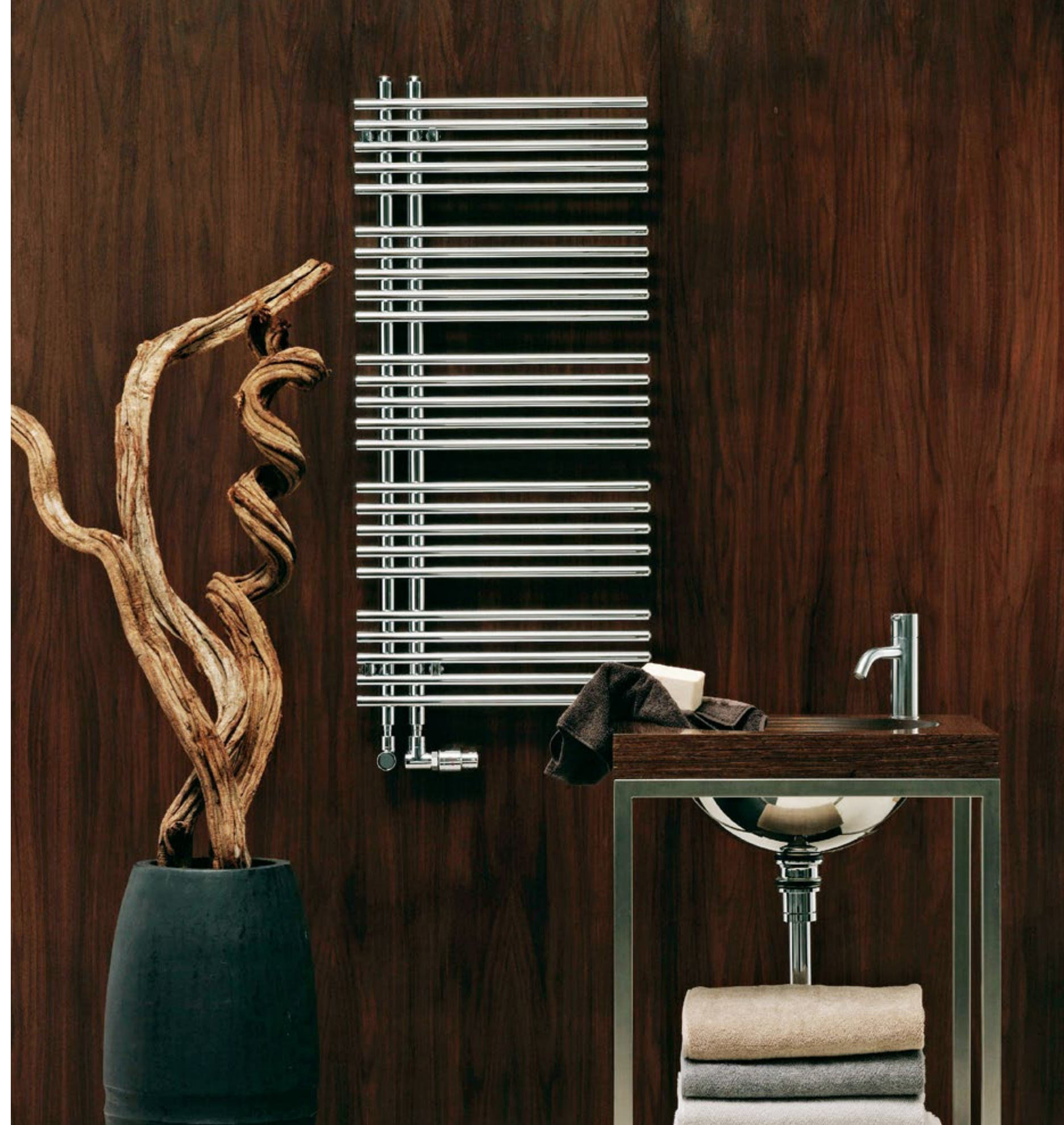
The weak earnings from Zehnder Germany were nevertheless reflected in the Group balance sheet. For the first time since the IPO, Zehnder had to cope with a drop in sales in 1996 and 1997 - of 3 percent. The Group had geographical diversification to thank for the fact that the slump in its largest sales market was not more significant. Strong growth momentum was emerging in France, and that was not something to be taken for granted. After all, the integration of Acova, a company steeped in tradition, with the Zehnder Group was a delicate process. But under the auspices of the experienced and well-connected Philippe Nicolas, both companies quickly learned to appreciate the advantages that the other had to offer. Acova contributed its marketing experience, while Zehnder provided the expertise in terms of efficiency and quality assurance. This amount of know-how under one roof, plus the outstanding market position in France meant that the country would become the Zehnder Group's sales leader over the next few years.

Southern Europe was also on the upswing, in contrast to Germany and Switzerland, as construction volumes were rising steadily there. In Spain, for example, around 500,000 new homes were being built each year. On top of that, conventional cast iron radiators were increasingly being replaced in renovation works by products made of steel or - as was particularly popular in Southern Europe - aluminium. However, Zehnder did not occupy this niche, which considerably weakened its market position. As the Group leader for radiators, Philippe Nicolas remained on the lookout for possible acquisitions or partnerships - unsuccessfully at first.



*More lightness: In 1998 Zehnder bought the traditional Italian company Faral, which manufactured radiators from aluminium. In the picture, melted aluminium flows into the container, which is then taken to the die-casting machines.*

*Opposite page:  
Design icon: The Zehnder Yucca bathroom radiator in asymmetrical design.*



## A Near False Start

At the end of the 1990s, the burden on Zehnder management was enormous. Everything was happening at once, from the integration of Acova in France and the challenges in Germany and Switzerland to the development of the Polish site. However, the biggest risk was the multi-million dollar commitment that they had made across an enormous political, cultural and geographic gulf: in China. Hans-Peter Zehnder was more and more aware that he needed an intermediary in China who could look after things on the ground. In short, he needed Peter Wiesendanger.

The former top manager of Zehnder had actually retired from the operative side of the business and joined the Board of Directors of Zehnder, while devoting himself full-time to studying psychology. But when Hans-Peter Zehnder went looking for a delegate to send to China at a meeting with the Group Executive Committee and all eyes turned to the student, he accepted the challenge. Wiesendanger's first visit to Beijing was sobering. Virtually everything went wrong. Although construction of the factory was progressing, the second Chinese partner, CCMC, had not contributed its portion of the financing. Despite tough negotiations, it was not possible to persuade the state-owned company to make a payment. Zehnder had no choice but to fill in the gap itself and expand its own stake.

## A Breakthrough in China

Thanks to this decisive intervention, the factory located on the outskirts of Beijing was able to start operating with a slight delay in September 1997. But this was a prelude to another series of mishaps and problems. The local management was unable to cope, and before long Peter Wiesendanger had to pull the plug and fire the general manager. He hired a replacement himself: Zhangeng Guo. The young engineer, who had completed his dissertation at the Technical University of Stuttgart in 1992, impressed Wiesendanger with his technical competence and flair for sales. In 1997, Guo was appointed the new Managing Director of the Switzerland-Germany-China joint venture.

Under the terms of the contract, Zehnder took over responsibility for production, management and finance in the joint venture, while the Chinese partner took care of the sale of the radiators under state-directed economic guidelines. However, the

*Opposite page:*

*We made it! The Beijing Zehnder Radiators factory in Tongzhou starts production in 1997.*



state-owned company only felt partially bound by these conditions. To Peter Wiesendanger's astonishment, the competitive rivalry that dominated Beijing's construction industry was as fierce as in any capitalist country; it would be very tough for Zehnder's unknown and much more expensive multi-column steel radiators to beat the cast-iron equivalents made by their local competitors. There would be no progress here without marketing, so the new managing director Zhangeng Guo took the marketing and sales activities under his wing as well.

Cultural differences were quickly revealed, though at times they also presented opportunities. For example, while the multi-column radiator had become a standard product in Europe, to the Chinese its slim design and precise finish seemed to come straight out of the future. Wiesendanger and Guo soon realised: This radiator had what it took to become a status symbol! And status symbols were very much in vogue among the growing upper class in China. So from that point on, the Zehnder representatives in DIY stores wore gold waistcoats, as they were not only selling radiators, but also a luxurious lifestyle. Metre-high advertisements were placed in Wangfujing Street, the most expensive shopping district in Beijing, with the slogan, "Zehnder turns every apartment into a luxury home." Advertisements were also placed in the ticket jackets for international airlines flying to Beijing. The marketing campaign worked. Over the next five years, sales increased from 20 million yuan (approx. 4 million Swiss francs) to over 180 million yuan (approx. 35 million Swiss francs).

In the meantime, Zehnder had cleverly expanded its portfolio in its European home market. Having gone on the hunt for a producer of aluminium radiators that would be interested in working with Zehnder, Philippe Nicolas found the right candidate in the province of Modena in Italy. Faral S.p.A., a traditional producer of inexpensive and extremely successful aluminium radiators, had started to expand its range several years earlier to include steel radiators - at a high cost and with fatal consequences. In 1998, the company was facing bankruptcy and was searching for a buyer. Zehnder seized the opportunity.

## A Strong Start to the New Millennium

The measuring instruments business was still a work in progress. Zehnder lacked the critical size to catch up technologically with its competitors through major investments. In 1999, a buyer was finally found for the Haenni Group. The Swiss CGS Investment Group acquired all of its assets. This safeguarded the immediate future of the employees in Switzerland, Germany, France and the USA. The sale was a strategic milestone for the Zehnder Group, which could now devote its full attention to the radiator business. This enabled the Group to enter the new millennium in a stronger position and with a clear focus - the radiator business. Since the IPO in 1986, sales had more than tripled to over 442 million Swiss francs and the number of employees had doubled to nearly 2,200. This growth was due in no small part to strategic foresight when it came to acquisitions, as well as skilful market positioning. These were success factors that would remain crucial for the development of Zehnder in the 21st century.

## ALL ABOUT CLIMATE

***By the end of the 20th century, Zehnder had become a global powerhouse for the production of steel radiators. But a new trend was emerging: low-energy houses with ventilation systems that did not require radiators. Did radiators still have a future? New ideas were needed but without losing sight of the tried and true - a balancing act that proved successful.***

“Gouverner, c’est prévoir”, or, as Hans-Peter Zehnder always says, “Leadership means planning ahead”. And for him and his team, that meant recognising trends, being open to new ideas and seizing opportunities. At the beginning of 2000, a memo landed on the desk of the company boss. The sender, comfoHOME, did not strike him as familiar, but nevertheless, he leafed through the documents with growing interest. The small company was owned by ETH Zurich graduate and engineer Ruedi Kriesi and economist Heinz Uebersax. Their product was a new type of heating/ventilation system that bypassed the need for radiators. Was this selling memo a provocation? Not at all. Hans-Peter Zehnder was also well aware that for some time now, builders had been constructing “low-energy” houses in Switzerland and even more in the Netherlands and Germany; in these houses, the indoor climate was regulated by a ventilation system combined with underfloor heating. And the company head was also well aware of another simple truth. Radiator technology was practically exhausted. A member of the Board of Directors, Adrian Zehnder, Hans-Peter Zehnder’s uncle, had pointed out this imminent change in trends on several occasions. However, due to its continuing strong market position, Zehnder had so far lacked any urgent need to rethink the indoor climate question and analyse alternative technologies. But now, the comfoHOME memo meant that a concrete offer to buy was on the table. And then of course, “Gouverner, c’est prévoir”.

