

K-WERT

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**One History.
One Team.
One Future.**

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PETER EDELMANN

Dear colleagues and friends of KAEFER,

Without wanting to encourage complacency regarding the challenges ahead, I would like to focus on the many positive events which have taken place during KAEFER's 100th year.

Numerous birthday celebrations were held around the world, commemorating not only our anniversary but also recent business achievements and the considerable improvements in our project and country governance, which all together have contributed to the company's financial success over the last two years. In Bremen alone, more than 1,200 current and former employees attended the company's Family Day on 1 September. My overwhelming impression on that occasion was of the pride and solidarity that people take in their connection to KAEFER. It was a day of storytelling and I enjoyed listening to several narratives – which also appear in our chronicle and here in the K-WERT. All these stories underline and illustrate the qualities of loyalty, courage, determination and ingenuity which have allowed KAEFER to adapt and succeed over so many years.

During my time as KAEFER CEO, it has been my task to help set us on the right road at the start of our second century. Together with senior management colleagues and the Advisory Board – and with the enthusiastic support of so many people at KAEFER – we have further developed our corporate strategy, designed to make the most of our global reach through greater emphasis on growth, close collaboration and a clear vision: to reduce and use resources more efficiently or in short RED-USE. Additionally, we have put people and systems in place to ensure proper risk and project governance and to encourage value driven innovations. We have worked on our values and the development of our employees and leaders to help foster and reinforce the high-performance standards necessary for a sustainable success.

As of 1 January 2019, the leadership of the company will rest in the very capable hands of my colleagues Steen Hansen and Roland Gärber. Together with their colleagues they will continue the work of shaping and consistently implementing our strategy for the future.

Time and again on trips around the world and at Mittendrinn meetings in Bremen, I have been impressed by the willingness of people to associate the company's interests with their own. We are blessed with a long-term mindset, loyal customers, employees and owners, a growing and fascinating market environment and a diverse and expanding service offering. If we remain flexible while preserving our strong value-driven behavior – maintaining and intensifying the trust of our customers, employees and our owner family – I believe that nothing will prevent our successors from celebrating KAEFER's 200th anniversary in the fullness of time.

PETER EDELMANN CEO



WIR FEI ERN

AM 1. SEPTEMBER 2018
IN DER PILLAUER STRASSE IN BREMEN

100 JAHRE
te. Ein Team. Eine Zukunft.





Happy birthday, KAEFER

Employees, families and friends
celebrate the centenary around
the world

SAFETY MAX AT KAEFER'S FAMILY DAY IN BREMEN
Just one of more than 1,200 attendees!



FAMILY DAY IN BREMEN Former employees take their place in the front row



CELEBRATING KAEFER'S ANNIVERSARY AT A GALA EVENT IN BREMEN
With music from the Deutsche Kammerphilharmonie Bremen and talks from our owners and the Board of Directors



UNITED ARAB EMIRATES Centenary celebrations at the annual staff party

KAEFER INDUSTRIE
 IN NORDHAUSEN,
 GERMANY
 Employees' children
 save the day



FAMILY DAY IN BREMEN
Attendees celebrate
victory for local football
team Werder Bremen





100 Stories

One history. One Team. One Future.

When Carl Kaefer founded KAEFER in 1918, he believed that people create their own future through vision and determination; it's a philosophy which runs like a thread through KAEFER's rich history – from Carl himself to Heinz Peter and Annelotte Koch, and on to each of the 27,000 employees who make up KAEFER today.

“If it’s cold or hot, if it sweats or freezes, then KAEFER will insulate it!”

“Was warm, was kalt, was schwitzt, was friert – das wird durch KAEFER isoliert!”

A memorable rhyme in German and one which remains true today, although it no longer does justice to the scale of our activities, from supporting customer asset integrity to delivering smart solutions across a whole range of integrated services.

From humble beginnings in the shipbuilding industry, the company developed rapidly, already offering an impressive range of services by the 1960s – hot and cold insulation, sound and fire protection for refineries, work on industrial and residential construction sites, contracts at chemical plants, power plants, breweries, and dairies. Again and again, recommendations from satisfied customers led to new orders. Soon, KAEFER technicians were insulating liquefied gas tankers, nuclear plants and oil rigs in countries as far away as South Africa and Sumatra, and under the leadership of Annelotte Koch and her son Ralf Koch, these decades of constant expansion had strong foundations – the traditional KAEFER values of collegiality, respect, reliability and professionalism.

From peat dealer to global market leader – currently generating an annual turnover of around 1.7 billion euros in more than 30 countries. These are very big numbers that build upon the fact that KAEFER remains no more or less than the sum of its people and the stories they tell about themselves and the company they work for – stories of courage and initiative, or a constant quest to become better today than we were yesterday.

To mark our centenary, 100 of these stories have been collected in a chronicle. We've gathered a brief selection here, which we hope you'll enjoy.



GETTING THE JOB DONE On behalf of client INEOS Nitriles in the UK

ANNELISE JENSEG
HR Manager, KAEFER
Energy in Norway



“I’ve never done it before, but it sounds like fun!”

In 2006, Annelise Jenseg found herself between jobs, working as a postman in Stavanger in Norway while considering her options...

It was a rainy and extremely cold morning in November. I was out delivering the post when my phone rang. I hit the buttons with numb fingers, wind and rain hammering at my face, while someone at the other end asked me to come for an interview at KAEFER in an hour’s time. I called my boss and told her people would be late getting their letters that day.

I must have looked like a drowned cat coming through the door, still in my dripping uniform. Two women met me and asked if I’d ever worked as a receptionist before.

“No,” I said, “*but it sounds like fun. Let me try.*”

The next day I started work at KAEFER. I’d already been there a few weeks when the person who punched the man-hours into our then cutting-edge system – iCORE – left the company, meaning there was a space which needed to be filled.

“*Let me do it,*” I said. “*I’ve never done it before, but it sounds like fun.*”

You learn a lot about a company from writing man-hours. You get to understand the payroll system, cost control, the projects, the people and their skills. And all the time the company was growing. Soon, I was working as a payroll consultant and learning even more. My boss at that time was a strong, dynamic woman; when she started looking for someone to take over responsibility for the software and become a systems administrator, I said:

“*Let me do it, I’ve never done it before, but it sounds like fun.*”

As a senior payroll consultant and systems administrator, I assisted cost-controllers, project managers and engineers at the same time as working with suppliers to find better systems for issues such as travel costs and sick-leave. KAEFER Energy kept developing; some people left but many more arrived and – like all growing companies – new positions and structures sometimes had to be created if we were going to keep up with the pace of change. One day, senior management realised that we needed a personnel manager.

“*Let me do it,*” I said. “*I’ve never done it before, but it sounds like fun.*”

Once again, I found myself in deep water – sometimes wondering why I’d taken the plunge! But there’s something about that feeling of mastering a new skill. It’s been a fabulous journey so far. I’ve met fantastic people – the toughest of the toughest, the smartest of the smartest and the kindest of the kindest – who have supported and challenged me every step of the way. Every operator and foreman at KAEFER Energy is a part of my working life, and I try my best to give them the attention they need, although I know I can do even better.

Not so long ago, when a new girl started working in reception, I overheard a conversation she had with her supervisor.

“*Let me do it,*” I heard her say. “*I’ve never done it before, but it sounds like fun.*”

And I thought to myself, the future is bright and full of hope.

Loyal service and outstanding contributions in Brazil

Launched by KAEFER's daughter company in Brazil, RIP Serviços Industriais, in 2016, the Dona Elza Award honours one outstanding employee each year as a way of celebrating everyone whose efforts make this such a rewarding place to work. A perfect example is the woman after whom the Award is named. Elza Benhossi, known by everyone as Dona Elza, has been at RIP since 1991. She's now over 80 years old and is still the company's 'good soul', who knows everyone by name and has a knack for knowing when to bring cake to the office or put the kettle on. Although a significant number of employees live in fear of the day when she finally decides to retire, Elza herself insists she has no intention of going anywhere: "I've watched this company grow and grow over the years," she says. "The people here are my family. How can you leave your family?"

Receiving the Award, therefore, and having one's name so closely associated with the qualities of loyalty, dedication and empathy embodied by Dona Elza, is regarded as an achievement to be cherished. Everyone takes an interest, and everyone agrees that the most recent recipient is a very worthy winner indeed.

Claudio Simplicio Teixeira, currently working at the São Paulo branch as a QSMA Safety Technician, joined RIP 16 years ago:

"My first role at the company was as a safety assistant when we were still working out the processes for repairing and replacing coke batteries at the steel plant in Cubatão. I was just a young man then; working with experienced colleagues on countless projects over the years has really helped me grow as a professional and as a human being."

Lessons in life that were to stand Claudio in good stead in 2008 when he was diagnosed with cancer.

"I had a choice – give up or fight. The illness and the treatment were making me weak when I knew I had to be strong. I started running to work. Not long after, I took part in a 10k run, then a half marathon, then my first full marathon in Rio in 2012."

Today, Claudio divides his time between work, ongoing medical treatment, and running ultramarathons – including one 24-hour run during which he clocked up an extraordinary 156 km. Unfailingly cheerful, even during the darkest days, Claudio is a role model for his colleagues and living proof that nothing is impossible.



CLAUDIO SIMPLICIO TEIXEIRA Displaying one of many medals

ELZA BENHOSSI Holding the eponymous Dona Elza Award





THE BIG MATCH, 1955 Heinz Peter Koch stands second from left

Football – a long and distinguished history

Sport – and teamwork – have been part of the KAEFER ethos from the very beginning. As long ago as 1955, hard-fought matches were taking place between ‘White Collar FC’ and ‘Insulators United’. Unfortunately, history does not record who won this first fixture, though the photos suggest it was certainly played in a collegial atmosphere!

