



iwis

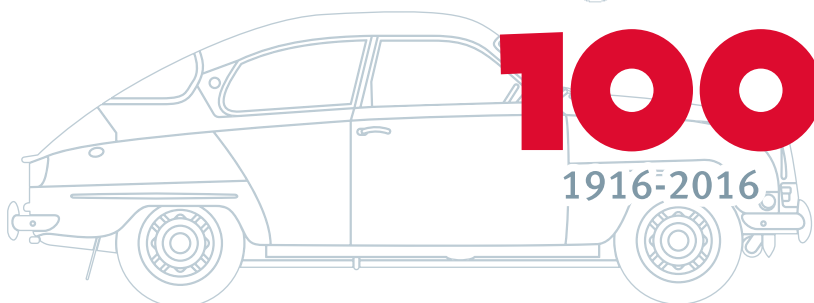
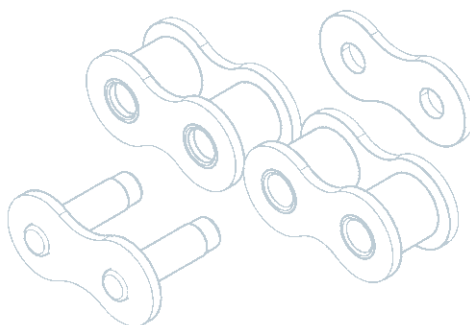
wir bewegen die welt



*Join us on a journey
through time...*

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1916-2016



THE JOURNEY OF THOSE STRIDING AHEAD

One century. Five stages. 100 years of (e)motion.

1885:

Wanderer-Werke established

1916:

Engineering company "Johann Winklhofer-Maschinenfabrik" founded in Munich on December 7th by Johann Baptist Winklhofer (1859 – 1949)

1920:

Company renamed "Joh. Winklhofer & Söhne" and the founder's two eldest sons Hans (1887 – 1933) and Fritz (1888 – 1972) Winklhofer enter the business

1922:

Production of bicycle chains begins



1933:

End of sales activities for Wanderer-Werke products (cars, motorcycles, typewriters and calculating machines)

1933/34:

The founder's sons Dr. Rudolf (1890 – 1977) and Otto (1900 – 1990) Winklhofer join the company as Technical Director and Commercial Director respectively

1936/37:

Production area doubled by the construction of new buildings

1937:

Manufacture of automobile timing chains (Adlerwerke, BMW, DKW, Hanomag) begins



1939:

Manufacture (approx. 10 % of total production) of products essential to the war effort begins

1945:

Company closes temporarily; production resumes on July 26th

1954:

First duplex timing chain for Daimler-Benz (Mercedes-Benz 300 SL)

1955:

Expansion of industrial chain production and company debut at the Hannover Messe exhibition

1963:

Gerhard Winklhofer (*1934) joins the company as Assistant to the Technical Director



GETTING STARTED

1881 - 1932

SPEEDING UP

1933 - 1938

GETTING BY

1939 - 1965

Our journey through time

100 years – not many people live that long. And not all companies reach this venerable age either – and even if they do, maturity is very rarely accompanied by an increase in strength, range and outlook. In our anniversary year, we are stronger and more visible than ever. We are more internationally oriented than ever before, but we are still very much a family company. And we are also living proof that “medium-sized company” and “market leader” is not a contradiction in terms. How did we become what we are today? That’s another question this little book is attempting to answer.

You are invited to join me on a journey back in time. A journey in five stages, characterised by a wide variety of events. I can promise you that we will not always be travelling at the same speed. Sometimes we will cruise effortlessly along a dead straight, flat and level road; at other times we will fight our way to the crest of a steep hill and hurtle downhill on the other side. Now and again we will have to brake suddenly because of a rock fall that is blocking the road ahead, and occasionally we will be driven along by such determination that, with the help of a good tailwind, our car will almost take off. From time to time, we will take a nostalgic yet critical look in the rear-view mirror, or delight in the scenery that is flashing past, but our gaze will always return to the horizon – and the objectives – that lie before us.

Our company history, and with it the history of my family, is and always has been about moving forward, characterised by a constant determination to advance and de-

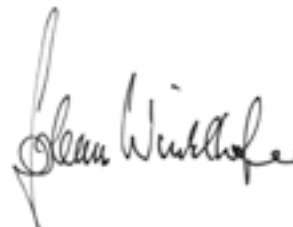
velop, rather than self-satisfied stagnation, mediocrity and complacency. We were, are and always will be proud of our commitment to striding ahead – as our history clearly shows. And to moving the world, which is why we have chosen “The journey of those striding ahead” as the central theme of our chronicle and our anniversary year, which draws to a close on December 7th, the anniversary of our foundation.

We pass dates and years only briefly. Our chronicle and its milestones provide the framework for the short, exquisite anecdotes and rather grander special occasions we would like to tell you about. And not only in this printed form, by the way: “Our journey through time” also enjoys its own unique, interactive multimedia expression on the internet, pushing back the boundaries to give historical awareness an entirely new form.

Today finds us more future-oriented and more innovative than ever before. In strategic and commercial terms, we are constantly looking and moving in the same direction: forwards! Yet after my intensive scrutiny of our past, I am certain of one thing: it is our history, our heritage, the sum of our experiences, our setbacks and successes, which guarantee our stability. These are the deep roots that keep us firmly on the ground while allowing us to reach for the sky.

I would now like to invite you to turn the page and let yourself be moved and inspired by the first 100 years of iwis. I can also say, with confidence and gratitude, that the next 100 years will be just as impressive.

Yours very truly,



Johannes Winklhofer

Striding ahead

The topics.

Insights into years of (e)motion

A vision that still drives iwis today, and turbulent beginnings: how it all started and what happened next ...

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Dear Diary, ...

The owners and their “diary” entries: three great iwis personalities and the current Managing Partner.

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Otto Winklhofer	14
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Unearthed

You didn't know? Then it's time to find out! Amusing anecdotes and curiosities from 100 years of iwis.

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Unearthed: Vice

At first sight, nothing special – but a game-changer nevertheless. Why a vice can also be a symbol of success ...



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Panorama

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Unearthed: Cattle comb

After World War Two, not just cows benefit from this humble tool ...

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Unearthed: Postcard

iwis in pole position as it roars into the world of motorsport in the 1950s and 1960s. Philipp Meub explains why ...



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GOLDEN RULES FOR THOSE STRIDING AHEAD

Way back in 1895, iwis founder Johann Baptist Winklhofer formulated ten precepts that the company, and above all its employees, have followed ever since – and will continue to follow in the future. Everyone who lives this vision of an entrepreneur striding ahead will be successful – a principle to which iwis is still firmly committed.

- 1 A fundamental requirement is a thorough understanding of your profession.
- 2 Make it your ambition to do everything better than anybody else.
- 3 Hold fast to the principle that the customer must be given the best value for money.
- 4 It should always be passion that drives you, not the desire to make money.
- 5 Always use the latest working methods and the best equipment available. Read and recommend professional journals. Attend trade fairs and exhibitions.
- 6 The majority of the money earned must be used to purchase resources that promote the company's advancement.
- 7 Put the right man in the right position.
- 8 Live modestly to start work early with a clear mind.
- 9 Accept the idea that you cannot, and need not, win every order. In this way, you will protect yourself against losses and earn the respect of your competitors.
- 10 Finally comes a large portion of patience – this will enable you to wait for your efforts to bear fruit, even if things look pretty hopeless at first.



With my bicycle.

April 12th, 1881, Ingolstadt

It's finished. My first very own bicycle. Going on a test ride after work tomorrow. My comrades in the Bicycle Club will be amazed.

September 28th, 1881, Berlin

6 minutes 19 seconds. Personal best! Although I had a serious fall, I still came in second at the Berlin Bicycle Club's autumn race meeting. Never seen so many spectators at one of our races before. Deafening noise from the crowd. Only half a spoke's length from victory after 2 English miles (3,218 meters). I'm going to win next time.

May 16th, 1884, Ingolstadt

Received a letter from Messrs. Chr. N. Schad in Munich today. Mr. Schad would like me to join the company as a bicycle salesman and cycling instructor. My success on the track is having a wider effect...

June 25th, 1884, Zwickau

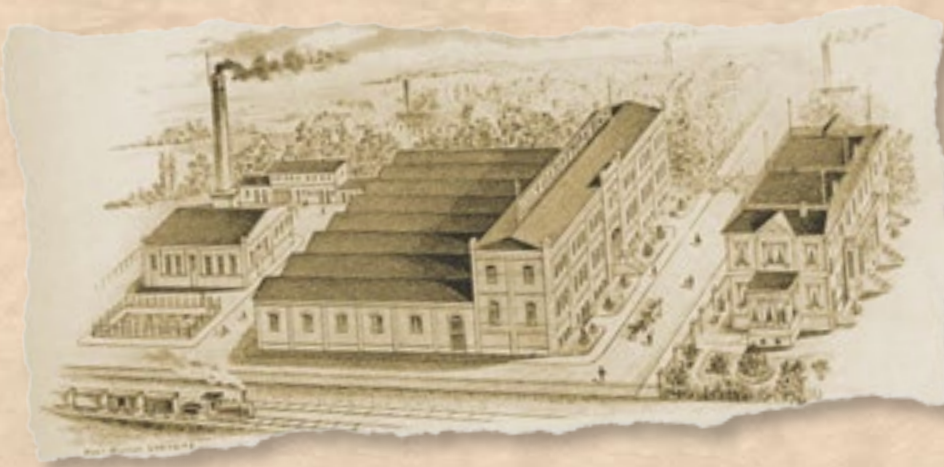
So it's Saxony after all. Met my first cycling pupils today, one of them a certain Adolf Jaenicke. A chap full of restless energy and great ambition. Tired from meeting so many people. Selling bicycles is not an easy business, but the popularity of cycling is growing.

July 18th, 1884, Zwickau

Back to Munich tomorrow. Don't know how long I will stay there yet. Currently considering a proposal Mr. Jaenicke made. He wants to open a bicycle shop with me in Chemnitz. I'm undecided. Let's see what Mr. Schad thinks about it.

February 15th, 1885, Chemnitz

There's no going back now. Our address is now Poststraße 38, rear annex. A small workshop with an office attached. This morning I thought of the Munich craftsmen's famous battle-cry "Let's go!". I'm certain we will make a go of it, too.



*Our new manufactory
in Schönau.*

February 26th, 1885, Chemnitz

Entered the new company in the Trade Register today: "Chemnitzer Velociped-Depot Winklhofer & Jaenicke". It won't be easy. Our means are limited. I can't contribute more than 600 marks and a parallel-jaw vice. Whatever happens, I'm determined to make absolutely sure that everything we make is of the highest quality. That's the only way to succeed.

October 1st, 1895, Chemnitz

Moving into the newly built manufactory in Schönau at last. Our "Wanderer" bicycles are doing a roaring trade and winning first prize at all major national and international exhibitions. Thinking about transforming our company into a joint stock company. "Wanderer-Werke"?!

August 7th, 1901, Chemnitz

Received the patent for my free-wheel rear hub from the Imperial Patent Office today. It won't be the last of my ideas to go into serial production.



My first patent.

October 4th, 1902, Chemnitz

Now I realise what homesickness means. Dear old Munich. I was in charge for long enough. It's someone else's turn now. They know where to find me, for heaven's sake. I'll still be there to advise them and check that all is well from time to time. The bicycle industry won't be profitable for much longer, that's been obvious for some time. So what next? (Maybe typewriters?). A trip to South Tyrol by motor car would be nice ...



March 28th, 1916, Munich

This war has been going on for a year and a half already. Hans, Rudolf and Otto are fighting at the front. I worry about them every day ...

June 30th, 1916, Munich

Just returned from Chemnitz. The Wanderer-Werke are completely swamped with war production orders. Met Huber this morning, he told me about the Imperial Army ordering ammunition from companys with no previous experience of ammunition production. He's not the only one ...

July 7th, 1916, Munich

Given it a lot of thought. After all, I know a bit about ammunition production. More than others. There's a tidy sum of money to be earned, too.

October 10th, 1916, Munich

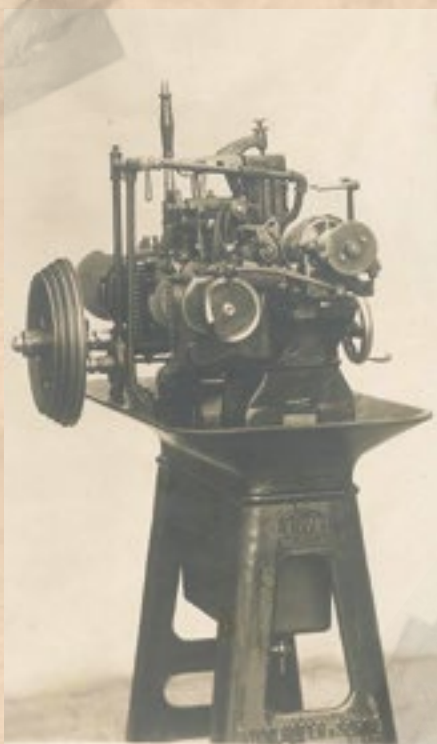
Just finished the letter to the Advisory Board and Management of the Wanderer-Werke. I need starting capital. Found a building that might be suitable for the new company ...

December 7th, 1916, Munich

Bought the old furniture factory in Forstenrieder Straße 53 for 305,000.00 yesterday and just come back from the Registry Court. The "Johann Winklhofer Maschinenfabrik" already has its first order: howitzer detonators.

December 5th, 1918, Munich

Decree issued by Demobilisation Commissioner: all Munich factories ordered to cease production due to coal shortage. What will happen to my workers?



One of our automatic screw-cutting machines.



Drawing for the howitzer detonator.



The furniture factory before I bought it.



A fine piece of work: our first directory of articles ...

February 17th, 1919, Chemnitz

The Wanderer-Werke Management Board advised me to let my factory fold. Had really put my hopes on the order for automatic screw-cutting machines. Such a wonderful, well equipped factory! I don't want to give up.

March 1st, 1919, Munich

Wanderer-Werke order 100 automatic screw-cutting machines after all. A good day!

January 1st, 1920, Munich

A new year, and from now on there are three of us. A real family company. Hans and Fritz have joined as shareholders. They want to build a future for themselves. "Joh. Winklhöfer & Sons" ...

April 14th, 1922, Munich

I want to give bicycle chains another try. Most chains on the market are very poor quality. We can do better – now under the name "JWIS".

June 10th, 1923, Munich

Our first index of articles: bicycle saddles, chains for pedal cycles and motor bicycles, and adjustable spanners. Many recommendations because of our good quality. A good feeling.

December 31st, 1929, Munich

Lunch break. No appetite. Just drawn up the balance sheet: loss of 51,329.00 marks. Many redundancies. Can only afford to keep 99 workers on. But we won't give up!



Adolf Jaenicke (left) and Johann Baptist Winkhofer (1885)

Power transmission

Anyone who calls his bicycle brand “Wanderer” (“Hiker” or “Rambler”) must be keen on exercise, overcoming insurmountable obstacles and making progress. In his twenties, Johann Baptist Winklhofer was definitely a young man who had boldly committed himself to striding ahead, full of determination. He was also in love with a machine that kept him ahead of his time: in 1885, the founder of iwis from Munich laid the foundations for what was to become the Wanderer-Werke engineering company in Chemnitz. The former bicycle maker is closely associated with the history of iwis. In 1916, he paved the way for the emergence of today’s chain specialist ...

Founding a company in wartime automatically has an effect on its chosen product portfolio, and Johann Baptist Winklhofer (1859 – 1949) was no exception; the first articles produced by his engineering company “Johann Winklhofer Maschinenfabrik”, which he set up in a disused furniture factory in Sendling in 1916, were detonators for howitzer shells. He already had some experience in this field, having worked for the Royal Bavarian Ordnance Factory in Ingolstadt as a young man. Winklhofer certainly did not lack vision, but he certainly lacked orders, capital and good skilled workers. It was natural for him to turn to the Wanderer-Werke for help. “It was quite obvious to me that I could only embark on such a daring venture with the help of the Wanderer-Werke”, he wrote in his memoirs in 1940.

And as he had hoped, the Wanderer-Werke really did give Johann Baptist Winklhofer an initial order and loaned him the required skilled personnel. Some of these able and efficient workers remained in Munich and en-

sured that the new company got off to a flying start. Was this simply a gesture of economic solidarity in time of war? No, it was more than that. There were other close ties between Johann Baptist Winklhofer and the Wanderer-Werke.

