

# THE ORANGE CHRONICLES

*Automation History*





*The performance of each individual increases or decreases the success of ifm. Each employee shares in the responsibility for the success of the enterprise.*

extract from ifm's corporate philosophy



## Acknowledgements

Thanks to all ifm employees, customers and suppliers who gave us their advice and help for the creation of ifm's company history.  
Without their support you would not hold "The Orange Chronicles" in your hands today.



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*Automation History*



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Martin Buck (left) and Michael Marhofer,  
Chairmen of the Management Board  
of the ifm group of companies

# FOREWORD

## Dear Readers, dear Employees,

On 29 October 1969 the time had come: today's ifm group of companies was founded as ifm electronic geräte gmbh+co kg. The motivation was to do it in a different way than all the others – and better. In ifm's foundation year, success started with the invention of inductive sensors for 220 V.

Briefly before, our fathers, Gerd Marhofer and Robert Buck, had laid the foundation in Alsace where the "salesman" and the "electrical engineer" set up rolling mills and steel plants for a plant manufacturer. But they were not satisfied with this work. As of 1967 Robert Buck started to build his own sensors and circuitry in the bedroom of his flat in Tett nang. Based on Gerd Marhofer's idea, he designed an inductive sensor for 220 V supply voltage. So far no other company could do that "but Robert Buck was a fantastic developer. You almost had the impression that he could reduce his size and go through the circuitry", Gerd Marhofer remembers. This was the beginning of ifm's success story.

Together they set up a small range of initially four articles within a very short time. Success was not long coming: The first subsidiaries abroad

were founded as early as 1976. Over the years, a worldwide acting group of companies with today more than 6,000 employees and 145,000 customers in more than 70 countries has developed.

The book you are now holding in your hands tells this story that every single ifm employee has shaped decisively. It not only contains figures, data and facts but also personal memories and anecdotes. It was important for us that the employees told "their" story to make ifm's history tangible and to allow a historical overview of our company history. Customers, partners and companions also comment on the development and complete our internal views by their external view of us, the company and our way of working.

We can tell a lot of stories about how ifm is, but the typical ifm culture becomes tangible via these different perspectives. In one of his articles in the company history, Robert Buck describes something that is typically ifm, "Gerd and I have different characters. One of us is enthusiastic about sales, the other one about technology, so we were a good match. Keeping to the motto "open and honest", we

sorted out differences and didn't allow them to develop. This fortunate match also became the basis for a friendship." These two traits can still be felt in ifm's culture today. As ifm's history book shows, a culture we can be – and are – proud of.

What has to survive every generational change is the culture of the company, i.e. their DNA. You can make many changes in a company, often have to do this, thus setting your own trends but you must not change a successful corporate culture as it exists at ifm.

In editing ifm's history, we tried to put this culture down on paper – for today, for tomorrow, in the long run.

We wish you much fun while reading ifm's history and look forward to continuing this history of success together with you.

Yours sincerely





In the begining  
was the idea.

1969-1973



ingenieurgemeinschaft  
für messtechnik

Essen / Mai 1969

Sehr geehrter Kunde,

seit einigen Jahren konnten wir Erfahrungen mit Annäherungsschaltern sammeln. - Jetzt bauen wir die "Dinger" selbst.

Ihre Probleme waren unsere Aufgabe. Daraus entstanden 4 Gerätetypen:

efector 12 - Schaltabstand 10 mm	Thyristorausgang 220 V 50 Hz
efector 13 - Schaltabstand 10 mm	Transistorausgang 24 Volt =
	3-Leiter System
	Thyristorausgang 220 V 50 Hz
	2-Leiter System
	Transistorausgang 24 Volt =



Robert Buck †, founder of ifm

**Open and honest.** I wanted to solve problems with electronic means that other people did not deal with.

At the time Gerd Marhofer worked in sales for Pfister in Eckbolsheim in Alsace. This company was my second job as an electrical engineer after working for PEK Elektronik for a good four years. There we met. Among other things, we together commissioned machines in rolling mills or steel works. After two years at Pfister I moved on to the company Dr Klein in April 1965, where Gerd worked as well.

In 1967 I started developing sensors and controllers in the bedroom and partly in the kitchen of our flat in Tettngang, in the Karlstrasse. We gave up using the kitchen as a workshop after devices hardening in the oven started “foaming”, which left the oven soiled with cast resin. Baking cakes, electronics and cast resin just don’t match.

For the first time integrated circuits appeared on the market. They enabled solutions for which Dr Klein still produced big and complex units with lots of tubes inside. With the aid of the new operational amplifier ICs I was able to find a solution that impressed the neighbouring Brosa company so much that they placed a call order for DM 28,000 spread over 1 year (at that time by far the most important order). This encouraged me to continue.

It is important to point out that my wife Annelies went along with all this, supporting me in my “insecure self-employment” and seeing it as her task, in addition to doing the book-keeping, to raise our children.

Together with Elmar Lindner, we started development and production in a room of a rented flat. At that time I was a freelance engineer and not allowed to engage in sales, therefore the sales office Annelies Buck was founded. I developed the technology, Elmar Lindner produced it and Annelies Buck, in turn, sold it to the “ingenieur-gemeinschaft für messtechnik” in Küntzelstraße, Essen.

Gerd Marhofer suggested developing an inductive sensor for a 220 V mains voltage for direct triggering of a contactor and if this was successful, to found a new company to develop, produce and sell such sensors. I took up the idea and after a while I sent him the first switch in a test tube. Until then I had worked for other companies as a freelance engineer. We founded ifm when it became clear that the sensor in a test tube functioned and there was a market for it. There wasn’t much to calculate. Everything was shared success as well as failure .

Gerd and I have different characters. One of us is enthusiastic about sales, the other one about technology, so we were a good match. Keeping to the motto “open and honest”, we sorted out differences and didn’t allow them to develop. And the business partnership also turned into friendship.

The ifm product programme initially consisted of the IA inductive and the IB. We had the best two-wire system.



While developing a full crate monitoring solution Robert Buck received a notice from his landlord to quit the flat.

1969

- 29 October: foundation of ifm electronic geräte gmbh+co kg.
- Share capital DM 21,000.
- The Managing Directors are Robert Buck, Gerd Marhofer and Bernd Rüsing.

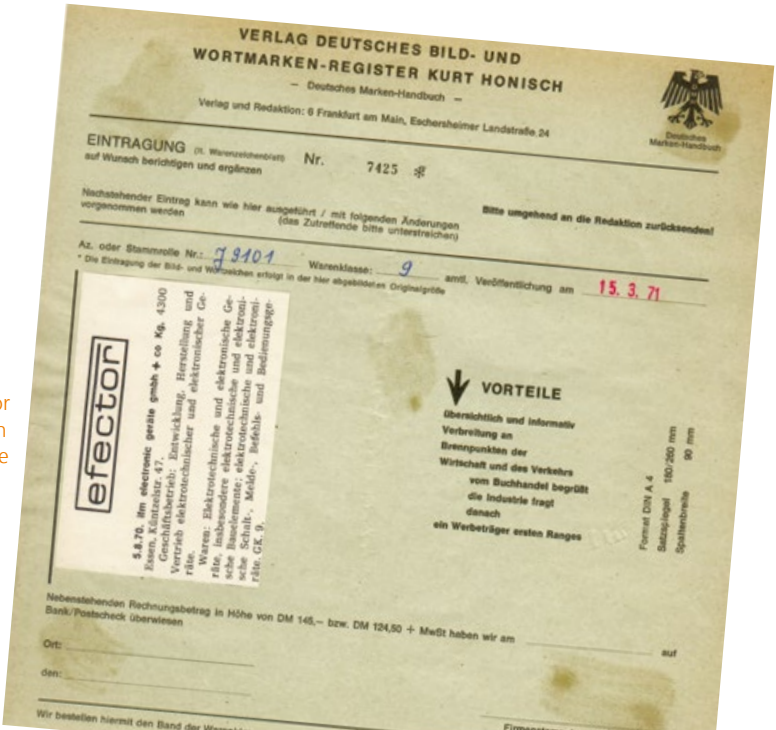


Olgastraße in Tettngang: the first home of the ifm production.

Birth of the brand “efector”. Hard to believe: The first sensor housings are made of common plastic tubes. Two suitable tube plugs, at the front of the coil and at the back where the cable enters, close the proximity switch.



The first balance sheet of 1970.



Hans-Dieter Gesthuysen, patent attorney

**Simple replacement.** At that time the switches should not require a completely new installation but be used for existing installations. Back then this meant two-wire alternating voltage. So there were two wires and the customers were only willing to use the new sensors if replacement was simple. If a completely new installation had been required, they wouldn’t have replaced their electromechanical switches. This is why the two-wire sensor was so important for ifm.







## Robert Buck †, founder of ifm

**Why film technology at all?** I had been giving some thought to the question of what would be the most efficient way to produce sensors. A PCB was not a reasonable solution. At some point I thought: Why don't we use a flexible circuit board? The idea of a flexible PCB was born. A fundamental and risky decision, since we did not know if such a new technology would work as a long-term solution. The idea kept evolving as it was our unique selling proposition.

I presented this idea in one of the management circles. At the same time, I stressed that I would only go on with the film technology if every-

one in the circle agreed that this was the technology of the future and would say, "Make it so!" Only then would I devote myself entirely to film technology.

There was only one vote against it, but we succeeded in convincing that person. We then started with the film technology. The entire production became fully automatic in a relatively short time. We bought, for example, the pick-and-place machines and converted them for our purposes.

ifm started with film technology very early.

## Jens F. Schulz, Rasselstein GmbH

A customer of ifm for more than 40 years. We could work well with Mr Marhofer, with his technology and his production. The most important thing was that existing problems were solved and that this finally led to success.



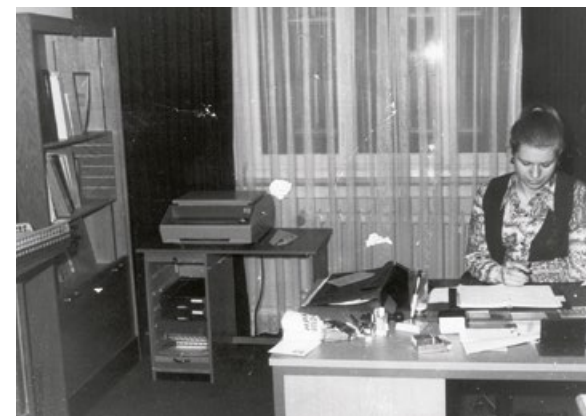
Interview with  
Dipl.-Ing. (grad.)  
Jens F. Schulz,  
formerly Rasselstein  
GmbH.

## 1970

6 April:  
ifm electronic is entered in  
the commercial register.

ifm has 16 employees and  
achieves a turnover of  
DM 800,000.

ifm starts in Essen  
in a 80 m² flat in  
the urban district  
Holsterhausen.



The first "headquarters" in  
Küntzelstraße, Essen in 1969.

The inductive proximity  
switch "efector" is regis-  
tered as a trademark.

1 September:  
foundation of a sales office  
for electronics under the  
name "Butron".

## Gerd Marhofer, founder of ifm

**Innovation in a test tube.** Bernd Rüsing and myself sold proximity switches for the engineering firm Kosmeyer. And we were so successful that we two alone achieved so much turnover in the first year that actually our boss could be more than happy. But instead of being happy he was annoyed that we "whippersnappers" earned so much money. So he wanted to reduce our com-



mission. I was on holiday with my mother-in-law when my boss called me and asked me to come to Hanover to give me a talking-to. After this phone call I wrote my notice. And then I phoned Bernd Rüsing. I asked him if he felt like setting up our own business. We simply said to ourselves: When we can sell, we can also produce on our own.

In November 1966, I founded the "ingenieurgesellschaft für messtechnik" (ifm for short) with the support of my wife. Our first office was in a flat in Essen that belonged to Bernd Rüsing. He said to me at the time, "If it takes off, I can join you in April and then we'll do it together." He then joined us in April 1967 and focussed on the design and sale of electronic teaching materials while I concentrated on the design and sale of technology for industrial automation. At that time, Robert Buck † was not yet there, although I had known him since 1962, when he was head of development at the French company Pfister and I was already employed at the engineering firm André Kosmeyer. Pfister and Kosmeyer had joined forces to work on infrared sensors. However, we weren't in touch after that. Until the

day I called him! During our work for "ingenieurgesellschaft für messtechnik", one product had evolved in the field of automation that was frequently requested in huge quantities: the "mechanical limit switch". This stimulated my imagination because "inductive sensors" already existed, but only for DC voltage. The limit switches were intended for use with AC voltage. At that time a decisive and important factor.

This was the moment I called Robert and asked him if he could make an inductive switch for us in a housing with a diameter of 20 mm, 65 mm long, 2-wire AC. I think he swallowed hard. Robert Buck † was working for Dr Klein (PEK) again at the time and was also developing a measuring transducer for Brosa in his rented flat in Olgastrasse in Tettnang. Soon afterwards, we received a glass tube with electronic content. And, believe it or not, it had exactly the requested specifications. At that stage, no other company was capable of producing units with such dimensions. But Robert Buck † was a fantastic developer, it was almost as if he could shrink to a tiny size and slip through the circuit. Not everyone can do that! From that moment, the company "ifm electronic" was planned and founded by the shareholders Robert Buck †, Gerd Marhofer and Bernd Rüsing in October 1969.



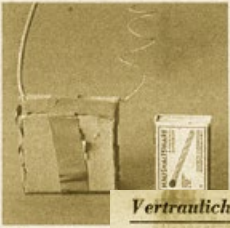


ifm in the press.

Technical data sheet for the Swedish market.



Messestand der Elektronik-Firma »ifm« in Düsseldorf  
»Bei Ihnen ist ein Geheimsender versteckt«



Pappschachtel im Format einer Zigarettenpackung hervor. Die versammelten Techniker identifizierten die beiden Gegenstände mühelos: als Mini-Mikrofon und dazugehörigen Sender. Die alarmierte Kripo konnte das Urteil nur bestätigen.  
Am Ladezustand der Batterien errechneten die Kriminalisten, daß der Sender bereits seit Be-

Vertrauliche Messe-Gespräche mitgehört

## Mini-Spion hinter der Kabinenwand

Von unserem Redaktionsmitglied Hartmut Zscherper

Die Gesprächspartner fielen fast von den Stühlen. Mitten in wichtige Verkaufsverhandlungen auf dem Stand der Essener ifm-Electronic GmbH & Co KG in Halle 2 des Messegeländes platzte am Wochenende ein Peiltrupp der Post, suchte — und wurde fündig. Hinter einer Kabinenwand entdeckten die Post-Pe

zinsarettend

## Spionage-Versuch auf Interkama Düsseldorf

Mini-Abhörgerät an der Wand durch Zufall geortet

„Billige“ Informationen ohne die üblichen Gespräche am Messestand haben sich — laut dpa — unbekannte Interessenten offenbar auf dem Düsseldorfer „Internationalen Kongreß mit Ausstellung für Meßtechnik und Automatic“ (Interkama) durch einen Mini-Spion verschaffen können. Am Freitag wurde ein solcher „Lauscher an der Wand“, wie der „Interkama-Schnelldienst“ erfuhr, durch Zufall bei einem Essener Aussteller von Elektronikgeräten geortet. Der Trick kam heraus, als am Stand eines benachbarten Unternehmens bei Meßversuchen auch die Sendefrequenz des Mini-Spions durchfahren wurde. Dabei konnte ein nebenan geführtes Messgespräch sehr klar mitgehört werden. Ein Peiltrupp der Post spürte den zigarettenschachtelgroßen Mini-Spino auf. Das mit einem fingernagelgroßen Mikrophon ausgestattete Gerät war offenbar schon seit Beginn der Interkama am 14. Oktober in Betrieb.



1971: move to I. Weberstraße 9, Essen.



Interkama 1971: ifm attracts attention not only with their colourful fair stand.

**Horst Jeruschke**  
*ifm group of companies, Germany*

**ifm sensors in Sweden.** From the very beginning of ifm the engineers knew each other. Gerd Marhofer knew Günther Weber who invented the first infrared sensor as a 2-wire device with AC voltage. He had a company in Northern Germany. Mr Weber was a friend of Mr Heinz Korn who therefore became aware of the ifm units, recognising straight away the potential for his adopted country Sweden. From his domicile in Överlida he started the first dis-

tribution with the company Svenska Sensoren Elektronik (SSE) and at the same time the first production of ifm products outside Germany. Later, he also serviced Denmark, Finland and England for ifm. In 1985, SSE became a 100 % subsidiary of ifm.



## 1971

1 January:  
ifm transfers their headquarters to I. Weberstraße 9 in the city of Essen.

October:  
ifm exhibits at Interkama in Düsseldorf.  
A spectacular bugging attempt hits the headlines, among others in STERN and SPIEGEL.

31 December:  
Bernd Rüsing leaves ifm electronic geräte gmbh+co kg as Managing Director and goes to the company hps.

**Wilhelm Hoffmann,**  
*ifm group of companies, Germany*

**Taking marketing to the third dimension.** ... we wanted to do it better. Better cooperation with staff, better cooperation with customers, and our products were to be better as well. From the very beginning, this was Gerd Marhofer's central theme, (later on) expressed in the slogan "ifm close to you!" The slogan also emphasises the importance culture has for communication: All exhibition locations of the world are suitable meeting places to foster intercultural communication.

As early as 1971, ifm, a rather young company, presented themselves like a big company at Interkama, the world's largest international trade fair for instrumentation and automation technology.

Until 1980 ifm exhibited at another 16 fairs in Germany and abroad. Even in Tokyo with a trade fair concept from Essen and the typical Japanese design with paper walls.

At Interkama 1980, an exhibition room with holographic objects was integrated into the fair stand. Besides technical, matter-of-fact holograms the exhibition also featured artistic works. 110,000 people visit-

ed Interkama, 40,000 of them visited the ifm fair stand. The holography exhibition had to be closed several times because it was overcrowded. As a result, the holographic objects became the main topic at the trade fair.

And in spring 1981, a completely different experience at the Leipzig Spring Fair. Microelectronics was the major topic at the most important trade policy event in the former GDR. However, with the massive support of the party and government who had a close eye on Western exhibitors. This did not feel like freedom!

More like in Hanover, where two weeks later the big Hanover Fair opened its western performance show with the theme "Industrial Application of Microelectronics". ifm was there for the first time.

Lots of trade fairs followed in Western Europe, Eastern Europe and the USA. The increasing globalisation of the economy, however, required new forms of organisation such as multinational groups and expansion of global trade with international management. The centres of this econom-

ic development were not only the USA and Europe any more but increasingly also Asian countries.

So at ENEX ASIA in Singapore in 1990 ifm was the only European exhibitor who showcased sensors for automation technology.

In 1991 ifm exhibited again with great success at the "System Control Fair" in Tokyo. Numerous trade fairs all over Asia as well as on the 5th continent in Australia and New Zealand followed.

Nowadays ifm is present in more than 70 countries worldwide. With ifm branches in 42 of these countries. In almost all these countries ifm has already participated several times in trade fairs and fostered intercultural communication.

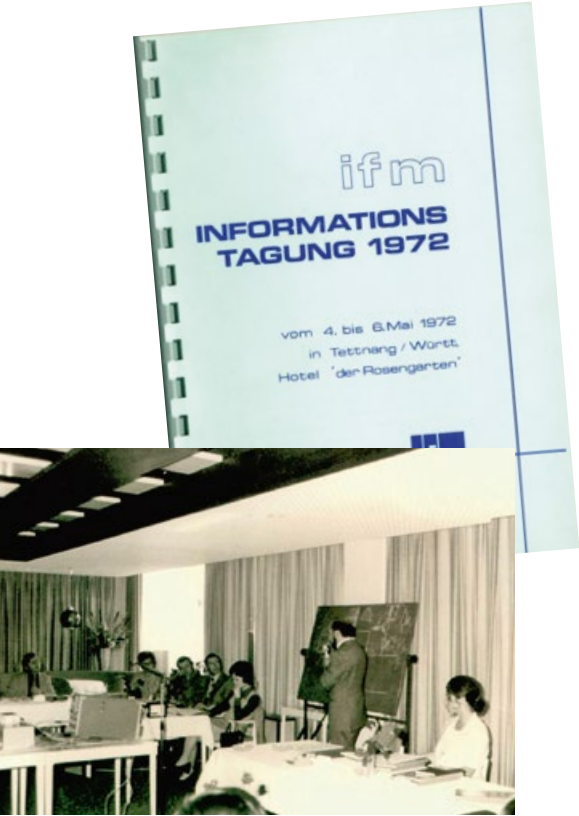
With 141 trade fairs Germany is still the world's most important exhibition country. Upcoming exhibition markets are Brazil, Russia, India and China.



**Horst Jeruschke**  
*ifm group of companies, Germany*

**A lot of commitment.** In the beginning, only Karl-Heinz Kleine was responsible for sales at ifm because there were no employees yet. ifm sold the first devices in the early 1970s via sales representatives who had various agents in the respective postcode areas. Gerd Marhofer, however, was always convinced of the idea to visit customers with ifm's own sales people. The sales agents had one disadvantage: They did not work 100 % for ifm, they always also sold products from other manufacturers. These could also be completely different products, they sold everything from lamps to windows. Success depended on external partners, which is not a safe strategy.

So a first attempt was made to work with ifm sales people and I was in charge of the area in the North. It stretched from Hanover to Unna and I was based in Bielefeld. Everything was going well because we only focussed on ifm. But ifm was still young and particularly at the beginning it was important to quickly get money back into the company. In this respect the trade partners had a clear advantage: the shorter terms of payment. When they bought products from us, the money was in our account eight days later. Customers could take up to 30 days. When the trading partner Friedel Wenglorz – Wenglorz was the only trading partner who worked almost exclusively for ifm and later took over sales in North Rhine-Westphalia – took on more employees in the north and expanded the area, I first went to the head office in Essen.

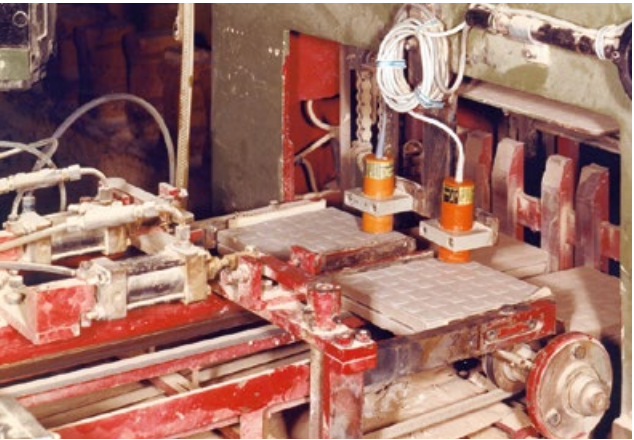


Information meeting at Hotel Rosengarten in Tettning in 1972. At the board, ifm Managing Director Robert Buck †.

**1972**

ifm achieves a turnover of DM 2.5 million and employs 36 people.

Capacitive two-wire proximity switches now also allow the detection of non-metallic materials.



Capacitive sensors used for the production of ceramic tiles.

**Wissen Sie, was Sie von berührungslosen Befehlsgebern verlangen können ?**

**efector® beweist es Ihnen.**

Berührungslose Befehlsgeber stehen als vorgeschobene Führer der Steuerung direkt an der Front. Genau dort, wo sie den Umwelt-einflüssen besonders stark ausgesetzt sind. Dabei sind Umwelteinflüsse nicht nur Wasser und Staub, sondern auch elektrische Stör-impulse, Spannungsspitzen usw. Jetzt zeigt es sich, wie wichtig Ihre Entscheidung ist, für zuverlässige Steuerungen.

Original-electronic einbaufähige effectoren bewahren sich an der Front. Sie dürfen viel erwarten! Sehen Sie sich die efector-Datenblätter an. Alle Angaben, die Sie brauchen, finden Sie schnell und ohne lautes Suchen.

Überzeugende Produkte sind das Ergebnis einer konsequenten Entwicklung. effectoren beweisen ihre Überlegenheit täglich durch tausendfache Anwendung unter härtesten Einsatzbedingungen.

efector – berührungslos, soich, einen Partner zu haben.

Voll-elektronisch – kein Kontaktpfaden, keine mechanischen bewegten Teile, kein Verschleiß, keine Wartung, keine Zusatzverstärker erforderlich. Zum direkten Schalten von Verbrauchern bis 200 VA z. B. bei 220 Volt, effectoren mit Zwei-Leiter-System arbeiten bei allen Wechselspannungen im Bereich von 40–250 Volt. Anschluß wie beim mechanischen Schalter über ein zweifaches Kabel.

effectoren mit Drei-Leiter-System für kontaktlose und Releu-Steuerungen arbeiten bei allen Gleichspannungen im Bereich von 8 bis 35 Volt. Garantie 2 Jahre.

efector ist ein Erzeugnis der ifm electronic, D 43 Essen - B. R. Deutschland

**efector**

einsetzen heißt

**Betriebssicherheit und neue Möglichkeiten für die Steuerungstechnik**

Ihre beste Steuerung wird wirkungslos, wenn die Befehlsgeber ausfallen. Befehlsgeber, wie Grenzlast, Positionstauerschalter, Impulsgeber usw., waren bisher nur einmal die störangefälligen Glieder der Gesamtsteuerung. Der Konstrukteur mußte der Form der Abtafistorgane (wie z. B. Rollenhebel, Federhebel, Teleskopstößel usw.) ganz besondere Aufmerksamkeit widmen. Hinzu kamen noch Berechnungen über Anfahrwinkel, Vor- und Nachlaufweg sowie Lebensdauer der Kontakte. Diese ganzen Überlegungen haben ihre Bedeutung verloren, denn effectoren tasten berührungslos ab.

Nähert sich ein Teil, welches das Signal auslösen soll (Maschinen-teil, Werkstück, Produktionsgut), dem efector und kommt in die aktive Schaltzone, so wird das Schaltsignal ausgelöst, ohne daß der efector berührt wird. Schaltkraft ist also nicht erforderlich.

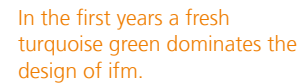
**Hans-Dieter Gesthuysen,**  
*patent attorneys*

**Stalemate.** Gerd Marhofer and Robert Buck † mutually conceded that they both did a good job and that “only those who do nothing will never make a mistake.” At the same time, it was clear that if one of them made a mistake, the other one would be there to help out. And vice versa. The situation back then meant a stalemate. Bernhard von Spiczak wasn't there yet, Bernd Rüsing wasn't there anymore; there were only Gerd Marhofer and Robert Buck †, and both owned 50 per cent of ifm. To do away with the stalemate, the idea was to set up an advisory board with three members. This advisory board never had three members. For a couple of years, it only consisted of me. However, they never needed me as there was never a situation they could not work out together. I don't know if they

would have been able to agree on everything if I hadn't been there. I guess they agreed that they were man enough to sort things out on their own without my support.

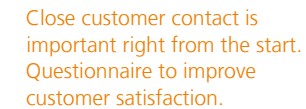
Apart from that, they were very different: At that time, Robert Buck † for example said, “I don't want a big business.” Gerd Marhofer, however, took the opposite view. He would have liked to have 1,000 employees sooner rather than later. This shows how much they differed in terms of character: Gerd Marhofer was the market expert, the salesperson, who had business journals lying around the house, and Robert Buck † was the inventor, engineer and developer. Despite all the differences, a very successful combination, as we have seen!





- 1 July:
- Production moves from
- Olgastraße, Tettmang with a
- space of approx. 50--140 m<sup>2</sup>
- to Wasserburg with a space
- of approx. 500 mm<sup>2</sup>.

- The first electronic speed monitor in a DIN rail housing, the basis for the monitor product line.



**Too complicated?** The speed monitor was developed according to the concept of Managing Director Robert Buck † and made by the Butron company. Albrecht "Abi" Bär had worked for ifm since 1973 and later on was responsible for the product management of the new device. Although the speed monitor had been developed it was not yet quite ready for selling. The nameplates were produced in strips of six each in Essen. The first data sheet was created – unfortunately with a big mistake in the heat of the moment. Now the first 20 to 39 units were ready to be sold. The demand for the new speed monitors was enormous, but at that time ifm was not able to supply so many customers. This is why Abi Bär travelled to Lake Constance and helped with the production of the speed monitors for four weeks. He soldered PCBs and made the units ready for delivery.



Then the next idea – let's make a slip monitor. The company Rheinbraun needed such a device. Robert Buck †, however, was sceptical and did not want to change the concept.

Therefore, Mr Bär travelled around to ask customers. He asked them if they needed a monitor that did not only switch if something was rotating or at standstill but also if the drive over-revved ("slip"). The result of the small market survey was 53 % in favour of the slip monitor against 47 % who had no need. Of course, Mr Buck then developed the slip monitor. The then famous slide switch was created. The functions of the four positions: overspeed, underspeed, switched on with start-up delay or without start-up delay. The colour of the housing from Dold was changed to the ifm colour orange. Sales people sold the newly launched speed monitor very well. And then the slip monitor came next.

The sales people were overstrained with the relatively complex device. They did not accept it because it was too complicated. Therefore the slip monitor was only rarely offered to customers. The big success of its predecessor, the speed monitor, did not come its way.



**Robert Buck †, founder of ifm**  
**Jörg Schütze, ifm group of companies, Germany**

**Decision before the Federal Patent Court.** One hurdle for ifm as a young company was probably the patent infringement suit brought against ifm by a competitor from the SME sector in the early 1970s, i.e. very shortly after ifm was founded in 1969. If the competitor had won the case, ifm would not have been allowed to make, offer and distribute or sell “non contact” 2-wire proximity switches in Germany.

We brought a revocation action to invalidate this fundamental German patent that was granted in 1971. For us this meant to prove to the judges of the Federal Patent Court that it was not legally valid, which usually involved a great deal of work. We had to find a document somewhere in the world (technical literature, brochures, etc.) or find a device that verifiably described or implemented this invention in an identical or similar way at an earlier date. I (Robert Buck †) flew to Munich for the court hearing.

Our patent attorney, Mr Hans-Dieter Gesthuysen, who researched and worked through lots of – unfortunately not really useful – letters patents regarding this subject, argued that the electronic two-wire “switch-gear” of two competitors, “Pulser” and “proxi-captor” were known to the public prior to the day of the patent application and would therefore anticipate the main ideas of the invention. What was decisive, however, was a pre-published brochure of one of the competitors that fortunately carried the reference “1/5/67” so that we could provide credible evidence to the patent judges that the 1 May 1967 was the publication or print date, which was just five months prior to 3 October, the date of the patent application.

If we had lost this case, this would have been the end for this important and back then only ifm product family and perhaps also for ifm. Because proximity switches with just two wires were a very modern electronic replacement for electromechanical two-wire limit switches that were prone to wear. And except their inductive 2-wire units with the designation efector 12 and efector 22 (10 and 20 mm sensing range) the young company ifm electronic had nothing else to offer to their customers. Apart from claiming licence payments, at least for the past period, the competitor would have been allowed to prohibit the production and sales of such ifm units in Germany for many years. Thank God this did not happen.

The opponent's legal representative congratulated me (Robert Buck †) on our success and stressed that they would accept and not challenge this judgement. This congratulation on the two court cases won positively surprised me because this was neither then nor now a matter of course and usual. So I will always positively remember the first big test for ifm in the field of patent law.

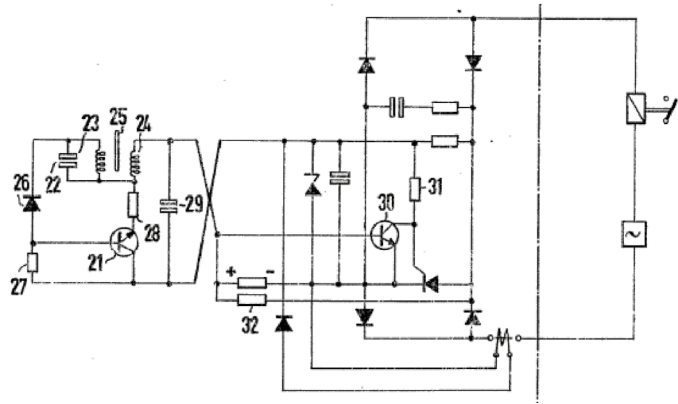
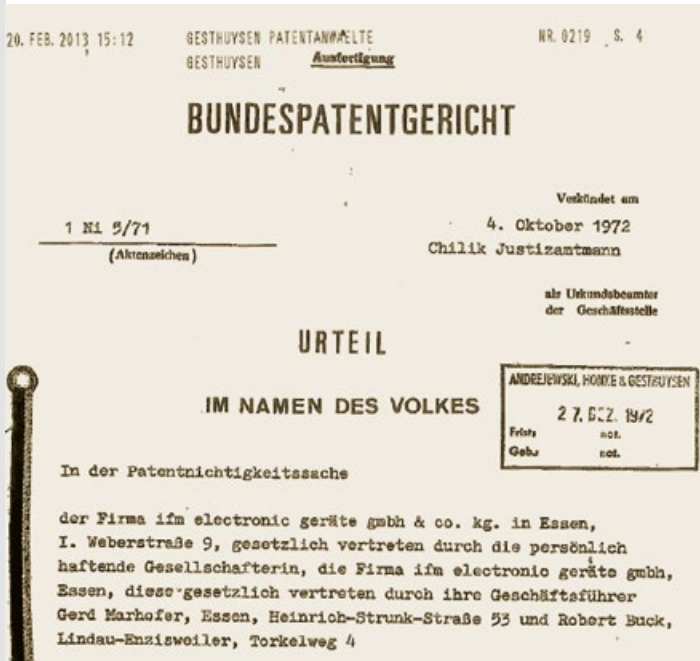
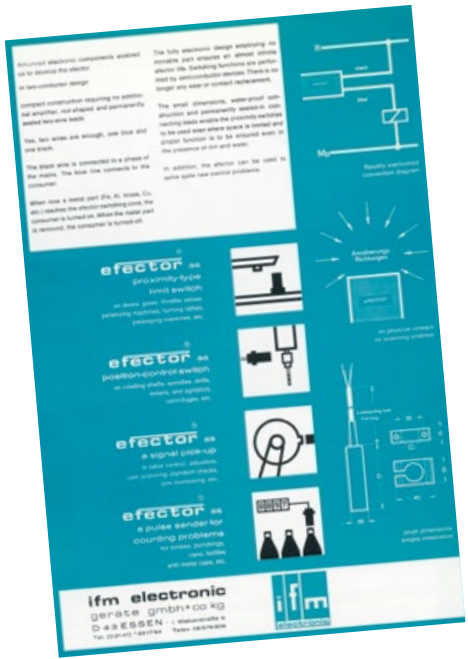


Figure 2 of the competitor's patent applied for in 1967 that protected the fundamental idea of the two-wire proximity switches and would perhaps have destroyed ifm's existence if ifm had lost the revocation and infringement actions.



**Norma Möller,**  
**ifm group of companies, Germany**

**Special atmosphere at work.** The first working day at ifm in Essen was of course exciting. As opposed to my former employer, a big company, the atmosphere here was very familiar. At that time only 12 people worked in Weberstraße.

I remember that we often had a good time together. As soon as the next turnover hurdle was crossed, Gerd Marhofer promptly rewarded us with ice cream or an invitation for dinner. When he came back from Tettnang he often had something for each of us, sometimes a very tasty special bread.



Until today the atmosphere at work has been something very special at ifm; this cannot be taken for granted. Of course, one or two things changed

with the strong growth. In 1973 at the age of 18 I myself could not imagine that I would work for ifm for forty years.

During the years, growth kept increasing. But we all knew each other well, many friendships still exist today. I think back then every employee worked as if ifm were his or her own company. You were motivated, did not look at the watch and simply did things.

For me ifm is and remains something very special!

## 1973

ifm electronic wins an existence-threatening patent lawsuit against a leading competitor.

ifm proximity switches are presented for the first time at the Hanover Fair in cooperation with the company Schlüter KG.

## 1969–1973

7 MILLION DM IN SALES

80 EMPLOYEES

35 PATENTS

2 COMPANIES

### Product milestones



Inductive proximity switches



Capacitive proximity switches



Monitor devices



# 1974–1978

## Foundation fever.

**efector**  
elektronische  
Annäherungsschalter  
für Wechselspannung

**Bauform IM**

I = induktive Abtastung  
K = kapazitive Abtastung

Arbeitsstromprinzip Typ	IM-2015-ABOW
Ruhestromprinzip Typ	IM-2015-BBOW
Schaltabstand	nb 15 mm
Anschlußspannung	35–230 V
Spannungsabfall efector geschaltet	4,5 Volt
Stromaufnahme	< 4,0 mA
Schaltleistung	500/100 VA
Schaltfrequenz bei 50 Hz Netz	25 Hz
Temperaturgang	-25 °C bis +80 °C
Grundpreis DM-Stück	97,-
Stückpreis DM bei Abnahme ab 10 Stück	82,65

Zwei-Leiter-Anschluß-System

1 = nicht leitend in  
2 = leitend in  
3 = leitend in

**IA**  
Kabel 2 m lang

**IB**  
Kabel 2 m lang

**ID**  
Temperaturgang  
von +10 °C bis +50 °C  
Typ: 0,2 mm

**IF**  
M 12 x 1  
Kabel 2 m lang

**IG**  
M 12 x 1  
Kabel 2 m lang

**KB**  
Kabel 2 m lang

**IN**  
Kabel 2 m lang

**IM**  
Kabel 2 m lang

**II**  
M 12 x 1,5  
Kabel 2 m lang





**Heidrun Scheider,**  
*ifm group of companies, Germany*

**Thirteen.** September 1974: A career change was imminent for me. So I applied for a job at ifm electronic geräte gmbh+co kg advertised in the newspaper WAZ and was invited for an interview.

At that time ifm electronic resided at Weberplatz in Essen. I was curious and took off. The door was opened by a woman wearing a white work coat. I got immediately into some kind of open-plan office. It looked a bit untidy. Everywhere boxes and demo boards were standing around. Green, felt-coated partitions separated the room. I was astonished. Were people supposed to vacuum-clean and dust themselves? The people sitting there, were all of them staff? No and yes. No, you didn't have to vacuum or dust, and yes, almost all employees were gathered in just one room. Only the boss and his secretary had a separate office – with the exception of the warehouse. My first impression: I did not want to work in such a company. After all I came from a large company with about 100 employees. The following interview was very harmonious, though. The employees seemed to be quite nice. Furthermore the job advertised sounded very interesting. So I threw all previous concerns overboard and hurtled into the adventure. After another interview the contract was drawn up. I got the staff number 13 which meant I was the thirteenth employee of the Essen company. Only sometimes am I superstitious, but not when it comes to the number Thirteen. Finally now after about 38 years it has shown that this figure can be seen as a real lucky number. Luck, to work for a company which writes in its corporate philosophy, for example, "Growing successfully in security". This security was felt in 1975 and is still felt today.

By the way: The lady wearing the white work coat was only packing boxes for the relocation to Teichstraße, the new address as of January 1975. And the demo boards were meant for the Interkama trade fair in October. That was something I only learnt later on.

Teichstraße 4 was the address of headquarters in Essen for 35 years.



Looking into the canteen "efector-Stübchen".



Warehouse and dispatch in Essen. The entire headquarters (still) find enough space on one floor at Teichstraße.

## 1974

- ifm starts with the foundation of independent sales companies:
- 1 January:
- ifm bayern and ifm baden-württemberg, 6
- August:
- ifm nord.

ifm is already among the five leading companies in the market.



Capacitive sensor from ifm on the title page of a technical magazine in 1974.

ifm at a fair trade in Japan in the 1970s.