Building on these early successes, the KAEFER International Soccer Cup was launched in 2002 to help deepen relationships between KAEFER employees working in different countries and disciplines. The first competition took place in Saarbrücken, attracting 13 teams from France, Spain, Austria, Poland, Norway and Germany, with demand so high that some countries even held competitive trials. Taking place at two-year intervals and attracting over 1,500 athletes and fans from an ever-increasing number of countries, the event was staged in France, Spain and Hungary before it returned to Germany in 2012, where Team Construction became the first team to defend the title successfully. As KAEFER’s operations became increasingly global in nature, so did the logistics involved in holding a representative Soccer Cup. After giving so much pleasure to so many insulators, scaffolders, painters, and even admin employees – from apprentices up to managing directors over a ten period, regrettably the sixth edition of the Cup was also the last (at least for now).

Football fans weren’t left wholly in limbo, however, as 2012 also saw the launch of the KAEFER Trophy, an annual tournament giving kids from schools in and around Bremen the chance to show-off their skills at the same time as getting to know more about KAEFER apprenticeships. Taking place every September, the event attracted 15 teams and 300 participants in 2018.

Another important football-related initiative began in 2017, when KAEFER employees in Bremen began playing regular matches with a group of young refugees looked after by the Hans Wendt Foundation. The games, which take place every two weeks, have been such a success that a mixed team of KAEFER employees and refugees joined forces to compete in the 2017 “SummerSpecial” charity football tournament, organized by AVS & Friends to raise money for cancer research. The KAEFER FOUNDATION also got involved, covering the costs of the venue and providing clothing for the young refugees. Victory may have eluded the team on the day, but everyone had a great time supporting this hugely worthwhile cause.



KAEFER INTERNATIONAL SOCCER CUP Berlin 2012

Getting the job done with wit and grit

Radio KAEFER

It was the end of the nineties and the team from KAEFER Schiffsausbau in Germany was determined to win a new insulation contract. In order to prevail against stiff competition, they knew it would take something special. Klaus-Dieter Müller, Division Manager Shipbuilding back then, remembers the moment with a smile:

"We'd developed a really effective, lightweight wall system and we were determined to make sure the clients knew exactly how good the sound insulation was; we invited them to a meeting in one of the cabins we'd built near the shipyard Bremer Vulkan. Once the door was closed, we set a radio playing in the next room with the volume cranked up to about 90 decibels. You couldn't hear it in the meeting until we opened the door half-way through. All of a sudden it was so loud, one of the clients actually put his hands over his ears. 'Did you turn that on just now?' they wanted to know. We shook our heads, faces innocent as angels. We had to open and close the door a few more times before they were convinced – but we had the contract signed and sealed by the end of the day!"

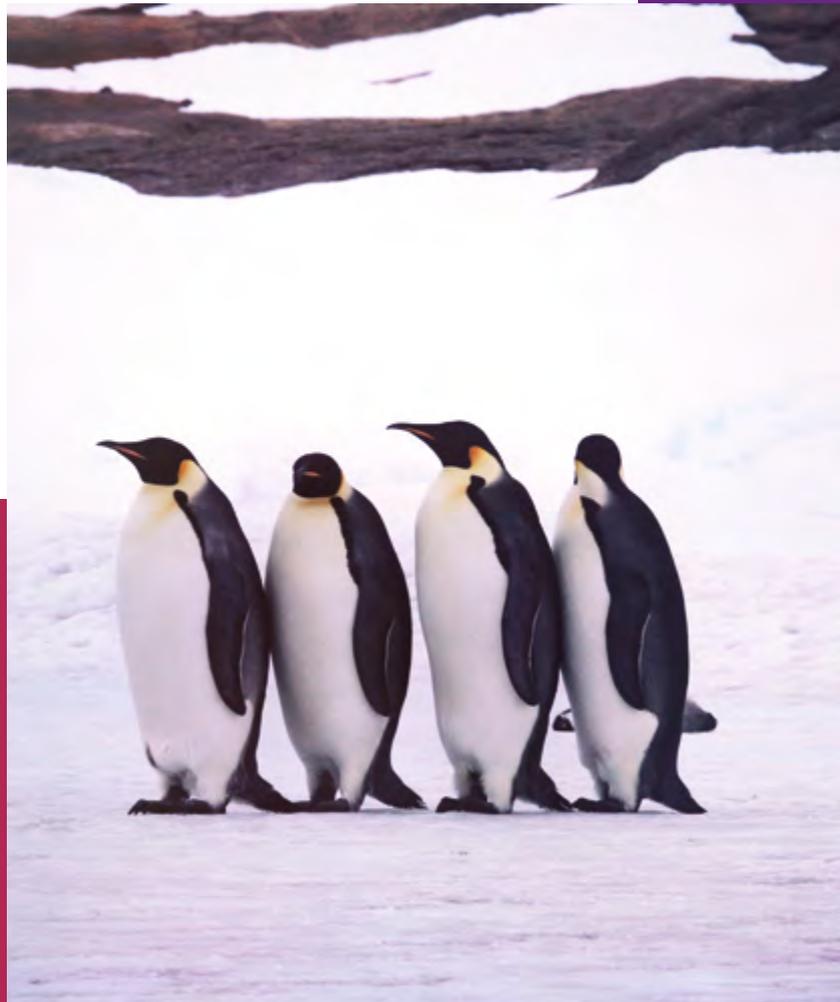
"You couldn't hear it in the meeting until we opened the door half-way through. All of a sudden it was so loud, one of the clients actually put his hands over his ears."

KLAUS-DIETER MÜLLER Former division Manager Shipbuilding

Penguin Country

Constructing the Bharati Research Station in the Antarctic was a mission that pushed everyone to their limits in 2012. "The Antarctic summer is short," explains Project Manager Torsten Haß, "we couldn't afford to lose a single day, which meant everything had to be planned down to the smallest detail – it's not as if you can just pop down to the local shop when a screw goes missing!" A practice run was carried out in Duisburg, assembling and dismantling the station before the materials were all packed and shipped to the Antarctic via Rotterdam and Cape Town.

"48 of us spent four and a half months living in shipping containers, working twelve-hour days beneath a sun which never set." The station was completed on time and the large KAEFER team returned to their families with tales of endless daytime, ice-cold baths, and with fond memories of their neighbours – curious penguins who visited each day to check on the progress of the building works.



CURIOS NEIGHBOURS Penguins visit KAEFER employees in the Antarctic



Continuity and Change

Building a sustainable future at KAEFER



Continuity and change at a family-owned company

It's not only the company that needs constantly to adapt to new developments, the owner family needs to do it, too. In a precisely planned process which leaves nothing to chance, the 3rd generation is now taking over the helm.

We asked joint owner Ralf Koch – long-standing managing director and former advisory board member – about his experiences and how he envisages the future of KAEFER.



RALF KOCH 2nd Generation



I was 24 years old when I joined KAEFER in 1964 and look back with thanks at my subsequent 32 years of active service at the company. I feel great gratitude towards my parents, particularly for the first four months from September to Christmas 1964, when my father initiated me into the company in line with his way of thinking. This was possibly in anticipation of the severe and incurable illness which struck him over Christmas 1964 and from which he was finally released at the end of 1965, shortly before his 57th birthday. His foresight and knowledge, and the experience he was able to share, greatly helped to smooth the unexpectedly early transition.

I also think back fondly on the many years of collaboration with my mother, when the two of us managed to shape the company according to my father's wishes, and on the close working relationships with our employees.

100 years of KAEFER

The speed with which KAEFER has grown over the last decades is retrospective confirmation of the path we pursued, and I greet our 100-year anniversary with a great sense of respect and gratitude towards the many generations of KAEFER employees who laid the foundations and towards our present employees, wherever they are in the world. We all have good reason to celebrate this anniversary properly.

Ready for the future

We cannot overlook the challenges of the future, however, and this also applies to me. KAEFER was and still is my world. I am delighted to be handing the company over in good shape to the next generation and know that it is in good hands. My brother Hubert and I have gradually introduced the generation change; our children and those of my sister Renate, who died so prematurely, are all shareholders. The biggest challenge of this third generation will be getting along within the family and being a reliable and trustworthy partner for the company bodies. Taking an interest in our employees and treating them with respect is also vital and should be a matter of course at any family-run company.

In his capacity as family spokesperson, deputy chair of the advisory board and member of the executive committee, I am convinced my nephew, Moritz Koch, will successfully master the challenges he faces. I am happy to be on hand to advise and I'm grateful to Moritz for taking on such an important role for the family and for KAEFER – in addition to running his own company."

In 2018, Moritz Koch was unanimously selected as family spokesperson. As he also takes on the role of deputy chair of the advisory board, we asked him to share his thoughts on KAEFER's future.



There's no question that 2018 is a key year – for KAEFER as a company and for me personally. Firstly, we are celebrating our 100th anniversary. Secondly, we have important new tasks ahead for which I have prepared intensively, actively supporting the family in its decision-making in recent years and, on the operational side, gaining valuable experience in running my own companies in the service sector.

New challenges

As a member of the KAEFER advisory board and the newly created executive committee, it is my job to continuously enhance and represent the long-term ownership strategy – internally and externally. At the same time, as spokesperson for the family, I represent all the shareholders.

I would like to take this opportunity to thank my uncle Ralf Koch on everyone's behalf for his tireless contribution to this responsibility. His advice will continue to provide valuable guidance in the future.

The advisory board will offer me the chance to perform tasks that are of immediate importance to the business. In cooperation with other members, it falls to me to advise and supervise the senior management, who are responsible for the day to day business.