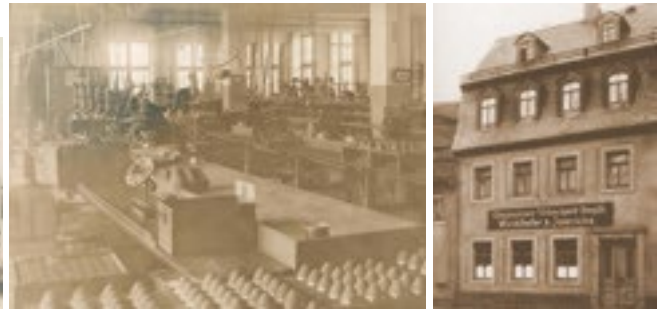
Turning passion into profits

Even in his youth, Winklhofer had always given his imagination free rein and was passionate about everything that promised mobility and progress. In the 1880s that meant not just the steam engine, but also the bicycle. Munich-born Johann Baptist Winklhofer was absolutely fascinated by two-wheelers. At the age of 21, the qualified lathe operator and mechanic assembled his first own bicycle with parts he had made himself. He spent most of his leisure time in the saddle, even founding his own Bicycle Club for kindred spirits in Ingolstadt. He made a name for himself in a race in Berlin in 1881 and soon became one of Germany’s best cyclists. His five minutes of fame brought him a new job, too. The sewing-machine manufacturer Chr. N. Schad from Munich wanted to expand his business and decided to invest in velocipedes (or bicycles, as they are now called). He required the services of Johann Baptist Winklhofer as a bicycle salesman and cycling instructor, who was able

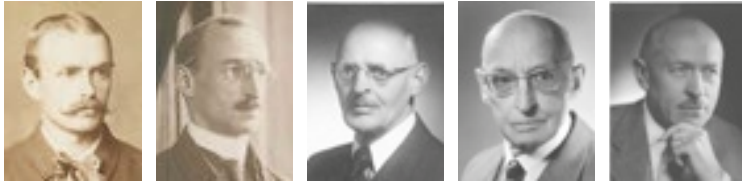
to turn his passion into money. His occupation enabled him to travel, first to Lindau, then Berchtesgaden and finally Zwickau, where he met the man who later became his brother-in-law and business partner: Adolf Jaenicke. Chemnitz, which was then a “flourishing” hub of industry with a benign climate for young entrepreneurs, was where the two men took the plunge and started business on their own account.

“It was quite obvious to me that I could only embark on such a daring venture with the help of the Wanderer-Werke.”

Johann Baptist Winklhofer



First delivery, 1917 (left), View of the assembly shop, 1917 (center), First workshop at Poststraße 38, Chemnitz 1885 (right).



Johann Baptist Winklhofer, 1859–1949
Hans Winklhofer, 1887–1933
Fritz Winklhofer, 1888–1972
Dr. Rudolf Winklhofer, 1890–1977
Otto Winklhofer, 1900–1990
(from left to right)

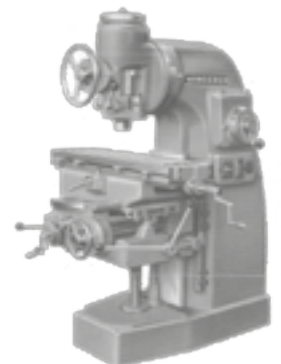
Booming business and saying farewell

In 1896, what had begun in 1885 as the “Chemnitzer Velociped-Depot Winklhofer & Jaenicke” in modest premises, with an even more modest stock of start-up capital and two employees, became a limited stock company with a share capital of 1.1 million Reichsmark. The bicycle business was booming, and so were the Wanderer-Werke. At the turn of the century, the company employed more than 250 people and was selling over 10,000 bicycles every year, making it one of the largest manufacturers anywhere in the world. But times were changing. The bicycle had long since become a means of transport for the people, but on the more affordable American bicycles. And not only the market was changing. From 1897 onwards, Johann Baptist Winklhofer was in sole charge of the Wanderer-Werke. At this time, the Wanderer-Werke was one of the most successful companies in Germany; its product portfolio contained not only bicycles, but also cars, milling and screw-cutting machines, typewriters, calculators and the Enigma cipher machine. In 1902, Johann Baptist Winklhofer – by now Royal Bavarian Undersecretary – emulated his former partner Jaenicke and retired. Initially, he returned to his home town of Munich before travelling the world. In his memoirs, he describes the years that followed as “the best days of his life”. Johann Baptist Winklhofer spent time in the USA, Mexico, Italy – and Chemnitz, to which he regularly returned from his travels in his capacity as technical advisor, bringing

with him new ideas for even more profitable products. Although retaining his connection with the company required a certain amount of effort, it was soon to prove worthwhile.

From dependency to emancipation

Johann Baptist Winklhofer’s great accomplishments assured him the continuing sympathy of the Wanderer-Werke management, who helped and supported their founder with his Munich engineering company, particularly in the difficult conversion phase after the First World War. An order for 15 automatic screw-cutting machines prevented the definitive closure of the young engineering company, which was in trouble as a result of demobilisation. Initially, the company from Chemnitz was the Maschinenfabrik’s only customer and determined its product range. After its foundation in 1916, Winklhofer’s sons Hans and Fritz entered the business, which had now developed into a true family company, in 1920. In 1922, now under the name of JWIS – “Johann Winklhofer & Söhne” – the company began to produce chains. Its range of bicycle and motorcycle chains continued to grow steadily. Besides chains, the company offered a rather heterogeneous product portfolio that included adjustable spanners, bicycle saddles, and compressed-air guns. A considerable proportion of the company’s revenue came from the sale of Wanderer products: typewriters, calculating machines, motorcycles and motor cars. When the sales departments were disbanded in 1933 and Otto, the youngest of Winklhofer’s sons, joined the company, the emancipation of JWIS from its backer Wanderer began to gather momentum. Supplier and customer were now operating on an equal footing.



The production of automatic screw-cutting machines initially ensures the survival of “Johann Winklhofer Maschinenfabrik”.

Vice

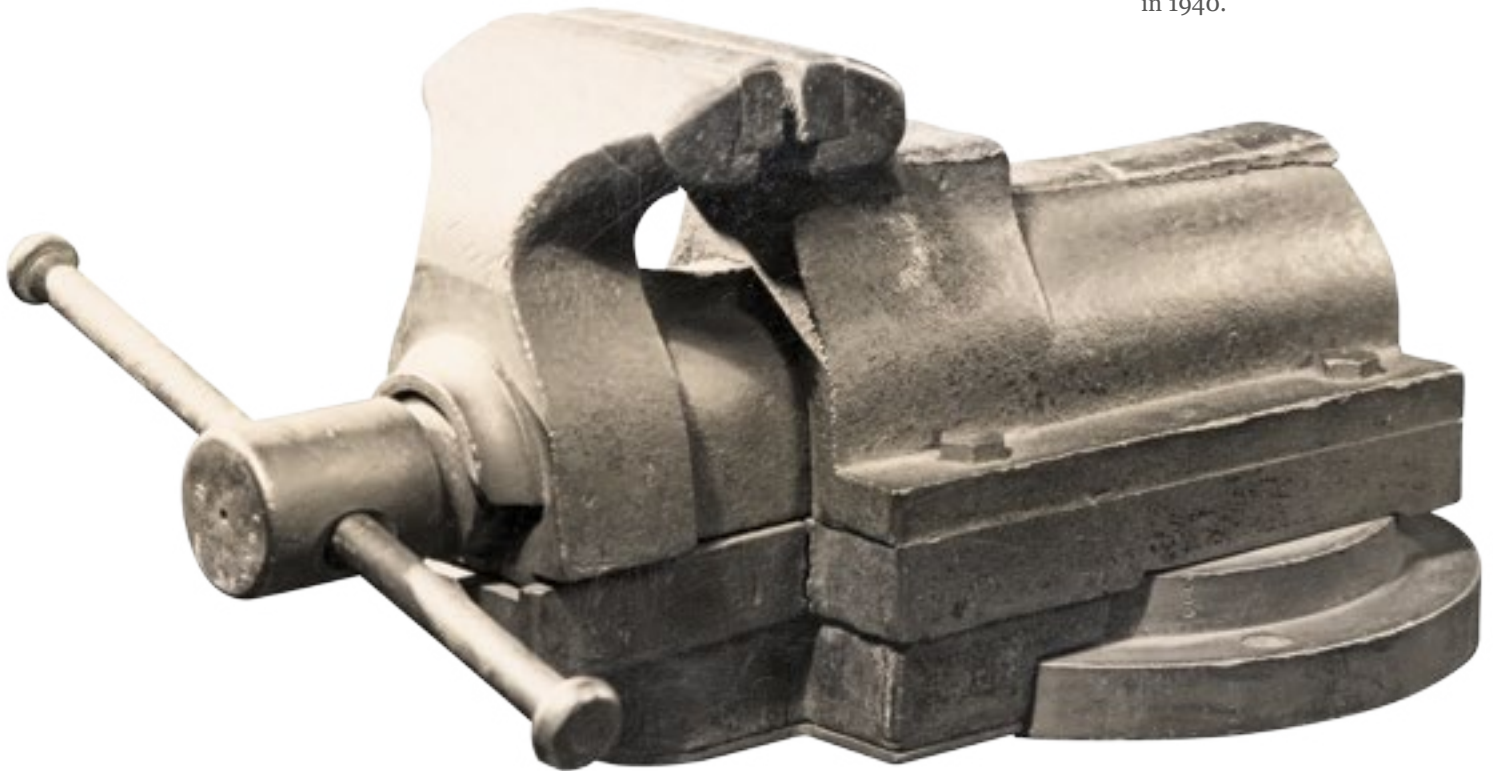


At first sight, it is nothing out of the ordinary – but for iwis, this special collection of cast-iron jaws, crank and threaded shaft has an almost iconic significance: this was the vice

that cemented the early entrepreneurial success of iwis founder Johann Baptist Winklhofer in 1885.

1 *The founding myth*

“My contribution to the foundation of the Wanderer-Werke was my savings of 600 RM in cash and a parallel-jaw vice that I brought with me to Chemnitz”, wrote Johann Baptist Winklhofer in his memoirs in 1940.



2 *Enduring friendship*

In 1938 Hermann Klee, Director General of the Wanderer-Werke, celebrated his 60th birthday. Also present was company founder Johann Baptist Winklhofer. Both men pose proudly beside the vice in its glass display cabinet (see photo top left).

3 *Lost without trace*

Despite intensive research, the whereabouts of Johann Baptist Winklhofer's vice remains a mystery. To this day, however, it has lost none of its special symbolic significance ...

June 10th, 1933, Landsberg

Still with my parents in Landsberg. Hans' death was a terrible blow for us all. Father would like me to come to Munich immediately as Commercial Director. My job will be to sell our own products. Should I give up my job at Wanderer, give up travelling? In two minds. All I know right now is that family is more important than ever.

July 31st, 1933, Munich

So, back in Munich again. My first day as Commercial Director starts tomorrow. Quite a big change. Fritz setting up on his own with the typewriter and calculating machine department. We have to get our own production moving.

November 11th, 1933, Landsberg

Discussion with Father. We need a new Technical Director. We want to get ahead. Make progress. Despite his amazing capacity for hard work, he can't cope with this task alone any longer. My proposal: Rudolf. Father will think about it. I'm sure the idea appeals to him.

December 1st, 1934, Munich

Our "Doctor" finally started as Technical Director today. Rudolf will do a fine job. Increasing demand for our bicycle and motorcycle chains. Things are moving forward.

July 10th, 1936, Munich

Builders making such a racket that we can't hear ourselves think. But we don't care. We need more space. The new building is coming along well.



May 5, 1936.



Pouring concrete in the suspended ceiling above the ground floor on July 10, 1936.



Scaffolding on the central building.



General view of the factory 1937.

March 16th, 1937, Munich

We managed to complete work on the new building before the onset of winter. Production area in our factory now doubled. Also received a very nice print showing the new general view.

April 9th, 1937, Munich

Now supplying more and more motor car manufacturers with our tried and tested roller chains: Adlerwerke, BMW, Auto Union AG, Hanomag. Profits are up. Focusing on chain production was the right decision.

July 20th, 1937, Munich

The hardening shop is too small, but we still have to wait for planning permission to be granted. Should be going through shortly. Selling chains to car and motorcycle manufacturers like Zündapp, Adler and BMW means that we are indirect suppliers to the army.

June 16th, 1939, Munich

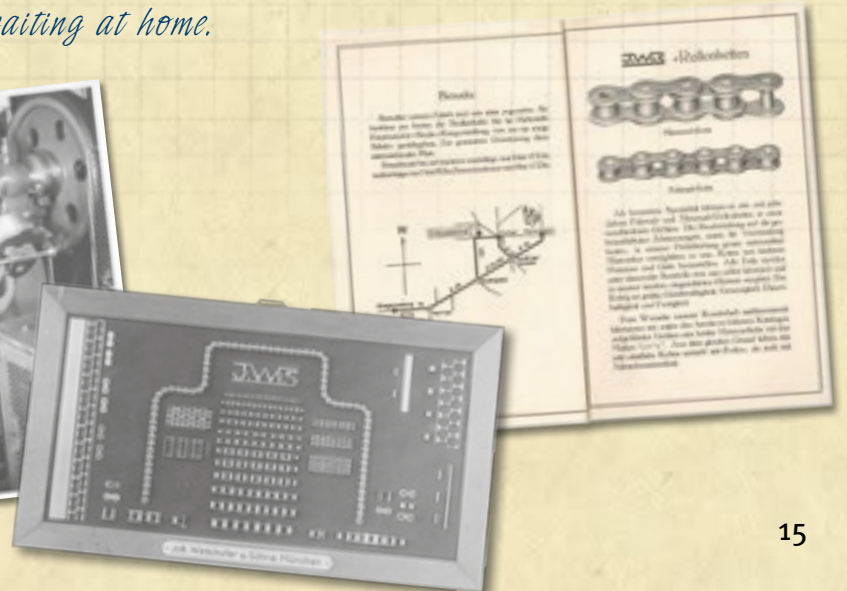
Improved and increased performance now after expansion of the hardening shop. Want to relieve the pressure on our women workers. They work hard and the children are waiting at home. Maybe a kindergarten?



JWIS chains make life easier.



Chain plates punching and stamping. Snapshot of the production floor. The chain is now our figurehead product.



September 5th, 1939, Munich

At war again since a few days ago. We will do everything we can to prevent at least some of our skilled workers from being called up. Hope the war is over soon, hope we will be able to keep the business running.



I also made a short speech in praise of the workforce.

December 6th, 1941, Munich

Despite the war, we were able to invite the staff to a Social Evening at the Thomasbräukeller in Kapuziner Square: JWIS is exactly 25 years old today! The high point of the evening was Father's speech, which was received with thunderous applause.

May 19th, 1943, Munich

Company roll-call: Rudolf welcomed the Ukrainian women who have arrived recently. More and more men now serving at the front. I hope we are all going to get along. Union representative

Schmidt appealed to his workmates "as Germans, to maintain the necessary attitude to and distance from the foreigners, but still be helpful and sociable".

April 30th, 1945, Munich

The Americans entered the city today. The war is over, the company has been closed down. No idea what comes next ...

June 20th, 1945, Munich

Hopeful news; the Munich Ministry of Agriculture has recommended that our production be allowed to restart. I hope they manage to convince the Americans.

July 14th, 1945, Munich

Received the operating licence from the American military government this morning.

July 26th, 1945, Munich

A few machines are running again. We are making replacement chains for the American government's Jeeps. At least until the electricity is cut off again and we run out of coal



Chain production is still in full swing (1942).

for heating. Bartering going on all over the city. Anyone who has the chance travels out of town to stock up on tradeable goods. The farmers desperately need curry combs for their cattle. Apparently cows give more milk if brushed regularly. We've used left-over sheet metal to make about 600 cattle combs. We make the handles out of surplus pistol butts from the old compressed-air gun stock.

December 31st, 1948, Munich

Things have improved steadily since the currency reform in June. The bartering has finally stopped and the balance sheet looks pretty healthy again: revenue 1,610,308 DM, profits 310,180 DM.

February 28th, 1954, Munich

On the recommendation of its American representative, Mercedes-Benz has presented its new sports car in New York. It's a technical masterpiece and an absolute gem. I'm proud to say that we deliver the camshaft drive timing chains fitted as standard.

April 29th, 1955, Hannover

The Hannover Messe exhibition is absolutely the right place for us to be. It's time for a change. Maybe JWIS chains for industrial applications are a business model for the future. The bicycle chain business has been poor for a few years now, and sales of motorcycle chains are fluctuating, too. We have to open up new markets. The exhibition was a success. It was also Gerhard's first time here. It was his job to guard the DKW "Meisterklasse" at the show.



