


70 YEARS  
OF INNOVATION

The logo features the number '70' in a large, blue, sans-serif font. The '0' is filled with horizontal blue lines. To the right of the '0', a series of thin, grey lines radiate from the right edge of the '0' and converge to a point on the right, creating a fan-like shape. Below the '70' and to the right of the fan shape, the words 'YEARS OF INNOVATION' are written in a smaller, grey, sans-serif font, stacked in two lines.

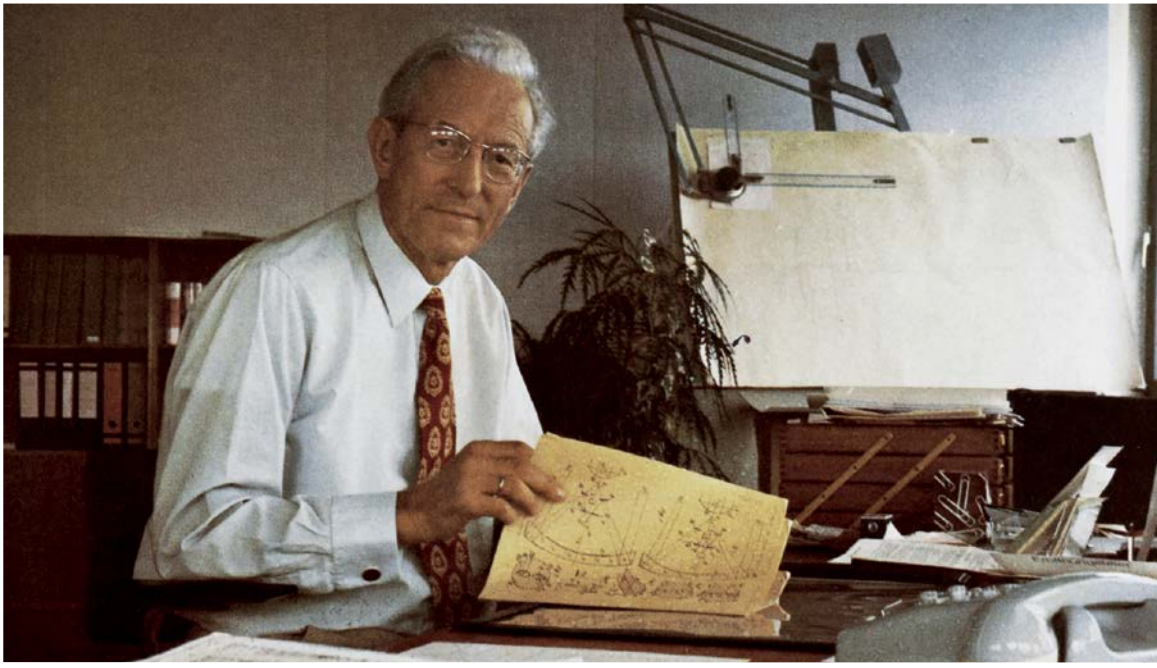
**SICK**  
Sensor Intelligence.

## FROM SENSOR TO SENSOR INTELLIGENCE

Germany was a very different place in 1946 – with its society, culture, and economy all lying in ruins. It was at this difficult time that a man called Erwin Sick came to prominence with his pioneering spirit, showing the courage of his convictions in the town of Vaterstetten near Munich. His idea? – To combine optics with electronics and use them in peaceful ways for the benefit of humanity. Referring to himself as the “Erfinder aus Leidenschaft” (“passionate inventor”), he wanted to develop devices with the “wow” factor. These would offer “greater capabilities than other devices” and would stand out from the crowd thanks to their innovation, quality, and distinctive benefits. Erwin Sick was motivated personally – and in his entrepreneurial endeavors –

by a desire to protect people and the environment, but it was also this very factor that led the incipient company in the direction of sustainable growth markets very early on.

At the end of September 2016, SICK AG will celebrate its 70th anniversary. The company that Gisela and Erwin Sick originally intended to become a “healthy medium-sized business with a select workforce of between 80 and 100” is now a world technology and market leader in the area of sensors and sensor solutions for industrial applications – having become a global player with more than 7,500 employees and having achieved a sales volume of over EUR 1.25 billion in 2015.



## THE EARLY YEARS

# 1946 - 1971

The story of what is now SICK AG began shortly after the end of the Second World War. Basing themselves in an old barracks in their home town of Vaterstetten near Munich, Gisela and Erwin Sick single-mindedly followed their technological development aims: to produce opto-electronic devices that would be used for peaceful purposes. On September 26, 1946, the US authorities granted Erwin Sick the license he needed to establish an engineering firm. Erwin Sick secured the livelihood of his family for a temporary period by selling radios that he had made himself.

The first orders were received at the "ACHEMA" fair – an exhibition and congress for the chemical apparatus industry – in 1949. At the "German Inventor and New Development Trade Fair" in Munich in June 1951, Erwin Sick presented the first ever model of his light curtain and received a certificate for "exceptional creative performance". On October 20, the company registered a patent for the light curtain based on the autocollimation principle. This registration was a technical breakthrough.

