

# Robert Bosch

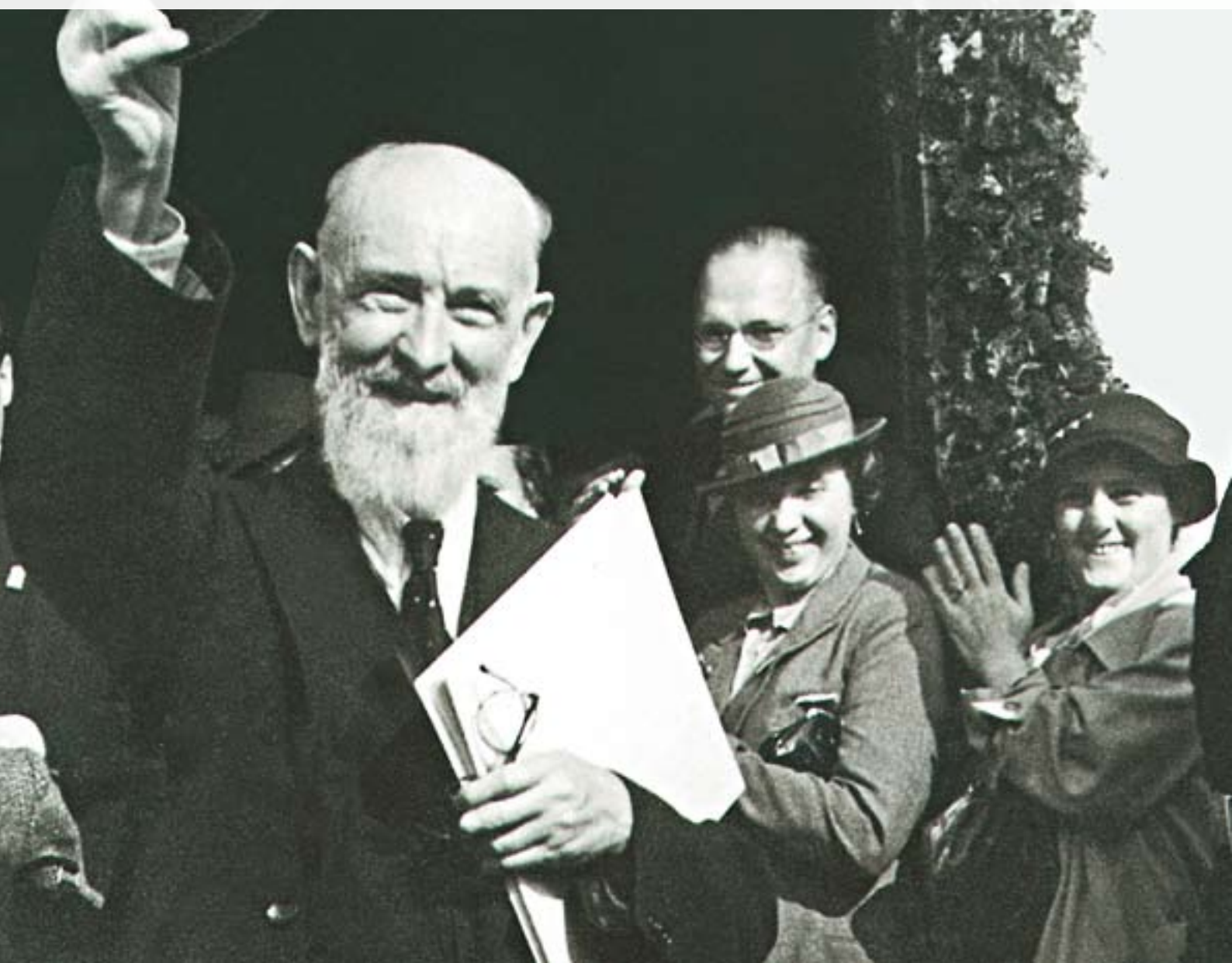
## His life and work

**Journal** of Bosch History  
**Supplement 1**



**BOSCH**

Invented for life



# Foreword

**Cover photo:**

Robert Bosch leaving the Stadthalle in Stuttgart on September 23, 1936, following the ceremonies on the occasion of the fiftieth anniversary of the company. The day also marked his seventy-fifth birthday.

This brochure is dedicated to the life and work of Robert Bosch. This completely new edition has been prepared by Robert Bosch GmbH and Robert Bosch Stiftung GmbH. Its task is not to present a comprehensive history of the company, but instead to sketch a portrait of Robert Bosch against the background of his personal and professional life.

Robert Bosch had a watchword which guided him from his early youth: “Never forget your humanity, and respect human dignity in your dealings with others.” Even if he was an enthusiastic technician and a passionate entrepreneur, it was people he was most interested in, and leadership was his greatest strength.

The way he lived, also privately, the experience that shaped his thinking, the economic and political challenges he was forced to rise up to: all these things make the portrait of the man clearer and more meaningful – a man who was a freethinking cosmopolitan with solid roots in his southwestern German homeland, a champion of technology whose heart nonetheless belonged to nature, a political thinker prone to outbursts of emotion, and yet a father figure and model of circumspection.

It never ceases to surprise me how much of Robert Bosch lingers on in the company and the foundation today, almost 70 years after his death. Yet he did not hand his successors a strict rulebook that might limit their freedom to act. His is a subtler influence, born of his strength of character, his charisma. Indeed, his plausibility as a role model derives from his flaws as much as it does from his qualities. He was a contemporary who was rough at the edges, a person who could be difficult. He was the source of much reverence and much offense. Above all, he was an object of respect, since people knew he was a careful thinker and keen observer, and that he was a person who kept his word, who “walked the talk.”

I hope this brochure will find many readers, since it offers a chance to learn about Robert Bosch as a person, as well as about the origins of our company. Finally, it helps them to understand the respect the founder commands to this very day, as well as the fascination evoked by his company.

Dr. Christof Bosch

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From 1890, Robert Bosch visited his customers on a bicycle he had imported from England expressly for this purpose. In contrast to other bicycles of the day with their high wheels in front and low in the back, his was quick and safe to ride. With his “safety bike,” the young entrepreneur caused something of a stir on the streets of Stuttgart.

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# The man

Robert Bosch with his  
wife Margarete and his  
son Robert junior, 1931







# “I also lacked the necessary patience and ambition”

## Childhood and education

by Dr. Kathrin Fastnacht

For a man who would go down in history as the founder of a successful global technology and services company, Robert Bosch failed to show much inclination for such matters at school. Indeed, all indications pointed, if anything, to a somewhat different career path: “My preference lay more with zoology and botany, but I was not at all fond of school [...]” However, his aversion was directed toward his teachers and, later, his instructors, rather than the subjects he was expected to learn. Even during his school years, Robert Bosch had a thirst for knowledge and had a wide range of interests.

Robert Bosch was born on September 23, 1861, in Albeck near Ulm in southern Germany. He was the eleventh of twelve children born to Servatius Bosch, the prosperous innkeeper of the “Krone” in Albeck, and his wife Maria Margaretha. Both parents had inherited considerable property, which allowed the father to include farming and brewing among his trades. His father, a freemason with politically liberal views, was a very widely-read and well-educated man. Robert Bosch later described his mother as an exceedingly hard-working and sympathetic woman, always willing to get up during the night to provide meals for teamsters whenever they arrived at the

inn late with their wagons, or to prepare malt lozenges for Robert whenever he was ill.

### The move to Ulm

The family’s move to Ulm marked the first major upheaval in Robert Bosch’s life. In 1869, Servatius Bosch sold his inn and retired from business at the age of 53. Plans for a new railroad between Ulm and Heidenheim led him to fear he would lose his main customers, the teamsters whose route took them through Albeck. In addition, none of his adult children wanted to take over the inn and the farm that went with it.

### Left:

Robert Bosch with his sister Maria, 1871

Robert Bosch’s mother Maria Margaretha (1818–1898), photograph of an oil painting, c. 1838



Robert Bosch’s father Servatius (1816–1880), photograph of an oil painting, c. 1838





**Top left:**

The house where Robert Bosch was born, in Albeck, near Ulm: the inn "Zur Krone"



**Top right:**

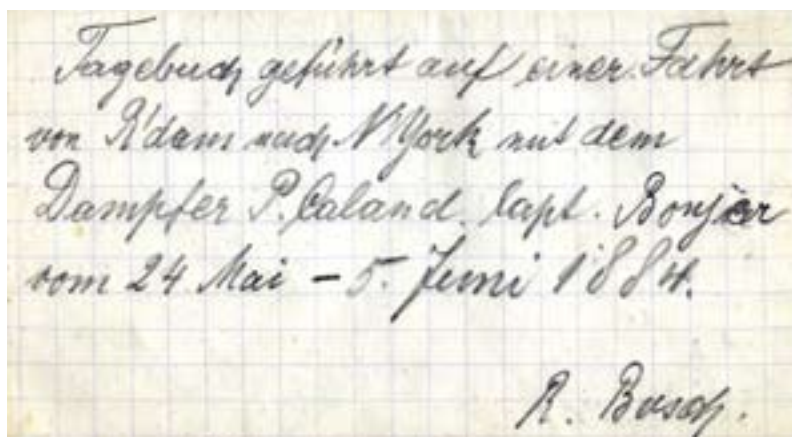
From 1869 to 1876, Robert Bosch attended the secondary-technical school on Olgastrasse in Ulm.

Robert Bosch attended the secondary-technical school in Ulm, but he did not have fond memories of this period: "I more or less muddled my way through school. We had a whole host of teachers who were either old or past it." Although his ability ensured he remained in the upper half of the class, he never excelled. However, as he admitted himself: "I also lacked the necessary patience and ambition." For that reason, and despite his desire to take up studies in the field of zoology or botany, he opted not to go on to high school and qualify for university. Instead, he followed his father's advice and began an apprenticeship as a precision mechanic. However, he was unfortunate in his choice of a master in Ulm – the "precision mechanic & optical instrument maker" Wilhelm Maier.

Maier paid hardly any attention to the training of his apprentices, was frequently absent from the workshop, and was generally unable to pass on much of value to those under his tutelage. After three years, at the age of 18, Bosch completed his apprenticeship. Above all else, his dream now was to explore the world and learn something new.

**Journeyman's travels**

Having tried in vain to get a job in Heidelberg, Pforzheim, and Karlsruhe, Robert Bosch decided in the fall of 1879 to join his brother Karl – 18 years his senior – in Cologne. He spent several months employed as a brass worker in Karl's gas and water pipe company. In the winter of the same year, however, he moved on



Robert Bosch's diary, written on his voyage to America in May 1884

Robert Bosch during his military service, 1881–1882



to Stuttgart, joining C. & E. Fein, a pioneer in the field of electrical engineering. Again, he remained there for just a few months before continuing his journeyman's travels and spending the time between spring 1880 and spring 1881 working in a chain factory in Hanau, near Frankfurt am Main. It was during this time that his father died. Robert Bosch was convinced his father's death was a direct result of his life of leisure: "It would have been better for him not to have retired so early."

In the spring of 1881, Robert Bosch returned to his brother's business in Cologne for a further six months to learn more about commercial matters. Then, in the fall, he returned to Ulm to begin a year of military service. After that, he

resumed his itinerant lifestyle as a journeyman. At the factory of Sigmund Schuckert in Nuremberg, he was mainly occupied with the manufacture of electrical measuring instruments. However, as he noted, "I couldn't put up with Schuckert long either, and by the summer I was already in Göppingen with a man named Schäffer who [...] built arc lamps."

Predictably, the construction of arc lamps joined the ranks of the occupations unable to hold Bosch's interest for long. Despite his lack of background knowledge, he enrolled at Stuttgart Polytechnic as a non-registered student for the winter semester of 1883–1884. Although he later admitted that he learned relatively little about science during these six months,

**Below left:**

From the fall of 1882 until the summer of 1883, Robert Bosch worked at the factory of Sigmund Schuckert in Nuremberg.

**Below right:**

Robert Bosch, 1884





he did concede that his “studies” had helped him overcome his “fear of technical terminology [...]. After that, I knew about voltage and currents, and what horsepower was.”

#### Travels abroad

Following this interlude at the polytechnic, Robert Bosch decided to extend the scope of his travels so that he could gain on-the-job experience beyond the borders of Germany. At that time, the U.S. and U.K. were home to many pioneers in the field of electrical engineering. Thanks to his tutor at the polytechnic, Bosch had received a letter of recommendation for the Edison works in New York. He duly set out from Rotterdam aboard a Dutch steamer headed for New York on May 24, 1884. Now aged 22, Robert Bosch kept a diary of the two-week voyage in which he records not only amusing observations about his traveling companions, but also his own thoughts on his future career. Alongside a sense of nervous excitement at the prospect of entering the unknown, his jottings also reveal his strength of will to succeed as well as considerable self-assurance: “[...] I also intend to do everything I can to get

ahead. It would be surprising if I could not make it in a country where any number of other people have [...].”

On his arrival in the U.S., Robert Bosch found a job in an Edison factory manufacturing all types of electrical equipment, including arc lamps, light fixtures, remote-reading thermometers, and phonographs. However, contrary to all his expectations, he did not feel he was learning anything really new. Career-wise, things were not going quite to plan for Robert Bosch, and he experienced a period of unemployment before once again finding a job at the Edison Machine Works. In their letters to each other, Robert Bosch and Anna Kayser, the sister of his friend Eugen Kayser, had agreed to become engaged, and so Bosch decided to return to Germany after a year in the U.S. On his way home, he stopped off in England and spent the period between May and December 1885 working for Siemens Brothers in Woolwich, London.

After returning to Germany at Christmas 1885, Robert Bosch became officially engaged to Anna. As his own writings reveal, a letter from his bride-to-be urging

**Top left:**

When he arrived in New York in the spring of 1884, Robert Bosch was fascinated by the Brooklyn Bridge.

**Right:**

Robert Bosch (right) with one of his brothers, 1884

him to return had evidently played a key role in his decision to come home: “Had you not written such an appealing letter, my stubborn dedication to my mission would have seen me remain here, annoyed and bored, for another three months while gaining no further benefit than a minor improvement in my English.” Nonetheless, there were no immediate thoughts of marriage. Bosch took up one last position of employment, this time at Buss, Sombart & Co. in Magdeburg. A few months later, he returned to southwest Germany, and opened his own business on Rotebühlstrasse in Stuttgart in November 1886—the “Workshop for Precision Mechanics and Electrical Engineering.” After all the experience he had gathered on the various stages of his journeyman’s career, Robert Bosch became an entrepreneur out of conviction. In his own business, as his own boss, he would at last be able to organize a company in the way he saw fit. Throughout the rest of his life, he placed importance on highest quality and absolute reliability. He offered his associates respect and trust, made it possible for them to receive good occupational and further training, and provided exemplary working conditions.



## “Dear Anna ...”

# Robert Bosch's marriage to Anna Kayser

by Dr. Kathrin Fastnacht

“No matter what happens, I must make you mine. If we should suffer any misfortune, there will always be your love for me, because I will fulfill my duty.” When Robert Bosch wrote these words to his fiancée Anna Kayser in November 1885, the cruel twist of fate that would destroy their relationship and their marriage still lay far in the future. The first years of their life together were governed by the waxing and waning fortunes of the small workshop that would take over a decade to truly find its feet.