A high-ranking guest at the 1953 IFMA in Frankfurt. Our Economics Minister Ludwig Erhard.

December 31st, 1960, Munich

I received the Federal Cross of Merit this year for "outstanding services to the Bavarian economy".

November 2nd, 1963, Munich

Gerhard has had his first day. He's 29 now. I'm confident that he will be able to take over the business one day. But he has to prove himself first, not least to the workforce.



Otto Winklhofer speaking at the company's 25th anniversary celebrations in 1941.

Getting by

Dealing openly with the role of the company and his own family during the National Socialist regime from 1933 to 1945, is an important issue for Johannes Winklhofer in this anniversary year. Research has revealed that iwis fluctuated between enforced cooperation and subversive resistance. On the one hand, the company produced goods that were essential for the war effort and employed forced labour. On the other hand, it distanced itself from the (racial) ideology of the Nazis, for which it was publicly denounced. The research makes a clear point: considering that iwis was a Wehrmacht supplier, the company displayed an astounding level of resistance to the Nazi regime.

A new generation took over at iwis in 1933. Following the death of his brother Hans and the departure of his brother Fritz to set up his own business, Otto Winklhofer assumed responsibilities in his family's company on August 1st of that year. He also convinced his father of the need to hire his elder brother Rudolf as Technical Director. Rudolf left the Wanderer-Werke and took up his post in Munich on December 1st, 1934.

Denunciation

The brothers and their father kept their distance from the National Socialist movement. Research in the Federal Archives shows that none of them was a member either of the NS-DAP or its party organisations, or of the SA or NSKK (the paramilitary National Socialist Motor Corps). There are no personal statements on this issue. Johann and Otto Winklhofer make no mention of their political views in their memoirs, in which they refer only to technical and commer-

cial issues. However, their treatment of Georg Cohn, their Jewish sales agent, suggests that both generations of Winklhofers disagreed with the racial ideology of the National Socialists. On the contrary, in Cohn's case they attempted to find out how far it was possible to actively resist the Nazis' racist requirements by simply refusing to join in. Georg Cohn was the iwis representative in Berlin from 1928 onwards. In December 1937, the Munich Chamber of Industry and Commerce ordered iwis to terminate the arrangement, an order which iwis ignored. It was only in March 1938, when the violently anti-Semitic tabloid "Der Stürmer" publicly denounced iwis for continuing to employ its Jewish representative, that the company bowed to pressure. Georg Cohn managed to emigrate to China, where he remained in contact with iwis. Shortly before the outbreak of war, iwis recommended Cohn to the Dutch company Snelwegefabriek N. v.

A conscious decision

Unlike many other German industrialists, the Winklhofer family did not attempt to gain an economic advantage by joining the Nazi party. However, the upsurge in arms production as a result of the National Socialists' preparations for war also meant an indirect increase of turnover and employment figures at iwis. In 1937, the company began to prepare for the resumption of munitions production and was an indirect supplier to the army: chains sold to the big car and motorcycle manufacturers such as BMW, Adler or Zündapp were also important to the war effort, as they were fitted, for example, in the BMW R 12 Wehrmacht motorcycle. After

“Only openness and clarity about what actually happened can help in dealing with the company's history under the National Socialist regime.”

Johannes Winklhofer



View of the apprentices' workshop during the Reichberufswettkampf vocational competition 1937/38.

the outbreak of war in 1939, iwis set up a department for the production of percussion detonators for 20 mm anti-aircraft shells. Production began in the same year. In all, detonator production accounted for about ten per cent of the total output, amounting to 150,000 units in 1943. He wanted to prevent a proportion of his skilled workers from being called up for military service – that is how, in retrospect, Otto justified his decision to manufacture munitions. Eventually, a total of 61 iwis men were called up to serve in the Wehrmacht by 1942. Keeping the company alive was another significant motive for Otto. He and Rudolf had not forgotten the dramatic events of the 1914-1918 war, when companies that were not considered important for the war effort were threatened with closure.

Forced labour at iwis

By employing forced labour, iwis was also forced to participate in the National Socialist policies involving racial discrimination and deprivation of rights: four Russian “prisoners of war”, 20 female “Eastern European workers” from Ukraine and up to 22 “foreign workers” from France, the Netherlands and Czechoslovakia were supposed to make up for the lack of skilled labour at iwis. This division into three categories was a reflection of the Nazi race doctrine: the lower a foreign worker’s position in the workplace hierarchy, the worse his or her living conditions in Germany. iwis treated all three groups fairly equally, as suggested by the evidence of



The female Ukrainian forced labourers were housed in this building. The photo was taken during rebuilding work in 1950.

the company roll-call of May 19, 1943, in which the factory management appeals to its German employees “to maintain the necessary attitude to and distance from the foreigners, but nevertheless remain helpful and sociable.” The appeal does not differentiate between the categories as the Nazi race ideology required. By asking the German workforce to be helpful and sociable, Otto and Dr. Rudolf Winklhofer showed that they did not regard the foreign labourers as “sub-humans” of Nazi ideology, but rather as employees. Again, they were trying to determine to what extent the company could resist conforming to the demands of Nazi race ideology by simply not joining in. However, some employees did not agree with this policy. A works council member of the National Socialist Factory Cell Organization NSBO, in particular, mistreated the Ukrainian women. In this case, the management did not dare to cross the line between passive and active resistance.

A fresh start

After the US forces had entered Munich on April 30, 1945, the military government closed the virtually undamaged factory, only to issue a new operating licence on July 14th. iwis resumed production on July 26nd. The fact that Otto and Dr. Rudolf Winklhofer were neither members of the NSDAP nor involved in any “Aryanisation” cases probably helped to accelerate the re-licensing process. The company also enjoyed unique status that was also significant: iwis was the only manufacturer of bicycle chains and drive chains for road vehicles and agricultural machinery in the US zone of occupation.

Curry combs for dairy cattle



Immediately after the end of the Second World War, raw material transport and industrial production came to a complete standstill. There were no reliable gas or electricity supplies, and it was impossible to recommence regular production. Business life was dominated by exchange and barter transactions, which gave Otto Winklhofer an idea: manufacturing curry combs for cattle.

1 *Curry comb production*

Albert Rilinger, who was an iwis apprentice at the time, still remembers dipping the metal heads in protective black varnish to protect them. The handles were made from the grips of the compressed-air guns that the company also used to make.



2 *Swap shop*

Bacon, butter, eggs, flour or potatoes. The curry combs were ideal for bartering with dairy farmers, who knew cows that were groomed regularly gave more milk.

3 *A fruitless search*

Although 3,745 combs were delivered between 1945 and 1947, they were not stamped with the company logo, so it is virtually impossible to trace any of the originals. However, the cattle comb illustrated has a similar form to those made by iwis.

The chain with a star.

In 1954, Mercedes-Benz presented its legendary 300 SL model at the “International Motor Sports Show” in New York. With celebrities such as the Shah of Persia, Herbert von Karajan or Romy Schneider among the buyers, the vehicle with the distinctive gull-wing doors soon attained cult status as an icon of the 1950s.

The sports car was powered by a 215 HP engine equipped with a reliable JWIS duplex roller chain. This investment proved to be a milestone in the development of iwis as a company, since it involved the first serial production of JWIS timing chains for overhead camshaft drive systems.







Always a good harvest.

About half of the world's cereal crop is harvested with combine harvesters made by the world's largest agricultural machinery manufacturer, who has been an iwis customer for many years. The challenge is to guarantee optimum transport of the various types of grain within the machines, even under the toughest harvesting conditions. Reliable iwis chains convey the crop from cutter bar to grain tank. Today's highly efficient harvesting processes would be unthinkable without such technical assistance.



The World Champion chain.

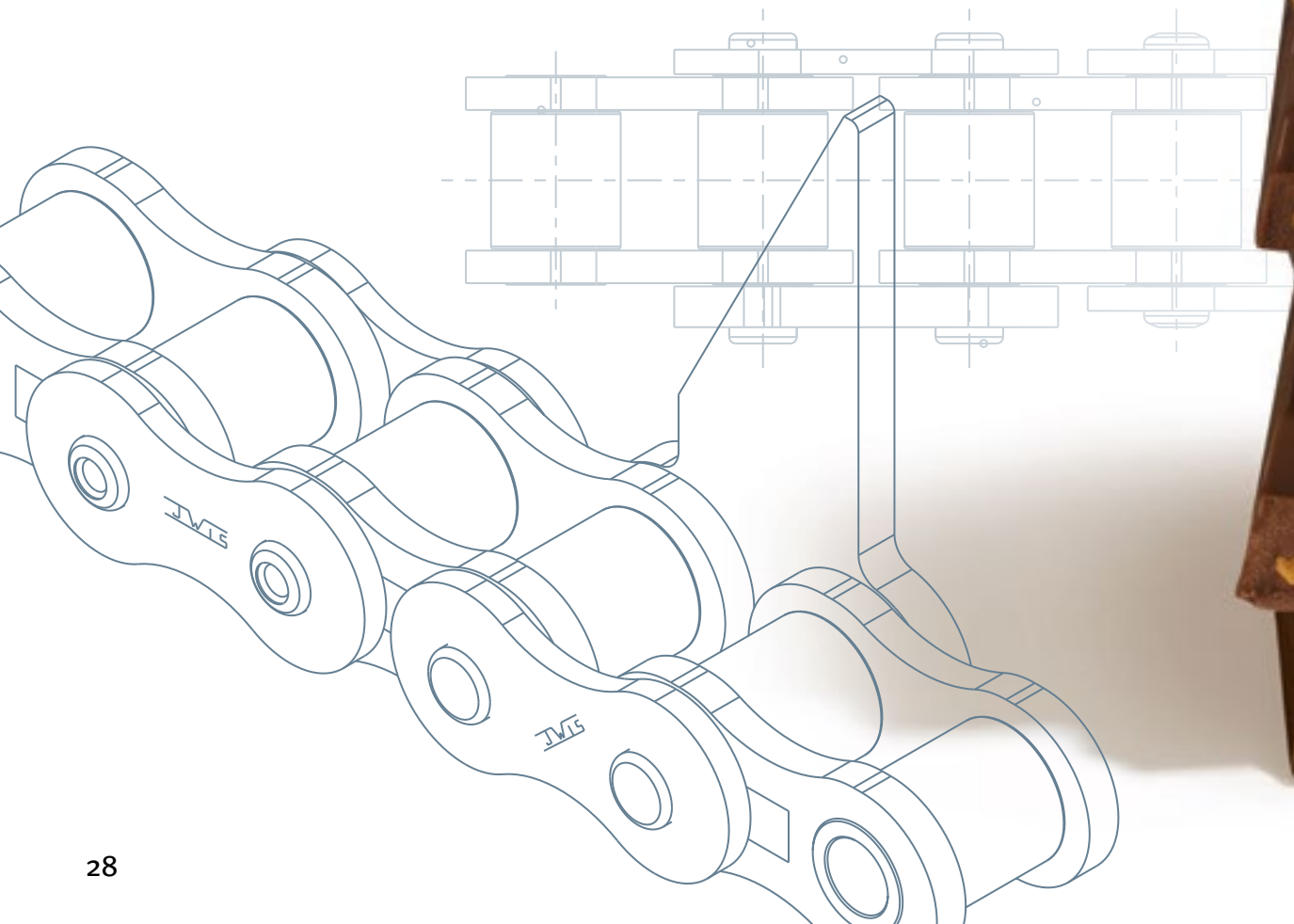
In the world of motor sport, tiny details can often decide whether a race is won or lost, so the first Formula 1 World Championship title won by a German in 1994 was also a cause for celebration at iwis. The engines in the Benetton-Ford cars were driven by a simplex JWIS roller chain from iwis in Munich. Incidentally, the car was driven by Michael Schumacher, no less.





Chocolate on the move.

iwis takes care of chocolate, too: modern industrial production of the cocoa-based creamy treat is only possible under high-technology conditions. Two 680-meter long **JWIS precision chains** ensure a congestion-free journey through the production plant for the characteristic square chocolate moulds. Reliable, trouble-free transport can only be guaranteed if the chain pair runs absolutely in parallel at all times.





CATCH 'EM YOUNG

211

children

of iwis employees have attended our company kindergarten "Kinderkette" ("Children's Chain") since it was founded in 1973



In 2015,

all 4th year apprentices

were taken on after qualification

= 100%

> 50% of all apprentices trained here are still working for iwis.

2.35 MILLION EUROS

is the average sum that iwis invests in educational training every year.

On average, more than

40%

of employees make use of the training programmes iwis provides.

Figures count

Sometimes figures speak louder than words. What's left if you take the (square) root of a company, insert variables, calculate probabilities, compare both sides of the equation and then put two and two together? We've converted the most interesting facts and comparisons into an easy-to-read matrix. We are sure you will agree that the results speak for themselves ...

TRUE AND FAITHFUL

8

married couples currently working at iwis met each other working here.

people now working at iwis once attended the company kindergarten "Kinderkette".

NEW DIMENSIONS

If you add up the surface area of all iwis plants and offices, the total is a staggering 142,000 m².

This is exactly the same area as the windows glass surface of the world's tallest building, the 828-meter "Burj Khalifa" skyscraper in Dubai.



Equal to the distance from Munich to the Tegernsee Lake and back again: every day, iwis factories worldwide produce a total of approx. 105,000 m of chain consisting of almost

53 million individual parts.

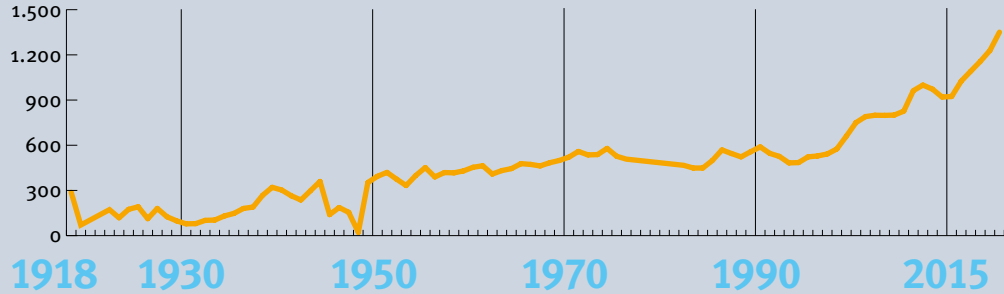
1,400 m = the longest single conveying distance for which iwis has ever supplied a chain. It is still in use on a car body production line.

The number of chain versions in the iwis portfolio between 1916 and 2015: > 95,000

PEAK PERFORMANCE

Employees

Up, down, then almost vertically upwards again. It was quite common for iwis employee numbers to fluctuate significantly in the past.



HUMAN CHAIN



If all

1,350
iwis employees

joined hands and stood in line, the resulting human chain would be **1.35 km** long – enough to encircle the Munich Allianz-Arena with ease.

25% women
75% men

make up the iwis workforce.

INTERNATIONAL

If you wanted to hold a conversation with a native speaker at each of the international iwis locations, you would need to speak

13
different languages.

38
nationalities
work at the main plant in Munich.

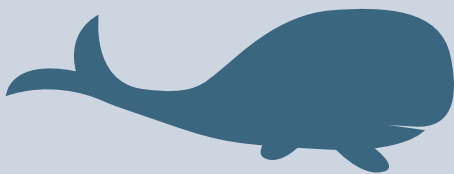
8
German colleagues
are working at international locations.

25
locations, of which

9
are production sites, on

4
continents.

LARGE AND SMALL



The largest iwis chain has a pitch of **320 mm**.



The smallest pitch of any iwis chain is a mere **4 mm**.

August 4th, 1960, Munich

I finally have my Engineering degree. Now I want to see the world. So does Traudl. We're dreaming of America.

March 17th, 1963, Minneapolis (USA)

We haven't given up. In the meantime I've landed a real "rags to riches" job at Minneapolis Moline. I really like the extremely customer-friendly attitude of the Americans. The Germans could certainly take a leaf out of their book.

September 24th, 1963, Ithaca (New York, USA)

"Now I understand, you want to be the quick fish in the big basin" - the man sitting opposite me wanted to buy iwis. He didn't believe that a small company like ours would stand a chance against the American competition. "The quick fish" - now there's an idea with strategic potential. Getting my draft papers from the US Army was a good thing after all ... I'm back and I have an objective to work towards.

November 2nd, 1963, Munich

My first day in the factory as assistant to the Head of Engineering. Uncle Rudolf isn't making it easy for me, but I wasn't expecting anything else. I can stand up for myself.

November 2nd, 1965, Munich

Father has now granted me full power of attorney two years after I joined the company. I'm now Head of Engineering. I want to get things moving, but I still want to - and must - learn a lot ... not just in theory, but in practice!