### More Comfort, Less Energy

The brain behind comfoHOME technology was Ruedi Kriesi. Since completing his studies, the full-time head of the energy department of the Canton of Zurich had been driven by the question of how to improve energy efficiency in homes. In 1990,

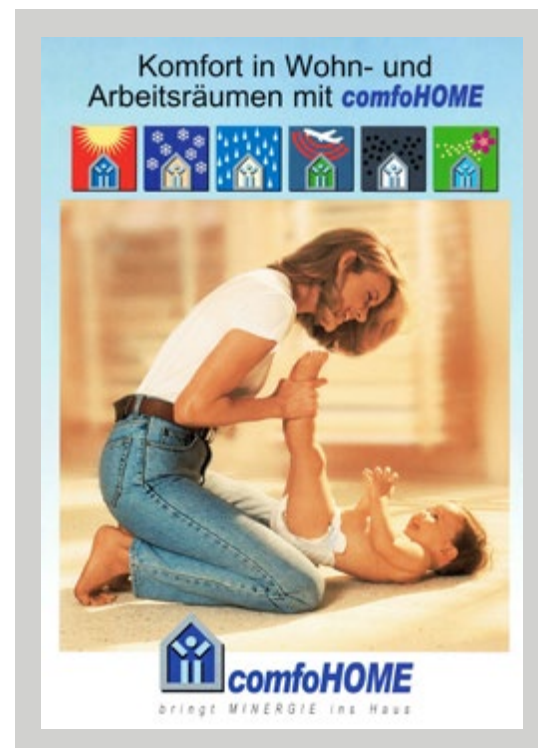
**2000 – 2020**

when the “economic and efficient use of energy” was enshrined in the Swiss Federal Constitution, he teamed up with an architect to build the pioneering “zero-heating-energy estate” in Wädenswil, which was comprised of five semi-detached houses, including his own. Kriesi’s vision was to reduce energy consumption almost to zero without compromising on comfort. To minimise heat loss, he relied on controlled ventilation in addition to thick insulation, compact construction and efficient heating systems. Instead of supplying unfiltered fresh air via opened windows, a sophisticated distribution system controlled the air exchange. The centralised ventilation unit recovered a large percentage of the heat from the extract air by means of a heat exchanger. In winter, the soil preheated the outdoor air. Regardless of whether there was humid heat or dry cold outside – the indoor climate always remained equally pleasant. What was more, zero-heating-energy houses achieved this level of comfort with one tenth of the energy requirement of a “normal” new building!

To market this building concept, Kriesi joined forces with Heinz Uebersax, the owner of UC Uebersax Consulting, a company that specialised in management consultancy, in 1992. In the mid-1990s, they built several show houses together, demonstrating the advantages of a holistic building concept with well-insulated, sealed casing, where climate control was provided via underfloor heating, ventilation and domestic hot water preparation. But they had yet to make a resounding success. The comfoHOME was seen as an energy-saving house, and these were considered unattractive, expensive and unsellable – a fad for the eco-friendly. So the crucial question was how to convince building owners, tenants and politicians of the importance of energy efficiency.

### The Birth of Minergie

In 1995, Heinz Uebersax, a shrewd brand strategist, proposed the creation of a quality label that was independent of comfoHOME to help promote a positive image for comfortable, energy-efficient buildings: MINERGIE. In 1996, he and Ruedi Kriesi succeeded in convincing the Zurich construction director (and Ruedi Kriesi’s most senior superior) of the benefits of this label and distributed a promotional brochure for those interested in construction within the Canton of Zurich. The following year in a high-publicity event, the first 200 buildings were awarded the Minergie label by Zurich’s Cantonal Government Councillor Hans Hofmann. The Canton of Berne also jumped on the bandwagon, and in August 1998 the National Conference of Energy Directors finally recognised the Minergie label and approved the founding of an independent Minergie association. Minergie thus became a synonym for energy-efficient construction.



*A momentous step: 2001 Zehnder takes over the start-up company comfoHOME specialized in residential ventilation.*

### A Second Economic Pillar

comfoHOME also benefited from the growing awareness of the Minergie label. Nevertheless, Uebersax and Kriesi lacked a strong financial partner with access to sound distribution channels, who at best might even have a strategic interest in the expertise of comfoHOME. The two friends sounded out certain companies whose business would be jeopardised by the emergence of low-energy buildings with underfloor heating systems, including manufacturers of radiators such as Zehnder.

The sales offer on comfoHOME undoubtedly provided Zehnder with an opportunity to acquire extensive know-how in exchange for a relatively modest investment. But did it really make sense to build up a completely new business segment from practically nothing? Or was it wiser to concentrate on their traditional strengths? For months, the Board of Directors and executive management of Zehnder weighed the pros and cons. Then Zehnder made its move and acquired UC Uebersax Consulting’s products and registered trademarks for comfoHOME, the comfoFRESH air distribution system, the comfoTUBE plastic air distribution tube, the comfoAIR ventilation unit and the comfoBOX compact energy unit. Ruedi Kriesi resigned from his position with the cantonal energy department to become the Managing Director of comfoHOME AG, which had been newly founded in 2001.

### The Radiator Market in Transition

comfoHOME was a promise for the future – but Zehnder’s present was still very much determined by radiators. After several challenging years, the economy picked up again at the turn of the millennium. Virtually all the factories were running at full capacity, and Faral in Italy was also generating a profit. In 2001, the Zehnder Group reached record sales of over 480 million Swiss francs. Nevertheless, the structural transition in the radiator business was becoming increasingly apparent. On the one hand, the prevalence of underfloor heating systems had created excess capacity, which had sparked a fierce price war. In order to remain profitable, Zehnder had to permanently reduce its costs. On the other hand, wholesale business was becoming increasingly important, to the point that Zehnder was generating roughly half of its sales through that distribution channel at the time. In order to be prominently represented in wholesalers’ showrooms, suppliers had to offer a comprehensive product portfolio, ideally ranging from inexpensive standard products to exclusive premium models.

## An Unsuccessful Acquisition

That was why Zehnder was also considering expanding its product range. The fastest way to achieve this would be to acquire a manufacturer of inexpensive panel radiators. In 2001, the Kermi Group from Plattling in Bavaria was put up for sale. In addition to its main business of panel radiators, the Group also offered a range of towel radiators and convectors – just like Zehnder. Its modern factory in Stribro in the Czech Republic and its production of shower enclosures would also provide an interesting diversification opportunity for Zehnder. On the whole, the overall package was attractive.

During the bidding process, Zehnder's Board of Directors increased the bid to 130 million Swiss francs, but to no avail. Arbonia – Zehnder's biggest competitor on the European radiator market alongside the Italian company Irsap – finished ahead, meaning that Zehnder's entry into the panel radiator business had to be postponed. It was difficult to assess the impact of Arbonia's acquisition of Kermi on the special radiator business. As a precaution, Zehnder reviewed its books with the aim of optimising operating efficiency in both production and marketing. All sales activities were collected under the umbrella of the national companies so that wholesalers and installers only had one contact point in each market. From then on, the factories also formed independent organisational units, separate from sales. By separating sales and production, the Group aimed to reduce local dependencies, because up to that point, the sales teams had felt a responsibility to their own national factories. In turn, production managers often gave priority to orders for the domestic market. In the future, however, each sales unit would be on equal footing, which would make the Group-wide network of highly specialised production lines more effective.

## Adapting the Business Model

Meanwhile, Ruedi Kriesi was pressing ahead with his marketing efforts from the small comfoHOME office in Schlieren, which housed just four employees. The comfoHOME showpiece was the comfoFRESH air distribution system. While conventional ventilation systems had a tree-like structure with a central tube and several outgoing tubes, with comfoFRESH, the individual tubes to the rooms were directly connected to a manifold box installed right beside the centralised ventilation unit. This star-shaped distribution system ensured a highly efficient air exchange. The new air distribution

tubes, which were made of plastic instead of sheet metal, also proved their worth. They were only a fraction of the weight, easier to transport and much simpler to install. In addition, they had a smooth inner skin that offered less resistance to the air flowing through it and therefore required less cleaning.

Although sales of comfort ventilation systems were encouraging, they were too slow to even suggest that this new business area would become a second economic pillar of the Zehnder Group. There was some vital piece missing from the business concept – but what? To answer this question, Peter Wiesendanger, Zehnder's tried and tested crisis manager, took a close look at the young company. He quickly found the weak point. As long as it did not produce and sell its own components, comfoHOME's earnings base would remain narrow. Although Ruedi Kriesi had developed a ventilation unit, it would take years to make it competitive. By then, considerable shares in the important markets of Switzerland and Germany would be lost. What was needed was a rapid technological advance, a further acquisition. The failed acquisition of Kermi meant that the funds were still available.

## The new Business Division Takes Shape

Wiesendanger had his sights set on producers from the Netherlands and Germany, where the construction of low-energy houses had been booming for some time now thanks to government support. At the end of 2001, Wiesendanger learned that Econosto, a Dutch conglomerate, had fallen into financial difficulties and intended to sell its "silverware": Europe's number one in domestic ventilation systems, the StorkAir Group from Zwolle in the Netherlands.

Like Zehnder, StorkAir had had an eventful history. Founded in 1937, the company originally produced hair-dryers and later became a leading manufacturer of roof and interior fans. When the trend towards low-energy houses began, the management decided to enter the comfort ventilation sector – a business area that promised high growth rates and synergies with the ventilation business. In 1994, StorkAir launched the first ventilation units featuring heat recovery, which became the standard in Holland and Belgium. However, the financial expenditure on research and development was considerable and constantly eroded the earnings base. In order to increase its economic latitude, StorkAir joined the industrial group Econosto in 1998. However, after only four years, the Group was forced to put StorkAir up for sale again.



After all of this back and forth, it was no wonder that the CEO of StorkAir, Paul Jansen, paid particular attention to factors such as stability and continuity when selecting the buyer. In contrast to its German competitors, Zehnder scored highly when it came to assurance that it would retain the management of StorkAir in Zwolle. The companies also seemed to be a good match from a cultural point of view: both shared a similar history and were distinguished by their commitment to quality, long-term vision and financial stability. But in the end, the price was the deciding factor, of course. And this time, Zehnder won by a nose, leaving their German competitor empty-handed. In May 2002, the Zehnder Group welcomed over 200 new employees in Holland and Belgium.

### From comfoHOME to Comfosystems

And just like that, Zehnder was at the top of the league of European manufacturers for comfort ventilation systems. As with previous acquisitions and joint ventures, it was the combination of courage and opportunity, of calculation and coincidence that allowed Zehnder to reach its next milestone. As early as its first year under Swiss ownership, StorkAir was able to increase sales by over 10 percent.