**Horst Jeruschke,**  
*ifm group of companies, Germany*

**Apprenticeship fee paid.** Japan – the model country for electrical engineering, far ahead of its time. To ensure not to miss any new development it was, of course, necessary to be close to the pulse of time. Therefore, we started to set up a branch office in Japan early on. The success of our own sales offices in Germany was very positive so that it simply also had to work abroad.

Unfortunately, we completely overlooked that our approaches could not be stamped on another civilisation just like that. We were not aware of the fact that people in Japan are very polite and that you do not have discussions the way we were used to having them. For example, if our local colleagues suggested a product and we wanted it differently, the Japanese agreed to it out of pure politeness, even if we were actually

wrong in our assessment. Therefore, business in the new market started quite slowly. When we were looking for staff we were blinded by recommendations given by other companies. We recruited people on the basis of the recommendation. However, we did not know that it was common practice over there for staff who are not good at their jobs to be "kicked upstairs". That's why we had to learn the hard way in the first few years. If Albrecht Bär had not decided to stay in Japan and work for ifm at that time, it would certainly have failed. In Germany the customers appreciated very much that we had our own branch office in Japan. We were reputed as an innovative and well-positioned company because we could afford this.

## 1975

- 1 January:
- New location of the headquarters Essen Teichstraße 4, not far from the central railway station.

The number of staff exceeds 100. So ifm has increased more than tenfold in less than six years.



**Dieter Kaiser,**  
*ifm group of companies,*  
*Germany*

**Wasn't meant to be!** At that time I had finished technical college. ifm had a job advert in a newspaper, in 1976, indicating a box number. Later on, I was told that the reason why was that the competitors should not know that we were in the process of setting up a sales force. Therefore, I did not know what company was behind the box number. And ifm was looking for a customer consultant at that time. No mention of sales. Because in those days sales was associated with "go and ring doorbells", with "selling insurance contracts" which had a negative touch to it already then. And I had not sold anything before but accepted nevertheless.

In 1976, 20 – 30 % of the population had a telephone. I started at ifm and did not have a telephone. When you asked for a telephone in those days, it took four months until it was actually standing on your desk. So I went into the nearby city centre (3 km) to the main post office every Monday and made appointments with customers from the telephone box at the post office until noon. Then I had to leave because the post office closed. There were hardly any customer details available. The ifm branch office süd-west had just been founded. Engineering consultants used to be in charge of this region. When our own branch office was founded, the engineering consultants made it pretty difficult for us to access the data. Therefore, Roland Schlotz and I started to create index

cards with customer details because there were no computers yet. Furthermore we began some kind of bookkeeping, one order book and one invoice book. Every sales engineer worked with these two books and that is how sales was controlled.

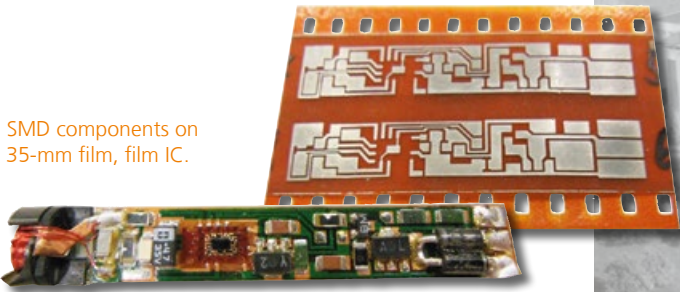
I did not make my first customer visit alone. In those days it was common practice that after the product training you "were off to the customer" together with an experienced sales engineer. So I was off to the customer with a colleague, Mr Schlotz. These two weeks actually were half a day since Mr Schlotz had to look after the build-up of the branch office building. When we made the first visit in the morning, Mr Schlotz was the one who led the conversation and before the second one he said: "Now it's your turn." So I was in charge of the second conversation and when we came out of there, he was short-spoken: "Maybe next time!" The customer had, of course, talked to Mr Schlotz rather than to the greenhorn. "But since you did not perform well at all, you will go on all on your own since I have no more time" he said and disappeared. From that point on I had all conversations with customers by myself.



The production  
in Tettang-  
Bechlingen.



After production 25 proximity switches each  
are bundled up and sent to Essen. Right from  
the start packaging is made in Essen.



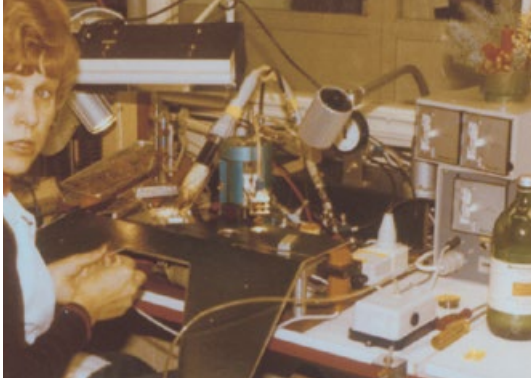
SMD components on  
35-mm film, film IC.



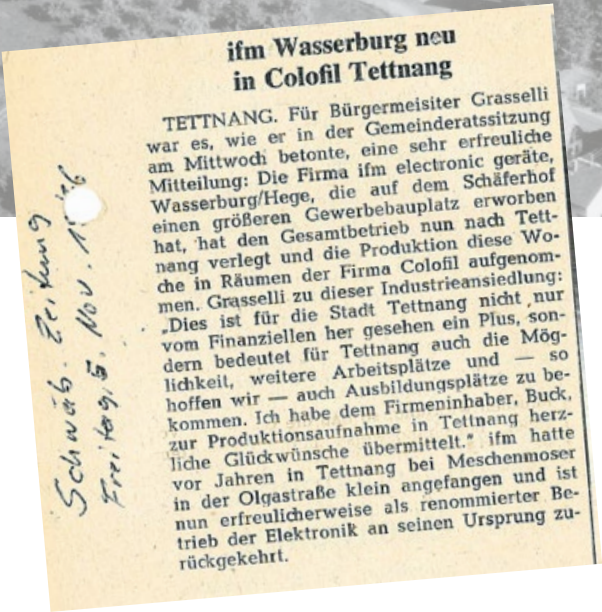
ifm produces in Tettang  
again in the former Colofil  
factory.

1976

1 July:  
The production moves  
from Wasserburg to  
Tettang-Bechlingen and has  
a production area of about  
1,000 m<sup>2</sup>.



ifm develops a machine which can  
solder the film IC with the PCB  
using a special holding down device.



**Otto Bauknecht,**  
*ifm group of companies, Germany*

**IC made for filming.** Following the wish to considerably increase the performance of the then still simple proximity switch, Robert Buck † developed the first IC suitable for large-series in cooperation with a large electronics supplier. This partnership enabled the integration of a trendsetting circuit complex.

Our partner could "pack" this IC chip but did not have any efficient know-how to position and solder components on the rigid PCB. That was a challenge for the highly motivated and highly committed experts of ifm development and production.

In this film IC, the approx. 1.5 x 2.5 mm silicon chip was equipped with an integrated circuit designed by Robert Buck † cleverly devised circuit via 0.2 mm wide copper tracks. The technology was called "outer lead bonding". The exposed copper tracks led from the surrounding solder pads of the 8 mm wide polyimide film to the contact positions of the chip. Instead of the chip there was a hole in the film into which the small conductors reached. 16 solder pads were arranged in a rectangle on the film. They were made solderable by means of galvanic tin plating.

Width and transport perforations of the polyimide film were taken from the standard of the super 8 narrow gauge film. This allowed us to make use of existing equipment such as take-up reel etc. By mastering the positioning and soldering of the film IC ifm succeeded in securing a revolutionary USP for the technology at that time.

On the basis of his experience in precision engineering, Berthold Schöcker succeeded in developing both a handling robot suitable for series production and soldering equipment

to place the film IC onto the rigid PCB.

A perforation cut of exactly 4.26 mm, corresponding to 1/6 ", was cut off the endless film, picked up using a tiny underpressure nozzle, turned into the correct position and then placed on the solder side of the PCB tinplated in the IC area. Even in those days we called it "pick and place". Then 16 fine needles pressed against the solder pads of the film ICs which consequently melted with the conductors of the PCB in a temporary hot-air flow. The film IC was then protected against mechanical pressures and solder temperatures with a small piece of adhesive tape. This procedure required exceptional precision throughout the entire process chain, starting with production and design of the PCB for which I was responsible at that time. Its mastering gave us a head start in that industry for many years. Moreover, it was the birth of the process "from reel to reel" which is still used today.

Now that the film IC was placed on the PCB it was populated with components in homeworking. Once returned to the company, the components were soldered with each other in a solder float, later via a solder wave. During this process the IC on the soldering side had to endure the bath soldering of far above +250 °C for a few seconds without any harm done.





Dieter Radtke,  
ifm group of companies, Germany

Interkama is right around the corner. How is advertising done in 1976? The world is not yet digitised. We have neither a Mac PC, nor photoshop, nor email, nor internet at our disposal. Telephones still have a dial plate. Advertising is a creative brain and in those days in particular manual work: Design graphics using a compass and stencils, text frames glued onto cardboard with unhealthy smelling “rubber cement”.

There is a darkroom with a huge repro camera which is used to take photos of graphics or typefaces. The prints as such are developed in development equipment with chemical baths. Text is exposed in a technically demanding device, letter after letter, on light-sensitive paper without a keyboard as we know it today.

The small advertising team has to produce catalogues of several pages or master large events such as Interkama fair, the top fair for ifm at that time, with these limited tools.

This is not always possible in the “normal” work rhythm. This requires special commitment.

In 1977, I had not been at the company for a long time, Günther Diederichs, the managing director then, comes to me and announces that the next month we have to work through, i.e. every day two hours longer and no plans for the next few Saturdays and Sundays Interkama is just around the corner ... so let's tackle it.

I also recall that after a successful fair event there are extensive celebrations and nobody minds the money.

However, whenever the bear was stepping in advertising, my family asked me: “Hey, another fair around the corner?”



Darkroom with repro camera and development device at Werbeberatung Günther Diederichs, Teichstraße, from which ifm identicom emerges later on.



ifm Managing Director Gerd Marhofer (centre) with sales managers at a conference.



Reception at the headquarters in Essen.



1976

ifm gives a five-year guarantee on standard devices.

Turnover exceeds the DM 10 million mark for the first time.

Ruth Weidtkamp,  
ifm group of companies, Germany

Nothing is impossible. Early on, I noticed that ifm was active not only in Germany, but had just started to set up internationally. On the technical fair for industrial communication, Interkama 1974, we had a guest visitor from Japan, Mr Kashiwabara. Discussions about further cooperation were held.

Today we have branch offices all over the world.

Nevertheless we felt like a family. We were all members of this family.

I like to remember Ms Budde. Ms Budde was in charge of the kitchen and of cleanliness. Sometimes she brought us beverages or she came to our desks while we were working and cleaned the keyboard of the typewriter. Whenever there was a party, Gerd Marhofer asked Ms Budde for the first dance, always! It went without saying that there were no differences and that Ms Budde was an integral part of our young team.

As far as analysis of the competition was concerned, we took unusual paths. Instead of getting documents about their products from third parties, we directly wrote to all competitors and offered them regular “exchange of documents”. Almost all companies joined in.



I liked in particular that we were wholly responsible for our tasks.

Tasks were not assigned but tasks simply arose.

We could carry them out according to our own ideas. We enjoyed large confidence. The target was set and with our focus on this target everybody performed their tasks to the best of their knowledge and belief.

The target was to market our products with everything, including everything that's involved to build up the company ifm. Right from the start we acted according to the philosophy: Nothing is impossible.





**Horst Jeruschke**  
*ifm group of companies, Germany*

**Good reputation.** Udo Lübeck was a downright sales guy and a big fan of France. He was determined to go to the neighbouring country to set up sales there. However, the search for a suitable office was a problem. Buildings we could afford were usually in a desolate state. So the search took quite a while. Mr Lübeck also placed a job advert in the daily newspapers in Paris, Lyon and Strasbourg. The office was not yet found and a hotel was indicated as the place for the interview. We went to the indicated hotel although I would have taken a bet that nobody would follow such an advert. However, I was proven wrong. Applicants came and in two weeks we had our team.

When we finally had an office, we had to have our first meeting in a sparsely furnished room. A door on two trestles had to serve as a table, only covered with a tablecloth. We explained the ifm products and the colleagues kicked off. The turnover came. Two years later I asked the colleagues why they had wanted to start with us under such conditions. They explained that German companies enjoyed a good reputation. They had asked for information at the Chamber of Commerce and when they said that ifm was doing well on the market, they applied. They believed in the company!



Those good old (D-Mark) times: Price list 1976.

- 1976

• 15 November:  
Foundation of ifm  
distribution in France.

• 25 December:  
Foundation of ifm Japan.



Besides committed work there also has to be some time for parties: All ifm colleagues from Germany meet for a traditional “knights evening”.

**Bruno Ruetz,**  
*ifm group of companies, Germany*

**Automated production.** I joined ifm in 1976. At that time the film IC had just been introduced. The chip packed in a Super 8 capton film (the correct name for this type of package is Tape Carrier Package) was assembled on the solder side of the printed circuit.



In home working, the prepared PCBs were then populated with wired components, further processed, tested and sent to Essen. There the type labels were applied and the units packed for dispatch to the customers.

All production equipment was produced in-house at ifm. To ensure that the strongly increasing quantities could be delivered meant a big challenge for everybody. There was one shift in production and working longer hours was the rule more often than not. Nevertheless, we often met after work in a relaxed atmosphere.

Berthold Schocker was at the company in October 1976; he was responsible for production equipment construction. He was also in charge of the mechanical workshop. To solder the film IC in larger quantities, Berthold Schocker had developed a semi-automated system which allowed the IC to be positioned automatically.

At the beginning, there was some kind of mysterious veil around this system and only selected people were allowed to enter the room in which it was standing.

Then eventually the system was ready and was used in production for testing. The solder parameters were set and Mr Pollack, mechanical engineer, who had set up the system had to solder the first parts under production conditions. Everything was OK. That called for a celebration. Everybody was happy to work faster and more accurately with the new system. The champagne glasses had long been removed and everybody was doing their regular work when it was noted that the system functioned mechanically but the test device showed an increased number of rejects. Berthold Schocker asked me to look after the system. There was considerable time pressure since the quantities from the system were desperately needed. ifm's Managing Director, Robert Buck †, showed up several times a day and asked for the current situation. I had to make do with this system for quite a while until the quality was finally OK.

A non-bureaucratic way of working was typical in those days. The order was given verbally, sketches were made if necessary, the order was discussed with those involved – and it was carried out.





Fair stand at Interkama 1977 in Düsseldorf.

Georg Kaluza, Designer

**Design at ifm.** ifm electronic, in particular company founder Gerd Marhofer, identified the importance of product design for the corporate culture early on. The outer appearance of the products and their aesthetic effect should meet the customer's expectations in a positive way. The technical quality is to be expressed in the design quality.

The different functions of the sensors led to various housing designs. The design is a bridge visibly transporting ifm's philosophy to the customer. ifm products should function reliably over a long period. Therefore,

the design is planned to last for a long time. It has its origin in the benefits of the product and therefore does not follow any changing fashion trends.

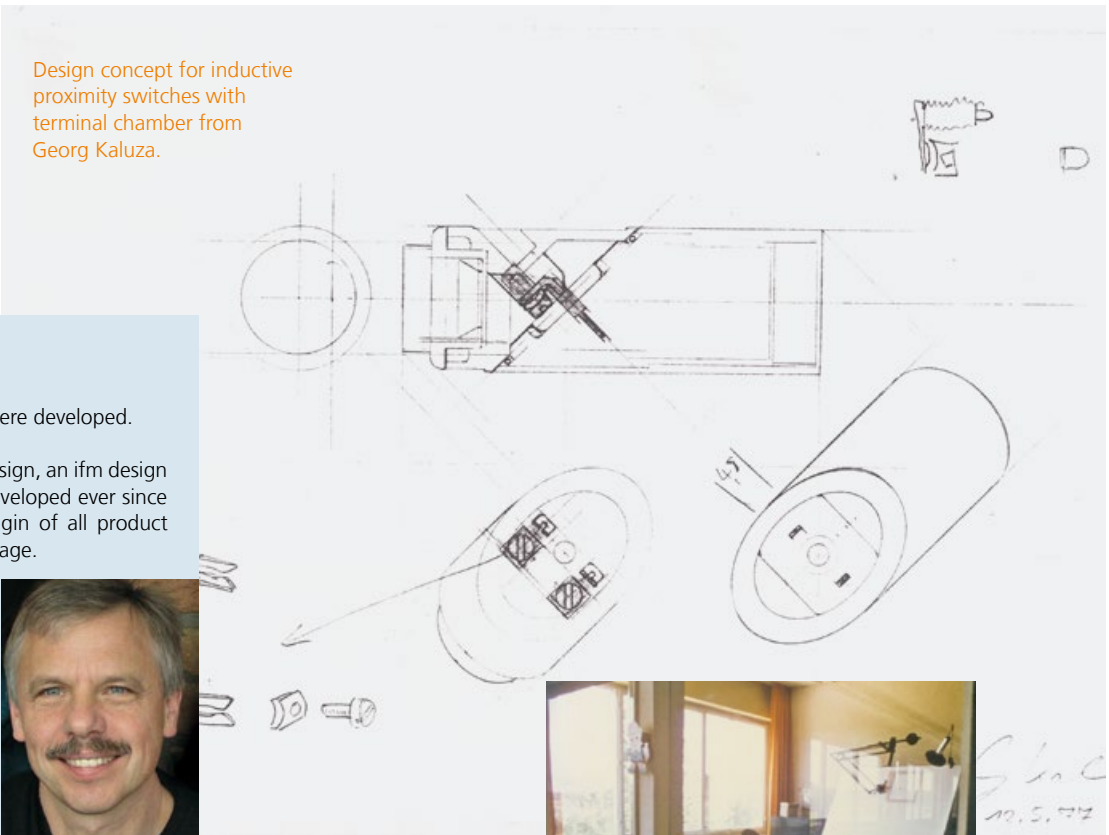
The first contact was made when Mr Gerd Marhofer and Mr Günther Diederichs visited the design fair Essen in October 1976 initiated by the Essener Haus Industrieform (at that time still located at the old synagogue), today known as Designzentrum Essen with the "red dot award". After first discussions with me I was invited to come to the ifm headquarters in Essen and the first designs of the types IAE and IBE, fol-

lowed by IME and OP were developed.

Together with Kaluza Design, an ifm design line has continuously developed ever since showing a common origin of all product groups shaping ifm's image.



Design concept for inductive proximity switches with terminal chamber from Georg Kaluza.



Look into the mechanical lab at the location in Tett nang.

Dieter Radtke,  
ifm group of companies, Germany

**ifm, a tongue twister?** At the beginning, the branch office in Japan was not called "ifm electronic" but efector co., ltd. Why's that? In the 1980s, we had controversial discussions with our Branch Manager, Mr Bär, because from our point of view from the point of view of advertising this choice of name could not really be understood. Ford, Coca Cola or Mercedes had the same name everywhere. The first thought of a worldwide brand or a uniform corporate design came intuitively.

Mr Bär's reasoning was quite simple: The Japanese cannot pronounce ifm as "ai-eff-emm"; it sounds more like "aifffm". And efector was the introduced brand name for the ifm proximity switches, as they were still called then and it was easy to pronounce. That was the decisive factor. ifm remained "unpronounceable" in the land of the rising sun. In 2015, the name was eventually changed to ifm efector.









In 1978, ifm has two capacitive proximity switches in its range, the KB and KD types.



**Dieter Kaiser,**  
*ifm group of companies,*  
*Germany*

**The wood magnet.** In the first product training we were told that we would get a demo case in which you could connect units etc. Forget it! In Germany, three new employees were recruited at that time and we only had one demo case. Everybody knows that necessity is the mother of invention. So I went into an electronics shop, bought a “contactor”, a switching device, open, with a cable for the mains outlet and assembled the sensor at the other end. As soon as the sensor had switched, the contactor was jumping around on the table. In those days you could impress the customers with such a demonstration, sensors were not yet known very well. Older electrical engineering technicians moved away

from the table right away because something had happened which you had not touched but nevertheless it switched. That was witchcraft!

Everything was demonstrated at that time; the speciality was a capacitive switch. You could switch through wood, for example. You placed it underneath the table, set it and moved your hand (or something else) over it and then it switched. One day I was at a company producing machines for the wood industry. I also impressed the company owner with the sensor underneath the table. All of a sudden he jumped up and shouted: “Come here, everybody, come here. There is someone here who has a wood magnet!”

## 1978

21 April:  
Foundation of the sixth German branch office, Vertrieb süd-west.

The international sales network is also growing:  
  
15 November:  
Foundation of an ifm company in Switzerland.



Always close to the customer: ifm's sales network in the Federal Republic, 1977.

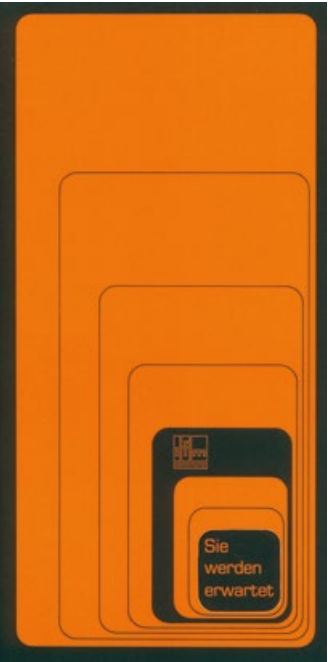


ifm football classic:  
Classic ifm football match: in Heppenheim the team Essen/sales force against the team from Tettnang.



Idyllic: the first branch office in Switzerland in Niederbuchsiten.

Invitation for the Elektrotechnik trade fair at the end of the 1970s.



**Anton Schaad,**  
*formerly ifm electronic, Switzerland*

**Speaking the language of the country.** At first an agency (Selectron) was responsible for selling the ifm products in Switzerland. This relationship, however, was ill-fated. Because this agency also copied the ifm products in orange. This was the main reason for the foundation. The Swiss industry was, of course, also of great interest.

The first branch office was situated in a rented one-family house in Niederbuchsiten. My predecessor, Peter Brendlin, a German, had lived there with his family. It was very difficult for Peter Brendlin, because language is very important in Switzerland. Swiss German is quite different from German and French, Italian and Rhaeto-Romanic are also the official languages in Switzerland besides German. At the beginning, the documents were only available in German.

The first big customer was Schlatter AG who are still a loyal customer today. As a German company we already fought Baumer, a Swiss manufacturer, at that time. Peter Brendlin was a lone fighter. He and his co-worker, Ms Gehret, had to handle everything themselves warehouse management and packing and forwarding units, which was a rule at that time.



I was the first Swiss sales engineer when I started on 1 October 1980. In the summer of 1981, Peter Brendlin left the company and I was alone at ifm Switzerland together with two colleagues. The support from nice people at headquarters was very good; otherwise this would not have worked.

In 1984, the company moved to Härkingen, Risweg. The number of staff was increased. In 1985, three men were working as sales engineers and two ladies in order processing and invoicing (ABF).



Otto Bauknecht,  
ifm group of compmanies, Germany

Safe landing. Robert Buck †, Bruno Ruetz and I flew with a one-engine Cessna to the company Thomson in France for a technical meeting. The pilot was Robert Buck † in person.

At the reception of the supplier, Robert Buck was standing a bit aside so that the customer thought Bruno Ruetz and myself were the bosses.

After the meeting there was an improvised lunch at the airplane, consisting of the emergency provisions on board 100 ml unsweetened blueberry juice and three dry hard cookies and that was shared honestly by the three of us.

The flight back was crossing Switzerland and right above Lake Geneva the ignition broke! Emergency landing, fire fighters everywhere you looked. Five metres above us there was a wide-bodied aircraft, which had to go at full speed because of our emergency landing. Robert Buck † asked us if we had noticed something. But we thought we would simply have a stopover Robert Buck † had mastered the situation very competently. None of us had any money on us but fortunately, an installer had some money for this unplanned stopover. The other formalities could wait for the next day.



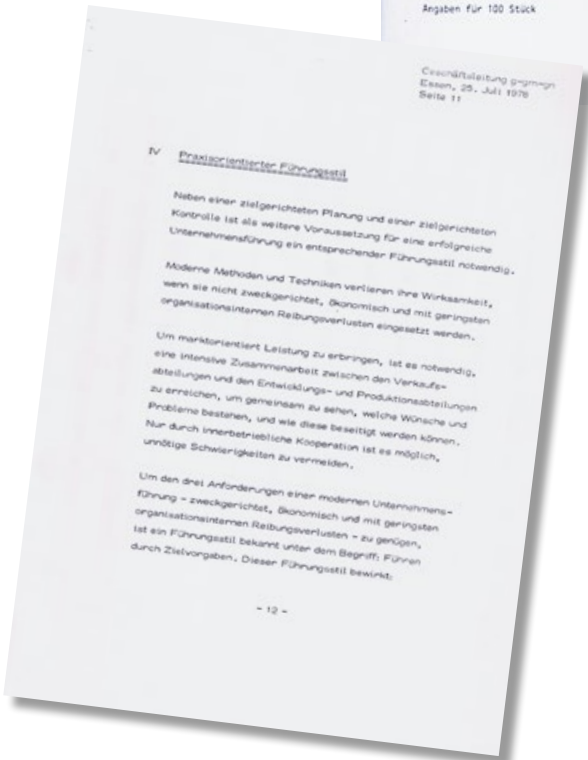
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1978

Einzelkostenzusammenfassung

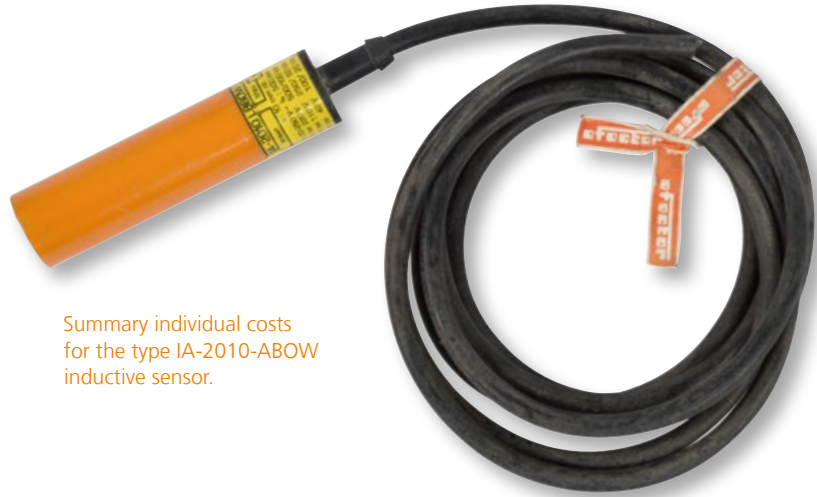
Gerätetyp: IA 210-ABOW

Bezeichnung	Materialeins. in DM	Stücklohn in DM	Fertig.-Zeit in Min.	Fertig.-Zeit in Min.
Kostenstelle	110/430	250	230	240
Platine	617,14	107,23	93,64	
Schule	61,60	-	248,88	
Hilfsfabrikat (Summe)	735,74	107,23	341,40	-
efector komplett	114,93			289,11
Fertigfabrikat (Summe) (Gemeinkostenbasis)	850,67	107,23	341,40	289,11
Zubehör	60,90			
Gesamt	911,57	107,23	341,40	289,11

Angaben für 100 Stück



Basis for the later ifm  
philosophy: manuscript  
from ifm founder Gerd  
Marhofer.



Summary individual costs  
for the type IA-210-ABOW  
inductive sensor.

Heidrun Scheider,  
ifm group of companies, Ger-  
many

Dial G for "Grüezi". Our Swiss branch office was founded in November 1987. It must have been some years later when I was asked to step in for the secretary of exactly that branch office. At that time four colleagues were working there. Three were active as sales engineers which meant they were on the road all day long and the colleague at the office had to do any kind of office work you can think of: telephone, order processing, writing delivery notes and invoices, making appointments, etc.

No problem – that's at least what I thought. During the first few hours there were no major incidents. Until there was an "original" Swiss on

the phone who I could not understand at all. He politely noted my desperate trials to explain that I was from the parent company in Essen and would have problems to understand him: "That's nice, I'm really pleased." But I could hardly understand him. It's a good thing that our article designations are so concise; so I could at least write down the quantities and the article for his order. My lifesaver was that the Swiss postal system also uses postal codes. And since in the early years the customer pool was still quite easy to view, I searched the registry on the basis of the post code and my adventurous notes and bingo – succeeded in finding this customer! Well done,

so the caller could at least be sent his order. After this experience I asked myself if it were better to ignore future calls, to place the receiver next to the phone or to escape to Essen. But I had discovered the trick with the post code! And whenever there was such a "difficult" customer on the phone, I insisted that I was given the post code. I was more than relieved that I had this tool. Nevertheless I always started sweating when the phone rang. And not to forget that my colleagues in Switzerland had a lot of fun when I was telling them about my daily experiences.

# 1974–1978

- 29 MILLION DM IN SALES
- 260 EMPLOYEES
- 69 PATENTS
- 4 COMPANIES

- 1978
- Under HRB 538 the Tett nang "branch office" is entered in the trade register on 7 June.
- On 1 July, ifm buys the premises of the production site in Tett nang-Bechlingen.
- From now on there are around 52,000 m<sup>2</sup> of which 13,000 m<sup>2</sup> is useful space covered by buildings at ifm's disposal.



# 1979–1983



## Roll it!





**Berthold Schocker,**  
*ifm group of companies, Germany*

**Brilliantly conceived and executed.** If it were possible to place electronic components on a flexible film instead of a rigid PCB, a world of new opportunities would open up.

But who would come up with such an idea? At the time, there was no such thing. Well, guess who did. Yup, Robert Buck †, head of ifm Tett nang back then. Not only did he come up with the idea, but his enthusiasm infected us all and so we set to work. For a new company with just 20 employees in the production equipment department, this represented quite a big challenge. The first pick-and-place machine was then running with a capacity of 3,600 components per hour on 35 mm film. For comparison: Today, in 2012, we have 30 machines in the production with a capacity of 150,000 components on 70 mm polyimide film.

What is so special and so ingenious about this film technology? Electronics on film can be folded or rolled up and so a lot of electronics can be placed on very limited space.

The polyimide film is stable, but not rigid. In the event of high temperature fluctuations and thus different expansion of the components, the film yields and no dangerous stresses arise on the assembled components.

During a visit to Hannover Messe in 1981, I was looking around the stand of a major competitor and was approached by an employee. During our conversation I gave him my ifm business card. He excused himself for a moment and went to their discussion cabin. One minute later he was back and asked me to please follow him into the cabin. There an older high-ranking employee of that company was expecting me. He offered me something to drink. Then from his briefcase he took an ifm sensor type IF with film circuit which had been cut open. He asked me which partner company had worked with us on that development. "Partner company?" I asked and said: "There is no partner company, that is 100 percent ifm development."

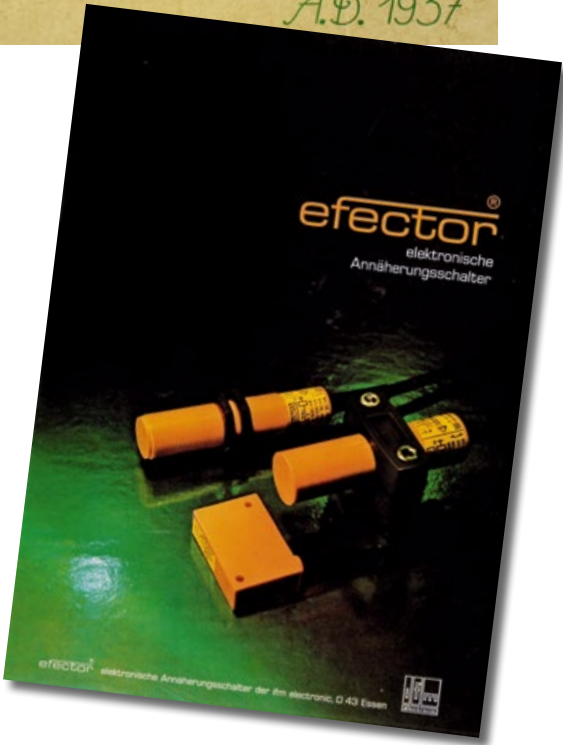
He excused himself for a moment and returned with two more col-

leagues. So there were four of us sitting round the table. They asked me about the manpower that had been necessary and for how long we had been working on this development. "Well", I said, "The complete staff in our department for production equipment has been working on it with around 20 people for approx. two years. However, the complete technology is in the hands of just three or four people, the rest are workshop staff."

The competitor's employees looked at me in complete bewilderment and one of them said: "We would have needed 150 employees and two years would not have been sufficient; if I had a hat on, I would take it off." They asked me to visit them again at the fair next year.

When I got back to Tett nang, I told this incident to Robert Buck † – a smile lit up his face.

Guideline for  
the sales force.



**Sigrid Felder,**  
*ifm group of companies, Germany*

**Help in times of need.** On July 1, 1979 I started working for ifm as secretary for the management. Management included Robert Buck † as Managing Director, Nick Schwindl as Head of Production and Mike Friedrich as Head of Development.



The first day and the first weeks were really exciting, interesting and at the same time "confusing". First, I had to get used to completely new

Sunday. The managing director Roland Schlotz really appreciated my xxx and for me as a 22-year old driver of a Citroen 2CV it was fun to drive a BMW company car.

Or when we urgently needed transistors from TAG Zurich that I picked up by car because there was no time to wait for the delivery time. The complete customs clearance on site was, of course, part of the package.

There would be many stories to tell. It was an exciting time in a very special company.

Special milestones in the ifm history, according to my personal perception, were the development of the film technology and of the modular technology because they were direct "projects" of my boss Robert Buck †.

A very special ifm moment reflecting ifm's sense of family was May 26, 2000 when my rented flat burnt out completely. NOTHING was left, just what I was wearing; from one hour to the next I had nothing left.

In this situation, ifm was very helpful to me. Robert Buck spontaneously offered me the use of a flat that ifm had rented so that I had time to look for something new. In xxx with Bernhard von Spiczak, then ifm Managing Director and after his retirement still consultant for ifm, I received a company loan at a very low interest rate. Without this support this total loss would have been much harder to bear.

One of the voluntary tasks that I was happy to take on as the "girl for everything" was spontaneous journeys in the company car when ifm Süd-West urgently needed equipment for a customer on Monday, which was quickly manufactured in Tett nang on Friday and then brought directly to Heppenheim by me on

1979

On July 1, the company introduces a pension scheme. This pension scheme is the basis for company pension provisions.

1980

ifm decides to produce flexible circuits and starts with film technology.



ifm film technology The film electronics can be folded and rolled up and thus stored in a small space.



Albrecht Bär,  
ifm group of companies, Germany and Asia

**Short partnership.** At the beginning of the 1980s, ifm was looking for a co-operation partner in Japan. This led to a partnership with the Japanese company SUNX in 1982 / 1983, whose photoelectric sensors were a good addition to ifm's product range. Ifm Managing Director Gerd Marhofer made the initial contact at a trade fair in Düsseldorf.

The co-operation with SUNX was initially an optimal connection. In keeping with the motto "Cobbler, stick to your last", it was agreed that ifm would only manufacture proximity sensors and SUNX only photoelectric sensors. At that time, SUNX already had an inductive sensor with an analogue output in its product range while ifm had already developed the OP photoelectric sensor type. That was the starting point and basis for the cooperation. All new and further developments were then to be agreed. Regular meetings to exchange experiences and visits were arranged. After a visit to the ifm production facility in Tett nang, SUNX probably said to themselves, "We can do better than that." They came in through the back door. But we realised that. SUNX was request-

ed by ifm to stop developing proximity sensors in accordance with the agreement. In return, we then developed a programme of photoelectric sensors ourselves, naturally under great secrecy.

Finally, ifm placed one last large order to fill the warehouse. SUNX probably assumed that ifm's order would be even larger in the following year. SUNX began to produce for stock accordingly. In the following year, Japan was hit by a general economic downturn. We no longer purchased photoelectric sensors from SUNX; ifm was now well positioned with its own photoelectric product range. SUNX got into difficulties and was bought by a large electronics manufacturer.

If the cooperation with SUNX, which had extensive expertise in the field of photoelectric technology, had continued, the market for photoelectric sensors would probably be divided up differently today.



Interkama 1980:  
The holography exhibition  
at the trade fair stand is a  
crowd-puller.

1980

- ifm presents the new "opto-efector" at the Interkama 1980 in Düsseldorf.

- ifm introduces a new company logo.



1981

- ifm opens a branch in Great Britain.

- The company is exhibiting its products on its own stand for the first time at the Hannover Messe.

Final design by Georg Kaluza  
for the new opto-efector  
photoelectric sensor.



Material warehouse  
at the Tett nang plant.

Joseph Witt,  
ifm group of companies, Germany

**Stock-taking.** The first stock-taking of the warehouse was due at the end of 1980. For this, I had merged the existing individual lists into an inventory master list. I did this work between Christmas and New Year, when the company was closed. But I wasn't completely alone, because at times Mr Thureau, who acted as caretaker, turned up. He was a former employee of Colofil – ifm had bought the building in Bechlingen from the company via its bank after it had stood empty for several years. Colofil, a manufacturer of fabrics, had filed for insolvency. Mr Thureau was taken on by ifm, as was Mr Schreiber, cook at Colofil and then cook at ifm until the end of his life. They were the first two employees that ifm hired after moving to Tett nang. "The last employees of Colofil become the first employees of ifm in Tett nang." Mr Schreiber was very popular and a street on the ifm site was named after him during his lifetime: the "Schreiberallee".

I had therefore merged the existing partial lists into an inventory collective list. The task was actually nothing new for me, as I had already done this with my former employer, Dr Klein. Nevertheless, it was particularly formative for me, because there was nothing to refer to or lean on. A lot of work went into it. The management ultimately accepted this "order".

Incoming goods were also reorganised from 1981. A goods receipt number was immediately assigned, which was entered in the goods receipt book, on the delivery note for the goods and on the goods themselves. In addition, an incoming goods and quality inspection had to be carried out. All this established a link between the goods and the delivery note for the first time.



Another special moment was when we closed the "open" camp in mid-1980. You had to record the warehouse, so you had to know where the material was going. For this reason, the storage locations were labelled with numbers and the shelves were numbered consecutively. This made it possible to indicate exactly where the material was located on the index card. From this point onwards, no material was allowed to be taken out of or brought into the warehouse without filling in a receipt. This gave them an overview of the warehouse stock at all times. Today there is order picking, but that didn't exist back then. Robert Buck † was particularly pleased about the closure of the open warehouse. Before that, you sometimes wondered why the warehouse was running – as chaotic as it was. Nevertheless, we have always earned money.

Invitation to the Interkama 1980 trade fair.



**Hans-Dieter Gesthuysen,**  
*patent attorney*

**Second distribution channel.** The history of ifm spans more than 40 years and includes many episodes, such as the story of syntron gmbh.

ifm devices often have more functions than the majority of our customers need. Nevertheless, we have always endeavoured to offer devices that could do “everything”. But such devices were of course also much more expensive than devices with less features.

At some point, we came up with the idea of selling our customers devices that were a different colour and only had specific features. This is why they were offered at a much lower price than our orange sensors that combined all the features. So we would launch our products on the market via a second distribution channel. That was the idea behind syntron. But what had happened in the meantime? in 1970, our product was a new product, no other had been established. At this time, Willi Liesenberg – the salesman who was to sell these products – was confronted with the customer’s demand that the devices should first have been tried and tested by other customers before they would use them themselves. In other words, this idea didn’t work.

ifm syntron still exists today, but the ifm subsidiary now develops and produces sensors and systems for object and environment detection.