December 7th, 1966, Munich

The 50th anniversary of iwis. Good reason to be proud, and rightly so, but we must not rest on our laurels. The bottom has fallen out of the market for bicycle chains and the motorbike market is also in decline. We have to keep increasing our share of the car timing chain market.



Traudl und I at our wedding in 1961.



October 5th, 1968, Munich

Three months of hard work that have really paid off. We've actually managed to achieve a fivefold increase of the service life of the Daimler engines to 100,000 kilometers. Our next target: 200,000 kilometers.



Topping-out ceremony: onwards and upwards.

July 10th, 1970, Munich

Just celebrated the topping-out of the new building. If work carries on at this rate, everything will be finished by the beginning of next year. It is expected to bring us 40 percent more production space, which we certainly need. The economy is booming and our growth rate is excellent.

November 19th, 1973, Munich

We are now the first company in Munich with its own kindergarten. Its main purpose is to help the numerous women working in the production department. Oil prices continue to rise. I'm extremely worried. Where will it all end?



Our "Kinderkette" kindergarten.

December 31st, 1975, Munich

The end of an exciting year. Father has now officially retired, but he is still involved as a limited partner. He's still as mentally alert as he ever was, and in good physical shape. I have a lot to thank him for, and I still benefit from all his experience. It's a blessing in these days of economic upheaval, even if it doesn't necessarily guarantees success. Our workforce is motivated, which gives us stability, and I have so many new ideas ...



Father and I on his 80th birthday.

April 8th, 1977, Landsberg am Lech

The secondary school in the new Plantanenstraße School Center will be known as the Johann-Winklhofer-Realschule, named after my grandfather Johann Baptist Winklhofer. The official announcement was made yesterday. It's a great honour, but he is also a great example for the young people of today. Throughout his life, Grandfather always looked after the needs of the socially disadvantaged and did a lot of charitable work. It's wonderful to see his commitment being honoured again in this way.

May 29th, 1979, Munich

I've been elected Vice-President of the Chamber of Industry and Commerce Munich-Upper Bavaria. We need to improve our networking.

July 16th, 1980, Munich

As I've always said, there's no substitute for quality. But being customer-oriented has its own rewards. This year, we've received Opel's "Supplier of the Year" award for the second time.

June 30th, 1983, Munich

Father is awarded the Bavarian Order of Merit. We are all so proud! He laid the foundations that made the company what it is today. We have built up an outstanding reputation for quality that is all down to him. That said, companies can only exist in the Here and Now - tradition alone doesn't guarantee survival. Compared to the international competition, we're still too expensive, too slow and not innovative enough. We need to keep moving.

June 10th, 1984, Munich

"For exemplary achievements in the professional training of young people". We are all incredibly proud of this award from the Federal President. What an honour.



Prof. Rolf Rodenstock, Chairman of the Chamber of Industry and Commerce Munich-Upper Bavaria, hands me the certificate from the Federal President.



Good customers: Daimler and Porsche engines modules.

May 13th, 1990, Munich

Father passed away. His death is the end of an era for iwis. It's a terrible loss for the family.

September 11th, 1990, Munich

BMW has given us our first-ever system order. This could be a milestone on our way from precision chain manufacturer to complete timing-drive system developer. A huge success. A real challenge!

June 4th, 1992, Munich

I've decided to go back to school. The concept I'm currently studying through textbooks, workshops and seminars is called "Reengineering". iwis needs to get into better shape, and economist Professor Horst Wildemann has the right ideas about how to do it. The Japanese can also tell us a lot about how to run a modern business e.g. "Kaizen", which means "continuous change for better", prioritises the customer and, above all, the process. A working philosophy I find highly attractive.

October 1st, 1992, Munich

I was able to take over the shares of my late father and my brother Hubert today. The company now has a uniform shareholder structure at last. I'm also thinking of my own children. Which one of them will take over responsibility next: Ursula, Susanne or Johannes? We'll see. I'm not putting them under pressure.

January 3rd, 1993, Munich

Although this will be a difficult year for the automotive industry, we still have to set up a dynamic, capable research and development department. If we want to hold our own in a competitive market, we need to stay on the ball and be innovative.

September 3rd, 1993, Strakonice

We are consistently pursuing a course towards internationalisation. Our Czech production subsidiary "ORWIS Ketten GmbH" opens today.

April 26th, 1994, Berlin

I received the Federal Republic's Order of Merit with Ribbon today.



August 7th, 1994, Munich

My objective now is to offer maximum customer benefit at an appropriate cost-benefit ratio. The future of iwis will involve divisionalisation, outsourcing, reorganisation, restructured work processes and working in teams.

December 10th, 1994, Munich

It will be ready soon: our first JWIS timing drive system for the BMW M47. A step into a completely new dimension and a sustainable business model for the future.



December 24th, 1995, Munich

Johannes, Ursula and Susanne have joined the company as limited partners this year. There is also the prospect of them being represented on the Advisory Board as shareholders.

My children: Dipl.-Kfm. Johannes Winklhofer, M.A., M.Phil. Ursula Hülshoff née Winklhofer and M.A. Susanne Bielenberg née Winklhofer (left).

October 13th, 1996, Munich

We have been awarded the Bavarian Quality Prize in recognition of our outstanding quality image in the market. This is a direct result of the joint efforts everyone in the company has made to improve quality and increase efficiency.



September 18th, 1998, Munich

After 23 years of active involvement, I'm stepping down as President of the Bavarian Metalworking and Electrical Industry Association. It's time to make room for the next generation. I don't want to withdraw entirely, though. I'm like a terrier who doesn't give up until he's gnawed all the meat off the bone.

December 29th, 1998, Munich

The quality of the product itself is vital, but so is the environmental compatibility of the production process. Winning the Environment Award of the City of Munich this year proves that we are on the right track.



A green prize that we're really pleased with!

July 1st, 1999, Munich

My son Johannes has taken the helm. I'm now Chairman of the iwis Advisory Board. I'm only 65, which is no age to retire.

February 11th, 2001, Munich

Order of Merit, 1st Class! I'm so proud.



A special day.

July 12th, 2004, Munich

Received the Bavarian Order of Merit "in honour and grateful recognition of outstanding services to the Free State of Bavaria" from Edmund Stoiber today.

December 13th, 2004, Regensburg

Landsberg am Lech is "Site Champion" in the "Factory of the Year" competition. I received the prize from Economics Minister Otto Wiesheu, and was accompanied by Johannes and a large number of employees in Regensburg.



With Wiesheu in Regensburg

December 25th, 2004, Munich

"Life-long learning" - this has always been my guiding principle, and I want to pass it on to the iwis workforce by this year's foundation of the charitable education institution "Gerhard Winklhofer Bildungswerk e. V.". Its object is to enable our employees to participate in continuous further training and education. That's the way to prepare today's precious young talent for the challenges of tomorrow!

January 22nd, 2011, Munich

"Gerhard Winklhofer's great achievement was to open up his company for the constant transfer and absorption of new knowledge from outside. It has always been clear to him that the human factor in the company is decisive." I was very touched by Prof. Horst Wildemann's eulogy, and by my induction into the Handelsblatt's "Family Company Hall of Fame". Now it's official: iwis belongs to the elite. We're a world-class company.



An industrial pioneer - that's a title I could get used to.

Postcard



An innocuous-looking file discovered in the iwis company archives, containing letters from numerous racing motorcyclists and racing car drivers from the 1950s and 1960s.

They all praised the quality and reliability of JWIS chains and urgently requested more, as their stock were running low. The postcard from Formula 3 driver Philipp Meub was a particular highlight.

❶ *Always “leader of the pack”*

The postcard shows Philipp Meub, holder of the Gold Motor Sport Award, during the race at the Sachsenring circuit on October 14, 1955. The event attracted around 250,000 spectators, making it the largest of its kind in the German Democratic Republic.



❷ *Chain endurance test*

In the early days of Formula 3, races were held on cobblestones, grass, concrete and even sand tracks, which made enormous demands on drivers and materials alike. JWIS chains transmitted power from the engine to the rear axle.

❸ *Reliable partner*

“After having nothing but the best experiences with your chains, I would be grateful if you could supply more of the same”, wrote Philipp Meub on August 9, 1956. iwis has been a reliable partner in the world of motor sport for many years.

The quick fish



His name is synonymous with positive change and progress at iwis. In his years as head of iwis, Gerhard Winklhofer implemented a number of significant changes that still benefit the company to this day. With his combination of inquisitiveness, discipline and an unshakeable belief in excellence and progress, the engineering graduate turned what was once an ambitious craftsmen's workshop into a reputable industrial company and a reliable system supplier. He unobtrusively laid the foundations on which today's strong, internationally oriented company was built – but without forgetting to make sure that the solid, traditional values of a family company did not fall by the wayside ...

Gerhard Winklhofer is still convinced that agility and speed are vital. He believes that the success and efficiency of a company are not determined by its size, but by how fast and agile it is: a quick fish in a big basin! These words – once spoken by an admiring competitor to describe Gerhard Winklhofer himself – became the guiding principle of iwis under his leadership, at a time when he was setting out to compete with the really big players. Gerhard Winklhofer continued to reinforce and develop these qualities for the benefit of his company. “A rolling stone gathers no moss” remains his motto to this day. Not without reason is iwis the world's number one supplier of timing drive systems for internal combustion engines and Europe's leading supplier of drive chains for industrial applications. Gerhard Winklhofer says that this was only possible because iwis has the right workforce and the right motivation: “For me, someone who is striding forward is a visionary. Someone who is capable of seeing far into the future, but who is also quite certain where to go next and can reflect on tasks that have supposedly already been completed. The same applies to the company itself. The path is created by walking along it.”

Gerhard Winklhofer's career path began in the 1950s when he began a degree course at the Technical University of Munich, which he broke off in favour of a mechanical engineering apprenticeship. In 1956 he qualified as a machine fitter, and took his engineering degree (Dipl. Ing.) four years later. After completing his formal education, Gerhard Winklhofer's desire to gain further practical

experience took him first to Robert Bosch GmbH, then across the Atlantic to the USA. This “curiosity and openness for all things new” are an expression of Gerhard Winklhofer's quest to stride ahead, following the maxim once set out by his grandfather. As is his ambition to strive for the best at all times. This was often put to the test in practice: “Once, when Mercedes was having problems with one of our timing chains. I was sent home with a clear assignment: come back in six weeks with a new chain – or we would lose the entire business. Our creativity and effort finally paid off, and the new JWIS chain helped us to save the business.” The same persistence helped him to meet his greatest challenge: with the help of his employees, turning a supplier of bicycle and motorcycle chains into the global market's leading system supplier for timing drives. This is what Gerhard Winklhofer, who has always believed firmly in life-long learning, managed to achieve in the 1990s with a change of strategy inspired by the Japanese working philosophy “Kaizen”. Gerhard Winklhofer applies its principles to ensure that iwis continuously changes for the better. To this day, besides the technical tasks in hand, it is the people at iwis – employees, customers and suppliers alike – that fascinate and impress him the most. The man who was Managing Director at iwis for many years is sure that today's global player is still a family company at heart. Now he has retired, he is not worried about the future; he is always led by example, and his son Johannes is following in his footsteps. The quick fish is livelier than ever.

“A rolling stone gathers no moss.”

Gerhard Winklhofer

iwisionaries

A chain is only as strong as the sum of its links, and a company is only as good as its workforce. iwis unites a wide variety of clever, ambitious minds that all contribute in their own special way to the success of the company. They share not only a passion for their career, but also the company's philosophy laid down over a century ago: Johann Baptist Winklhofer's "10 Golden Rules for those striding ahead" are still firmly ingrained in the collective spirit of the workforce. There is only one thing they all reject: stagnation.

FLORIAN MADLENER

Age 31

Director Development and Testing, iwis antriebssysteme



Always one step ahead.

"I have to test everything once I've developed it, so it makes sense to put the responsibility for development and testing in a single pair of hands," says Florian Madlener. He is in charge of Development and Testing and responsible for ensuring that innovation does not end in stagnation at the Drive Systems Division. Basically, it is true that a chain is a chain, but Florian Madlener and his team are always on the lookout for potential improvements and possible new industrial application fields for iwis products. "iwis doesn't have a pre-development department with a 100-strong team that can take plenty of time to investigate interesting market possibilities before starting to develop pre-series or serial production. We have to use our resources in a way that allows us to realise a lot of new products and channel our development activities. The aim is to bring as many serial products as possible to market simultaneously and always be one step ahead of the competition," says Madlener. Industry 4.0 – the current Fourth Industrial Revolution – is also reflected in the substance of Florian Madlener's work. "Monitoring technology or chain monitoring is becoming more and more decisive. As soon as we launched our chain monitoring system CCM, we knew it was a product that answers a real customer need. Many of them had been waiting years for so-

mething like this." Florian Madlener also stresses the importance of thoroughly understanding the products the company develops, which sometimes involves exploring unfamiliar territory: "Development is a bit like visiting a big town for the first time. You walk down the street and look down dark, crooked alleyways. If you want to find out what's there, you have to go further in. Maybe you will find what you're looking for, but if you don't, you have to go back to the main street again."

PIA LINKE

Age 36

Executive Assistant to the CEO, iwis motorsysteme



Variety is the spice of life.

Pia Linke fills in knowledge gaps and builds information bridges – internally and externally – so she needs to be able to keep everything in view and to prioritise appropriately. She is always on the lookout for new angles and new viewpoints that can be incorporated in the Group's strategy. Pia Linke is very good at juggling a lot of balls at the same time, as well as constantly walking a tightrope between risks and opportunities: how will the market develop? What are the current trends? What impact could something like "Dieselgate" have on iwis? And above all: what if...?

For Pia Linke, Executive Assistant to the CEO of iwis motorsysteme, scenarios like these are more or less part of her daily work. Her working day is full of variety

and diversity – particularly in the current transition period in which iwis is becoming more and more internationally oriented and therefore has to realign itself in a number of areas. Pia Linke couldn't be happier, because she hates monotony. On the other hand, she has respect for realism, especially when it comes to self-assessment: "We are a medium-sized company, so we can't always keep up with the really big players. But we know exactly who we are and what makes us better than others", she says.

CESAR GÜNTHER

Age 38

Chairman of the
Works Council



In balance.

He is a kind of medium, although the term is a little too esoteric for Cesar Günther's liking. Since 2010 the qualified toolmaker has not only been looking after the interests of his colleagues, but also ensuring that the dialogue between workforce and management is always conducted critically, constructively and in a spirit of fairness and partnership. And he's been successful: "iwis is definitely striding ahead in its efforts to deal with conflicts, helped by its traditions and values as a family company. The Winklhofer family always seeks to discuss on level terms", says the works council chairman. He also stresses the exemplary equality of the contract workers – which was introduced at iwis before it was officially adopted via the collective agreement. "We were actually cited by the union IG Metall as an example of Best Practice", says Cesar Günther proudly. iwis is also on the right track towards gender equality. Cesar Günther would like to see more women in management posts: "For example, we have a number of promising female apprentices who are not afraid to learn a techni-

cal trade. On the other hand, there are now two male nursery school teachers in the 'Kinderkette' kindergarten." Cesar says it's important to be critical, as that is the only way to change things for the better. "You can't both have your cake and eat it – we all have to work to ensure that our past success continues into tomorrow." However, he has no worries on that score when he looks at the current workforce. "People here are fair and tolerant. They can see the bigger picture and are always on hand when the going gets tough. Even on Saturdays." iwis rewards this commitment, too. Workers who turn up on Saturdays in an emergency, are paid an attendance bonus of 50 euros, on top of the rates set out in the wage agreement. That's striding pretty far ahead, says Cesar Günther.

TOBIAS HAUNGS

Age 31

Vice President IT



The human factor.

"Only a few processes at iwis work without the support of IT". This is an opportunity and a challenge at the same time, because Tobias Haungs and his three teams look after all iwis locations besides Munich. All iwis locations around the world benefit from the company's centralised IT set-up 24 hours a day. "I don't want the best IT system in the world", says the qualified SAP consultant. "I want the best IT system for iwis. It has to be global and flexible." Although IT speeds up the actual processes, it's the people who really make the difference. "We're not the only company that has to navigate in the huge cloud of new technologies. Our biggest challenge is to ensure that everyone is aware of what IT can do and uses its resources conscientiously. That's only possible if fundamental IT functions are reliable. A certain amount of mo-

monitoring and structure are necessary”, he says. His work allows him a lot of freedom, and his relationship with the management is very good. “Being a senior manager is a great job – a job in a class of its own. Johannes Winklhofer is a very good judge of people, and it’s obvious that it’s up to us to make the best of the opportunities on offer. iwis has a lot of good ideas, such as the new chain monitoring system CCM for industrial chain applications. The company really is striding ahead, and we have plenty of potential. I’d like to help to make full use of it.”