In the Netherlands and Belgium, StorkAir ventilation components were the undisputed leaders with a 60 percent share of the market. In contrast, StorkAir's foreign business was still in its development stage. To boost sales in Germany, Zehnder gave notice to the exclusive agent there and began managing sales itself via the profit centre in Lahr. The market was highly competitive with some 50 suppliers.

The situation in Switzerland was different. Here, the Macosy sales company had succeeded in becoming the market leader thanks to its exclusive distribution rights for StorkAir products. The Zehnder Group inherited this position when it took over Macosy in October 2002. The new subsidiary was consolidated within the Group with comfoHOME to form Zehnder Comfosystems AG, based in Wädenswil.

*Opposite page:*

*How a comfort ventilation system works: Fresh outside air enters the heat exchanger of the ventilation unit (white box) via the intake pipe (green). Supply air pipes (red) distribute the tempered and filtered air in the house, return air pipes (yellow) lead the exhausted air back into the heat exchanger, where the heat in the exhaust air is transferred to fresh outside air. The remaining exhaust air is then transported outside via the exhaust air pipe (brown).*

*Following double page:*

*A successful product: Zehnder's ceiling-mounted radiant panels in the Härkingen distribution centre of Swiss Post.*





## A New Heat Exchanger

Peter Wiesendanger was becoming increasingly concerned about the linchpin of every comfort ventilation system: the heat exchanger that was fitted as standard in every comfoAIR model. As the name suggests, the heat exchanger took up to 95 percent of the heat out of the extract air from the living areas and used it to heat the supply air. Without the heat exchanger, low-energy houses could not exist. This was why Zehnder acquired the StorkAir Group and its subsidiary Recair, which manufactured the heat exchangers. However, Recair only manufactured them under licence. Without a patent, Zehnder would always be dependent on a third party – a risk that would only increase as the comfort ventilation business grew.

In 2003, Peter Wiesendanger travelled to Zwickau in the German state of Saxony. The company, owned by Eberhard Paul, a brilliant and somewhat idealistic inventor, was facing bankruptcy. Paul held the patent for several high-performance heat exchangers that even worked in apartment buildings and older buildings. Paul also had his own sales organisation in Germany. In 2004, the company PAUL Wärmerückgewinnung GmbH was newly founded as a subsidiary of Zehnder. Subsequently, Zehnder encouraged the management of Recair to agree to a management buy-out, which executed in 2006 by mutual agreement to the benefit of both parties.

## Innovation and Design

By that point, the Zehnder Group was generating 70 percent of its sales in euros. This fact was finally reflected in the balance sheet, which was converted to euros in 2003. Meanwhile, the excess capacity in the radiator market was clearly leaving its mark. Only the low-price segment was still growing, while the demand for special radiators was either stagnating or declining. This also had an impact on the factories. In Châlons, Vaux-Andigny and Graenichen, reduced working hours were in force for individual production lines. The Portsmouth factory was hardest hit: after operating at a loss for years, it was closed in 2004. Only the factories in Boleslawiec and Beijing were still running at full speed.

The lack of innovative power in the radiator business remained a core issue. Where there is an absence of innovation, imitators are always ready to make a name for themselves, catching up with premium brands in terms of design and quality and

undercutting their prices. In order to stand out more effectively, Zehnder had to set new trends, as it had last succeeded in doing in 2000 with the revolutionary radiant ceiling panels called “ZIP”. These were produced in standardised sizes and were mainly used in commercial and industrial buildings. The competitive advantage of “ZIP” lay in the new type of technology used to connect the individual panels, which enabled unrivalled ease-of-use.

## Warm and Beautiful

This made “ZIP” a shining example of Zehnder’s high aspirations for the quality, service and aesthetic standards of its products. The development department at Zehnder was increasingly reliant on its cooperation with renowned designers such as the Milan studio of Perry King and Santiago Miranda. Their first creation for Zehnder was a radiator that acted as a heat source, a sculpture and a statement piece all rolled into one. Marketed as “Velum” by Runtal and “Dualis” by Zehnder, the radiator was transformed into a decorative piece of furniture. It also boasted a high level of efficiency thanks to the undulating aluminium radiating screen – proving that function and aesthetics were by no means mutually exclusive.

This held especially true for the most important segment in terms of volume and earnings: towel radiators. Just as with radiant ceiling panels, bathroom radiators were standard products, making design all the more important. However, their aesthetic integration with other bathroom fittings continued to present a challenge. Demanding customers such as hoteliers in particular were looking for complete, stylistically consistent solutions. The leaders in this field were Villeroy & Boch, a traditional German-French company whose “World of Bathrooms” collection adorned exclusive showrooms throughout Europe. The bathroom specialist was only missing one thing: matching radiators. In 2003, Zehnder and Villeroy & Boch signed a cooperation agreement. The following year, the first towel radiators from the newly designed product line were launched on the market: Villeroy & Boch by Zehnder.

*Design radiator Zehnder Dualis, also sold under the brand Runtal as Velum.*



*Runtal panel Jet-X.*

*Steel radiator with flat surface: Runtal Arteplano.*



*Zehnder Nobis, chrome-plated brass bathroom radiator.*

### Pricing Pressure Hits European Locations

The innovation campaign helped to consolidate the Group's position in the high-end towel radiator segment. In the low-price segment, however, pricing pressure continued to rise, as more and more suppliers pushed into west European core markets with low-cost products. Philippe Nicolas, head of radiators at Zehnder, for example, was looking into even cheaper production locations than Poland. He had his sights set on Turkey, which had developed into one of the most important production countries for bathroom radiators in the space of a few years. Approximately 65 suppliers manufactured more than 900,000 towel radiators there every year, over 80 percent of them were exported. This growth posed a challenge for many Turkish producers. Smaller companies, such as Sanpan Isitma Sistemleri from Manisa in western Anatolia lacked the investment capital to keep up with the automation levels of the major players. The ambitious owner of Sanpan, Ünal Sandalci, was looking for a partner who could give him access to distribution structures in addition to capital. After a visit to Manisa, Philippe Nicolas and Ünal Sandalci agreed to phase-in Zehnder's involvement. The Swiss would get started with a 51 percent stake in 2006 and increased their share over the next few years, while Sandalci would stay on as Managing Director to ensure operational continuity.



Paint facility at the new production plant in Manisa, Turkey, opened in 2018.

The new location in Turkey made it possible for Zehnder to expand its range to include low-cost towel radiators. The models were intentionally simple in design so as to avoid competing with other Zehnder products. The higher-quality models would continue to be produced in the traditional European factories.

### Overseas Business

The drop in prices affected radiator business across the globe – including the Chinese joint venture Beijing Zehnder Radiators. China is a master of imitation, with competitors dumping products on the market at giveaway prices. Peter Wiesendanger estimated the annual price drop at 20 percent. Zehnder had to substantially reduce margins, but keeping the Beijing factory running at full capacity was paramount – in no small part because of contractual obligations. At the time, the factory was manufacturing products for the Chinese market only, as was the intention when it was founded.

The USA was the only exception. There, consumers still controlled their houses' indoor climates almost exclusively through air-conditioning systems. In order to succeed in this demanding market, Zehnder wanted to offer its towel radiators at the lowest possible price – with the help of raw materials sourced from the factory in China. With US bathrooms often perceived as too cool because of air-conditioning, the potential for towel radiators seemed to be a given. However, what Zehnder lacked in North America was a suitable distribution company. Runtal North America, based in Haverhill, Massachusetts, had become highly profitable by this time, but with its focus on well-funded hoteliers and villa owners, it was a niche player that was not well positioned to market inexpensive towel radiators.

This was the situation when the Hydro-Air Components information memorandum showed up at the beginning of 2006, as if on cue. Walter Zurowski, the owner and Managing Director, was forced to buy out family members and now faced a lack of liquidity. However, the substance of the company remained intact. Hydro-Air enjoyed an excellent reputation in the USA for inexpensive, high-quality radiators and air recirculation units, especially for commercial buildings. The company also owned the market leader for water-bearing heating and cooling panels, the renowned Rittling company.

In other words, an acquisition held huge potential for Zehnder – particularly with regard to launching comfort ventilation systems on the US and Chinese markets. Peter Wiesendanger was able to use this long-term perspective to persuade Walter Zurowski. Despite receiving higher offers, he sold his company to Zehnder in 2006, and Zehnder-Rittling was born.

### Clean Air

Unlike radiators, Zehnder's comfort ventilation systems benefited from multiple major trends such as health, urbanisation and climate change. Clean, healthy, dust-free air was a sought-after commodity and not something to be taken for granted, especially in the commercial sector. From large bakeries to logistics centres, fine dust affects employees, reduces the shelf life of products, accelerates machine wear and tear, and increases cleaning requirements. There was enormous potential here for multi-functional ventilation. The Zehnder Group, which had cultivated strong



The new Zehnder-Rittling production plant in Buffalo, USA.

relationships with industrial clients through the sale of radiant ceiling panels, was well aware of this fact. The only thing the Group lacked was expertise in manufacturing high-performance filter units.

In light of that, in 2007, Hans-Peter Zehnder got back in touch with Göran Bernhardsson, a Swedish engineer who had supported him on several occasions as an independent consultant. As it happened, he was knowing of a small Swedish company that produced highly efficient, patented dust filters. That same year, Zehnder acquired Freshman AB in Täby near Stockholm and founded a new business division, Zehnder Clean Air Solutions. Thanks to its financial security, the Zehnder Group managed to convince major new customers interested in long-term service guarantees to buy the air cleaning system. After a positive trial run, none other than Swedish furniture giant IKEA equipped all its logistics centres in Europe with the recirculating air filters from Zehnder.

*Opposite page:  
Air cleaning systems from Zehnder help Oerlikon to maintain quality standards and protect the health of employees.*

### Expanding the Market Position

After the rapid growth of the preceding years, comfort ventilation systems already accounted for 15 percent of the Zehnder Group sales in 2007. This division generated its sales primarily in the traditional, largely saturated markets of the Benelux countries, Switzerland and Germany. If growth was to continue, which was the stated goal of the Zehnder Group, it would have to be achieved through new markets, which is why Zehnder management always kept a watchful eye on foreign companies that were up for sale.

Greenwood Air Management, the leading ventilation company in the UK, was a particular favourite. Zehnder was quite familiar with the company, as it sourced its extract air and heat recovery units primarily from StorkAir. Greenwood only developed some of the cheaper ventilation components itself and these were manufactured in southern China. When Greenwood's parent company, the Belgian Aliaxis Group, looked for a buyer in 2008, Zehnder snapped it up, acquiring a leading market position in one of the largest markets in Europe. As Zehnder was simultaneously acquiring a well-established trading company, Cesovent AG, that sold ventilation components in the Swiss domestic market, it had to make full use of its liquid assets and even take out a bank loan. The signs were pointing to growth.





*Of course, Zehnder also ensures a perfect climate in its own building. Picture: Ceiling-mounted radiant panels and air cleaning units in the 2013 opened new logistics centre in Lahr, Germany.*

## Dominating Niche Markets

All the same, the rising sales in the comfort ventilation segment were taking some of the pressure off the core business. Entering the mass market for panel radiators was financially no longer feasible. Instead, Zehnder was pursuing an offensive niche strategy, and thanks to innovative models such as the “Arteplano” panel radiator and the “Stratos” convector, it was even able to expand its market share in a stagnating market.