**Top left:**  
Anna Bosch, née Kayser  
(1864–1949), 1886

**Top right:**  
Robert and Anna Bosch,  
c. 1890

During his period in the U.S. and U.K., Robert Bosch wrote long letters to Anna Kayser describing to his future wife his character and his plans for the future. Today, these letters give us an insight into the man himself, revealing his dependability, his ambition, but also a tendency to erupt into sudden fits of anger. Bosch admitted as much to his fiancée: “One of my main failings is that I lose my temper easily. But I always regret this immediately afterwards and am now at least able to ask forgiveness if I treat anyone unjustly.”

The two of them did not always see eye to eye. On the question of women's emancipation, Robert Bosch was in fact more

progressive than his fiancée. She believed that it was female nature to “rely on the greater strength of the man [...]”. In contrast, he had made some astute observations about cause and effect: “It is little wonder that women are incapable of profound thoughts [...] since, for centuries, they have been denied the right to think at all [...]”. Nonetheless, closer examination of his letters reveals that his views were otherwise entirely characteristic of the era. For instance, he urged Anna to acquire a thorough knowledge of cooking. The couple were married in the Lutheran church in Obertürkheim on October 10, 1887.



The children Paula, Margarete, and Robert junior,  
c. 1900



Anna Bosch with her son  
Robert junior, 1913

### A growing family

Robert and Anna Bosch's first apartment was located at 56 Schwabstrasse in Stuttgart. Their daughters Margarete and Paula were born there in 1888 and 1889. A year and a half later, the birth of their third child Robert prompted a move to a larger apartment at 145 Rotebühlstrasse. The arrival of their third daughter Erna Elisabeth in 1893 saw the family move to yet another new home, this time at 20 Moltkestrasse. One year later, the Bosch family had to suffer the sudden death of little Elisabeth due to "acute diabetes."

Despite suffering these blows of fate in his private life, business was soon doing well. During the period between roughly 1900 and 1910, Robert Bosch was able to see his business grow from a small workshop to a global enterprise. This success was also reflected in the family's lifestyle. In 1902, Bosch built a small villa at 7 Hölderlinstrasse, before embarking on the construction of the spacious villa at 31 Heidehofstrasse in 1910.

### The nature lover

Every year, the entire family would mark the school vacations with a trip to the mountains. During these holidays and weekend trips to the Swabian Jura, the low mountain ranges to the south and east of Stuttgart, Robert Bosch passed on to his children his own great love for nature. Nonetheless, he always remained a strict father. His daughter Margarete recalled: "He explained many things to us children and gave us an enormous amount of intellectual stimulation, particularly during our childhood years. But you had to watch out, because he wouldn't explain anything a second time."

### The heir apparent

Robert Bosch introduced his son to the business early, letting him help with inventory-taking at the age of just eleven. He regarded him as his successor. Young Robert took up a post as an apprentice in his father's company in 1909, but his career came to an abrupt end only the following

year: “To my deep regret, I had to leave the company after only a short time because of my eyes.” This terse sentence marks the beginning of a sequence of events that would culminate in the breakdown of the marriage between Robert and Anna Bosch: their son had developed multiple sclerosis. The next few years were filled with health cures and doctors’ appointments. Anna Bosch was consumed by her worries and the effort of caring for her son, who died after a long illness on April 6, 1921.

### The breakdown of the marriage

Robert Bosch received the news of his son’s death during a business trip to South America: “No matter how much one hoped his life would end peacefully, the fact that he is now gone has moved me to the very

depths of my soul. [...] I don’t know how many times I have asked myself why I should still be alive when he – one so young – had to suffer and waste away.” The parents each tried to come to terms with the death of their son in their own way. Two months later, Robert Bosch wrote the following in a letter to his wife: “It’s true that I prefer not to speak of Robert. It is better that I deal with such things by myself. [...] I cannot change what has happened, and I have to accept the inevitable.” While Bosch sought solace in his work and continued to play an active role in public life, his wife withdrew more and more from society. Their grief and different ways of dealing with the death of their son drove the couple further and further apart until the marriage was finally dissolved in 1927.



#### Left:

Margarete Bosch  
(1888–1971), painted by  
Georg Friedrich Zundel,  
1907

#### Right:

Paula Bosch  
(1889–1974), painted by  
Georg Friedrich Zundel,  
1907

# Assistant, advisor, and intermediary

## Robert Bosch's marriage to Margarete Wörz

by Dr. Kathrin Fastnacht

When the 39-year-old Margarete Wörz married the now 66-year-old Robert Bosch in November 1927, he was already a successful entrepreneur. She in turn was well aware of the expectations society would place on the new Mrs. Bosch, and proceeded to live up to these with ease. In addition, the spacious house on Heidehofstrasse experienced a new lease on life with the birth of two further children. Given his displeasure with conditions under National Socialism, these new arrivals provided a degree of distraction for Robert Bosch.



Margarete Wörz  
(1888–1979), c. 1924



Robert Bosch remarried shortly after his divorce from Anna in 1927. Born on July 12, 1888, Margarete Wörz was the daughter of the head forester Eberhard Wörz and his wife Maria. She moved into the villa on Heidehofstrasse after the wedding and, in 1928, Robert and Margarete Bosch celebrated the birth of their son Robert. In the fall of 1930, the couple lost a child born prematurely.

Their daughter Eva was born the following year. As Robert Bosch had already relinquished responsibility for the day-to-day running of the business by the time he remarried, he was able to spend a lot of time with his wife and children. As with his first family, he often took Margarete and their children Robert and Eva on trips to the mountains, to the Bosch Farm in Bavaria, and to his hunting lodge near Urach in the Swabian Jura. Writing from the Engadine area of southeastern Switzerland, he said: “My wife and children are

blissfully happy here. Robl [Robert] is proving an accomplished skier. [...] Last week, I finally had the chance to play curling again, which was a great pleasure.”

However, the life Robert Bosch now led was by no means simply that of a private individual. He continued to use his time to further his many civic initiatives. Apart from international understanding, he was especially concerned to help people in need and to contribute to a better educational system.

#### **Withdrawal from public life**

After the National Socialists took power in 1933, Robert Bosch withdrew even more from public life. Hitler’s intention to embark on a new war became evident very early on, and this troubled Bosch deeply. Writing around 1935, Bosch’s private secretary Felix Olpp reported: “The iniquity of the Nazis distressed Mr. Bosch greatly, and we were often at a loss as to how to calm him

#### **Top left:**

In 1910–11, Robert Bosch had a villa built on a plot of parkland he had bought on Heidehofstrasse in Stuttgart.

#### **Top right:**

The renowned German architect Bruno Paul designed the dining room of the villa in the 1920s.

down. At such times, I would call Mr. Mauk [director of the Bosch Farm], who could always think of some important farm matters to discuss with Mr. Bosch. In the days or weeks when Mr. Bosch was in particularly low spirits, we would suggest that he go to the Bosch Farm, where Mr. Mauk was usually able to lighten his mood.”

Following the outbreak of war in September 1939, the family moved to the Bosch Farm and the children attended school locally. When Paula, his daughter from his first marriage, invited the family to live in Sillenbuch near Stuttgart, Robert Bosch turned down her offer, saying: “We do not intend to return to Stuttgart while there is any danger of the city coming under attack. For one thing, we have the children to consider. For another, my associates in the company would certainly not wish to think of me in danger.”

There are hardly any written accounts of Robert Bosch’s second marriage. Theodor Bäuerle, a close confidant, recalled the following in his memoirs: “He took an almost grandfatherly joy in his children and had great hopes of his growing son. [...] Mrs. Margarete Bosch was extremely clever in dealing with the idiosyncrasies of her husband. [...] She invited guests into their home so there was never any lack of entertainment or companionship, and was careful to select guests who would satisfy his many interests.” In many respects, Margarete was also an assistant and advisor, as well as an intermediary between the older and younger generations. She thus became an enormous support to Robert Bosch in his later years.

#### The final years

After the company became a close corporation (GmbH) in 1937, Robert Bosch put his affairs in order before drawing up his will in 1938. In this document, he set out his



vision for the future of his company and for the legacy he would leave behind. Three years later, he celebrated his 80th birthday at the Brenner Spa Hotel in Baden-Baden. He had purposely chosen this venue to avoid being presented the “Pioneer of Labor” title by the National Socialist Party in Stuttgart. The plan backfired, however, when Robert Ley, the National Socialist leader of the “Labor Front,” managed to track Bosch down in Baden-Baden and present the unwilling recipient with the award.

The following winter, Robert Bosch was plagued by serious illness. As Olpp recalled, he nonetheless continued to pay regular visits to his administrative office: “He was working in his office just two or three days before his death. He wore a bandage around his head at ear level and was moaning with pain.” Robert Bosch died on March 12, 1942, of complications resulting from an inflammation of the middle ear.

Even in death, the National Socialist regime refused to leave him in peace. A telephone call from Berlin announced that a state funeral would be held on March 18, 1942. On the eve of the funeral, a simple service took place in the Stuttgart plant in the presence of Robert Bosch’s family. The state funeral was held in the König Karl Hall of the Landesgewerbemuseum in Stuttgart.

Many obituaries paid tribute not only to the entrepreneurial and personal achievements of Robert Bosch, but also to the social commitment demonstrated by the company founder. Today, his memory continues to be honored by the entire company, by the Robert Bosch Stiftung, and by his direct descendants.

**From left to right:**

Robert junior and Eva Bosch take to the track outside the Stuttgart riding arena, 1937.

Robert Bosch (third from left) on the deck of the ship that took him to the United States, 1924

Group photo in the spa gardens in Baden-Baden, showing Robert und Margarete Bosch (second and third from left), 1935



# Hunters' tales and a natural paradise

## Robert Bosch, hunter and farmer

by Dr. Kathrin Fastnacht



As early as his apprenticeship years in Ulm, Robert Bosch honed his shooting skills using a Flobert rifle bought and paid for with his own pocket money. However, with sparrows the only quarry in his sights at this early stage, it would take another 20 years and more before he became a “real” hunter. Yet Robert Bosch was not simply a huntsman; he was also concerned with preserving and maintaining stocks of game. In addition to his passion for hunting, he also pursued his keen interest in agriculture at the Bosch Farm in Mooseurach. Here, instead of shooting at sparrows, he introduced a hugely diverse bird population that would feed on the insects that inhabited the marshland.

“Up until the year 1904, I hunted only in the summer months and in the mountains. Then I leased the communal hunting estate at Magstadt [near Stuttgart] and found it an excellent source of relaxation. I had bought myself a small automobile and spent almost every Saturday afternoon and Sunday at the hunting lodge. If the weather was good, I took my family with me, otherwise a fellow hunter or my son.” These hunting trips were not only about pursuing a favorite pastime. They were also about being close to nature. Each year from 1918 onwards, at the beginning of the mating season, he would spend around eight days in Pfronten, located in the Upper Allgäu region directly on the border to Austria, stalking game on his new hunting grounds with head huntsman Franz Schöll or other companions.

### Hunting companions

Even with those nearest to him, Robert Bosch’s manner remained somewhat guarded and detached. Although this meant he did not have a great many close friends, his few true confidants knew they could trust him implicitly. That said, the level of familiarity in any such relationship was always his to determine. His closest friendships were reserved for the men who shared his passion for hunting. They included Paul Reusch (1868–1956), the Swabian CEO of Gutehoffnungshütte in Oberhausen, the professional hunter Georg Escherich (1870–1941), and Bosch’s favorite hunting companion Otto Mezger (1875–1934), who was director of the Chemical Investigation Office of the City of Stuttgart. As Robert Bosch’s associate

**Left:**  
Interesting perspectives:  
Robert Bosch (right) with estate  
director Mauk at the Bosch Farm,  
1935

**Right:**  
Robert Bosch and his licensed  
hunter Seraphin Schöll, 1941





**Top left:**  
Robert Bosch (right) with three further hunters and their trophies, c. 1938



**Top right:**  
Robert Bosch (right) with traveling companions outside a hunting lodge in Sweden, 1917

Felix Olpp recalled: “His favorite guests included his estate manager Walther Mauk from the Bosch Farm, various doctors, our own Dr. Alfred Knoerzer, Messrs. August and Felix Schuler, director Ritter from Daimler-Benz, and, above all, his friend Schirg (the forestry director Dr. Georg Escherich).”

#### **An invitation to the hunt**

Being invited to join one of these hunting expeditions was a sign of great esteem. But as Robert Bosch’s private secretary Felix

Olpp described later, the expectations placed on the guests were equally high: “Mr. Bosch often said that, at Pfronten, it was possible to build up relationships that were virtually unknown in the office. He said that hunting reveals a completely different side to people. Discussions in the hunting lodges or at the ‘Krone’ inn in Pfronten were always extremely useful to him from a business point of view.” If any guest was unlucky enough to disappoint his host, it more or less put to rest any hopes of a business relationship with Bosch.



Bosch's hunting estates in Urach in the Swabian Jura, in the Karwendel mountains in Tirol, and in the Allgäu region near Pfronten soon became famous. Fellow hunters respected his careful husbandry of an impressive stock of game. Robert Bosch continued to hunt into old age, even when he was no longer able to tackle the strenuous climbs on foot and had to rely on a horse to carry him to the start of the hunt. As in his company's production operations, precision was everything on these hunting expeditions and Bosch became renowned for his prowess as a marksman. The law required hunting estate tenants to be living persons, not organizations such as Robert Bosch GmbH. Following Robert Bosch's death, his wife Margarete therefore took it upon herself to qualify as a hunter in Pfronten so that the estates could be retained for the family and for the company.

Robert Bosch derived a particular pleasure from all aspects of hunting. The silence that had to be maintained while stalking

suited his taciturn nature. However, after a successful hunting trip, he let himself relax and join in hearty renditions of hunting songs, even though he was not necessarily the best of singers.

#### **The acquisition of the Bosch Farm**

Robert Bosch's close affinity with nature is also evident in his interest in agriculture: "Agriculture in itself is one of the most interesting lines of business there is. It is more varied than virtually any other field, for it has to do with zoology, botany, geology, chemistry, and meteorology in their widest sense." This enthusiasm for farming emerged early in his career. In the period around 1900, he had already toyed with the idea of purchasing the "Klein-Hohenheim" farm near Stuttgart. However, his wife Anna was far from keen on the idea. She was in all likelihood concerned that, if he added this project to his already very heavy workload, her husband would simply be taking on too much.

**Left:**  
Robert Bosch with a seal  
in Sweden, 1917

**Right:**  
Robert Bosch with estate  
director Mauk on an inspec-  
tion tour of the Bosch Farm,  
1932





**Top left:**  
Modern silage facilities  
at the Bosch Farm, 1930



**Top right:**  
Advertisement for Bosch  
Farm products, 1931

After the first world war, Robert Bosch did eventually take his first steps into the world of agriculture. However, this was done less as a result of his passion for farming, and more as the result of an ill-advised investment. Around 1912, he had acquired shares in a company in Beuerberg, Bavaria, that planned to use the Ekenberg process of electrolytic hydrogenation to produce peat for use in the manufacture of fuel. However, this process proved to be economically inviable.

#### **From peat bog to a land of milk and honey**

Far from being discouraged, this setback simply fuelled Bosch's ambition. Having made plans to transform the expanses of

poor soil in Upper Bavaria into a model farming estate, seven previously independent farmsteads were amalgamated to create the Bosch Farm. "Back then, it seemed to me a great feat to transform a mere bog into a land of milk and honey."