THOMAS WIRTH

Age 53

Vice President Production
Munich, iwis antriebssysteme



Be visible.

“You don’t actually have to be responsible to feel responsible”, says Thomas Wirth. He is responsible for ensuring that the Drive Systems production in Munich runs smoothly. His job often takes him to the Czech location, too. And he takes ideas about the company’s processes a step further. “It’s good that we have the freedom and resources to develop ideas and thoughts here”, says the plant manager. He adds: “Fear of making mistakes suppresses creativity and obstructs innovation.” He has long since shed the strait-jacket that restricts the development of ideas. “I came from a big company with a much more rigid structure. Responsibilities were strictly assigned, so we had fewer opportunities to focus on all the different influences and to use them to create something new. Your horizon is much broader in a small company. There isn’t so much red tape, which gives individuals more responsibility. If there isn’t a ready-made solution, we make up our own. That’s one of our big strengths.” Another strength is the warm and close interpersonal ties at iwis, says Thomas Wirth. “Four weeks after I started here, I ran into Johannes Winklhofer by chance. He said hello and I was amazed that he addressed me by name. You don’t get that

in big companies. Everyone knows everyone else here. This visibility increases efficiency, because you can’t hide here, either”, according to Thomas Wirth.

ANNA HERZOG

Age 25

Product Manager,
iwis antriebssysteme



Of your own accord.

Either...or? What’s wrong with not only...but also? – That’s what Anna Herzog thought when, with support from iwis, she trained as an industrial manager after qualifying as an industrial mechanic. Now, as a product manager, she benefits from the experience and knowledge she acquired in both fields. “I work not only with Engineering, but also with my colleagues from Sales and Marketing. And with the management, of course.” Hints and suggestions from customers, trends at exhibitions and trade fairs, or shifts and currents in the market – Anna Herzog needs to keep her eyes open to ensure that “our technology complies with market demands.” Anna Herzog is always up to date, no matter where she is. She takes her responsibilities very seriously. She recently completed a product management training course which took place every Friday evening and on Saturdays. She went of her own accord. “Employees here are allowed, and actually encouraged, to make their own suggestions regarding further training, with the active support of the training institution GWB Bildungswerk e. V. Willingness to learn and stride ahead is actively encouraged. iwis actually insists on it, but also rewards it”, says Anna Herzog. Chains have become one of her favorite subjects, too. “I did my apprenticeship in the Engine Systems division, but I also supported the drive systems teams at exhibitions, means that I’m also familiar with the Drive Systems side. It’s fascinating to see how many different versions and materials there are.” These days, 25-year-old Anna Herzog is responsible for all products, and her work also takes her to

other German locations. “We’re lucky to have such a fantastic culture of open communication and flat hierarchies at iwis, because it means that dialogue with colleagues is pleasant and solution-oriented”, she adds.

HELMUT GIRG

Age 72

Managing Director of iwis motorsysteme, retired



ANNE-MARIE STIER

Age 68

Assistant to the Management Board of iwis motorsysteme, retired



Roll your sleeves up.

Employees always smile when they run into Anne-Marie Stier. And even after almost ten years in retirement, Helmut Girg still feels a strong bond with iwis and its workforce. While he was still Chairman of the Management Board and she was still his Assistant, they experienced times at iwis which, above all, offered opportunities for anyone prepared to take a step into the unknown and help to shape a company that was determined to advance. It was time to roll up your sleeves and get on with the job. A time for pioneers. Anne-Marie Stier, who was dissatisfied with the safe but undemanding job she was doing at the time, arrived in 1983: “Back then, iwis offered me the personal development opportunities I was looking for. Gerhard Winklhofer soon saw that I was capable of getting things done. Nobody ever tried to curb my enthusiasm.” In 1987, Helmut Girg also recognised the advantages that a smaller company offered. He moved from a major industry to the “medium-sized compa-

ny that was nowhere near as charismatic as it is today”. Helmut Girg, who now serves iwis on the Advisory Board, is still convinced that the change did him good. “Responsibility for success was clearly assigned, so everybody knew who’d done what and who’d achieved something”, explains Girg. Not all changes were easy: “Gerhard Winklhofer was a visionary leader who wanted to modernise his company.” iwis was in transition from a craftsman’s workshop to an industrial manufacturer”, recalls Anne-Marie Stier, who was then invited – or rather required – to take on additional challenges: “Then came computerization, followed by all the audits. We really wanted more time to adjust to the new situations, but we were usually thrown straight in at the deep end. But we managed somehow”. You can still feel her unqualified enthusiasm for her former occupation – an enthusiasm which, for her, is vital for success and job satisfaction. Helmut Girg had a vision, too: he wanted to ensure his business received the recognition it deserved. One highlight of his tenure was winning the 2005 award for “Germany’s Factory of the Year” in all categories. Along with his team and Anne-Marie Stier, who was instrumental in creating the presentation, he was responsible for the preparations that eventually led to victory: “That was one of greatest projects ever, and an important feather in iwis’ cap”, recalls Helmut Girg proudly, but modestly. “I was never interested in showing off about our success. But we deserved it all the same”. The owner’s philosophy also set the tone at that time: “Gerhard Winklhofer always said that success is a question of staying one step ahead. As a medium-sized company, we had to be a bit quicker than the others, and that always spurred us on. And it still does”, says Anne-Marie Stier. The assertiveness of “The General” – as Gerhard Winklhofer was fondly nicknamed by his employees – also left its mark on the workforce and impressed Anne-Marie Stier. Helmut Girg – whose determination and notorious “inner drive” are now legendary – was the perfect sparring partner for “The General”. This is Helmut Girg’s advice for the current generation of people striding ahead: “Always remember where you are heading and don’t get side-tracked along the way. That’s how I always did it. But don’t forget look in the rear-view mirror now and again, because we can all learn from our past.”

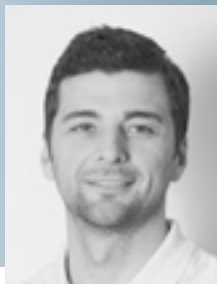
ANDREAS EPPENEDER

Age 41
HR Manager
Apprenticeship



DANIMIR RISONJIC

Age 36
Supervisor
Apprenticeship



Leave traces.

Andreas Eppeneder was an iwis apprentice himself, so he knows both sides of the story. Today he is in charge of all training at the Munich, Landsberg and Wilnsdorf locations. Danimir Risonjic is also a genuine home-grown iwis product. He has worked in Munich for 20 years and is now the contact person for all apprentices on site – especially in the mechatronics department, but also for general organisational matters. A task that certainly offers plenty of variety: “Our clientele is young, so every day is different. Little surprises. Something you didn’t know before”, says Andreas Eppeneder. His biggest challenge and most important task is to ensure a steady supply of new, well-qualified employees: “We usually take on all the apprentices who complete their training here. Unfortunately, they don’t always stay on”. However, it’s often the working atmosphere that induces a lot of them to stay: “iwis is an ambitious, vibrant company that has developed into a global player. This international orientation attracts young people”, according to Andreas Eppeneder. He and Danimir Risonjic never forget that they are also role models: “We can only train young people who want to stride ahead if we put this philosophy into practice 100 per cent”, states Danimir Risonjic. The 36-year-old is convinced that standing still effectively means going backwards, but he is also aware that success comes in small steps. “First I have to finish the job in hand because otherwise I won’t be able to con-

centrate on the next stage of the process”. This is exactly why he places great emphasis on adapting the content and structure of the training courses to current requirements and trends. In order to do so, he stays in contact with other companies and exchanges ideas with his counterparts: “Our aim in Munich is to become the best training company in the industry. For this, we also need role models, we have to broaden our horizons and look critically at our own performance. In other words, although we adopt the basic idea of a learning island, we adapt it to our own specific requirements”. For the same reason, Danimir Risonjic applies the “do-it-yourself” principle in other areas, too: not only learning modules are constructed in-house; the equipment required for the various individual trades being taught is often created from scratch. Sometimes trainers and apprentices work together to set up specially commissioned production machines. A construction phase with a sustainable learning effect. “This is a great way of showing appreciation. The apprentices know that this machine will be used in production at some time in the future. They leave a trace – a legacy – here, and they can say: “I made that”, explains Danimir Risonjic. As a matter of principle, the apprentices are expected and trained to work autonomously. “We want individuals to assume responsibility for themselves. Our apprentices should understand that they are not just doing it for the company; they are doing it for themselves. That’s the only way to turn an ordinary job into a true vocation”, adds Andreas Eppeneder.

KARIM ELWAN

Age 33
Manager Chain
Development,
iwis motorsysteme



Find your own solutions.

New ideas are part of Karim Elwan’s daily routine. His team develops chains for car engine timing drives, checks their design, plans trials, keeps an eye on

wear, friction and acoustic emissions, and finally takes stock. Is the chain any good? If so, it can go into serial production, which is Karim Elwan's idea of striding ahead: "iwis chains are produced 99 per cent in-house. We find our own solutions instead of sourcing them externally. That gives us more freedom in the creation of production processes". Nowadays Karim Elwan's work focuses on the car, but that wasn't always the case. The aerospace engineer came to Munich to expand his knowledge of aerodynamics at the Technical University. "But then I got involved with a racing team and spent three years helping to design racing cars, which brought me into contact with Formula 1". And then iwis. "Because this is a company where simply average isn't good enough. Because we have good ideas and are brave when it comes to development", are the reasons the head of the iwis Competence Center for chains gives for his decision. He is still proud of the company's achievements: "The biggest ever investment in the history of iwis was a gamble that paid off. iwis pushed ahead with the TRITAN coating regardless, the desire to stride ahead being stronger than the possible risk of failure. That was pretty cool". The reaction of one automotive customer to this particular iwis innovation is said to have been: "It's like NASA" – in Karim Elwan's eyes, a very fitting comparison.

DR. FRANK MITZSCHKE

Age 37

Plant Manager, iwis
antriebssysteme Wilnsdorf



Seizing opportunities.

Dr. Frank Mitzschke actively contributes to the rules for success – not least for his staff of around 111 employees. The 37-year-old has been in charge of iwis antriebssysteme GmbH in Wilnsdorf since 2010. He also took over responsibility for the Sontra location in 2014. He is responsible for a truly global business model: the man with a doctorate in engineering unites customer require-

ments from Europe, production capacity in the Far East and quality standards from Germany. These responsibilities mean that Dr. Frank Mitzschke flies to Asia five or six times a year: "The advantage is that it costs less to produce in Asia than in Europe, with the disadvantage that the Asian concept of quality can sometimes differ from ours, so we need to monitor the situation and take corrective action where necessary. The finished goods also have to be shipped an extremely long way." It can take up to 16 weeks for products made in Asia to reach their European customers, says Dr. Mitzschke. The Wilnsdorf plant takes care of customers with special requirements and orders with particularly short deadlines by manufacturing the products locally.

As the pragmatic Westphalians say, "There's no such word as "can't", but even the best strategy is no use if nobody is prepared to put it into practice. "iwis has achieved so much in recent years. We have enormously expanded the Wilnsdorf plant, drastically increased our vertical range of production, launched new products and opened up new branches of industry. One of the most recent examples is the new ELITE round baler chain from Sontra. This kind of thing only works if everybody pulls together" – an ambitious idea that must not be taken for granted: "It requires a big, conscious effort to break out of your comfort zone and overcome your inner resistance. You have to be prepared to learn something new every day". Dr. Frank Mitzschke sees his refusal to be satisfied with what he has already achieved as a prime example of the "striding ahead" mindset, which is why he also actively seeks competitive situations that allow him to compare himself with the best. "I want iwis drive systems to be the division of the company with the most satisfied customers", he says. Dr. Mitzschke is grateful that he was given the chance to prove himself in this environment. "I did my doctorate when I was still very young and took over in Wilnsdorf at the tender age of 30. That in itself was a huge challenge". Having the freedom to develop enabled Dr. Frank Mitzschke to prove himself: "iwis personnel planning doesn't always follow traditional rules. In this company, young and talented employees are given a chance to take on big tasks and prove what they can do. iwis is always there in the background to give them the benefit of its experience, but always allows them enough freedom to develop themselves and the task in hand".

DR. THOMAS FINK

Age 55

Vice President Application
Engineering and Business
Development,
iwis motorsysteme**Opening treasure chests.**

Many development activities for automotive customers land on his desk: Dr. Fink's job as Head of Serial Development for iwis motorsysteme is to collaborate closely with other iwis departments and bring finished products to market – which sets iwis apart from the competition. “Our customers see us as open, genuine and, above all, innovative”, he says proudly. He often hears this kind of positive feedback, mainly at congresses or after presentations of selected new developments and core topics. There is a lot of respect for the iwis culture of communication: “The people we are in contact with see it as a good sign; we definitely deliver more innovative ideas and new products compared with our competitors”. iwis is renowned for its high level of commitment: “We open entire treasure chests full of new developments for our customers”. For Dr. Fink, striding ahead is primarily a question of innovation and the will to embrace the customers' ideas and requirements: “Other companies, some of them much bigger than us, tend to be more restrictive, preferring instead to offer the customer off-the-shelf standard product ranges. We are much more flexible, able and willing to look for a product solution that is not just 100% but 120% to the customer's liking”. Dr. Fink is convinced that going the extra mile is what tips the balance in iwis' favour. This thread runs all through his work. Whatever technical challenges the customers present him with, he always tries to find the appropriate solution. “Every customer is special, that's why I don't believe in standard presentations or standard sales pitches; every meeting with a customer means finding a new individualised solution that exactly meets their needs”. This great diversity is one reason why the 55-year-old is just as enthusiastic about his job as he was when he started back in 1994.

He always looks towards the future. One of his wider visions for what has now become an international era for iwis involves autonomous international locations which do not simply produce in accordance with iwis specifications, but actively engage in research and development. “That would be the perfect way towards optimum fulfilment of market-specific requirements everywhere in the world!”

JENS BECHTOLD

Age 48

Vice President Production
Munich, Launch Manager
TRITAN, iwis motorsysteme**There's no such thing as “can't”.**

“Bechtold, get over there and sort it out!”. Where others would be afraid to act, a self-assured Jens Bechtold just “gets over there”. That's why, from 2014 onwards, the Vice President Production at Engine Systems has not only been responsible for the Munich operation, but has also been engaged in putting TRITAN production in Landsberg on a company footing. “Production figures have stabilised now, but we have also had to stabilise the entire process. We are still tweaking it here and there to optimise it”, says Jens Bechtold. He adds that TRITAN is currently the most important project in the Engine Systems division, as it is a symbol not only of the innovative strength of iwis, but also of its courage: “It was brave to put so much money into such a specialised project, but it's paid off. At present we're coating about seven million pins a week. That's quite a tall order, we're the only company in the world that can deliver that kind of quantity.” If something is rusted or seized up, Jens Bechtold is the man who can get it running again. The qualified rubber and plastics technologist and auditor was hired by iwis 16 years ago as a process optimizer, and only one year later he was Vice President Production. “That's part of my character. I get on with the job and don't waste time talking about it.” Jens

Bechtold admits he can be a bit prickly at times, but adds that “respect and honesty in dealings with other people are right at the top of my list of values”. He also appreciates these qualities in his staff. “I’m surrounded by moaners and know-alls. I’ve got no time for yes-men”, says the 48-year-old, who by his own account is never satisfied for long with what he has achieved. “There’s always room for a bit more improvement”. So it’s hardly surprising that Jens Bechtold really makes a special effort when his ideas meet with resistance. “If someone says such-and-such will never work, I try all the harder to get it to work. Not out of defiance, but because I know that it will work. You need a bit of foresight if you want to get anywhere”. Jens Bechtold predicts a good future for iwis “if we create clear, universally applicable production structures and defined standards for plants and production facilities worldwide”. Personally, he has enough responsibility for the time being. “My objective is to hand over TRITAN in good shape and as a firmly established new technology”. What’s next? A new task is bound to turn up. iwis knows it can rely on him. “It’s great fun striding ahead with new stuff, but it certainly takes it out of you”, he says.