In France, the new electric radiators “Premium” and “Volga” were helping to safeguard Acova’s outstanding market position. Meanwhile, in neighbouring Germany there were increasing signs that the nearly ten-year construction crisis was coming to an end. Sales of radiant ceiling panels in particular were doing very well in Zehnder’s second largest sales market. However, the most important source of revenue remained the multi-column radiator business. In contrast to most of its competitors who no longer manufactured their products in Germany, Zehnder was able to excel in this domain through extremely short delivery times. In over 80 percent of orders, the custom-made radiators from the factories in Riegel and Lahr reached their destinations within five days.

The Zehnder Group was taking a major step forwards in the UK, the largest European market for radiators in terms of volume. The Bisque Group in London, acquired in 2007, was responsible for this. This company represented exclusive radiators, which it showcased in exclusive showrooms as part of the interior design – a concept that perfectly highlighted Zehnder’s decorative panel radiators and towel radiators.

Faral’s aluminium radiators no longer fit into Zehnder’s niche strategy, which, with the exception of low-cost towel radiators, was focused on selected premium segments. Although productivity had been significantly improved, the Italian subsidiary was sold in 2008.

## Releasing New Energy

The sale of Faral took place just in time. Shortly thereafter, on 15 September 2008, the global financial crisis reached its peak as the US investment bank Lehman Brothers became insolvent. Share prices plummeted worldwide, dragging down scores of banks and insurance companies with them. In Switzerland, the value of companies

listed on the Swiss Market Index halved from its high of over 9,500 points in summer 2007. Only government aid measures amounting to several hundred billion dollars prevented the international financial system from collapsing.

In the United Kingdom, Spain and Italy, the construction industry collapsed completely. In the context of the global recession, the Zehnder Group began preparing for several years without growth and put the entire Group through a corporate fitness programme called “energiZe”. The Group Executive Committee reviewed every area for potential optimisation measures, from organisation and logistics to marketing. In order to better leverage the synergies between the radiator and comfort ventilation divisions, Zehnder combined the sale of radiators and ventilation components within the individual markets. This made Zehnder a system provider for healthy, comfortable and energy-efficient indoor climate solutions.

The sharp decline in the market volume for radiators resulted in further economisation. In Germany, relocation of the site to Boleslawiec (Poland) was even being considered. In the end, in 2009 Zehnder simply abandoned the Riegel site and moved its production lines and workforce to Lahr. Additional millions were invested in the modernisation of the German site. Logistics were also consolidated. Two logistics centres in Lahr (Germany) and Étieux (France) collected all of the orders from Europe, combined the products and delivered them. That meant that since 2013, roughly 80 trucks left the Lahr factory every day. Thanks to these hubs, the logistics processes between production and sales organisations could be simplified and local warehouses could be eliminated.

However, it was not only about economising and streamlining, but also about investing. Because in order for the new logistics centres to realise their full potential, processes, interfaces and data had to be harmonised. In other words, standardised information technology was needed throughout the Group. Only SAP could qualify as a partner for this mammoth project. After successful trial runs, the roll-out began in 2011 in Switzerland, Germany and Austria. The other locations would follow in stages.





To mark its 125th birthday, Zehnder can inaugurate the new Shanghai Nather site in Shanghai. The office building in front, the factory and warehouse behind it.

### Expanding the Ventilation Business to China

Even China's economic powerhouse, which had been unshakable in recent years, was beginning to sputter. But a massive economic stimulus package of four trillion yuan from the Central Committee helped to soften the blow. China wanted to continue its growth at any cost. This not only benefited the export industry, but also the domestic construction industry - good news for the Zehnder Group, which had also successfully maintained a presence in Shanghai since 2006 with a Comfosystems branch. Only one competitor was giving Comfosystems a bit of trouble: Shanghai Nather Air Tech. The founders Jin Chunlin and Jin Yitao were agile entrepreneurs. However, the stand-alone exclusive sales company was dependent on suppliers, which could hardly keep up with the rapidly growing demand of the Chinese construction industry. Quality and delivery problems were accumulating and Shanghai Nather Air Tech did not have the necessary financial security to secure large orders. So the two managing directors were looking for a strong financial partner - and found Zehnder. In 2010, Zehnder acquired a 51 percent majority stake in Shanghai Nather.

In order to meet the growing demand for ventilation components, Zehnder had to expand the capacity of the Beijing Zehnder Radiators factory. But while green spaces had bordered the factory site only a few years ago, it was now surrounded by high-rise buildings. A move was becoming unavoidable. After the authorities had given the green light, construction of the new factory in the nearby technology park in Dachang began in 2010.



Ground-breaking ceremony on 8 June 2010 for the new factory of Beijing Zehnder Radiators in Dachang.

### Investing in Future Technologies

At the same time, the Zehnder Group was pushing ahead with research and development. For instance, Ruedi Kriesi, who was promoted to Head of Products and Technology at Zehnder in 2003, was working on the "enthalpy exchanger", which regulates the air humidity, and which had been installed in the ventilation units of Comfosystems since 2005. Initially, Zehnder used cellulose filters containing salt in the exchanger, but as they could not be cleaned, they had to be replaced regularly for hygiene reasons. Looking for a smarter technological solution, the Group explored the possibilities of using humidifiers from fuel cells.

The global El Dorado of fuel cell production was Vancouver, on the west coast of Canada. This highly innovative cluster was also home to the start-up company dPoint Technologies, which produced highly efficient membranes based on a polymer; these membranes were suitable not only for humidifying fuel cells but also as enthalpy exchangers in ventilation units.

Like every start-up, dPoint needed regular venture capital, and in 2010, this gave Zehnder an opportunity to enter the market with a 20 percent stake, a commitment that it would expand in the following years. In return, Zehnder received a seat on the Board of Directors and a say in the supply of new customers. This ensured that Zehnder's ventilation units had an exclusive technological advantage, particularly in Europe: a cleanable enthalpy exchanger similar to those used in fuel cells.

### The Rewards of Innovation

Ruedi Kriesi's work at Zehnder came to an end with the integration of dPoint into the Zehnder Group. At the end of 2010, he returned to his roots as an independent consultant for Minergie concepts. When he joined Zehnder as head of comfoHOME, the turnover of the comfort ventilation business unit was less than 100,000 euros. In 2010 it had grown to be 140 million - almost a third of the Group's revenue. Over the course of ten years, he had helped to systematically expand and further develop the entire range of ventilation components - from the ventilation units of the ComfoAIR family for detached houses and apartment buildings and air distribution systems, complete with flat oval tubes developed within the Group, through to silencers, air coolers, external wall grilles and fully modulating brine/water heat pumps. He remained affiliated with Zehnder as a consultant.

Zehnder's core business continued to be radiators, as the Group was still the market leader for towel and decorative models. Innovations such as the "Metropolitan" towel radiator developed in Boleslawiec and collaborations with renowned designers - as challenging as they were fruitful - had contributed to this state of affairs. More than ever, the Zehnder brand was a watchword for both form and function, a status that was confirmed when Zehnder received the "Most Innovative Brand" award in the heating, air-conditioning and ventilation industry in 2011 - the world's largest innovation prize!



An employee of dPoint in Vancouver, Canada, during the assembly of an enthalpy exchanger. These increase the durability and efficiency of fuel cells - a market with high future potential.



The ComfoTube Flat is an oval, flexible flat tube with a flat inner skin. Thanks to this, the tube is easy to clean and has a low pressure loss.



Cooperation with renowned designers:  
(top left) Zehnder Metropolitan  
(by King & Miranda), (top right)  
Runtal Puzzle (by Claudio Colucci),  
(bottom right) Runtal Arteplano in  
horizontal design.

Opposite page:  
Runtal Splash (by Christian Ghion).



On the subject of innovations, progress in control technology was becoming increasingly urgent for the Zehnder Group. This was because the interaction between the individual ventilation components and external climate factors was becoming increasingly complex. And only those who understood this complexity could create the perfect indoor climate.

In southern Europe, for example, a system of heat pumps, comfort ventilation and radiant ceiling panels was becoming increasingly established as a way of creating a pleasant indoor climate despite the often poorly insulated building fabric. The Italian company Nest had exactly the right control system for this. With the acquisition of Nest, Zehnder strengthened its position as a system provider and gained additional expertise in the field of smart homes, where IT was becoming increasingly important.

### Consolidation

The acquisition of Nest would remain Zehnder's last for many years. After record results with sales of over 500 million euros in 2011, the market environment was deteriorating due to the debt crisis, especially in Southern Europe. The Group's motto was along the lines of: consolidate and safeguard the business. Zehnder hoped that the introduction of the Japanese kaizen principle, which literally means "continuous change for the better", could provide new impetus for boosting productivity. Kaizen had become famous through the rise of the Japanese car manufacturer Toyota as global market leader. All employees were permanently invited to submit ideas for improving productivity, either on notice boards, in letterboxes or via email. A kaizen officer collected and checked the suggestions and implemented them if necessary – from adjusting tool storage and the supply chain to the reorganisation of entire production lines. The promotion of best practices not only led to cost savings at Zehnder, but also to greater satisfaction and motivation for the more than 3,200 employees.

At the same time, the USA had overcome the financial crisis, and from 2012, the American real estate market started to pick up again. Private construction investments were on the upswing, and following a restructuring of Hydro-Air, sales of comfort ventilation systems were also rising significantly. Lighthouse projects such as the "Grow Community" housing development on Bainbridge, a small island off the coast of Seattle, which has been photographed in dozens of magazines, were helping to develop this pioneer market. The "Grow Community" was composed of 130 residential



*The 130 houses of the visionary "Grow Community" near Seattle, USA, are completely equipped with ventilation systems from Zehnder.*

buildings equipped with solar energy systems and ventilation from Comfosystems. Through its message of sustainability and comfort at affordable prices Zehnder was able to get Comfosystems established in the USA.

### Arrival of the Fifth Generation

Like Hans-Jakob Zehnder, Hans-Peter Zehnder also decided at an early stage that he would place operational management in younger hands and retire to the Board of Directors as Chairman at the age of 60. As there were no successors within the Zehnder family, the company management would be handed over to someone outside the family for the very first time on 1 November 2014: Dominik Berchtold. The business economist joined Zehnder in 2006 as Director of Business Development and was appointed Chief Financial Officer in 2008, simultaneously advancing to the Group Executive Committee. As an internal candidate, Berchtold had a track record in international management, a broad range of experience from development and production to marketing, precise market knowledge in the construction supply industry and, last but not least, an understanding of the interests of family shareholders and investors.

Faced with dwindling profitability, Berchtold could not avoid launching a cost-cutting programme after just a few months. Almost 10 percent of jobs had to be cut – many of them in France. Excess capacity had reigned there for some time now. In particular, the production lines for panel radiators and convectors in the city of Châlons-en-Champagne were seldom utilised to capacity. Now the lines were partly outsourced to a Czech partner and partly moved to Vaux-Andigny, where the French logistics hub was also located. The factory itself was sold in 2015.