The principles that governed his industrial projects were also brought to bear in his agricultural activities. Bosch's plan was to use state-of-the-art technology to produce high-quality products that could be sold in the region. This project got under way with the help of special machines, and a newly developed process of silage making was introduced. At the same time, Bosch even



then made use of what we would call eco-friendly methods in creating an environment that would attract hosts of birds, thus providing a natural means of pest control. On the farm at Mooseurach, Robert Bosch built a house for his own family and accommodation for a workforce that soon numbered over 300. Yet despite his best efforts, the Bosch Farm remained a subsidized operation. As he would later admit, he “acquired [the Bosch Farm] completely by chance.” From that point onwards, he firmly believed that farming should be left to those who really understood what they were doing.

Following Robert Bosch’s death in 1942, Mooseurach became a haven for his second family, and Margarete Bosch carried on the farm with the aid of various managers. Although the estate was reduced in size on several occasions, it never managed to achieve a profit and operations finally came to an end in 1976. The land once wrested from the moor has been undergoing a process of renaturalization since 1986, and the Bosch family now operates a small organic farm business on the site.

Stand of the Bosch Farm at the agricultural exhibition in Munich, 1936

# The entrepreneur

Robert Bosch at his desk  
at the factory in Stuttgart,  
1906





# “I would much prefer to do business on my own”

## The Workshop for Precision Mechanics and Electrical Engineering

by Dieter Schmitt

In his letters to Anna Kayser, the woman who would later become his first wife, it is already clear that Robert Bosch wished to become self-employed and set up his own company. In the spring of 1886, however, he was still unsure where he should locate this new enterprise. Although Cologne had long been at the top of his list, he finally opted for Stuttgart. In all probability, this decision was based not only on the city's economic prospects, but also on the fact that his fiancée lived in nearby Obertürkheim.



The first company plaque of the newly established “Workshop for Precision Mechanics and Electrical Engineering,” 1886

For his new venture into independence, Robert Bosch rented ground-floor rooms in a courtyard-entrance building at 75B Rotebühlstrasse in Stuttgart. His own description of the premises lists “an office, one larger and one smaller workshop, and a room without its own light where the forge was housed.” On November 11, 1886, Robert Bosch established the “Workshop for Precision Mechanics and Electrical Engineering” with his very first associates – a technician and an errand boy. However, with official permission yet to be granted, work could not begin immediately. The necessary permission arrived four days later on November 15, 1886, and it is this date that has been regarded as the company's foundation day ever since. The initial capital stock of 10,000 German marks came from Bosch's inheritance from his father, who had died six years earlier. However, this money was not destined to last long.



### Teething troubles

Robert Bosch could not afford the luxury of picking and choosing which orders to accept. He turned his hand to any piece of precision mechanics or electrical engineering work that came his way. Gottlob Honold, who was an apprentice at Bosch between 1891 and 1894, and later became the head of development as well as a member of the board of management, recalls that the range of products and services was very diverse: “An electric stenograph machine, various large cameras with a focal length of around 10 meters (lens distance), typewriters, speedometers, fountain pens, caliper compasses, photographic shutters, telephone cords, telephone terminals, line switches, electric bells, remote electrical water-level indicators, electric elements, electrical door contacts and push buttons, resistance bridges, cigar holders, faucets for water pipes that empty automatically

once the pressure is removed, gas lighters, shooting targets with electrical displays, and no doubt many other things that I do not recall.”

Yet despite even this extensive portfolio, orders were sometimes sparse during the early years, leaving Bosch struggling to keep his workforce busy and pay their wages on time. Not wishing to be in debt to his associates, he borrowed money from his mother or took out loans for which his family acted as guarantor. Occasionally, a neighboring fruit merchant helped out by offering smaller loans. In his memoirs, Richard Schyle, who worked for Bosch between 1891 and 1930, recounts that Robert Bosch’s “workers may have been in a better financial position than he was at that time.” In retrospect, Robert Bosch felt this was somewhat exaggerated, even though he himself described his first years

### Left:

Robert Bosch at the age of 25, 1886

### Right:

The courtyard of the building at 75 B Rotebühlstrasse. From 1886 until 1890, the workshop was located on the ground floor at the right.



To celebrate the completion of his thousandth magneto ignition device, Robert Bosch (back row, third from left) took his associates on a company outing, 1896.

as a self-employed businessman as a “shambles,” plagued by constant highs and lows. In 1892, he faced a particularly difficult year and was obliged to reduce his workforce from 24 associates to just two. Nonetheless, Bosch succeeded in overcoming even these most trying of times.

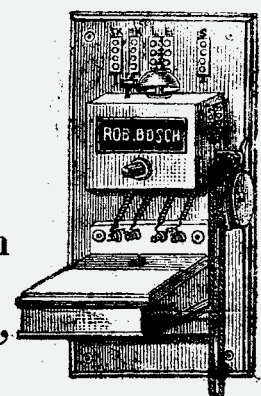
#### Basic principles

The rules of the workshop were strict. Robert Bosch placed great importance on thriftiness, quality, punctuality, and discipline. For him, it was absolutely crucial

that his customers should be offered work of the very highest standard. In 1921, he outlined this principle in the “Bosch-Zünder,” the associate newspaper: “I have always acted according to the principle that I would rather lose money than trust. The integrity of my promises, the belief in the value of my products and in my word of honor have always had a higher priority to me than a transitory profit.”

If Robert Bosch observed any associate being careless or wasting materials, he was quick to take them to task. Long-serving

**ROB. BOSCH**  
 Rothebühlstr. 75 B.  
*Telephone, Haustelegraphen.*  
 Fachmännische Prüfung und Anlegung von  
 Blitzableitern. (37)  
 Anlegung und Reparatur elektr. Apparate,  
 sowie aller Arbeiten der Feinmechanik.



associates such as Gottlob Honold knew exactly how to deal with such situations. He said that, from time to time, it was as if “a storm raged through the entire place” but “the skies soon cleared and peace was restored thanks to the good personal relationship between employer and employees.”

While Robert Bosch demanded much from his associates, he also made sure they had the equipment they needed to live up to his expectations. He knew his associates could not produce the high-quality products he demanded if they were working with inadequate equipment at outdated benches.

With this in mind, he invested the company’s meager profits in the very latest machines and tools. In 1890, he purchased a bicycle to help him fulfill his service contracts. To enable his customers to contact him quickly and easily, he also took the step of installing a telephone at what was then the very considerable cost of 150 German marks a year. A subscription to the magazine “Centralblatt für Elektrotechnik” kept him up to date with the latest industry developments, and he also placed advertisements in various other magazines to spread the word about his workshop.

### The workshop environment

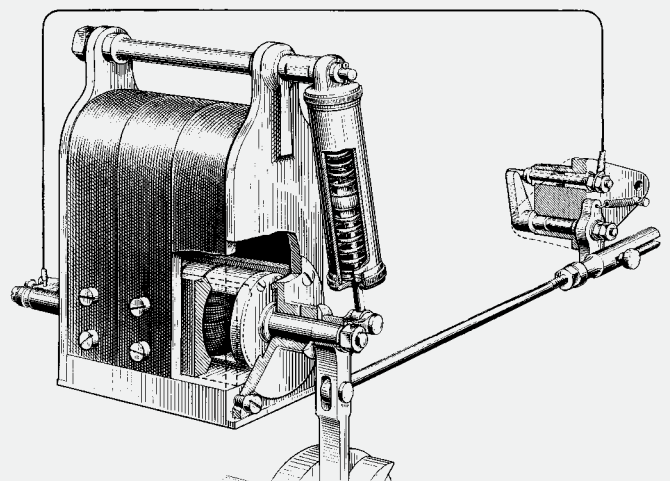
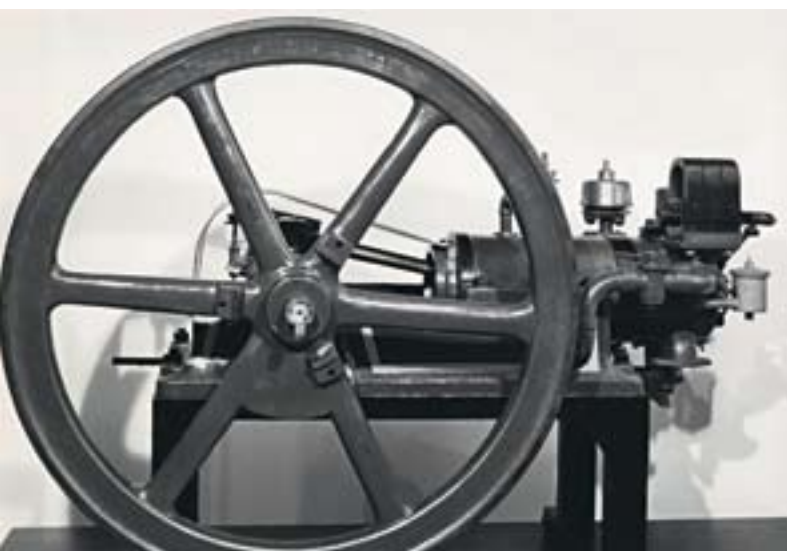
Richard Schyle’s memoirs provide an insight into the atmosphere in the Bosch workshop and records some of the lighter moments. For example, he relates that on one particular summer’s day when the heat in the workshop had become unbearable, Robert Bosch suddenly decided to shut up shop and give his staff the day off. He also notes that his associates liked to sing while they worked. Bosch supposedly enjoyed this so much that he tended to stay in his office so they would not be interrupted or disturbed by his presence. In 1896, Robert Bosch celebrated the assembly of the one thousandth magneto ignition device together with his associates, organizing an outing to an inn near Stuttgart. By that time, the magneto ignition device already accounted for most of the company’s sales. Even so, no one had any inkling that this product would soon be the medium that would make the Bosch name famous the world over.

### Below from left to right:

The first advertisement placed by Robert Bosch, in the Stuttgart daily newspaper “Der Beobachter,” 1887

Stationary gasoline engine from the 1890s, equipped with a Bosch low-voltage magneto ignition device

Technical drawing of the first Bosch low-voltage magneto ignition device with break-spark rodging, 1887



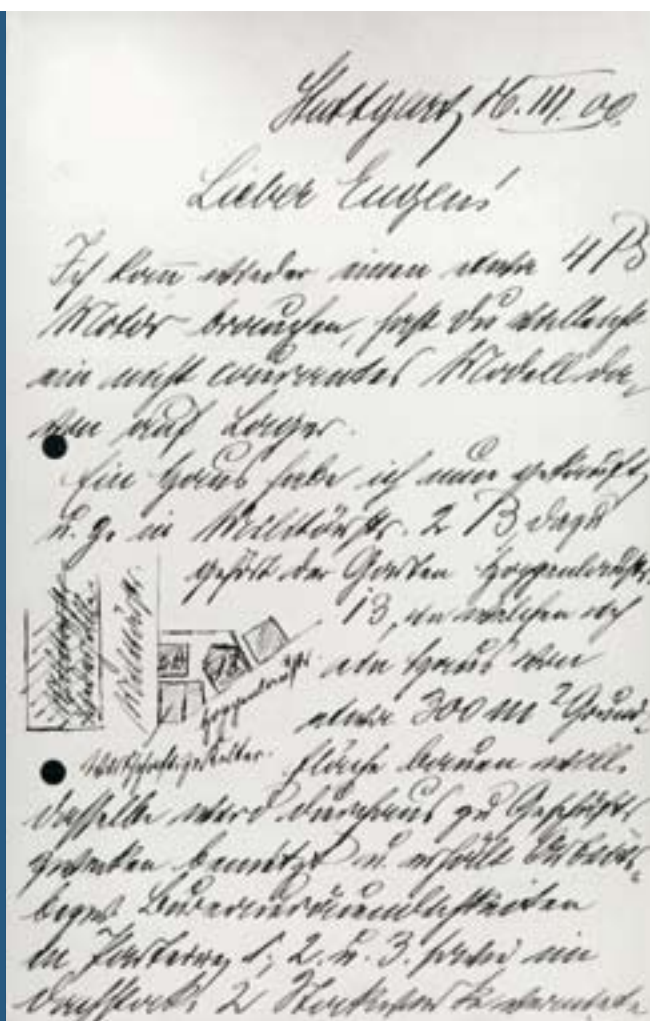
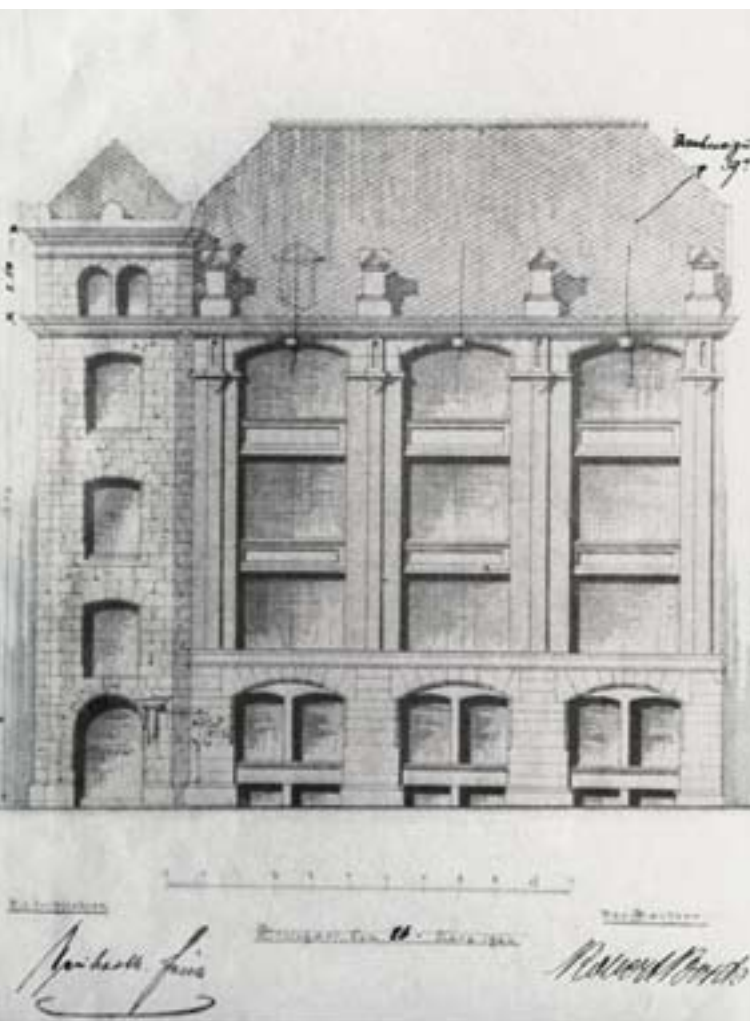


## The spark of genius

### Robert Bosch and the magneto ignition device

by Dieter Schmitt

On March 16, 1900, Robert Bosch wrote a letter to his brother-in-law Eugen Kayser, proudly announcing his plans to buy a building in Stuttgart and set up a factory of his own. The new building marked the start of the company's transformation from a small courtyard-entrance workshop in Stuttgart to an industrial enterprise with sales offices and locations throughout the world. This commercial breakthrough was fuelled by the achievements Bosch and his associates had made in developing the magneto ignition device into the best automotive ignition system of its age.