First ifm booth  
at the Hannover Messe 1981.



**1981**

Foundation of syntron gmbh for the sale of customised sensors.

photoelectric sensors from the Japanese company SUNX complete the sales programme; they will be replaced by in-house developments over the next few years.

**1982**

Ifm ecomatic gmbh is founded for the development of control systems.

Another new product group: ifm distributes encoders from IHI; later it will be devices from the market leader Heidenhain.



The current  
ifm UK branch  
in Hampton.



**Joy Rahman,**  
*ifm group of companies, Germany*

**From Great Britain to the wide world.** In 1981, I went to England with great confidence after Managing Director Gerd Marhofer and Sales Manager Horst Jeruschke had given me their blessing – not yet



realising what storms awaited me. The family went along, also with great confidence and not knowing what to expect.

Thus began the joys and sorrows of house hunting. We stayed in a hotel during the transition period. There the heating would brake down occasionally in the middle of the cold and wet English winter. But my colleague Meinhard Born, who was responsible for international sales at the time – and therefore also for the UK – was not to be deterred. Inventive as he was, he simply replaced the heating with his hairdryer.

As the search for an appropriate office turned out to be very difficult, we initially preferred to operate from home until we finally found an office with a backyard atmosphere in Staines. However, we got used to the new surroundings and the external conditions improved over time. I was able to go looking for customers again. I also experienced a few unusual things. For example, I was under surveillance by Scotland Yard for a while. The explanation was simple: Our dear South African neighbour turned out to be a mini James Bond and all his acquaintances were under surveillance by Scotland Yard.

By 1983, Meinhard Born had had enough of England, partly because his area of responsibility had expanded, and so ifm made me

Managing Director. One thing led to another – one employee became two, two became three, and with more employees came more worries. One day, something very mysterious happened. An employee wanted to go for a barefoot walk along the Thames during her lunch break; she never returned. But the shoes stayed. We were naturally very upset and alerted the police; but this Cinderella had vanished into thin air.

A lot has happened during my 16 years in England. The fact that the company continued to grow and spread across the British Isles, moving to appropriate headquarters in Hampton Court, should not go unmentioned at this point. This was only possible thanks to capable and competent employees.

1996 marked a new beginning for me. Gerd Marhofer called me back from England. From then on, I travelled around the world for 80 days a year or more to spread “the good news of the Marhofers”. These journeys around the world in 80 days or more have given rise to a popular saying. Wherever my travels took me, a new branch was founded! In 14 years, 20 branches have been established on all continents, helping ifm to continue to grow.



**Bernd Busch,**  
*ifm group of companies, Germany*

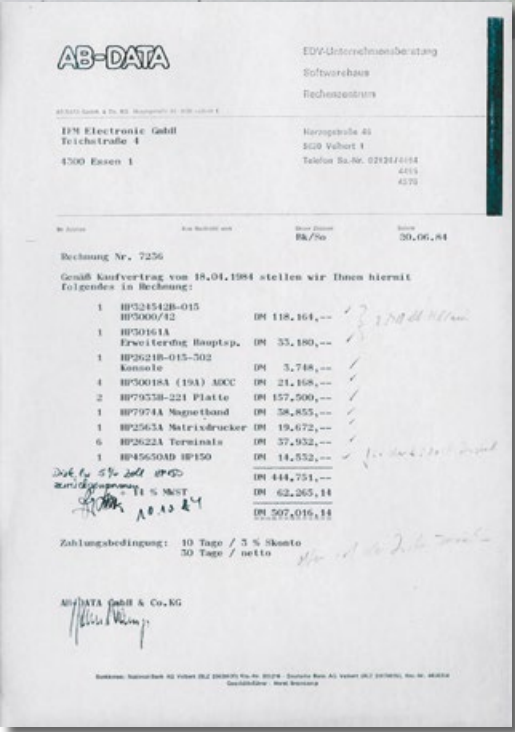
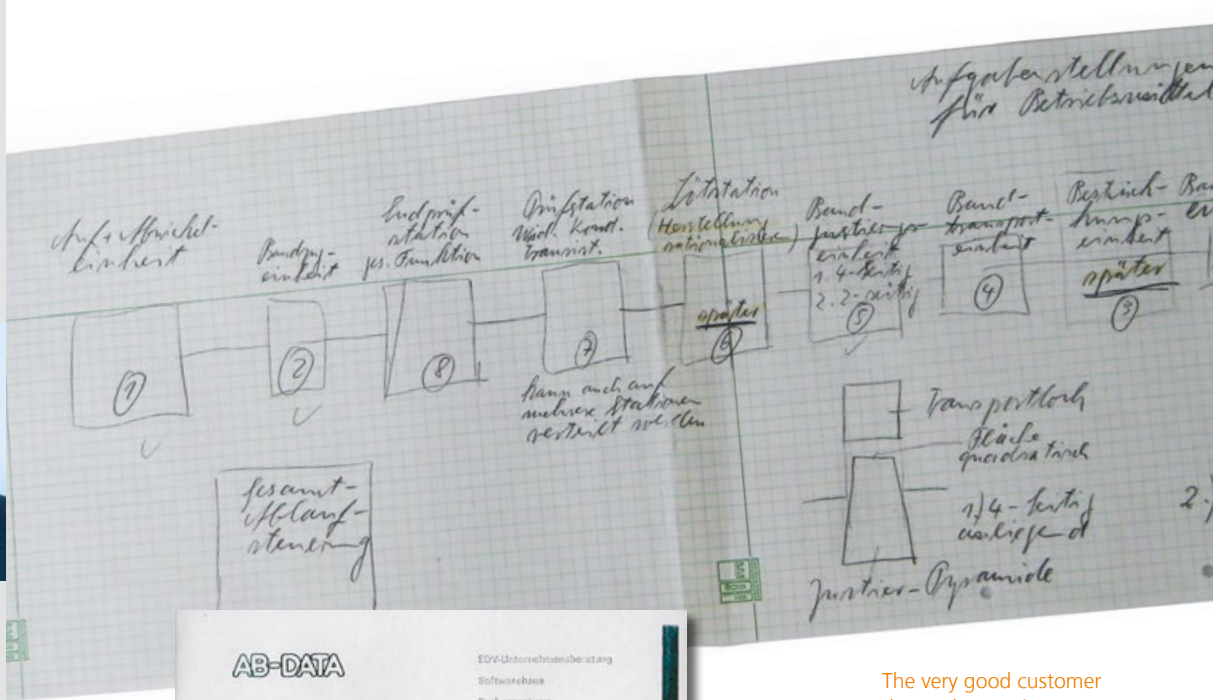
From punched tape to an ERP system. There was no computer until 1979, and it was not until around 1980 that the first magnetic stripe reader was purchased in Tettngang. This made it possible to process bills of materials. Each item and component had a card number and a magnetic strip with different holes on which the information was stored. For example, if you wanted to build a hundred items, you had to feed the corresponding strips into the device and it would then calculate accurately how many components you had to order. This was the first electronic calculating device for materials management (a forerunner of BaaN or SAP), but unfortunately it never worked properly.

The first invoices had three carbon copies, the white original was for the customer, the yellow one was for the sales department, the blue copy was for the branch office and the red copy was for the accounts department. So if we wanted to know what the turnover was, we were given a pile of red carbon copies of the invoices every day that we had to add up. Only if we were lucky, doing this three times would lead to the same result. That's how we used to calculate the turnover back then. A breakdown by product or customer was not even to be thought about at that time; there was only the total turnover.

At some point, it was no longer possible to process everything manually, so the first Nixdorf computers were purchased. Each ifm location now had its own computer. Every week, a huge 5¼-inch disc would come in from each location that was then read in and added up. This made things a lot easier!

In 1980, an HP 3000 computer was initially purchased in Tettngang for materials management. The first predecessor of the ERP software in Tettngang ran on it. Since there was no network between the locations yet, an extension was created for Essen and the sales department with the Nixdorf computers, the AWE-Data. This was the first official ERP system on the sales side and later also for order processing. The decision as to which ERP system would be suitable for ifm was not an easy one to make at the time. The large software manufacturers such as SAP and BaaN sprang up like mushrooms and a decision had to be made in favour of a common system. The HR department was already working with SAP and after a few tests it was generally agreed that SAP would be the better system, despite the high costs.

That was until the day when our managing director Gerd Marhofer gave me a report from Wirtschaftswoche, which I still have today. The title said, "Like lemmings...!" which meant that nobody really asked any more questions, but simply switched to SAP. We then entered into further negotiations with BaaN, which was represented by Mr Petersen at the time. A newspaper article triggered the decision in favour of BaaN.



Invoice for the first HP server at ifm in Essen. Remarkable: the pricing of the components

The very good customer demand necessitates a gradual expansion of the operating resources developed by ifm itself, here is a sketch by ifm founder Robert Buck †.

## 1982

- 11 March: Dipl. Oec. Bernhard von Spiczak is appointed as a further Managing Director of ifm electronic gmbh.

**Berthold Schocker,**  
*ifm group of companies, Germany*

Developed in-house. Keeping the important things in our own hands was essential to our founder, head of technology in Tettngang and engineer Robert Buck † right from the start. The equipment, i.e. devices and machines for assembly, were developed and built in-house right from the start. There were several reasons for this:

1. We could go our own way, technologically. One example of this is film technology, something completely new. A flexible circuit board that can be rolled and folded, making it possible to put a lot of electronics in a very small space, which of course has a major impact on the sensor design. Ingeniously conceived and executed, only possible with competent employees from very different specialisms. Or laser technology: for welding, cutting, labelling and adjusting the electronics. A technology that is of the highest standard at ifm.

- ifm Tettngang buys its first IT system.

2. If the equipment is developed and built in-house, the right employees are immediately on hand to intervene in the event of a malfunction. Another important advantage of this approach is the opportunity for continuous improvement of the devices and machines, as it is only when working with them that further potential for improving quality and rationality can be recognised.

3. This approach ensured that the sensor design team worked together with the assembly technology specialists. This constellation enabled mutual stimulation, always with the aim of achieving the highest quality and rationalisation.

Other important things included ifm's in-house prototyping department, its own toolmaking shop with plastic injection moulding, the sleeve turning shop and, last but not least, the mechanical and electronic training department.

- ifm electronic in Tettngang takes on its first trainees; the head office in Essen follows in 1984.



Equipment construction at the Tettngang plant.



**Albrecht Bär,**  
*ifm group of companies, Germany and Asia*

**Sales launch in Japan.** I came to Japan when I was 33. We want to conquer all of Japan and Asia from Tokyo and be successful. The biggest problem was that in Japan, “sales” meant something completely different: In Japan, you would sit in the office, waited for customer calls you then answered, and sometimes you would also visit customers if there were technical problems. Sales work like in Germany was not known. So what should I do as a young, motivated ifm guy in a country whose language I didn’t speak and where everything was new to me?

We had a young interpreter who came once or twice a week. Then issues would be discussed in detail, and so it went on step by step. I was able to motivate the sales staff to visit customers – that was the first step. Then I noticed that the sales staff travelled to the company by train from home in the morning (which meant a two-hour journey for many), made phone calls to customers and prospective customers, made visits and then parked their car at ifm again in the evening and travelled home by train. That was the daily rhythm of the sales staff. Certainly not efficient.

Once I had recognised the system, I suggested that everyone could take their car home and drive to their customers from there, as they all lived in their sales area. This would save them a lot of time and enable them to be with the customer sooner. The answer was silence.

After two weeks, I realised that nothing had changed. “What’s the problem?” I asked. “We don’t have a car park at home, and if we use

the car after working hours, we’re not insured if an accident happens.” “OK,” I said, “from now on, everyone will be on duty for ifm 24 hours a day and everyone will rent a parking space near their home and the company will cover the parking costs.” Everyone nodded – and the problem seemed to be solved.

After a further two weeks, there were still no recognisable changes in the system. “What’s the problem?” I asked during the next meeting. “If we want to make customer contacts, we have to use our private phone. It then becomes the “company phone” at home. And then our wives can no longer use the phone.” Company property is sacred to the Japanese and would never be used for private purposes. “OK,” I said, “don’t tell your wives you’re making business calls and ifm will pay the phone bill. Use the phone and give me the bill at the end of the month, and then you and your wives can use the phone.”

Another nod of understanding. And now that all sales organisation problems seemed to have been solved, we started in mid-1980 with three sales employees and a sales system similar to that in Germany.

It should also be mentioned that the sales employee who had the most reservations at the beginning was the first to win a large order for 1,000 IB-2020-ABOWs!



Managing Director  
Bernhard von Spiczak  
(left) with ifm founders  
Gerd Marhofer (centre)  
and Robert Buck † in  
the mid-1980s.

**Ulrike Lechtenberg,**  
*ifm group of companies, Germany*

**Surprise call.** I realised very early on that the type of collaboration and the working atmosphere at ifm were different to other companies.

I had prepared a translation for the managing director, Mr Marhofer, and handed it in to his secretary. It was, of course, long before e-mails existed. A short time later, my phone rang. “Marhofer.” I got a big fright, because the first thought I had was, “What was wrong with my translation? Which mistakes have I made?” It would never have occurred to me that the owner of ifm could just call to thank me personally for the quick translation.

That really impressed me and is representative of many similar experiences I have had at ifm over the decades.



Football at ifm: The match between Essen and Tett nang/ Vertrieb takes place in Lüdenscheid.



Neon art is the trend:  
The exhibition stand  
at Interkama 1983 in  
Düsseldorf appears in a  
special light.



**1983**

The sale of the PB80 programmable logic controller marks the launch of the new control technology product area.

## 1979–1983



**68**  
MILLION DM IN  
SALES



**440**  
EMPLOYEES



**183**  
PATENTS



**6**  
COMPANIES



Product milestones



Photoelectric  
sensors



1984-88

Investing in the future.



Viele Branchen, eine Lösung.

Qualität und Leistungsfähigkeit von Sensoren und Steuerungen sind die Grundlage für erfolgreiches Automatisieren. ifm electronic entwickelt und produziert Automatisierungstechnik, die speziell auf die Anforderungen der industriellen Erzeugung...

ifm electronic  
weil richtige Entscheidungen sicher sind

Sensor-System  
optoelektronisch



HANDELSBLATT — Seite 19

## Signatur der Zeit

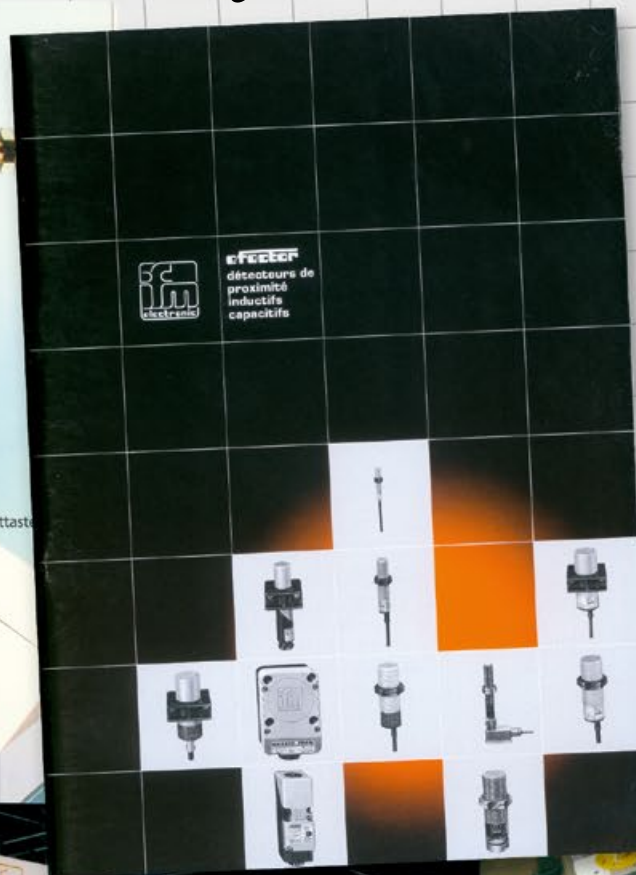
Zwei Revier-Ingenieure und ein schwäbischer Tüftler  
schufen ein äußerst erfolgreiches Elektronik-Unternehmen



Produktion im Revier

Marketing und Forschung

Das knifflige ifm-Puzzle  
The tricky ifm puzzle  
Le tricky efferet : un jeu difficile



ifm electronic • 443 Essen I





Wolfgang Kaiser,  
ifm group of companies, Germany

**Flow monitoring.** In the early 1980s, sensors for the monitoring of flowing media only insufficiently fulfilled the requirements placed on them. This was also clear to the managing directors and founders of ifm and they saw the opportunity to develop this market with a new sensor.

Small and reliable, easy to handle and cost-efficient, producible in large quantities at a high quality – these were the requirements.

Relying on external development support at first, a rather limited product range of calorimetric flow sensors was presented after two years at Interkama 1983.



Of course, the ifm sales force and the customers had to be convinced of the sensor's features and advantages at first.

The principle of the sensor system requires the heat generated in the sensor to be conducted away. By nature, this conduction is done by media such as gases or liquids, whose flow the sensor is supposed to monitor. By blowing on the sensor until one's head turned deep-red or relocating the meeting to the washbasin of the men's toilet, the operating principle of the sensor was convincingly demonstrated during the first training seminars and customer visits.

However, just like the product range, the demonstration and presentation of the products has been refined over the years, so that inundations of the fair stand (which regularly occurred at the beginning) have become a thing of the past...



Sports activities:  
Table tennis tournament in  
the still unfinished rooms  
of the headquarters in  
Essen.



In 1985, the  
foyer of the  
headquarters  
is redesigned .



1984

ifm launches electronic flow  
monitors; development of  
the new product area "fluid  
sensors".

ifm identicom (= identity  
and communication) emerges  
from Werbeberatung  
Günther Diederichs.

The model workshop  
in Teichstraße shortly  
before Interkama 1986 .  
Back then, the models  
to present the products  
were designed and built  
in-house .



Albrecht Bär,  
ifm group of companies, Germany and Asia

**Seminar for boozers.** During my visit in Taiwan, our trade partner organised a seminar especially for members of the machine building industry . It took a good two hours and was held at a hotel. Everything went well, and in the evening, some important customers were invited to a dinner.

There were round tables of twelve and of course, the dinner provided an occasion to further discuss technical data, applications and questions. At the beginning, the Branch Manager gave a short speech ending with the words "Thank you and cheers, Mr. Bär". I also thanked him and the glasses were filled with beer and the Chinese "Shaoshing Wine". Then a Chinese "Ganbei", which means "bottoms up!". Then we ate and continued our discussions. After about 2 to 3 minutes, the Branch

Manager raised his Shaoshing wine glass in my direction. So I did the same, saying "Ganbei". After another 2 to 3 minutes, his neighbour raised his glass to me. "He is just being nice," I thought. It was only when the next dinner guest raised his glass about 2 3 minutes later that I realised everyone had conspired against me. So I put a good face on the matter, and about half an hour later, everyone had had their turn and everyone was having great fun . No one else had had more than 2 glasses – I had had 13! I smiled and thought: "ifm never loses!"

Of course, one has to understand the Asian mindset. If you say "no", you are seen as weak, and a "weak" drinker is regarded as a weak businessman.

However, Europeans have the advantage that their bodies metabolise alcohol more quickly. Asians tend to flush easily when drinking alcohol.

Therefore, I came up with my own strategy: I checked which dinner guests already had a slightly red face and then raised my glass to this gentleman. Of course, everyone quickly caught on to my strategy and we ended up having a very successful and pleasant evening.

Without staggering too much, I said good-bye after dinner, and while the others looked rather knackered, I walked straight to my taxi, got into the back seat and slept through the three-hour return journey.

When in Rome, do as the Romans do.



**Björn Lenér,**  
*ifm group of companies, Sweden*

**Production way up north.** The reason for the location in Överlida was that Managing Director Heinz Korn Senior had a summer cottage in the forest close to some lakes near a small village called Kalv, approx. 20 km southeast of Överlida. Actually the location in Överlida was from a logistical point of view perfect at that time, straight in the middle of the Swedish single main textile area where a lot of big catalogue postal order companies had their business, with a lot of transport solutions.

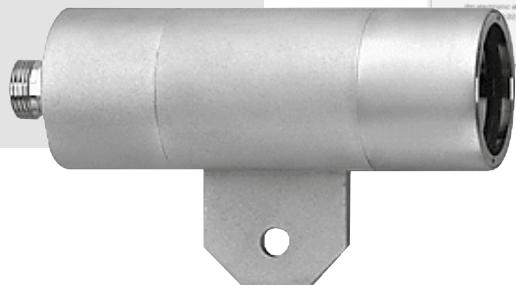
The first location was in a basement in an apartment building in the center of Överlida, called Cityhuset (=city house).

The production in Sweden started in the mid-1970s. It made it possible to react very quickly to customer wishes and demands and our approach on the Swedish market was very customer oriented with flexible solutions. This helped us of course to become the market leader in our segment.

During the years we produced mainly inductive sensors, normal sized, but also the big ones, internally

called the mines. We also produced capacitive sensors, flow sensors and infrared heat sensors. After we became a 100 % subsidiary of ifm we changed a lot of our technology to ifm technology and started with the production of semi-finished products to replace all standard inductive types. We developed the infrared sensors together with the opto-department in Tettnang so that we used the same output electronics.

Another attraction for the German visitors to the subsidiary in Sweden has been the possibility to see elks, which was quite common in the forest area in Överlida. There are many stories about this. We remember quite some ifm visitors who reacted strangely when they saw an elk for the first time in the wild.



Infrared sensor  
"made in Sweden".

## 1985

The company SSE, partner company in Sweden, becomes a subsidiary of ifm.

Expansion everywhere:  
Ground-breaking ceremony for the new building of ifm Süd-West in Heppenheim.



Manufacture in Överlida, Sweden: Final assembly of inductive sensors.

**Dieter Kaiser,**  
*ifm group of companies, Germany*

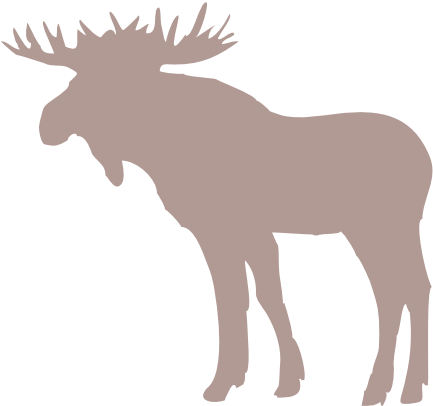
**Industry work.** Back then, there was no real industry work with evaluations etc. There were too many "blank spaces", i.e. industries in which we were not represented. Wherever a trend emerged, we immediately jumped on it. At first, we did not address big customers at all. Our strict pricing policy did not allow for this. In this area, we could not keep up with our competitors, who were prepared to make price concessions. Back then, ifm was not as financially secured as today, and such things were impossible for us. For the same reasons, the automotive industry was not among our target customers at first. We wanted to avoid becoming too dependent. It was only under pressure from the sales department that we entered

this field of business. Today, most of our customers are from the automotive industry or are directly or indirectly involved with it. These customers also urged us to produce metal units. At first, our management declined to manufacture those, but the automotive industry in turn refused to install units made of plastic, which made increasing the customer base very hard.

ifm mainly took the way via the end user into machines and applications while many of our competitors took the way via machine builders. The end user market was the market our competitors avoided and therefore the market our management decided to conquer.



Inductive sensors become available in metal design and with connectors.





**Ulrike Lechtenberg,**  
*ifm group of companies, Germany*

**Interpreting in the USA.** In 1985, ifm decided to set up a joint venture with the American company ATC. ifm contributed the products, ATC the distribution network, and so the American market was to be conquered.

Two years later, however, it turned out that the two companies had rather different objectives: ATC was interested in short-term profit, while ifm pursued a more future-oriented strategy. Therefore it was decided to acquire ATC's shares.

For this purpose, our three Managing Directors and owners at that time Robert Buck, Gerd Marhofer and Bernhard von Spiczak flew to the USA to conduct negotiations with the Americans. A few days before the meeting was scheduled, Mr von Spiczak contacted me and asked me to interpret during the negotiations.

Back then, I had only been at ifm for a couple of years. But I knew that Mr von Spiczak's English was excellent and that Mister Buck and Mr Marhofer were fully capable of conducting negotiations in English as well. Therefore, I was very surprised when they asked me to support them at this meeting. And I was very nervous, because I had never conducted such

an interpreting session before. And now I was to accompany the management to important negotiations!

The negotiations went on for several days. Our management had asked me to interpret consecutively, i.e. let the speaker say a few sentences and then interpret these sentences into the other language respectively. Only afterwards did I realise how advantageous this kind of interpreting was for our management. On the one hand, it established a balance between them and the Americans, as everyone could speak their mother tongue. On the other hand, it was very clever to have me interpret whole passages of speech, because our chief negotiator, who had understood the English explanations without problem, used the time during which I spoke to carefully draft his answer.

The negotiations were very successful. With the successful takeover, ifm efector USA emerged from the joint venture. Back then, only a handful of full-time employees worked for the joint venture. Today, ifm efector has several hundred employees and is one of the biggest ifm subsidiaries!

in 1986, for the first time, 1 million efectors are produced in one year, and production manager Hans Holländer proudly presents the result together with his management colleagues in Tettngang.



New production hall at the Tettngang plant.



In the mid-1980s, ifm's complete product range easily fits on a magazine insert.

**Gerd Heß, Managing Director**  
**HUPPERZ Systemechnik GmbH**

Since 1986, the company HUPPERZ Systemechnik (which started as a sole proprietorship and today is a limited liability company (GmbH)) expanded its business relationship with ifm. The cooperation started with the construction of different demo boards for ifm identicom.

The first development order and delivery agreement were concluded for the E65000 SSI controller. Since then, approx. 60 different products have been developed or manufac-

tured according to production specifications (e.g. from ifm ecomatic). In 2011, a turnover of EUR 290,000 was achieved. ifm electronic's high reliability lead to a long-term partnership. Besides, the two Managing Directors, Gerd Heß and Johannes Hupperz, used to work for ifm for a few years.

In short: ifm electronic is a company for the future!

## 1985

1 January:  
Cooperation with the company ATC in the USA under the name of efector inc.

In a first step, the production department at the Tettngang plant is extended from 4,500 to 10,000 m².

Internal communication is key: ifm starts publishing a magazine for employees, ifm notice, in three languages.

## 1986

For the first time, 1 million efectors are produced within one year.





**Wolfgang Weiland,**  
*ifm group of companies, Germany*

**Hot service assignment.** Let me tell you about a service assignment at Sairstahl in Völklingen. They had a continuous casting plant in which 56 of our ST3204 flow monitors and 14 of our SR0012 evaluation units were installed – back then, these were rather impressive numbers.

The problem was that the sensors at that time did not respond very well to fast temperature changes, which again and again lead to faults when the cooling water temperature increased too rapidly.

In order to help the customer quickly and unbureaucratically, my colleague Wolfgang Kaiser and I went on a service call. What we did not know: Temperatures are very high in steel plants, particularly at the continuous casting plant (approx. 33°C), which makes working rather difficult. Setting the 56 sensors took the whole day. But in the end, the customer was very satisfied – and we were finally relieved of the heat.



The branch office ifm Nord constructs a new building in Großburgwedel near Hanover.



Opening of the branch office ifm Nord.



efector inc. in Exton, Pennsylvania, USA.



Storage in Bochum-Wattenscheid.



Members of the management at the reel-to-reel placement machine at the Tett nang plant.



B.M. Friedrich develops the first ifm controller at ifm ecomatic: the ecomat 100.

**Bernhard von Spiczak,**  
*ifm group of companies, Germany*

**Tradition at ifm.** To celebrate the grand “opening” of the new/old branch office in Exton, Pennsylvania, there was a big dinner. Among the guests was young engineer John Ibbetson (today Sales Manager in the USA) who was having his first day at ifm . As we were celebrating a very special occasion, we had decided on a very exclusive restaurant. I gave a short speech. At the end, I welcomed Mr Ibbetson as a new member of the ifm family and not quite seriously informed him that at ifm, it was a tradition that the newest employee had to pay for such

dinners. He took my joke seriously, and looking at the prices on the menu, he became visibly nervous. Later, we of course explained to him that it had all been a joke, and he was very relieved.

Years later, we talked about this evening, and he told me that he had worried throughout the dinner until told the truth about how much he would have to pay and how he was supposed to explain this all to his wife.



## 1986

ifm presents the first in-house development in the field of control technology: ecomat 100 for industrial use – with award-winning design.

## 1987

In November, ifm's first pick-and-place machine is put into operation at the Tett nang plant.

efector inc. in the USA becomes a 100 % subsidiary of ifm .

Move to the new warehouse in Bochum-Wattenscheid, 250,000 items in 1,500 m<sup>2</sup> of storage space.



Misako Okada,  
ifm group of companies, Japan

Tuesday is Toyota day. The car manufacturer Toyota has its own standard for bought-in equipment, including for sensors. The devices are checked using different criteria such as performance, safety, universal applicability, procurement, delivery, prices etc. Only devices that have passed all these tests receive a so-called TMS standard number. These devices will be preferably used by Toyota. This means that the TMS standard is indispensable for a successful cooperation with Toyota.

In 1983, ifm opened a branch office in Nagoya. The most important customer in the Nagoya region is Toyota. Therefore, it was very important for our branch office to obtain the TMS standard for ifm sensors. Devices that had never been used by Toyota had no chance of receiving the TMS status. It was important that Toyota had made their own experience with the device.

We decided to initially focus on Toyota's maintenance departments. Toyota has many plants, and every plant has approx. 5 to 25 maintenance departments. It was very important to visit these maintenance departments on a regular basis, as we wanted them to get to know us. Mr Sugiura, branch manager at Nagoya at that time and later managing director of ifm Japan, used to spent his Tuesdays visiting Toyota. Tuesday was his Toyota day. Each maintenance department (more than 200) received a folder containing an ifm catalogue and documents. He met so many people at Toyota that we received more and more enquiries regarding ifm sensors. Thanks to our fast troubleshooting, our contact with the maintenance technicians grew closer and closer.

Besides the TMS standard, Toyota assigns a registration number to all devices bought by Toyota. Under this number, all relevant information of the manufacturer such as article number, price etc. can be accessed, which allows the maintenance department to order the right replacement units. All maintenance departments have some of these Toyota devices in stock to be used in emergencies. Of course, their shelves were well-stocked with sensors from our competitor Omron. Mr Sugiura noted down all types of Omron devices used and offered the maintenance department corresponding ifm alternatives. Due to the close contact established via the weekly visits, we immediately received a registration number for the ifm devices. An overview of the ifm devices and their registration numbers was created and put on the wall at all maintenance departments. This facilitated ordering for the maintenance departments and we received more and more orders from Toyota.

Toyota made good experience with ifm devices; we adjusted the prices according to the registration list and made sure there were sufficient Toyota devices in stock in our warehouses and our agents' warehouses. This helped us to meet all requirements of the TMS standard. In 1987, three years after the first Toyota Tuesday, ifm sensors obtained the TMS standard.



ifm starts manufacturing in Le Bourget du Lac in France.

## 1987

9 June:  
ifm obtains the office building in Teichstraße 4, in the town centre of Essen.

The new production hall in Tettng is completed.

## 1988

18 April:  
Butron and ifm ecomatic merge into the new ifm ecomatic gmbh for the development and production of evaluation and control systems.

The sales tool "Beute", programmed by the IT department, makes it possible to check the figures every second. For the first time, turnover exceeds DM 10 million per month.

November:  
ifm France's newly created production site in Le Bourget du Lac starts business.

Ruth Weidtkamp,  
ifm group of companies, Germany

David versus Goliath. The highly qualified employees of the patent department of an electronics giant had never imagined this: At the beginning of the 1980s, the relatively small company ifm actually sued the global corporation for infringement of its patents ("inductive proximity switch" and "electronic, preferably non-contact switching device")! ifm wins the case before the Düsseldorf Regional Court and the opponent is ordered to cease and desist and pay compensation.

The electronics giant reaches into his bags of tricks and tries to have ifm's property rights invalidated by filing a revocation action.

The situation calls for courage, determination and stamina. Focusing on these strengths and benefiting from the expertise of our patent attorney,

Dr Hans Dieter Gesthuysen, we battle our way all the way up to the Federal Court of Justice. On 10 March 1987, Mr Gesthuysen and I travel to Karlsruhe. On this memorable day, David and Goliath meet before the Federal Court of Justice's Civil Panel X for oral proceedings. Finally, the judge suggests that the two parties conclude a settlement.

The settlement negotiations end with a bang: The electronics group makes a one-off lump payment amounting to DM 6.5 million for the license granted retrospectively and for the future!

This amount, paid to ifm on 31 May 1987, was used for the development of new products and thus became an investment in the future of our company.

# 1984–1988

150  
MILLION DM IN  
SALES

1,300  
EMPLOYEES

173  
PATENTS

8  
COMPANIES

Product milestones



Flow sensors



Control systems



1989–1993

Yes I can!



ifm electronic

efector®

Betauung  
Na und?

Kapazitive Sensoren der ifm electronic sind mit einer feuchte Kompensations-  
gründet. Damit werden die negativen Auswirkungen der Feuchtigkeit auf die  
vorgelagerten führen können – w

VISION  
PHILOSOPHIE  
LEITSATZE

VISION  
PHILOSOPHY  
PRINCIPLES

VISION  
PHILOSOPHIE  
PRINCIPLES

...zu ifm electronic:  
Das  
ifm  
Service  
Telefon.



CISCO



Branch Manager Wolfgang Giesemann at the efector quadronorm presentation in Bielefeld in 1989. Lots of specials: the presentation box for select customers.



#### Wolfgang Petsch, ifm group of companies, Romania

**Wind of change in the East.** One Friday in November 1989, Mr Sdenek Kuhn, member of ifm's Czech sales force, and I drove back to Prague after visiting a customer.

We wanted to turn into the street where the National Museum is when there was a sudden holdup. The road was completely blocked. There were many, many people around us. Mr Kuhn turned to some teenagers who stood close to our car and asked what was going on.

We heard people shouting together, "Havel, Havel!" One of the teenagers told us that Václav Havel and Alexander Dubček were at the entrance, in front of this mass demonstration, advocating a complete political restructuring of the country. The "Velvet Revolution" had just been proclaimed.

We opened the car windows and shouted, "Havel, Havel!" as well. The people, most of them were young, looked at us, at our car, a

western make, and the German license plate. A huge crowd of people gathered around us and applauded us in broken German, "Thank you for supporting our cause as Germans!"

I will never forget this moment.



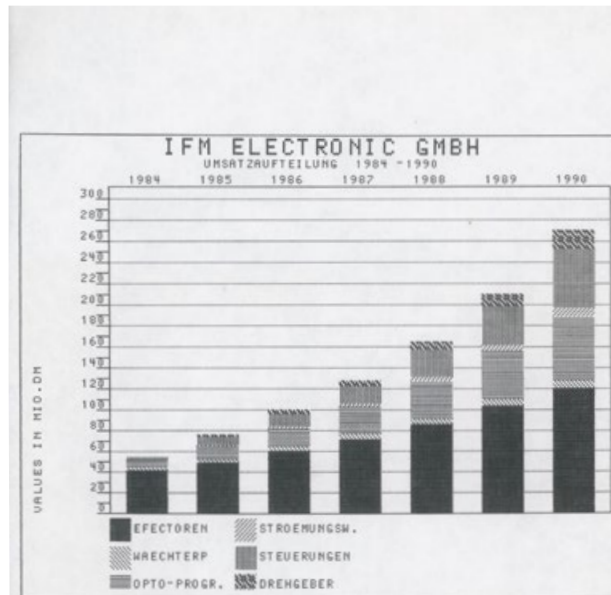
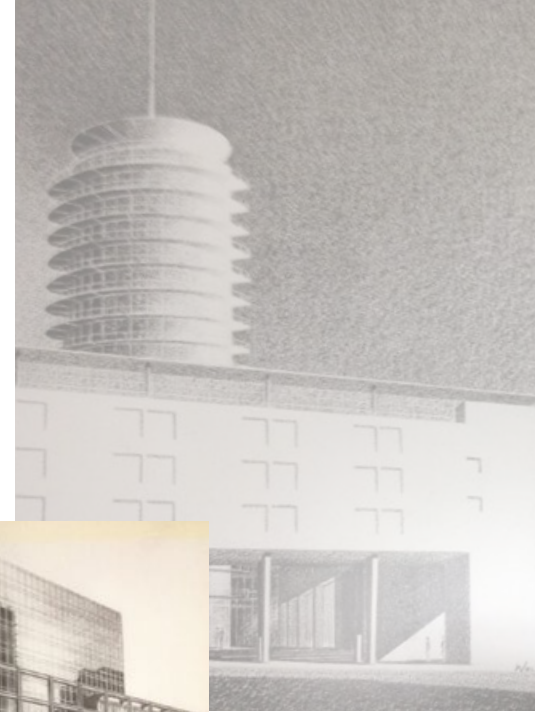
#### 1989

Further development of the proximity sensors with efector quadronorm (NC and NO / PNP and NPN in one unit).

The ifm logo and other brand logos are presented with a revised design.



By the end of the 1980s, there were first plans concerning the reconstruction of the headquarters between Teichstraße and Gildehofstraße. These plans, however, were dismissed again.



#### Brigitte Bostel ifm group of companies, Germany

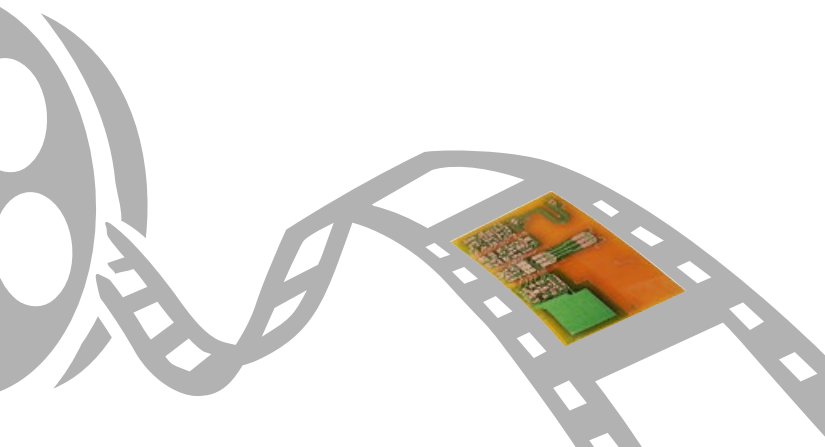
**A new beginning.** To begin with, we moved into an open-plan office in Weberstraße in Essen. That was quite impressive because now were a proper and representable company. When I came back from my maternity leave, however, everything had changed. I came to work and thought, "Good grief! You won't make it!" I was very nervous because I had no idea what my tasks would be now. Before, I had known everything, but now I was completely overwhelmed by the huge range of new products. Before, I had been able to give technical information on the phone every now and then because I had been familiar with all the products.



Of course, I had heard a lot about ifm during my absence, how big ifm had become, about the "efector Stübchen" and everything, but despite the new impressive image, I had always identified with the company – also during my maternity leave – and was proud of its success. My heart has always been attached to ifm. Nonetheless, the new beginning was difficult, despite my strong connection. Juanita Staub and Gerd Marhofer, however, gave me their support, and I started working on the organisation of trade fairs.

ifm's growth is dynamic: turnovers per product group.





The film technology department moves within the plant in Tett nang.

1990

As the only European sensor manufacturer, ifm electronic presents application solutions at the ENEX-ASIA in Singapore.

ifm publishes "Visions, Philosophy, Principles" as a hardcover book for all employees.