At the same time, Zehnder was investing in the modernisation of the existing production sites in Vaux-Andigny and Boleslawiec, where state-of-the-art robotic welding systems guaranteed ultra-high quality with shorter production times.

Despite all of these changes, the Zehnder family sent a sign of continuity to its employees, partners and investors in 2016. Milva Zehnder, the daughter of Hans-Peter and Rita Zehnder, represents the fifth generation of the family to join the Board of Directors. Milva's arrival made it clear that the Zehnder family was determined to continue to bear responsibility for the Group in the future.



*A new face: in 2016 Milva Zehnder, lawyer and daughter of Hans-Peter and Rita Zehnder, joins the Board of Directors of Zehnder Group Ltd.*

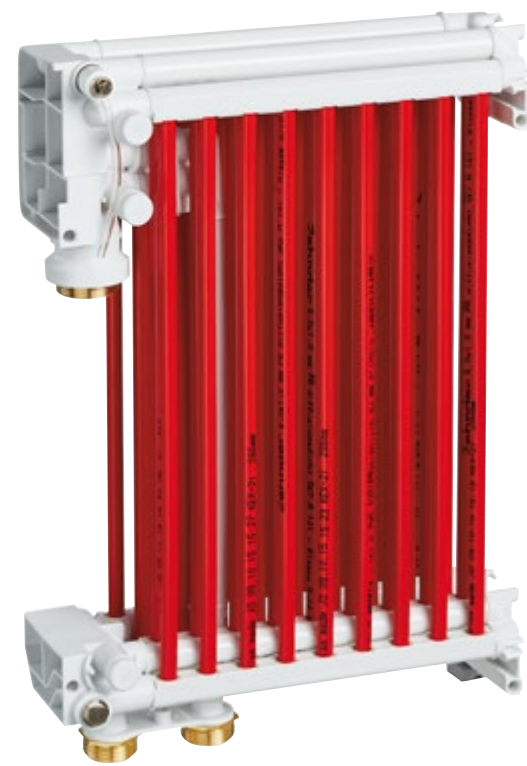
## A Polymer Radiator

The market environment remained challenging, especially for radiators. But there was one exception: low-cost towel radiators. In the last six years alone, production had more than doubled, and the trend was rising. In order to expand capacity, Zehnder was acquiring a 40,000 square metre site in Manisa, where a new factory would be built over the next few years at a cost of 20 million euros.

The Zehnder Group expected fresh momentum from its latest innovation. After more than 80 years of steel radiators, Zehnder was set to launch its first polymer radiator in 2014. The “Zmart” heralded a mini revolution, not only for Zehnder but also for installers. With 60 percent less weight and variable connection options, only one fitter was needed for installation instead of two. The only question was whether this was not too much of a departure for the heating industry, which was not particularly open to innovation.

It was a question of principle. How do you sell innovation? How could Zehnder ensure that decision-makers such as architects, installers and wholesalers would embrace change and recognise the benefits, at least in the medium term? In 2015, Zehnder opened a campus south of Paris which, as the first commercial Minergie-P building in France, consumed less than 50 kilowatt hours per square metre per year. The new building not only served as the headquarters of Zehnder France, but also as a showroom and training centre for customers, sales staff and tradespeople. Zehnder was pursuing a similar concept with a new training centre in Lahr and the Zehnder Academy in Graenichen, where distributors, installers and end customers could take a practical approach to learning about the latest developments in building services. Through these consulting services, Zehnder demonstrated thought leadership and strengthened trust and customer loyalty.

The more important the ventilation business became for Zehnder, the more the Group from Graenichen would have to invest in research and development, and the rate of innovation was increasing noticeably as a result. In 2016, the latest generation of centralised ventilation units was launched on the market with the “ComfoAir Q”. Just like Zehnder “Zmart”, the unit captivated consumers with its easy installation and operation. With its reduced energy consumption, improved silencers and a new filter concept, the “ComfoAir Q” reinforced the technological edge that Zehnder had achieved.



*Innovative polymer register for Zehnder Zmart.*

## Zehnder continues to grow

Thanks to its cost-cutting measures and successful new products, Zehnder grew again by 9 percent in 2017. After three demanding years as CEO, Dominik Berchtold felt it was the right time to seek a new challenge. Hans-Peter Zehnder took over operational management on an interim basis.

The significantly improved business results increased the scope for acquisitions. In early 2018, Zehnder-Rittling acquired NuClimate Air Quality Systems in Buffalo, a company that specialised in cooling elements. Not least due to climate change, efficient cooling was becoming ever more desirable in integrated indoor climate systems, together with heating and ventilation. NuClimate had developed the perfect technology for that purpose: cooling radiant ceiling panels, known as “chilled beams”.

Geographically, Zehnder was also investing in the Baltic states and Scandinavia, where there were special requirements for comfort ventilation. As in-house development would have cost too much time and money in light of the manageable market volume, two smaller companies, InteliVENT OÜ from Tallinn in Estonia and Enervent 2018 in Finland, joined the Zehnder Group to help expand the existing range to meet geographical requirements.

Recair, the former subsidiary of StorkAir, also became part of the Zehnder Group again at the beginning of 2019. The manufacturer of heat exchangers had developed brilliantly after the management buy-out in 2003 and in many markets, it now held second place behind the Zehnder companies Paul and dPoint. The acquisition, which was achieved in no small part thanks to the friendly management buy-out in 2006, made Zehnder the undisputed market leader, enabling it to draw on all its experience going forwards, particularly in the OEM market. Zehnder was increasingly evolving from a system supplier to a component manufacturer in the comfort ventilation sector.



*Heat exchanger, produced by Recair (NL), acquired 2019.*

## Right on Track

This transformation was also evident in China, where the Zehnder Group had increased its share in Shanghai Nather to 75.5 percent. In Pinghu, southwest of Shanghai, Zehnder built a new factory for the production of ventilation units in 2018. Enormous construction projects require huge production capacities, and anyone who cannot deliver is out of the running.

In the 2018 financial year, Zehnder reached the 600 million euro sales milestone for the first time. Matthias Huenerwadel, who had held the post of CEO since January 2019, had little reason to change course. The only setback Zehnder experienced was with the “Zmart” plastic radiator. Despite years of effort, the Group had not managed to reduce the production costs and sales price to a competitive level. Management pulled the plug and stopped production.

But turnabout is fair play and the classic multi-column radiator experienced a renaissance. Under the product name “Charleston”, the original steel radiator designed in 1930 celebrated its 90th anniversary in 2020. Its large selection of colours and shapes made the model a timeless all-rounder.

## Coronavirus Shockwaves Strike at the Group’s Peak

The Zehnder Group could now reap what it had sown decades ago. Thanks to skilful brand management, constant innovation and the courage to find a niche market and make significant investments, it had successfully led the radiator business into the new millennium. At the same time, comfort ventilation – as once hoped – had developed into a powerful driver of growth. Twenty years after the takeover of comfoHOME, the turnover achieved in the ventilation business was on a par with that of the radiator business.

On 26 February 2020, shortly before seven o’clock, the Zehnder Group financial analysts and investors eagerly awaited the publication of the business figures for 2019. The profit results exceeded the analysts’ estimates. With sales growing by 7 percent to 644 million euros, the Group had increased its operating result by a remarkable 35 percent to 42 million euros and net income by 31 percent to 32 million euros. The

investors highly appreciated the positive development. Over the course of a year, Zehnder shares had gained 30 percent, and after the announcement of the business figures, they climbed to a new five-year high.

But then the long underestimated coronavirus pandemic struck in full force. First Zehnder’s factories in China came to a standstill, then half the world economy. In March 2020, virtually all industrialised nations went into lockdown. Schools, shops, companies and factories were closed and government rescue packages worth billions were put together. “The fight to prevent the coronavirus from spreading has produced the first state-mandated recession in modern economic history,” as the UBS chief economist said so aptly.

125 years of Zehnder – and no one is really in the mood to celebrate. The coronavirus is a killjoy on top of everything else. But for a variety of reasons, uncertain times like these are precisely the right moment to delve into the history of Zehnder. Because if the history of this Swiss family business has proven anything, it is that every crisis also opens up new opportunities. Recognising this has always been one of the many strengths of Zehnder. The future will show that this remains true today.

*Pages 70 and 98:  
Zehnder employees at the factory  
in Graenichen. The fins pressed  
here are later welded to the back of  
the heating panels to increase  
their thermal output.*





**SIX TIME WITNESSES  
REMEMBER**



## 1971: AN UNSHAVEN INTERVIEWEE FROM PHILIPPE NICOLAS

*Philippe Nicolas was Zehnder's first plant director from 1972 to 1976 in Châlons-sur-Marne and then managing director of Zehnder SA. In 1991 he was promoted to Divisional Head of Radiators of the Zehnder Group. Until his retirement in 2008 he was a member of the Board of Directors of Zehnder Group. Today he is honorary chairman of the Club Entreprise Arts et Métiers, which advises graduates of the Arts et Métiers in business matters.*

I was 27 years young and living happily in Paris. But I was keen to try something new in my professional life. I was an economic consultant, but I wanted to work in industry, closer to people. I was less interested in the administrative work that was the norm among the French elite at the time.

In 1971, I got a call from a friend from my college days, who, like me, had attended the elite university Arts et Métiers in Châlons-sur-Marne. He was now a consultant at the Chamber of Commerce in Châlons, and the town was trying to attract companies by offering them cheap land for development. A Swiss company called Zehnder had seized the opportunity and was now planning a factory on a greenfield site. It was looking for a French person to serve as director. So I sent my application to Graenichen.

In December, I took the night train from Paris to Mulhouse, but I wasn't alone; I was joined by my friend from the Chamber of Commerce and another friend of ours from university, an architect. After all, the factory did still need to be designed. "Fraternité, c'est là notre devise" ("Brotherhood, that's our motto") was how the saying went among us, a band of 11 graduates from the Arts et Métiers – and voilà!

We had drunk a little wine in the Brasserie Aux Armes de Colmar at the Gare de l'Est, and as it happened, I overslept a bit in the morning. I had just applied shaving cream to my face when the announcement came: "Mulhouse Gare Central!" I quickly packed my things, jumped out of the train and wiped the shaving cream off my face on the platform. Then I continued my journey in the rental car. Unshaven.

And of course we got lost. We stopped and asked a passer-by how to get to Graenichen. But she sent us towards Grenchen. My German was terrible back then, so we had a long detour.

We were slowly starting to get nervous, because we knew how punctual the Swiss were. We arrived at the car park in Graenichen exactly on time. Then I suddenly remembered. I still hadn't shaved! At that very moment, two gentlemen came and greeted us cheerfully: it was Hans-Jakob Zehnder and the Technical Director of Zehnder, Walter Hagmann. Mon Dieu! Mortified, I apologised, although I could hardly find the right words. But they just laughed and showed me the way to the washbasin, where I finally finished my shave. Afterwards there was "Kafi and Gipfeli" – coffee and croissants, Swiss-style.

Our hosts' reactions were revealing. Actions are what count here and not appearances, I thought to myself. I was impressed by the modesty and sincerity of these two gentlemen – they were completely without airs or pretensions. We French were used to a different way of life back then ...