The next 100 years start with the first day

Where do we go from here? The first hundred years of KAEFER are behind us and we have the next hundred ahead. Who knows where we'll be in 2118. What is clear is that digitisation will play an important role in the immediate future. At KAEFER, I already see very good progress in this regard but also a great deal of potential. Digitisation is not an end in itself – it needs to be shaped. It has to help the company satisfy the requirements of our customers and, if possible, exceed them. The introduction of digital technologies and processes can only be successful if they are accepted, supported and valued by our employees from the very beginning.



MORITZ KOCH 3rd Generation

We will remain as we are, but better

KAEFER has always been especially successful when it comes to providing our customers with new solutions to meet their requirements and implementing them reliably. We will continue to manage this in the future through focusing on our strengths: a strong ability to innovate paired with readiness for action and the determination to deliver top quality. My top priority is to help create the right framework to make sure this happens, at the same time as ensuring that the KAEFER family stays together.

It is a great honour for me, in KAEFER's centenary, to become even more active at this fantastic company and help to ensure that it continues to grow and become even stronger over the generations."

Spotlight on Innovation

A Corporate Innovation & Technical Excellence department and an Innovation Marketplace are just some of the ways in which we are recognising the importance of – and providing fresh impetus for – one of KAEFER's traditional strengths.

'Polyphem' – How two KAEFER engineers are planning to change the world!

Imagine if people living in remote locations were suddenly freed from their dependence on fossil fuels or expensive mainline connections. Imagine if there was no longer a need for tank trucks to drive through ecologically sensitive regions. Imagine bringing clean, reliable energy to areas which currently rely on diesel generators, or which have no electricity at all due to a lack of infrastructure or problems with fuel supply.

Two KAEFER engineers did exactly this, demonstrating creativity, determination and technical knowledge in their quest to meet a major and – given current global energy trends – rapidly growing need.

Working in the Corporate Competence Center Renewable Energies, Andreas Pöppinghaus and Daniel Ipse came up with Polyphem, a mini solar power plant that captures and focuses sunbeams on a heat exchanger (receiver). Ambient air sucked in through a modified micro-gas turbine is then heated by the receiver before being released and converted into electricity.

Capable of generating 100 KW of energy (enough to meet the needs of a medium-sized industrial operation), the Concentrated Solar Power (CSP) plant will be small enough to be transported, ready-assembled, in a standard shipping container. Once on site, an electrician only has to lay the connections before the plant is operational.

All KAEFER's costs are being covered by a €1.1M grant from the European Commission's 'Horizon 2020' Research and Innovation programme, sufficient to hire a dedicated manager and con-

trolling engineer for the project, with an additional €3.8M being shared between four research centres and four private companies based in France, Spain, Germany and Denmark, which are providing logistical and technical support. The prototype is currently being engineered and tested. Looking ahead, the team plans to have a market-ready product available in 2022.

→ For more detailed information on this project, please contact 'Horizon 2020' Project Leader Simon Schütrumpf at Simon.Schuetrumpf@kaefer.com



The brightest minds seek the next big thing

To mark our centenary – and help us to stay close to the latest academic research – the ‘KAEFER Zukunftspreis’ was launched in 2018. Open to students from German universities, this €5,000 prize will be awarded regularly to an outstanding research project in one of the following fields: decreasing emissions, energy efficiency, Lean construction, insulation, process optimisation and materials research.

Twenty-five entries for the inaugural edition were accepted between April and June, from which a KAEFER jury selected a runner-up – Laura Marie Henning, for her work on removing substances such as dyes from wastewater – and an overall winner.

Congratulations to Leander Stützel, recipient of the first ‘KAEFER Zukunftspreis’!

A graduate of Augsburg University, Leander was awarded the prize for his work on optimising the natural building material loam, specifically through im-

proving its thermal properties. Because Leander’s approach avoids biological additives, the material displays better mould resistance compared with alternatives. The result, after firing at an appropriate temperature, is a new light-weight insulation brick, ideal for use in buildings where natural construction materials are required.

“I decided on a Master’s in energy efficient construction because the scope for reducing energy and material consumption is still huge. One thing I’ve learned – traditional building techniques and materials such as loam have a habit of demonstrating their worth time and time again.” Leander Stützel

News from Norway

During celebrations in Stavanger on 7 June 2018 – to mark 100 years of KAEFER and 41 years of KAEFER in Norway – the team brought clients and partners up to date with the current focus on digitisation, continuous improvement via Lean methods, innovation and developing the next generation of experts.

On a tour of the premises, Lean Leader Trond Magne Susort told visitors why Lean and digitisation are such a natural fit at KAEFER Energy:

“Embracing Lean working methods and new technologies allows our employees to spend more time on the tasks which make us grow as a company. Using EX secure tablets in the field, for example, has massively reduced the time we spend on paperwork. In addition, communication is improved as we can now effectively share information with colleagues on multiple sites and across national borders.”

Less time spent on paperwork means more time for innovation. The world-class pre-fabrication workshop in Stavanger is staffed by craftsmen dedicated to delivering products faster, at market-leading quality and for market-beating prices. KAEFER Energy has its own range of 30 commercial products – ENERGY Products® – developed to meet the needs of clients, often in collaboration with KAEFER’s innovation department in Germany.

With forecasts suggesting strong growth for KAEFER Energy in 2018, CEO Bård Bjørshol is determined to mark

KAEFER’s 100th anniversary by bringing another 100 employees on-board, including at least 20 new apprentices over the next twelve months.

“We aim to be the best supplier for our customers, and the preferred employer for those seeking employment within our disciplines.” Bård Bjørshol

France in flight

Focused on improving conditions for employees and delivering the best possible service for clients, KAEFER WANNER is embracing new technology. As part of a switch to ‘paperless’ working practices, tablets running a bespoke operation management system are currently in use on eight nuclear sites. In addition, new digital procedures have been introduced to guide and record the assembly and disassembly of high-pressure vessel cover heads. Popular with employees, the new system aims to minimise time spent exposed to radiation, standardise working methods and maintain, via this medium, required levels of expertise. Launched in the first half of 2018 for use on 900MW nuclear reactors, the new procedures are now also in development for the bigger, 1300MW reactor.

In addition, KAEFER WANNER teams are currently testing drone technology as a faster and more efficient way to conduct thermography. Images recorded by the drones are also being used to help develop improved access solutions.

“At KAEFER WANNER, we don’t just sell scaffolding. We sell access solutions. Great collaboration between our design and operation teams allows us to continually develop and integrate more efficient and cost-effective solutions for our clients.” Matthieu Blanquet (Head of the Technical Department)



KAEFER Rubies – our focus topics in innovation

Innovation is essential for KAEFER's future, a fact emphasised at the International Managements' Meeting in 2017 and 2018, when the best ideas from around the company were presented as part of our Innovation Marketplace and categorised as either 'High Impact', 'Fast Impact' or 'Strategic' Rubies.

High Impact Rubies are 'best practices' which, if implemented everywhere, will have a potentially significant impact on the group's profitability, whilst Fast Impact Rubies are 'best practices' which can be quickly and straightforwardly implemented on site. Last but not least, KAEFER's Strategic Rubies have been selected based on their potential to significantly improve the company's fortunes through the development of a new service, process or product.

All Strategic Rubies are being supported by dedicated teams and project managers to ensure they reach their full potential. Details of most of them still remain confidential, but K-WERT is delighted to report on two which are already causing a stir.

“At KAEFER, the ambition is to supply our clients with solutions that are simply smarter.”

THOMAS-PETER WILK Head of Corporate Innovation & Technical Excellence



ASSEMBLING A KAEFER ENERGY FIRECOVER® At the workshop in Stavanger, Norway

CUI Healthcheck

Ruby status at KAEFER requires a product or a new or enhanced service to offer the potential for increased profitability. The new CUI (Corrosion Under Insulation) Healthcheck meets this definition admirably.

CUI only becomes obvious once it's too late to treat. Until now, plant managers have been forced to play a guessing game, either re-insulating whole areas of a facility before it's necessary or running the risk of waiting too long. KAEFER's new CUI Healthcheck, designed in partnership with Plant Integrity Management (PIM), combines expertise in plant integrity, inspection, insulation, access and surface protection to offer clients a rapid evaluation of current CUI integrity management protocols – and significant potential savings in terms of time, money and inconvenience.

Valuable as a one-off exercise, the CUI Healthcheck is most effective when undertaken as the first step in the creation of a tailored, long-term control programme. All plants present their own unique issues, but all have one thing in common – using this new service from KAEFER, major control improvements can be achieved at any stage of the asset cycle, minimising unnecessary work on risk reduction and the danger of expensive CUI failures.

Taking the ENERGY Firecover® global

Norway's ENERGY Firecover® is a maintenance-free fire insulation box for valves and flanges which is significantly lighter, easier to install and more adaptable than any alternative system available on the market. A hugely successful product in its home country since being launched in 2011, take-up elsewhere has so far been limited by high-production costs in Norway. In order to bring this superb product to a greater number of clients, it is necessary to invest in additional design, blending and engineering facilities around the KAEFER world.

Our daughter company in Brazil, RIP Serviços Industriais is leading the way, developing a sales and production strategy and training local workers. The original creators of ENERGY Firecover® are supporting their colleagues in Brazil through the supply of certain elements and – because this is an approved product – through ensuring and then certifying that the ones produced in Brazil are identical to those produced in Norway. Production is currently expected to begin in early 2019, with key clients already in talks to place the first orders.



INSULATION ANALYSIS AT HEIGHT An ultrasonic device is stored in one of KAEFER's bespoke rope access PODs

“An amazing history. An even better future in prospect!”

Following the centenary motto: One History. One Team. One Future., KAEFER employees all over the world enjoyed the company’s 100th birthday celebrations with an extra spring in their step...