1 January: Office space is running out at the headquarters in Essen. Additional office space is rented in Teichstraße 8.

1991

At the plant in Tett nang, the film technology department moves to new and bigger spaces – a great challenge.

Michael Rohe,  
NOBAMED Paul Danz AG

All my experiences with ifm are positive – what distinguishes ifm's employees is their great technical competence combined with flexibility and reliability.



Family day in Tett nang in September 1991.



Bipin Jirge, Managing Director of ifm electronic India (r.), with Albrecht Bär (middle) and the German Ambassador at the IMTEX trade fair in Delhi.

Albrecht Bär,  
ifm group of companies, Germany and Asia

**Sensors for India.** I received a call from India. A young engineer, who had studied in Germany, wanted to establish a company and distribute our products as a trade partner. After the first business details had been settled, I needed to prepare for my first trip to India. The most important question was: What do I need to take with me? The answer was simple: catalogues in English and product samples. Preferably the large ID series for the steel industry!

I had it all in my luggage when I set off to India. With about 10 kilograms of excess luggage, twelve IDs and other types, I managed to fly to India without having to pay any extra fee.

When I arrived, all passengers were waiting for their luggage. We waited and waited. At last, the first pieces of luggage arrived, mine included. The new suitcase looked quite dilapidated, and there was a huge chalk mark on it. I took the suitcase from the belt, cleaned it a little and went to the exit. All of a sudden, a loud voice shouted, "STOP". I turned around, and saw a customs officer with a stern expression on his face, waving at me to come to his table. "Please open your luggage." The first thing he saw was, of course, the catalogues and then the sensors. "What is this and how much does it cost?" he asked. I said that they were switches at one Dollar apiece! Now

the discussion started. He did not believe me and insisted on calling his boss, claiming that the latter knew more about these things. More waiting. After about 10 minutes he came back – he hadn't found his boss.

I showed him a circuit diagram I found in my documents that had absolutely nothing to do with sensors and told him, "Look. How much is a transistor, how much is a resistor, etc.?"

He became more confident. Then I asked him another question, "This is only a very small part of the electronics. How big is a TV set and how many parts are in it? By comparison, such a switch cannot cost that much, can it?"

He looked at me, bewildered, seemed to think for a moment and then said, "Pack and go!"

I quickly packed my things and disappeared. I met Bipin Jirge – today he is ifm India's Branch Manager – at the exit. He asked me if there had been any problems and why it had taken so long. I told him the story. He laughed and said that I had really been lucky because the customs duty for sensors was 300 percent!

Just imagine I would have had to pay that in addition to the punitive tariff!



Wolfgang Schupp  
ifm group of companies, Germany

The early days in East Germany. In the beginning, the task was to find an office for our sales activities. That, however, was easier said than done. Our first attempts at locations we would have preferred were not successful, and so I decided to rent a mobile home to be more flexible while looking for an office. After the Fall of the Wall, there was no infrastructure – and no hotels.

My family and I occupied the car park of an inn called “Zur Kanone” where we were entertained with great hospitality. From here, I continued my tireless search for an office for our sales force, however, without any success. This could not go on forever. I asked the landlord of the inn for a room I could use on a temporary basis. This seemed to be rather unusual, and he needed some time to think before he offered me a very modestly furnished room for 350 Deutsche Mark per month. This room became the office from which I would operate for three months. The room did not have a bathroom. The bathroom was outside. Also, the heating did not work in winter. At minus 20 to minus 25°C! All you could do was sit under a blanket and work in bed.

One day, finally, I got a hint at the inn's regulars' table. One of the villagers told me that his neighbour wanted to sell real estate. I did not think twice. I bought the plot and built a semi-detached house there. My family and I moved in, too.

We had to move out again, however, after a few years because the branch office continued to grow, and there was no more space for us. Today, the branch office is still in this building. The first regional office was temporarily opened in Gera-Liebschitz. Here, we had ants walking over our desks. It is hard to believe, but it really was the best office we could find.



I fondly remember one of the first few times that ifm Managing Director Bernhard von Spiczak visited us. We were driving on a motorway that was full of construction sites and drove straight into a traffic jam. Since it did not seem to get any better, we lost our patience at one point, and I simply made a full turn right on the motorway and drove back on the other side to take a different route to our destination. Since there was no guardrail in the middle, this was the easiest and fastest solution. Mr von Spiczak was not quite used to such manoeuvres, and I must admit that I enjoy recalling his reaction.



First ifm base at the inn “Zur Kanone” in Tautenhain, Thüringen.



The Fall of the Wall: The first package with ifm products delivered from the branch office in Heppenheim to the GDR.



Ants on the table: ifm office in Gera.



1991

Automation technology for the “five new German states”: beginning sales activities at ifm East.

Tailor-made electronics: ifm develop and sell custom-er and application-specific controllers.

ifm-notice – the newspaper for employees of the ifm group of companies – is published with a new concept.



Outside the office: branch manager meeting in an unusual camping atmosphere in the early 1990s.



Branch office meeting at the campsite.





**Klaus-Peter Prause,**  
*ifm group of companies, Germany*

A mission that stinks to high heaven. The telephone rings, I answer, say hello, mention the time of day, my name and ask politely what I can do for the person calling.

“Listen, your flow monitors that we have installed at the construction site in England do not work properly. Sometimes they flash, sometimes they don’t. You better send one of your people here to have a look...”

“Hm, sometimes they flash and sometimes they don’t?” I ask politely. “Yes, that’s what I said,” he hisses back. I ask a few routine questions about the application. Since I have planned a business trip to England for the following week, this would be a good opportunity to have a look at the application. I mention this to the man on the phone, and he appears to be quite pleased about it. The customer sends a few more details by fax – at that time there were no emails yet. I ask for a translation of the fax and send it to our branch office in Hampton, England.

Who won the sales competition? “Legal” arbitration that was not taken too seriously plus evidence.

A few days later, we are on the premises of a big automotive manufacturer, at a distance from the workshops. Pipes with a diameter of an arm lead to an open basin. This basin is supplied with water from a nearby river through even bigger pipes.

I have seen many cooling water supply systems for welding guns on robots, but this is new to me and I am getting curious. We approach the “crime scene”, the place where the ST360 flow monitors have been installed on a welding robot. Everything according to plan. The question whether there is usually enough water in the pipes is answered with “Yes”. The pump is roaring, but the indication on the flow monitor is not stable at all! Surely something must be wrong? We ask the technician to remove a flow monitor. The good man does as he is told, and soon a ghastly stench hits our noses. A rotting fish has rolled itself around the sensor tip, thereby impairing the water flow.

The remains of the fish are removed – and the flow monitor functions like the customer is used to from many applications. The customer is baffled, and this unusual “service call” ends with a slightly embarrassed “Thank you”.

Shortly after, the customer installed filters and screens.



**Detlef Keller, Michael Perplies und Jürgen Sockel,**  
*ifm group of companies, Germany*

**Telesales.** In 1990, Gerd Marhofer introduced the ifm telesales service in order to support customers also by phone. In 1994, one of our colleagues began taking care of nothing but incoming phone calls. The team grew as the number of calls increased. And when even more calls came in after the 0130 (5659) had been adopted, which was free for the person calling, a system to distribute the calls became necessary as well. After 1996, the ifm Service Center (SC) officially became a separate department within the VMD main department (Sales Marketing Services).

At the same time, there was a dramatic increase of fun calls from “creative kids”. So during breaks and after school, the young SC team would receive a great number of calls from singing and rhyming kids. And heaven help us if we would respond! In that case, the redialling button would definitely be used more than once!

What is now the home, national and global data network consisted at the beginning of the two departments of a local network with a PC – approximately 386 SX with 16 MHz, 1 MB RAM, 40 MB hard drive, 5 ¼-inch floppy disc drive: large, floppy, little storage space), 14-inch monochrome monitor – and the software Open Access!



ifm mascot, “efi”,  
promoting the new  
telesales service.

Each telesales colleague had such a compact “network” at their disposal and was responsible for the weekly floppy disk data backup. In practice, this meant: Every Friday, after lunch, the telephone service would be over, and the data backup was initiated. The read/write heads of the telesales floppy disk drives would rattle along for hours. Those were the glorious early days of information technology...

Back then, in Teichstraße 8, each colleague sat in their own cube, surrounded by 1.70m high sound protection panels. You could hardly hear or see a thing.

Sometimes everyone would turn their heads up because someone would shout and solemnly proclaim, for example, that a hundred IA0032 had just been sold. That was a reason to celebrate, and every now and then we would indeed open a bottle of sparkling wine. While the floppy drives were rattling.



Behind scaffolds:  
the headquarters  
in Essen.

1991

The hot line to ifm – launch of the new telemarketing division.

1992

A new branch office in Spain.

At the headquarters in Essen, the facade of the office building from the 1950s is refurbished.



**Dress code in Switzerland.** It was my first trip to the branch office in Switzerland, in the early 1990s. I had almost reached the Swiss border when I realised that I had no tie with me. Just in time. I could still get off the motorway and drive to Weil am Rhein. It was not yet 3:00pm. The department stores were closed. To my surprise, they also stayed closed after 3:00pm. This is how I found out that stores stayed closed on Wednesday afternoons. I decided to drive on and to keep my eyes open. I was lucky. In Härkingen, close to the branch office, I found a shopping centre. And I did indeed find the missing piece of equipment there. So, the day after, I wore the new tie for my official visit. When I came to the branch office, the colleagues were wearing casual clothes. I was very surprised since I was used to very different customs. So I presented my topics, wearing my tie, and the colleagues participated in their casual clothes and sandals. When I said goodbye to Toni Schaad, he said, "Next time, you will come without a tie. Ties do not belong in our dress code." I wish I had known this in the first place. I am not that keen on wearing ties myself.

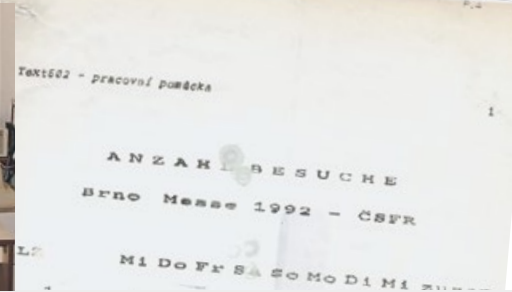


ifm branch office  
in Prohunice,  
Czech Republic,  
close to Prague,  
move-in: 1996.



- At Hannover Messe, ifm were first to present a fully functional version of the AS-i field bus system (Actor Sensor Interface).

- syntron gmbh
- now signs with
- the firm name
- ifm syntron gmbh.



Evaluation of the visit reports from the Brno fair in 1992.

**Christmas cake in September.** One morning in September 1990, at the trade fair stand of the company where I had been working, a German customer arrived accompanied by my then-boss. The two wanted something for breakfast. However, since there was no staff at the stand, the kitchen was closed. I offered them cake and coffee. The German customer looked at me with bewilderment and said, "No, I do not want to eat that!" I could not believe it! I had searched the entire fair stand for something edible, and when I had finally found something, this gentleman would refuse it? Now I wanted him to eat the cake even more and actively convinced him to have some of it.

I met this gentleman at the best café in Prague. He told me that, a few months earlier, I had convinced a customer to eat Christmas cake in September for breakfast, and that such skills might come in handy, too, when selling ifm sensors.

They needed a part-time secretary and offered me three times the salary I had as a graduate mechanical engineer. I did not think twice and said, "Yes".

This is how I came to a very small office in February 1991. There was one colleague, seventy-year-old Zdenek Kuhn, who showed me a Russian typewriter that I was supposed to use to write some kind of letters to potential customers. That was the first shock! Until then, I had always worked with a PC – which was really modern back in 1991. And now I was supposed to work for a German company using a twenty-year-old Russian typewriter? In socialist Czechoslovakia, we had always believed Germany to be at least a hundred years ahead. Well, Mr Kuhn

We got the new office. And only the Russian typewriter moved with us. When Mr Petsch came, he brought ten ring binders from Germany and two plastic boxes with empty customer cards. The ring binders had numbers and hand-written labels on them. I also got a phone register with three phone numbers:

1. Mr Wolfgang Petsch: of course, he was our boss!
2. Mr Heinz Kostedde: Regional Export Manager in Essen, but we were strongly advised not to call him!
3. Ms Brigitte Weiss: for orders, and my best colleague in Essen for years to come.

This is how we started. Zdenek Kuhn and I in Prague. Wolfgang Petsch would come every second Monday, and the two gentlemen went out to see customers. I did the office work and prepared customer calls for the weeks to come.

After a couple of months, it became obvious that we needed to see the customers more often since they were calling us and had technical questions, too. I got a company car and would also call on customers from now on.

Those were happy and really successful years. And it did not take long before we celebrated our first million in Czech crowns.

## 1989–1993



214  
MILLION DM IN  
SALES




**1,500**  
EMPLOYEES



**225**  
PATENTS



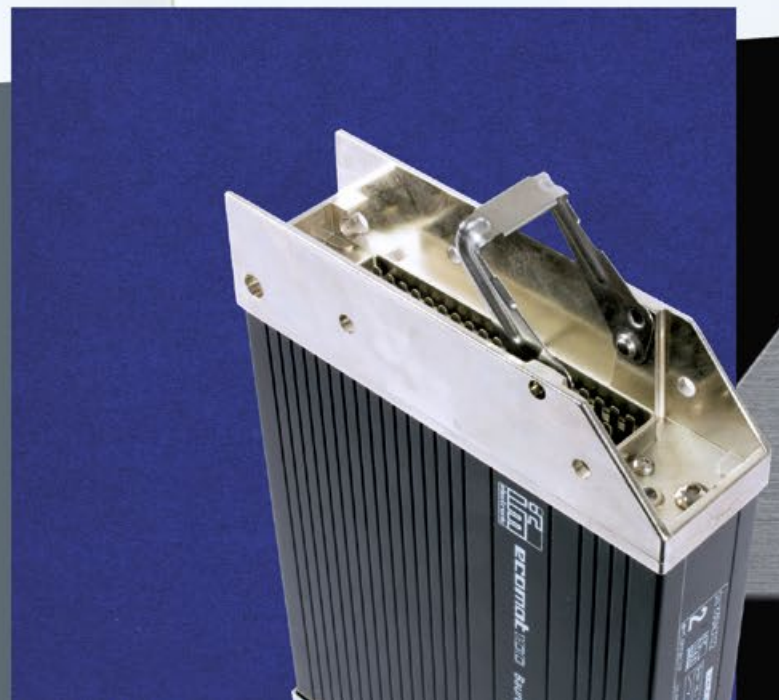
## 10 COMPANIES

 Product milestonesquadronorm  
technology

Industrial communication



New markets,  
new service.



1994–1998



**Meinhard Born,**  
*ifm group of companies, Germany*

In the beginning was milk. In ifm's philosophy, published for the first time in 1990, the chapter called "Market" contains the following motto: "ifm is a globally orientated company. The centres of our activities and investments for the foreseeable future will be in the U.S., in Japan and in Europe. However, we will not close our minds to opportunities in other markets."

This was the reason why I suggested at the AK-Global in 1994 that all countries should cooperate under my direction. A market analysis with end users and OEMs from the food industry was carried out by the university in Le Bourget du Lac in order to find the greatest common denominator to market ifm products.

At the AK-Global in 1995, Mr Gasparini from ifm France and Dieter Ebbinghaus from ifm Germany presented the results of the market analysis. In addition, weak points were shown up and possible products for the international market were defined. The selection was thoroughly evaluated.

Finally, the committee decided to begin by marketing this selection in the dairy industry, a part of the food industry. More than 80 countries participated in the campaign. The basis for it all was a special ring binder containing technical datasheets of all ifm products for the dairy industry. Of course, it was translated into all corresponding languages including the accessories, so that the customer could immediately plunge into complete automation.

In 1996, the worldwide marketing campaign was rolled out. It was accompanied by direct advertisement addressed to potential customers in

the dairy industry. Adverts and press releases in all countries also supported the campaign.

At the same time, the product management developed new products meeting customer requirements in the food industry in collaboration with the developers in Tett nang. This is how the first ifm EVT type socket for the food industry was developed and placed on the market.

At the AK-Global in Paris in 1997, Berthold Schocker from ifm Tett nang even presented the first prototype of a proximity sensor specially designed for the food industry. This was also the birth of the "shocker test" that is still famous today. In this test, all ifm products for the food industry are exposed to an extreme temperature shock. After first being immersed in ice water and then in boiling water, they must be 100 % functional according to a special test protocol. This set a new ifm quality standard.

Within the first year after the marketing campaign had started, more than 8,000 EVT sockets were sold to the dairy industry. ifm became renowned as a competent manufacturer of automation technology for special applications in the food industry. A great success that was initiated by all representatives of the countries that had participated in the AK-Global in 1994.



ifm celebrate their 25th anniversary. On stage: Gerd Marhofer (2nd from the left) with his colleagues from the Management, Juanita Staub and Horst Jeruschke, on the right: the host, Detlef Keller.

**Thomas Gaisser, Sales Manager, motrona GmbH**

The first business transactions took place in 1993. After a couple of initial project deals, motrona became a reliable ifm supplier producing bough-in parts that are tailored to ifm's requirements and feature ifm's brand labelling. The down-to-earth and friendly way of communicating and the goal of growing together on the market were among the reasons to continue our collaboration with ifm. The contact was very personal, and technical problems were always dealt with in an uncomplicated way. ifm electronic is a fair and reliable partner – even in difficult times!

**Jörg Schütze,**  
*ifm group of companies, Germany*

**Much ado about the oscillation build-up support.** In 1995, ifm electronic unexpectedly wins a lawsuit involving several millions concerning patent infringement against a competitor. This company, holder of the oscillation build-up support patent DE 3016821C2, accused ifm of massive patent infringement concerning all inductive proximity sensors produced since 1982. The distinguishing feature: high switching frequency thanks to an oscillation build-up support.

In a counter-suit, ifm electronic proves the invalidity of the patent and convinces the competitor to make an agreement. The competitor signs an agreement that keeps the patent intact. However, the competitor pays the legal cost of the opposite party (ifm) while ifm does not need to pay any compensation and may also use this patent for free in the future.

**1994**

- Foundation of an ifm company in Malaysia.
- ifm opens a sales office in India.
- ifm's first electronic catalogue for PC.



Michael Paintner, Klaus Unger,  
ifm group of companies, Germany

**Electronics under control** Interestingly enough, ifm never intended to become an automotive supplier. It all began with the contacts at the Hannover Messe.

With the goal of making it possible to open a vehicle without a key and in real-time, the company “Huf” visited our Hannover Messe stand in the mid-nineties. They found the solution for their application there: our film technology. Nothing else would suit the particular shape of the door handle. They wanted to buy our technology immediately. However, we did not agree to this.

At some point, we got a request concerning the development of a capacitive sensor for door handles. Actually, there was the regulation that ifm would not supply the automotive industry with products. The reason for this was that the high quantities, the business behaviour and the dictated prices did not comply with ifm's corporate philosophy, “growing successfully in security!”. With regards to Huf, the Management decided to stay faithful to the principle of not approaching the automotive industry actively through advertisement and customer acquisition. Since this case required our core competences while the technological risk was very small, we decided to cooperate with Huf.

The first tests with a capacitive sensor (KI) were immediately successful and met all expectations. However, the sensor was attached to the outside of the vehicle and therefore exposed to extreme exterior influences like

dirt, snow and rain. A “normal” capacitive sensor would be far too sensitive. This is why we developed the dynamic capacitive sensor that was to meet all requirements. This capacitive sensor was able to suppress dirt and beginning rain and thereby malfunctions while interacting with the door control. This was possible without straining the car battery too much and without enabling unauthorised access.

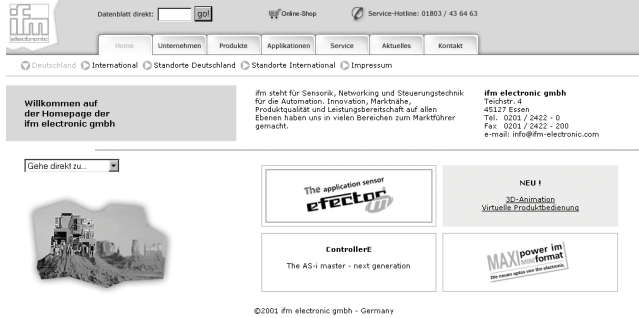
For Huf, this collaboration was one of the very first electronic developments. By collaborating with Huf, we were able to slowly approach everything else that is required from suppliers of the automotive industry. And this for one simple reason: Huf were dependent on our capacitive sensor that was flexible thanks to our film technology. There were not many other options at the time. This is why, in the background, Huf caught a lot from their OEMs. Therefore, we could start by focusing on the technology and by making a capacitive sensor fit for outdoor applications. With our two patents, the capacitive sensor and the implementation of the “mechanical key”, we were innovative pioneers in the entire industry back them.



The mayor of Tettngang, Harald Meichle, honours Robert Buck † with the golden medal of the city for his achievements for medium-sized businesses and the economic development of the city.



Study for a new type of pressure sensors – however, still in the rectangular design.



1994

Product launch of pressure sensors with innovative ceramic measuring cell and ground-breaking housing design.

1995

7 August:  
ifm founder Robert Buck † receives the golden medal of the City of Tettngang.

ifm unexpectedly wins a lawsuit involving several millions concerning patent infringement against a major US manufacturer.

Rainer Sasse,  
ifm group of companies, Germany

**ifm on the internet.** (Excerpt from an article about the internet in the magazine for employees, ifm notice, 1996).

In view of the dramatic growth of the internet last year and the available sources of information, it was only obvious to present ifm there.



By now, there are 30 50 million participants from all kinds of areas, such as companies, private persons, associations, organisations and universities who use the world's biggest data network.

Five pages (English and German), or “web pages”, as they are called, will inform curious “internet surfers” about ifm, our products and worldwide locations. The design was made by ifm identicom. Several parts of these presentations are interactive.

It includes, for example, a map of Germany with all locations. If you click on one of the locations, its address and phone and fax number are shown in a window that opens. Moreover, it is possible to send ifm an electronic message.

How do “curious surfers” find ifm on the internet?

You find the ifm presentation by entering search criteria in the search server (e.g. ifm or sensor).

What happens now?

After a test period of about six months during which we will be constantly informed about how often our website is visited, we will decide whether ifm's presence on the internet will be extended.



**Peter Winterscheidt,**  
*ifm group of companies, Germany*

**Toy cow and snow globe.** Those mailing productions in the mid-nineties were indeed quite elaborate. It all began on Gerd Marhofer's initiative. He wanted us to look into a trend that was very new in those days: dialogue marketing. Communicating new products on the market and strengthening existing customer relations were the goals, along with providing advertising support for the rather young team from the ifm Service Center. The contact with the customers was almost exclusively by telephone, and printed mail was the only way to provide customers with an image of ifm and our products. Well, the internet did not yet exist, and there was no ifm website...

A team of eight colleagues began to deal with the task and to develop a concept. The style of future mailing campaigns was quickly defined:

ifm mailings were to stand out due to their shape, size, creativity and content. The quality of the new productions was particularly high with corrugated cardboard boxes that were sent to a hand-selected number of customers. We surprised our customers with pyramid-shaped cardboard displays, an IND demonstrating its robust and water-proof design in a snow globe, a Rubic's Cube illustrating the infinite possibilities of the IMC that was brand-new back then, a message in a bottle that was sent to breweries, an ifm newspaper with a coffee mug, coffee, milk and sugar in an elaborate presentation box, and much, much more. One of the most popular gimmicks, however, was the toy cow squeezed into a tin: For the dairy industry, we packed a product flyer along with a toy cow into a tin. The tin that had a specially designed label was sent to the customers and caused a sensation. The reactions from the ifm staff would already have been worth the effort. It was fun!

It took some time, but in the end these extraordinary mailing campaigns would solidify customer relations, generate sales increase and help establish the ifm Service Center.



Quite unusual: advertising the IND dual sensor in the new direct mailing campaign.



Deputy Managing Director, Franz Müller, talking to colleagues in the USA: one of the very first video conferences at the Tett nang plant.

The new ifm syntron building in the industrial estate Schäferhof in Tett nang was finished in 1995.

RPD sensor (Rope Position Detector) for the ropeway and cable car manufacturer, Doppelmayr.



**Karl Brückner,**  
*ifm group of companies, Germany*

**The biggest (and highest) job.** In cooperation with the ropeway and cable car manufacturer, Doppelmayr, we developed a safety switch in 1996/97 that was produced two years after. It is a real highlight in syntron's history. Back then, we were the only ones capable of supplying such a product, especially from a technological point of view. Moreover, it had a patent. Hence, no other supplier could manufacture such a sensor. In return, however, we were only allowed to supply Doppelmayr with it.

The cables on ropeways have varying diameters. We opted for the average. The cable ran over wheels. ifm's fail-safe sensor was positioned in the middle between two wheels and would signal if the cable drifted from the middle or was leaving the guide rail.



We are not the only ones to believe that this sensor was a significant step forward in cable car technology. For safety purposes, cable cars were only allowed to ride four metres per second – before our sensor came. Thanks to our sensor, they now could ride at twice the speed, and it was even safer.

Tests were carried out at various stops. One night, a branch from a tree fell into the cables. No one had expected this, of course. Without our sensor, the cable car would simply have set off, and the branch would have caused significant damage and downtime.

This collaboration between Doppelmayr and syntron marked the beginning of ifm's safety technology.

## 1996

With the new presence on the internet, ifm offers information and services online.

Premiere: ifm produces more than five million sensors and circuits.

In Exton, Pennsylvania, USA, an ifm production is being established.

Control system with a new orientation: ecomat R360 for mobile vehicles.



The future of production in the USA: machines and production equipment from Tett nang have arrived.

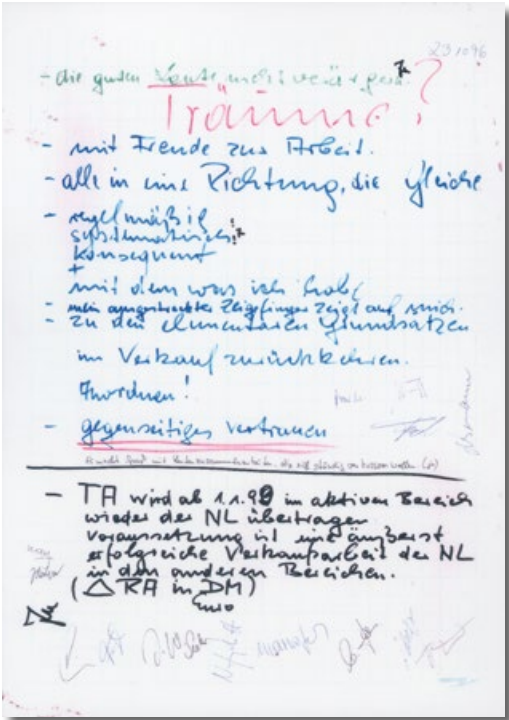


**Benno Kathan,**  
*ifm group of companies, Germany*

A design and technology pioneer. In 1994, ifm placed the very first pressure sensors on the market. The innovative design with the slanted display was a real eye-catcher. It was so convincing that even today, more than half of the twenty competitors are still using the design characteristics of the PN type. The special design of the display had one huge advantage in everyday use: It can be easily read from all angles. Unfortunately, no one had thought of having it patented. One reason for this was that companies back then generally tried to be very different from each other. The PN, however, changed it all. But not just the design brought this huge and permanent market success: In terms of technology, the PN surprised with a newly developed ceramic measuring cell with an above-average overpressure and pressure peak resistance. Even today, about 20 years after the product launch, the PN pressure sensor is one of our bestsellers. In order to be able to sustain this market success in the long term, despite of the constantly increasing competition, it became necessary to place the next innovative generation of PN sensors on the market in 2014.

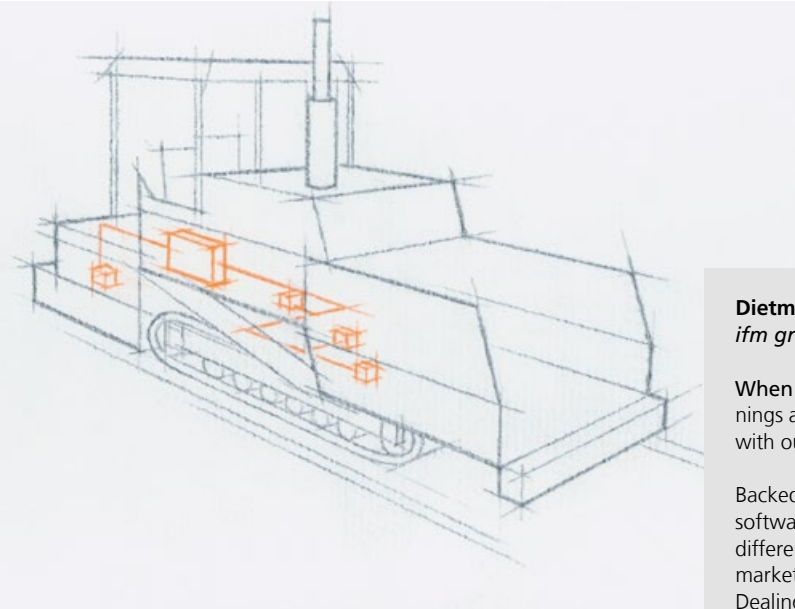


Even when times are rough, the colleagues at ifm stick together and support each other. During a meeting of all managing directors, a contract is “officially” signed (and drawn up on a flipchart) that motivates all participants to do an even better job in order to push the sales back to the top.



**1997**

- 1 December:
- the new storage building (approx. 1500 m²) at
- the Tett nang plant is put into use.
- costs: DM 1.5 million



**Dietmar Brüss,**  
*ifm group of companies, Germany*

When mobile machines learned to walk. All beginnings are difficult. And this saying turned out to be true with our first *ecomatmobile* projects.

Backed up by a lot of knowledge of our hardware and software, but with very little information about the different mobile applications, we approached a new market segment, the automation of mobile machines. Dealing with all those hydraulic hoses and cable harnesses was like being lost in a dense jungle.



We were even accommodated under the stars. Since there was no proper assembly shop and no laboratory equipment, software development as well as on-road tests had to be carried out “on the living object”.

Often, camping tables and chairs were set up, so that we could be as close as possible to the mobile monsters.

All this is long ago. Nowadays, the software projecting is in most cases done by the customer or a system integrator. And if we need to do the job ourselves, there will be experienced application engineers with professional tools at many ifm locations.

Sometimes, however, by the “campfires” in the evenings of sales meetings, the stories of the pioneering days of *ecomatmobile* are still being told.



The new central warehouse at Steeler Straße in Essen.

The central warehouse moves from Bochum-Wattenscheid to Essen-Steele, along with the order processing, requirements planning and technical sales services departments.

Extension of the product group “pulse evaluation systems” by a family of monitors and switched-mode power supplies.



**Benno Kathan,**  
*ifm group of companies, Germany*

From flow sensors to process sensors. Our two managing directors, Gerd Marhofer and Robert Buck †, have always taken a great interest in flow sensors. Today, the piece of paper on which Gerd Marhofer made a sketch of the “Strömi”, as the flow monitor is endearingly called, still exists. That was in 1979. It took years for the idea to be put into practice. However, Mr Marhofer had had the idea in 1979, and he knew that money could be earned with it someday. In the 1980s, there were a couple of mechanical solutions on the market. However, they all had the typical disadvantages. This is why, in the beginning, we only sold flow monitors as bought-in products. And we received a positive response from the market.

When Dr May became product manager for pressure sensors at ifm, he searched for a solution to monitor hydraulic systems. Dr May made a survey to find out what the customer really needed. What was different from before was that the people interviewed where not our usual customer contacts, but those who worked in the mechanical departments of our customers.

The subject became more and more important, so that soon there was a fluid specialist in every branch office. These would later turn into the so-

called “Prover godfathers”, the fluid sales specialists.

In order to be able to respond to the requirements in process technology, the ceramic measuring cell was not enough because it had problems with pressure peaks of up to 400 bar. Up until then, no measuring cell could endure this. However, the supplier from the USA only supplied the automotive industry, and the latter did not have these requirements. Therefore, there was no reason to meet our higher demands. Even a visit in person in the USA did not help. We wanted to break new ground with good ideas for the implementation of stronger pressure cells. However, people would always tell us that such developments should be made in the USA where all the creative heads were. By developing our own measuring cell in 2005, we showed them that we people from Swabia can also be quite creative. Moreover, we produced it ourselves, which reduced the supplier risk.

In 1997, ifm prover gmbh was founded. Back then, the subsidiary did not yet have its own premises. The market success, however, made it possible to move into our own building in 2000.

For the very first time, ifm electronic's public appearance is defined in the corporate design manual that is distributed all around the globe.



Experience trade fair history with ifm.

1997

Foundation of ifm prover for the development and production of sensors for the process technology.

Development of the first temperature sensors.

ifm establishes a branch office in Brazil.

**Heinz Kostedde,**  
*ifm group of companies, Germany*

**Pirates in Brazil.** In the mid-1990s, economy as a whole was becoming more and more stable in Brazil. A new currency, the Real, was introduced, and the inflation rate could be held at around 5 %. National and foreign companies planned investments with support from the government. In order to participate in this growing market, ifm was looking for a trade partner for Brazil in November 1995. After assessing the



companies that had been applying, we decided for Al Dantas. The owner, Mr Agostinho Dantas, knew a lot about automation technology, and his understanding of customer processing and, especially, service entirely met our expectations. He had good contacts in the industry, especially in the automotive industry. The other applicants were not considered since they were only interested in telephone selling at dumping prices.

In January 1996, Al Dantas began selling ifm products, with much success during the first year. During the second year, the sales increase was dramatic. However, it became clear that Al Dantas would not be able to cope with this growth without support and without running into seven-figure debts. In mid-1997, the Management in Essen decided to buy the customer base from Al Dantas and to establish a proper branch office in Brazil. Agostinho Dantas was appointed Managing Director of the new company.

However, before ifm Brazil could get started in January 1998, there was a big obstacle to overcome.

There was a company that had acquired the right to the names of “ifm electronic gmbh” and “efector” for the Brazilian Market in 1980. Introducing products with the brand names “ifm electronic” or “efector” in Brazil would have been illegal for ifm, and the other company would have been entitled to a licence fee for all sales. Taking legal steps against this brand piracy would have taken five to ten years. Consequently,

ifm carried on negotiations with this company to regain the right to the names for the Brazilian market. The company returned those rights to ifm for a price of US\$ 180,000.

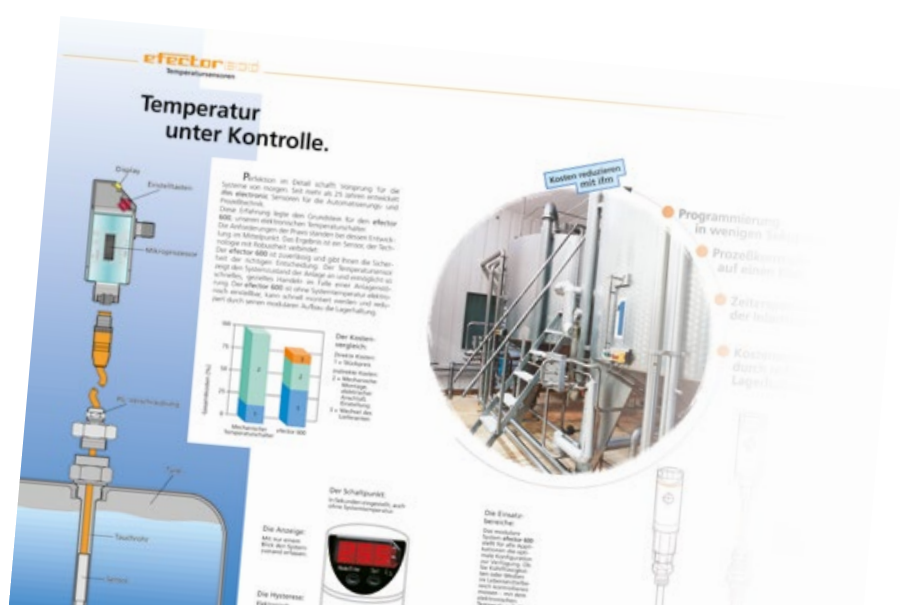
The next problem was that the company in question had copied ifm products and had been selling them in Brazil since the 1980s. They had done an excellent job copying the design. The electronics, however, were far from excellent. The units often failed due to electronic issues. This caused ifm a lot of trouble on the market, and it was necessary to make up for the image damaged by the brand pirates.

The ifm team, however, was not impressed and could not be stopped in its development. The sales increase was good, and the number of employees was also steadily growing. In 1999, the first recession was noticeable. Working hours were reduced in the automotive and other industries. ifm also passed this test. As a newcomer on the market, new potentials could be opened up in other industries, and the outlook on the future was optimistic.



The early days in Brazil.





Trade fair  
in Australia.



The Service Centre in  
Essen Bredeneu.



Hans-Erich Gubela senior,  
Research and Development, IMOS Gubela GmbH

(excerpt from an interview, 2012)

IMOS could develop and produce many new photoelectric products for ifm electronic. Both sides trusted each other fully.

ifm electronic was and is a reliable partner and technically intelligent. Our products have supported ifm's success, and ifm have shared their success with us.

We have met strong personalities in ifm's technical departments and among their purchasing managers. Due to these encounters, we turned into "ifm staff at the extended workbench".

Apart from that, ifm electronic offer their partners a fair partnership with an intelligent technological future and success.

1994–1998

354  
MILLION DM IN  
SALES

2,200  
EMPLOYEES

309  
PATENTS

15  
COMPANIES

Product milestones



Pressure sensors



Temperature sensors



Safety technology

Alfred Wagner  
ifm group of companies, Germany

The Father's Day sensor It was the job of "Projektteam Drucksensor" – that was how we were called back then – to develop pressure sensors.

There already was a sensor with a 3-digit 7-segment LED display. We technicians decided that we could transform it very easily into a temperature sensor.

Benno Kathan, today Board Member of ifm, presented the idea, but it was dismissed for the time being. It was

our task to focus on the pressure sensor after all...

Since we stressed how easy it was, the temperature sensor was finally approved – the condition was, however, "to do it just like that, at the weekend, or so", so that no precious time for the development of the pressure sensor would be wasted. Ascension Day was close at this stage of our discussions.

We made the quick decision to meet

on Father's Day at ifm prover and did indeed manage to build the first functional prototype in one day.

This is how the story of ifm's temperature sensors began on Father's Day...



1998

In September, an ifm company is founded in Australia.

ifm has had its own website (then www.ifm-electronic.com) on the Internet since 1 April 1998.

The first ifm subsidiary in Austria is founded. For many years, ifm products had been distributed here by Kühnel.

Foundation of the subsidiary ifm flexpro as production site for electronic circuits on flexible basic material (flexible PCBs).

The development and the production of photoelectric sensors moves from Tettnang to Meckenbeuren.

Early days of the ifm Service Centre in Essen.

The new product area "safety technology" starts, among other things, with inductive sensors without a special target.

ifm participates in the trade fair SPS/IPC/Drives in Nuremberg for the very first time.



# Innovation offensive.



Na, alles dicht?

efectorm  
mit Schutzart IP 69K  
finden Sie im  
Internet nur unter  
dieser Adresse!