This very first impression has never misled me, not in 36 years. That's how Zehnder was and that's how Zehnder is today.





## 1977: MY ZEHNDER-FAMILY FROM ELISABETH OBERLI

*Elisabeth Oberli was an executive assistant at Zehnder Group from 1977 to 2020 and during this time she got to know and appreciate three generations of the entrepreneurial family.*

With the exception of my apprenticeship I have only had one employer all my life: Zehnder. In 43 years as an executive secretary, I have gotten to know three generations of this family of entrepreneurs. And the longer I worked at Zehnder, the more I felt a part of this family, and not merely an employee.

As a farm girl from Emmental, I originally wanted to become a tour guide and travel all over the world. But when my commercial apprenticeship came to an end, the economy was in tatters due to the oil crisis. I was happy to have found a job. On 1 March 1977, I started as an executive secretary at the measuring instrument manufacturer Haenni in Jegenstorf. The struggling company had just been taken over by Zehnder, and I remember how nervous I was when the gentlemen from Graenichen came to the board meeting for the first time. But my fears were unfounded. Hans-Jakob Zehnder was a patron in the best sense of the word – challenging, but always kind and friendly.

Hans-Jakob Zehnder was born in the same year as my father, 1923. His son, Hans-Peter, was two years older than me and had joined the company in 1986 as head of the measuring instruments division. In this role he was my direct supervisor, but it felt more like he was my elder brother. We got along splendidly.

In 1988, Hans-Peter Zehnder took over as Deputy Chairman of the Group Executive Committee and rarely came to Jegenstorf any more. So I was all the more delighted when he called me up and asked if I would like to become his new executive assistant

in Graenichen – especially as my lifelong partner had also moved from Jegenstorf to the headquarters in Graenichen.

The orientation process went flawlessly, although a few minor linguistic differences cropped up. I once asked Hans-Peter Zehnder in my Emmental dialect if he wanted a coffee. “Heit dir no es Kaffi wöue?” I said, using the informal form of “you”. My predecessor promptly instructed me to always use the formal form: “Mir tüe üs de nid duze!” I replied that I hadn’t intended to use the informal version of “you”, but that the formal version simply did not exist in my dialect.

One of my tasks was organising the annual general meetings. At that time, that meant that half of the Wynental valley inhabitants were streaming into the Bärenmatte Centre in Suhr. There were groups of shareholders with just one share per person who met as if it were a class reunion, so the dinner after the AGM was a sociable affair, including a free three-course menu with plum-stuffed roasted pork from Aargau and an after-dinner drink. It was not unusual for these AGMs to last until midnight.

One day in the early 1990s, I heard girls’ voices in the stairwell – Hans-Peter Zehnder had his daughters Milva and Mara with him. I was so happy! They spent the whole afternoon playing school at the large blackboard in the meeting room. The younger one, Mara, was playing the assertive teacher, while Milva was the model pupil. And during the break they came to me to get a token so they could get an Ovo drink out of the vending machine.

Now I am officially retired. Unofficially, you’ll always find me popping back to Graenichen to check on “my” Zehnder family.



## 1996: CHINA: A LAND OF CUNNING AND WISDOM FROM PETER WIESENDANGER

*Peter Wiesendanger was a member of the Board of Directors of Zehnder Group from 1988 to 2012, from 1988 to 2008 with executive functions. From 1997 to 2008 he built up the China and ventilation business of Zehnder Group.*

I was 55 years old and studying psychology at the University of Zurich. I had largely withdrawn from the operational business of Zehnder. Only occasionally did I still attend the meetings of the executive management and Board of Directors in Graenichen.

In 1996, Zehnder founded the joint venture Beijing Zehnder Radiators Company Ltd. with two Chinese partner companies with close ties to the state. But Beijing was far away. We had hired a former VW manager as the project manager, but things started to go wrong with the project. So Hans-Peter Zehnder came to the conclusion that we needed a local representative in Beijing. During an executive management meeting in 1997 he asked the colleagues who would be willing to do this. There was a long silence. And then Philippe Nicolas, who was head of the radiator division at the time, looked at me. "You're just studying now," he said. Two weeks later I was on a plane to Beijing with Hans-Peter Zehnder.

We were greeted with all the honours. Our partners took us out to one of the most expensive restaurants – although it was charged to our joint venture's account. Everyone at the big round table kept toasting me with Maotai, the Chinese sorghum and wheat liquor, and each time, you had to drain your glass in one go. I was amazed at this custom; it reminded me of certain evenings during my fraternity days. I had learned how to hold my drink back then, and that came in handy now.

Over the next few days, I took a more sober look at things and realised that we had big problems. In the joint venture contract, it was agreed that Zehnder would be responsible for production and that the Chinese partner companies would be

responsible for sales according to state-planned economic principles. Beijing was booming, with over 100,000 new homes being built each year. But the days of the state-planned economy were long gone, so we had to sell our steel radiators in a free and very competitive market. Yet our multi-column radiators were completely unknown and five times more expensive than the conventional cast iron radiators. I was a bit desperate. In nine months, the factory and its production capacity of one million multi-column elements per year would be ready. Who would buy them? The sales manager from one of our contractors was completely helpless and overwhelmed by the task.

As a result of these observations, I suggested to Hans-Peter Zehnder that we write off the 20 million Swiss francs we had invested as a precautionary measure. Which, thanks to Zehnder's strong balance sheet, we were able to do. But there were also positive aspects. Dr. Zhangeng Guo, who holds a doctorate in engineering from the Technical University of Stuttgart, was working in the joint venture company to support sales. This young man, originally from Shanghai, was not only technically brilliant but also a very good salesman. With the approval of Hans-Peter Zehnder, I dismissed the previous project manager and CEO and appointed Zhangeng Guo as the new CEO. This was also well received by our partner companies.

At the same time, I sat down with my friend Harro von Senger, Professor of Sinology at the University of Freiburg im Breisgau. During his years of study in China, he came across the "Thirty-Six Stratagems", a centuries-old system of using cunning as a means of winning or getting out of a

tricky situation. He explained to me that the Chinese word for "wisdom" also meant stratagem, or cunning. In other words, being cunning meant being wise, without the negative moral connotations of the Western world (where we think of "devilish cunning"). I also learned that the Chinese think more strongly in terms of the present than we do. I began to understand that a contract is always interpreted in new ways in the here and now. This culture and the incredible variety it contained began to fascinate me, and I even started learning Chinese. Over time, this helped me to better understand the thinking of my Chinese partners and to make the negotiations increasingly successful.

Meanwhile, the question of how we could sell our radiators continued to arise for me and Zhangeng Guo. We decided to take the bull by the horns. Since Chinese people, like us "big nosed" Westerners, respond to prestige and status symbols, we decided to market the radiators as a symbol of prestige. Our representatives equipped the salesmen with gold waistcoats at the hardware stores, and we placed advertisements in the most expensive shopping street in Beijing, in newspapers and airline ticket envelopes. With success: Within five years, we were able to increase sales fivefold to 180 million yuan (35 million Swiss francs).

As word of the success of this "model joint venture" got around, I was invited to give lectures on it, including at the University of Zurich. Speaking of the University of Zurich, I continued to study psychology at the same time and graduated magna cum laude in 2000.



## 1998: ZEHNDER'S LESSON TO HARVARD GRADUATE STUDENTS FROM WES OWENS

*Wes Owens began his career at Zehnder as CFO and later as CEO of Runtal North America, Inc. (RNA) when the company was acquired by Zehnder in the late 1980's. Today he is responsible for the Zehnder Group North American Operations from his base at RNA just north of Boston.*

In 1998 Hans-Peter Zehnder, Paul Aeschimann and I were in the Runtal North America (RNA) factory in Ward Hill for a regular quarterly visit, but also because both Mr. Zehnder and Mr. Aeschimann had been invited to the Harvard Business School to observe a special evening discussion of a Business Case involving both Runtal and Zehnder.

As background: In the late 1980's a Professor from the Harvard Business School developed a Case Study about the Zehnder purchase of Runtal North America (RNA). Specifically, the Case Study describes in detail the situation with both RNA and Zehnder at that time with the central question being: Should Zehnder purchase Runtal North America or should Zehnder pass on this opportunity? Though the case was some years old in 1998, the company names, dates, and other identifying information were always omitted such that the cases might be used at any time for a variety of courses at the Business School.

Personally, I was not so excited that Hans-Peter Zehnder and Paul Aeschimann had agreed to appear as guest panel members as I was pretty sure they'd receive a great deal of criticism for having made the purchase of Runtal in the face of such an apparently bleak set of financial facts. As accurately noted in the Business Case, revenues at RNA at the time of purchase decision were just \$1.5 million (with an annual loss of over \$2.5 million). Further it was noted that in 17 years of prior operation up to that point, had yet to manage even one annual profit, had significant debt, an unproven market potential, essentially no cash, and a relatively weak management team!

But now, 10 years later, Mr. Zehnder and Mr. Aeschimann were happy to oblige, and that evening they appeared to a packed auditorium of students and faculty who had clearly done quite a good job of analysis and preparation of their findings. The bottom line was that they had reached the unanimous conclusion that a purchase of RNA could not possibly be recommended at any price and could only result in a substantial downside for Zehnder.

It was then revealed that a deal had been reached and that the purchaser was in fact Zehnder. Hans-Peter Zehnder and Paul Aeschimann were introduced on the panel and students were encouraged to ask questions. The questions could likely be summarized as a polite version of "How could you have been so stupid to go through with the purchase in the face of such obvious facts arguing against it?"

The answer to this question was surprising to the students and should be an invaluable lesson. Mr. Zehnder and Mr. Aeschimann were happy to point out that since the acquisition, not only had the purchase of RNA paid for itself many times over in terms of steady growth and quite substantial profits, but it also provided an opportunity for the Zehnder Group to expand its footprint in North America resulting in the acquisition of additional highly profitable ventures and expectations for even greater profits going forward.

The key as Mr. Zehnder explained was that apparently everyone in that auditorium (and likely most in business) calculates from what the Swiss would consider a very short time frame - perhaps 2, maybe 3 years at the outside. Zehnder on the other

hand, with the exact same facts, would also consider the situation in terms of a minimum of 5 and more likely 10 years.

Of course simply changing the time frame doesn't always change the decision, but as Hans-Peter Zehnder explained to those vaunted Harvard Graduate Students there are sometimes cases where the willingness of the traditional Swiss to look past the short term negatives combined with the ability to envision the potential of the longer term can be the difference between missing out completely, or making an excellent investment outperforming expectations for many years.

And while it is just my humble personal opinion, I believe that it is this willingness to invest in people and projects with an eye for the longer term that has made the Zehnder Group so successful for so many generations.



## 2009: THE GERMAN LOCATION'S BIGGEST FAN FROM HARALD SCHREMP

*Harald Schrempp began his career at Zehnder in 1978 as an apprentice toolmaker. In 1998, he was elected as a full time works council member who represents the interests of the workforce in Germany on a full-time basis. After various further training courses, he has been responsible for site management at Zehnder GmbH.*

In the past, people here in South Baden used to say, "Find a job where your father works." My father was a foreman with Beutler in Lahr. So I started my apprenticeship as a toolmaker there in 1978, just like my two younger sisters did later in other trades. After Zehnder and Beutler merged in 1980, we became employees of Zehnder.