Robert Bosch had come across the magneto ignition device more or less by chance. A mechanical engineer had inquired whether Bosch might be able to replicate a magneto ignition device he had seen in Schorndorf. Accepting the challenge, Robert Bosch traveled the 30 kilometers from Stuttgart to Schorndorf to take a closer look. The purpose of the magneto ignition device was to generate the electric spark needed to cause the air-fuel mixture in a stationary internal-combustion engine to explode.

#### Sales driver

The device Robert Bosch had traveled to see was mounted on an engine manufactured by the Cologne-based company Deutz. Having ascertained that the magneto ignition device was not patent-protected, Bosch succeeded in producing a replica.

The very first Bosch ignition device was duly delivered to Schmehl & Hespelt, a mechanical engineering company in the small town of Möckmühl in Württemberg. However, Bosch had done more than simply copy the device he had seen in Schorndorf. He had also made improvements, replacing the heavy bar magnets with smaller, more stable U-shaped magnets. This made the magnets stronger and meant that the device worked even better.

Over the next few years, Bosch manufactured the magneto ignition device in growing, albeit still relatively small, numbers. He delivered a total of nine magneto ignition devices in 1888, and 23 the following year. In 1891, that figure rose to more than 100 and, for the first time, the device accounted for over 50 percent of the work-

#### From left to right:

View to the first factory building owned by Robert Bosch on Hoppenlaustasse in Stuttgart, photo from 1936

In the planning phase of the building, Robert Bosch contributed his ideas to the drafts of the architects Beisbarth & Fröh, 1900.

Robert Bosch proudly announces to his brother-in-law Eugen Kayser that he has bought an apartment building at 2B Militärstrasse, and that he plans to build a new factory next door, 1900.



**Left:**  
The first Bosch high-voltage magneto ignition system, the HdH magneto, 1902

**Right:**  
Bosch developed magneto ignition systems for vehicles such as this motorized three-wheeler built by Heinle & Wegelin, featuring a back seat and trailer, 1897.



shop's sales. From that point onwards, it served as the commercial bedrock of Bosch.

However, the first Bosch magneto ignition devices had one major flaw that initially prevented any further expansion of this field. As a consequence of their design, they were only suitable for low-speed stationary engines. Engines of this type were used to drive machinery in factories and mills, for example, where their size and weight were of next to no significance. The sheer size of these engines meant they were able to generate enough power to fulfill their purpose even at low speeds of around 120 revolutions per minute. In the years that followed, their speed was increased to some 200 to 300 revolutions per minute, but this was as fast as magnetos of this kind could go. They were simply not suitable for the smaller, faster engines that were required for the modern vehicles of the age, such as motorized carriages, bicycles, and three-wheelers. These new engines were capable of achieving speeds of over 1,000 revolutions per minute.

#### **Magneto ignition in automobiles**

In 1897, the English automotive pioneer Frederick Richard Simms sent a three-wheeler manufactured by the French

company De Dion-Bouton to Stuttgart, with the request that it be fitted with a magneto ignition device. Doubting Simms's claim that the engine could run at some 600 revolutions per minute, Robert Bosch and his master craftsman Arnold Zähringer decided to test it for themselves. As it happened, the only person brave enough to undertake the first test run on this unusually speedy machine was Max Rall, an apprentice who later became a member of the board of management. He promptly crashed into a stack of empty wine barrels belonging to the neighboring wine merchant Hirsch. A further attempt on the open road revealed that the engine was actually capable of reaching around 1,800 rpm.

One thing was now abundantly clear: in its current form, the magneto ignition device would never be capable of achieving such speeds. However, with neither Bosch nor Zähringer prepared to give up so easily, Zähringer was finally struck by an ingenious idea. Instead of the heavy armature, he came up with the startlingly simple solution of a smaller, oscillating sleeve inside the magneto.

Many drivers were now keen to replace the unreliable ignition systems currently fitted in their vehicles with this new Bosch sys-

**Top:**

Advertisement for the Bosch magneto ignition system placed by Bosch's Austrian sales agents Dénés und Friedmann, c. 1905

**Below, left:**

French advertisement for the Bosch automotive lighting system, featuring headlights, generator, voltage regulator, and battery, 1914

**Below, right:**

Test drive of the first Bosch company car, with Gustav Klein, Gottlob Honold, Ernst Ulmer, Arnold Zähringer (from left to right), 1907

tem. To ensure prompt supplies for his customers outside Germany, Bosch and Simms jointly set up the first Bosch sales office in London in 1898. This served the U.K. market, and further offices were established in France and Austria the following year.

**"I am a houseowner now"**

With business taking off across Europe, it was now possible—and indeed necessary—to increase the level of investment in Stuttgart. In 1900, Robert Bosch purchased an apartment building in Militärstrasse (now Breitscheidstrasse), not far from his existing workshop premises. In letters to his friends, he proudly announced

that he was now a "houseowner" and predicted that his investment would pay off within just a few years. The card up his sleeve: attached to the building was a sizeable lawn where he intended to build a new factory.

Robert Bosch was careful to ensure that his new factory reflected his own ideas. It was the first structure in Stuttgart to be built using reinforced concrete, a real innovation at that time. In addition, Bosch paid close attention to the design of the workspace within the building. Large windows ensured there was enough light, for example, while a sophisticated ventilation system kept the air fresh. On April 1, 1901, Bosch and his





**Above from left to right:** Robert Bosch at the official opening ceremony for the factory in Paris, shown together with associates and business partners, among them Frederick Simms (fifth from right), 1905

Entrance of the factory in Paris, c. 1906

Group photo of important Bosch associates of the early years: Gustav Klein, Gottlob Honold, Ernst Ulmer, and Hugo Borst (from left to right), 1906

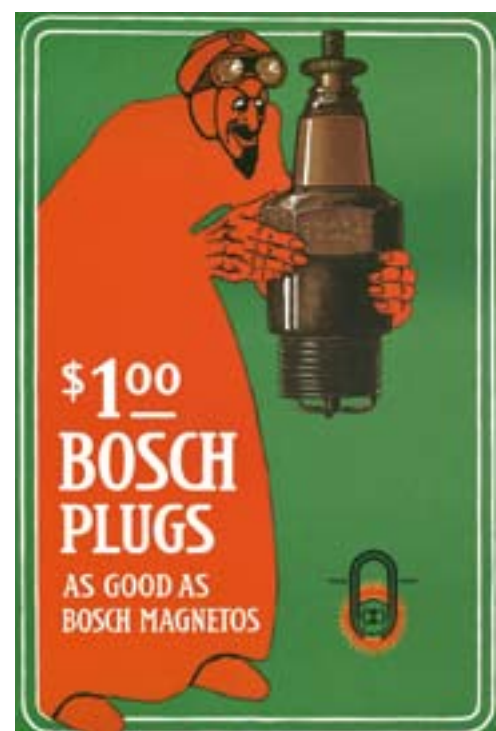
45 associates moved into the new building, whose name – “Elektrotechnische Fabrik Robert Bosch” (Robert Bosch Electrical Engineering Factory) – was emblazoned down the exterior of the stairwell in large letters.

### High voltage

That day also marked the return of Gottlob Honold. Having completed his apprenticeship, he had left Bosch in order to work as a technician at other companies. After then studying in Stuttgart and carrying out his military service, he bumped into his former mentor, who persuaded him to return to Bosch as an engineer. Robert Bosch set up a new laboratory for Honold in the courtyard of the new factory, and set him the

task of finding a way to dispense with the failure-prone break-spark rodding used in the magneto ignition device. The rodding was the cause of frequent problems and, as it had to be adapted to each individual engine, it was also extremely complicated to manufacture.

Despite numerous failed attempts, Honold persisted in his efforts to find a solution. He finally developed a high-voltage magneto ignition system that used spark plugs instead of the unreliable break-spark rodding. When Honold unveiled the first prototype in December 1901, Robert Bosch was clearly impressed, declaring: “You have hit the bull’s eye!”





### Worldwide growth

The company now entered a period of rapid growth. Both the older low-voltage magneto ignition device and the new high-voltage system sold like hot cakes worldwide. Although only just built, the new factory was soon bursting at the seams and Bosch had to constantly expand his premises in the west of Stuttgart. In 1905, he was able to inaugurate the company's second production location together with his most important associates and business partners: a factory in Paris, set up as a joint venture with Frederick Simms. However, with tensions already existing between the partners, the relationship soon deteriorated. Bosch was increasingly dissatisfied with the Englishman's business practices and wanted them to go their separate ways as soon as possible. He even considered selling his company to Simms lock, stock, and barrel, including the joint ventures in England and France.

Bosch appointed a friend of Honold's named Gustav Klein to handle the negotiations. In 1906, Bosch finally cut all ties with Simms and assumed sole responsibility for sales operations in what were then the primary markets—England and France. He was now in a position to take the plunge and enter the transatlantic market. Armed with a list of key American automakers, Gustav Klein set off for the U.S. in 1906. Robert Bosch later described the trip by Klein and his colleagues as a real "triumph." In just a few weeks, Klein managed to secure orders worth more than 1 million dollars. Over the next few years, business with the U.S. went through the roof, and

Robert Bosch decided to set up his own manufacturing site in Springfield, Massachusetts, to circumvent high import duties and reduce transportation costs. In just a few short years, the U.S. had become by far the most important sales market for Bosch.

### Robert Bosch AG

The outbreak of the first world war in the summer of 1914 was an unmitigated catastrophe for Bosch. The vast majority of the company's key foreign markets vanished in one fell swoop and most of Germany's wartime enemies seized not only the company's tangible assets, but also its industrial property rights, patents, and brands.

The war also affected Robert Bosch deeply on a personal level. As early as 1912, when the Balkan crisis had been threatening to destroy peace in Europe, he had written to a friend, saying: "I would willingly pay ten million marks if it meant I could prevent a war." As if to compound these business and political difficulties, Bosch was also faced with increasingly trying times in his private life. The serious illness that had afflicted his son was weighing heavily on both Bosch and his wife. When Robert Bosch also fell ill, his own concerns and those of his key associates prompted him to address the question of who should succeed him at the helm of the company. He therefore decided to change the company into a stock corporation. Robert Bosch became the chairman of the supervisory council of Robert Bosch AG and increasingly left responsibility for the day-to-day running of the company to his board of management.

#### Below left:

Camille Jenatzy driving his Mercedes at the Gordon Bennett Race in Ireland, 1903. The Belgian race driver was later reincarnated as the "Red Devil," the legendary Bosch advertising figure.

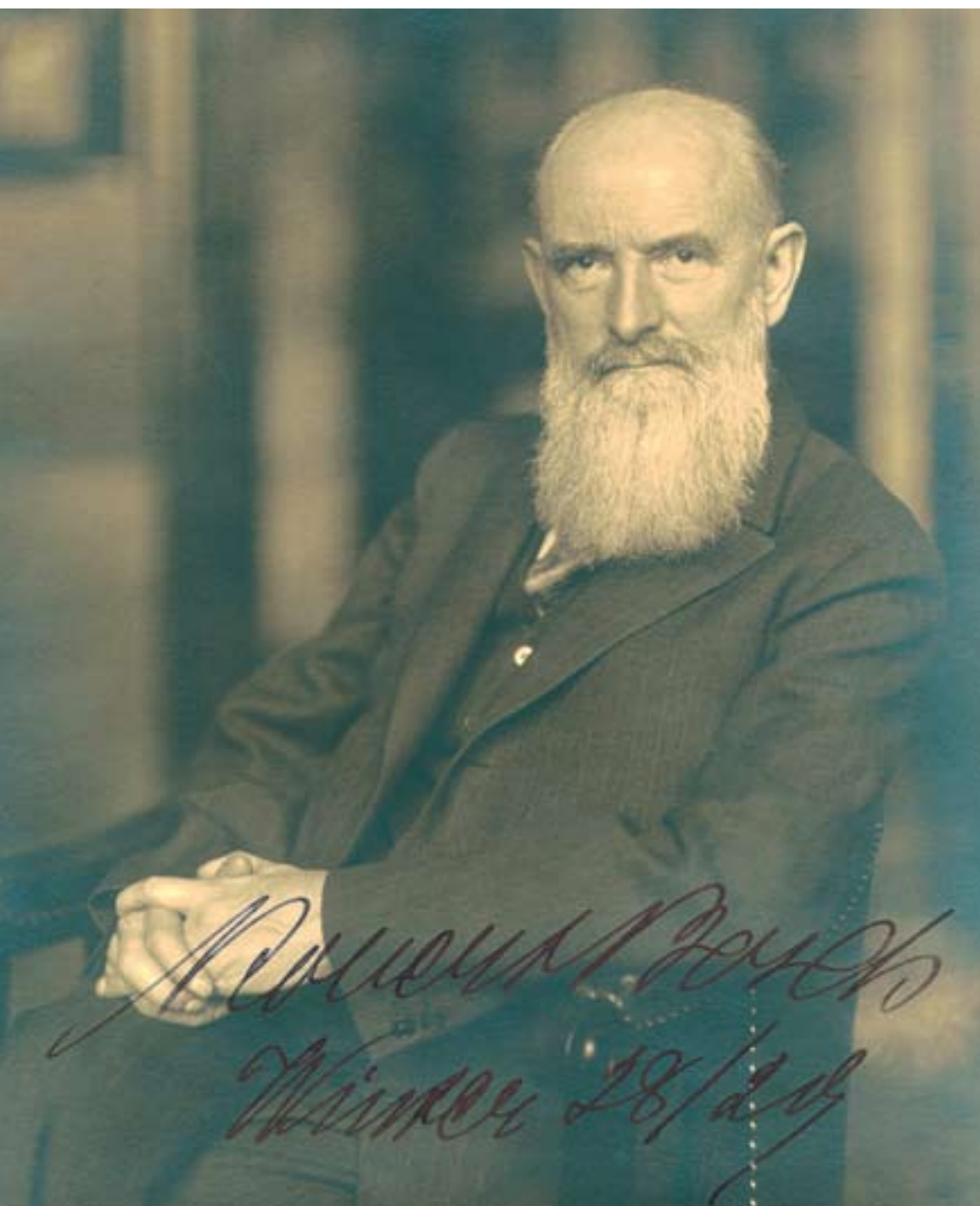
#### Below right:

Poster for spark plugs showing the "Red Devil," 1913

# The years that changed everything

Rationalization, diversification,  
and agreements

by Christine Siegel



The company founder  
Robert Bosch at the age  
of 67

The two decades that followed the first world war brought dramatic changes to Bosch as a company. Economic turmoil and fundamental shifts in the geopolitical situation meant Bosch had to develop new strategies that would equip the company for the future, while still retaining its traditional standards of quality. Assembly-line work, an expansion of the product portfolio, and international joint ventures enabled the company to successfully carve a new niche for itself against this backdrop of change.

The years after the first world war were a time of considerable challenge for the company, as well as of personal tragedy for Robert Bosch. This period was overshadowed by the death not only of Bosch's first-born son Robert in 1921, but also of several close associates who had long played an active role in the successful development of the company.

The company was also hit hard by the unstable political climate and economic upheavals. In addition, the lack of orders from abroad was felt all too keenly following the end of the war, particularly since Bosch had generated the majority of its pre-1914 sales outside Germany. In the period up to 1918, Germany's former war-time enemies had been busy building up their own automotive supply industries, and these were now serious competitors for Bosch in the global market.