[www.ifm-electronic.com](http://www.ifm-electronic.com)



Guten Tag Herr Müller,  
sind Sensoren, resistent gegen Ter  
reinigung, nicht ideal für Ihren Be  
induktiver Näherungsschalter efec  
mehr Betriebssicherheit. Konzipier  
wie V4A und PEEK. Mit einem Tem  
Wann testen Sie efectorm?  
Jetzt im Internet informieren:



Erleben Sie  
ifm ist electronic

Erleben Sie Automatisierungstechnik in ihrer ganzen Viel  
falt. Von der Sensorik über Auswertungs- und Steuerungs  
elektronik bis zur industriellen Kommunikation. Egal in  
welcher Branche Sie tätig sind – bei uns finden Sie für  
ihre Automatisierungsprojekte immer eine optimale  
Lösung. Vom einzelnen Sensor mit sinnvollem Zubehör  
bis zum kompletten System. Besuchen Sie unseren Mes  
sestand, wir freuen uns auf das Gespräch mit Ihnen.



1999–2003

Innovation für die Kostensenkung in der Pneumatik.

TECHNIK & INNOVATION



Die Früherkennung wird erschwi  
Ein intelligentes Sensorsystem meldet rechtzeitig den Verschleiß von Maschinenbauteilen

Der Zustand der Maschine wird  
mit Methoden der so genannten  
Schwingungsanalyse bewertet. Wdh  
rend früher Meister oder Betriebe  
techniker durch Handanlegen oder  
mit dem Schraubenzieher am Ohr  
den Zustand der Maschine feststell  
ten, ist heute ein intelligentes Sen  
sorsystem in der Lage, den Verschleiß  
von Maschinenbauteilen zu erken  
nen. Das System besteht aus einem  
Sensormodul, das an der Maschine  
montiert wird, und einem Auswert  
modul, das an einem PC angeschlossen  
ist. Das System kann den Verschleiß  
von Maschinenbauteilen bis zu 10  
% vor dem Ausfall erkennen. Das  
System ist für die Früherkennung  
von Verschleiß an Maschinenbauteilen  
geeignet. Das System ist für die Frü  
herkennung von Verschleiß an Maschi  
nenbauteilen geeignet. Das System  
ist für die Früherkennung von Verschleiß  
an Maschinenbauteilen geeignet.



Werner Gmür,  
SIP Elektroanlagen GmbH

“We need more suppliers like ifm electronic.”

Constanze Fuchs,  
ifm group of companies, Germany

**Challenges at the Lake.** The biggest challenge when I started to work for ifm flexpro gmbh was the Allgäu dialect of my boss Karl Milz. It took some time for my northern hearing to adapt to southern communication – and there are still a few things I still don’t understand today.



No matter where my path in the ifm group may lead me one thing from my flexpro time will go with me: the personnel number 350001 as the first employee of flexpro.

My most beautiful memory of the time in Wasserburg: enjoying a cup of coffee during my break on the terrace with a view of the Swiss mountains!



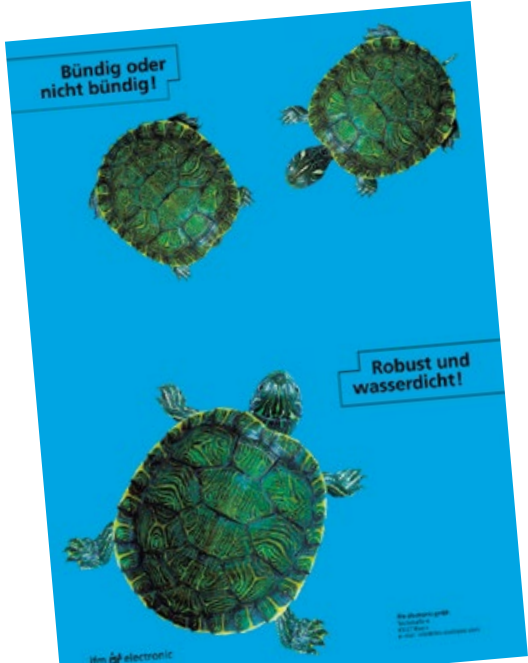
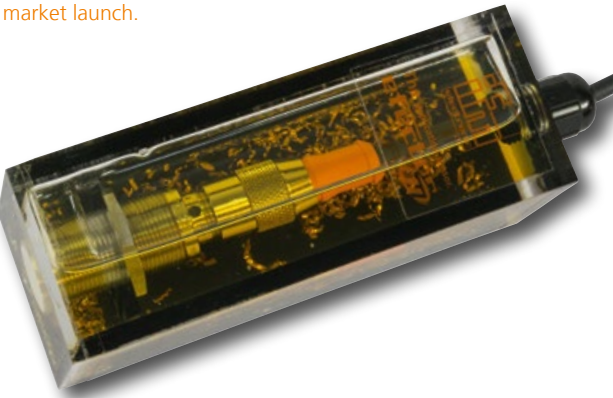
The Japanese branch  
has moved.

1999

In March the new building of ifm flexpro gmbh in Wasserburg is officially inaugurated.

Foundation of an ifm company in Denmark.

efector co. ltd. in Japan moves to a new building.



2000

Launch of the first level sensors with freely selectable switch points without moving mechanical parts.

Presentation of the “application sensor” efector m at the Hanover fair.

ifm wins the first marketing prize “Editors’ Choice Award 2000” of the trade journal Control Engineering, USA, for the product launch of efector m.  
The demo model shows the insensitivity of the sensor to oil.  
Mailing campaigns also accompany the market launch.

Wilhelm Ploetz,  
Managing Director of ABP-Antriebstechnik GmbH

As a Product Manager in another company I established my first relationship with ifm electronic in 1983 and continued this relationship in the years to come with successful sales figures.

Since 1999 we have worked with ifm as ABP-Antriebstechnik GmbH. For years ABP-Antriebstechnik GmbH has delivered different types of shaft couplings as accessories for encoders to ifm. The relationship could be extended continuously to mechanical precision components and mounting elements. The fair cooperative contact with the Product Managers and with the employees in purchasing was always right for us despite the sometimes “hard” price negotiations.

The expertise of all Product Managers I got to know in the almost 30 years of cooperation (Mr Peter Klein, Mr Michael Paintner, Mr Bernd Bruckmann) has always impressed me, allowing us to talk shop even in our special product area on a “level playing field”.

For us ifm is an important, reliable and loyal customer with whom we get along well. Now we only meet once a year to discuss what is required; more is not needed because the cooperation is “right”.



The new production site ifm prover in Kressbronn.



**Michael Marhofer,**  
*ifm group of companies, Germany*

**Generational change.** As long as I can remember ifm has always been part of my life, even when I was a child. Since my father was often not at home for several weeks but away on business, we often talked about ifm when sitting together at the table. People who worked with my father know the 80 g wood-free writing pads he brought along from holiday: filled with new ideas waiting for implementation. Later on, ifm became the company I was to take over and, honestly, I fought against it for many years. Probably mainly for fear that this might be too big for me and out of humility that such an achievement of two founders demands from everybody also from me. Therefore I will never forget New Year's Eve 2000/2001. It's a whole

different thing when you assume responsibility in an organisation or are the boss of a company. That night I felt the additional responsibility on my shoulders and believe it or not: This has not changed today.

What has to survive every generational change is the culture of the company, i.e. their DNA. You can make many changes in a company, often have to do this, thus setting your own trends but you must not change a successful corporate culture as it exists at ifm. That's like wanting to basically change the character of a person, this almost always goes wrong. Sure, there may be nuances you add or take away but you must never make a basic change. I want to illustrate this with an exam-

ple: ifm was never the cheapest supplier in the market. Our strengths are service, close customer contact and innovative products. Let's assume everything must be cheap from now on, the company would break up. All our experience from the past would be useless, nobody would know what to do. Neither sales people nor those on the technical side. In the end such a thing must fail.



**2000**

In July the opening ceremony of the new building for ifm prover takes place in Kressbronn.

Connection of the ifm corporate network to the internet.

Since the beginning of March 2000, catalogue articles from ifm electronic Germany can be ordered online at list price. The first ifm online shop opens the chapter on e-commerce.

Important target industry automotive: international automotive meeting in Munich in May 2000.



**Martin Buck,**  
*ifm group of companies, Germany*

Generational change. ifm had always been another family member with whom I had to share my parents' attention and time. At the

weekend my father often drove to the company. For me this was a great thing, I drove with him and played with my model car in the totally empty halls or let my airplane



fly in the yard. Back then, it was not important for me what all the other people made there. When I got older and the driving license was within reach, the toys became bigger and bigger: When my father disappeared into a room where the mysterious film technology was born I took the initiative with my first driving lessons

on the premises. That was the time when I began to understand what actually happened there, what challenges you had to face and what caused my father to make the decisions the way he made them.

When I assumed responsibility it was simply exciting like an adventure. It happened very quickly and I was in the middle of the goings-on. Since then boredom has never come up.

My father always dealt with one subject and then advanced it consistently. The subjects he advanced had always been of a technical nature, everything else did not interest him. He could virtually call the transistors and resistors by name. I have a great deal of respect for the impetus with which he went on to improve things that others thought were good enough and finished. The world

where my father felt at home are the analogue circuits. Digital electronics and software were unfamiliar to him. Nowadays half of ifm's turnover is made with digital electronics, the technical range has increased enormously from the passive socket without any electronics, analogue and digital electronics of various degrees of complexity to PC software. Now many Robert Bucks are needed who are experts in their fields. What distinguishes me from my father is that I myself cannot be an expert in all these fields but I must make sure that there are many experts like my father and that I must set up an organisation where they can work well and even so the left hand still knows what the right hand is doing.

Bernd Buck



**2001**

Generational change: The sons of the founders – Bernd Buck, Martin Buck and Michael Marhofer – took over the running of the company as managing partners of ifm. Bernard von Spiczak continues to support them as Managing Director.

Foundation of an ifm company in Singapore.



**Dr Thomas May,**  
*ifm group of companies, Germany*

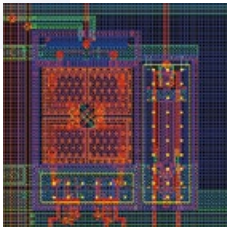
**Exciting technology.** In 2001 we were basically driven to increasingly think about new innovations. As early as 1993 first attempts were made to develop something new in the field of optos. For this project we also worked together with Dr Schwarte, an external partner. Unfortunately we had no success back then.

In 2002 I read an article from the Fraunhofer Institute in Duisburg regarding time of flight technology. I thought this might be something really exciting. Unfortunately I had forgotten where I read this article and asked my assistant, Ms Fastrich, to find this out. Apart from Fraunhofer Institute she came across a small start-up dealing with time of flight technology

– pmdtechnologies. And in connection with this company a familiar name appeared: Dr Schwarte who had a share in this company. So thanks to my forgetfulness we became aware of pmdtechnologies. When I visited the company I met a team that was full of enthusiasm for the time of flight technology. Right from the start we had a wonderful basis. In 2005 we then took over Dr Schwarte's shares in pmdtechnologies.



Workplace at pmdtechnologies in Siegen.



PMD technology:  
smart pixel element.

ifm advertises at educational institutes, for example at the University of Duisburg-Essen.



2002

A newly developed semiconductor chip, PMD, is nominated for the German Future Prize Award. In the future it will be the basis for innovative ifm products such as the distance sensor efector pmd and the 3D sensor efector pmd 3d.

2003

1 January: foundation of ifm electronic gmbh Vertrieb Deutschland. The seven sales branches in Germany are merged into one company, a logical consequence of the German market situation.

Step by step, ifm electronic acquires a participation in i-for-T GmbH in Rosenheim.



A grievous loss: Death of Juanita Staub, Managing Director Finance, Administration and Personnel in 2003.

**Bernhard von Spiczak,**  
*ifm group of companies, Germany*

**Exemplary personality.** I got to know ifm as an external financial auditor and tax accountant in 1978. Since at that time



Mrs Staub was responsible for finance and personnel she was my most important contact. So as an outsider I had the chance to get to know and accompany her with her many professional and, above all, human traits at an early stage.

I soon realised that she made sure that money was held together at ifm. A difficult task because ifm was very successful, which, in turn, triggered major future projects and high expenses. Actually a paradoxical situation but the greater the success and growth of ifm, the more difficult it was to adhere to financial discipline and to provide the capital needed for growth. On top of that, there were unforeseen and unknown challenges on foreign markets due to currency problems or unusually long terms of payment for receivables from customers.

Mrs Staub recognised the problems for ifm and made a decision that distinguished her as a courageous personality that put the

needs of the company first. She recommended to the shareholders to search for an external finance and tax expert for the company although this was her area of responsibility and declared her willingness to support this expert with great loyalty and all her force. Back then, she gave a personal recommendation for me.

In the many years of close collaboration that followed my early assessment was confirmed and deepened: Mrs Staub managed not only with professional accuracy and continuous willingness to make changes and improvements but above all with her positive and human personality.

Her employees had full confidence in her, therefore she knew a lot about their personal situation, their problems and worries, if any, in their families. When she or the company could help, she made this possible. She herself modestly stayed in the background.

When – despite ifm's continued growth – it became necessary to make savings and impose restrictions, Ms Staub always argued that as the person in charge she had to set a good example. Unfortunately, saving measures often had to be taken when, for example, she was about to get a new car. Especially in such a situation it was impor-

tant for her to set a good example. She never complained about that. Admirable!

Of course the human side of her personality also had problematic aspects. For example the first impression she got of a person was very important for her and influenced her for a long time. If it was negative it was difficult to correct it again.

She simply wasn't a typical boss. If something had to be done, she would do it – across all hierarchical boundaries. When the ladies in the kitchen had their hands full it was, for example, no problem for her to load and unload the dishwasher. She respected all employees and met them on a level playing field.

In particular children had a very special place in her heart. When Mrs Staub visited me at home I often found her on the floor playing with our children, no matter what skirt suit or dress she wore.

As an extraordinary employee, admirable person and reliable friend Mrs Staub found a very special place in my heart.



**Dr Bernd Buxbaum,**  
*pmdtechnologies, Siegen*

**Lasting partnership.** Everything began in 2003. Dr Thomas May, Managing Director of ifm for products, phoned. He had come across a newspaper article regarding our nomination for the German Future Prize Award 2002 and was curious. He was on the road from Essen to Lake Constance and asked me if he could come around for a cup of coffee. After our first meeting everything got going.

The first project was a development project resulting in the O1D distance sensor. It was presented at the Hannover Fair 2005 and won the Hermes Award. After this cooperation ifm took over a share of 50 % in pmdtechnologies in 2005. Audi Electronics Venture (AEV) also held 50 %.

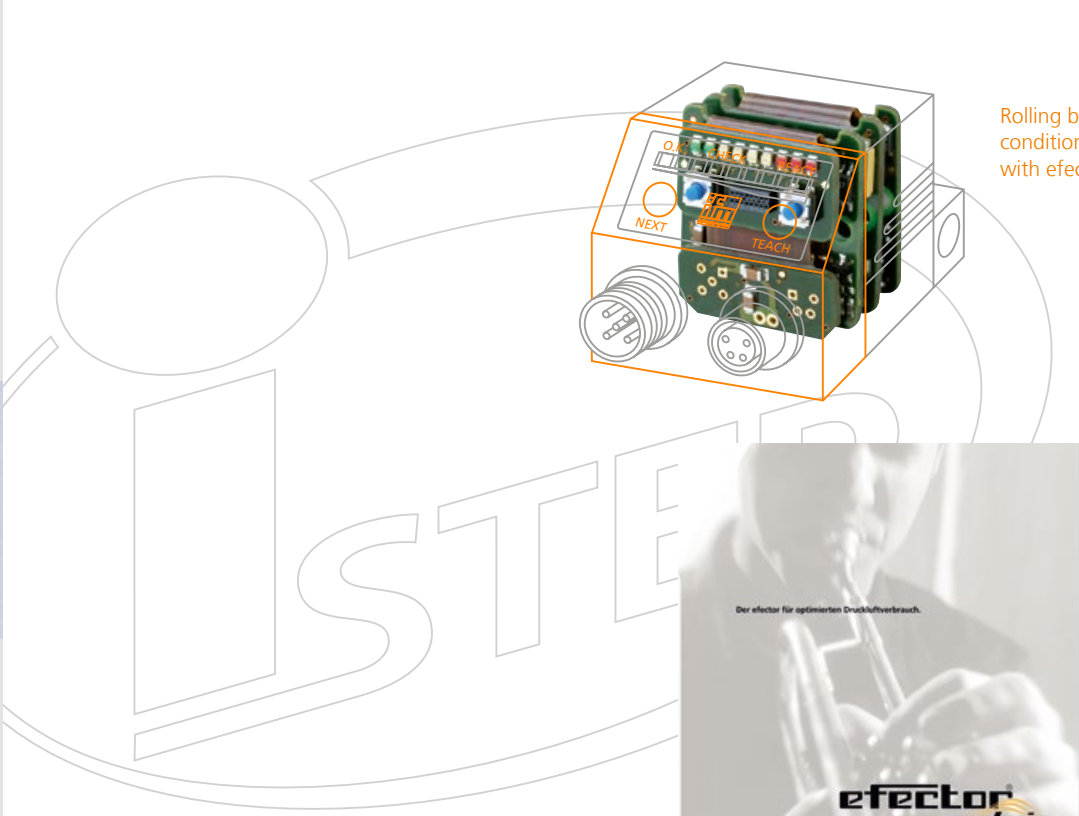
Right from the start you noticed that compared to other companies we worked with the culture at ifm was different: cordial, very familiar and cooperative. This was much different with the other companies. None

was as sustainable as ifm, and I don't only say so because we are now also "orange". You feel that the values described in the philosophy are really lived by the ifm executives and the entire team.

After the O1D, came the Audi project ifm got involved with. A real challenge! It was about recognition of pedestrians before a crash. The background for this was a law that was about to be adopted and defined certain safety requirements for vehicles. When the first road tests went well, we set about the series production. We started the search for a system supplier who used our technology and developed the system for Audi. ifm intervened, dealing with the implementation. Everything went fine and even the final decision about the series was in our favour until the whole thing failed at the end of 2012. Not because of the performance, which was good and even better than the competitors' solution. The project ul-

timately failed because of legislation that was not adopted as expected: The information our sensor could supply was no longer needed so that a cheaper solution was preferred.

Right from the start it was obvious that our shareholder Audi Electronics Ventures would withdraw some day. The task now was to make the technology usable for Audi and then to withdraw. Instead of break-off payments we agreed with Audi Electronics Venture that they would pay for all the project investments and assign their share (50 %) in pmdtechnologies to ifm. Since then we have been a 100 % member of the ifm group.



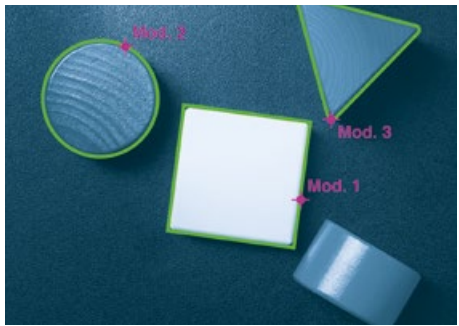
Rolling bearing diagnostics for condition-based maintenance with efector octavis.

**Dr Thomas May,**  
*ifm group of companies, Germany*

**A completely new approach.** Gerd Marhofer initiated the collaboration with i-for-T gmbh. When he visited the Hannover Fair 2002 he made a discovery. Back at the ifm stand he put a business card in my hand: "Take a look at this, that's interesting!" A young company, i-for-T, presented a machine diagnostic system. The whole thing was based on an acceleration sensor (micro-mechanical) allowing more low-cost vibration diagnostics than available on the market. But unfortunately, the solution was not yet fit for industrial use. However, the approach was so exciting that we wanted to deal with the subject. Much personal commitment was now needed. We turned night into day when trying to find out if implementing our idea was possible at all. It took some time until we found a solution.

In 2003 we bought shares in i-for-T. The whole thing was a completely new approach, a second path to automation. The thing now was to monitor the machine and to control the energy monitoring. As early as 2004 we launched our vibration monitoring sensor, efector octavis. With this sensor we were even nominated for the Hermes Award. But soon we also started to cope with compressed air monitoring, and efector metris was developed. The impulse for this was a study in a trade journal saying that avoidance of compressed air leaks in industry would allow elimination of all wind farms in Germany!

But it was not sufficient to read out the display on the sensor at the machine. The customer needed a signal on their PC. So we first implemented the solution to send the data to a mobile phone via SMS. But this was not the optimal solution. In search of such a solution we again came across a young company called "HIS". There we found the possibility to connect the data from the sensor to the customer's ERP. The successful cooperation resulted in another subsidiary, ifm datalink gmbh.



With the contour sensor efector dualis geometries are detected in direct illumination.

The compressed air meter efector metris opens new applications for condition monitoring of machines.

**2003**

Presentation of the new product generation i-STEP implementing sophisticated technologies in industrially compatible, easy-to-use products.

With efector octavis, nominated for the Hermes Award 2004, the new vibration monitoring product line is established.

With the vision system efector dualis ifm presents an industrial imaging system for the first time.



**Wilma van de Wetering,**  
*ifm group of companies, Netherlands*

The right technology at the right place. On 1 July 2003 the ifm branch started as an independent company after our move from Amersfoort to Harderwijk as a division of VEGA, the long-standing trade partner.



The Netherlands are known worldwide for their cheese, tulips, dikes and the seaport in Rotterdam. Of course these products and the related technology are also very important for ifm Netherlands. Cheese, for example, is automatically produced using ifm technology. Dikes, pumps, floodgates and canals are monitored by ifm fluid products. Without the robust controllers and sensors containers could not be loaded onto and unloaded from the cargo ships. ifm sensors and AS-Interface are indispensable for the sophisticated logistics in greenhouses to ensure a quick and efficient process.

We started with 18 employees; by 2012 the team grew to 25 employees.

Within ten years turnover has more than doubled. A success story we are proud of.

Celebration of the first orders invoiced in the newly founded branch in Mexico.



Joy Rahman opens the new branch in Harderwijk in the Netherlands.



International advertising campaign "Opto75".



Opening ceremony of the new building of ifm ecomatic: Managing Director Bernd Boolzen (2nd from left) with the ifm shareholders (from left) Martin Buck, Bernd Buck and Michael Marhofer.



## 2003

1 July:  
The newly founded ifm company in the Netherlands starts business. Previously we had a long-standing partnership with VEGA.

ifm electronic is "BoschSupplier of the Year 2003/2004".

Online shopping at ifm: In July the e-shop opens, first in the USA.

New foundation in America: ifm companies now also exist in Mexico and Canada.

New branches in Eastern Europe: ifm Russia and ifm Hungary are founded.

In September the new building of ifm ecomatic is opened.

# 1999–2003

 **264**  
MILLION EUR IN SALES

 **2,500**  
EMPLOYEES

 **411**  
PATENTS

 **24**  
COMPANIES

 Product milestones



Level sensors



Vibration monitoring



Measurement of compressed air consumption



Vision sensors



2004–2008

ifm is continuously growing...



Identifikationssysteme  
www.ifm-electronic.com/rfid

Innovatives  
Zusammenspiel in der  
Produktionssteuerung.  
Identifizieren und codieren  
mit RFID und AS-Interface.



KÖLBL KRUSE

HOCHTIEF



Grundsteinlegung Glückaufhaus

15. Mai 2008



WAZ

## Der stille Riese

ifm Electronic erhält eine neue Zentrale im Glückaufhaus. Das Familienunternehmen zählt zu den weltweit führenden der Automatisierungstechnik. Jährliches Umsatzwachstum von über zehn Prozent. Offene Ingenieur-Arbeitsplätze.

Von Hans-Walter Scheffler

Am 15. Mai findet die Grundsteinlegung des „neuen“ Glückaufhauses statt. Am 1. September 2008 will ifm Electronic in das 45-Millionen-Euro-Projekt als Generalmieter einziehen und zwei Drittel der 17 000 Quadratmeter Räumlichkeiten zur Bismarck- und zur Friedrichstraße hin belegen. Aber wer ist ifm?

„Uns kennt keiner“, lacht Geschäftsführer Michael Marhofer. Dabei sind bei der Erfolgsgeschichte des Familienunternehmens genügend Schlagzeilen geschrieben worden. So erhielt ifm mehrere Auszeichnungen wie den Innovationspreis der Deutschen Wirtschaft und zählte zu den „besten Arbeitgebern“. Alles begann 1969 mit technischen Tätigkeiten im Wohnzimmereier der beiden Unternehmensgründer am Bodensee. Heute zählt ifm mit über 3300 Mitarbeitern zu den Top Ten der



Die neue Unternehmenszentrale von ifm entsteht im Glückaufhaus, am Bodensee befindet sich der Hauptproduktionsstandort.

logie. Mit über 3000 Mitarbeitern in 100 Niederlassungen in 15 Ländern ist ifm ein weltweit führender Hersteller von Automatisierungstechnik. Das Unternehmen ist seit 1969 am Bodensee beheimatet. In den USA, 340 Mio. sind in der Forschung Entwicklung tätig. Eine Reihe von neuen Produkten werden auf der Messe. So den „M-Render“. Bei beiden werden und Glas werden zur einstellung häufig Codes aufgebracht. code Reader kann. Bisher sind über 20 Stellen könnten die gesamte Aus einem kleinen Z Gebäude von 600 integriert.

Foto: WAZ, Kerstin Koleska

uns wohnt in Essen, auch wenn nach der Denkmalpflege beim Glückaufhaus einige Nervens gekostet hat. Der Ingenieur-mangel bremsen die Entwicklung auch wenn Unternehmung über 20 Stellen könnten





**Hu Schracke,**  
*ifm group of companies, Germany*

**Support from the Chancellor.** Back when ifm China was founded in 2005, the company ifm electronic was completely unknown in China. In order to change this, we decided against simply announcing the official opening in the local media. Instead, we wanted to make a statement and show who we are and what we stand for. Easier said than done! Finally, fate came to our aid:

At Hannover Messe 2004, ifm was one of the five companies nominated for the Hermes Award, the newly created industrial award of the trade fair. The award was presented to ifm's Managing Director Michael Marhofer by Gerhard Schröder, the Chancellor of Germany at that time.

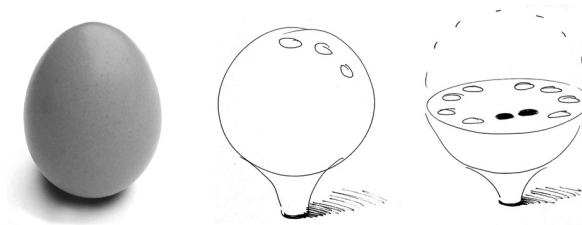


This was the perfect motif for our statement advertisement. Why? Gerhard Schröder was very well known in China, he was a real celebrity. Firstly because he was a big fan of China, and secondly because he was a close ally of the then Chinese Prime Minister Wen Jia-bao. Schröder had witnessed the first stage of China's economic upswing; without his support, the Shanghai Maglev for example would never have been realised.

The response to our campaign proved us right: The picture of Mr Marhofer and Chancellor Schröder was very well received by the customers and the press. Until today, people often refer to this advertisement.



Office building "An der Reichsbank" in the city centre of Essen.



Award-winning AS-i module with pre-studies by Georg Kaluza.

Federal Chancellor Gerhard Schröder with the five nominees for the Hermes Award 2004.



**Benno Kathan,**  
*ifm group of companies, Germany*

**A turn for the better.** Once again, we were looking for a simpler and faster way to set our pressure sensors. The sensors were to be inexpensive and easy to handle. At that time, our premises were located near a railway line. Whenever a train passed by, we had to close the windows. As a result, I spent a lot of time regulating the room temperature by opening and closing the window and turning the heating on and off. While I was doing this, my gaze settled on the thermostat of the radiator. "That is something everyone understands!" That thought crossed my mind, and this is how the idea to use setting rings was born.

## 2004

A large part of ifm's head office in Essen moves from Teichstrasse to the office building "Reichsbank".

In January, ifm receives the "Top Job" award for vision and leadership in 2003.



With the vibration sensor efector octavis, ifm is among the five nominees for the Hermes award, the new technology prize of the Hannover Messe.



Introduction of innovative cylinder sensors using GMR technology.

The AS-i ProcessLine module receives the Red Dot Design Award.

The PK pressure sensor with an intuitive operating concept wins the innovation award at the "Automation Optimization Europe" trade fair in Paris.





**Bernd Busch,**  
*ifm group of companies, Germany*

**Project “Glückaufhaus”.** At the end of 2005, the decision had been made to move to a new building. As early as 2007, the first tenancy agreement was concluded. Unfortunately, this was followed by the crisis of 2008/2009, which could not be averted any more. When we learned that the Lehman Brothers had filed for insolvency during a management meeting in October 2008, we all knew that this would affect us as well and we immediately initiated countermeasures. No new staff were hired, stock levels were reduced and large investments were stopped where possible.

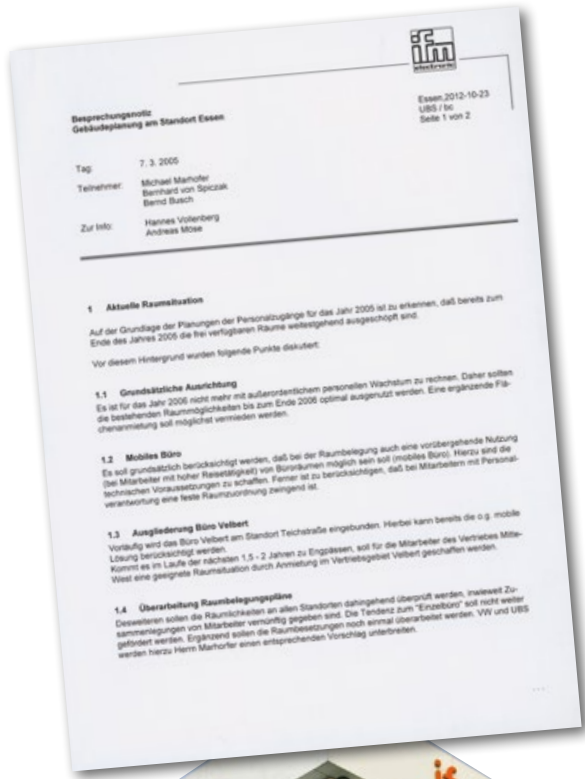
Of course, these were difficult conditions for the “Glückaufhaus” project. Basically, there were three options. One: Stopping all construction works and leaving the building a ruin for the time being. Two: Finishing the works halfway. Thirdly: Believing in ifm and its success and finishing the project. Back then, Bernhard von Spiczak was a great support to me, he encouraged me to believe in ifm and its growth. Details such as paintings and furniture were disregarded in the first step, but the rest was properly implemented.

The façades of the Glückaufhaus were to be preserved. Unfortunately, it turned out that there still was an unexploded bomb from World War II under the premises (located under today's garage entrance) so that the entire city centre of Essen had to be evacuated for the bomb disposal. Time was a critical factor, as the bomb was very dangerous. Fortunately, everything went well.

The Glückaufhaus has shaped the public image of ifm in Essen. Quite intentionally, the location in Teichstraße had been rather inconspicuous. Today, we follow a different approach: ifm electronic is supposed to grow and present itself as a modern and strong company. It is not only about our external image, though, but also about our employees' perception. Before, there were several office locations distributed throughout Essen. Being united at one single location makes us feel even more like one company.



Sleeping Beauty:  
The Glückaufhaus in Essen  
before the remodelling.



The branch office ifm Poland  
in Katowice.

**Michael Marhofer,**  
*ifm group of companies, Germany*

**International growth.** It was extremely important to me not to focus too much on Europe, but to open up the Asian and American markets as well. With our customers becoming more and more international, we made it a priority to become internationally oriented as well. The first step was to found new branch offices in all countries of interest. This has almost been completed. Now we have to establish regional branch offices in the respective countries, e.g. in China. It will still take some years to establish a structure in these countries comparable to the one we have in many European countries. In many countries, founding a company is an exciting experience! Two stories particularly stand out: the foundation in Turkey and in India.

In Turkey, we were waiting for our deed of incorporation at the notary's

office when we were called by the head clerk (a Turkish notary office resembles more a German road traffic licensing department than a German notary office) and asked to pay our bill. In most countries, you will receive an invoice for such fees, but not in Turkey. According to the motto “cash is king”, the head clerk then told me where to find the nearest ATM. I went there and withdrew cash using my private debit card in order to appease the gentleman, who came across rather grumpy. Five minutes later, we held the deed in our hands.

In India, you need a lot of patience to found a company. I had to complete the first forms (several pages) three times: The first time, I had written in the margin. The second time, I had switched pens halfway through, the new pen's colour differing very

slightly from the first one. When these forms were finally completed, we had to make three trips to the Consulate-General of India in Frankfurt. All in all, it took 18 months to found the company. By the way, all forms had to be completed by hand!

As already mentioned, every foundation has its own history, but that is what makes things interesting and exciting.

## 2004

30 July:  
After 9 years of cooperation with its trade partner Newtech from Gliwice, ifm establishes a company in Poland.

ifm has a worldwide slogan:  
ifm – close to you.

## 2004

Identification systems featuring RFID technology and AS-i connection open up new market opportunities for ifm.

With effector valvis, a feedback system for continuous position detection on linear valves is presented.





Ring binders that can be positioned upright to hold presentations at the customer pep up ifm's sales activities.



27 October 2005  
Laying the foundation stone  
for building 15 (7,000 m<sup>2</sup>)  
in Tettngang.



After the tsunami disaster at the end of 2004, ifm starts supporting the children's home St. Vincents Home in Maggona, Sri Lanka, in 2005.  
To date, ifm and its employees have donated EUR 58,378.63.



ifm philosophy

**Ute Scherhag,**  
*ifm group of companies, Germany*

**Everything new in Tettngang.** With the expansion of the Bechlingen location, a new canteen was opened in building 12 in cooperation with the caterer ARAMARK. The managing directors and their secretaries moved to the second floor of the new building as well.

Besides, premises of approximately 26,000 m<sup>2</sup> were bought on 1 July 2005 from Tettngang city council. Within only 12 months, a brand-new production building for the prefabrication of sub-assemblies and special purpose machinery manufacture was established. The construction works began in autumn 2005. In this context, some departments moved from the old to the new building in order to reorganise and optimise historically grown processes. The space freed in the old building became available for future growth. Simultaneously to the construction of the new building, the storage area on the existing premises was expanded in order to optimise material handling and warehouse organisation. The new storage building was to cover an area of 20 x 40 m and be 14 m high. It is very impressive to see how everything was reorganised and adapted to ifm's growth within a few months.



Entrance building of the Tettngang plant.

**2005**

24 May:  
Opening of the new ifm office Portugal in Vila Nova near Porto.

The branch office in China is founded.

The new entrance building with canteen is finished at the plant in Tettngang.

1 January:  
Introduction of a new working time model – among other things the return to the 40-hour week step by step.

**Michael Marhofer,**  
*ifm group of companies, Germany*

**Family business and international group of companies.** I admit that it is becoming more and more difficult to unify these two aspects. We do our best following different approaches. For example, a copy of our philosophy (which is available in many different languages) is given to each new ifm employee. But what is more important is that the executives of the whole company live the values described in the philosophy. It is only if this is the case that can we ask our employees to do the same.

We shareholders are no exception to this. It is our task to live these values and urge our executives to do the same. When we realise that things do not run smoothly, we take appropriate measures. What is also important is that the company is organised in a way that makes it possible to live the principles. For example, structures have to be kept simple, responsibility and expertise should be bundled etc. It definitely remains our most important task to convey and preserve this culture, even if our company keeps growing.



ifm works meeting regarding the introduction of a new work time model in the festival hall in Tettngang.



**Bernd Froese,**  
*ifm group of companies, Germany*

**ecolink – it's all about the right contacts.** At the end of 2004, the ifm management decided to develop and sell ifm connectors. Today, we know that this was a very wise decision.

Besides economic aspects and the aim to be independent of suppliers, the main focus was on technical product requirements. Today, ifm sensors are used in numerous industries and applications around the world. This is favoured by their high reliability even in very challenging applications. Operating conditions include for example shock and vibration, thermal stress, EMC stress, moisture, dust or chemical stress caused by oils, coolants, cleaning agents and disinfectants.

But what is the use of the best sensor if the sensor signal is not reliably transmitted to the evaluation electronics? This is why our connectors have to meet high technical demands as well. We like to compare them to the tyres of a Formula 1 car which have to transfer the highly efficient technology used in the car to the road; you will never achieve a podium position with bad tyres.

The decision had been taken, we were highly motivated and had the means, we only had to roll up our sleeves and get going... No, it wasn't that simple. In a first step, we decided to carry out extensive market research in order to identify actual product requirements. Many customers thought of connectors as wear material. They had accepted that particularly in challenging applications, connectors failed on a regular basis, similar to brake linings on a vehicle that have to be replaced frequently if they are exposed to

enormous stress; as long as there is no better solution available, you put up with the existing one.

Bad for the customer and good for us, because this showed us what product features and customer benefits we had to include for a successful market launch. The evaluation of our research clearly showed the potential for improvement and now we had to channel this into a mass product in a cost-neutral way. Thanks to an impressive development achievement, we succeeded to do so with ecolink. These were good conditions for a market entry with a good product, but would that be enough?

In fact, the ecolink connectors have become a bestseller. They are a real door opener with new customers, not only because ifm sensors and ecolink are perfectly adapted to each other, but also because they make it possible for ifm to cover the task of signal transmission with its own products. The ifm development is also highly accepted by our existing customer base, not least because of its high quality and reliability and its good price/performance ratio.



**Hermes Award 2005:** ifm's Managing Director Michael Marhofer (second from the left) at the award ceremony together with Prime Minister of the state of Lower Saxony Christian Wulff and Federal Minister for Education and Research Edelgard Bulmahn.

**ifm fair run 2005:** ifm runners and cyclists bring the efector pmd sensor from Tettnang to Hanover, ifm supports them with one euro per km. The proceeds are donated to the orphanage St Vincent's Home in Sri Lanka.



## 2005

In December, Bernhard von Spiczak, Managing Director for many years, retires.



Award ceremony  
Hermes Award

The first photoelectric distance sensor with PMD technology, efector pmd, is awarded the Hermes Award 2005.

On his last day of work, ifm's Managing Director Bernhard von Spiczak plants a tree at the location Essen.



**Hu Schracke,**  
*ifm group of companies, Germany*

**Dedicated consultant.** In January 2004, I started working for ifm electronic; I was the first Asian ifm employee in Essen. Only three months later, in April 2004, the Hannover Messe took place. As China was the fair's partner country that year, I, the native speaker, was to be the contact person for Chinese guests. I was supposed to show them our fair stand, present ifm to them and give them advice. As this was my first time at the fair and many things were completely new to me, I was very nervous. Nevertheless, I tried to

support my colleagues as best as I could.

At some point I saw a customer enter the stall, an older gentleman, obviously not Asian. I looked around, but none of my German ifm colleagues was available to speak to the customer and give him a tour of our fair stand. So I filled in for my colleagues and tried to inform the customer about ifm and our products. I was about to present some of our product highlights to him and tell him some more about the company,

when he said with a smile: "I know ifm very well, because I founded the company!"

During my job interview, I had only talked to Mr Michael Marhofer. I had never seen his father and, of course, had not recognised him. I was so surprised I was lost for words. When I started to apologise for trying to tell him about his own company, he reacted very friendly and was happy that I, a new employee, had acted as such a dedicated consultant.



ifm electronic holds a share in the company pmdtechnologies GmbH.



Dieter Radtke,  
ifm group of companies, Germany

**Square becomes round.** When the new company logo was introduced on 1 October 2006, we had spent some months of “creative hard work”. Innumerable ideas, good ones and bad ones, had been sketched on innumerable sheets and then been abandoned. Often, we thought we had found the perfect solution, only to question our idea again on the following day. It took some months before we had identified some favourites, which were then elaborated in detail using a PC.