RITA FORST

Age 60

Member of the Advisory Board



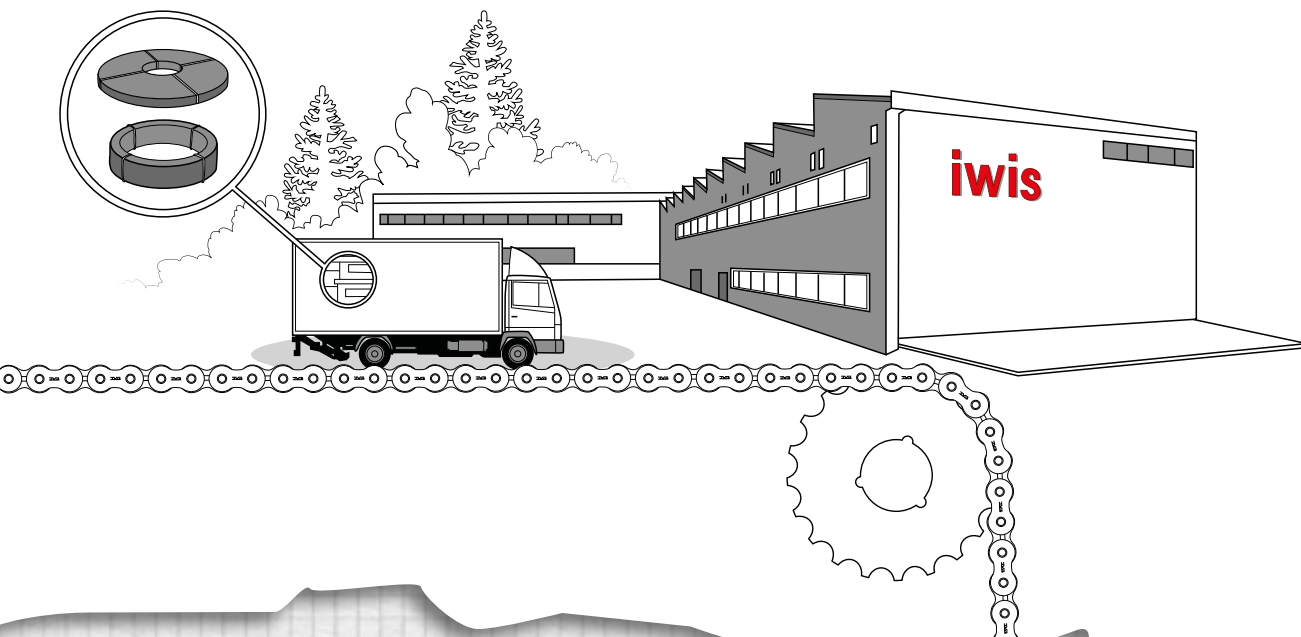
No blinkers.

“Mrs. Forst, what do you think?” is a question the former Head of Development at Adam Opel AG can’t hear often enough. Engineering graduate Rita Forst has been a member of the Advisory Board of Joh. Winklhofer Beteiligungs GmbH & Co. KG since 2014. She mainly advises iwis on technical issues. The experienced engine designer made a conscious decision to assume this responsibility, to which she devotes not only a lot of time, but also her heart and soul. Rita Forst, who was then a promising young project engineer working on timing

chain drive systems at Opel in Rüsselsheim, first encountered iwis and Gerhard Winklhofer in the mid-1980s, and took to them immediately. “I needed help in a critical situation”, she recalls. iwis did exactly the right thing: the company assured its customer that they would help her: “iwis placed its best qualified experts at our disposal, commissioned test benches, and was not satisfied until we finally found a joint solution to all the problems. We would never have managed on our own, and I’ve never forgotten what iwis did”. This experience was one reason why Rita Forst was glad to take up Johannes Winklhofer’s personal offer to join the iwis Advisory Board in 2014. “Even as a junior engineer I knew that iwis was the Mercedes-Benz of chain manufacturers – and still is.” The complexity of global economic change presents a big challenge to any company, and especially to a medium-sized family enterprise like iwis. However, the unchanged iwis characteristics of flexibility and customer-orientation are as relevant now as they ever were, says Rita Forst. She speaks from experience, following many years of service as a Board Member of Adam Opel AG and Vice President Engineering at General Motors Europe: “The big automotive manufacturers continue to rely on the outstanding competencies of the supplier industry, and have adjusted their business model accordingly. They are becoming increasingly dependent on systems integration. System development as such should remain in the hands of the supplier”. iwis was always – and still is – a reliable partner for automotive and industry customers. Rita Forst is sure there is a special reason for this: “iwis embodies innovative strength and reliability and stands for continuity; the company has made tradition a characteristic virtue”. A virtue that continues to put people and, above all, employees first. Even though the Group’s products have now achieved outstanding positions in all global markets, iwis is still a family company at heart. A company that puts great emphasis on openness, respect and trust in its dealings with partners and employees, but also its advisors. Rita Forst experiences this remarkable strength at first hand: “The Winklhofer family believes firmly in the importance of letting external experts and opinion leaders look critically at internal processes and attitudes. An exclusively inward-looking view is a blinkered view”.

Added value chain

How is an iwis chain created, and how does iwis ensure that the product delivers on all of its promises? All departments are involved in the creation of a chain. The path from original quotation to delivery of the finished item consists of many important steps carried out by our qualified specialist employees. But what happens in the production department, where people only monitor what machines do automatically? Here's the story.

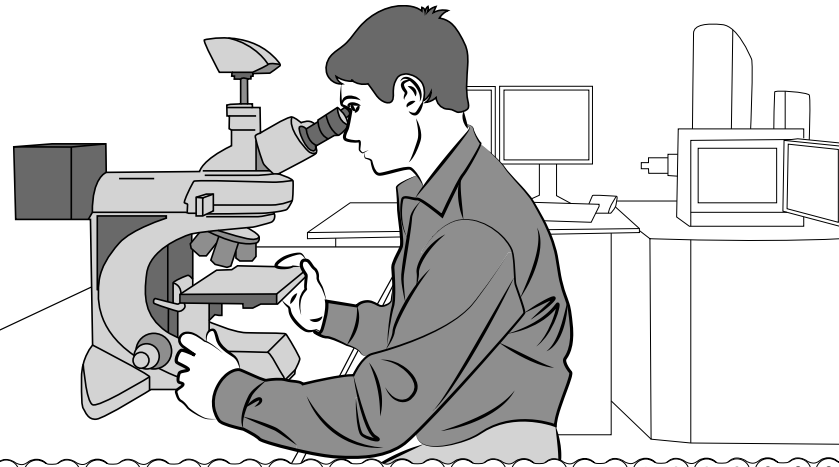


1. SELECTED STEEL

iwis needs a wide range of different raw materials for the production of a new order for bush, tooth or roller chains. The materials are in the form of strip steel or wire with precisely defined grades and specifications. As iwis expects its materials to meet high standards and fulfil strict requirements, it sources them from suppliers it has known for many years and who produce mainly in Europe and Japan. Most deliveries by truck go to Landsberg am Lech, the location of the logistics center and main production facilities.

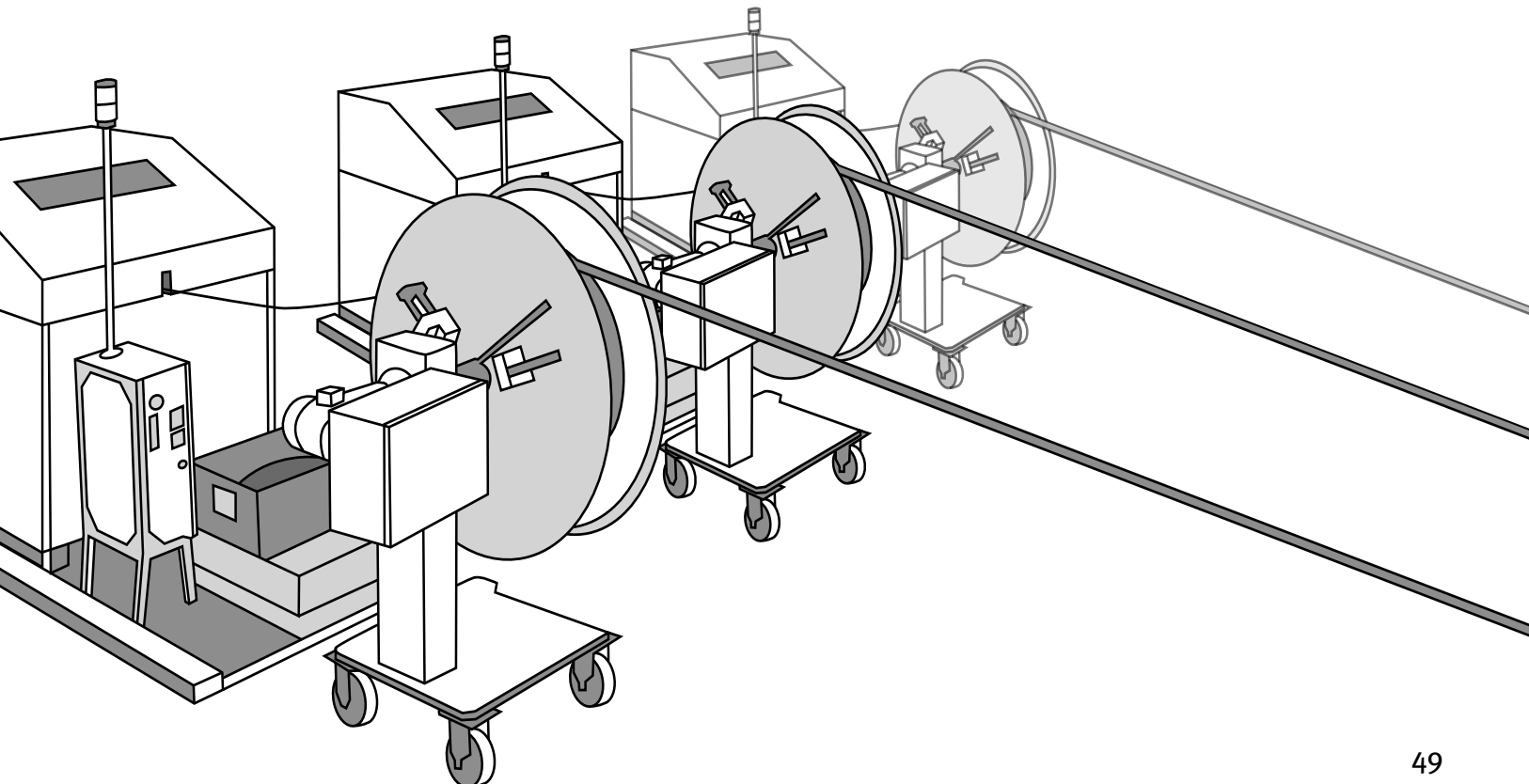
2. TRIED AND TESTED ...

Once the steel has arrived at the plant, it has to wait for a while. First the raw material undergoes an incoming goods inspection in the iwis laboratory. The material is meticulously analysed using ultra-modern test equipment such as a spectrometer. Only strip and wire materials that have passed all the tests are released into the production cycle for individual components.



3. MANY PARTS MAKE A WHOLE

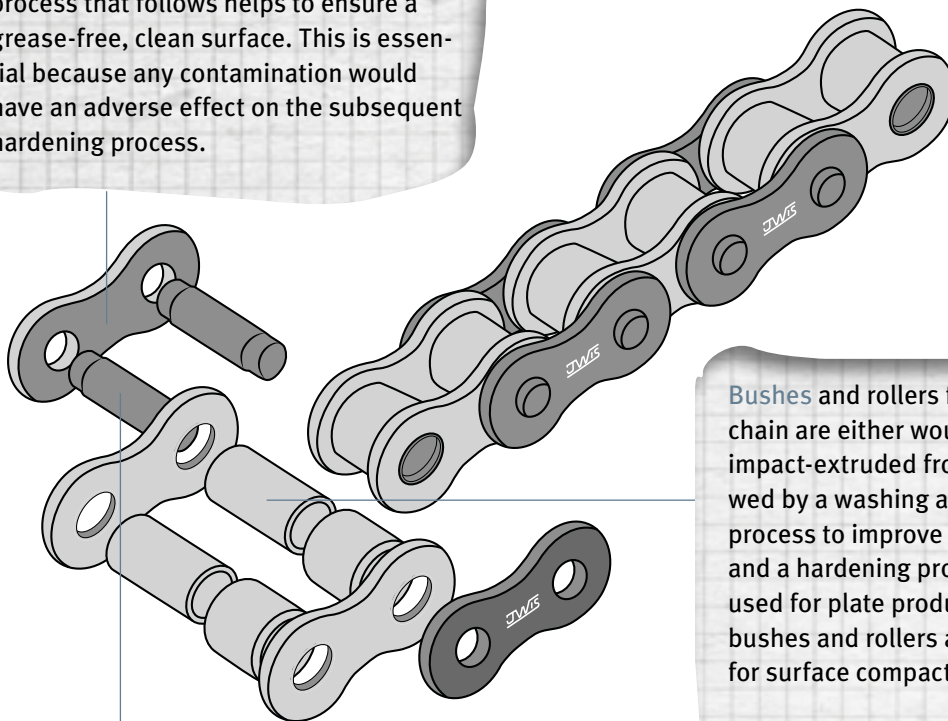
The selected steel is now pressed and cut to the right size and shape. Some of these processes can be quite noisy ... Individual chain components (pins, bushes, rollers and plates) are produced on specially constructed machines positioned at the optimum point along the material flow.



4. A COMPLETE WORK OF ART UNDER PRESSURE

The individual components are finished. But how are they assembled to form an entire chain? The first links are created by joining and press-fitting plates, bushes and rollers. These are then connected by means of outer plates and pins to form an endless chain strand, which includes riveting the pins followed by cleaning and lubrication of the entire chain. As soon as it is finished, the chain has to pass its first test, in which it is subjected to severe stretching. It is then cut to length according to individual customer requirements and finally closed. Incidentally, the chains are under observation at all times: every production stage is monitored by cameras, sensors and measuring devices, and the results are documented. This process continues without a break... and then the assembly, consisting of plate, bush, roller and pin, is complete.

The **plates** are punched from strip steel. Any roughness resulting from the punching process is reduced by an additional cutting operation. The washing process that follows helps to ensure a grease-free, clean surface. This is essential because any contamination would have an adverse effect on the subsequent hardening process.



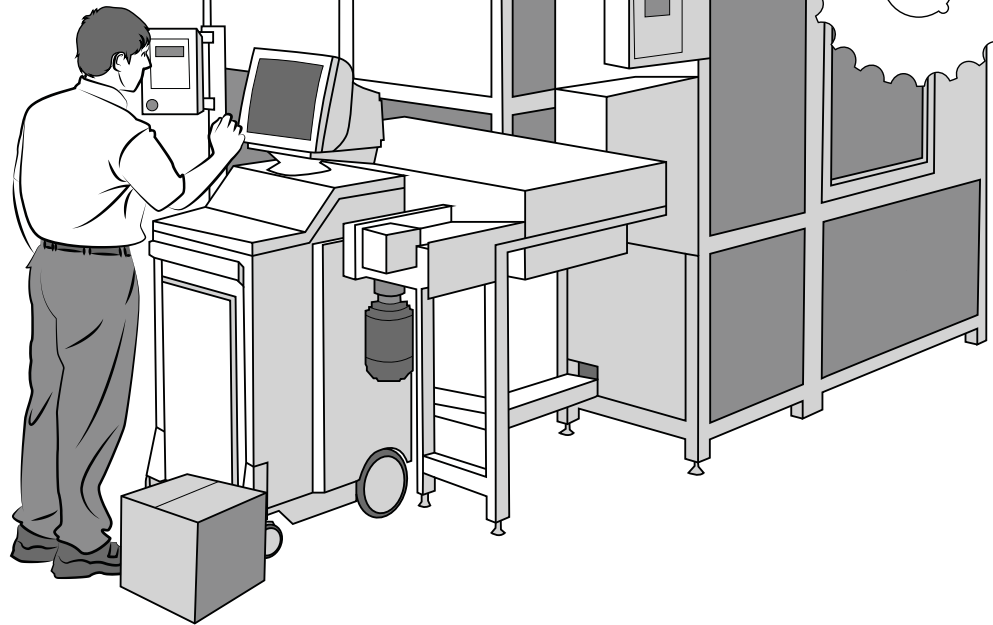
Bushes and rollers for various types of chain are either wound from strip steel or impact-extruded from wire. This is followed by a washing and vibratory finishing process to improve surface smoothness, and a hardening process similar to that used for plate production. In many cases, bushes and rollers are also shot-blasted for surface compaction.

The **pins** also undergo heat treatment. Various processes are available, depending on the application purpose of the chain. Certain pins also receive further treatment in the form of wear protective coatings. Finally, the pins are repolished.

The basic material for pins is steel wire, which is cut to a defined length and then ground to the required diameter. It is essential to adhere to the given tolerances, which can sometimes be in the micron range.