Peter Edelmann: There have been a whole series of wonderful events around the world. Their success is a testament to our values and the loyalty we’ve built up among employees and clients alike over so many years. More than 1,200 people came to our Family Day in Bremen at the beginning of September. I don’t know when I’ve spoken to so many people at once, but what touched me most was seeing how many present and former employees attended with their partners and children.

Dr Roland Gärber: One of my greatest pleasures during my first full year as KAEFER COO and member of the Board of Directors has been seeing how much pride people take in working for KAEFER, not only at the celebrations, but also on visits I’ve made to remote parts of the world, in the Middle East, Brazil or South-East Asia. After hours of travelling, to arrive on site and see that familiar red logo being worn with such pride is a true highlight.

Steen E. Hansen: In part, the centenary events have been so enjoyable because the company is in such good health. Record-breaking results in 2017, and I’ve also been struck by how much structural change we’ve achieved this year. Among the administrative teams, which is my particular area, we’ve improved IT security, finalised the business template roll-out in Germany, and launched a new Code of Business Conduct; these are all big projects, managed by employees at the same time as they’ve continued carrying out their day to day tasks.

Dr Roland Gärber: We can tell a similar story in operations. Every region has been involved in complex projects this year and we’ve experienced no major problems or failures so far. At the same time as delivering on the fundamentals we’ve also updated our project governance procedures. People everywhere have been integrating new methods and technologies into their daily routines and actively looking for opportunities to collaborate across disciplines and borders.

Peter Edelmann: Record turnover is obviously welcome but not nearly as significant as where this revenue is coming from. Not that long ago, people at KAEFER checked oil prices compulsively from a feeling that any major fluctuation might have a substantial negative impact on the company, but in fact our portfolio of services is so broad and diverse that we’re not dependent on any one industry, market or country – which is something we need to make clear. It’s a massive achievement which wouldn’t have happened without several generations at KAEFER knuckling down and showing a real appetite for acquiring new skills and working methods.

Dr Roland Gärber: Peter’s right. It’s vital people at the company feel confident and know that we have no need or interest in pursuing profits at the expense of HSE, quality or our values. Corrosion Under Insulation (CUI) Healthcheck is a case in point. Some people have wondered why we’re promoting this innovative new service so enthusiastically when it will likely mean a



KAEFER'S BOARD OF DIRECTORS From left to right:
COO Dr Roland Gärber, CEO Peter Edelmann, CFO Steen E. Hansen

“People everywhere have been integrating new methods and technologies into their daily routines.”

DR ROLAND GÄRBER COO

reduction in insulation services on-site. The answer is simple. By offering CUI Healthchecks, we support the efficiency and integrity of the asset base of our clients at the same time as we expand our portfolio of services.

Peter Edelmann: I could describe this year's relaunch of the KAEFER Academy in similar terms. We're a people business; our success depends on having the right people with the right skills in the right place at the right time, which requires the kind of teamwork and high performance that only comes from making KAEFER a truly attractive place to work. If people stay, if we train them internally rather than hiring them from outside, and give them genuine opportunities and challenges to develop, then we protect and strengthen the accumulated

know-how which sets us apart from our competitors. As a family business, we understand the value of good succession planning. This focus on continuity of expertise is one of our traditional strengths and something we have to nurture.

Steen E. Hansen: If the last two years have shown anything, it's that we're making the right strategic decisions for a prosperous future. Confirmation, if any were needed, came this summer. Our last long-term financing structure was put in place in 2014 for a five-year period. When we considered our options for 2019 and beyond, we decided that offering senior secured notes was the optimal means of creating space to develop the company further, while ensuring that KAEFER remains a 100%-family-owned business. To be clear, we have

not sold company shares, but have simply increased our third-party financing facilities, this time with a combination of senior secured notes and a syndicated loan facility. We thereby generate the flexibility we need to develop the company in the years to come for the benefit of our clients and our employees.

Peter Edelmann: The enthusiasm with which investors took the opportunity was a welcome vote of confidence, not only in our current market position and strategy, but also in KAEFER's traditional strengths – our common values, a long-term mindset and an experienced workforce who combine the confidence to speak frankly with a desire to show initiative, to be proactive when it comes to anticipating the needs of our clients.

Steen E. Hansen: That goes to the heart of everything we do at KAEFER. Recently, we discussed a number of current group-wide initiatives – innovation, Lean, quality, our health & safety culture, compliance and digitisation – and I thought it makes no sense to think of these as separate initiatives; they're all part of a unified approach to enhance our ability to understand and serve the needs of our clients, something which has always been integral to KAEFER. Take digitisation – we're not promoting it for its own sake but only when and where it allows us to deliver increased value...

Dr Roland Gärber: ... and make life easier for our employees. When we develop a new tech-assisted 'best practice' in one region, then implement it in another, you might describe this in terms of digitisation, or Lean, or collaboration, or innovation – the important thing to remember is that these are simply tools with a shared purpose: to help us get even better. Above all, to help us learn from each other, which is one area where there's still room for improvement.

“We want everyone at KAEFER to feel a sense of ownership.”

PETER EDELMANN CEO



THE BOARD OF DIRECTORS Sharing their thoughts with the K-WERT

Peter Edelmann: Another thing these initiatives have in common – whether it's fostering a safety culture or insisting on compliance training for all employees – is that we want everyone at KAEFER to feel a sense of ownership. Everyone should be confident enough to speak up and share his or her ideas, and everyone should feel a sense of responsibility for the success of the company as a whole. People tend to stay at KAEFER for a long time; when you talk to them, you can hear the pride they take in delivering such high standards across a diverse range of tasks, in their contribution to the value we create for our customers and in their commitment to reducing and using resources more efficiently and helping to sustain our environment. Without doubt, this pride is the most important asset that we have, though by no means the only one. We operate in expanding markets and offer a broad, recession-proof portfolio of services. We have a good long-term strategy. We can face the future with confidence...

Dr Roland Gärber: ... and should stay focused on delivering continuous improvement. There's no room for complacency. Our most important task is ensuring that KAEFER remains a company which values and develops people who want to keep learning, stay flexible and become the best they can be. Ultimately, we're selling services, which means we have to prove ourselves every day.

Mastering Lean drives continuous improvement

Thanks to the hard work and commitment of so many of our employees, KAEFER is gradually transforming from a company that does Lean into a genuinely Lean company.

A cornerstone of KAEFER's corporate strategy is the Lean Journey, focused on maximizing customer value and the continuous elimination of waste in all our processes. Thousands of improvements have been introduced since the Journey started in 2013, which are having a substantial impact – on KAEFER's bottom line, in terms of shifting the overall company culture, and on how we're viewed by existing and potential clients.

The Global KAEFER Lean Survey, carried out in April 2018 among former Lean training participants, revealed that 57% (not including Lean Leaders) are now working on improvements on at least a monthly basis, and over a third of the participants on a daily or weekly basis. This is also practised by 88% of Lean Leaders.

For KAEFER to become a genuinely 'Lean company' requires relationships of trust between managers and frontline operatives. As more and more employees receive Lean training as part of KAEFER's Lean Development Programme – and more and more Lean Leaders take up management positions – traditional methods of leadership are being replaced with a willingness to lead by example and encourage and coach operators, foremen and supervisors to improve their problem-solving capabilities.

Having focused on training managers during the first years of KAEFER's Lean Journey, the current focus is increasingly on providing training for foremen and operators, particularly on identifying waste types and value-adding activities, as well as daily planning and performance management (PPM). At the present time, more than 3,000 supervisors, foremen, operators and other supporting functions have received local Lean training. In addition, at the beginning of 2018 we began piloting proven Training-within-Industry (TWI) Job Instruction in Canada, South Africa and the Middle East. TWI is an effective and reliable training method, which improves operator skills safely, efficiently and quickly.

"I've been an insulator for over 15 years. TWI Job Instruction has taught me to be a better communicator when teaching people something new – specifically, how to break down all the steps in a more simplified way." Brett Ulry, KAEFER insulator based in Canada



Living and breathing Lean – on site AND in the office...

Safety, quality and schedule improvements are as important as purely operational gains. When KAEFER began its Lean Journey, the principle focus was on-site. Now, following the first years of successful Lean projects and initiatives within administrative functions, we are developing our Lean culture throughout the whole company.

"With projects involving different people and departments, such as global software implementation, Lean methods like the PPM Board with daily meetings helped us identify when we were running late and had bottlenecks – everyone can see at a glance what the issues are, prioritise and then improve." Steen Hansen, KAEFER CFO and Lean sponsor in Corporate Information Technology (CIT)

"It's Lean's ability to lift employees into a shared problem-solving mode that makes it so valuable."

TIM NOTTVEIT The first Lean Leader Practitioner promoted to a project management position (in KAEFER Energy's offshore division).

We are looking forward to learning about Lean from KAEFER

What KAEFER's clients and partners think about the Lean Journey

“ At KAEFER, Lean means eliminating waste to improve productivity and working together with partners – supporting our power plants' efficiencies.”

“ Together with KAEFER we follow the Lean approach in order to realise a differentiation from our market competitors, to be more competitive in offering our services to our clients.”

“ Working collaboratively with KAEFER and their established Lean processes, we've seen considerable gains in efficiency and savings from the improved utilisation of personnel and materials on site.”

“ It was refreshing to see a contractor taking a serious look at how they could reduce installation time and costs – without compromising on safety and quality – in ways which could lead to savings on future projects.”

DR ROLAND GÄRBER
(2nd from left)
on site in Oman

Talking Lean with Dr Roland Gärber

KAEFER's Chief Operating Officer



In the last year, you have visited many countries where KAEFER has operations. How would you assess the progress of our Lean Journey?