Under Zehnder, my father rose to become factory manager. So some outsiders were surprised that I decided to run in the election for the works council in 1998. It wasn't actually my intention to do that. But I had the gift of the gab and was also a good listener – a mediator. I was captain of the football club. People trusted me, and trust is not something you simply get, you have to earn it.

When the old works council retired in 2002, everyone pointed at me. And then I said okay: "If that's what you want, that's what I'll do." It was a matter of honour. From that point on, I was a works council member, exempt from all other work.

My primary objective on the works council was and is to safeguard jobs here at Zehnder in Lahr. We know that personnel costs are high here by international standards. So we have to work even harder and prove that the production site is still worthwhile. This is not only a challenge for the employer, but we as employees also have to make our own contributions, through outstanding work and the occasional hour or two of unpaid work.

The well-established relationship between employer and employees paid off, especially in 2009. At that time, a relocation of the production lines to Poland was actually

under discussion. I travelled twice to Boleslawiec myself as a works council member to inspect the site. That's when I realised: These are good people too, and they cost half as much as we do.

We had to take a good hard look at the books. I was constantly negotiating. Sometimes with our management, sometimes with the unions, sometimes with both. We had to bring the unit costs down. The only way to do this was uncompensated overtime on the employee side, the merging of the factories in Lahr and Riegel and heavy investments in automation on the management side. We called this the "Alliance for Jobs". The plan worked: Not a single employee was let go for operational reasons. Instead, millions were invested in the modernisation of the Lahr site every year. Today at this location, 50 employees generate the same output as 100 employees did ten years ago.

We are all proud of what we do for Zehnder and the region in South Baden. Zehnder has a history here.



## 2018: DOORS WIDE OPEN FROM TESSA WIJLENS

*Tessa Wijlens (24) is a management trainee at Zehnder Nederland and a student at the University of Twente in Enschede and the TU in Berlin. She is about to complete a double master's program in Innovation Management, Entrepreneurship & Sustainability.*

I hadn't even been at Zehnder for a week when I got into conversation with a fellow co-worker in the cafeteria. I told him that I was a student at the Saxion University of Applied Sciences in Enschede and that I was going to do my thesis - or "graduation assignment" - at Zehnder. Why Zehnder? Firstly, because a friend had recommended this innovative company to me. And secondly, because it meant I could live with my parents, as I come from Zwolle.

Now back to my colleague in the cafeteria. So I told him that I was interested in logistics in the factory and that I was planning to optimise logistics through a problem analysis, the collection and evaluation of data and brainstorming workshops.

The colleague listened to me and at some point said, "I know someone you should definitely talk to about your project." I answered: "Great, let's go!" And then we went upstairs, walked through a few corridors and eventually directly into an office. The door was open. There was a man sitting at an overflowing desk, and since my colleague suddenly got a phone call, I introduced myself with the question: "So, what do you do here at Zehnder?" The man at the desk looked at me in surprise. After a moment he smiled and replied: "I do a little bit of everything here." Then I understood. I was face to face with the Managing Director of Zehnder Nederland, Hendrik de Wilde! We still laugh about that first encounter to this day.

But that is just so typical of Zehnder. The doors are always open. Anyone can walk in, anyone can ask a question, anyone can contribute their ideas, whether you are a student, worker or manager. That is how Hendrik began - instead of giving me an

appointment or turning me away - he asked me about my project, my ideas and my goals. It's a flat hierarchy, and what counts is the quality of the ideas.

At the end of my six-month internship, I was hired by Zehnder to implement my suggestions for optimising the flow of goods and to assist with a related project called "Supply Chain Self-Assessment".

Today I am back at my studies and will soon be doing my master's thesis at the University of Twente in Enschede. But I still work at Zehnder on a project basis and last year I was even able to visit the headquarters in Graenichen for a week.

## FATHER AND DAUGHTER

*Hans-Peter Zehnder has left behind some impressive traces of his 25 years as CEO and Chairman of the Board of Directors of the Zehnder Group. How are things looking for his successor? And is it an opportunity or a burden to be the descendant of an entrepreneurial family? An interview with Hans-Peter Zehnder and his daughter Milva, who since 2016 has become the first woman ever to serve on the Board of Directors of the Zehnder Group.*

*“Topics such as health, sustainability and well-being will become increasingly important in the future, and we can make a contribution to this with our products and systems.” Hans-Peter Zehnder*

*“I still see potential in Zehnder’s positioning as an employer. We can present and position ourselves better to attract the best talents.” Milva Zehnder*

**Milva Zehnder, what is your first memory of the Zehnder Company?**

**MZ:** *As children we often joined our father at the office on Saturday or Sunday. He took care of his correspondence and we used to stock up on writing materials and markers from the supply cabinet in the meeting room and play "schoolroom". I still remember the big metal blackboard that we wrote and drew on.*

**What was your childhood like as the daughter of an entrepreneur?**

**MZ:** *My father is a calm and balanced person. That's why he never made a fuss at home, even when something was not going well at work. For a long time I was not even aware of what my father did exactly (or concretely). Sure, we grew up privileged because we could afford a nice house and nice holidays. But we were never spoiled. I think I grew up fairly normal.*

**HPZ:** *We also gave our two daughters Milva and Mara only a little pocket money. If they wanted to earn extra money, then they had to work during the holidays.*

**Milva Zehnder, what was your dad like as a father?**

**MZ:** *He was and still is a good father because he is always there for us when we need him. But of course, he was always very busy and used to work constantly – even on weekends. That was normal for us.*

**HPZ:** *I wanted to be present and show my employees that I was there for them. For a group of companies like Zehnder, which is active in the USA and China, among other markets, this means a 24-hour presence. When the Americans went to bed, the Chinese were just waking up.*

**How were you brought up, Hans-Peter Zehnder?**

**HPZ:** *My brother, my sister and I had a very strict upbringing, especially from my mother. We had to start helping out early on in order to earn our pocket money. This taught us humility. We had very few luxuries. We bought a television set very late. My mother took great care to make sure that we were not the first to own any luxury or expensive consumer goods.*

**As a child, how did you see Zehnder as a company?**

**HPZ:** *My father rarely discussed business at home. He preferred to relax. In addition, he had other activities he was interested in, he was involved in the church administration and in the local council. The exception was when business partners would visit from abroad. Then our mother cooked for everyone.*

**And did you pick up your ears to hear what was discussed?**

**HPZ:** *Yes, I took an early interest in the company. Even as early on as during the school holidays, I was allowed or made to work in the company. My father put me in the fastest piecework group – together with the son of the other company director. There we learned what it meant to do physical work. Then before the final exams I said: "I'm going to St. Gallen to study economics at the HSG, just like my father." It was then clear to my mother where my journey was heading and that I wanted to follow in my father's footsteps. In private she asked me, "Are you sure you can do this?"*

**You then joined the Zehnder Company in 1985. What was it like working under your father?**

**HPZ:** *He was naturally proud and relieved that his son was a part of the company. This was not a matter of course – business friends of his had not found a successor within the family. So of course, I could sense his good will. He gave me a lot of leeway. He only gave me two pieces of advice. Firstly, "You can do whatever you want as long as you do it better." Secondly, "Don't make the same mistake twice." Otherwise, he kept a low profile. He was also a very different man from myself, much more reserved. An old employee once told me of my father, "Ton père est un chef invisible." ("Your father is an invisible boss.")*

**Your father then threw you into the deep end in 1986 as head of the measuring instruments division ...**

**HPZ:** *After a year of training in Graenichen, I was to earn my stripes in our subsidiary Haenni, which was operating at a loss. The weak dollar gave us a hard time in one of our key markets, the USA. So in my very first year I was forced to do the worst thing an entrepreneur could be faced with. I had to lay off employees who had done nothing wrong or improper. I didn't sleep a wink, night after night. I swore to myself, "I will go and speak to each one of the 40 employees personally and explain it to them." Of the 40 employees who were made redundant, 39 later attended the Christmas party. That was really very touching for me.*

**Milva Zehnder, do you actually remember your grandfather, Hans-Jakob Zehnder?**

**MZ:** *Of course! He lived to a ripe old age and stayed fit for a very long time. He was a funny and loving person, but he could also be serious when he had to be. What fascinated me most was his curiosity. He followed technical developments right through to old age. He always had the latest iPhone model and asked me and Mara what new apps were available on the market.*

**Have you ever felt pressure to continue a family tradition and take on responsibility at Zehnder?**

**MZ:** *Not as a child, but later on. But I also put that pressure on myself. At some point you realise that such a large family business not only means prosperity, but also brings with it a sense of responsibility and obligation. Moreover, my grandfather and my father could not hide the fact that they wished that we, the fifth generation, would one day take over the responsibility. The crucial question I had to ask myself was, "What contribution could I make to the prosperity of this company apart from being the daughter of Hans-Peter Zehnder?"*

**HPZ:** *Making a plan of succession in a family business is a process that is initially open-ended and has to be managed wisely. In 2014, I turned 60 and for the first time handed over the position of CEO to a non-family member and concentrated on my tasks as Chairman of the Board of Directors. Then I realised, my role on the Board of Directors would also end at some point. But because my shares in the company will eventually pass on to my daughters, at least one of them should be on the Board of Directors. I waited for Milva to pass the bar exam and asked her if she would be interested in joining the Board of Directors of the company. Milva was very critical of herself. "What am I supposed to do there? What kind of expertise can I bring to the table?" I answered her: Like children, Board members only have to ask two questions, but persistently: "why?" and "how?". I also gave her time and carried out a kind of onboarding process with her. For two years we met once a month to discuss all the aspects of the Board's work. Milva then joined the Board of Directors in 2016.*

**MZ:** *The decisive factor for me was that I could bring added value to the Board of Directors. I had to develop this self-confidence – first in discussions with my father, then as a young member of the Board. At the beginning, I mostly listened. Today I have a better understanding of my role – namely as a lawyer, as a woman and as a representative of a younger generation. The longer I serve on the Board of Directors, the more fun it becomes. I am proud to represent my generation on the Board.*

*"Every successful company  
needs new perspectives."  
Hans-Peter Zehnder*



*"I am proud to represent the younger  
generation on the Board of Directors."  
Milva Zehnder*



**HPZ:** I remember very well how Milva indicated the way forward for the first time. It was about the new training building in Lahr, a 17 to 18 million euro property, which the Board of Directors was critical of. Do we really need this? What is the return on investment there? Towards the end of this tough meeting Milva took the floor and said, "I am the youngest person here and when I think of young employees, I think that this type of prestigious training site is a symbol to them. It means that this company is investing in the future and in its employees! It shows that optimism is our primary characteristic!"

**MZ:** Especially since we are always complaining about the lack of skilled workers and talking about the war for talents. Soft factors such as attractive offices and good training opportunities could become competitive advantages. These days, a good employer is no longer just someone who pays well. Young talents want to see themselves as part of an attractive, progressive company. They appreciate the latest technology and an attractive working environment. In this sense, an architecturally appealing training building has a positive knock-on effect.