### **New strategies**

Robert Bosch and his senior management drew up a number of strategies in response to these challenges. In order to win back the markets outside Germany, Bosch re-established contacts with business partners from the pre-war period, wherever this was possible. In 1921, the creation of the Bosch Car Service resulted in vehicle service stations being set up worldwide and helped to spread the reputation of Bosch products right around the globe. That same year, Robert Bosch undertook a journey to South America to explore the potential of this region's markets. The automotive indus-

try there was undergoing a veritable boom. In Buenos Aires, he laid the foundation stone for a sales office that would coordinate sales of Bosch products, not only in Argentina but also throughout South America.

### **Expansion of the product portfolio**

Until the mid-1920s, the Bosch product portfolio had been limited to automotive equipment. In addition to ignition systems and automotive lighting, Bosch had also extended the company's research and production activities to include new areas. Horns, batteries, servo brakes, windshield wipers, and turn signals became part of the Bosch range. At the same time, the diesel engine was generating increasing interest within the automotive industry. With much lower flammability, diesel fuel posed less of a fire risk than gasoline. In addition, the diesel engine consumed less fuel than its gasoline-powered counterpart. Recognizing the potential in this field, Bosch tested prototype injection pumps for diesel engines in 1923 and 1924. The fully developed product went into series production at the end of November 1927. The first customer was M.A.N.

### **Rationalization and crisis**

This expansion of the product portfolio came in response to the increasing competitive pressure exerted by the industries that had developed outside Germany. However, in order to maintain a strong position in the market, it was also necessary to rationalize production processes, and in

this way to make them more economical. Accordingly, assembly-line production was also introduced in Stuttgart from 1925.

Yet before these measures had a chance to take proper effect, a major crisis rocked the automotive industry to its core. In the period between 1925 and 1926, sales dropped by 35 percent. Many associates had to be laid off and work in the plants was cut back to just three days a week. These rationalization measures also affected the company's senior executives. The company's board of management was stripped back from eleven members to just three members and three deputies. Reshuffling the board of management now gave Robert Bosch opportunity to place responsibility for the company in the hands of a triumvirate, effectively a board of directors, comprising Hans Walz (commercial affairs), Hermann Fellmeth (engineering), and Karl Martell Wild (sales and human resources). They were charged with the task of continuing to run the company – then known as Robert Bosch AG – in accordance with the principles and wishes of its founder.

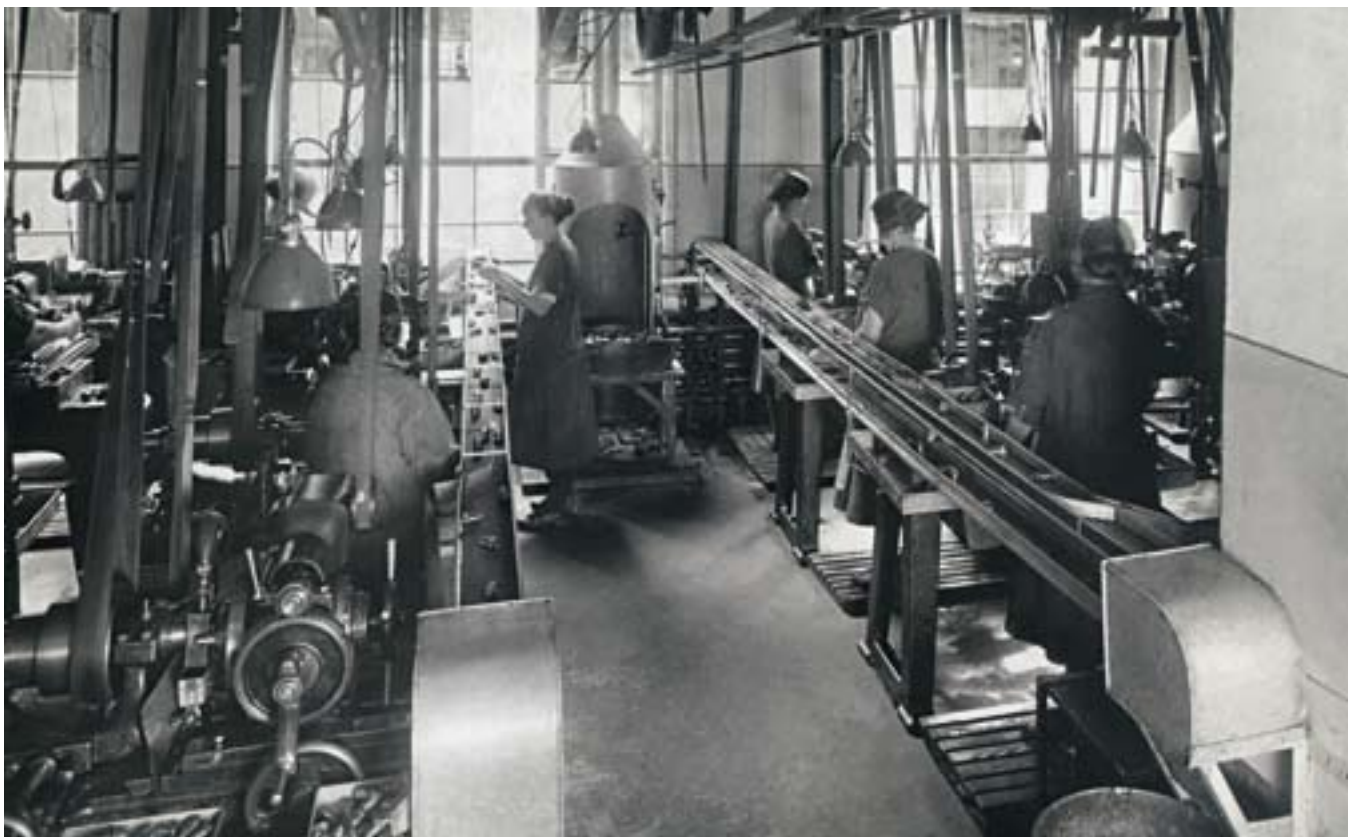
Although health problems meant Bosch now felt unable to fulfill this role himself, he was still eager to provide support and advice to the new board of directors.

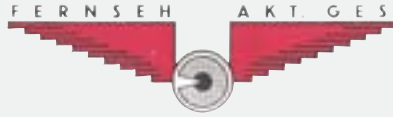
### Cooperation and licenses

Rationalization was just one of the ways in which Robert Bosch and his board of management aimed to tackle the challenges posed by the unsettled economic climate and increased competition. Another option was to diversify by expanding beyond the automotive market. Robert Bosch wrote in 1927: “We ourselves are trying to move away from automotive work if we can, or, to be more precise, to add more strings to our bow.”

By acquiring a number of companies and expanding production into new areas, it took Robert Bosch AG only a few short years to transform itself from a supplier of automotive parts into an electrical engineering group. The product that launched this new era was the Forflex hair trimmer, a power tool with a motor in the handle. It was to become the precursor of drills and

Assembly-line workers producing spark plugs, 1925



hammer drills. 1933 heralded the market launch of the very first Bosch refrigerator, while the purchase of the Junkers gas-fired appliance manufacturing business in 1932 saw Bosch enter the heating systems business. The company also made additional acquisitions in the fields of radio, television, and film and camera technology.

Alongside rationalization and diversification, the company management instituted a policy of cooperation with competitors both in and outside Germany in order to secure its position on the international stage. In 1924, Bosch merged with Eisemann, a Stuttgart-based company that manufactured products of a very similar nature. Four years later, in 1928, production operations got under way at a new joint venture, Lavalette-Bosch, near Paris. In 1931, the first products manufactured by C.A.V.-Bosch rolled off the production line in London. C.A.V. was a subsidiary of the British Bosch competitor Joseph Lucas Ltd. The German-Italian operation MABO was founded in 1935 as the last in a series of European joint ventures that relieved competitive pressure and allowed Bosch to avoid high import duties. High customs tariffs also prompted Bosch to grant licenses to local companies in Japan, Australia, and Argentina, permitting them to manufacture Bosch products.

Although the company was very much on course economically by the mid-1930s, conditions under the National Socialist dictatorship weighed heavily on Robert Bosch. The regime's discrimination against Jewish citizens, coupled with the prospect of another war and a renewed loss of foreign markets, alarmed not only Robert Bosch, but also his board of management. By this time, Robert Bosch had already chosen Hans Walz as a worthy successor, and as a man capable of running the business in his spirit and according to his principles. In the period after 1926, Hans Walz had increasingly assumed the role of managing director and designated "next in line." In a letter to Walz written in 1940, Robert Bosch wrote: "What would have become of the company, what would have become of me had you not been there over the last twenty years!"

After the outbreak of the second world war, Robert Bosch relinquished more and more of his responsibility for the company. His death in 1942 meant he did not live to witness the production of ever more armaments, the massive use of forced labor, and the ultimate destruction of his plants by Allied bombs. In the words of his biographer Theodor Heuss: "That was a merciful blessing."

By diversifying into new product areas at the beginning of the 1930s, the automotive supplier Bosch was transformed into an electrical engineering company.

# **“Associates,” not wage earners**

## Robert Bosch as an employer

by Christine Siegel



For Robert Bosch, it was extremely important that his associates should be able to apply their skills and use their potential to the full. As a socially-minded entrepreneur, he was committed not only to giving his associates the best possible opportunities to advance their careers, but also to improving their working and living conditions. This made him a father figure to his associates.

When Robert Bosch and his modest workforce of just two associates moved into his first small workshop in Stuttgart's Rotebühlstrasse in 1886, they did so under the curious gaze of a four-year-old boy who lived in the same building with his parents. Young Otto Fischer observed every single detail. Full of astonishment, he saw the young man with the full beard set off to visit his customers on his new-fangled bicycle, and closely watched the technicians at work. What he saw must have made a lasting impression on him, for he later decided to take up a technical apprenticeship.

Having completed his years as an apprentice and journeyman with flying colors, Otto Fischer joined Bosch in 1905. As he was not personally involved in this new appointment, Robert Bosch was unaware of his new associate. However, when he learned of this latest addition through a chance encounter with Otto Fischer, Bosch visited him at his workplace in the test workshop the very next day. Bosch continued to take a benevolent interest in the young, talented technician. By the following

year, Fischer had already achieved the position of master craftsman in the test workshop. As a close associate of Gottlob Honold, Fischer worked on improving the spark plug and its applications in racing cars and aircraft.

### The benefits of responsibility

Robert Bosch felt it was very important to maintain direct contact with his associates. Rather than simply earning a wage, he wanted them to feel they were a part of the bigger picture, fully integrated into the business and its operations: "It has also been an established principle of mine to cultivate eager associates by letting each individual work independently as far as possible while at the same time delegating the responsibility that goes with the task." Ultimately, this willingness to assume responsibility also brought financial benefits. The associates at Bosch were paid comparatively high wages. Robert Bosch summed up this reciprocal relationship in an essay dating from 1931: "I don't pay good wages because I have a lot of money. I have a lot of money because I pay good wages."

### Left:

Engineers from the injection-pump testing department photographed on the load area of a Benz truck at the Stuttgart plant, together with Robert Bosch (front), 1926

### Below, from left to right:

The director of the spark plug plant in Feuerbach, Paul Grundler (left), takes Robert Bosch on an inspection tour through production, 1941.





**Above, from left to right:**  
Chance meeting:  
associates from the light  
plant in Feuerbach, on a  
company outing in Ulm,  
suddenly encountered  
the company founder  
Robert Bosch, 1936.

Motivation for associates:  
in-company advertise-  
ment featuring quota-  
tions of Robert Bosch,  
1943

However, having been given this responsibility, associates had to prove themselves worthy of it at all times. As a man who ran a tight financial ship, Robert Bosch had little patience for disorder at the workplace or poor workmanship. During the early years in the new factory, the usual response to the question “Seen the ‘godfather’ today yet?” was “No, but I have certainly heard him.” Nonetheless, the nickname “godfather” also reveals another side to Robert Bosch: his awareness of his duty towards his employees and their welfare. This was a responsibility he took especially seriously. In his business dealings, he never forgot that the fate of an increasing number of associates depended on the fortunes of his company. In periods of crisis in particular, this burden of responsibility weighed heavily on Robert Bosch. As the company developed into a large industrial enterprise and it became impossible to maintain a personal relationship with each and every associate, Robert Bosch’s own direct commitment to associate welfare was replaced by a comprehensive in-company program of social benefits.



### Motivation and identification

Ever since its establishment, exemplary working conditions and a good work environment had been the hallmarks of the company. Robert Bosch knew very well how these factors affected his associates’ motivation and, in the end, the profitability of the company as a whole. In 1906, he was one of the first employers to introduce the eight-hour working day. However, this move was motivated not simply by concern for the social welfare of the associates, but also by sound business sense. Under this system, associates worked more effectively, were more motivated, and managed the same amount of work in a shorter period of time. In addition, it was now possible to introduce a two-shift system.

Thirteen years later, the associate newspaper “Bosch-Zünder” was launched to motivate associates and help them identify with the company. The first edition, published on March 15, 1919, announced: “This newspaper was born out of a wish to involve the people who work for us more in the day-to-day life, the fate, the anxieties, and the hopes of the company—the company in which they have placed their trust, to which they devote their strength, knowledge and ability, and whose future they



To celebrate the 50th anniversary of the company, a procession was organized in which all associates participated.

share.” Even today, this remains the main objective of the associate newspaper, which is now published in nine languages.

However, social benefits were not limited to those associates currently employed by the company. In 1929, the company launched Bosch-Hilfe, a retirement and surviving dependents’ providence fund intended to provide support to employees and their relatives. On its introduction, this scheme was backdated to cover the period to January 1, 1927. The foundation of Bosch-Hilfe e.V. marks the start of the company’s schemes to provide its employees with a guaranteed pension.

### Fortunate choices

Concern for the welfare of his associates also led Robert Bosch to establish a separate apprentice training department in 1913. As someone who had been deeply disappointed by his own apprenticeship and the commitment—or lack of it—shown by his master, Bosch was determined to do things better in his own company. In the small artisan workshop where the company had spent its earliest years, he only ever employed two apprentices at any one time and was careful to ensure they received comprehensive training. As a result of the

increasing rationalization of work processes, more specialists and fewer “all-rounders” had to repeatedly perform the same task. Nonetheless, Bosch wanted his apprentices to continue to have an all-round training program, and so he brought them together in the newly-formed apprentice training department. One of the people who responded to the advertisement for a new head of the apprentices’ workshop, August Utzinger, was an old acquaintance of Robert Bosch, whom he had met and come to respect during his journeyman’s travels. He proved an extremely fortunate addition to this new department.

In selecting Utzinger, as well as many of his other key associates, Robert Bosch demonstrated a real “Midas touch.” Together with people such as Gottlob Honold, the head of development responsible for numerous technological innovations, and Gustav Klein, the driving force behind the process of internationalization, Bosch was able to build up a successful industrial enterprise. Today, the company is still staffed by people who see themselves as “associates,” and not merely as wage or salary earners—just as Robert Bosch intended.

# The visionary

Pathbreaking: Robert Bosch  
(third from left) at the  
opening of the Robert Bosch  
Hospital, 1940





# Education and healthcare

## The civic initiatives of Robert Bosch

by Dr. Sabine Lutz



Independence, family tradition, and an early concern with contemporary social issues formed the roots of the civic initiatives championed by Robert Bosch. At the same time, he was well aware that he could not put his vision of corporate social responsibility into practice unless his company was profitable. Accordingly, he saw himself not as a benefactor, but as a “socially minded businessman.”