In May 2005, the ifm management had asked identicom to develop a new, modern logo and present several alternatives for a revision of the existing company logo. The new logo was to be more succinct and striking and to prominently feature the colour orange. It had to visually compete with the powerful logos of our competitors, especially on the internet, which was becoming more and more important. Martina Linn and I engaged graphic designer Klaus Appel from Düsseldorf as a consultant, an exciting cooperation began; it ended with impressive results.

In the end, we decided in favour of a round, opaque logo. Despite the new shape, there is a clear continuity between the old and the new logo.



Innumerable sketches on the way to the new ifm logo.



ifm branch office in Sibiu, Romania.



A new, larger building: ifm efector in the USA.



The former owner of Voltam, Mr Durkaya (on the right) with ifm sales engineer Dieter Ebbinghaus.

Derya Gürsoy  
ifm group of companies Turkey

**Born as an ifm colleague.** Some people say that the company they work for is like a big family. ifm indeed is. But in my case it is more than that because I was born into it:



During the global Product Marketing Circle meetings all of us stand up and give brief information about ourselves: age, country of origin, position, name of our children.

In most of the meetings I am one of the youngest attendees and often the only woman. Once I was asked how many years I had been working at ifm. I, truthfully, said twenty-four years. This could be counted as nor-

mal in the ifm world, but everyone was stunned. Because I looked like I was twenty-four at that time. There were, mostly, engineers listening and I bet they were trying to calculate my age. There was truly something not matching with my appearance.

Being the daughter of the owner of the previous ifm trade partner, Voltam Limited Co., I had been taken to the office since I was eight. For two reasons: no relatives to take care of me during school holidays and to learn the business. I experienced exhibitions, bargaining, how to sell technical products and I had good hard lessons.

Once I was left alone at our small office to answer the incoming calls while my father was on a sales call. I remember taking a note of a cus-

tomers on the phone. As a perfectionist eight-year-old I did not like my handwriting and whited it out. And then... I had totally forgotten the name of the customer. I was so sad and terrified and did not know what to tell my father when he came back in the afternoon. Luckily I thought of looking at the white sheet of paper in front of a light source. and there it was behind the white fluid: Bosch. I saved myself and of course a few sensors – then. Bosch is still one of the best customers of ifm Turkey.

It is so motivating to work in such a dynamic company that welcomes all bright ideas and appreciates the efforts of its employees.



New ifm logo 2006



## 2005

Foundation of an ifm company in Turkey; for many years, ifm products had been distributed by the trade partner Voltam.

10 November: Opening of the new building of ifm efector in Exton, USA.

## 2006

Product launch: The new efector gwr level sensor operates on the principle of guided wave radar.

New locations in Eastern Europe: Opening of branch offices in the Ukraine and in Romania.

After 17 years, the ifm company logo is changed.

ifm is one of “Deutschlands beste Arbeitgeber 2006” (Germany's best employers 2006).

Besides, the company receives the quality mark Top 100 for outstanding innovative performance.





**Tin-Chee Man,**  
*ifm group of companies, Germany*

**An unforgettable moment.** I started my training at ifm in 2006. Together with the other trainees, I had much fun. There were several projects we managed together. One was the disposal of the old ifm crockery for a good cause. After the change of the logo, new crockery had been acquired.

The question was: What should we do with the old crockery? Give it away, auction it off or sell it? This all seemed too boring to us, and we came up with the idea to dispose of the crockery in an entertaining way. But how can you turn broken crockery into money? Very easy: Against a small payment, our ifm colleagues could smash the crockery in a tossing game of our own design. Putting our idea into practice turned out to be rather complicated. We had never had to organise such an event. The creation of the concept was completely up to us, as was the implementation. Many things had to be taken into account. One aspect was ensuring the safety of the game. The marketing department helped us to create a wooden box to make the smashing of the crockery safe. The plates were placed in the box in rows and the cups were used as missiles. Each player received three cups. The colleagues who smashed most plates in three throws received an attractive prize.

Our hard work paid off. Our idea was received very positively and our colleagues enjoyed the game, which was presented at our end-of-year celebration. We donated the collected money to the Sri Lanka project. We were very proud of ourselves, because we had organised many things without help. This was one of my moments at ifm I will never forget.



26 July:  
Opening of the extension  
of ifm syntron in Tettang.



**Brigitte Bostel**  
*ifm group of companies, Germany*

**Incentives at ifm.** Offering incentives was Michael Marhofer's idea. He was convinced that incentives can be great motivation tools and that they can help to increase sales. We started in North America, because sales were rather slow there at the beginning. Later, we expanded the idea to South West European countries. However, we only focused on one single country group at a time. For example, the employees from North America could win a 14-day trip to Europe with their family. Of course, that was fantastic! I vividly remember our guests from North America. Then, incentives were offered in France, Spain and Italy. Here, the employees were offered the chance to go to North America, according to the motto "North America – close to you!"



Managing Directors Bernd Busch  
(in the middle) and Marc Everaert  
during the official opening of the  
branch office ifm Belgium.



**Marc Everaert,**  
*ifm group of companies, Belgium*

**A perfect day.** After more than 30 years of partnership with VEGA in Belgium, ifm electronic opened its own branch office in Zellik, a small town close to the capital Brussels. After a training which we were given by our colleagues from Germany the official opening on 02 July 2007 started with a small ceremony and a toast – since after the first quotation an order was placed ... a perfect day!



In October 2008 we presented ifm electronic n.v./s.a. to our families. Partners, children, mothers, grand-fathers – everybody was welcome at ifm electronic Belgium.

ifm's Managing Director  
Dr Thomas May (in the  
middle) during the opening  
of the new building of ifm  
India in October 2007.

## 2006

ifm ecolink sets new standards in the connection technology market.

Together with the 14 founding companies of the IO-Link consortium ifm electronic presents the new point-to-point connection IO-Link.



## 2007

In March, Bernd Buck resigns from the Management for personal reasons.

With effect from 23 March, Bernd Busch, Horst Jeruschke and Dr Thomas May are appointed to the extended management.

Further expansion in Asia: Opening of ifm companies in South Korea and Hong Kong.

In Europe, ifm locations are founded in Belgium and Greece.

Entrepreneur of the year 2007: ifm is one of the finalists.







State visit at ifm:  
Federal Chancellor Angela Merkel  
and Turkish Prime Minister Recep  
Tayyip Erdoğan visit the ifm stand at  
the Hannover Messe.



Photoelectric ifm sensor at the  
chocolate museum in Cologne.



ifm's Managing Director Martin Buck  
(second from the right) is presented  
with the Innovation Award of the  
German industry.



Laying of the  
foundation stone for  
Glückaufhaus



## Andreas Fobbe, ifm group of companies, Germany

**Who has the better steaks?** In 2008, ifm Argentina was founded. The foundation went very smoothly, as the Managing Director of ifm Argentina, Gustavo Yangosian, had worked for years as a sales engineer at an ifm trade partner. Besides, we had the good luck of recruiting a very experienced Argentine colleague, Yamila Laham, for ifm Argentina's order processing department.

Argentina, a very proud country, is often called the "Spain of South America", and, strolling through Buenos Aires' residential areas, one might actually have the impression of being in Spain. Argentina is often in the shadow of its "big brother" in South America, Brazil. Nevertheless, Argentina has a powerful and interesting industrial sector, just like Brazil – only on a smaller scale.



The countries are also rivals when it comes to food. For someone from Argentina, it is a question of faith and a point of honour to prefer Argentine steaks over Brazilian steaks.

As a foreigner, you should adopt a neutral position. Otherwise, you might share the fate of the author of this article, only being served rice during your next visit.

1 April 2008  
Opening of the new  
office building of ifm  
China in Shanghai.



15 May 2008:  
Laying the foundation  
stone for the new  
corporate headquarters  
Glückaufhaus in Essen.



## 2007

Start of the cooperation with the Hochschule Ravensburg-Weingarten (University of Applied Sciences). Among other things, this will result in an ifm lecture hall and as from 2010 a course as well as the corresponding endowed professorship.

ifm electronic and the chocolate museum in Cologne establish a cooperation and become a "Landmark in the Land of Ideas".

Intelligent fluid sensors: The volumetric flow sensor efector mid with magnetic-inductive principle is presented at the Hannover Messe.



## 2008

The ifm consulting gmbh for the marketing and implementation of consulting and project planning services concerning maintenance and production is founded.

ifm opens further sales companies in Taiwan and Argentina.

ifm Italy becomes an independent branch office.

ifm South Africa is founded; before, there has been a long-standing cooperation with the trade partner Shorrock.

ifm is finalist of the Innovation Award of the German Industry and receives the special award for continuous innovation.

# 2004–2008



**420**  
MILLION EUR IN  
SALES



**3,200**  
EMPLOYEES



**546**  
PATENTS



**38**  
COMPANIES



Product milestones



Identification  
systems



Valve sensors

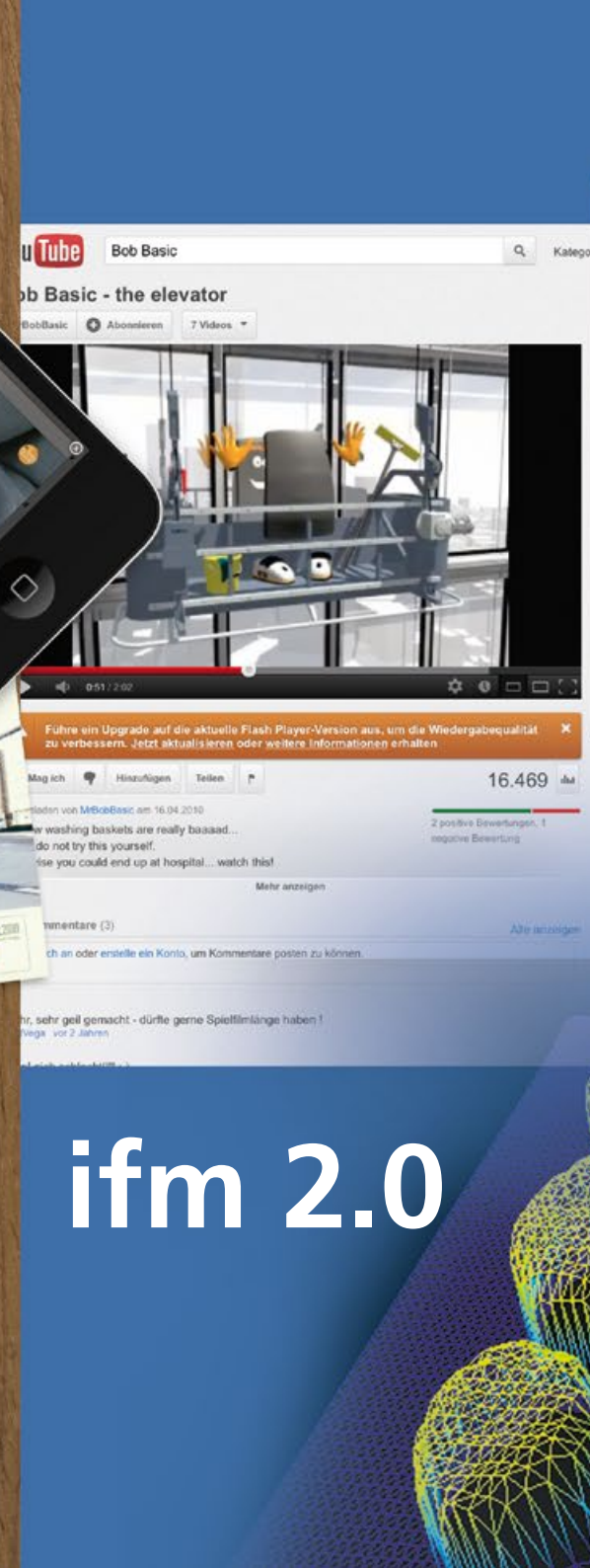


Cylinder sen-  
sors



Connection  
technology





2009–2013

ifm 2.0







Gutting work on the ramshackle structure of Glückaufhaus built between 1921 and 1923.

**Meiyu Bai,**  
*ifm group of companies, Singapore*

**A beautiful plant.** I was struck at once by the open-minded and friendly atmosphere during the job interview. I felt that ifm Management was really interested in developing their employees and that they did not offer me just a job but rather the possibility to “grow” together with the new Singapore plant.

My first day at ifm was really nice and my colleagues gave me a hearty welcome. I have ever since been amazed how that empty building transformed into a beautiful plant, housing machines, a warehouse, offices, a canteen and much more. It was an exciting feeling to have had a share in this “transformation”. And whenever we welcome new colleagues, I am always a bit proud to be able to show them what we have accomplished so far and how much we have achieved already.



2009

Headquarters move into Glückaufhaus on the outskirts of Essen City.



**Michael Marhofer,**  
*Chairman and Managing Director, on receiving the keys to Glückaufhaus.*



Leasing of the first ifm jet and procurement of its own IATA licence, as a result of which ifm travation gmbh is separated as a subsidiary.

*ifm branch office in Istanbul.*



*Korean Minister of Economy Youn Ho Lee (4th from left) at the ifm trade fair stand in Hanover 2009.*

16 January: Foundation of ifm Bulgaria after about seven years of collaboration with trade partner ANIPAL from Sofia.

ifm electronic is rated “Top employer for Engineers”.

**Hans-Peter Hoffmann,**  
*ifm group of companies, Germany*

**Property search in Istanbul.** ifm is international, which means: multicultural. I am lucky enough to be directly involved. As interior designer I am in charge of office planning for the whole ifm world and therefore work on interesting projects all over the globe. As an example, I would like to report on the expansion of the ifm location in Istanbul. A story from the Arabian Nights, if you like.



At the end of 2008, our colleagues in Turkey were confronted, in their turn, with office space reaching the limits due to the worldwide expansion of our company. Therefore, in May 2008, ifm's Managing Director Volker Jahns and myself set off to look for an appropriate new location in Istanbul together with our Turkish colleagues. Beforehand, the branch management had already commissioned a local estate agent to spot suitable objects and arrange for them to be visited. On arrival, we were therefore looking forward to a journey across Istanbul's architectural variety and confidently set off. However, the initial excitement quickly gave way to a certain scepticism as we would soon find out that in oriental countries, the notion of a high-quality building may differ from what you would expect in the Occident. Our Turkish colleagues from ifm as well had certainly expected a quite different choice of suggestions. The most bizarre object, however, that we got to visit was certainly the former club house of a local motorcycle club. Not surprisingly then, some of their members showed up at the viewing appointment on their motorbike and,

of course, dressed with the classical leather jacket. \ I must admit that at that moment I felt slightly overdressed in my suit. Anyway, the location naturally looked what you would expect a club house of a local motorcycle club to look like and therefore was not suitable at all for our purposes.

After various similarly unsuccessful visits, we gradually gave up hope that we would still find something appropriate on our first stay in Istanbul. Later in the afternoon, the estate agent finally got news of another available property that we could visit the next day. This property finally met all our requirements. Shortly afterwards, the decision was made and the preparations for acquisition could begin.

The following weeks were spent on conceiving the optimum utilisation of the building, with the planning being almost completed by July. The implementation phase, which took place in cooperation with a Turkish architect from Istanbul, ensued and as everything ran smoothly, construction work was finished by mid-October.

On October 19, 2009, the official opening ceremony took place, with a small delegation from Essen having once again made their way to Istanbul in order to inspect the result and discuss the further development of the branch office. In the evening, we celebrated together with all our Turkish colleagues the completion of a successful project at pleasant temperatures around a barbecue outdoors – something you can hardly imagine doing in October in Germany.



Steffen Fischer, Head of Human Resources and member of the ifm Management Board (left), with Wolfgang Heikamp, Head of Human Resources at ifm Essen, at the award ceremony for the Top Employer for Engineers seal of approval.



Automotive summit in Würzburg: Managing Director of ifm syntron, Michael Paintner, explains the technology “three-dimensional vision with a compact 3D camera”.



Preisträger TOP 30 NoAE Innovations-Wettbewerb 2009

Michael Marhofer, ifm group of companies, Germany

In crisis. June 2009. I am faced with the worst days in my ifm career. I had always been proud that we could offer our employees not just a competitive remuneration but also better working conditions and social security benefits than standard. Heaven knows I had seen differently during many visits to customers, also in Germany. ifm should never be like that! And now it's up to me to face the employees and ask them to waive their vacation and Christmas bonuses until 2010. Sure, we had

tried everything possible to avert this situation: The number of temporary workers had been brought down, limited contracts had not been extended, we had short-time work since March, the general expenses had been reduced to the absolute limit, investments been frozen where possible and material costs been reduced by millions of euros. But a 30 % decrease in turnover is just too much. We must save more if we want to keep the losses under some kind of control. But what is the

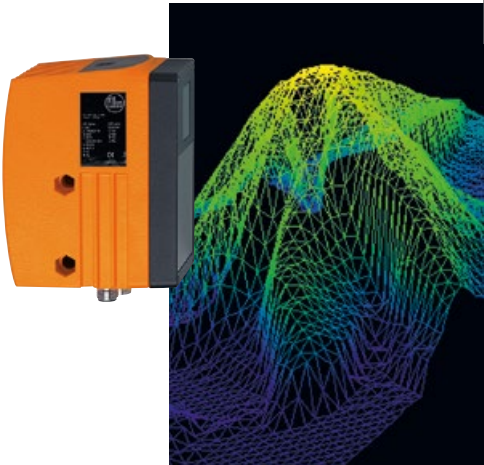
alternative to a salary waiver? If we wanted to save the same amount per year, 250-300 employees would have to leave the company. I am sadly aware that this also involves 250 to 300 families that have been relying on ifm, some of them for 10 or 20 years already, if not more. No, that is no alternative, at least not without having tried everything possible beforehand, including a collective salary waiver.

2009

ifm, too, is hit by worldwide recession and implements short-time working in Germany.

ifm is top 30 awardee in the NoAE-innovation competition at the Würzburg automotive summit.

Market launch of efector pmd 3d. First vision sensor to detect objects and scenes in three dimensions at a glance.



Heinz-Georg Wirooks, ifm group of companies, Germany

From sensor to SAP. To start with, there was efector octavis sensor, a vibration diagnostic system launched in 2004 in order to tread new paths in condition-based maintenance. However, it quickly became apparent that the sensor alone could not meet

the customers' wishes and requirements in terms of maintenance.

What was the use of having a traffic light system on their machine to signal the machine's condition if the customer's staff overlooked it?



machine was able to autonomously signal its condition by issuing an email or a direct maintenance order.

Introduction of such an RTM solution demanded that the customer be advised accordingly, the hardware and software be implemented, all elements be put into operation and the customer be trained.

As this was hardly compatible with ifm electronic's fields of business of that time, the idea came up to have such services handled by a separate private limited company – ifm consulting was born.

The birth of ifm consulting, on 1 January 2009, fell in the midst of the century's biggest economic crisis.

After a turbulent start, ifm consulting's portfolio has meanwhile been extended.

Besides offering hardware, software and engineering services, today's focus is on optimising plants and machinery and on creating transparency in production processes in terms of machine condition and capacity utilisation.

Meanwhile, the RTM concept also covers product traceability as well as process traceability, energy and software solutions and – with “LINERECORDER” – even an entire manufacturing execution system (MES). The “From sensor to SAP” approach is consistently being pursued.

Owing to the consideration that a great number of customers use SAP and also employ the SAP tools for maintenance purposes, the decision was made to develop a software solution in the SAP environment that could be used as an SAP add-on for preventive maintenance: RTM-SAP.

For the first time, signals could be continuously processed from sensor to SAP.

It became possible to pass information from the VSE evaluation unit to the SAP world where, by means of an RTM Cockpit, the respective maintenance and alarm rules could be generated. From then on, the



**Michael Marhofer,**  
*ifm group of companies, Germany*

**A risky path.** In 2008, we still believed, at least until October, that we would come through unscathed. Like many analysts, we too were taken in by the erroneous belief that a banking crisis must not necessarily be followed by an economic crisis. From November 2008 on, it was evident that we would face quite a big shortfall in turnover. Then, things came thick and fast. Short-time work, suspension of all investments that could still be suspended, waiver on the part of the employees of special benefits etc. Moreover, the sales activities were entirely reoriented towards acquiring new customers, and the development departments increasingly focussed on customer-specific products so as to get out of the crisis as quickly as possible by our own efforts. One thing, however, that was of utmost importance to us was to weather the crisis without having to resort to compulsory redundancies. A risky path as nobody knew how long the crisis might last. In the end, it paid off because hardly any competitor attained their pre-crisis level as rapidly as ifm did. Those were extremely difficult times, nonetheless. And for me personally as well. In hard times, you are much more aware of the responsibility you bear than in good times.



The team of newly founded ifm engineering.



Chinese award for LMT level sensor.

2010

End of short-time working at ifm Germany in May.

6 July: Foundation of ifm engineering pvt. ltd. in India, the core competence being hardware and software development for fast digital signal processing.

Presentation of mini controller ecomatmobile Basic for use in mobile machines.

“Green production”: one of the hot topics at Hannover Messe 2010. ifm presents their innovative solutions for sustainable climate and resource protection in a compendium named likewise.

LMT level sensor awarded one of the “2010 Top Ten Innovative Products in the Field of Industrial Automation in China” in November.



Mascot Bob Basic supports market launch campaign for new mini controller “Basic”.



In 2011, ifm receives the monument plaque for the Glückaufhaus: the traditional building in Essen officially enters the list of historical monuments of North Rhine-Westphalia.

2011

July: Foundation of ifm ecolink, the new production site for connectors, in Poland.

Foundation of ifm automotive gmbh.

Founding of Automation24 in May 2011 – Stefan von der Bey and team gain valuable experience in a bundled online shop together with other suppliers.



**Cristina Gonzalez Garrido,**  
*ifm group of companies, Germany*

**A big building.** When I hear the word “ifm” today, the first thing that comes to my mind is “orange”. I still remember coming for my job interview: The impressive building alone intimidated me and I was almost tempted to head back home. I just had not expected to come upon such a big building that suggested a company of a size I would not have associated with the family-owned company ifm. ifm, however, not only offered me something completely different from what I would have expected but did actually give me a very warm, open arms welcome. I never get the feeling of being left alone. This is why I am glad that, at the time, I did not head back home.







Manfred "Manni" Breukmann, radio legend of West German broadcasting corporation WDR, moderates at ifm stand in Hanover.

**Michael Marhofer,**  
*ifm group of companies, Germany*

**According to plan.** A turbulent year is over, a year which was as unreal as the previous year 2009, only in the opposite way. At the beginning of 2010 it was definitely not yet foreseeable that the economy and therefore also ifm would recover from the economic crisis so fast. Sure, we had already seen first positive signs at the end of 2009. Based on this we submitted a sales projection for 2010 of 8.5 % increase compared to 2009. From our point of view this was more than positive. Now we have reached nearly 40 % increase of the total revenue and have therefore exceeded the result of 2008. Thus we are in a very good position compared with our competitors and we have experienced a better development than the market.

The measures that we initiated during the crisis have contributed considerably to this. We already decided at the end of 2008 that the sales engineers worldwide would not work short time, but spend 30 % of their time with selected potential new customers. The result of this measure is something to be proud of. During the crisis ifm was able to win more than 7,000 new customers, an increase of nearly 8 %, which is something we haven't had for more than 10 years. These customers could certainly only slightly attenuate the effects of the crisis for ifm in 2009, but it is also certain that part of this year's additional growth is due to exactly these new customers.

The decision to deal with the crisis without redundancies was very good, too. This was the only way that ifm could handle the enormous growth after the end of the short-time work in such a short time. This fast recovery put us in the position to take back some of the saving measures earlier than planned, e.g. by paying the Christmas bonus in 2010.

**2011**

3 February:  
ifm receives the German "Axia Award 2010" for medium-sized companies in the category "Future-oriented customer cooperation from the customer idea to innovation".

The second edition of the book "Aus bester Familie 2011" presents ifm as a successful family business.



Employees promote their job: ifm employees pose for new HR marketing campaign so as to authentically address the target group.

**Christian Riethmann,**  
*ifm group of companies, Germany*

**Help from the DIY market.** ifm exhibited at the SPS trade fair in Parma, Italy. Shortly before the start of the fair, I arrived in our exhibition hall and expected our stand to be finished as usual. How wrong I was! All



of the stand constructions for our exhibits were missing. The exhibition stand builder was sure that they had been sent. In Italy, however, nobody was sure that they had been received. No wonder, in the chaos of exhibition stand building you can easily lose track of things. Everybody mounts their exhibit stands at the same time and the alleys keep being cleared so as to allow for new material to be delivered. We therefore

presumed that our stuff was disposed of and scrapped by mistake. What to do now? Ask for a new delivery from Germany and mount the stand over night?

I had an alternative idea: On our outward journey, I had seen a building supplies store. So I headed there and was enormously lucky to find what we needed in exactly the correct colour. Together with the installers on site, we managed to replicate everything and were done just in time. However, we never got to know what really happened to our stuff. During the fair, nobody noticed a thing and the whole event was a great success.



ifm shareholder Michael Marhofer (on the left) at the "Axia Award 2010" ceremony in the Intercontinental Hotel in Düsseldorf.



**Ulrich Wickert,**  
*journalist and book author*

(Translation of an extract from his book "Redet Geld, schweigt die Welt Was uns Werte wert sein müssen" (When money speaks, the world remains silent – how we should value our values))



Some companies in Germany earn billions by producing weapons. Germany is in the top group of countries that sell military equipment.

This is not the kind of business that ifm electronic, with their production sites located on Lake Constance, wishes to make money with.

Which is why one of the company's corporate principles says: As a matter of principle, ifm will not develop, produce or sell products that directly serve military purposes.

However, ifm produces electronic sensors and control systems that any arms producer would be keen to have at his disposal. Thus, the inevitable happened and the company was offered a large order, which it declined for fear that their products would end up being part of a weapon system.

After all, a company can indeed assume responsibility for humanity at the expense of its own profits.





**Kent Karlsson,**  
*ifm group of companies, Germany*

A purchase order for a plant. The strategic considerations began back in 2008. Possible locations for an integrated plant in Asia were analysed. Discussions with local authorities had already taken place, too, but then the whole project was temporarily put on hold due to the financial crisis of 2009.

In autumn 2009, the managing directors then officially charged me to prepare the decision-making for “an integrated plant in Asia”. The first step consisted in defining evaluation criteria for possible locations, creating a general and location independent business plan and entering into further discussions with local authorities. Moreover, I needed a partner for the Asian project. My former Hilti colleague Mr Chen Zhou proved to be the ideal person.

With regard to our requirements, two locations – Hong Kong and Singapore – were eventually shortlisted and individual business plans and qualitative evaluation criteria developed for the two locations under consideration. In July 2010, a further trip to Hong Kong and Singapore followed, this time together with Michael Marhofer and Martin Buck and with the objective to examine the respective conditions on site. On the basis of the business plans, evaluation criteria and the conclusions reached during the visits on site, the choice for the future location fell on Singapore (including the decision for the plant building). Then, a contract was negotiated with the local authorities in charge of foreign direct investments, the Economic Development Board (EDB) in Singapore. In autumn, Chen Zhou took up his post as managing director of the new company ifm electronic Asia Pte. Ltd. I was confirmed as project manager

for the period up to the start of series production before subsequently taking up a role as member of the Board of Directors. The target deadline for production release (of sockets, to begin with) was scheduled for June 2011.

The next thing to do was to entirely renovate the existing building, provide all machines required for socket production, install a suitable ERP system, recruit staff etc. so as to allow for the start of series production. Our first office was located in the sales organisation in Singapore. Then, in April 2011, we could move into the renovated building. The required machines were delivered by May. Qualification of processes was completed in time so that we could release series production three weeks earlier than the deadline of beginning of June 2011. The opening of the plant in October 2011 completed the “Setting up an integrated plant in Singapore” project, with the responsibility being transferred to Mr Zhou.

In November 2009, when the decision had been taken, Mr Buck had sent me an “informal order” by text message right from the AK1: “I hereby place an order for a plant in Asia. SOP by mid-2011 at the latest.” On the occasion of the official plant opening on 12 October 2011, I took great fun in referring to this episode by also sending a text message which said: “I hereby confirm that the order has been completed.”



## 2011

12 October:  
In Singapore, ifm opens the first production and development site in Asia.

The annual production volume exceeds the 10 million euro mark for the first time.

“Half-a-billion mark” hit: In November, the turnover of the ifm group of companies amounts to EUR 500 million.

**Dipl.-Ing. Wilko Willuhn,**  
*INDAG Maschinenbau GmbH*

ifm manufactures products you really need.



Project manager Kent Karlsson (on the left) with ifm shareholder Michael Marhofer at opening ceremony in Singapore.



**Michael Marhofer,**  
*ifm group of companies, Germany*

**International production.** For many years, ifm had been developing and producing primarily in Germany. In the last years, more and more international development and production sites have been founded (for example in Singapore, Poland and the USA).

This was basically due to two reasons: First of all, it became and becomes increasingly difficult to get qualified personnel in the Lake Constance region, especially in the field of development. This increases the risk of a restriction in growth as we permanently need new products if we want to grow. For this reason, many locations abroad were also provided with a development and production department.

The second reason mainly applies to production in Poland where the costs are considerably lower than in Germany. Well, at ifm we also have products for which the production processes cannot be automated at all, or only insufficiently, and where it is rather unlikely that this will change in future. At the same time, the market price for these products is under severe pressure. At some point, we too had to accept that we could no longer exclusively hold on to our initial strategy.

Hence the following rule: Any products for which the production process can be automated or which generate high gross profits allow for production in Germany in the future as well. Any low-margin products that require a lot of staff for production and where economic automated production is extremely unlikely to be feasible in the future are produced in Poland.



**Michael Pitschlitz,**  
*ifm group of companies, Australia (formerly South Africa)*

**Expansion in Africa.** Since 01 August 2012 ifm electronic has been represented in Africa in a second country – namely in Namibia. Namibia is rich in mineral resources such as uranium, zinc, diamonds and copper. With a population of roughly 2.2 million inhabitants it is renowned and respected for its political stability. In the past three years, Chris Cronje – one of ifm's sales managers in South Africa – has established sales in Namibia by visiting Namibia every two months and regularly making phone calls. On this basis it was decided to found a company.



At first glance, ifm Namibia is quite small with just two people, but they have ambitious plans. The latest ifm subsidiary is the consistent translation of the ifm principle of creating solutions in close cooperation with the customer and thus establishing a business relationship from which both sides benefit equally in the long term.

The office is perfectly situated on the outskirts of the Windhoek CBD in an up-market office park. Total office space is 70 m² and comprises two offices, the storage space, the reception area, a small kitchen and the staff rooms.

One of the main reasons why ifm Namibia was not founded as a branch office of ifm South Africa, is that companies in Namibia prefer making business with and buying from companies in Namibia. At present there are only two sensor manufacturers in Namibia with their own businesses: ifm electronic and the competitor Wika.



What is  
ifm quality?



Intensification of cooperation between Pfungstweid in Tettang (a home for the handicapped) and ifm, initiated more than 25 years ago:  
At the beginning of 2012, the second washing plant for reusable packaging is put into operation.



Conquers a new market segment: TD temperature transmitter with display, developed in the USA.



In July, the newly founded development and production site ifm prover is officially opened in Malvern, USA.

**Benno Kathan,**  
*ifm group of companies, Germany*

**The first subsidiary of a subsidiary.** The decision to create a development and production subsidiary in the USA resulted from various events. Post 2008 recession was very painful. We could not really act as we would have liked to.

Starting in 2010, the economic situation improved again and we could finally create new jobs. However, it was incredibly difficult at that time to recruit employees. Another reason were the exchange rate fluctuations of the dollar, which before long made production in the dollar zone economically attractive. In addition, space problems gradually got worse we were literally bursting at the seams!

In order to solve the problem, our focus fell on temperature sensors as they easily allowed for separation. Moreover, there was also a human factor that came into play: One of our colleagues unfortunately had to deal with a hard blow of fate. As he was THE temperature sensor specialist par excellence, we proposed him as the new manager of development in the USA. It was a win-win situation for both, the company and the employee: We benefited from an experienced manager who did not require any training and the colleague in question got the chance to start a new chapter in life.

Today, 90 % of temperature sensors are produced in the USA. And we

are now aiming for the 100 % mark. Our choice of location was not only positive in terms of "geography" but also in terms of mentality as the people there are simply exactly in line with our way of thinking. This helps reduce cultural differences. Our colleague took our company culture "across the pond" and we can confidently give him his head, thus allowing each of us to focus on our strong points.

## 2012

March:  
The new ifm website with its revised product structure goes online. By now, it is available in many languages and for 43 locations.

March:  
The CRF Institute rates ifm among the "top employers 2012" in Germany.

23 July:  
Opening of a new development and production location in Malvern, USA. Development, production and product management of temperature sensors are from now on located in the USA.

Take-over of the software company Handke under the new name of ifm datalink.

With LINERECORDER system software, ifm complements the product portfolio with industry software perfectly in line with the Industry 4.0 trend.





Simone Felderhoff,  
ifm group of companies, Germany

Connection technology from Poland. Together with ifm founder Robert Buck †, Chairman and Managing Director of ifm Martin Buck, numerous guests from politics and business as well as 180 new colleagues, the managing directors of the new Polish production site, Andrzej Durdyn and Karl Milz, celebrated the opening in Opole on 1 October 2012.

The official part of the ceremony started at 11:00am. After a speech by Martin Buck, the Managing Directors of ifm ecolink looked back at the construction phase. They thanked all those involved for their great commitment and outstanding support during this time. And in my opinion, it was indeed a great performance, given that the building was constructed and equipped within only six months from the first discussion until the start of production.

Moreover, not only was I very much impressed with the perfectly organised bilingual event but also with the great hospitality shown to us. The managing directors insisted on personally accompanying us during the visit and were at our disposal for any question whatsoever.

On the new production site's 5,000 square metres, ifm sockets will be manufactured as of now. During the construction phase, the 180 employees took it in turns to visit the main production site in Tettnang. There, the new ifm colleagues got to know the company and the philosophy of ifm so as to anchor the latter in their own country as well.



Time of flight measurement for standard sensors The O5D photoelectric sensor combines the advantages of long ranges, reliable background suppression, visible red light and high excess gain in one unit.



PMDLine  
under test



Since 2013, ifm has their own social media presence on facebook.

Jessica Staub,  
ifm group of companies, Germany

Social media: Who would not have heard of them? Facebook, Twitter and Co have become an integral part of daily life for many millions of people today. But do companies also need to join in? We say, "Yes!" After all we want to support our customers directly and immediately, fully in line with our slogan "ifm electronic close to you!". Today, social media allow much more than "just" exchange information and enter into a dialogue with our customers. Our customers, in turn, get the chance to ask questions and have them immediately answered.



efector mid – Inline flow sensor for precise measurement of liquids up to 600 l/min.

2012

1 August:  
Foundation of ifm Namibia.

1 October:  
Opening of the new production site in Opole, Poland.

ifm now officially nominated as one of the "Brands of the Century" after having won the "Brand Award of the German Standards".

2013

Since January 31, pmd-technologies ag is a 100 % member of the ifm group of companies. With this step, ifm consistently extends their competence range in microelectronics.

ifm receives SMETA certificate. The Sedex Members Ethical Trade Audit assesses production sites and value chains with regard to their compliance with national laws (on the basis of a defined ethical code).



Sarah Brühl,  
ifm group of companies, Germany

**Compliance.** Many colleagues ask themselves, “What is it actually about?”, “What does it mean for ifm?”, “Why do we actually need such a thing?” Since its publication in August 2013, the ifm internal code of conduct has repeatedly given rise to questions on the meaning of the term “compliance”.

Wikipedia proposes the following definition: “In general, compliance means conforming to a rule, such as a specification, policy, standard or law. Regulatory compliance describes the goal that organizations aspire to achieve in their efforts to ensure that they are aware of and take steps to comply with relevant laws, policies, and regulations.” It can, however, also refer to voluntarily implemented codes.

But does it not go without saying that legal provisions are complied with? Well, as far as ifm is concerned it definitely does. However, in order to be able to comply with legal provisions, you must be aware of them as well as understand and implement them. This is the responsibility of specially qualified colleagues who watch over compliance in their fields of activity and ensure its implementation. This can involve tax regulations, labour law-related or environmental regulations, standards related to the development or marking of our products and much more ...

The ifm philosophy, however, stipulates much more than “merely” comply with legal provisions.

ifm actually aspires to also meet their own moral obligations which means, among others, that we also demand of our suppliers that they comply with European standards during their production processes etc. Not all companies consider this to be self-evident. We all remember the news on textile production in a Bangladeshi factory building in danger of collapsing ...

In some cultural groups, it can be part of “common” business practices that, on concluding a bargain, the representative of the customer receives a benefit of some kind or another. Even if in certain countries and up to a certain extent this is not liable to prosecution, we prefer to convince by technically highly developed products and by our sales colleagues' expertise and not by granting materialistic benefits.

To complete the philosophy of our company that has been existing for many years already we have developed and put down in writing, in a clearly structured form, our own code of conduct. This code is binding for all ifm employees and serves as a guideline for implementing the self-imposed rules in daily work. Every employee can thus contribute to the implementation of the self-defined high-level moral obligations.



From 8 to 12 April 2013, the world of automation gathers together again in Hanover. The new ifm fair stand with its LED curtains, in hall 9, stands out immediately from a long way off.  
Among the visitors: German Chancellor Angela Merkel and Russian President Vladimir Putin.



The new ifm flexpro buildings were officially opened in March 2013. Martin Buck, Chairman of the Board and co-CEO of the ifm group of companies, welcomes the guests.



## 2013

- ifm goes online with their own mobile website for mobile terminal equipment (smartphones, tablets). It comprises the most frequently used functions and contents of ifm's standard website.

- In August, ifm publishes their own code of conduct under the headline of “compliance”.

- In June, ifm electronic migrates from ERP system BaaN to SAP. In the following years, the individual national subsidiaries gradually follow suit.

ifm opens their gates for the company's offspring during the summer holiday: A varied holiday program including handicraft and physical activities as well as trips to nearby places awaits up to 30 kids at the Lake Constance locations.



- In June, ifm efector gmbh was founded for the development and production of inductive, capacitive and photoelectric sensors.

## 2009 – 2013

- 610 MILLION EUR IN SALES
- 5,000 EMPLOYEES
- 600 PATENTS
- 49 COMPANIES

### Product milestones



3D sensors



Modular mini controller



Industry software



**2014–2018**  
ifm is changing –  
the world is  
becoming digital.



**ifm**  
knowledge network

**posi**  
HIGHTECH YOUR BUSINESS

**5 YEARS**  
Warranty  
on ifm products





**Michael Marhofer,**  
*ifm group of companies, Germany*

**New Group structure – ifm has fundamentally reorganised itself.** ifm electronic gmbh used to be the parent company of all our shareholdings and subsidiaries. At the same time it was our largest operative company.

For quite some time, the company has been divided into divisions such as fluid or position sensors.

The new group structure, which became effective in January 2014, should accommodate these developments but it also fulfils another important function: The shareholders of the ifm group have already started to prepare a change of generations.

This does not mean that this change is imminent but the next generation gets into an age in which we have to prepare to familiarise these young people with the company and also to set up structures which support a change to the third generation in the best possible way.

The last change of generations also took more than 15 years of preparation. The company today is significantly larger, more complex and more international. This does not make such a step any easier.

Owing to these considerations, we have decided to establish ifm stiftung & co. kg on the very top of the new structure as the new parent company for the whole group of companies.