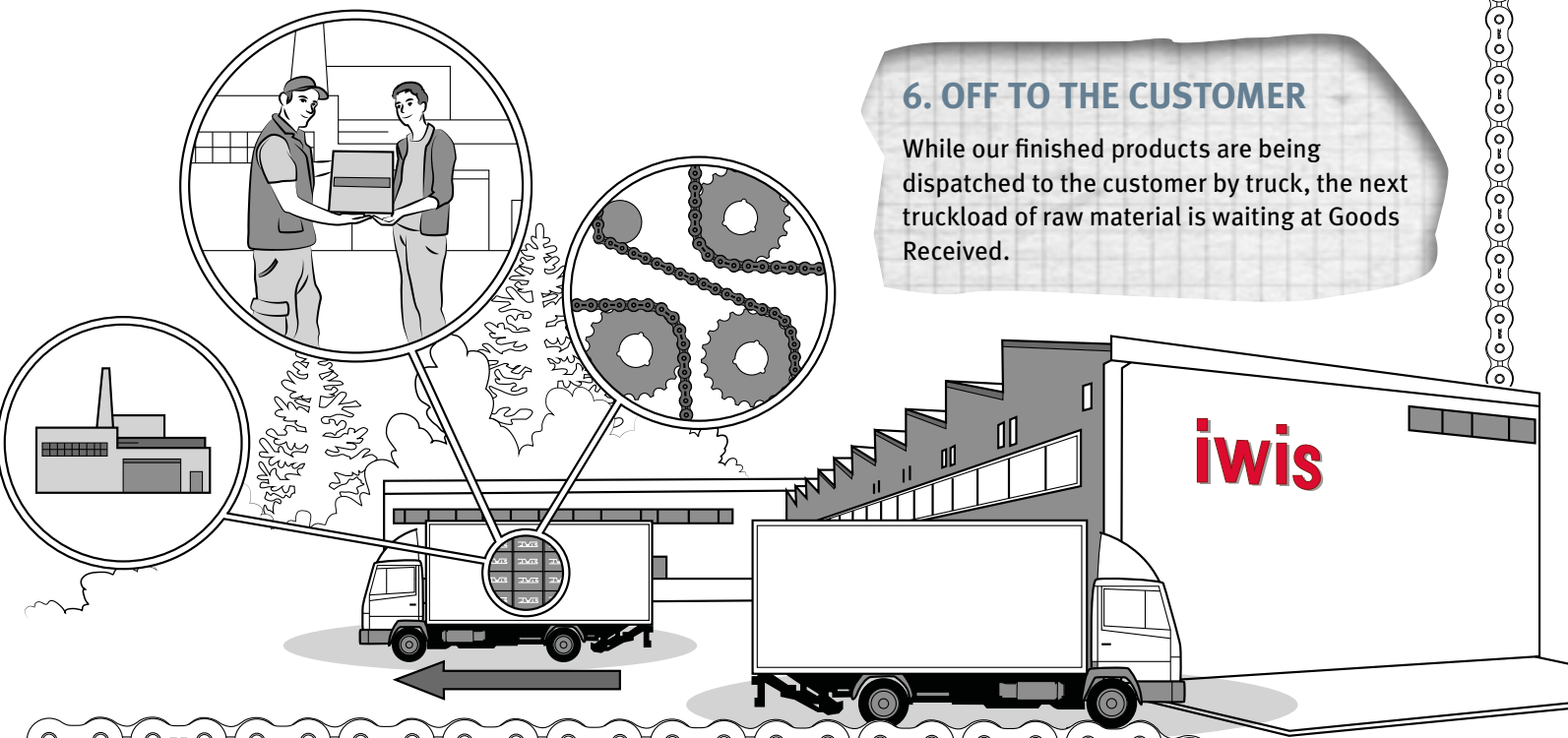
5. FINAL INSPECTION

In order to ensure that every single chain delivers the promised performance, a video camera is used to check it for completeness and correct assembly. This process is usually fully automatic, but the machines do not bear full responsibility: specially trained employees handle the chain one last time, check it and place it in its high-protection packaging.



6. OFF TO THE CUSTOMER

While our finished products are being dispatched to the customer by truck, the next truckload of raw material is waiting at Goods Received.



July 1st, 1999, Munich

So, my first day as Managing Director is over. Although there are big challenges facing me, I feel that I'm well prepared. All the discussions I had with my father gave me confidence to undertake this step, and my co-directors Mr. Girg and Mr. Stumpe are both highly capable men. Our new plant in Landsberg is coming along nicely. We intend to start producing there next spring.



Handover of the key to Martin Kohn. High-precision work as usual by our Munich apprentices.

February 21st, 2000, Landsberg

The first JWIS timing chains produced at the new plant have been delivered to our customers. Now we are able to reap the benefits of all the hard work that my father and his workforce put in. While our main focus is still on Europe for the time being, we will have to move into the global market in the medium and long term. The automotive industry, especially, is compelling us to expand our horizons.



Our "Factory of the Year"!

October 17th, 2005, Landsberg

This award is especially prestigious – and not just for the workforce in Landsberg. We've been named "Factory of the Year 2005"! Our "outstanding increase in the levels of efficiency and effectiveness in the production department" came in for particular praise. Our decision to produce in Landsberg was right. And who says that it's impossible to produce at a profit in the high-wage German economy?

December 31st, 2006, Munich

Time to take stock. The takeover of Flexon GmbH was our big breakthrough in the industrial business division this year: it's vital that we expand in this area. We will already have a joint stand at the Hannover Messe exhibition in spring. The idea with the "wedding cake" is a good one.



October 5th, 2007, Munich

The name is “iwisupreme”: a new chain that combines the advantages of tooth- and bush-type chains. Our design engineers have really excelled themselves. Once again, my father’s decision to set up a research and development department in the early 1990s, in spite of all the difficulties, has proved to have been right. This is the only way for us to achieve our objective of producing top quality. The only way to remain the best supplier of our products worldwide.

September 28th, 2010, Nanhui (Shanghai, China)

A nice ceremony. Although it’s a while since our Chinese factory was set up, I still wanted a proper opening ceremony. A wide variety of tasks awaits the workforce here. Our unique iwis spirit is very much alive here, despite the various cultural differences. My great-grandfather Johann Baptist’s “10 golden rules for those striding ahead” are now valid in China, too. They sum up what makes iwis so special.

May 29th, 2014, Munich

The next generation has laid the foundations for the next 100 years of iwis: to mark the occasion of Father’s 80th birthday, Susanne, Ursula and I presented him with a copy of our family constitution in the name of the whole family.

June 2nd, 2014, Landsberg

The newly developed TRITAN coating center was inaugurated today. We can now produce chain pins that are even more wear-resistant – a real asset for our company. This is additional proof of our innovative strength. I was particularly pleased that Father could attend the inauguration ceremony.



Quality time with the family!



Our family constitution.



Day One at our TRITAN coating center.

From left to right: Dr. Thomas Goppel (Member of the Bavarian Parliament and Secretary of State (retired)), The Right Reverend Wolfgang Öxler OSB (Abbot of the Priory of St. Ottilia in Bavaria), Dr. Eberhard Sasse (President of the CIC Munich-Upper Bavaria), my father Gerhard Winklhofer, HRH Prince Luitpold of Bavaria, and me.

November 24th, 2014, Munich

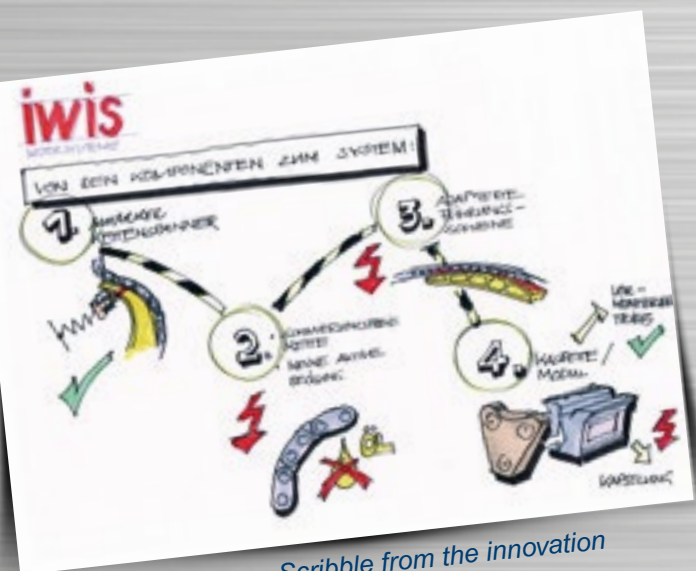
We have our own place in the “Land of the Rising Sun”: iwis motorsysteme now has a subsidiary in Japan. The Agenda 2025 has been finalised. This won’t be our last international location.

December 16th, 2014, Munich

Just come from an exciting presentation. We must start preparing our anniversary celebrations – and set new standards. A special website and a commemorative anniversary brochure are planned. And – although I always carry this idea over into the New Year anyway – it has a particular significance this time: there’s still a lot to be done.

January 8th, 2015, Munich

Innovation is an ever-present issue. Particularly in the field of mobility. Began the New Year with a cooperation project. Together with students from the TU Munich, we want to take part in the European Shell Eco-Marathon in Rotterdam. We are helping them to build a vehicle with maximum energy efficiency. We’ve devised a new kind of power transmission by chain. It might have potential for future development in our core business, too. Who knows what the future holds?

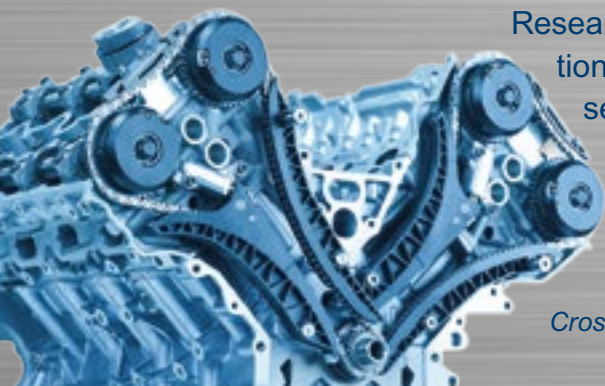


Scribble from the innovation workshop.

June 17th, 2015, Munich

“Roots are what give you stability and the strength to grow upwards towards the sun. There’s nothing wrong with having dreams, but you mustn’t forget to keep growing while you dream. Your roots – and therefore your history – give you an inner strength and the ability to distinguish right from wrong, to recognise what’s going well now and what might not have gone so well in the past” – my words during a filmed interview.

Research for our anniversary celebrations is in full swing. I can’t wait to see what else comes to light ...



Cross-section of a BMW engine.



During the interview.

June 29th, 2015, Munich

“Presentation of the facts”: this document was published today, and contains everything that defines and distinguishes us. The key to our history. The triumphs and a few darker points besides. But I think it’s important to be absolutely clear about the historical facts – and not to ignore the existence of difficult times in the past.



Our contribution to sustainable mobility.

July 30th, 2015, Munich

What is the best way to enhance our profile as a system supplier even further? How do we tackle the challenges of our industry? And how can we ensure that our products continue to be models of efficiency and, above all, innovation? Our innovation workshop has been brought to a successful conclusion. The results are impressive, and some of the ideas can certainly be put into practice ...

August 5th, 2015, Munich

We are still moving in the right direction. Not only that, but we are also innovative, successful and highly committed. We have received the State Government of Bavaria’s “Bavaria’s Best 50” award for the third time. A brilliant achievement. Not just for me, but for all of us.



October 17th, 2015, Munich

There’s no going back now. The Zenith Hall in Munich has been booked, and the schedule for the anniversary celebrations is rapidly taking shape. What is the best way to honour people who have moved the world? What is the most concise way of telling the story of the last 100 years? These are the questions that are driving us at the moment. I hope we will manage to infect every single member of the workforce with enthusiasm for our joint celebrations. I’m proud of what we’ve achieved so far. Roll on the next 100 years!



Award ceremony with Ilse Aigner.

Skydiving

Not every entrepreneur is fortunate enough to be able to celebrate the milestone of his company's 100th anniversary – a fact of which Johannes Winklhofer, Managing Partner at iwis, is all too aware. In this interview, he reveals why iwis will not waver from its successful course to date, and why striding ahead sometimes involves walking a tightrope.

Mr. Winklhofer, the 10 Golden Rules were formulated more than a century ago: what is the significance of the “striding ahead” leitmotif for you as Managing Partner today?

Johannes Winklhofer (JW): It means, for instance, remaining curious, having the courage to be innovative and not being afraid of change. Striding ahead doesn't simply mean rushing headlong into danger without weighing up the risks. After all, we want our business to be successful and profitable. As I see it, striding ahead involves being passionate about what one does. Stepping out, marching on, not standing still – this is a deep-seated, fundamental human passion. It's a question of not being satisfied with what one has, but of constantly seeking new possibilities – a quest that is incredibly exciting!

And also pretty stressful, perhaps?

JW: Well, stress is relative, isn't it? I'd find it much more stressful to repeat the same task day after day. I wouldn't like having to do that. I also expect my workforce to think about ways of improving things here and now. Everyone in their own position, in their own field of responsibility. Every day. Any number of times. Anyone who finds something that they'd like to change can either keep it to themselves or actively share it with the rest of us. To my mind, that's also part of the definition of “striding ahead”.

How does innovation work at iwis?

JW: “20 percent inspiration and 80 percent perspiration” (laughs). No,

but seriously, creativity is hard work. I encourage innovation and promote it with creative workshops, advice and scientific impulses. We need a creative workforce, which in turn requires an organisational structure, a system to ensure that ideas are converted into products. We want to be innovation leaders with everything we manufacture, which isn't always easy. What's more, the market window for any individual innovation is only open for a limited time period. If you arrive late, you won't sell anything.

How much courage does innovation require?

JW: Curry combs, fridges, typewriters – iwis has adapted its product portfolio many times in the course of the decades. Although I admit there are business models that survive for centuries, they are the exception rather than the rule. Many companies have failed because of their lack of innovation. And iwis won't fail. I'm not afraid of iwis reinventing itself, but it's a bit like walking a tightrope. People striding ahead will only succeed if they don't seek change for change's sake, but because they have a concrete objective, capitalise on their strengths and proceed one step at a time. The opposite of striding ahead is not standing still, but rushing headlong into danger. Although an entrepreneur may sometimes be compelled to enter uncharted territory, I'm more of a skydiver than a cliff diver. Safety first!

“Many companies have failed because of their lack of innovation. And I don't want to fail. I'm not afraid of reinventing myself, but it's a bit like walking a tightrope.”

Johannes Winklhofer

How much of you is a realist and how much a visionary?

JW: I'd class myself as a realist who

*Johannes Winklhofer in
the production area of
iwis headquarters in
Munich.*



looks a long way ahead. I'm not a visionary who can predict what products will look like in 20 years' time. But my eyes are fixed firmly on the future.

And what do you see there in terms of internationalisation?

JW: Only 30 years ago we had problems selling our products in North Germany, because many of our employees spoke German with an Upper Bavarian accent. Of course, internationalisation is now advancing rapidly. Maybe we won't have subsidiaries in every country on Earth, but we still have a couple of countries on our list. Russia, Turkey and Ukraine, Malaysia, Thailand, Singapore and Indonesia are exciting prospects. Mexico would also be an option. In the long term, Australia, Tanzania, Kenya and Nigeria will also be added to the list. iwis currently employs about 350 people in foreign countries and 1,000 in Germany. In ten years' time there will be 1,500 abroad and 800 to 1,000 in Germany.

What role do your business partners and traditionally loyal customers play here?

JW: We can only be as good as the network of partners we collaborate with. If one link in the chain fails, it will become unstable. With regard to our customers, the answer's simple: every single one of them is close to my heart and I'll fight tooth and nail to keep them all. Given the right customers, one has an incredible growth potential. The best customers are the ones who continually challenge us to show what we are made of. The lessons we learn from them can also be applied to others. That's what has made iwis big and strong: the fact that our customers spur us on to deliver top performance time and time again.

What else will keep iwis competitive?

JW: In our core business, it's our innovative products, our better ideas, our ingenious solutions and the superior cost-effectiveness of our complete systems with less hassle for the customer: we have a definite compe-

titive advantage with many of our products that nobody else will be able to copy in a hurry. No other company anywhere in the world has our coating technology, such as TRITAN. That makes us unique for the time being. But not for ever!

So iwis is safe for the next 100 years, too?