In 1935, in the guidelines for the executors of his will, Robert Bosch outlined what his civic initiatives aimed to achieve: “It is my intention, apart from the alleviation of all kinds of hardship, to promote the moral, physical, and intellectual development of the people.”

#### **“The alleviation of all kinds of hardship”**

Robert Bosch’s actions during the first world war in particular are clear evidence of his willingness to make generous donations in times of dire need. In the very first year of the war, he donated over 400,000 German marks to the City of Stuttgart, most of which was used to help war orphans. With space urgently needed for a field hospital, Robert Bosch made halls available in his newly constructed “light plant” in Feuerbach near Stuttgart. As a result, no generators were actually assembled in the building until two years after its completion.



In addition to his efforts to provide shelter for the wounded, Robert Bosch was also concerned about the living conditions of workers and their families. The general shortage of housing meant rents were unaffordable for most of these families. As a result, most of them lived in horribly cramped and miserable conditions. The Schwäbische Siedlungsverein was a non-profit organization that sought to promote the construction of affordable housing. When it was set up in 1915, Robert Bosch contributed a full two-thirds of its initial funding of 1.5 million German marks.

In view of the widespread hardship and suffering caused by the war, Robert Bosch did not want to profit from the income generated by armaments contracts. This prompted him to set up his largest charitable foundation: “When the war came and brought with it new military contracts, [...] it appalled me to think that I was making

#### **Far left:**

View into a patient room at the Robert Bosch Hospital, 1940. Robert Bosch (right) is standing on the balcony.

#### **Top left:**

Robert Bosch delivering his address at the opening of the Robert Bosch Hospital, 1940

#### **Top right:**

Construction of the Neckar Canal near Heilbronn, 1932. Photograph: ullsteinbild

money while others were sacrificing their lives. At the end of 1916, I decided to use any profits from the war to set up a foundation to support the construction of the Neckar Canal.” Although the City of Stuttgart had long harbored plans to canalize the River Neckar to improve shipping, the project had been postponed due to lack of funds. Robert Bosch donated twenty million marks to this project. With work scheduled to begin after the war, thirteen million marks were set aside for the construction of the Neckar Canal itself, while the interest from the endowment as a whole was donated to the city authorities for the purpose of relieving social deprivation.

#### “Promote intellectual development”

With Robert Bosch showing a keen interest in education throughout his life, it is hardly surprising that it became one of the main beneficiaries of his endowment activities. In addition to schools, colleges, and universities, he also focused on vocational training and adult education.

In the field of higher education, the primary beneficiary of these activities was what is now the University of Stuttgart. Based on his own personal experience and his years as an entrepreneur, he knew only too well the importance of educating young people with a flair for technology. Established in 1910, his first major foundation used the ten million marks at its disposal to provide generous support to research and teaching at what was then the Stuttgart Polytechnic. He played a key role in setting up the “Vereinigung der Freunde der Technischen Hochschule” (Association of Friends of the Polytechnic) in 1923. He provided the financial backing for the association and also acted as its chairman.

Alongside his interest in improving conditions at universities and colleges, Robert Bosch also wanted gifted schoolchildren to have the opportunity to study. To that end, he founded and donated two million marks to the “Förderung der Begabten” society in 1916. From 1932 onwards, he also covered the costs of the Markel-Stiftung, a founda-



#### Left:

Wounded patients and nursing staff at the field hospital set up at the light plant in Feuerbach, 1915

tion that awarded grants to gifted individuals, which had lost its main source of financial support due to the death of its founder. Robert Bosch was also particularly committed to expanding adult education, as evidenced by his involvement in the “Verein zur Förderung der Volksbildung” (Society to Support Public Education) managed by his friend Theodor Bäuerle. A pioneer in its field, the association had, among other things, taken over responsibility for the new Stuttgart adult education center. For Bosch, education was more than just the accumulation of knowledge. It also meant developing the ability “to make the right political decisions and to recognize false doctrines as such.” In the politically turbulent era of the Weimar Republic, Robert Bosch wanted more than ever to play his part in promoting a basic understanding of democracy based on the “recognition of the rights and merits of others.” This view also underpinned his decision to support the university of political science run by the liberal politician Friedrich Naumann, as well as the

“Deutsche Liga für den Völkerbund” (German Federation for the League of Nations) founded by Matthias Erzberger.

### “Promote physical development”

When it came to healthcare, Robert Bosch was a dedicated supporter of alternative medicine. In the period from 1915 to 1916, he supplied a total of three million marks to help achieve his ambition of setting up a homeopathic hospital. In 1936, he marked the double celebration of his 75th birthday and the company’s 50th anniversary by donating a further 5.5 million marks to this project. Robert Bosch’s civic initiatives during his lifetime reached their pinnacle with the opening of the Robert Bosch Hospital in Stuttgart in 1940, two years before his death.

He also made sure that these activities continued. In accordance with his will, Robert Bosch Stiftung GmbH, a charitable foundation set up in 1964, carries on his work to promote and support the sciences, health, international understanding, and education in contemporary form.



**Left:**  
The Bundesverdienstkreuz (Federal Cross of Merit) is conferred to Marianne Weber, 1967. Ms. Weber had worked closely with Theodor Bäuerle, whose efforts to promote adult education in Germany were strongly supported by Robert Bosch.

**Right:**  
Certificate of appointment of Robert Bosch to honorary doctor, honorary senator, and freeman of the Stuttgart Polytechnic, 1941

# The healing power of nature

## Homeopath and “lifestyle reformer”

by Prof. Dr. Robert Jütte

There is an element of Lebensreform philosophy in Robert Bosch's support of alternative medicine. His sympathy for the views of this “lifestyle reform” movement is also reflected in his preference for woolen clothing. Yet Bosch was not dogmatic in his views on the causes of illness and what constituted a healthy lifestyle. Despite his staunch support for homeopathy, he was also open to other forms of treatment, even conventional medicine. Today, the Robert Bosch Hospital and the Institute for the History of Medicine still stand testament to his commitment in the field of healthcare.

Prof. Dr. Gustav Jäger  
(1832–1917) in woolen  
clothing



On September 22, 1941, the Stuttgart City Council decided to present Robert Bosch with a plot of land to mark his 80th birthday. With Bosch already holding the Freedom of the City of Stuttgart, this new honor recognized his “lasting services [...] to the science of homeopathy and natural remedies, and to promoting good health among the general populace.” This plot of land was to be used to build a museum that would “bring to life the work of Paracelsus and the other great names in alternative medicine.” But this was not the only honor conferred on Robert Bosch on his 80th birthday. To mark the same occasion, the Faculty of Medicine at the University of Tübingen awarded him an honorary doctorate.

The contrast between these two honors could hardly be more striking. While the first was awarded in recognition of Robert Bosch's contribution to alternative medicine, the second was an acclamation from an institute of conventional medicine.



Drawing of the  
Homeopathic  
Hospital in Stuttgart  
(draft), 1914

What is the common denominator? The historian Golo Mann may have the answer: the “workings of the living spirit of the individual,” he says, follow no hard and fast rules. Sometimes, he adds, certain things are required to co-exist even though “they appear to be at complete odds with each another.” Yet this still leaves a second fundamental question unanswered. What was it that attracted an industrialist like Robert Bosch to such an area of activity—one that had no bearing on his company at the time? As is so often the case, the answer can be found in his upbringing and family environment.

### **In harmony with nature**

An excerpt from Robert Bosch’s memoirs sheds further light on this: “My father was himself a dedicated follower of homeopathy. Even as a young boy, I never received anything other than alternative treatments. I am extremely sensitive to all types of medicine and have discovered that homeopathic medicines have a strong effect on me, even when diluted by a factor of one thousand.”

When he wrote these words, Robert Bosch was by no means alone in his criticism of conventional medicine. Even in the second third of the 19th century, there were still only very few treatments that would be considered effective today, such as using quinine to treat fever. It is therefore hardly surprising that hundreds of thousands of people shared this critical view of medicine.

When Robert Bosch attended lectures at Stuttgart Polytechnic in 1883–84, the man who impressed him most was not an electrical engineer, but a physician. After many years of research, Prof. Gustav Jäger (1832–1917) had come to the conclusion that wool was better for the human skin than vegetable fibers. The “Normalkleidung für Herren” (woolen clothing for men) advocated by Prof. Jäger consisted of garments made of breathable animal wool. It was also through Jäger that Bosch became familiar with the principles of the Lebensreform movement, whose slogan was “Back to nature!” In addition to natural



**Top left:**  
Patient in a galvanic bath,  
c. 1940



**Top right:**  
Lab technician at the  
Robert Bosch Hospital,  
c. 1940

remedies, the movement's followers advocated a more natural lifestyle, a combination of modern and "natural" agriculture, and a meat-free diet, as they believed this would counteract what they saw as the negative impact of the economic and social changes of the 19th century. Like Hermann Göhrum (1861–1945), the man who would later become his family doctor and whom he first met in 1890 at an evening organized by followers of Gustav Jäger, Robert Bosch embraced these principles early on and much preferred to wear the clothing advocated by this movement. Robert Bosch's love of nature therefore clearly also owes something to the ideas of the Lebensreform movement. And these ideas were again in evidence when he became an employer, and placed great importance on ensuring that his factories had sufficient ventilation and decent lighting conditions.

### The homeopathic hospital

Even though he has been accused of it on occasion, Robert Bosch was by no means dogmatic in his views about the causes of illness and what constituted a healthy lifestyle. While he was a keen advocate of homeopathy, he was also open to other methods of treatment, including conventional medicine. In his memoirs he commented: "When I say that I owe much to homeopathy, that does not mean I believe illnesses should be treated using only alternative methods."

Nonetheless, Robert Bosch's debt of gratitude to homeopathy is reflected in the institutions or projects to which he granted his patronage. In 1915, he donated a total of three million German marks to the construction of a homeopathic hospital near his home at the time (later the Robert Bosch House), but the war put a stop to the project. In 1920, with the economic

crisis making any plan to build a new hospital inconceivable, plans were instead made to set up a homeopathic “interim hospital” on Marienstrasse. Just as he had earlier helped to fund a homeopathic field hospital during the war, Robert Bosch once again stepped in to offer financial support. It was not until April 1940 that he was able to see his plan finally come to fruition with the opening of the homeopathic hospital that bore his name—the Robert Bosch Hospital in Stuttgart.

As early as 1925, Robert Bosch had founded Hippokrates Verlag, a medical publishing company that would be “dedicated to no one single school of medical thought.” The aim was to promote dialogue between conventional and alternative medicine. However, Bosch was interested

not only in the practical use of homeopathy in combination with other forms of complementary medicine (such as the Bircher diet and hydrotherapy), but also in the history of natural medicine as a whole and of homeopathy in particular. In 1926, Robert Bosch purchased a valuable collection of texts on the history of homeopathy from Richard Haehl (1873–1932), a physician based in Stuttgart. Together with the Paracelsus-Bibliothek, a library funded largely by Robert Bosch, this collection was to form the basis of a museum dedicated to the history of natural medicine. Unfortunately, the second world war put a stop to these plans. Today, both collections are housed and available to the public in the Institute for the History of Medicine in Stuttgart, part of the Robert Bosch Stiftung.



View inside Richard Haehl's private “Hahnemannmuseum,” 1922



Robert Bosch in the pharmacy of the Robert Bosch Hospital, 1940

# Liberal politics and social responsibility

## Robert Bosch and politics

by Prof. Dr. Joachim Rogall

Robert Bosch's liberal upbringing, his years as an apprentice, and the journeyman's travels that took him as far afield as the U.S. all played their part in shaping the socially-minded businessman he later became. A pacifist and pan-European, he was particularly committed to reconciliation between Germany and France following the first world war. The final years of his life, when he was an opponent of National Socialism, were overshadowed by the Bosch Group's entanglement in the Third Reich's rearmament and war-mongering policies. Bosch and his company directors supported resistance to the Nazi regime and helped to rescue Jewish associates and others facing persecution.

Robert Bosch's political views were shaped early on by his liberal upbringing. His father Servatius was a staunch advocate of civil liberties and the rule of law. These inherited views were further consolidated during his journeyman's travels, particularly his time in the U.S. between 1884 and 1885. Yet even here, in the "cradle of democracy," Robert Bosch felt a lack of what he considered "the cornerstone of justice – equality before the law."

After returning to Germany and setting up his own business, Bosch for some time enjoyed a close relationship with his neighbor Karl Kautsky, the social democrat

politician. It was during this time that Bosch, who was unconvinced by the economic theories of Marx and Engels, fully developed his vision of what a socially minded entrepreneur should be.

Robert Bosch initially opted not to join the Verband Württembergischer Metall-industrieller, a syndicate formed in 1907 whose members were entrepreneurs from the metal industry in the Württemberg region. This conscious decision to maintain a degree of distance, coupled with his well-known socialist leanings, the above-average wages paid to his associates, and the social benefits provided by his





company all earned him the nickname “Bosch the red” among his peers.

However, the rapid growth of his company made it more and more difficult to maintain the tricky balance between his economic responsibilities as a major entrepreneur and his social principles. “Bosch the red,” of all people, found himself the target of a strike in 1913. In his memoirs, the company founder wrote: “An entrepreneur with a social conscience simply got in the way. The left stirred up hatred against the right, and the right against the left. But there was hatred from both sides for those in the middle – and that’s exactly where I was.”

#### **Franco-German reconciliation**

More than ever before, Robert Bosch critically examined his role as an entrepreneur and as a member of society, and what this meant in terms of his responsibility for public welfare. As a result, not only did his social commitment become stronger, but also his political involvement. He was a pacifist through and through. The loss of close friends and associates killed in the war and the deep gulf the conflict had opened up between Germany and France in particular prompted Bosch to become a dedicated supporter of international rapprochement. He joined the German section of the Committee for Franco-German

Robert Bosch conversing with Leo Hausleiter, a Munich newspaper editor, 1932

Robert Bosch at a meeting of French and German first world war veterans in Stuttgart, 1935



Relations and, in 1935, invited German and French war veterans to Stuttgart under the slogan “Pioniere des Friedens – Pionniers de la Paix” (Pioneers of Peace).

Following the end of the German monarchy, Robert Bosch saw it as his task to defend the newly founded Weimar Republic against its numerous political opponents in Germany. He believed the key to this lay in promoting the general welfare of the people, adult education, and international understanding. Accordingly, he also backed Count Richard Coudenhove-Kalergi’s vision of a pan-European confederation of states.

For his part, Count Coudenhove-Kalergi described Bosch as a “Pan-European for moral, rather than economic reasons, [...] seeking not to sell his goods better in other countries, but to protect Europe from another war.”

Robert Bosch also supported the reformist views of the national liberal Friedrich Naumann, particularly his German university for political science, which sought to bring together academics and practitioners to teach politics in an environment free from the influence of the state.

### An entrepreneur under National Socialism

The National Socialists assumed power in January 1933. In September of the same year, Robert Bosch was invited to attend a meeting with German Chancellor Adolf Hitler. However, his hopes of finding sympathy for his political ideas were soon dashed. Hitler merely harangued him with his own views and, repulsed by the dictator's ideas, Bosch returned to Stuttgart in heavy spirits: "This individual wants to be a statesman and doesn't know what justice is!"