Wherever I went – and where Lean has been implemented – I was struck by how much pride KAEFER employees take in “being” Lean, in having these new skills which allow them to drive positive change. Lean is something which motivates and has certainly brought us all closer together as a team. At a construction site which I visited in Oman, for example, it was clear that the commitment to Lean extends from senior management to front-line operators. They all share an expectation of continuous improvement. That’s precisely what we want for everyone at KAEFER: this ability to identify wasted time and effort.

Is it fair to say that different KAEFER regions and entities are currently at different stages of the Lean Journey?

Yes, and there’s nothing surprising about that. Lean was introduced in different places at different times. Actually, it’s also an advantage – in the sense that countries which are further along can share what they have learned with others. It’s no use expecting people to run before they can walk. That means selecting Lean projects more strategically and making use of the Lean resources and expertise we have among Local Lean Leaders and on the Global Lean Team.

By now, I feel confident that everyone at KAEFER understands the benefits of Lean and the opportunities it offers for career development. Lean encourages employee engagement. It makes us more competitive, and our clients happy, which means that we can generate more rewarding work for a greater number of people. Better organisation through Lean also leads to improved safety. Furthermore, stable processes are the foundation for digitisation and help with claim management.

In the last five years we’ve come a long way on our Lean Journey. What needs to happen now in order to help us reach the next level?

We need role models, as many as possible. That’s why it’s so important that every director, manager and employee becomes a certified Lean Master – including me! As more and more of us start applying what we learn, we will become a Lean company – everyone, every process and every day. Our Lean Development Programme is about helping people at KAEFER to develop and to increase their capabilities – to work smarter rather than harder. Ultimately, what we want from Lean is that it fosters a culture at KAEFER where employees at all levels of the company feel valued and are encouraged to look for new ways to improve and develop their own problem-solving skills. The more we can create opportunities for employees to grow as professionals, the more we can expect the company to grow as a whole.

Realising KAEFER's Lean dream

With more and more employees trained in Lean, an increasing proportion of projects run according to Lean principles, and KAEFER's Lean Maturity scores rising worldwide, it's little wonder that employees and clients alike are beginning to feel the benefits.

Piloting KATA in Norway

"KATA is about improving processes on a continuous basis at the same time as coaching colleagues to do the same and then pass on their knowledge to the next group."
Kenneth Askeland, KAEFER Energy Project Manager

On the Lean Maturity scale, the highest accolade consists of a single word – sustainable. This means a culture of daily, continuous improvement at all levels of a company, where coaching and encouragement is an ingrained feature of management. Having already carried out multiple Lean projects with great success, KAEFER Energy's onshore business unit and prefabrication workshop in Stavanger took a step closer to 'Lean sustainability' in January 2018, when the entire management team undertook initial KATA training.

Further intensive training sessions took place in March, April, June and September for all Lean Leaders, as well as managers at the Kårstø and Mongstad construction sites.

"A structured way for coaching management, KATA helps guide our teams in the direction of KAEFER Energy's strategy. The advantage of KATA is that improvements become part of the daily routine and therefore natural. After we have successfully piloted the improvement and coaching for selected managers, we want to get our project managers involved in helping us reach the next level." Rolf Ingebrigtsen, Vice President of KAEFER Energy

KAEFER Energy wins the "Lean Inspirational Prize 2018"

Further confirmation of Norway's Lean progress arrived when the team was awarded the prestigious "Lean Inspirational Prize" by the TPM Lean User Network, in recognition of their success in creating added value for clients and employees through safer workplaces, increased efficiency and quality, and delivery according to unified plans.

"Receiving this prize is an inspiration to all our colleagues, helping to reinforce their commitment to Lean."

JANNE BIE KAARUD, Lean Leader at KAEFER Energy



Golfech Nuclear Plant in France

The Lean Site Management System is only ever as good as the line managers who implement it. Line managers are the keystone, ensuring quality and the maintenance of routines, which is why the leadership team in France have specified that they should spend between 20 and 40% of their time on-site and for Lean (including two improvement cycles per week) as well as for introducing clear routines for continuous improvement with defined indicators and space for structured feedback. 'Easy to learn' problem-solving methods, such as the 'flash 5', where each crew goes through their KPIs at the end of a shift, have also been introduced, encouraging greater engagement with Lean among supervisors and operatives.

Fort Hills PFP Block Outs

On the biggest project in KAEFER Canada's history, with a peak workforce of over 700 employees, familiarity with Lean methods gave the team sufficient confidence to take a different approach from our competitors on application methods and site management processes.

The Lean initiatives on site led to a 59% increase in production and a 100% reduction in defects between phases 1 and 2, with the result that our methods became 'preferred processes' for all contractors. The team was also able to streamline and standardise numerous operating procedures, developing a significantly more comprehensive management programme for use on future projects.

Lean impact in Brazil

In October 2017, when a preventative and corrective maintenance contract in Brazil began returning a poor financial result, Lean Leaders in the country immediately carried out three weeks of analysis, identifying several areas of potential improvement: from the absence of a structured flow of main processes to excessive waiting and moving.

Project managers were encouraged to take a step back and reflect on these results, to think about the data they needed in order to make better decisions, and then restructure information flows accordingly. Once implemented, this new system solved many of the principal bottlenecks and deficiencies at a single stroke. Planning controls were also introduced, making it easier for foremen to order the right materials at the right time, and reducing unnecessary movement and transportation. Productivity increased and the project started meeting contractual KPIs again. Subsequently, workshops were carried out to improve equipment maintenance and productivity in specific areas, resulting in contract benefits and a significant increase in the financial margin.

As always with Lean, considerable thought went into ensuring these gains are maintained in the long-term. The Senior Project Manager has shown great understanding of Lean methodology and remarkable leadership in persuading his team to believe in the concept of continuous improvement, employing a variety of motivational and 'visual management' tools to demonstrate how the contributions of each individual lead to improved results for everyone.

From 100 problems to a model industrial workshop

For employees at the Prefabrication Workshop in Bilbao, Spain, KAEFER's Lean Journey began two years ago when local management carried out a comprehensive Overall Process Analysis (OPA), identifying nearly 100 problems, of which 30 were designated as 'high priority'.

After initial training from Lean experts, improvements were carried out independently by the team – the start of a period of intense effort as managers and supervisors analysed root causes and initiated multiple Plan-Do-Check-Act Cycles to create a culture of continuous improvement. Motivation among the workforce was kept high by an initial focus on 'quick wins' and a determination to make sure everyone was kept informed of improvements via visual management and regular status updates. In fact, reflecting on how these multiple small improvements resulted in such substantial gains led KAEFER management to ask the following question – "why do we manufacture our products like we do" – which in turn inspired the Innovation Board to launch a strategic innovation project named 'InPact.' Bringing together a multinational internal and external team with an array of expertise, InPact's initial goals include final concept design, validation and planning and is expected to conclude with an implementation phase early in 2020. Fundamentally, through collaboration, the project aims to revolutionise insulation services in Spain, delivering bottom line impact and top line potential.



A WINNING TEAM Employees from KAEFER Energy collect their prize

Excellence in Execution

Creating an environment which brings the best out of the creative people who work at KAEFER is not only a question of new practices and products – it's also about excellence in execution, combining the love of craftsmanship with a cutting-edge approach to service delivery.

Building pride through excellence

"A corporate headquarters is more than just an ensemble of functional buildings. It expresses what a company wants to achieve. It embodies values and defines the physical and social space in which employees are active every day." (Quoted from the 'Merck Innovation Center' book)

Even before KAEFER Construction was awarded the complete interior outfitting of Merck's new HQ, the team had identified this as a project which would

allow the full expression of their skills and philosophy:

- We live end-user orientation
- We are motivated, highly qualified, and focused on building successful partnerships
- We believe in our Project Life Cycle processes
- With our clients, we create the living and working spaces of the future

The Merck building was the Frankfurt interior outfitting department's biggest

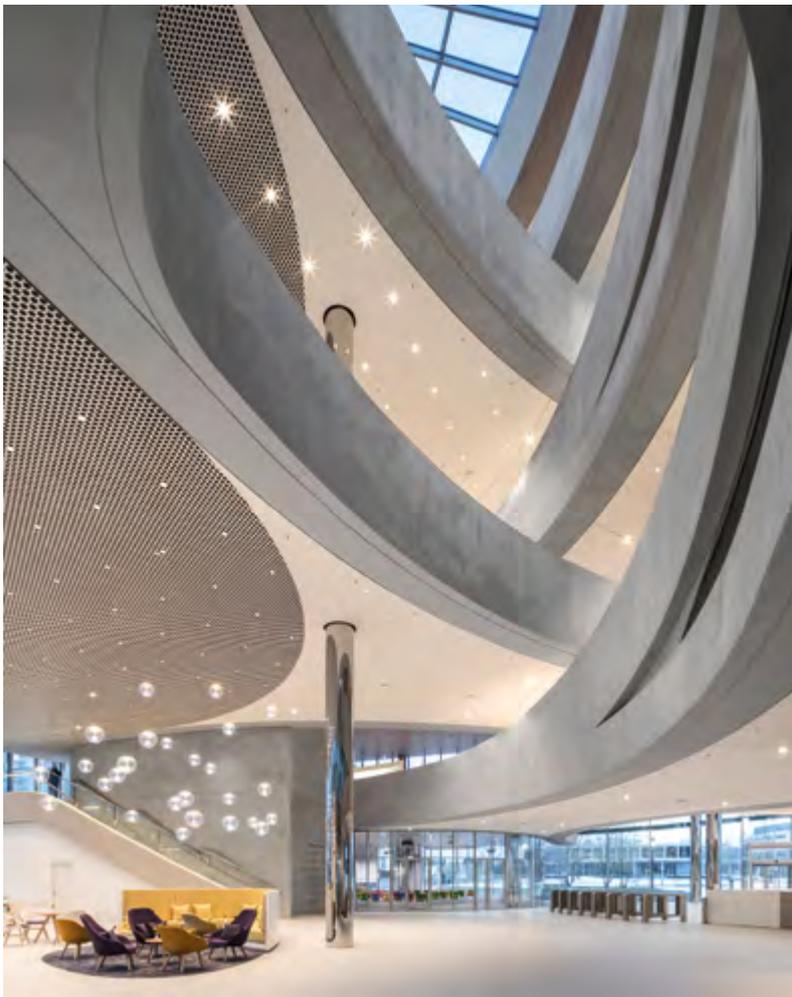
project between 2016 and 2018. More importantly, being responsible for interior outfitting and the co-ordination of additional contractors on such an innovative and architecturally fascinating project allowed us to be pro-active in introducing Lean methods and new levels of digitisation. Due to the complexity of the project, everyone on site was updated on a daily basis – problems could be anticipated ahead of time and teams responded smoothly to changes in both scope and schedule.