JW: There are enough opportunities to make sure it is. Our Strategy 2025 is already formulated, and I could give you a rough idea of our Strategy 2035 off the top of my head. Both strategies contain important cornerstones. We are and will remain a family-run company, and we will continue to take mega-trends and new investment opportunities into account. In other words, we will break into new business areas and develop new product lines. We are also on the lookout for companies for acquisition. Obviously we can't buy everything available. It must fit in with our spirit, our commitment to "striding ahead", and our dynamic attitude. We don't want to rest on our laurels and rely completely on the strength of our roots, but to continue to make a positive contribution with original, intelligent product ideas. Although chains are the origin of our current corporate organisation, they don't define its boundaries. 15 years ago, our slogan was still "iwis chains, we move the world". We changed that because it restricted us. Nowadays we see ourselves as a system supplier – and one who will continue to grow.

iwis international

Growth means change. When a family company becomes a global player, it expands geographically as well as economically. Internationalisation seemingly makes the world a smaller place, with employees holding telephone discussions and conferences across several different time zones. Internationalisation is highlighting how important it is to understand the rules and traditions that govern business in other countries, increasingly raising English to the status of corporate language, and turning the company's founding location into the headquarters of a network spanning several continents. Above all, an international strategy has an effect on the company's employees. The multi-faceted nature of such a strategy has a formative influence on the "expats" and staff alike.

Martin Kohn originally didn't want to work for iwis at all. Back in 1988, he had set his sights on joining a bigger company, which – or so he thought at the time – would present him with bigger challenges. Now Martin Kohn can't help smiling at how things have turned out. Surmounting challenges has become part of the day-to-day business of the former Plant Manager of the Munich site, who is now Head of Global Business Operations. In recent years, Martin Kohn's tasks have included ensuring that iwis also manufactures its automotive products at international locations – subject to foreign conditions, but naturally with the same quality requirements and standards that apply in Munich. Shanghai is just one current example. Murray, a small town in the US state of Kentucky, is another. Kohn supervised the development of both locations from the word go.

He first visited China in 1997. Internationalisation was already an important issue under Gerhard Winklhofer, he says. 2005 was the year in which first contacts with the Chinese chain manufacturing and automotive industries were set. In those days, his sales office was located in Shanghai's "German Center", and Martin Kohn travelled to China frequently to look at various potential locations, before eventually renting a small production hall. The contract was signed in 2009. Production started in 2010. It was the beginning of a comprehensive learning process: "Adaptability is essential. You have to accept the habits and customs of your host country and be prepared to see things from a different angle. You have to take the time to put yourself in the shoes of people who are suddenly expected to work for

a German company, which involves adopting new ideas and a new mindset", Martin Kohn recalls.

German thoroughness is no problem for **Chunguang Chu**, General Manager at iwis in Shanghai. He joined the company at the end of 2011, by which time he already had positive experiences with German corporate culture. In collaboration with his German colleagues, he is expanding the existing premises and is now responsible for almost every process that takes place in Shanghai – personnel, quality management, production, product development and sales.

What began as a five-man operation in Shanghai is now a thriving business that provides jobs for more than 50 people. Chunguang Chu also has ambitious plans for the future, because although China is still a very lucrative market for German automotive suppliers, competition is fierce. Chunguang Chu says: "Although we have great growth potential here, local competition is growing too. In the meantime, Chinese manufacturers have also forced their way into the market, most of them with lower prices. However, our aim is to preserve our high quality standard and good reputation in China. While that may offer us a lot of opportunities, it presents us with some challenges at the same time." With this in mind, the aim is to create an autonomous product design department in Shanghai. The General Manager is therefore in the process of sending teams to Germany to give them optimum preparation for the tasks that await them.

Anton Baumgartner chose to travel in the other direction. As one of the so-called "expats", he emigrated

from Munich to the USA in the summer of 2014 to contribute his specialist production expertise to the setting up of iwis-standard chain production. He oversees the construction of the machines in Germany, assembles them with his own hands, supervises their delivery, and finally installs them in the USA. iwis chain production has been running in Murray since July 2015. “We’ll soon be equipping around 1,000 engines a week”, says Baumgartner. He also says that he sometimes feels like a pioneer, a free and independent cowboy – because his day-to-day work now offers him so much variety and Munich entrusts him with so much responsibility. He regards his foreign posting as both a privilege and a mark of esteem: “Before coming here, I worked for a good 14

Training an entire team, and even an entire location, to be autonomous to the point where it doesn’t need the trainer any more – that’s the job that **Pervin Ergündüz** has also undertaken to do in Murray. Accompanied by her husband and their dog, she has been in the USA since summer 2015. She is now responsible for the supply chain and local purchasing, having already taken on the task of setting up the purchasing organisation in Shanghai. This opportunity to see the bigger, global picture left a lasting impression on her. “I wanted to make use of my experiences in a new environment. I’m pleased and excited to be part of this mission”, she says. She regards her posting as an expression of recognition and



Two "expats" abroad: Pervin Engündüz and Anton Baumgartner continue building up the site in Murray.

Responsible for "Global Business Operations" at iwis: Martin Kohn (right).

years in Assembly, where I was deputy shift foreman and production coordinator. I’d risen as high as it was possible to go without going back to the classroom to get higher qualifications.” Anton Baumgartner decided he would prefer to prove his worth on the practical side instead, and succeeded in asserting himself against some 20 other candidates hoping to be sent to the USA. He has exchanged the familiarity of home for a large number of other benefits. I’m very grateful to iwis and the Winklhofer family for all they’ve done for me”. The 38-year-old takes his development responsibilities in Murray very seriously. The long-term aim is autonomy for the location and its eventual emancipation from the main site in Munich.

appreciation of her experience and know-how. She never feels she has been left to do the job alone, because the bridge to Munich stands company, and there is always someone there to lend a hand or a sympathetic ear. Pervin Ergündüz says with a hint of pride: “Cross-border communications are in good shape. Our headquarters in Munich ensure that everybody in the iwis world looks in the same direction. iwis was quick to recognise the importance of having a globalised set-up and laid the foundations of a professional organisational structure accordingly.” Yet in spite of this expansion and global outlook, iwis still feels like a family company. Flat hierarchies, an “open-door” policy for managers and a combination of traditional values

with modern challenges – her American colleagues in Murray also appreciate this mindset, according to Per-
vin Ergündüz. She wants to devote all her efforts to
completing her task in Murray successfully and ensur-
ing that the globally valid iwis standards are imple-
mented in Kentucky, too. She would then like to seek a
new challenge somewhere else in the big wide world of
iwis. In the meantime, Anton Baumgartner has exten-
ded his stay in the United States. “It ain’t over till it’s
over“, he chuckles.

That’s what **Dan Egenolf** thinks, too. This is largely a
result of the good relations he has enjoyed with his Ger-
man employers for the last ten years. He joined iwis in
2006, when the company acquired Flexon, where he
was employed at the time. Germany is something like a
second home for him anyway. His great grandfather
emigrated to the USA from a small town north of Frank-
furt at the end of the 19th century. Dan Egenolf, who
speaks a little German himself, has always lived in Indi-
anapolis, even if some of his compatriots jokingly refer
to the city as “Fly-Over Country”. This is the home base
from which he, as President of “iwis drive systems,
LLC”, takes care of key drive system customers, with a
strong focus on the agricultural machinery industry. His
business trips take him not only into the farthest cor-
ners of his home country, but also to China, Canada, Bra-
zil and South Africa. Not to mention Germany, of course.
Dan Egenolf spends almost 70 per cent of his working
life on the road or in the air. On his trips around the wor-
ld, he seeks out new markets and new customers. “The-
re are some big corporations testing our chains right
now“, says Egenolf, who attaches great importance to
the vitality and strong performance of the location he
runs together with Glenn Walters. He wants to break the
symbolic sound barrier of 100 million dollars turnover
by 2020. Dan Egenolf sometimes finds the world very
small indeed, because in spite of the diversity of langu-
ages and cultures, people are very similar in one res-
pect: they are all striving to improve themselves, to ma-
ke something of their lives and fulfil their potential.
“Every day, I get e-mails from people in China,
Brazil, Germany, Mexico, South Africa or Canada. The
senders all have different jobs, eat different food, speak
a different language, but we all work with the same



A promising production location: Murray, USA.



Since the 1990s, iwis has no longer been confined to Europe. The company is in the process of global expansion.

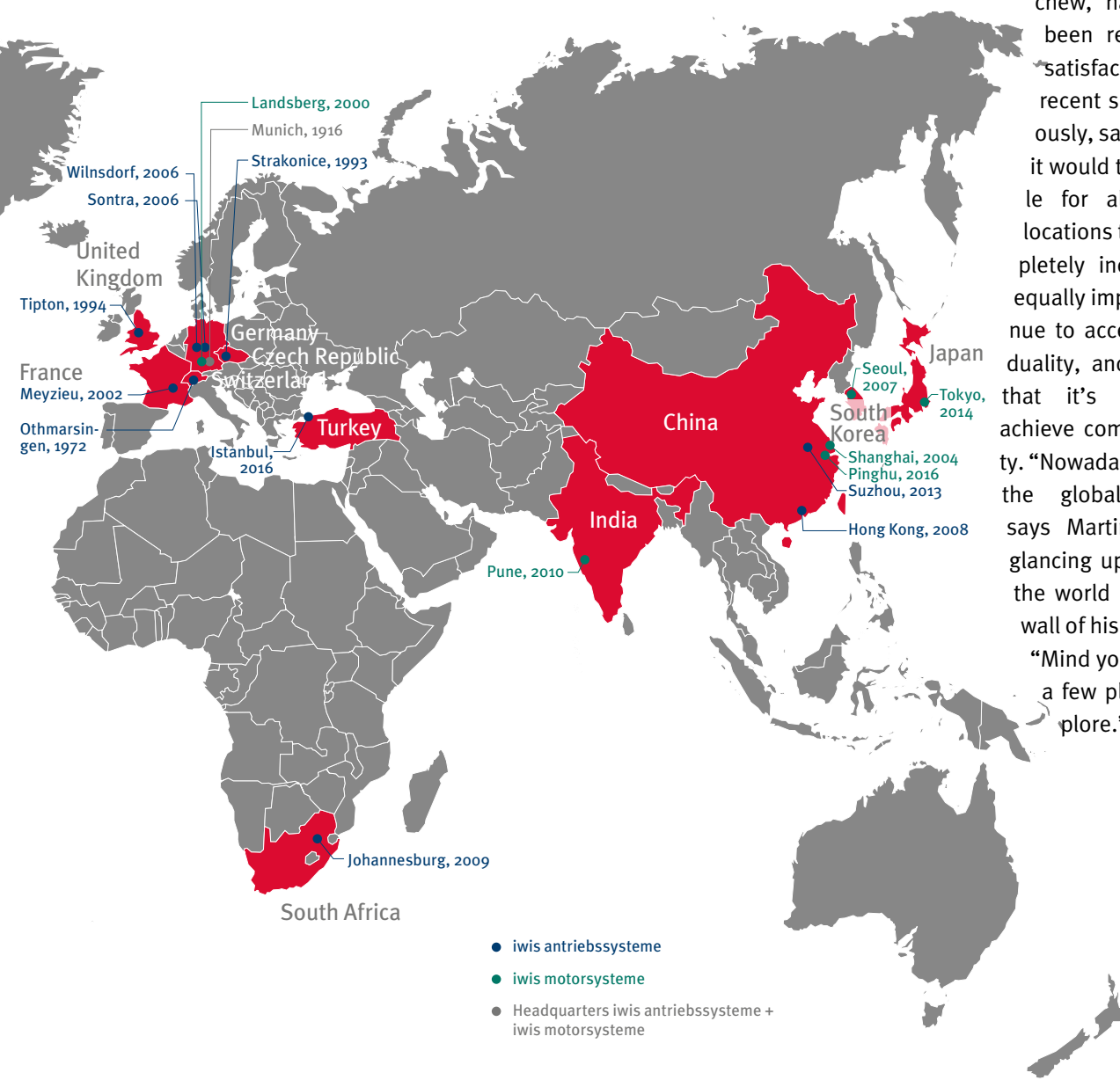


Head of the iwis plant in Shanghai since the end of 2011: Chunguang Chu (left). Dan Egenolf (pictured here with his wife Jan) travels for iwis from his home base in Indianapolis, USA.

e-mail system and we're all committed to the same product. Deep down, despite our differences, we're all the same", says Dan Egenolf, who is convinced that moving in international circles opens up new horizons.

To make sure it stays that way, **Martin Kohn** is also about to explore new horizons. Location expansion and relocation are scheduled in China, and iwis has also turned its attention to India. When new location planning and development were at critical stages, Martin Kohn was often away for 130 days in a year. And he still has a few flights ahead of him. He enjoys travelling, but he says that flying is not as much fun as it used to be. The sceptical attitude towards internationalisation when it first became an issue, the fear that iwis could be

biting off more than it could chew, have long since been replaced by the satisfaction caused by recent successes. Obviously, says Martin Kohn, it would take a little while for all international locations to become completely independent. It's equally important to continue to accept their individuality, and bear in mind that it's impossible to achieve complete uniformity. "Nowadays iwis is part of the global community", says Martin Kohn. Then, glancing up at the map of the world hanging on the wall of his office, he adds: "Mind you, there are still a few places left to explore."



The final frontier.



The year is 2066. iwis is striding towards its 150th anniversary – and not just globally; the company is literally reaching for the stars, by means of a space lift in geostationary orbit. The anniversary celebrations are being held on Mars, and the entire workforce will be there.

Pure fantasy? Highly improbable? We believe that anything is possible ...

Being a pioneering developer means freeing yourself of the constraints of conventional thought and ignoring the barriers limiting the imagination, daring to redefine the frontier between the possible and the impossible.





Visit us at:
www.100.iwis.com

Join us on an interactive “guided tour” of our history: there is an impressive account of 100 years of iwis in five stages on the internet. Our interactive microsite includes **moving images** and **in-depth excursions** that bring the Past into the Present.

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STRIDING

The journey



2017:

Chain elongation monitoring system CCM proves its worth and is a huge success in the market

2020:

Fully autonomous: iwis invests in self-driving cars



2023:

The height of eco-friendliness: market launch of the oil-free iwis b.dry timing chain drive system

2026:

iwis expands and opens more production sites in Russia, Africa and South America

2028:

iwis 5.0: iwis completes the "Fifth Industrial Revolution" at all of its ten production sites worldwide

2030:

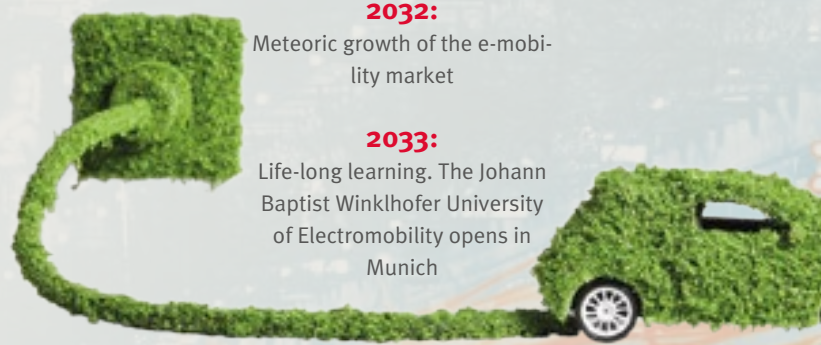
AI – Agricultural Intelligence: Harvesting intelligent chains

2032:

Meteoric growth of the e-mobility market

2033:

Life-long learning. The Johann Baptist Winklhofer University of Electromobility opens in Munich



2035:

Exemplary as ever: iwis receives the "Great Place to Work" award for the 15th time

2041:

Who needs a chain? iwis marks its 125th anniversary with the market launch of its own chain-less drive system



KICKDOWN

2017 - 2028

ONWARDS AND UPWARDS

2029 - 2048

G AHEAD 4.0

ney continues.



2049:

iwis launches the world's first flying bicycle with electro-magnetic drive. It goes down in mobility history as the "Wanderer 2049"

2051:

iwis takes part in the first manned expedition to Mars

2059:

100 per cent recyclable: iwis develops a chain made entirely from bio-degradable material

2066:

The world is not enough, so iwis celebrates its 150th anniversary in space. The journey to Mars is made possible by a geostationary space lift operated by iwis chains ...



2069:

Totally free: virtual chains replace their conventional mechanical predecessors

2075:

Refrigerator reloaded: iwis develops a chain-based cooling system for fridges

2091:

Excursion into medicine: iwis tests genetic chains

2102:

Star Wars for real: iwis invents digitised gears that work like lightsabers

2116:

Travel 6.0: iwis realizes high-speed chains for the mobility of tomorrow. It is now possible to travel at the speed of light. iwis celebrates its 200th anniversary by exploring a new galaxy beyond the Milky Way ...



LIFT-OFF

2049 - 2066

FLIGHT

2067 - 2116

iwis
wir bewegen die welt

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