The former shareholders of ifm electronic gmbh have transferred

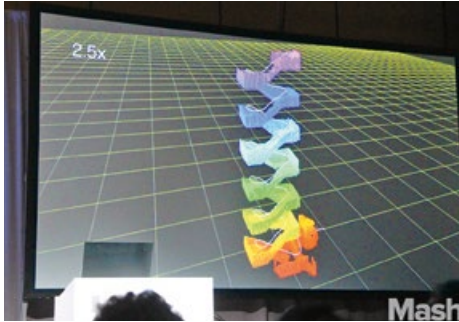
their shares in ifm electronic gmbh to ifm stiftung & co. kg. The new intermediate holding companies in which ifm electronic gmbh and also all central Managing Directors are based are also 100 % subsidiaries of ifm stiftung & co. kg.

In ifm stiftung & co. kg. all our shareholders are represented as owners of the whole company. The vote allotment, as so far at ifm electronic gmbh, has not changed. The recent Managing Directors of the group of companies (Martin Buck, Bernd Busch, Michael Marhofer and Dr Thomas May) are now the responsible Board Members in the new parent company.

The recent Corporate Sector Directors have now been appointed Managing Directors of the intermediate holding companies (ifm electronic gmbh, ifm process gmbh, ifm position gmbh und ifm network & control gmbh). They have the same tasks as before.

All operative subsidiaries like ifm prover gmbh or ifm flexpro gmbh are now assigned to the corresponding intermediate holding companies and report directly to the Central Managing Director, just like before to the Corporate Sector Director.

This structure allows us any freedom for the future and we have taken the first formal step towards the third generation.



The “Advanced Technology and Projects” group from Google whose project partner is the ifm subsidiary pmd-technologies presents seven tablets with integrated and pmd-based depth sensors to the public for the first time in the context of their current “Project Tango”.



Smart 3D sensors for mobile machines: The O3M 3D sensor for automatic object detection and fast identification of 3D scenarios.



ifm uses energy sustainably: Günther Hohloch, Christian Alber, Bernd Boolzen and Arnold Roth are presented with the reward for ifm.

In close coordination with users the new generation of the PN pressure sensors was created. They are distinguished by even more user-friendliness and improved visualisation.







identicom in Essen is looking for a cold challenge: Matthias Jablonski (left) with his colleague Hans-Peter Hoffmann during the Ice Bucket Challenge.



In 2014, three English colleagues, Paul Stansfield, John Wilkinson and Steve Owens, meet a special sports challenge: They go by bike from the English ifm branch office to the ifm headquarters in Essen. They cover a distance of 512 kilometres which means 26 hours on the bike.



Sabrina Buxbaum,  
pmdtechnologies, Siegen

On an equal footing with Google and Lenovo. It all began at the Consumer Electronics Show (CES) 2014 in Las Vegas, the world's largest trade fair for electronic trends and IT solutions, with over 170,000 international visitors. From 2009, when the global technology leader for 3D time-of-flight image sensors pmd presented a new company and market strategy, the CES has been a basic factor and has also functioned as yearly kick-off event since 2010: For there is no other location where all the major players in the industry can come together within a few days and make or intensify initiating and important contacts.



2014 saw the decisive meeting with Google to discuss 'Project Tango'. After an impressive presentation of the then 3D camera system, the colleagues from Mountain View were convinced of the potential for mobile applications. Dr Bernd Buxbaum, CEO, remembers, "Johnny Chung Lee, project manager, and the Google Tango team were working at full speed on the vision of a human, three-dimensional perception of the environment. After the presentation of our prototype camera there was a key scene: The Tango team had eventually found the hoped-for performance in combination with the small size. Enthusiasm was tremendous. It was a goose-bump moment that everyone who was there likes to remember and which plays a decisive role for our company development." As a result, first projects were carried out with Google. The focus was placed

on massive miniaturisation of the technology as well as enhancement of the software algorithms and the depth map computation. The aim of the Tango project was to give mobile devices the same three-dimensional appreciation of the environment as people have.

The first milestone was the integration of the 3D technology in tablet prototypes, presented at the Google I/O 2014. In a second step, pmd had to overcome 3D technology competition in a benchmark project. Then, on account of Google's parallel development of the Android ecosystem for 3D technology (3D camera support on Android operating systems), Lenovo approached pmd and Google in 2015 to become the first Tango OEM. In addition, Qualcomm was presented at the Google I/O 2015 as a partner and processor manufacturer for the project. On the basis of this constellation, the pmd technology was integrated into the first Tango-based smartphone called the Lenovo Phab2 Pro. Lenovo officially presented this product at the Lenovo Tech World in San Francisco on 9 June 2016.

It was a long and bumpy road: It can surely be said that pmd as a relatively small company managed to work with big companies such as Google and Lenovo at an equal footing and was appreciated as such.

Matthias Jablonski,  
ifm group of companies, Germany

**Ice Bucket Challenge.** Marc Zuckerberg, Bill Gates and Lady Gaga have one thing in common: They all met the physical challenge to animate others to participate for a good cause in the summer of 2014. The ALS Ice Bucket Challenge was an event intended to be a donation campaign in the summer of 2014. It was to promote awareness of the motor neuron disease amyotrophic lateral sclerosis (ALS) and to collect donations to research and fight this

disease. The challenge was to pour a bucket of ice water on your head and then to nominate three or more people to do the same within 24 hours and to donate 10 dollars or euros to the ALS Association. If you did not want to pour a bucket of ice water on your head, you should donate 100 US dollars or euros to the ALS Association (ALSA). ifm joined this campaign (for from our point of view also important other organisations). In just two weeks

more than 30 funny, surprising and above all "refreshing" videos were made within a short time. ifm staff from all over the world joined in and donated more than 2,300 euros, with or without video and ice water. Mr Marhofer, Chairman of the ifm group of companies, rewards the commitment of the ifm staff: "Since I waited too long with the video, I will double the amount donated by 26 September."

## 2014

On 10 July 2014, ifm sells the Glückaufhaus to Cordea Savillis, an internationally active investment management company.

On 12 November, ifm electronic gmbh from Tettngang receives the "Family-friendly company" certificate for their systematic, family-friendly HR policy.



On the occasion of ifm's 45th birthday a poster was created as a visual "family reunion".



Andreas Fobbe,  
ifm group of companies, Germany

**Slowness.** How to develop successfully in a country where you march to the beat of a different drummer, when you bridge unexpected time windows in a meaningful way and even work in front of “closed doors” is linked for me with the following adventure:

The farther south you get in the south of Chile, the slower the marching tune and life goes at a more leisurely pace. Marco Zamora, Sales Manager ifm Chile, and myself could experience it when we visited the forestry and paper trade fair “Expocorma” in Concepción. The flight from Santiago to Concepción was in the middle of the night to make sure to arrive on time for the opening at 9 h in the morning.

So we were standing in front of the entrance like many other visitors and were waiting for the doors to open. After quite some seesawing

we found out that unfortunately everything had been postponed and there was a typing error: Doors opened not before 11:00am!

So what to do without any city activities close by?

Quickly following the advice of trade fair staff and taking a public bus to the next mall to deal with necessary phone calls and emails at a coffee shop or restaurant with internet access. Unfortunately we had to find out that all facilities in Concepción do not open before 11 a.m.! So we eventually found ourselves sitting on a bench in front of closed shops and had the meeting which had been planned for the next day at the office in Santiago. This way the waiting time could be bridged in a meaningful way.

Later on we learnt that the people in Concepción are known for their

“slowness” and in general it is said in Chile: “Lazy Concepción”.

Today the branch office ifm Chile develops faster than “planned on paper” thanks to the mix of integrators, customer visits and customer contacts via telephone, Skype or chats. The focus of the branch office ifm Chile is on food and beverage and is complemented by customers in the nearby copper mines. The small ifm team continuously wins new customers and the market share in the country increases. For 2017 the required expansion into the south of Chile is pushed to create greater loyalty of the local food industry towards ifm Chile. So not that “lazy” anymore, this Concepción ...



The team of ifm Chile.



## 2015

The ifm group of companies is certified as “Ausgezeichneter Ausbildungsbetrieb” (excellent certified training company) by ertragswerkstatt GmbH.

Since January 2015, ifm has had the short URL ifm.com – a lengthy process has now been completed, and another milestone in online business has been reached. It is now even a top-level domain, meaning that ifm websites can also end in .ifm.

1 April:  
The ifm group of companies has a new subsidiary: ifm electronic SpA in Chile.

ifm and SAP agree a “Memorandum of Understanding”. As early as December 2014, ifm was certified as an SAP partner for “SAP Integration with Cloud Solutions”.

ifm Engineering India receives the EN ISO 9001:2008 certification.

System change to Microsoft: ifm changes from Lotus Notes to Outlook.



ifm in Brazil

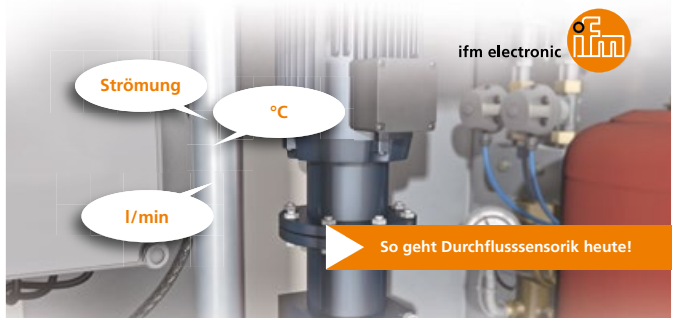


Attractive packaging: intelligent incremental encoders with display and IO-Link.



Early January 2015: Opening of the new logistics centre of ifm electronic Ltda. Brazil in Guarulhos / São Paulo. The opening was officially celebrated on 27 February in a cosy atmosphere with live music.

13 March THW awards ifm: Many employers, among them ifm, support the Technische Hilfswerk (THW, provider of professional help to people in distress) thus ensuring civil protection on a voluntary basis in Germany.



Smart flow rate measurement: mailer for the new inline flow meters with user-friendly display.



In the context of the “German Design Award” two ifm sensors are awarded on 27 February: the PN pressure sensor with special mention and the O6 WetLine photoelectric sensor. Another success for the PN: On 29 June, it receives the world-famous Red Dot Design Award.





Laptops for students: In March 2015, ifm enters into an educational partnership with the Bildungszentrum Parkschule Kressbronn.



The new company headquarters ifm efector in Malvern, USA.



In August 2015, the new 4,181 m<sup>2</sup> company headquarters of ifm efector USA in Malvern is opened. The modern building provides lots of space for future growth on the US American market.



**Michael Marhofer,**  
ifm group of companies, Germany

**ifm knowledgenetwork.** With the go-live of our ifm knowledgenetwork on 19 November 2015 we created the basis for digital networking of all ifm colleagues around the globe.

The ifm knowledgenetwork will be the central platform for our knowledge and our cooperation across all locations.

With the ifm knowledgenetwork, we make a great jump ahead in order to offer our increasingly demanding customers what they have always appreciated in us: competent and unique brand ambassadors with a passion for innovative products and solutions. In a constantly growing world of products and markets, new approaches are needed to make this knowledge more accessible and to protect employees against excessive strain.

The ifm knowledgenetwork is not intended to replace personal contact, but it constitutes a short-cut if it is not possible to meet in person. It is not intended to become an additional information channel, but it is designed to help us reduce effort and work in a reasonable way.

The project team around Marie-Isabelle Mönnig, Jessica Staub, Mark Kumbruch, Frank Niedermann and Jörg Rieck has worked hard towards this day with a lot of heart and soul and commitment for one year. Thanks to the committed cooperation of many ifm colleagues and their ideas a platform has been created which meets the requirements of modern cooperation. As a member of the steering committee I could already gain some insight in advance and my enthusiasm increased the more the ifm knowledgenetwork took shape. We are now starting with a basic version which will continue to be further developed in the next few years so that we can replace all Lotus Notes databases successively.

Now it is up to all of us to let the ifm knowledgenetwork come to life by curiously discovering its possibilities and leaving our own traces there. A knowledge platform lives on giving and taking.

With this in mind: create – connect – share!



In November ifm prover USA starts with the production of the flow sensors of the SU series. In December 2015, manufacturing of the SV series begins.



In cooperation with some German medium-sized enterprises from the automation industry the Singapore EDB (Economic Development Board) starts a training program which ifm joins.



In a common project between the GEA group of companies, ifm and SAP Germany, the vision of "Industry 4.0" becomes reality. The essential part of the project is the efficient design of predictive maintenance and condition monitoring of machines.



Introduction of parameter setting software for IO-Link sensors: LINERECORDER SENSOR.

Opening of the new company headquarters of ifm efector USA in Malvern, Pennsylvania.



2015

ifm consulting merges with ifm datalink. The new company name is ifm datalink gmbh.



**Dr Bernd Buxbaum,**  
*pmdtechnologies, Siegen*

**Brave new world.** When US President Barack Obama visited the stand of the ifm group of companies at Hannover Messe 2016 and put on virtual reality glasses, he was obviously fascinated. This reaction can be witnessed with everyone who uses this technology for the first time. It is indeed very fascinating to plunge from the real world into an entirely new and maybe distant or even inaccessible world without much ado or to add virtual objects to the real world (augmented reality). Things become even more impressive if you can interact with these virtual objects in an entirely natural way and manipulate them with your hands as if they were real.

This is exactly what the President and Chancellor Merkel experienced when they tried the Google Cardboard glasses that had an integrated 3D camera from pmdtechnologies. To fly across a virtual city and to change the direction just by using your hands, to travel “as free as a bird”... Who would not like to do it? Thanks to innovative camera and display technologies on modern smartphones, now anyone can experience this. This makes various applications possible that range from games (casual gaming) to professional purposes. The present hype about the augmented reality game Pokémon Go shows how many users are fascinated by the new possibilities.

In general, there is currently a great trend to provide smartphones with an improved perception of their environment by equipping them with additional sensors (such as 3D cameras) and algorithms (deep learning for artificial intelligence) which also open up new applications. This makes it possible, for example, that future smartphones will be able to recognise and understand their environment and relate to it in a way that is similar to us humans. Such devices can perform tasks that help and support us humans in certain situations.

So it is no surprise that the President was visibly impressed and proclaimed “It’s a brave new world” when he left ifm’s exhibition stand after more than ten minutes of intensive discussions instead of only five minutes as had originally been scheduled.

In the framework of the expansion of the more and more increasing international business of pmdtechnologies, the legal form of the company was changed from GmbH (private limited company) to AG (public limited company). So the course was set for a considerable growth which is expected from the consumer industry with smartphones and the automotive industry with driver assistance systems on the basis of 3D cameras.



US President Barack Obama and Chancellor Angela Merkel with Michael Marhofer and Dr Bernd Buxbaum (r.) at the ifm stand in Hanover.

**2016**

12 January:  
ifm holds a majority share  
in Qosit AG.

pmdtechnologies and ifm  
efector USA become active  
with a joint branch office at  
Silicon Valley, California.



Mailing campaign with  
the newly launched O3D  
3D sensor.



Chancellor Merkel  
and President Obama  
visit the ifm fair stand at  
Hannover Messe.



Martin Buck and Klaus Unger (on  
the right) at the official opening  
ceremony of the ifm production  
site in Sibiu, Romania.



19 May  
Opening of the production  
and development location  
Sibiu in Romania.



Complex international advertising campaign: Presentation box for the inductive Kplus sensors with constant correction factor.



100 staff and around 9,400 active articles find their new home at the logistics centre in Essen.



One of the most modern logistic centres in Europe.

A true eye-catcher. Advertising for the "VISION" trade fair in Stuttgart.



## 2016

The ifm subsidiary pmdtechnologies becomes a public limited company.

The ifm logistics centre in Essen, one of the most modern logistic centres in Europe, is officially opened in early February. The Board, everybody involved in the project and project partners as well as the staff were present.

# close to you!

## THE MOVIE



Close to you!  
The Movie

Ines Mehler,  
ifm group of companies, Germany

"Quiet please! ... aaaaand action!" Shooting of the ifm image / corporate film started in spring 2015. After intensive planning and final coordination with ifm's Board of Directors, the shoot of a one-of-a-kind project took almost one year.



The film should focus on "ifm close to you!". The well-known company slogan has become an integral part of ifm's communication for years now, but what exactly does it mean? The film wants to answer this question yes, to meet this challenge and intends to emphasise ifm's strengths as compared to

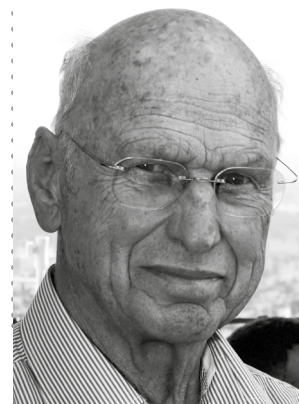
the competitors. "ifm means service and passion, and the people behind the technology". How can something this abstract be conveyed in a four-minute film? Given that we place the focus on people and want to credibly convey emotions, we need people who speak authentically in front of the camera. Therefore, the project team spent the first half of the year looking for interview partners among staff and customers for an "honest" interview. And as the ifm group of companies is a global company, employees and customers from all big international markets of ifm were asked. Filming began in Europe and North America and in November in Korea, Singapore and Malaysia. The shoots in the different places were all very exciting. In every country the conditions were different,

whether it was very hot or it was very crowded due to traffic congestions, despite all odds the film team managed to film everything, partly until late at night. Whether at busy crossroads or with the drone well above the most famous buildings of the world, everything was captured in sound and image.

The corporate movie has a speaker in addition to the original audio of the interview partners. The speaker enriches the film by giving facts and figures. The film has now been translated into more than ten languages and is widely used. A very fascinating project which has reached the target of communicating ifm's "core".

Software for systems from sensor to SAP: The newly founded TISC AG combines QOSIT Informationstechnik GmbH and G.I.B. mbh as holding under one roof.

12 November:  
ifm founder Robert Buck passes away at the age of 81 in Tett nang.





**Stefanie Heib, Mario Holt  
and Torsten Schwermann,  
ifm group of companies, Germany**

So much more than just a website. In 2017, there were more than one billion websites worldwide. Of course, ifm had also been on the internet for a long time and had been communicating with customers online. However, what does a modern business website need to offer if it is supposed to become a leading website among automation technology competitors? Generation Z expects a website presenting products in a unique way that also gives the user helpful advice.

It is estimated that the year 2020 will have a global B2B market of 6,700 billion US dollars. What an incredible potential for our future growth, or is it rather a risk if other and new competitors will suddenly generate their sales online? If, so far, online sales had been playing a side role in the ifm world, we were now considering it a great opportunity to establish the online shop as an additional sales channel. For this purpose, a couple of cornerstones were defined that would have a decisive impact on the way the project later evolved:

- The shop is supposed to please users by being easy and intuitive to handle.
- The customer portal, myifm, offers services to manage personal data, shipping options, payment, and many more.
- The content is always new, interesting and useful to our customers.
- Products can be found intuitively and with a few clicks.

So far, everything is understandable for everyone. However, in a 6,000-person household, it is not that easy to turn everything inside out. Keywords like “high degree of integration” or “holistic architectural consideration”

must come to life. A project was developed with the active support of the marketing, product management, sales, IT and web development departments. A first preliminary project resulted in a rough system architecture consisting of CMS (Content Management System), PIM (Product Information Management) and shop system. The next step was to carve out and implement the details.

The PIM system is the core of the faceted search and the detailed product pages. What makes this system so important? In the old system, for example, the operating voltage of 15,000 articles had been documented and rendered in 342 different versions. It was sheer madness to drag this attribute in so many versions through different product groups and selectors. Today, this attribute is subdivided into seven different facets that can be combined individually for each product. The result is increased flexibility while complexity is under control.

The project even led to tangible structural changes. New teams have been formed that focus on web development, product data and online marketing.

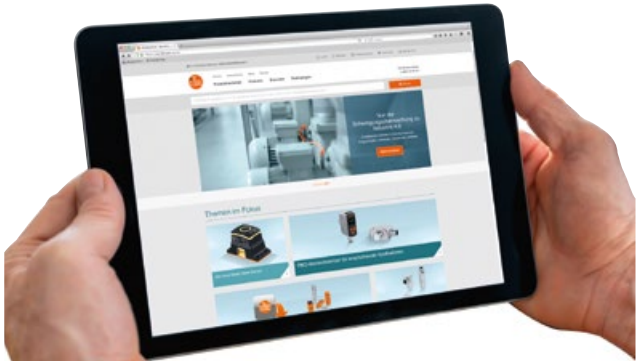
Towards the end of the project, the many people involved in the project became aware of what they had accomplished. 50 different databases had been discontinued, and the modern online shop was rolled out in 49 countries. The product data and many content elements are available in more than 25 languages. The foundation had been laid, and the further strategic development follows the message: Go ifmonline – browsing, choosing and ordering in the ifm webshop.



**K8 Compass** – competency model for managers.



ifm's new webshop



**Vera Lerch,  
ifm group of companies, Germany**

Compass for executives. In 2014, the Management Board asked us to also offer training courses for executives in the ifm learning factory. When we wanted to know more precisely what our executives were supposed to learn, we had to start from scratch, i.e. we needed to define what ifm's understanding of management actually is. The strategic management competence programme was supposed to apply to all locations, focus on the requirements and practice while being modular, pragmatic, measurable and sustainable. It was supposed to consider ifm's corporate philosophy, vision, culture and, of course, the employees' requirements.



The result was the K8 competence model in the shape of a compass. The model and the elaboration of the competences is able to grow with the requirements. This will also be necessary, considering our constant growth and the challenges of the future.

## 2016

- 11 August:  
The ifm subsidiary i-for-T, specialist for detection, analyses and diagnostics of highly dynamic vibration data in real-time changes its company name into ifm diagnostic.

## 2017

- 1 January:  
The new ifm webshop goes online.

The ifm Vietnam team  
with Sales Manager  
Frank Spitzer (on the left).



**Tin-Chee Man,  
ifm group of companies, Germany**

Small family. ifm had been cooperating for years with local trade partners in Vietnam who were selling ifm products on a local basis. However, the great potential of the country led to the decision to set up an ifm location in Vietnam.

Said and done? It was not that easy – especially because of the language and legal barriers, but also because we were not familiar enough with the market. This is why the first step in 2012 was to found a representative office in Ho Chi Minh City with the goal of studying the market more precisely and to become familiar with the local situation in general. The staff was restricted. We began with three employees. Two of them are still with ifm Vietnam today. The team was quite young, but able to gain many sales-related and technical experiences by visiting customers together with trade partners.

After five years, we finally dared to take the next step and founded a 100 % subsidiary. The foundation process was very bureaucratic. Some documents had to be signed and submitted to the authorities several times because the legal situation had changed in the meantime, and the bureaucratic processes were not properly coordinated with each other. With the help of colleagues in South-East Asia, ifm electronic Vietnam Co., Ltd. was officially founded in March 2017.

For our team in Vietnam, this was yet another challenge. There are many tasks in various areas, for example, finances, marketing and, of course, distribution. This ifm location, as so many others, is like a small family. Everyone gives a hand, and everyone tries to help as much as they can. The Vietnam team has become part of the ifm family. In the beginning, it will not be easy, but we believe that our colleagues will manage to establish the ifm brand successfully on the Vietnamese market.



- 4 January:  
The ZenFone AR is awarded “best smartphone 2017” at the Consumer Electronics Show (CES) in Las Vegas. It is equipped with a 3D camera from pmd technologies.



**Nadine Rahman,**  
*ifm group of companies, Germany*

**Thinking new ways.** In 2013, I had finally managed to leave SAP after 13 years, and since the position as Managing Director became vacant in Singapore at that time and Michael Marhofer offered it to me, I became a lucky member of ifm. Three years later, Michael Marhofer called me again and told me he had invested in a company that does SAP and if I would like to offer my support there. Hence, I packed my suitcases again, travelled to Siegen and joined TiSC AG's Board of Directors in 2016.

The company was founded in 2016 and is the current answer to digital transformation that is driven by Industry 4.0, IoT, Suite on Hana, S/4 and, finally, the SAP cloud platform. Since 2018, the ifm group owns 100 % of TiSC, and it was renamed as ifm solutions gmbh in March 2019. As world market leader for sensor technology and shopfloor-related software, ifm brings the expertise for the acquisition and transfer to connected systems. Since 2015, there has been a close cooperation with QOSIT in this area. Their special field is intelligent aggregation from big data to smart data including reliable data transport to the cloud or connected enterprise resource planning systems. This is the interface where GIB comes into play as internationally acting producer of software to optimise SAP-controlled logistics processes. The company has established itself in the market of system-controlled supply chain management.

In relation to customers, the three Industry 4.0 players ifm, GIB and QOSIT have focused independently of each other on medium-sized businesses with a strong inclination towards the manufacturing industry.

However, the target groups are different because they address different specialist departments. While ifm focuses on production, QOSIT (since 2019, ifm services gmbh) addresses IT and GIB disposition and logistics. This is how we have a competent answer for all specialist areas along the value chain, which enables us to develop precisely tailored Industry-4.0 solutions.

Digitalisation has been playing a leading role for quite a while, but not all of our customers have realised it yet. As a technology company, we feel responsible to advise and support our customers on the path to a digital future and to guarantee them the decisive competitive advantages by being fast, competent and reliable.

Of course, we also benefit from the new technologies. We perceive them as something very liberating in the field of software development. We are coming up with entirely new ways and alternatives. This makes our product range a lot more dynamic.

Our focus is on people, and consequently they are at the centre of our IIoT (Industrial Internet of Things) strategy for a digitalised value chain. The basis for this is our guiding thought to provide the right users in the network with the right information (not data!) in the right place to help users make the right relevant decisions for business optimisation.



ifm ecomatic in Kressbronn starts to produce the new controller generation, ecomatController, for mobile machines.



What did the glasses see?



The German Federal Minister of Economics, Brigitte Zypries, is trying to control the plans of a digital factor virtually, along with Michael Marhofer, Chairman of the Board of the ifm group.

Strong communication concept for Hannover Messe ranging from banner to give-away.



**Peter Winterscheidt,**  
*ifm group of companies, Germany*

**Brand presence.** Marketing communication has always been changing along with the increasing size of the company. Today, the focus of the advertising image is no longer exclusively on the product features, i.e. the "hard facts", but more and more on the brand. Entirely new measures have been introduced, to present ifm on a larger stage. The communication concepts developed for the national trade fair events, Hannover Messe, SPS Drives or VISION, included billboards in city centres, railway stations and airports. Mega screens at exposed locations and mobile screens driving around on the trade fair premises present the recently developed slogans "ifmnovation – ifmdundrie 4.0 – ifmfspiration". Ads are taken out on full pages in magazines such as "Wirtschaftswoche" and "DB mobil" whose high circulation contributes to the brand presence all over Germany.

Sensor no. "1 million" gets its label.



**Oana Nistor and Alina Radulescu,**  
*ifm group of companies, Romania*

**Team spirit.** For the plant in Sibiu, the most important goal is to create a pleasant working environment where employees feel like spending a large part of their professional life. Everything is designed to support this motivation. With the help of the team and the results achieved, it was possible that just one year after the SOP, on 14th of March 2017, the 1 millionth sensor of the plant would be delivered.

For us, "close to you" is more than just a motto. It represents the philosophy of ifm, it is our approach for the client and at the same time, the manner in which we try to meet his/her needs. "close to you" also refers to our employees since ifm has an open management that focuses on the individual. In our view, "our family" consists of people who have team spirit, who are honest and show initiative values we would also like to find in our future colleagues.



The year 2017 has a quite successful start for ifm Poland: For the first time, the branch office is awarded with the "Diantenty Forbesa" by the important Polish Forbes magazine and wins an award in the "Gazele Biznesu" ranking, which is for small and medium-sized enterprises that have a particularly dynamic growth.





**Ines Mehler,**  
*ifm group of companies, Germany*

**Silver Dolphin for ifm.** Cannes – there is hardly a city that is so closely and legendarily linked to film festivals as the city located on the Côte d’Azur. The “Cannes Corporate Media & TV Awards” for the world’s best corporate films, online media and TV productions have been taking place in Cannes, too, every year since 2010 and show that the term “film” does not only refer to feature-length blockbusters featuring big stars from Hollywood. With “Knocking without touching”, an image film for the non-contact inductive sensors from the Kplus series, ifm has managed to be among the winners of the “Cannes Corporate Media & TV Awards” in the category “Integrated Communication films and videos as part of a larger communication campaign”. ifm was awarded the Silver Dolphin at the festive Awards Gala Dinner on 28 September 2017 in Palm Beach Cannes.

This award is a good example for how great the reward can be if you have the courage to address the B2B market with emotional, unusual and unconventional product adverts!

The end credits clearly read: ifm can(nes) do it. Simple as that.



Award ceremony  
in Cannes

Matthias Jablonski, Senior Department Manager Advertising & Marketing (2nd from left), with Video Team Leader Ines Mehler in Cannes.



ifm diagnostic gmbh celebrate their move to a new building in Rosenheim with a family party on 10 November.

Trade fair innovation 2017 from ifm diagnostic: diagnostic unit VSE 150 with fieldbus interfaces.



**Andreas Kim,***ifm group of companies, Korea*

**Success thanks to a guardian angel.** This year, ifm Korea have celebrated their 10th anniversary. I knew from the very beginning how we would manage to grow in security in the highly competitive Korean market. The best expertise, the best products, fast deliveries and trust – these are the key factors.

In the beginning, ifm Korea participated in important trade fairs like SIMTOS in 2008. There were only a few visitors, but only four years later, in 2012, we had 1004 visitors. In Korean, “1004” is pronounced exactly like the word for “guardian angel”. This success has also been achieved with the great support from the headquarters in Essen.

Today, ifm is a leading sensor and system provider for industrial automation in Korea and has gained trust and respect with innovative and flexible product and service offers, as well as a well-trained sales force in accordance with ifm’s corporate philosophy. The same applies to the focus on local presence – close to you!



This is how ifm Korea has been accomplishing stable growth for ten years and will be successful during the stage of digital change.



“The SUMMIT” will be the largest technology centre in South Westphalia and the new home of the four ifm subsidiaries from Siegen, ifm solutions gmbh, GIB mbH, ifm services gmbh and pmdtechnologies AG.

## 2017

20 October:  
Laying the foundation stone for the technology centre “The SUMMIT” in Siegen.

27 November:  
ifm prover srl start their production in Sibiu, Romania, by manufacturing PT/PV type pressure sensors.



**Martin Buck (Chairman of the Management Board),**  
*ifm group of companies, Germany*

**Digital change.** We are not only happy with our sales development, but also the “clouds” that are covering the digital change here and there, are slowly disappearing, and we are beginning to see clearly how ifm can be successful in this field.

If only a year ago many of you might have asked with which products, solutions and business models we at ifm can earn money with the digital change, it is now more than obvious that condition-based real-time maintenance will form both the fulcrum and the nucleus. Solutions to optimise energy efficiency and production quality will follow.

In a not too distant future, sensors will place orders for spare parts and automatically plan maintenance measures. Maintenance, repair and improvement measures can be carried out at the right time and in the right place. This increases the machines’ availability and improves the efficiency of our customers’ production.

This partly automated future will be prepared in a first step by “small solutions” for condition monitoring – we network our diagnostic sensors, visualise important information and our software signals changes on the machine which could lead to interference in the production processes.

With the help of our two subsidiaries GIB and ifm services, we will be linking the machines’ diagnostic data with SAP next year so that the right

employees will be informed in good time and targeted maintenance processes will be triggered in SAP. Weak points will be indicated immediately. To put it in a nutshell: Our customers want to see rejects and waste in real time – our consistent solutions will provide improvements in real time.

In the development, product management and sales departments and for on-site project management for our customers, we will train employees step by step who will deal exclusively with the development of this new business area. We do not only provide the requested solution packages, but also the service to integrate our solutions in the machines and IT systems of our customers.

The feedback from the market is very promising: Renowned companies consider our solutions as a pragmatic step towards further factory digitisation and a practical implementation of the theory of Industry 4.0.

At the same time, our organisation is facing the challenge to integrate unfamiliar processes in almost all areas of the company. No doubt, there is still quite some work ahead of us but one thing is for sure: Your support secures a new piece of future for us.



The Fraunhofer IAO and Management Circle reward digital start-ups that have created strong property rights portfolios for digital markets with the IP-Management-Award. Among the winners 2018: ifm syntron, the subsidiary that has developed 3D camera systems for industrial and smartphone applications in collaboration with pmdtechnologies.



**Marie-Claire Fink,**  
*ifm group of companies, Germany*



**ifm cares.** In the corporate philosophy, ifm's Management develops a "vision of the future": A world in which 15 billion people exist who need all kinds of things is a tangible future scenario on which we base our actions. There is one thing that makes this particularly clear: ifm thinks about the world and the people who live in it. ifm assumes responsibility. And ifm cares: ifm supports numerous social initiatives ranging from school projects in South Africa or help for victims of the earthquake in Mexico or the support of children with cancer in Germany. Since ifm is worldwide, ifm's engagement is worldwide as well.

The logo "ifm cares": Three figures carrying the slogan "ifm cares" together. The logo shows what "engagement" actually means for ifm: Together you make a difference, you take the initiative and move something together with your colleagues for the benefit of others.



Continuous position feedback – now with diagnostic function.



The European Commission as ifm ecolink's guest in Opole: The guests were full of appreciation for the work and innovative strength of ifm's engineers and were visibly impressed when inspecting the presented products.

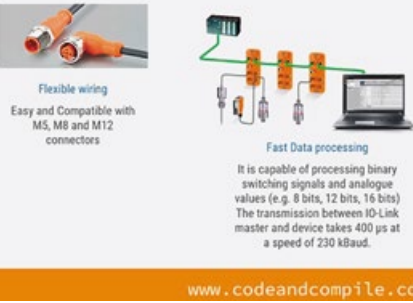
Relief supplies for public institutions in Ukraine: ifm colleague Markus Brunold supports the non-profit organisation H.O.P.E – we help children.



2018

- 26 February: Leica Camera and pmdtechnologies announce a strategic partnership for the joint development of objectives for 3D depth measurement for the smartphone segment.

More benefits  
IO-Link



New channels: The Indian YouTuber Rajvir Singh creates the first two videos about IO-Link for ifm and shares them on his YouTube channel for PLC training courses with more than 44,000 subscribers.

ifm stand at the Anuga FoodTec in Cologne.



In March, ifm participated for the first time with our own stand in the Anuga FoodTec trade fair in Cologne.

**Verena Gruber,**  
*ifm group of companies, Germany*

**From BaaN to SAP.** In 2013, ifm Germany and the German subsidiaries changed over from BaaN to SAP. At the same time, our branch offices in Austria, Hungary and the Netherlands underwent this changeover. In 2015, they were followed by the sales offices in Great Britain and Ireland, but that was only the beginning of the roll-out wave. In the following months and years, seven other foreign sales offices and four production sites

were changed over, and this is not yet the end of it.

Today, there are two parallel project teams, one for the sales offices and one

for the production sites, consisting of more than 30 employees and, of course, local key users who are working on changing further locations over to SAP.

When I had my job interview at ifm fifteen years ago, the trainer back then asked me why I wanted to receive my professional training here. One reason for this was that I found it fascinating to work for a company represented in so many countries. She answered that my commercial tasks would probably not have much to do with that. It would turn out that she was very wrong...

After more than ten years in the Financial Accounting Department, I have changed over to the SAP Finance Competence Team three years ago. I am now part of the SAP roll-out team for our sales offices' financial service and have travelled to six countries so far and have been in touch with many more.

If you are used to financial accounting and to a quite regular workflow with strict requirements and laws, it is, at least in the beginning, a bit difficult to get used to project work. You never know what to expect with the next project. The specific requirements for each country rarely just allow simple "copy & paste", the people with whom you collaborate are always changing and it is always necessary to familiarise yourself with each country's particularities. It is certainly never boring. Quite on the contrary.

For example, people in countries like France and Spain still like to pay with bills of exchange, in Italy it is called RiBa and works in a very similar way, in America they love cheques and also have a very sophisticated tax system. There is no standardised VAT rate in the USA, and the sales tax differs from state to state.

Project work also means to adhere to agreed deadlines, and it is not unusual to work one or the other night shift for this. You spend much time far from home on business trips. This is why it is so important to collaborate with a team with whom you get along and to support each other. Without this mutual support, some of the SAP starts would certainly not have been as punctual as eventually was the case.

I am glad to have met many great and interesting people through my work, people you can rely on and who are just like a second family. Somehow, we all have a little "orange blood" inside.



**Sara Jean Kwapien und Yuen Li,**  
*ifm group of companies, USA*

**Running for a good cause.** On 21 June, ifm USA hosted the seventh annual Orange Run. More than 275 walkers and runners of all ages, including colleagues from ifm USA and their friends and families, local business partners and dedicated runners and walkers from in and around the community gathered at the Atwater Corporate Center. Thanks to donating employees, raffle ticket sales, registration fees and support from generous sponsors, our family-friendly 5k and 2k runs raised more than \$21,000 for two organisations dedicated to the battle against cancer, the Cure4Cam Childhood Cancer Foundation and the Breathing Room Foundation.

The Cure4Cam Childhood Cancer Foundation raises awareness about paediatric cancer, its effects, and its current treatments. It also raises funds to support the development of new, less toxic therapies for children fighting the disease. Cure4Cam was initiated by the family and friends of Cameron Evans from Downingtown, PA, who lost his battle with cancer in 2012 at the age of fourteen.

The Breathing Room Foundation is best described as neighbours helping neighbours who are affected by cancer. The BRF provides meals, transportation and financial support and helps in all imaginable ways to reduce the daily stress connected to a life with this dreadful disease.

At the event, runners were challenged to push their limits and traverse the hilly 5k course throughout the surrounding neighbourhoods, while walkers strolled along the scenic path in the Atwater Corporate Center. Afterwards, everyone

enjoyed a post-run party with live music, delicious food and beverages. Medals were awarded to top overall male and female 5k champions and first place male and female in different age groups.

ifm USA CEO, Roger Varma, started the evening by welcoming the crowd and reminding everyone that the Orange Run originated six years ago when ifm employees learned that one of their most dedicated colleagues, Lizanne Dathe, was diagnosed with Stage 4 cancer. Funds raised from this event covered out-of-pocket expenses associated with treatments so Lizanne could focus on her health. Lizanne's journey with cancer ended on April 26, 2014, but the ifm-family commitment to help those affected by cancer in her memory continues.

When the run was over, we could celebrate our success: the amount raised in the previous year was even exceeded. More importantly, aside from this achievement, we're hoping that our collective efforts, time and energy contributed to uniting the community in making a positive impact in our society and in the lives of others. ifm – close to you!



From 8 to 9 June, the #ifmHackathon took place for the first time at the ifm location in Bechlingen. 19 students from the neighbouring technical universities faced the challenge to create and present a zero-error packaging concept in 13 hours.

The word “Hackathon” comes from the world of computers and refers to an event where software solutions for a specific task or problem are developed in a limited time.



**Bernd Bentele,**  
*ifm group of companies, Germany*

**Excellent education.** Education at ifm is a very special kind of success story: If ten years ago ifm had about 60 trainees, today, about 130 young people are enjoying their education or their dual studies at the ifm group of companies at all German locations including Siegen.



ifm has been educating trainees for more than 35 years. Ever since, the family-owned company has been focusing on educating its own young professionals.

Expert knowledge and ifm know-how have, of course, always been the most important aspect. However, surveys show that other particularities that are characteristic for an education at ifm are being emphasised:

- ifm trainees are particularly well integrated into the work processes.

- Treating each other with respect is only natural. The focus is on the individual.
- Career opportunities at ifm are far above average.

This feedback is also reflected by the educational philosophy that ifm has been following from the very beginning: The individual needs to match ifm and, according to ifm's corporate philosophy, we would like to offer trainees an interesting workplace.

We have always been bound to this educational principle with all official trainers and training officers in the departments, and it is the maxim of all our actions.