In order to alleviate the pressure the new regime was exerting on the company, the director Hans Walz and two other members of the board of management became official members of the Nazi party (NSDAP). In its everyday dealings with the regime, however, Bosch ensured that objections to the National Socialists' anti-Jewish policies were raised in the Reich Ministry of Economics. Moreover, Bosch took on Jewish youngsters as apprentices and gave jobs to others facing persecution under the regime. Financial support was given to Jewish charities, and funds were made available to allow imprisoned Jews to emigrate. Finally, people of "mixed descent" were employed in vehicle-repair workshops so they could be saved from deportation. Since this work was classified as strategically vital for armaments production and the war effort, these workers were deemed

indispensable. In 1969, on behalf of Bosch, Hans Walz accepted the title of "Righteous Among the Nations" bestowed by the Yad Vashem Shrine of Remembrance in Israel in recognition of these efforts to save people of Jewish and mixed descent.

In 1937, Bosch brought Carl Goerdeler, the former Lord Mayor of Leipzig who would later become the civilian leader of the resistance movement against Hitler, into the company as an advisor. This appointment led to the formation of a liberal-conservative resistance cell, comprising Goerdeler, the managing director Hans Walz, Bosch's private secretary Willy Schlosstein, and other members of the board of management.

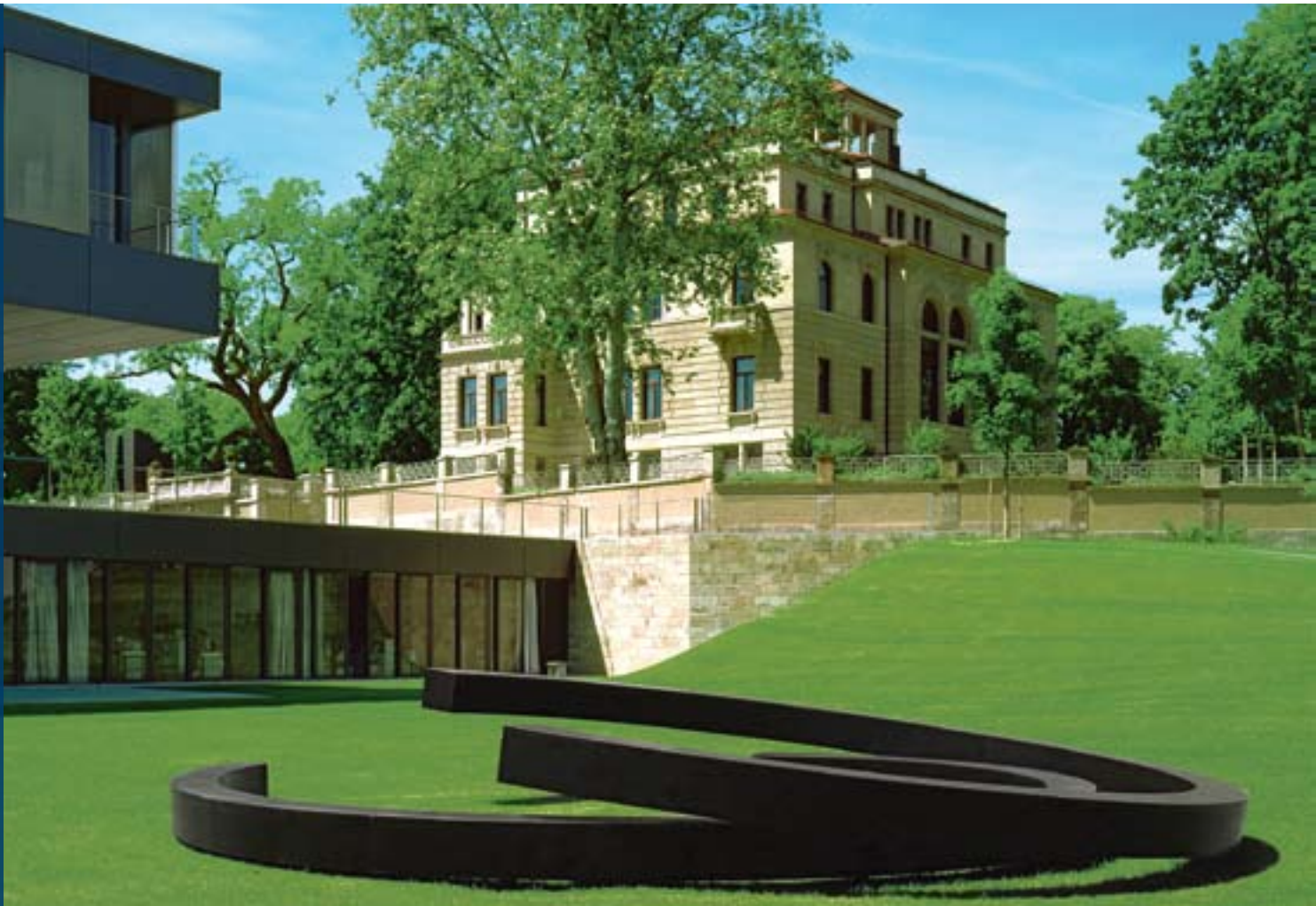
Robert Bosch's health had deteriorated in the period since 1937. For him, the outbreak of war in 1939 was a catastrophe – both on a personal level and for his country. Much to the distress of his family, Robert Bosch's 80th birthday on September 23, 1941, and his death in March 1942 were both pounced on by the Nazis for propaganda purposes. Shortly before his death, Bosch asked Theodor Heuss to write his biography to ensure his true views would be properly documented. Bosch had selected the liberal Heuss for this task because he came "from a background that enables him to understand me and my nature."



**Left:**  
Friedrich Naumann (1860–1919), founder of the "Deutsche Hochschule für Politik" (a private university for the study of politics) whose work was supported by Robert Bosch  
Photograph: ullsteinbild

**Right:**  
Richard Coudenhove-Kalergi (left) and Robert Bosch at the Paneuropa Conference in Berlin, 1930





In his will, Robert Bosch stipulated that the company was to be carried on after his death in a manner reflective of his wishes. The will paved the way for today's corporate constitution. This constitution is based on the founder's wishes that the company should secure its lasting entrepreneurial freedom, retain links to the Bosch family, and use its dividends to support charitable and social causes.

# His final wishes

## The will of Robert Bosch

by Dieter Schmitt

It was Robert Bosch's dearest wish that the company should continue to show a "strong and meaningful development" after his death. This was not simply a matter of maintaining and administering the status quo, but also one of growing and actively shaping the future. Since he wanted to avoid disputes about who should succeed him, the question of how to secure the company's long-term success was one that concerned him from an early stage. His first attempt to find a solution to this question – the foundation of Robert Bosch AG in 1917 – proved to be unfeasible in the long run. Accordingly, Bosch reversed his decision. He repurchased the shares that had been sold to the directors and, in 1937, changed the legal form of the company to that of a close corporation (GmbH). By that time, the company had a workforce of over 18,000 associates.

### His will

One year later, in 1938, Robert Bosch drew up his will, which included guidelines for his successors: "It is a matter dear to my heart that Robert Bosch GmbH should be safeguarded in its substance [...] for as many future generations as possible, and that it should remain at all times financially independent, autonomous, and able to take appropriate action." In addition to the long-term safeguarding of the company's future and its development potential, the will's main concerns were that lasting ties should be maintained with Robert Bosch's descendants, and that a proportion of the company's profits be used for charitable and social causes.

### The trusted few

For these reasons, Robert Bosch left the decision about the future of his company in the hands of his closest and most trusted confidants. When the time was right, it

### Far left:

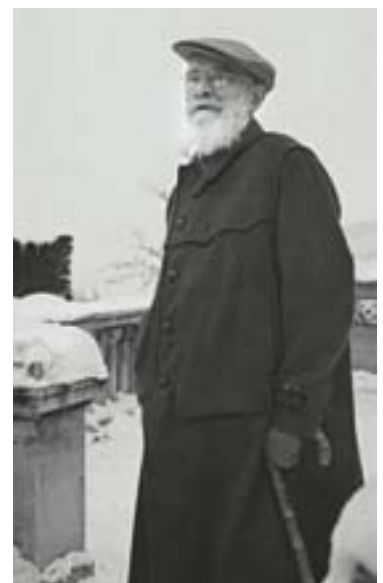
The former residence of Robert Bosch, which now houses the Robert Bosch Stiftung, and Bosch Haus Heidehof, the new training and conference center for Bosch executives worldwide, 2005

### Below, left:

A meeting of the executors, 1954. Seated at the table are Robert Bosch junior and Hans Walz (fourth and fifth from left).

### Below, right:

Robert Bosch, March 2, 1942



was to be their responsibility to find a sustainable solution that reflected Bosch's own wishes. Bosch selected seven men to act as the executors of his will, including Hans Walz, whom this same group of men would later elect as their chairman. He had joined the company as Robert Bosch's private secretary in 1912, and become a member of the board of management in 1924. He had later taken on overall responsibility for running the company and, over the years, become Bosch's closest advisor on business matters and social issues. The designated executors knew Bosch personally and were familiar with his ideas and his wishes. Robert Bosch also provided them with detailed guidelines upon which to base their decisions.

Robert Bosch died in Stuttgart in the early hours of March 12, 1942, and his executors assumed the responsibility of administering his estate. They protected the company as far as possible from any attempted interference by the National Socialists, and managed to rebuild it after the devastation caused by the second world war.

#### **As he would have wished**

The executors of Robert Bosch's will not only laid the foundation for today's corpo-

rate constitution. They also found a way of giving concrete expression to his will – a distinctive solution that has stood the test of time.

In 1921, Bosch had founded Vermögensverwaltung Bosch GmbH (Bosch Asset Management) to administer his shareholdings in the company. The long-term objective was that his charitable activities should be pooled there. In 1964, this organization acquired the majority of the capital stock of Robert Bosch GmbH from the heirs of the estate, transferring the voting rights accruing to the capital stock to the newly formed Robert Bosch Industriebeteiligung GmbH (Robert Bosch Industrial Equities). This in turn was the precursor of today's Robert Bosch Industrietreuhand KG (Robert Bosch Industrial Trust), the body that therefore carries out the entrepreneurial functions that would normally fall to the owner.

In 1969, Vermögensverwaltung Robert Bosch changed its name to Robert Bosch Stiftung GmbH (Robert Bosch Foundation), thus underlining the social focus of its activities. The foundation carries on the charitable work of Robert Bosch in contemporary form and uses the dividend it receives in a manner that reflects the spirit

“As a matter of principle, the executors [of my estate] are expected to ensure that the business activities of Robert Bosch GmbH are carried out and carried on in a manner reflective of my wishes, i. e. of my spirit and will, i. e. to secure for these activities over a long period of time not only their bare existence, but also a strong and meaningful development to help them cope with the inevitable difficulties and crises of the future. To achieve this end, no sacrifice may be considered too great.”



of the company founder. In addition to promoting projects in the fields of education, healthcare, international relations, society, culture, and science, the foundation also owns the Robert Bosch Hospital in Stuttgart.

Today, the Robert Bosch Stiftung holds 92 percent of the share capital of Robert Bosch GmbH. Most of the remaining shares are held by the Bosch family, while Robert Bosch GmbH holds a one percent share. The Bosch family thus retains close ties with the company. As the family's spokesperson, Robert Bosch's grandson Christof Bosch is a member of the supervisory council of Robert Bosch GmbH, a partner in Robert Bosch Industrietreuhand KG, and a member of the board of trustees of the Robert Bosch Stiftung.

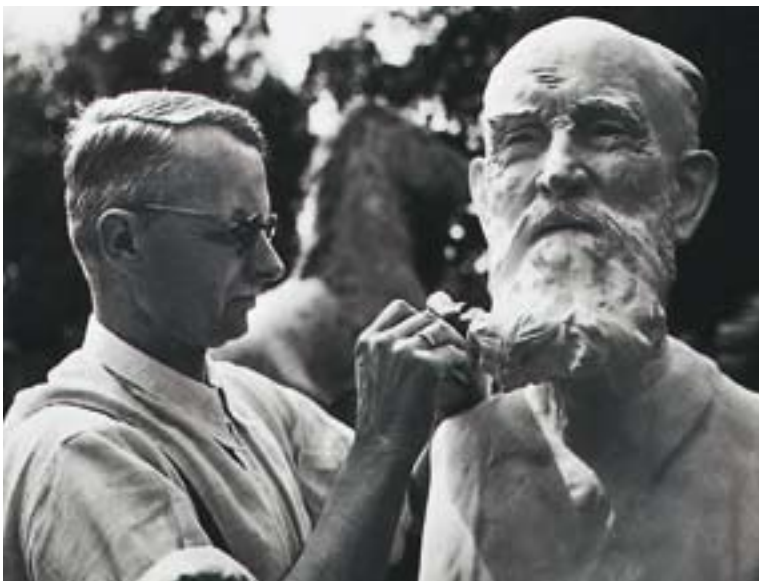
Representing the final wishes of Robert Bosch, the corporate constitution secures the entrepreneurial freedom and financial independence of the Bosch Group, as well as its ability to take appropriate action. Most of the earnings generated remain within the company, where they are used to secure the company's future. This allows the company to plan over the long term

and to invest in the future without borrowing from the capital markets. By providing for a dividend to be paid to the Robert Bosch Stiftung, the constitution allows the Stiftung to sustain its commitment to charitable causes.

### His legacy

In the time since Robert Bosch died, and despite the occasional external crisis, the company has developed – as the founder would have wished – in a “strong and meaningful” way. Preserving his legacy for future generations is what Robert Bosch wanted. It was his heartfelt wish that all associates should play an active role in giving this legacy concrete form.

On October 27, 1941, Robert Bosch thanked his associates for their best wishes on the occasion of his 80th birthday. Written just a few months before his death, these words of thanks were also his parting words: “During my lifetime, I ask you to share this spirit of dedication to our common cause. And after I am gone, continue in this spirit, for the sake of each and every associate, and for the sake of the company that, as my life's work, is so close to my heart.”



Fritz von Graevenitz working on his bust of Robert Bosch, 1940  
Photograph:  
Stiftung Fritz von Graevenitz

# The lasting legacy of Robert Bosch

by Andreas Kempf

“It’s part of the Bosch DNA.” This is how Franz Fehrenbach, the chairman of the Bosch board of management, likes to reply whenever he is asked what the secret behind the outstanding innovative strength of Bosch is. And he will generally add: “We have never stopped looking for even better solutions.” This “Bosch spirit” is frequently equated with “corporate culture,” and closer inspection reveals that much of it can be traced back to just one man – the company founder Robert Bosch.

Even many decades after his death in 1942, the values and way of thinking embodied by Robert Bosch still permeate a company that is present on every continent, and now employs more than 270,000 men and women. Neither revolutionary technology, nor political upheavals, nor even globalization have been able to do lasting damage to these roots. But what is the glue that holds Bosch – the company and its founder – together? The answer lies in the “Bosch DNA” – it is much more important for the day-to-day running of the company than people might generally expect.

## Success through perseverance

This is especially apparent when we consider the force that has driven the company ever since its foundation in 1886: technology. Robert Bosch’s own involvement in the company teaches us that the path from an initial idea to a successful product can be a long and difficult one. In 1920, for example, there were plans to discontinue the development of the oiler – a centrally located lubricator for machines – because only

around 50,000 had been sold in twelve years. Robert Bosch, however, rejected this idea. In his view, halting this project would have been an admission that they had failed to make a success of this idea despite more than a decade of unstinting work. Bosch may also have had an inkling that this technology would be a springboard for other applications. Whatever the reason, he was ultimately proved right. By 1922, the annual production of oilers had reached 20,000. The experience gained in using a pump for the precise injection of lubrication oil at high pressure paved the way for the development of diesel technology, which is a main pillar of the Bosch portfolio to this day.