Our clients at Merck AG were more than satisfied...

"In less than three years, we succeeded in completing this project according to the highest architectural and structural quality standards, despite enormous time and technical challenges."

Extract from a letter of thanks sent to KAEFER by Dr Dietmar Möller of Merck.

... and so were the independent judges at LEED (Leadership in Energy and Environmental Design), who awarded the project the highest possible Platinum accolade for consistent excellence across categories, including sustainable sites; water efficiency; energy and atmosphere; materials and resources; indoor environment quality; and innovation and design process.



Listening pays dividends at KAEFER Industrie

In 2005, when MainMan was first conceived in Bremen, Germany following a request from client Kellogg, none of the engineers who worked on this maintenance documentation solution could have imagined how it would develop during the following decade. The original product – a digitally rendered architectural sketch of ventilation and fire protection components – is a superb example of how complex information can be presented in a format which is simultaneously compliant, affordable, adaptable, and easy-to-use.

Not only did MainMan fulfil the original client's needs, it led to the creation of a new business unit, with dedicated engineers using it to carry out maintenance at plants in Hamburg, Bremen and Hanover, as well as at nuclear facilities across northern Germany.

In 2017, after twelve years of continuous small improvements, the decision was made to comprehensively update the product to take advantage of new developments in technology. Now an 'all in one' solution for our clients, MainMan can be adapted for use on any construction site. Using digital scanners and 'next generation' tablets, it documents projects from inception to invoicing and provides clients with complete peace of mind with respect to compliance with insurance companies, planning and safety authorities.

The new and improved 'MainMan' offers our clients a range of advantages:

- Individual components such as motors can now be recorded and processed in the same way as fire protection measures
- Meter readings can be securely edited and forwarded

- All readings are given a unique barcode
- Date-stamped photos of individual components provide a legal record of actions.

The new and improved version of MainMan is just one example of the many ways in which KAEFER Industrie has risen to the challenge of a Germany-wide reduction in nuclear energy and fossil fuels. A collective determination among the team to create a more diverse portfolio of services and clients, captured in the 2020 Strategy, is already paying dividends.

'Bliss' at sea – KAEFER Schiffs-ausbau

With the skills to offer either visual or steel to steel turnkey interior outfitting and insulation services plus a long track record of excellence, KAEFER Schiffs-ausbau is perfectly positioned to take advantage of the current boom in cruise-ship construction and renovation.

"It's special, working on something as beautiful as a ship, and little wonder our employees are so passionate about what they do." Jürgen Trost, Managing Director at KAEFER Schiffsausbau Germany

This passion, allied with technical expertise and KAEFER resources, means our clients can be confident we'll deliver excellent quality on time and on budget. Recent work on the cruise ship 'Norwegian Bliss' provides an excellent overview of the company's strengths.

Built for cruises to the Arctic Circle, KAEFER Schiffsausbau worked on the ship between November 2017 and April 2018 at the MEYER WERFT Shipyard in Papenburg, Germany. The team was responsible for the interiors of the Texas Barbecue Club, the 1,000 seat Bliss Theatre, and the Horizon Lounge:

1

A 'visual turnkey' project, KAEFER was responsible for everything visible in the room, including the walls, ceilings, chairs, floor and furniture.

2

The Horizon Lounge is spread over two decks in the forward VIP area of the ship, joined by an interior staircase and seamless wooden handrail – a particular challenge for KAEFER's stair-builder and carpenter.

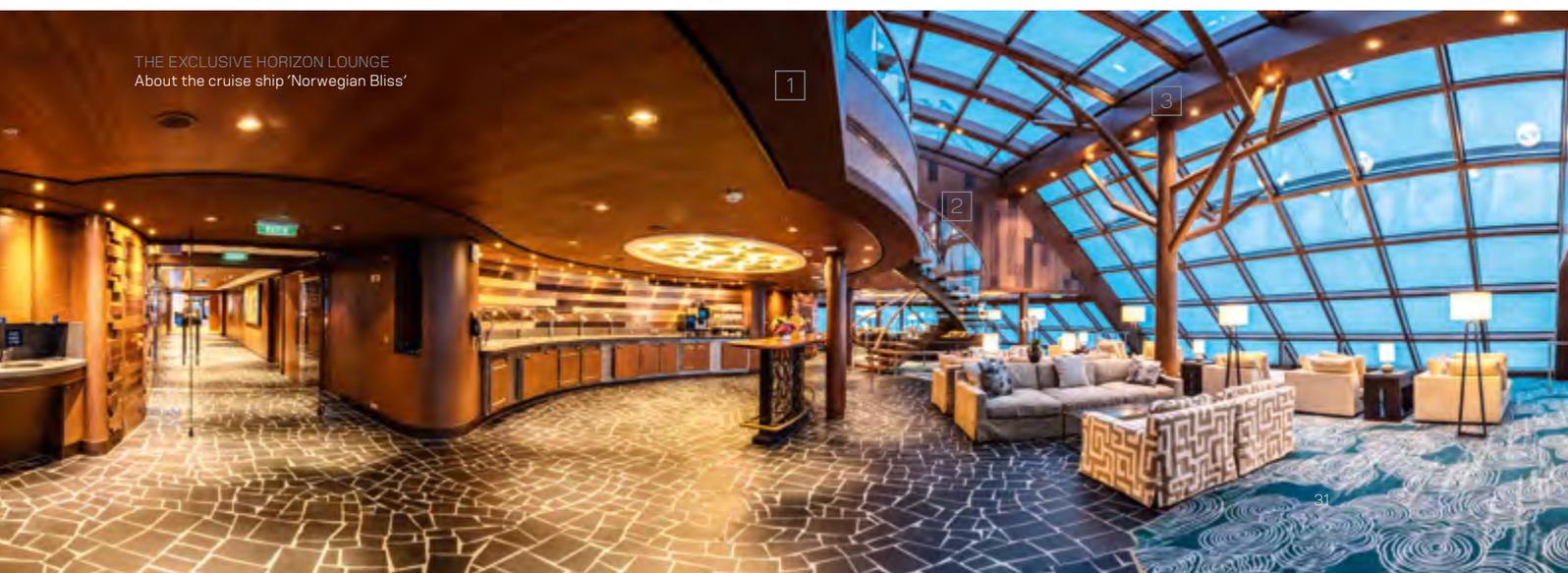
3

The unusual 'Tree' construction in the centre of the Lounge is made of aluminium tubes, assembled and painted on site.

As required by environmental regulations in Alaska, Norwegian Bliss is equipped with the latest emission control systems. Energy efficiency was a key consideration throughout, from the use of LED lighting to the application of a special exterior paint which minimises drag through the water.

No two ships are the same, and the industry's insistence on flexibility and creativity from its contractors is something that brings out the best in the KAEFER team. With a collective determination to stay abreast of the latest technological developments and the ability to share resources and know-how with sister companies in Finland, France and Romania, the forecast for KAEFER Schiffsausbau is fair.

THE EXCLUSIVE HORIZON LOUNGE
About the cruise ship 'Norwegian Bliss'



1

3

2



Collaboration

As a multi-national company active in more than 30 countries, KAEFER's success rests on our ability to integrate people with different skillsets, working methods, languages and backgrounds into a single group.





TALARA

**Two continents.
Four countries.
One team.**



GIOVANI UGARELLI General Manager, KAEFER KOSTEC in Peru



Involving other KAEFER entities at the earliest possible opportunity is a great way of reassuring clients and avoiding unpleasant surprises. The multi-disciplinary project team which worked on the modernisation of Petroperu's Talara refinery – a major project by any standards – included KAEFER people from Peru, Brazil, Spain and Germany.