The conditions have been changing all the time. It is no longer that easy to find the right applicants. Sometimes, an apprenticeship training position will remain vacant if we are not entirely sure about the applicant. However, the focus has always been on the technical areas. Electrotech-

nical, information technology and mechanical engineers and students form the core of the future strategy of all educational efforts. The main goal is to create the ideal conditions for trainees and students to face the competitive pressure on the market.

To keep up with this development, we will set up a training and competence centre for information technology in 2018 that will be run by a full-time training supervisor.

I have been in charge of the training at the ifm locations in the Lake Constance area for ten years now, and it is very exciting to witness the development of the education at ifm. From the time when I had finished my education and my studies with ifm to today. The conditions are different today, the market is different, but the result is the same: young, motivated ifm colleagues with orange blood.



## 2018

- 15 March:
- The Lighthouse smart home camera is brought to the market. It works with 3D depth measurement from pmdtechnologies and can differentiate between adults, children or pets.

- 4 July:
- ifm founds a subsidiary in Israel.



**Martin Buck (Chairman of the Management Board),**  
*ifm group of companies, Germany*

**ifm on a shopping spree?** If we only consider the facts, the following statement is quite true: Never before in its company history, the ifm group has acquired as many shares in other companies as in recent times, often even taking over entire companies. This is why it is no surprise that this approach seems unusual to us at ifm, who are used to consistency and continuity, and that it leads to divided opinions. Especially if we consider that, we as the Management, do not miss out on any opportunity to point out the strains caused by the pension scheme and to take precautions against a possible economic downturn. Why do we make so many acquisitions at a time when we would actually need to save money?

The answer is simple: Since ifm's foundation, the market of ifm's activities has never before faced so many changes that are as fundamental as those we expect for the coming years. Our usual approach to acquire new competences from time to time, as we did with i-for-T or pmdtechnologies, is not enough to meet these changes. These acquisitions always concerned new technologies we used in products to extend our existing business model of selling sensors as components.

But at present we are expanding our business model and even adding completely new business models – by not only selling components but also software, complete solutions and services. We want to open up a completely new market and additional sales opportunities for us to continue to “grow successfully in security”. However, the new business model will only work if all necessary components are available to us and if

they are all compatible. If we would develop these individual components on our own, this would, on the one hand, take very long, and, on the other hand, we would need to spend money for a very long time before we could profit from them. So what we are acquiring is not only many years of expertise, but, most importantly, time; so that we will be on the market early enough to generate sales. Think of it as a jigsaw puzzle: Only when the last piece is where it belongs, you will have a full picture that will please the customer.

The good news is that we think the jigsaw puzzle will be complete with this year's acquisitions. However, we will still need to put it together. This is certainly not an easy task, and it will take several years and great efforts, but also patience and confidence.

This is nothing new for ifm: just think of the controllers for mobile machines, the pressure sensors, the diagnostic sensors or, very recently, pmdtechnologies, only to mention a few examples. Judging from our experience, we know that it will always take longer than we think in the beginning to sell new technologies in a profitable way. However, our experience also teaches us that it is worth the effort because, in most cases, we have been able to generate long-term sales that have been exceeding our expectations by far.



**Essen is on Lake Constance? In ifm's logistics centre, the skyline of Essen and the Lake Constance region are united on a canvas that is 40 m wide – close to you! This canvas is used to cover a part of the shelving cube for safety reasons.**



Excellent design: design awards for the DV signal lamp and the DP display.



ifm's Central Management Directors Ludger Tismer and Andreas Möse as well as the French Management and several African partners attend the official opening ceremony of ifm Morocco.



Martin Buck (on the left), Chairman of the Board, and Benno Kathan, Member of the Board of the ifm group, inaugurate the new production building in Sibiu.



On 18 July, Martin Buck, Chairman of the Board of the ifm group of companies, has been elected unanimously as president of the Lake Constance Upper Swabia Chamber of Commerce and Industry.



The new image brochure, **ifm** pressions, conveys a strong impression of ifm.

# 2014–2018

 **943**  
MILLION EUR IN SALES

 **7,000**  
EMPLOYEES

 **880**  
PATENTS

 **60**  
COMPANIES

 Product milestones



Ultrasonic sensors



IO-Link components





**2019–2023**  
**Climate-friendly behaviour  
for a secure future.**



A clear view of the data forest,  
January 2019

statmath GmbH becomes part of ifm. Since early 2019, ifm has been collaborating with statmath – a company that specialises in data science, i.e. systematic extraction of knowledge from data. It was founded in 2002 as a start-up by Christian Friedrich and Dr Alexander Hoffmann at the University of Siegen. “We at statmath and together with ifm are able to identify the market demands, refine sensor data and turn it into scalable solutions for industry by means of AI,” says Hoffmann.

Three years later, in 2022, statmath GmbH becomes a wholly owned subsidiary of ifm solutions. “The experience we have gained from numerous customer projects in using data analysis and the development of algorithms to generate ‘smart data’ from ‘big data’ completes our software solutions in the areas of Industry 4.0, the Internet of Things and digitalisation. This will give our key product moneo a further boost,” says Michael Schimanowski, Managing Director Products at ifm solutions gmbh. “We are very much looking forward to the continued support of statmath GmbH so that we can continue to contribute innovative software modules and intelligent solutions to our product portfolio,” says Joachim Theusner, Managing Director Technology at ifm solutions gmbh.



Michael Schuster,  
ifm group of companies, Germany

**Evolution of ifm solutions gmbh.** The companies GIB and QOSIT have been part of the ifm Group since 2016. Together with other software specialists from ifm, the Siegen-based company is working towards its vision of becoming the leading provider of comprehensive digitalisation solutions, from sensors to ERP. Decades of experience in the SAP environment and in-depth knowledge of supply chain processes are combined with bundled expertise from the system house business and infrastructure connection. ifm’s sensor expertise rounds off the portfolio and paves the way for future-oriented Industry 4.0 solutions that connect the business process level with the production level.

With the moneo suite, a convenient platform has been created that offers every manufacturing company decisive added value in sensor-controlled and monitored production, and with shop-floor integration, or SFI for short, bidirectional communication between the sensor and ERP system has been implemented.

This Industry 4.0 symbiosis is a real revolution. By joining forces, we bring OT and IT together and thus make our customers fit for the future. ifm has created a think tank for Industry 4.0 solutions with the Siegen SUMMIT, which is unique in Germany.



Christoph von Rosenberg,  
ifm group of companies, Germany

**One billion in group sales for the 50th anniversary.** In 2019, ifm celebrates its 50th anniversary and breaks the one billion turnover mark for the first time. Despite global trade conflicts, the specialist for innovative automation and digitalisation technology is able to significantly increase group sales

again. At the end of the year, the overall growth is 5.5 % higher than in the previous year. The markets in North and South America and China made a particular contribution to this. Thanks to good growth in the food and mobile machinery sectors, we were able to cushion the sharp downturn in the global automotive

and associated mechanical engineering industry. This result demonstrates the sustained profitability of our business model. The total number of active customers also reached a new record level: 174,000. The number of employees has also risen further and now totals more than 7,000.

PRODUCT HIGHLIGHTS 2019



ecolink M12 with connector

Tight connection: Even with demanding requirements in hygienic and wet areas, the M12 connectors of the ecolink series ensure permanently reliable connection of sensors and actuators thanks to a mechanical end stop, vibration protection and EMC interference protection.





**Michael Paintner,**  
*ifm group of companies, Germany*

**Virtual vision.** Virtual Retail GmbH (VR) develops software and algorithms in the field of artificial intelligence and machine vision. The range of solutions includes applications for mobile scanning and measuring of dynamic scenes as well as software modules for photoelectric detection and recognition of objects. In future, the current ten-strong VR team will support us with application solutions in photoelectric measurement technology and for product and integration solutions relating to Industry 4.0. In initial projects, VR is collaborating with colleagues from the ifm group of companies and pmdtechnologies ag on camera-based real-time soft-

ware solutions for packaging and assembly processes and on the optimisation of 3D point clouds based on machine learning and AI.

A mobile body scanning technology from VR calculates all important body measurements from just two photos of a person, for example. Retailers and clothing manufacturers can use this data to offer their customers more precise fit advice or produce customised and precisely fitting products – this will be demonstrated in 2022 with the sizeez app, a joint project with ifm Group-UX.



You can find out more on page 177 and under sizeez – shopping the easy way.



**2019**

Stefan von der Bey is appointed Central Managing Director Marketing of ifm electronic gmbh and Stefan Schneider is appointed Central Managing Director Finance of ifm group services gmbh.

**PRODUCT HIGHLIGHTS 2020**



**IO-Link CompactLine Module M8**

The small M8 IO-Link modules do not require much space. This makes them ideal for use in robotics, handling and assembly technology. The full potting ensures that they are resistant to shocks and vibrations.



**ifm mate**

ifm mate is a worker assistance system to support manual activities.



**io-key**

Measuring no matter where and no wiring needed: Often, centralised monitoring of sensor data of small or decentralised applications is rather difficult and expensive. The solution: the io-key. It simply transmits data from connected sensors via mobile network to a secure cloud where the user can access it from no matter where. Long, expensive and error-prone cable runs are a matter of the past.



**Biying Zhang,**  
*ifm group of companies, Shanghai*

**Further expansion of inventories in China.** Due to the growth in orders and increased space requirements, the ifm China warehouse has been relocated. This is the warehouse's third relocation since it was founded in 2005 and testifies to the success of its business activities. The new warehouse owns an area of 2000 m<sup>2</sup>, which is 1.8 times the volume of the current one. During the Covid-19 outbreak, ifm China has optimised warehousing, transport and payment processes to speed up deliveries and provide customers with an even better service.



**Rebekka Neubauer,**  
*ifm group of companies, Germany*

**Sustainability award.** In addition to ISO 14001, ifm's environmental management system is also validated in accordance with EMAS (Eco-Management and Audit Scheme). Validation is checked in annual monitoring audits and must be renewed every three years. In the course of this, ifm has also drawn up an environmental statement in which, among other things, environmental indicators and environmental targets are described. This includes, for example, the changeover to green electricity in 2020, which will save around 10,000 tonnes of CO<sub>2</sub> per year at ifm's German sites. An internal environmental management system has been in place since 2000.



Rebekka Neubauer and Sarah Brühl,  
ifm group of companies,  
Germany

**First ifm sustainability report.** From now on, ifm will provide annual information on the current status, objectives and measures relating to sustainability in accordance with the internationally recognised standards of the Global Reporting Initiative (GRI). And it shows: Social cooperation, economic strength and environmental protection are not a contradiction for ifm. The sustainability report is published every three years and the data is updated once a year – on a voluntary basis.



Sustainability - ifm

**Forward-looking partnerships,  
November 2022**

**ADAMOS**

**Like-minded partners.** ifm becomes a member of the ADAMOS network (ADaptive Manufacturing Open Solutions), a strategic alliance of global market leaders in mechanical and plant engineering for the future topics of Industry 4.0 and IIoT: "Supporting digitalisation in mechanical engineering and advancing the topics of interoperability, plug & play and simplicity provide a strong moti-



Added value for a strong, digitalised industry | ADAMOS

**5GACIA**

**ifm as part of the 5G ACIA.** The Alliance for Connected Industries and Automation was founded by the German Electrical and Electronic Manufacturers' Association at the beginning of 2018. With their help, 5G is to be established in production and made industrially viable. The integration of new frequencies in the approx. 30 GHz range enables a significantly higher data transfer



5G-ACIA - 5G Alliance for Connected Industries and Automation

rate and real-time communication. Companies will be able to buy own frequency ranges and can establish own private or partially private networks.

## PRODUCT HIGHLIGHTS 2020

### ifm moneo

moneo family (2020) consisting of software, mobile applications and hardware package for easy starting and testing of a condition monitoring application (QZ9100 starter kit).



Jan-Remi Fromentin,  
ifm group of companies, Germany

**moneo: the IIoT platform for industry and production.** As an IIoT platform, ifm moneo combines the level of operation technology with the level of information technology. The sensor data generated in the production plants can be read and processed easily and used as a basis for sustainable corporate decisions.

moneo has a modular structure and consists of a basic software as well as applications, e.g. for condition monitoring or for IO-Link sensor parameter setting. This makes it possible to put together a tailor-made software package for every individual requirement.

For over 50 years, we have been supporting our customers as a leading supplier of automation solutions. We have now combined our experience in sensor technology with the expert knowledge of our software subsidiaries – this is moneo, "simply made for you". Since its launch, moneo has been well received by thousands of users and has already generated sales of several million euros



moneo: the IIoT platform for industry and production



**Bernd Hausler,**  
*ifm group of companies, Ger-  
many*

ifm is “Factory of the Year 2020”. The concept of the digital factory shows the potential in connecting shop floor and top floor. It allows us and our customers to experience the entire range of services we offer at ifm. Especially in current times, it is of highest importance to give our employees and customers an orientation as to how we can grow successfully in security, also in the future.

In 2020, ifm was named the winner in the category “Location Safeguarding by Digitalisation”. The appreciation for winning this award is the reward for my team and myself, for the top achievements during the past years. The award shows that we are on a good way and up to date, thus the Digital Factory will secure our future success for us and our customers. ifm and all other participants also benefit from the professional feedback from the Kearney audit team. The event provides an ideal forum for an exchange of ideas between experts.



(from left to right) Helena Roggenkamp, Bernd Hausler, Holger Zweifel and Sonja Reiner at the official award ceremony was held later on 21 June 2021 due to the coronavirus.

2020

- Andreas Thürrer is appointed Central Managing Director Technology of ifm group services gmbh.



**Ines Mehler,**  
*ifm group of companies, Germany*

**New moving image format.** With “Impulse”, ifm launches its own magazine programme that is now an integral part of the website. The video editorial team regularly creates and implements new broadcast schedules to inform interested parties about new products and news from the ifm group of companies as well as topics from the digitalisation and automation industry, independently of face-to-face events. The modern studio allows customers to join in live, for example. Filming takes place in a virtual studio based on the Unreal Engine. This is a special framework for console and computer games from Epic Games. We work in a highly complex automated studio unit with a live 3D environment. The cameras and the people in front of them move within this virtual world, so to speak.

**Hans Kornmeier,**  
*ifm group of companies, Germany*

**Rovema’s application patent has been successfully overturned.** ifm has prevailed and won the years-long patent dispute.

**Background:** In 2011, the leading international manufacturer of packaging machines Rovema GmbH applied for a patent. The patent concerned the use of a vibration diagnostic system to prevent metal shavings from entering the products to be filled. However, anyone familiar with the ifm octavis vibration diagnostic system will be surprised why no VSE100 sensor was used here.

Since the patent office cannot in principle know all the prior art, especially as regards product launches or company information, patent law provides that the public can file an objection after the patent has been granted. In this way, the patent office can be made aware of further

prior art that may not have been taken into account in the examination procedure.

After the Rovema patent was granted on 21 December 2015, ifm filed an objection in due time within nine months, based on an advertising brochure from ifm and a Japanese document that showed a similar solution before 2011. The publication date of the ifm promotional leaflet had to be affirmed under oath. In November 2018, the patent was revoked after a seven-hour hearing at first instance. This decision was confirmed in second instance by a Board of Appeal of the European Patent Office on 26 January. The revocation of the patent thus became legally binding and ifm can once again supply all packaging machine manufacturers without any patent restrictions.







**Michael Marhofer (Chairman of the Board),**  
*ifm group of companies, Germany*

ifm during the corona pandemic. On 25 January 2020, I sent out the first internal communication in connection with the pandemic. The situation would worsen on a daily basis and lead to an exceptional situation – both privately and professionally. For months we could

only drive by sight because nobody knew what tomorrow would bring. Business trips, meetings, trade fairs etc. were cancelled or rescheduled: Everyday working life has changed completely from one day to the next, inevitably boosting digitalisation even further. Since then, social distancing rules, mask-wearing and sanitiser dispensers have been part of everyday life. Moreover, many workplaces are relocated to the employees' homes.

Despite it all, we at ifm still have a clear goal in mind: The safety of our employees and their workplaces is our top priority. Together with the measures implemented in the ifm group of companies this will help us to keep the coronavirus away from ifm and maintain our business operations. And if you are asking yourself why this is so important, we have another good reason besides the

preservation of jobs. There are probably few food and pharmaceutical factories, fresh water and wastewater treatment plants worldwide where none of our products are installed in the production machines. All of these machines require spare parts to maintain operation.

So we are also part of the solution in this crisis, even if the situation is putting us all to the test. Any measures will be taken with a sense of proportion. We will consider both the economic existence of the company and its employees and the health of our staff. "ifm – that is all of us" (ifm philosophy) characterises this time in particular and is particularly rewarding: Despite the coronavirus crisis, delivery capacity has remained exceptionally high to date.



**Prof. Dr Bernd Buxbaum,**  
*ifm group of companies, Germany and pmd group, Siegen*

**Smart demonstration factory Siegen.** As Siegen is not a traditional IT location, we thought early on about how we could support the region in attracting skilled workers in the areas of IT, Industry 4.0 and sensor technology. To this end, we have decided to seek cooperation with the University of Siegen and jointly develop an entrepreneurship model to support IT and Industry 4.0 start-

ups in the region. This collaboration ultimately led to the founding of the Start-up Accelerator at the ifm SUM-MIT site and the Smart Demonstration Factory Siegen (SDFS) and thus also to direct cooperation between ifm and the SDFS.



reddot winner 2021



**Martin Schmidt,**  
*ifm group of companies, Germany*

**Awarded three times: the SM6020.** The magnetic-inductive flow sensor wins the German Design Award, Red Dot Award and the iF DESIGN AWARD – the world's three most prestigious awards for product design. This makes me very proud – especially as it was the first project that I was able to accompany in my previous ifm career as a designer. For me, the awards are proof of a great team performance.

In order to make good design measurable, the jury bases its evaluation on the criteria of idea, form, function, differentiation and effect. The flow sensor is particularly impressive due to its compact, user-friendly design. High accuracy, precision and reduced set-up costs – the black multi-component injection moulded part embodies all of this. This precisely

manufactured component forms the interface and attracts attention due to its contrast. The strong colour contrast directs the user's attention to the process data and the interactive elements (buttons and LEDs). The use of robust, high-quality materials underlines the reliability and performance of the product – and at the same time gives the SM6020 its modern, simple aesthetics.



Click here for more details about the product.



Benno Kathan, member of the ifm Board of Directors, with representatives of the ctrlX World partners WAGO and NOKIA, and with Steffen Winkler (CSO Business Unit Automation & Electrification Solutions) and Hans Michael Krause (Director Product Management ctrlX World) from Bosch Rexroth.

**Benno Kathan,**  
*ifm group of companies, Germany*

**Bosch Rexroth becomes a new co-operation partner of ifm.** At the beginning of 2021, Bosch Rexroth and ifm identified joint potential and possible synergies, resulting in a partnership that was officially announced in September 2021 at a press conference in Bosch Rexroth's new Customer and Innovation Centre.

ctrlX AUTOMATION is an alternative concept to the previous proprietary automation systems on the market. It was presented by Bosch Rexroth at the end of 2019. In regard to the ecosystem around the new ctrlX

controllers, the emphasis has been placed on radical openness, simplicity and maximum flexibility. Bosch Rexroth has taken this approach to successfully tackle the increasingly complex tasks in the world of automation. The aim of the partnership has been to open up the ctrlX AUTOMATION platform for the globally standardised communication system IO-Link, thereby creating additional benefits for both sides and in particular for end customers. Both hardware and software from ifm are used in this context. The ctrlX World partners include ifm, WAGO and Nokia.



**Stefan von der Bey,**  
*ifm group of companies, Germany*

**Automation24 – One stop. Smart shop.** Around ten years ago, I was asked by Michael Marhofer to realise his idea of establishing an online shop for automation technology on the market. Based on this idea, we developed a business model and looked for a memorable company name. This would form the basis for the subsequent founding of the company in May 2011.

Fortunately, we were allowed to start on a ‘greenfield’ site and used the initial time to set up a location with the appropriate equipment and IT infrastructure and to find suitable systems and service providers for the webshop and ERP. At the beginning, there were no suppliers including the corresponding product portfolio, no warehouse with connected logistics processes, no marketing concept and no online shop with corresponding domains.

“After these milestones were jointly developed and finalised in the first six months, we launched our online shop automation24.com in Germany with 600 products from seven suppliers. Ten years after the company was founded, we now have well over 100,000 satisfied customers in twelve country-specific webshops in eight languages who can purchase more than 6,000 products from over 40 top suppliers such as ifm, Siemens, Endress+Hauser, Wieland and Rittal from us. We are very grateful for the faith and support from the shareholders that has been shown to us and the company in all phases of development. The trust placed in us and the associated creative freedom have always been the foundation and driver for a high level of commitment, goal achievement and further development. Working and building a great team with dedicated and loyal people has always been a lot of fun. Katharina Messerschmidt and Thorsten Schulze confirm this.



automation24.com



From left to right: Mr Stefan von der Bey with the Automation24 management team consisting of Thorsten Schulze and Katharina Messerschmidt.



**Andreas Thürer,**  
*ifm group of companies, Germany*

**Sustainability at ifm.** “A major topic in 2020 was climate protection. With the European Green Deal and the 2030 Climate Protection Programme of the German Government, a regulatory framework has been adopted that will point the way towards a climate-neutral future.” (Michael Marhofer and Martin Buck in the preface to the Update of the Sustainability Report 2020). They further explain, These developments are further confirmation that we are on the right track with our corporate philosophy, which we have lived by since 1990: ‘ifm demands and promotes ecologically conscious decisions and conduct.’ We would like to continue to take this guiding principle to heart and expand it in the future. We consider sustainable

value creation to be an essential prerequisite of our business success. After all, durable and high-quality products from ifm not only contribute towards the conservation of resources, but also increase customer satisfaction. For us, climate-friendly action begins on our own doorstep and is not limited to energy efficiency or the use of renewable energy sources. The construction of our first ‘green factory’ in Romania marks a milestone in eco-friendly and climate-neutral manufacturing, and serves as a blueprint for future construction projects, bringing us one step closer to our goal of becoming climate-neutral in our operations by 2030.

In addition, Steffen Fischer, Social

Sustainability Manager, Managing Director Human Resources, member of the central Group Management Board, and I have been appointed Sustainability Managers since 2020. One of the most important pieces of advice though regarding sustainability was probably that we should always focus on the best economic overall solution in terms of sustainability from the outset. This means neither pursuing a maximum principle nor only doing what is absolutely (legally) necessary. Rather, the key here is to act early and with foresight.



Reports, certificates  
and portals



**Dr Dirk Kristes,**  
*ifm group of companies, Germany*

**Logical logistics development.** In response to the strong growth and increased production volumes, ifm creates 130 additional office workplaces and more warehouse capacity in Tett nang. The logistics centre planned for this is due to start operations in spring 2023, and the symbolic ground-breaking ceremony took place on 11 August 2021. The new building has space for 4,400 pallets stored in automated mobile racking systems. This modern logistics concept offers high access speeds and makes optimum use of the available space. The focus is on the direct supply of major customers and represents an ideal addition to the central warehouse in Essen. With

the commissioning of the new logistics centre, we will be able to send around 20 % of the sensors we produce at our Lake Constance locations directly to customers all over the world without any detours via our existing distribution warehouse in Essen. This makes a significant contribution to improving ifm’s carbon footprint, as it eliminates the need to transport around 10,000 sensors a day to the central warehouse in Essen. Ultimately, this will enable us to reduce our CO<sub>2</sub> emissions and at the same time fulfil the wishes of numerous customers for highly flexible delivery at short notice.





#### ifm headquarters, December 2021

**New company headquarters.** The ifm group of companies will build its future headquarters in the new office quarter ESSEN EINS, around 500 metres from the Glückaufhaus. The contracts have been signed and project planning is in full swing.

ifm's headquarters have been based in Friedrichstraße, Essen since 2009. "The Glückaufhaus is bursting at the seams, we simply don't have enough space for the entire staff here in Essen," says Michael Marhofer, Chairman and co-CEO of the ifm group of companies.

"This can be put down to our ongoing success which is set to continue in the future on the basis of a global market. And it goes without saying that this success entails an equivalent rise in the number of employees. In order to be able to successfully carry out this large project, we have bundled our competences from past construction projects in Essen and Siegen and set up a dedicated project team. We are already looking forward to our new modern company headquarters in the heart of the city of Essen, where we will be able to continue our positive business trend on a long-term basis," says Michael Marhofer.

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"In order to meet the increasing demand for space, modern corporate headquarters will be built in the next few years on a part of the 30,000 sqm site of the former RWE headquarters on the corner of Huysenallee and Baedekerstraße, which, unlike the Glückaufhaus, will offer us a long-term perspective," this is how Christoph von Rosenberg explains an important advantage of the new location. The new ifm company headquarters will be conveniently located near the main railway station and easy to reach by public transport.

#### Martin Buck (Chairman of the Management Board), ifm group of companies, Germany

**Foundation of ifm group services gmbh.** On behalf of ifm stiftung & co. kg, the newly founded ifm group services gmbh concentrates on the group service functions with a view to the internal customer. To this end, around 670 employees from the areas of finance, controlling, IT, service, human resources, technical compliance, pre-development and production resources have moved from ifm electronic gmbh to the new ifm group services gmbh, where they form a powerful unit. Since January

2022, this has been the sixth pillar in the organisation alongside ifm electronic gmbh, ifm position gmbh, ifm process gmbh, ifm network & control gmbh and ifm solutions gmbh. Strong growth requires correspondingly strong Group service functions. These play a very special role, for example for future topics such as self-service functions via the internet and the digitisation of products.



#### Björn Ostertag, ifm group of companies, Singapore

**ifm Singapore is growing.** The growth of the ifm group of companies can be felt in practically all markets worldwide. At the Singapore site, which is very important for the Asian region, ifm has inaugurated a new company building that doubles the space previously available. From a small company with ten employees at the beginning, ifm electronic Asia has developed over the past eleven years into a medium-sized company with almost 100 employees working in two shifts. This led to all possibilities for space utilisation being exhausted in 2018. The ifm efector production lines have been outsourced and the local research and development (R&D) team has grown steadily, as has the product family. At almost 10,000 m², the site of the new plant is more than twice as large as the old one. On 22 June 2022, the grand opening of the new plant of ifm electronic Asia Pte. Ltd. took place at 8 Tuas Avenue.



#### 2021

- 28 January 2021 ifm Norway:
- Foundation of the new subsidiary ifm electronic AS



**Alex Magdoiu,**  
*ifm group of companies, Romania*

**Building a green factory.** On 7 April 2022, ifm Romania organised a festive event to announce the start of work on a new ifm factory and sales headquarters in Sibiu. As one of the world's leading manufacturers of industrial sensors, ifm is currently one of the largest employers in Sibiu County with over 650 employees. ifm is striving to be the first plant in the world to receive the gold medal according to the international DGNB system. Various aspects such as eco-

logical, economic and socio-cultural factors are assessed – both during construction of the building and its subsequent use. The entire energy system will be optimised to achieve this level of certification. This also includes the use of photovoltaic modules and heat pumps, as well as the latest generation of materials and technologies.



DGNB stands for “Deutsche Gesellschaft für Nachhaltiges Bauen” (German Sustainable Building Council), which, together with the Federal Ministry of Transport and Digital Infrastructure, awards sustainability certifications for new buildings for various uses. The paradigms of the DGNB system are a life cycle approach, a holistic approach and performance-orientation of construction projects.

*Excerpts from Michael Marhofer's letter to all ifm employees on the subject of the war in Ukraine:*

Since 24 February 2022, a war against Ukraine has been waged by Russia. Many of you will know that we have sites in both Russia and Ukraine. Ten employees work for ifm in Ukraine and 28 in Russia. We have closed our location in Ukraine since 24 February 2022. Families who wanted to be evacuated have now been taken out of the country. Nevertheless, the majority of male employees are still in Ukraine, mostly in Kiev, and are or have been drafted into the Ukrainian army as part of the general mobilisation. Our employees are considered to be on leave and will of course continue to be paid 100 % by ifm. We have

also practically closed our location in Russia since 28 February 2022. In Moscow, some employees are still working, as they are needed to answer questions and make sure that we meet our financial obligations towards the employees. As in Ukraine, all other employees are on leave and continue to receive 100 % of their salary, contrary to legal requirements. Since 28 February 2022, we have stopped all deliveries to Russia, as we do not want our products to be used as spare parts to keep Russian industry machines operational or, worse still, to be installed in military equipment without us being able to control this.

Some ifm employees immediately set up various aid campaigns: From handbag donation campaigns to drugstore items and food, many things are collected and donated to colleagues in need. Motorised convoys are set up for border crossings and people are temporarily housed and fed, for example with the help of a mobile field kitchen. Thanks to Kamila Maskova's, Regional Sales Management, initiative, a considerable amount of donations was collected and handed over to local aid projects. Our colleagues are courageous and they are prepared to make personal sacrifices for this, even though they themselves have done nothing

wrong and, above all, even though they themselves are suffering under a state that increasingly resembles a dictatorship. I am very proud of my colleagues in both Ukraine and Russia and they can all rest assured that we will not let them down and will do everything in our power to continue to support them.



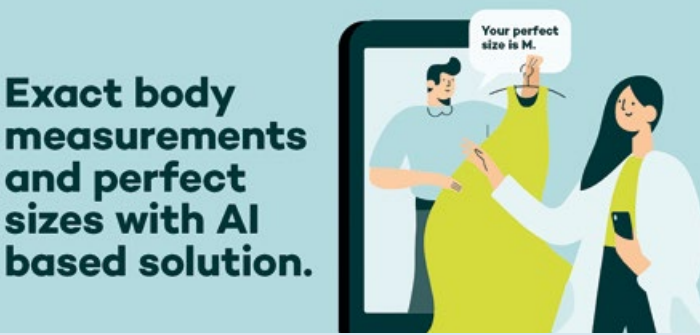
Read the news  
on the website.

**Digital change,**  
*June 2022*

**From hardware company to digital company.** “You have to change yourself in order to convince other people,” says Michael Marhofer (Chairman of the Management Board) about the path towards digitalisation using the example of the ifm Group. Michael Marhofer explains what it means to digitalise a family and industrial company, to increasingly rely on software in addition to the original products, not to jeopardise the core business, to deal with change and much more at the Industry Future Conference. The main topic on 2 June 2022 was “Performance AND sustainability – entrepreneurs and thought leaders are shaping the transition to a climate-neutral industrial society”.



**sizeez.**



**Image processing goes fashion,**  
*June 2022*

**sizeez.** Within a very short space of time, the UX team from ifm Product Design and Virtual Retail GmbH developed an app that can be used to take body measurements digitally. The primary target group is fashion mail order companies so that they can give their customers reliable and suitable recommendations. But the solution is also ideally suited for other fields in online business where precise body measurements are required. Among other things, a 3D camera sensor from pmdtechnologies and the experience of the

Virtual Retail software developers are used.

With sizeez – a body scanning app that brings intelligent image processing to the fashion industry – online shopping is now becoming more sustainable: Because if the right size can be found straight away, fewer items need to be dispatched or returned. This in turn saves several tonnes of CO<sub>2</sub>, also during production, storage, order picking and packaging.



Exceptional commitment,  
July 2022

ifm China remains able to deliver despite coronavirus lockdown. On 28 March, the Shanghai Pudong New Area was sealed off, which made customs clearance and the transport of all imported goods extremely difficult. In addition, the warehouses were closed so that goods could neither be accepted nor delivered. We had to act in order to uphold our guiding principle “ifm – close to you”. The contact and close exchange between the logistics centre and the head office, import agents and government authorities was particularly important. This ultimately led to an analysis of which logistics concept was still feasible in the context of the epidemic situation – a complex undertaking. Huhang Wang was “the last man standing” in closed-loop management: He manually processed the delivery of urgent orders and was unable to leave the warehouse until the end of the lockdown due to the strict conditions. An employee of an import partner supported him temporarily and provided catering and accommodation (a tent). This determination is remarkable. All in all, the Chinese ifm team did an excellent job in overcoming the challenges - this is not something to be taken for granted. In retrospect, it can be said that despite the disrupted supply chain, there was no backlog in deliveries. On the contrary, sales actually increased by 5 % despite these challenging times and circumstances.



2022

The subsidiary PT ifm electronic Indonesia was founded on 18 October 2022 and has been legally authorised to trade in Indonesia since 15 November 2022.

Closure of the Russian ifm branch and consistent cessation of all business with Russia on moral grounds after 70 days of war against Ukraine.

ifm moneo cracks the fourth turnover million.

PRODUCT HIGHLIGHTS 2022



LW radar level sensor

measures levels of liquids and viscous media in tanks with a height of up to ten metres precisely and without blind areas.

Field-compatible IP67 power supply unit

with IO-Link and electronic fuses.



Now live: Fit for Service  
August 2022

“A global training programme has been developed to support our experienced customer service employees and ensure that new colleagues in different regions receive the same level of training,” says Kevin Barr (Head of Customer Service ifm USA). This is because ifm strives to achieve or fulfil world class status in all areas of the company. “We recruit and train a large number of new colleagues, some with years of experience, others fresh from university, all with their own strengths and needs. Fit for Service offers a wide range of topics to ensure that all service basics are covered during the induction programme. It also emphasises the extent of our individual influence while we are part of a global whole,” he continues. There are both self-study modules and live training courses – the new programmes are now available in nine languages.





“Modern, consistent and authentic” is the promise of the new HR marketing campaign. Since the redesign, much of what ifm stands for as an employer is embodied with more emotion. These include self-development and passion.



**Sander Roosjen,**  
Research and Development Manager at Koedood

As an innovative company, we have recognised the potential of inland navigation to become an even greener mode of transport, and we want to do our part with clean propulsion solutions. This is why we like working with ifm as a company that continuously drives the innovative development of its sensor technology forward. ifm really understands our needs and what we want to achieve, and provides us with the necessary automation solutions. Joining forces and combining strengths and competences gets you further. And that is exactly what ifm and Koedood are doing in the case of maritime fuel cell propulsion.

2023



Since mid-May, the Nuremberg-based start-up Sentinum GmbH has been a wholly owned subsidiary of ifm group services. Sentinum develops and sells wireless sensors that are currently mainly used for smart city and smart building applications.



As part of the “EMAS Scope Extension”, the environmental management requirements of EMAS and ISO 14001 were implemented at other locations on Lake Constance and in Rosenheim. The recertification of the previous locations (Essen, Tett nang-Bechlingen, Wasserburg) that were validated and certified for the first time in 2020, also took place.



**Martin Buck (Chairman of the Management Board),**  
ifm group of companies, Germany

We don't let others drive us crazy. We stay crazy. I believe that AI is a great technology that is gradually finding its way into working life – especially as an assistance function – or into our products. I think AI will take the interface between man and machine in particular to a new level and

significantly improve the collaboration that already takes place today or help to analyse large amounts of data. We should be crazy enough to try out the possible and the impossible, but not let the hype drive us crazy.



The impulse paper “Artificial Intelligence in Industry”, to which Steffen Fischer contributed, is a German publication of the Working Group on Labour, Education and Training (Plattform Industrie 4.0) and aims to provide initial guidance on AI in industry. [The QR code will take you there:](#)



**Frank Stegherr**  
ifm group of companies, Germany

**Open heart surgery: the Bamberstraße project.** When I look at ifm, I am very impressed by the development of the group of companies and how the organisation has managed to generate and reflect the growth rates. The values “close to you”, “innovation” and “excellent customer fulfilment” come together very clearly here. Values that are not only carried outwards, but also lived internally.

The expansion of the logistics centre

is a perfect example of how we want to make physical logistics more efficient and thus once again take values into account. When we set up the warehouse in Essen eight years ago, we did so with great foresight. The 55 % capacity utilisation at the time speaks for itself. At that time, we had created enough reserves to offer our customers the usual performance for many years to come.

But at some point, even these reserves are used up, a sign of the ifm

Group's success. We have therefore already activated backup processes to prevent the warehouse from filling up and coming to a standstill. An expansion is therefore unavoidable and has already been initiated. We will increase the number of pallet bays by 120 % and thus create space for products that flow through the warehouse in large quantities. We will also gradually expand the storage areas from which customer deliveries are picked at high speed from the current 35,000 to 125,000.

This is a considerable expansion potential of 260 %.

These figures once again demonstrate the forward-looking element of the ifm Group. But also the unconditional will to not only document “Excellent Customer Fulfilment” in the company values, but to actively live it.



**Tilo Haug,**  
*ifm group of companies, Germany*

**ifm listed with Magna.** We have been working on the contractual connection with Magna (a leading global automotive supplier with 351 production sites and 103 product development, engineering and sales centres in 30 countries) for three years now. This has now been successfully realised with the signatures and another major step has been taken to expand our business with Magna. We are very pleased about this and are looking forward to future developments.

On 1 September 2023, ifm launched a contract and a product catalogue with Magna Europe containing almost 10,000 ifm products – this opens up great potential for us as the ifm Group. There is no secret behind this success, but it is a sign of the outstanding co-operation between the ifm sales companies in Austria and Germany and the Global Groups and Commercial Accounts department.



**Sebastian Schlicht,**  
*Head of Automation at Magna International*

The nice thing about ifm is that by developing a project of this dimension, you can realise potential that benefits both sides. Communication is also a key factor in this collaboration; it was on an equal footing from the outset. A simple one: "Attention, I'm still missing this or that feature element in the software here, could you perhaps pass it on to your guys?" is enough – you'll find open ears here and we're grateful for such give and take.

**Joy Rahman,**  
*ifm Group, Africa, America, Asia and Europe*

**Caution should be exercised with foresight.** Congratulations to Martin Buck and his team! When I was asked by Michael Marhofer and Martin Buck in 2008 to find a suitable production location in Asia, we came up with Singapore. I am convinced that it was the right decision – given the ease of doing business, cost of doing business and quality of living for employees. Today, patent security and employee loyalty would also have to be taken into account. Our ifm employees are proud to be part of the Orange Family and stay with the company for many years. We

have also achieved this in China – which is unusual. In 2005, when ifm set up its own branches in China, the sales staff were given company cars. This was unusual and was viewed critically by competitors. (Their employees had to take public transport.) One or two assurances helped to retain employees for many years. The reason why we chose Singapore over China in 2008 (although the trend to go there was very strong) was due to the high regulatory hurdles that no longer exist today. My advice would be not to let fear determine our actions. Good luck!



SV Veranstaltungen KEARNEY

**2023**

In November, ifm once again receives the "Factory of the Year" award in the "Outstanding Series Production" category for its site in Sibiu, Romania.

**Martin Buck (Chairman of the Management Board),**  
*ifm group of companies, Germany*

**The search for a location is over.** On 6 December 2023, the investment agreement for the Chinese production site in Suzhou was signed at Lake Constance. This step is a significant milestone for the entire project team. We are very pleased to have found a location for our future production in China that

combines all the aspects that are important to us and at the same time offers us exactly the flexibility we need to remain capable of acting in a wide variety of scenarios. We can now start preparing the construction measures that will be implemented taking the current economic situation into account.



Andrzej Durdyn, Wu Hong (Chairman of SIP Administrative Committee) and Martin Buck sign the investment agreement on 6 December 2023.

**2019–2023**



**1,366**  
MILLION EUR IN  
SALES



**8,750**  
EMPLOYEES



**1,170**  
PATENTS



**80**  
COMPANIES

 Product milestones



ifm mate



ifm moneo



### What happens next is up to us

Our mutual chance of growing successfully in security will remain comprehensible and a constant motivation for all of us. Almost every human progress has started by striving for a utopia.

That is why, like our vision, the chronicle should also conclude with this sentence by David Ben-Gurion:



*“Anyone who doesn’t believe in miracles is not a realist.”*