**HPZ:** At the end of the meeting, the Board gave the green light. The argument that Milva had put forward had simply not been considered by anyone on the Board of Directors. And that is what I mean: it is important to discuss as many different perspectives as possible in the Board. That is why it is also conceivable in principle that my second daughter, Mara, as a medical doctor, could contribute her expertise to the Board of Directors. After all, our comfort ventilation systems are increasingly turning us into a healthcare company.

#### **What about the other members of the fifth generation?**

**MZ:** I would like to see more family members on the Board of Directors or in the company. My sister would be wonderful, but my cousins are also great people and could bring in their individual experiences in business administration, computer science and communications.

**HPZ:** For three years now I have been organising what we call G5 meetings for the fifth generation. My two daughters, my sister's daughter and son, and my brother's two sons are participating. I explain the background of our company and the decisions to them so that they can learn more than just what they hear at the General Meeting. On the other hand, I also like to be surprised and challenged by the younger generation. Quite astonishing new approaches often come to light. Taking a broader view can be very enlightening, especially for "old hands" like me. In the end, every successful company thrives on new perspectives.

#### **As a listed company, to what extent is Zehnder still a family business today?**

**HPZ:** The Zehnder family continues to represent the majority of votes in the shareholder base through its voting shares. This gives the company continuity and predictability. People know who is making the decisions, and this group of people does not change every few months. In general, as a family business, we do not think about fast profits, but about sustainable development. Our entire company history is proof of that. It is precisely the fact that we have a high equity base and little debt that allows us to think in such a long-term perspective. This far-sighted approach is also a plus point when recruiting managers. The people who come to us want to build something over the long term. In the end, you can still feel the values of the founding generation: humility, long-term vision, a sense of responsibility and the constant will to improve.

#### **How do you see the future of Zehnder?**

**HPZ:** With our comfort ventilation systems, we are operating in an attractive growth market. Issues such as health, sustainability and well-being will become increasingly important in the future, and we can contribute to these areas with our products and systems. With radiators, on the other hand, we are operating in a mature

market. Here we must maintain our strong position and the strong brand we have established in the past. There is also a need for further development, especially in pre- and post-sales support for our customers, so that we can offer an increasingly comprehensive all-round service.

As far as the ownership structure is concerned, I would like the Zehnder family to retain or even expand its voting majority for as long as possible by investing part of the dividends back into the company. Because the interest is there in the fifth generation. Whether one or several of the fifth generation's descendants are qualified for a career in the operating business is not decided by the name Zehnder, but by the competition between the best talents. But of course it would be nice if at some point there were another CEO named Zehnder.

#### **Where does Zehnder need to improve?**

**HPZ:** We need to constantly invest in our core competence, indoor climate, and optimise our systems. At the moment, this applies in particular to cooling and dehumidification. Another point is controlling and monitoring the indoor climate – the keyword being smart homes. Here, new technologies such as digitalisation and sensors help us to extend the customer journey, from consultation and sales to using our products. For example, if a control system indicates to our customer that the defined filter resistance has been exceeded, our service technicians could step in and change the air filters.

**MZ:** I still see potential in the image of Zehnder as an employer. We can present and position ourselves more effectively to attract the best talents. This includes new technologies and new working models with more flexible working hours. Otherwise there is a risk, particularly among talented women, of losing valuable expertise when it comes to family planning. Here, too, digitalisation offers a wide range of solutions that allows for flexible working.

**HPZ:** If we have the best and most satisfied employees, who are motivated and see the value of their work, then they will also develop good products and services. As a result, customers will feel satisfied, so that in the end this will also be reflected in the earnings statement.

Hans-Peter Zehnder was CEO of the Zehnder Group from 1993 to 2014 – and again on an interim basis in 2018. He has been a member of the Board of Directors since 1988 and Chairman of the Board since 1993.

Milva Zehnder is the elder of Hans-Peter and Rita Zehnder's two daughters and works as a lawyer and notary public in a law firm. She has been a member of the Board of Directors of the Zehnder Group Ltd. since 2016.

## OUTLOOK – SHAPING THE FUTURE



Matthias Huenerwadel  
CEO Zehnder Group since 2019

*“Making History – Shaping the Future” is our motto for the 125th anniversary of the Zehnder Group. As CEO of the company, I take pride in the long and successful history of the company, and feel that it is my duty to carefully preserve its heritage. At the same time, it is only natural for my colleagues and me in the Group Executive Committee to look primarily to the future, to constantly examine how we can develop the company in a sustainable manner and how we can successfully shape the future for the benefit of all Zehnder Group stakeholders.*

*I began my role as CEO with the company at the start of 2019 and, as usual in such a position, there was an in-depth getting-to-know-you process before the contract was signed. During this time, I had the opportunity to take a close look at the company and to exchange views on several occasions with a number of key members of the Zehnder family and the Zehnder Group. I have very fond memories of how open and transparent, how friendly and trusting, and how respectful everyone was with me and with each other during our conversations. In addition I was also quite impressed by the range of business activities, all of which boast both established and future-oriented product and service portfolios, while also enjoying leading market positions. All of this, combined with the drive and fundamental understanding it takes to continuously develop the independent and enterprising spirit of the Group, while always maintaining sound finances through prudent business practices, represents the kind of environment that every CEO hopes for. I am therefore extremely happy to have been entrusted with this position.*

*In keeping with the vision of “guaranteeing a healthy indoor climate”, the management has further refined our corporate strategy over the past two years. In our main area of activity, comfort ventilation, where we currently enjoy a leading position in the residential housing sector in Western Europe, we intend to strengthen our position by broadening the range of services we offer, by expanding geographically and by introducing new innovative products, while at the same time benefiting from the expected positive market environment.*

*Zehnder is also a leading supplier in our second main area of activity, the radiators. Our aim is to gain market share, in particular with the growing sub-segments of towel radiators and electric radiators. At the same time, continuous process optimisation will help us to make a solid contribution to the sub-segments that are no longer experiencing further growth.*

*The other three more minor activities, clean air systems, heat and moisture exchangers and heating and cooling ceiling systems, are to follow an organic, entrepreneurial development path. Our expectation is that they could achieve disproportionately high growth and earnings as compared to the overall business, and that sooner or later, they may generate a third or fourth main area of activity for us.*

*We also see major opportunities overseas, particularly in China and North America, where we are already well-positioned thanks to our long-standing presence. The topic of healthy indoor climates is still lagging behind somewhat in these markets when compared to Europe, but they are now catching up quickly and in great steps.*

*Thanks to digitalisation, Zehnder has achieved a major increase in efficiency over the past few years, especially when it comes to internal processes. Consequently, we now intend to take a systematic approach to the opportunities that digitalisation has to offer in terms of processes with and at our customers. This will help to create additional value for our customers in particular.*

*Finally, we are striving to be perceived as a sustainable company, which is something we have always been thanks to the values we embody, the products we offer and the customer benefits these products provide.*

*In short, Zehnder Group is now well-positioned and has enormous potential for further growth. My team and I are extremely pleased to be able to help shape and guide yet another successful phase in our company’s history.*

*Graenichen, September 2020*

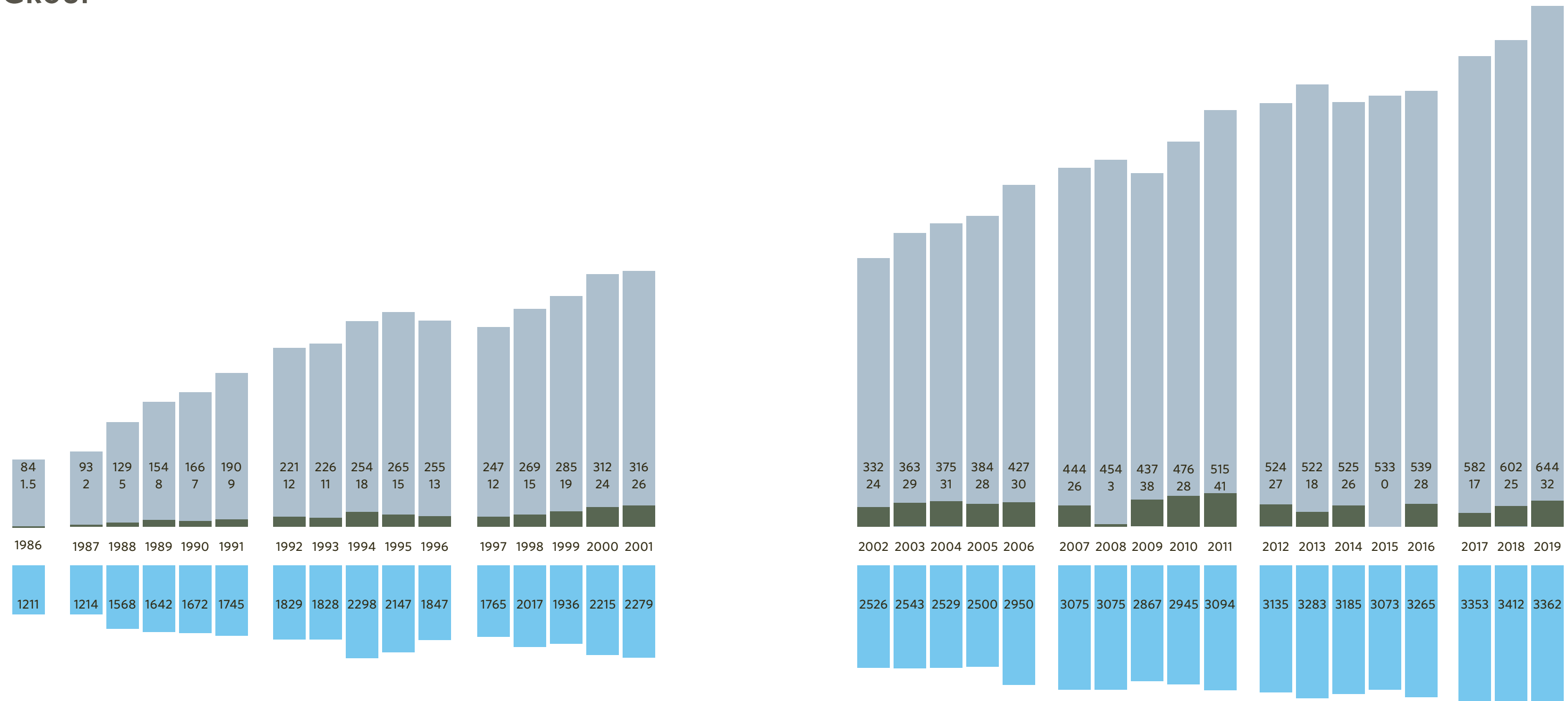


*Matthias Huenerwadel  
CEO Zehnder Group*



# SALES, NET PROFIT AND EMPLOYEES

## ZEHNDER GROUP



■ Sales | EUR million     
 ■ Net profit | EUR million     
 ■ Employees | Full-time equivalents

*Figures as of 1986, year of initial public offering*

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