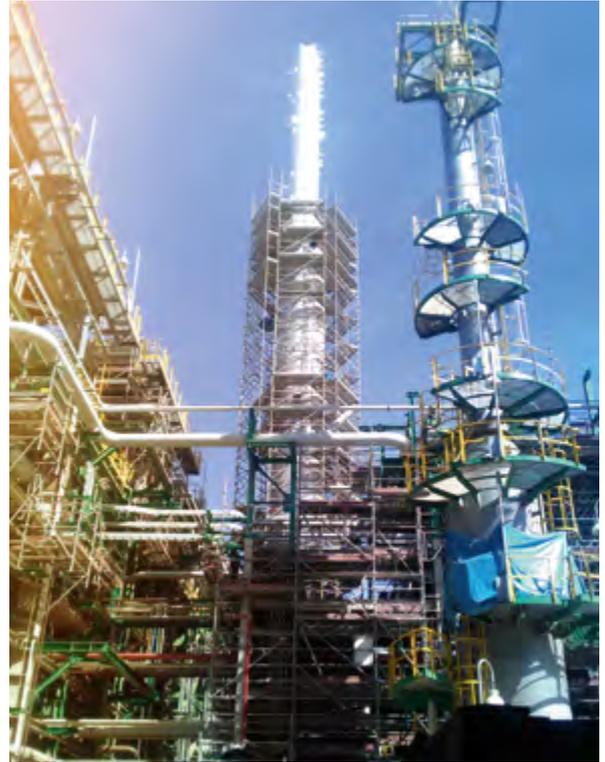
The right team in place

Despite having already worked with the two local contractors (the consortium CJS and GyM) KAEFER KOSTEC in Peru's chances of winning significant Passive Fire Protection, thermal insulation and scaffolding work on such a complex project were undoubtedly enhanced by KAEFER Spain's pre-existing relationship with ultimate contractor Tecnicas Reunidas. Not only did the Spanish team members possess vital technical PFP expertise, they'd also worked with Tecnicas Reunidas on a number of successful projects in Spain.

"Involving the Spanish team from the very beginning was crucial. The quality of their work in Spain and their expertise with PFP were the reasons Tecnicas Reunidas was willing to take a chance on us. They've been involved at every step of the process, not only providing vital skills but also ensuring clear and transparent communications with the ultimate contractor." Giovanni Ugarelli, General Manager KAEFER KOSTEC

A native of Peru, with many years of experience managing multinational companies both at home and abroad, Giovanni's philosophy is a perfect match for KAEFER's:

"The first priority is understanding the needs of our clients. That's why we try to recruit local managers and staff, ensuring that each KAEFER entity remains independent and flexible enough to meet local needs and challenges. At the same time, it's vital our clients experience the benefits that come from working with a multi-national company. Offering the best of both worlds is what we mean when we say that KAEFER has to be more than the sum of its parts, and the success of our approach was amply demonstrated on the Talara project." Giovanni Ugarelli



The Talara Refinery, Peru

Talara Collaboration: Key benefits at a glance

For our clients...

- Measurable improvements in productivity and reductions in fixed costs
- Execution according to the highest international quality and safety standards
- Reliable (and reliably competitive) cost forecasts
- The reassurance that comes from knowing a project is in safe hands

For our employees...

- New levels of expertise in PFP, Scaffolding and Insulation services
- Access to improved tools and methods
- The pride that comes from delivering a first-class service according to the highest international standards

The Spanish Connection

Successful collaboration isn't just a question of logistics, it's about sharing knowledge and expertise.

Before the project began in July 2016, two PFP supervisors flew out from Spain, knowing they would be based in Peru for at least the next year. Responsible for training and supervision, one big measure of their success was the fact that a local supervisor was able to move into a leadership position just a year into the project.

"Successful training is as much the responsibility of trainees as trainers, and the team in Peru distinguished themselves again and again with their dedication and willingness to learn." Miguel Belmont, Spanish PFP Supervisor

“What made it work was the determination shown by everyone involved to face these challenges together.”

MIGUEL BELMONT Spanish PFP Supervisor

Support from Brazil and Germany

Collaboration means being able to maintain the highest international standards wherever we work and however circumstances change.

Partly in response to continuous improvements made by the joint Peru/Spain team, KAEFER's on-site responsibilities continued to grow in scope, eventually rising to 70% of all PFP, thermal insulation and scaffolding work (60,000 m² of PFP, 170,000 m² of thermal insulation piping and 15,000 m² of associated equipment and over 3,500 tonnes of scaffolding).

In order to stay on top of this increased volume, Project Manager Tarciano Costa and three co-ordinators arrived from Brazil to support project management, contracts, planning and logistics. Tarciano's experience on previous projects run jointly with teams from France, Germany and Norway, as well as his familiarity with Latin American working practices, proved invaluable. In addition to support from Brazil, a Lean team from Germany also arrived in Peru to spend a total of five weeks on site.

“With Lean, clients and employees alike were able to see how the application of the highest international standards leads to improved results AND greater decision-making power for local management. Standardisation, managed correctly, is often the most effective basis for increased local autonomy.” Tarciano Costa, Project Manager RIP Serviços Industriais

“For me, one of the most satisfying parts of the project was learning that the same priorities apply wherever KAEFER operates, in terms of safety and training as well as quality. We had people from four countries working simultaneously for local and international clients – everyone could see immediately that there are no double standards at KAEFER.” Rosendo Sandoval, KAEFER KOSTEC PFP Supervisor, trained by operatives from Spain

The most important step towards overcoming challenges is acknowledging they exist.

Unsurprisingly, it wasn't all plain sailing. For Spanish members of the team, the challenges included training and developing local PFP operatives whilst simultaneously supervising day to day operations. Team members from Brazil had the added hurdle of working in a different language. And for everyone who'd come from abroad, there was the issue of being so far from home for such long periods.

“What made it work was the determination shown by everyone involved to face these challenges together. And, of course, the outstanding hospitality provided by the team in Peru!” Miguel Belmont, Spanish PFP Supervisor

Ultimately a project is judged on the numbers...

KAEFER's international approach to the Talara project delivered significant and measurable savings over the life-cycle of the project, both in terms of improved PFP and scaffolding productivity and reduced indirect fixed costs. KAEFER's performance has also led to additional contracts, notably with new client SSK for another 20,000 m² of PFP services. Just reward for the hard work and commitment shown by everyone involved with the project, whether from Peru, Spain, Brazil or Germany.

ONE TEAM, ONE GOAL

Members of the local project team and Lean experts from COE



Cross-border collaboration at KAEFER

Forging ever closer links between different disciplines and countries, at the same time as maintaining our decentralised management structure, delivers the best of both worlds for our customers – the reassurance that comes from working with a global company and that all important personal touch.

Blast Off!

Sandblasting is used to remove rust, dirt and paint prior to the (re)application of paint or insulating materials. The materials used as abrasive – often waste materials such as slag – have little or no value in themselves. The trick is having the right quantity and consistency in the right place at the right time, as it's not uncommon to need several tonnes on large projects.

Compared to insulation materials, KAEFER's outlay on abrasives is modest, but still substantial enough that the Corporate Supply Management team (CSM) was determined to leave no stone unturned in their ongoing quest to procure the best possible materials for KAEFER, at the best available price.

"It's the KAEFER way; we challenge ourselves to discover whether we could be making better, more efficient and cost-effective choices." Niels Gogler, Category Manager CSM

It was this attitude which ignited a project to optimise the use of abrasives at KAEFER – a process of analysis, testing and implementation which involved two corporate departments, plus research and operational teams from Norway, Oman, Saudi Arabia and Australia.

CSM analysis revealed that KAEFER buys the vast majority of its abrasives from a single supplier, but was that just force of habit or are these really the best

products available? To find out, the team got in touch with KAEFER Energy in Norway, whose blasting chamber provided the ideal location to run comprehensive tests on a wide range of products.

"There were two significant outcomes. First, we can now be sure that our purchasing strategy stands up to scrutiny and – with the support of colleagues in Australia – we've already signed a co-operation agreement with our preferred supplier to ensure this remains the case. Secondly, the tests in Norway also suggested that significant process and application improvements were possible. The analogy's not perfect, but sandblasting has something in common with fuel consumption. Theoretically, a car consumes exactly X litres of fuel per kilometre, whereas in actual fact the number fluctuates depending on who's behind the wheel." Niels Gogler

Further investigations in Oman and Saudi Arabia in the spring of 2018 were sufficient to identify and refine a sandblasting 'best practice'. The next step is training operatives in this new methodology. Led by the CIE (Corporate Innovation & Technical Excellence) department, guidance is currently being prepared for distribution across the KAEFER world.

Implementation will take time. What's already clear, however, is that a question asked by CSM, and answered with the enthusiastic co-operation of teams across a whole range of locations and disciplines, will lead to considerable savings not only for KAEFER but also for our clients, not forgetting, the environment.

'Into the Blue' in South-East Asia

KAEFER's ambitious new growth strategy in South-East Asia takes inspiration from the Blue Ocean Shift approach developed by INSEAD professors of strategy W. Chan Kim and Renée Mauborgne. Mar van Sluijs (KAEFER's Regional Director, South-East Asia), who knows professor W. Chan Kim personally, is confident that the value innovations encouraged by the strategy will lead to higher customer demand for KAEFER in the region, and thus higher profits.

"Even though the three countries are neighbours, it takes empathy, commitment and patience to build a strong and united team." Mar van Sluijs, Regional Director SEA.

This journey 'Into the Blue' started in summer 2017, when a small regional team was formed with 6 managers from KAEFER in Malaysia, Thailand and Vietnam. Inspired by KAEFER's Roadmap to promote a leadership style based on trust, openness and respect, this new structure has already fostered a more engaged and collaborative approach among the three companies, a sense of togetherness which was further reinforced during quarterly strategy retreats at which participants each took ownership of at least one value innovation initiative.

Together the team then plotted a 3-year course to take the 'fleet' from its current turbulent zone (a highly competitive, stagnating Oil & Gas insulation service market) towards a clear open sea of new growth and profit opportunities. Joined by colleagues from the Corporate Competence Center and other regions, the international team has already started marketing the following high-value

Sandblasting in Australia





DPMS IN ACTION A KAEFER employee uses a tablet on site in Brazil

KAEFER services to new and existing customers in South East Asia:

- Lean passive fire protection solutions for the energy and construction industries
- Advanced insulation solutions (e.g. energy audits, CUI scans, NDT, online repair, waste heat recovery)
- Offshore maintenance services
- Insulation mattress solutions for the power generation sector

KAEFER insulation mattresses hit the market in South-East Asia

In early 2018, as part of an increasingly close working relationship between KAEFER in South-East Asia and the Corporate Competence Center Mattresses in Germany, colleagues from Vietnam, Singapore and Thailand attended training sessions in Bremen and Hungary. Determined to employ their newly acquired technical know-how to best effect, the team has already signed new contracts with clients in the region.