And, in the later history of the company, there is a further example of how a great deal of tenacity and perseverance are required to get new technologies off the ground. In the mid-1950s, the Bosch Group’s engineers had to decide how electronic components could be used in vehicles. Technologically, it was obvious that electronics would allow ignition, for



Corporate headquarters of Robert Bosch GmbH  
at the Schillerhöhe in Gerlingen, near Stuttgart

example, to be maintenance-free, as well as controlled much more accurately. And as early as 1967, the first electronically controlled system, the Jetronic gasoline injection system, came onto the market. But it was to take until the late 1970s before this system and its successors – L-Jetronic and Motronic – were able to become fully established. This was because most of Bosch’s customers in the automotive industry initially preferred to stay with K-Jetronic, a mechanically controlled system. In this instance, much is owed to the tenacity of Franz Fehrenbach’s predecessor Hermann Scholl. Scholl is regarded at Bosch – and beyond – as the father not only of the electronic gasoline injection system, but also of Bosch automotive electronics as a whole. Without electronics, Bosch would never have developed areas of business such as engine management, transmission control, or driver assistance systems such as the ABS antilock braking system and the ESP electronic stability program.

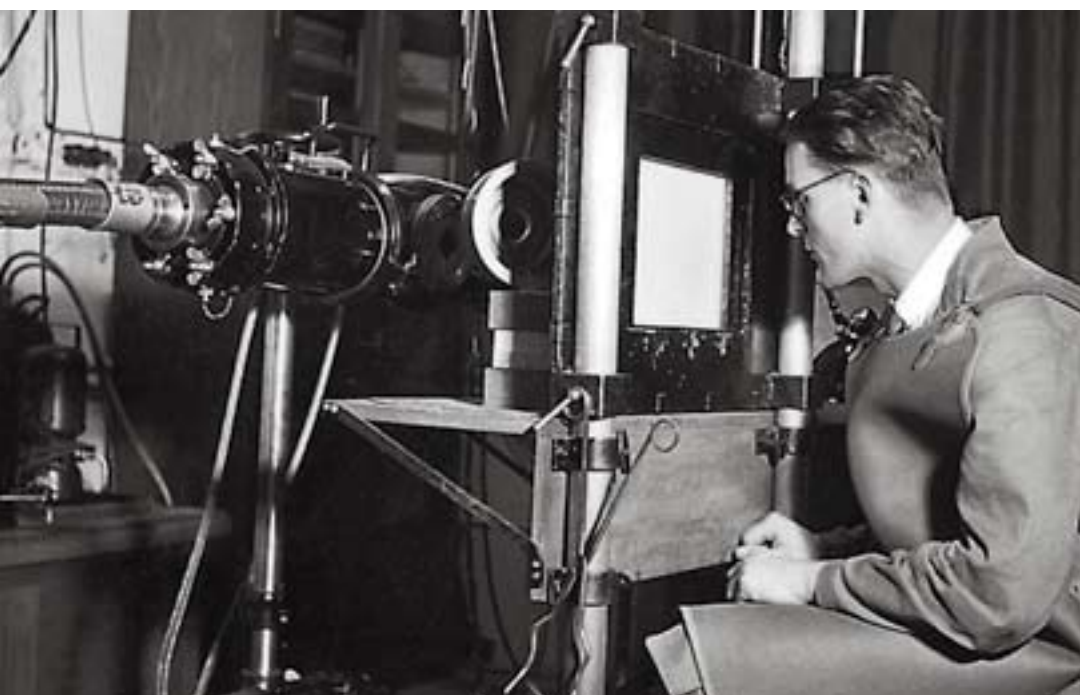
#### **Consensus instead of confrontation**

Entrepreneurial decisions can only be implemented successfully if the workforce can accept the chosen path. At Bosch, the relationship between the workforce

on the one hand and the company and its management on the other plays an especially important role. In the most recent internal survey, four out of every five associates said they were proud to work for Bosch.

Even so, Bosch has always kept a tight rein on its operations. For example, the realization that shorter working hours also mean better productivity led to the introduction of the eight-hour working day in 1906. Output went up, while wage costs decreased. As far as the workforce was concerned, this marked the beginning of a process of increasing productivity.

The relationship between management and workforce has by no means always been a harmonious one. Even the company founder Robert Bosch – known as “Bosch the red” by fellow businessmen – was faced with strikes, despite paying good wages for shorter working hours. In subsequent decades, major industrial disputes – about rationalization, for example, or the debate about the 35-hour working week – caused unrest and long, heated debate at Bosch as well.



**Left:**  
Bosch materials researcher  
at an X-ray apparatus, 1936

**Right:**  
Manufacture – in Japan – of  
electronic control units for  
Bosch Jetronic systems,  
1986

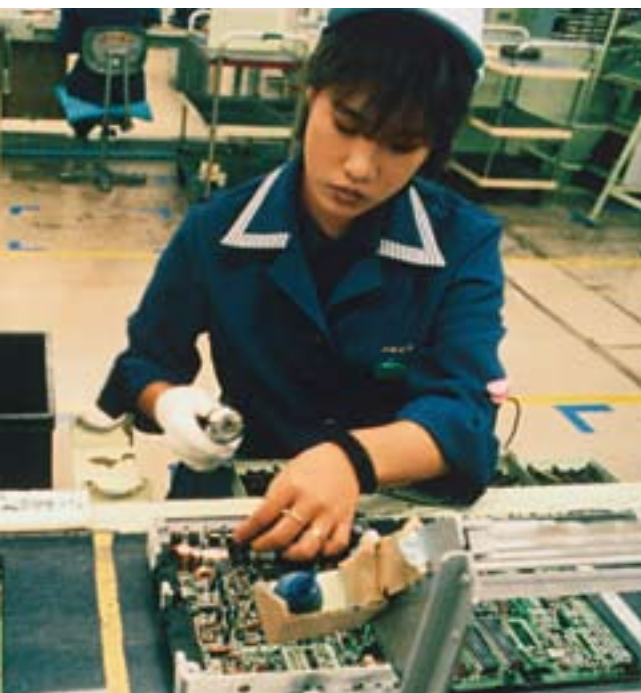
Yet however heated these disputes may be, they have always been marked by a mutual desire to reach a workable solution, as well as by an atmosphere of mutual respect.

#### **Lifelong commitment**

In his will, Robert Bosch mapped out the special ownership structure that still distinguishes the company today. The role of main shareholder is played by the industrial trust Robert Bosch Industrietreuhand KG. Former as well as present members of the Bosch board of management, Christof Bosch in his role as spokesperson for the descendants of Robert Bosch, and industrialists from outside the company are members of this trust. “We act in accordance with Robert Bosch’s express wish that the company should continue to enjoy strong and meaningful development,” says Franz Fehrenbach, describing the brief of those at the helm of the company. What is meant is that anyone who is appointed to the most senior level of management at Bosch is not simply an officeholder, but also takes on a mission. This also explains why the company has had only six CEOs, including the founder himself, since its establishment in 1886. The stable shareholder structure safeguards the Bosch Group against poten-



**Top:**  
Advertising poster by  
Lucian Bernard, 1914



**From left to right:**

Robert Bosch

Hans Walz

Hans L. Merkle

Marcus Bierich

Hermann Scholl

Franz Fehrenbach

tial takeover bids and ensures an independent, long-term business policy. But it is not only the members of the board of management who often stay with the company for decades. It is also the members of the workforce, many of whom spend their entire working lives at Bosch.

#### **International understanding and cultural diversity**

Yet Robert Bosch's legacy does not end here. He also placed his actions as a man and as an entrepreneur in the context of his responsibilities to society. Throughout his life, for example, he was committed to promoting greater understanding among nations. This has had a significant influence on the company. Marcus Bierich, who was Bosch CEO between 1984 and 1993, summarized this nicely when he said: "This commitment to society and to culture lives

on in the company. Bosch invests in other countries, but these countries are more than just places for doing business. We also try to develop a feeling for, and thus to understand, the culture of these countries." Today, executives wishing to progress up the career ladder at Bosch will have to spend a certain period working outside their home country. This is not only to promote a better understanding of markets. The board of management also wants to be sure that the company's executives are receptive to other cultures and mentalities. Accordingly, Bosch refers as a matter of principle to "regional" rather than "foreign" subsidiaries. This vision of a pluralistic society has not always met with undivided approval. In Nazi Germany, for example, it generated hostility. Yet despite the risks, people were not willing to compromise these values.



### The living legacy

The legacy of Robert Bosch lives on, and this not only because the founder's values, attitudes, and principles are still omnipresent even today. It also owes its vitality to the way it has been adapted to the present age, and thus preserved in its freshness. In the late 1990s, the Bosch board of management subjected the company's unwritten values to close scrutiny. How much of Robert Bosch's legacy was still valid? This was not an uncontroversial process, since any company that sets out its values in writing can also be judged by those values.

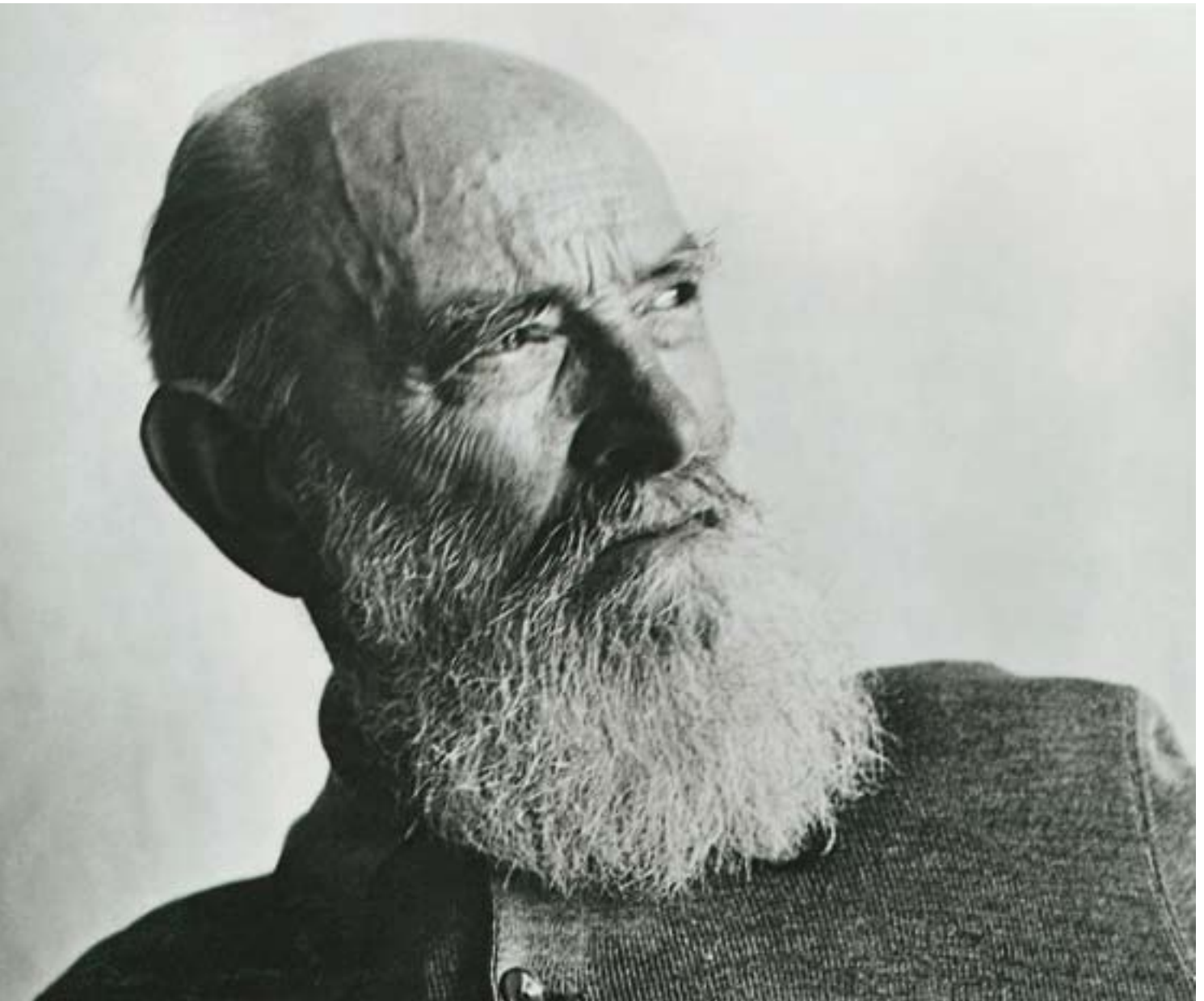
Today, these values as set out in the "House of Orientation" are the common factor uniting all associates worldwide. Designed as a frame of reference for all associates, the "House of Orientation" identifies basic principles such as legality,

reliability, a commitment to quality, and respect for different cultures. Not least, the Bosch vision outlined in this brochure sets out the company's ambition to enhance the quality of life and to achieve a leading position on the market with solutions that are both innovative and beneficial.

This brings us back to the Bosch DNA – the quest for an even better technological solution for the benefit of both the company and society. Robert Bosch would no doubt have approved of the company's slogan "Invented for life." Writing in 1932, he said: "[...] Advances in technology in the widest sense of the word serve to bring the greatest possible benefits to mankind. Technology is designed and has the capability to help the whole of mankind make the best of their lives and find happiness in life."

# Timeline

<b>1861</b>	Robert Bosch is born on September 23, in Albeck near Ulm
<b>1876–79</b>	Trains as a precision mechanic in Ulm
<b>1883–84</b>	Attends Stuttgart Polytechnic as a non-registered student
<b>1884</b>	Spends one year working at various companies in the U.S., including the Edison Machine Works
<b>1885</b>	Spends several months working for Siemens Brothers in the U.K.
<b>1886</b>	Robert Bosch opens his “Workshop for Precision Mechanics and Electrical Engineering” in Stuttgart on November 15
<b>1887</b>	Marries Anna Kayser (1864–1949)
<b>1888</b>	Birth of daughter Margarete (died 1971)
<b>1889</b>	Birth of daughter Paula (died 1974)
<b>1891</b>	Birth of first son Robert (died 1921)
<b>1893</b>	Birth of daughter Erna Elisabeth (died 1894)
<b>1897</b>	Robert Bosch fits a magneto ignition device in an automobile for the first time
<b>1901</b>	Robert Bosch and 45 associates move into the company's first factory in Stuttgart
<b>1910</b>	Construction of the Robert Bosch Haus on Heidehofstrasse
<b>1917</b>	Robert Bosch changes his company to an AG (stock corporation)
<b>1927</b>	Marries Margarete Wörz (1888–1979)
<b>1928</b>	Birth of second son Robert (died 2004)
<b>1931</b>	Birth of daughter Eva
<b>1937</b>	Robert Bosch AG becomes a GmbH (close corporation)
<b>1940</b>	Official opening of the Robert Bosch Hospital
<b>1942</b>	Robert Bosch dies on March 12



Robert Bosch in Pfronten  
1940/41

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