At the "2nd International Machine Tool Trade Fair" in Hanover in 1952, SICK presented the first marketable accident prevention light curtain. The orders that followed necessitated the expansion of serial production and further investments. His light curtain became estab-

lished on the market, along with a print mark control device that he developed.

It became clear that the family barracks would soon be too small to house the expanding company. In 1954, Erwin Sick tried in vain to obtain a loan from the Free State of Bavaria to build up the company. He managed to obtain one in the federal state of Baden-Württemberg. SICK moved from Munich to Oberkirch in Baden. At the new site, employees produced the print mark control unit and the light curtain in small series. By this point, SICK's products had already gained popularity with customers in France, Italy, and Switzerland as well as with companies based in Germany.

Just two years later, in 1956, the company had to move again because it needed even more space, this time relocating to Waldkirch. By this stage, SICK had 25 employees. In October of the same year, SICK was granted the patent for a new type of photoelectric retro-reflective sensor that would later become one of the company's strongest products in terms of sales.

Back in 1958 - long before the environmental movement arrived on the scene - Erwin Sick applied for a patent for a smoke detection device. He hoped that the device

would help to prevent health hazards caused by smoke. This device was the starting point for the company's activities in the field of environmental measuring technology. Like the light curtain before it, this was a pioneering step for SICK.

Over the following years, the company continued to grow. In addition, Erwin Sick founded the Institute for Automation in 1960 for the purpose of developing new technol-

ogies. However, the site in Waldkirch remained in charge of ongoing development and production.

In 1971, during the celebrations to mark the company's 25th anniversary which were held in the town hall in Waldkirch, Erwin Sick was awarded the Federal Cross of Merit, First Class. "Surely we need better and more useful technology instead of simply more technology," he said in his speech.

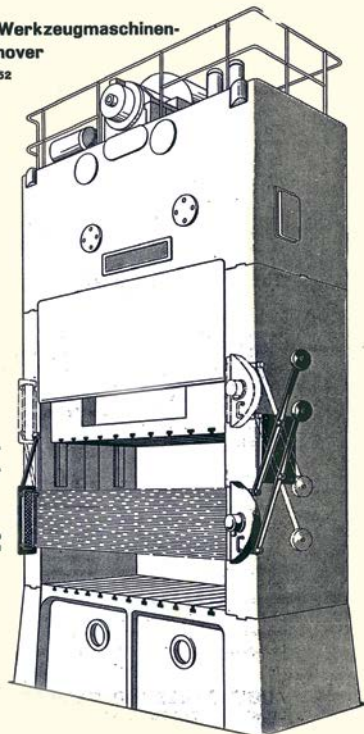
## 2. Internationale Werkzeugmaschinen-Ausstellung Hannover

14. bis 23. September 1952

Stand:  
Maschinenfabrik  
Weingarten

Neuartiger,  
absolut sicherer  
lichtelektrischer

**Unfall-  
schutz**



### Der Licht-Vorhang nach Patent Sick

dient als Unfallschutz-Vorrichtung für Stanzen, Pressen, Walzen, Schneidmaschinen usw., als Schutz für Räume, Gebäude usw.

**Entscheidende Vorteile:** Mechanische und optische Unempfindlichkeit der Anlagen insbesondere gegen Erschütterungen, Fibrationen, Winkelverstellung des Spezialspiegels bis  $\pm 15^\circ$  und Abstandsänderungen ohne Einfluss auf die Betriebssicherheit. Robuster, elektronischer Impulsverstärker, also kein diffiziler Gleichstromverstärker. Die Anwendung völlig neuer Konstruktionsprinzipien hat nun zum masselosen, also idealen Unfallschutz mit robustem Aufbau geführt. Die Anlage kann aus dem Einfahrbereich der Werkzeuge hoch geschwenkt werden.

### The light-curtain according to patents of Mr. Sick

is a new device of protection against accidents with presses, stamping machines, cutting machines, as safeguard for safes, rooms, houses a. s. o.

**Decisive advantages:** Mechanical and optical insensibility of the construction, especially against vibrations, shakes a. s. o. Angle adjustment of the special glasses up to  $\pm 15^\circ$  and alterations in distance without influence on working safety. Robust electronic impulse amplifier, therefore no sensitive continuous-current amplifier. The application of really new principles of construction has led to an ideal device of protection against accidents.

The device can be raised out of place if needed for working and bringing in tools.

### Le rideau de lumière suivant brevets de Mr. Sick

est un dispositif nouveau de protection contre les accidents avec presses, machines à couper, à étamper etc., ainsi que pour la protection pour trésors, chambres, maisons etc.

**Avantages décisifs:** Insensibilité mécanique et optique de la construction, spécialement contre vibrations, tremblements etc. Déplacement angulaire des glaces spéciales jusqu'à  $\pm 15^\circ$  et changements de distance sans influencer la sécurité de fonctionnement. Emploi d'un amplificateur à impulsion électronique.

L'emploi de principes de construction complètement nouveaux a permis une solution de protection parfaite contre les accidents.

Le dispositif peut être déplacé hors de la zone de travail.

Ing. Erwin Sick  
Maschinenfabrik  
Vaterstetten bei München

## THE JOURNEY TO BECOMING AN INTERNATIONAL COMPANY

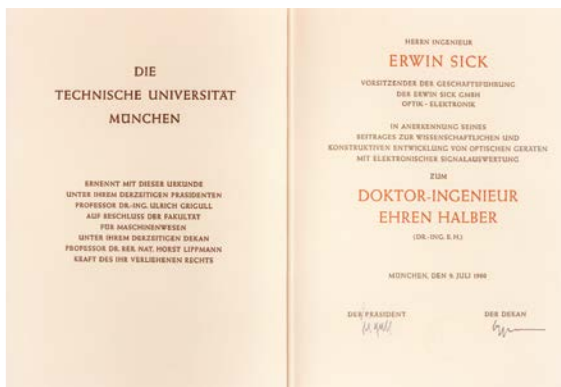
At the beginning of the 70s, the company began to expand internationally. The first subsidiary was founded in France in 1972, which was quickly followed by a sales company in the USA in 1975.

In 1976, the company – previously run as a sole proprietorship – became Erwin Sick GmbH Optik-Elektronik. The company invested DM 10 million in a new building on Sebastian-Kneipp-Straße – which now bears the name Erwin-Sick-Straße – in Waldkirch. By 1977, the development, production, administration, and social facilities were all housed in one location with a floor

space over 13,000 square meters. A training workshop was also built.

In November 1980, the Technical University of Munich awarded Erwin Sick his honorary doctorate in engineering in recognition of his contribution “to the scientific and constructive development of optical devices with electronic signal evaluation”. Two years later, Erwin Sick was awarded the Gold Diesel Medal “for his diverse inventions in the field of opto-electronics”.

On December 3, 1988, Dr. Erwin Sick sadly died at the





1972 -  
1996

age of 79 following a heart attack. Immediately after the death of her husband, Gisela Sick sent a message to the company management and employees. She promised to continue his life's work: "With the long-established expert guidance of our managing directors and your dedicated cooperation, we will ensure that Erwin Sick GmbH continues to succeed in the future." Gisela Sick has been constantly guiding the company forward ever since as honorary chair of the Supervisory Board, a role in which she is now ably assisted by the next two generations of the family.



1996 -  
2016

## FROM INTERNATIONAL COMPANY TO MULTINATIONAL GROUP

Increasing globalization led to various developments, including the founding of subsidiaries in Spain, Finland, and Singapore. It was also during this period that Erwin Sick Engineering GmbH (based in Dresden) was founded, along with a new production site in Hungary.

In order to keep up with new requirements and remain competitive in the face of changing conditions, Erwin Sick GmbH became an “Aktiengesellschaft” (joint stock company) in 1996.

The following years were characterized by technical innovations, including time-of-flight sensor technology and two- and three-dimensional camera sensors, and the technology portfolio was expanded through the acquisition of companies including Maihak AG and Stegmann, a rotary encoder manufacturer based in Donaueschingen.

By the time the company celebrated its 60th anniversary in 2006, the SICK Group had over 4,000 employees worldwide. With over 40 subsidiaries and equity invest-

---

ments, SICK now had a presence in over 20 countries. Sebastian-Kneipp-Straße was renamed Erwin-Sick-Straße in memory of the company founder.

In 2009, Gisela Sick was awarded the Medal of Merit by the federal state of Baden-Württemberg. The presentation speech praised her loyalty to the region, her courage and vision with regard to continuing the work of the company, and her commitment to training and professional development.

Thanks to globalization, the company continued to grow. Development and production facilities were set up in Singapore, Malaysia, and the USA to provide better support for customers based in Asia and America. By this time, the small company had become a global player, achieving sales of EUR one billion for the first time in 2013.



*The four generations of the Sick family of owners.*



## FUTURE PROSPECTS

For 70 years, the SICK name has stood for innovative products and solutions which set standards in the field of sensor technology all over the globe. Brilliant ideas and exceptional pioneering spirit have produced automation technology which has changed the world. The work started by Dr. Erwin Sick in 1946 is being continued by over 7,500 employees all over the world as they embark on a new future with industry 4.0. With its products, SICK protects both people and the environment. SICK is helping to make processes more efficient and to preserve resources.

In 2004, SICK aligned its company slogan – “Sensor Intelligence.” – with the changes in the world of automation that were just starting to become evident at that time. Since then, this slogan has characterized SICK's commitment to technical intelligence, which extends far beyond sensor technology alone. Sensor intelligence has already become successfully established within the field of automation technology and is now a key part of Industry 4.0. The possibility of using a multitude of data to produce and supply goods in a more efficient and flexible way, while also saving resources and achieving



**4** INDUSTRY 4.0  
READY

---

better quality, ultimately depends on the reliability of the data which forms the input of many process chains. This represents the fundamental starting point for complex systems to be able to make autonomous decisions. To put it in a nutshell: transparent data evaluation would be completely impossible without sensor technology.

70 years of SICK have produced 70 years of innovation in the field of sensor technology. With its new, intelligent sensors, SICK will keep setting standards in this field in the future and will promote the merits of useful technology as its remarkable success story continues.