"This clearly shows our top management's commitment to professionally equip our sales people in the regions with the adequate application knowledge and marketing material to enable us to propose high value solutions to our customers." Mrs Mai Xuan, Country Manager KAEFER in Vietnam.

DPMS – for a paperless and Excel-free construction site

Pen, paper and Excel were yesterday. Today, with the implementation of DPMS (Digital Project Management Solution) KAEFER is realising the goal of a paperless and Excel-free construction site.

So far, the new system has been introduced across eight construction sites in six different countries (Germany, Norway, UK, Brazil, Oman, South Africa), including a mix of maintenance and new build. DPMS offers the following features for all our services:

- Request
- Measurement & scoping
- Estimation based on contract norms
- Authorisation
- Task planning & preparation
- Time & progress recording
- Hindrance reporting
- Scaffolding register
- Quality assessment & quality control
- Invoicing
- Reporting

Designed in partnership with on-site operatives, the new system includes measurement and scoping features and access to planned daily tasks. It allows project managers to report on progress, take pictures and document inspection results, as well as maintain a record of any unforeseen issues as and when they arise.

A real differentiator – with clients already asking whether we can make the system available to them – DPMS can also be used in conjunction with KAEFER's new Lean mobile phone app for managers and Lean Leaders, designed to provide coaching and support on site.

- Take a look at how DPMS is being used in Norway by scanning the QR-Code below. For more information on DPMS, please write to us at DPMS@kaefer.com

DPMS



The NDT expert group

If KAEFER knew what KAEFER knows...

With operations all over the world, KAEFER needs to ensure that people in one region aren't labouring on problems which have already been solved in another. That's why multi-national groups of KAEFER experts have been created in various key disciplines, each of which will hold a minimum of two workshops per year.

The first of these expert groups – and the one which blazed the trail for others – is NDT (non-destructive testing), a set of analytical techniques used to assess the properties of a material, component or system without causing damage. Group leader Calum White talks us through a busy year.

K-WERT: How did you become an expert in the field?

Calum: Thanks to my father, initially. I used to work for KAEFER in the UK, where my dad Martin has built a fantastic NDT unit offering services such as ultrasonic testing, magnetic particle testing and dye penetrant inspection. I've been working in the field since I was 17 and I find the science behind it fascinating.

K-WERT: The first NDT workshop took place in February 2017...

Calum: ... and focused on communicating the basic benefits of NDT. Since then,

programmes have been started in various countries, including Norway and Australia, and sales teams are getting up to speed with the potential advantages of NDT for our clients. Even better, our success has spurred the formation of similar expert groups in other disciplines.

As far as the NDT group goes, our focus is on raising awareness, teaching and strategy. NDT is a logical addition to our portfolio of services and it's already working well in some regions so we're not re-inventing the wheel, just making sure that knowledge is shared in the most efficient manner possible.

The second workshop took place in the UK, with attendees coming from all over the KAEFER world. We went on-site to see NDT in action and heard about progress elsewhere. And then there was the strategic element – explaining how our expertise in NDT can be used to win new contracts. Now that clients can use us as a one-stop shop for coating, insulation, access and NDT, that gives us an advantage over our competitors when it comes to bidding for maintenance or new build work.

K-WERT: It sounds like you have plenty to keep you busy...

Calum: Spreading the word is only one part. The second big attraction is the chance to conduct original research. Using NDT to control Corrosion Under Insulation (CUI), for example, is a relatively new development – get it right and we can become genuine world leaders in the field.

KAEFER Expert Groups at a glance

Expert Groups have been and are currently being created in a number of disciplines, including NDT, PFP, Scaffolding and Insulation. Each Group will be led by an expert in the field responsible for:

- Staying informed of the latest technical developments
- Communicating these developments via twice-yearly workshops
- Taking responsibility for allocating additional training and resources where necessary
- Helping establish regional experts via the creation of 'Junior Expert Development' programmes

CALUM WHITE NDT Group Leader





Thermography & 3D Scans in Industry

Inefficient or non-existent insulation is a massive cause of energy waste. A 2012 study by Ecofys suggested that as much as 620 PJ (the equivalent to 10 million households) and 49 million tonnes of CO₂ could be saved each year in Germany alone if pipes, tanks, heat exchangers, armatures, flanges and other devices at industrial plants were correctly insulated.

The reason poor insulation has not already been stripped out and replaced is due to the complexity and expense of current procedures, involving intrusive measurements and endless calculations. Which poses the question – how could this process be dramatically simplified?

In collaboration with scientists at the University of Applied Sciences in Würzburg-Schweinfurt, engineers at KAEFER are trying to provide the answer. Project eDlan, which stands for ‘effiziente Dämmung von Industrieanlagen’ (efficient insulation in industrial facilities), began life when they wondered whether it might be possible – for the first time anywhere in the world – to conduct automated thermal and geometric recordings of industrial facilities by combining thermographic cameras with 3D imaging.

Recognising the potential value of this idea, Germany’s Federal Ministry of Education and Research is supporting the project with a €500,000 grant. The

joint research team also includes members of the EiiF (European Industrial Insulation Foundation), with everyone pooling their expertise in order to perfect a system which automatically records single thermographic images, then stitches them – after geometric calibration – into a 2D panorama. After that, the geometry of the surroundings is digitalised via terrestrial laser scanning and rendered as a 3D image, also known as a point-cloud.

“When these two images are combined, the user will be able to look at models on their PCs and see at a glance where energy loss due to poor insulation occurs. The models will be interactive, allowing managers to check whether they’re looking at a real heat source, or a shadow cast by a neighbouring object. The next developmental stage should also allow us to calculate the scale of potential savings and reverse-engineer the process so that the precise quantities and forms of insulation material required can be cut and prepared off-site.” Frank Jüngerhans, Corporate Innovation and Technical Excellence

The technology has already been proven. Research is now being carried out into a creating a format which meets the safety, quality and economic needs of our clients, with a view to bringing this exciting new product to market sometime in the near future.



Health and Safety

Safety Max hit the road in 2018, visiting KAEFER locations around the world. Here, he shares some of what he learned...

Bremen, Germany with 'Corporate Health, Safety & Environment' Head Thomas Eickhoff

Thomas Eickhoff: *"Enjoy your trip, Max. I think you'll be impressed with the progress we've made with the transition to a genuine safety culture, in which we move from automatically following rules to actually living the concept of health and safety – already, over 2,000 people from more than 20 countries have taken part in our training courses and the feedback has been overwhelmingly positive. The overall number of accidents is down and the programme is proving very popular with clients."*

First Stop – a conversation with Loss Control Manager Renata Twigg in South Africa

An excellent first port of call for Max, as there have been some remarkable recent achievements in Health and Safety in South Africa. In 2018, the Medupi Scaffolding and Insulation contract passed the '9 million man-hours LTI free' mark, and the team were also winners of the KAEFER Group Safety Award at the International Managers' Meeting in 2017...

Renata Twigg: *"We're proud, of course. These achievements are the result of a dynamic approach to health and safety which chimes perfectly with KAEFER's overall transition to a genuine Safety Culture. The key is making sure that campaigns are tailored as closely as possible to the needs of individual regions and sites – a challenge in South Africa, which has such a diverse range of cultures and languages! We're constantly reminding ourselves of the need to stop, listen, learn and plan ahead. One current example is the large-scale demobilisation taking place at Medupi Power Station as the project is finishing. Impending lay-offs mean that people are distracted and worried, which has a huge knock-on effect on health and safety. We've commissioned an industrial psychologist to spend two months on site conducting a 'Safety Climate Diagnostic'. Given the nature of our business, large-scale demobilisations are a fact of life; thus, a better understanding of the underlying issues and ways to overcome them will help us to get better at managing them and also learn lessons that might be useful more generally."*

Second Stop – visiting HSE Manager Rogerio Beluci in Brazil

Reinforcing a positive safety culture lies at the heart of RIP's approach to Health and Safety.

Rogerio Beluci: *"In 2018, as part of our journey towards developing a true Safety Culture at RIP Serviços Industriais, we made sure that all our employees in leadership positions took part in a bespoke training programme – 574 people in all. Brazil is a big country – you could almost think of it as several countries in one – so the next step was making sure that our goals and methods are aligned wherever we operate, which we did via a week-long workshop for our ten regional health and safety coordinators."*

But the really crucial element in transitioning to a Safety Culture is raising and maintaining awareness among our employees generally. That means frequent and memorable campaigns – we don't want to just drag people into the classroom, we want to put them at the heart of what we do. When we developed a Safety Culture video, our employees were involved at every step of the process. We even designed a board game for people to take home and play with their children, based around performing missions which minimise the risk of accidents in the home."

Other imaginative campaigns recently conducted in Brazil include "For whom do you tip your cap?" (based on a popular TV programme, safety questions were hidden in worker's helmets), and "security technician for a day", which saw blue collar workers asked to prepare a safety induction for new workers on site. Designed to guard against any fall-off in vigilance during busy periods, when the induction took place workers discovered that their new colleagues were actually members of their own families, reinforcing the point that poor safety behaviour can affect you and the people you love. Not only did these campaigns improve safety on site, they also made a strong impression on many clients.



Third Stop – Saudi Arabia to meet Sharath Shetty, HSEQ Manager for the Middle East

Clients including Saudi ARAMCO, SAIPEM and ADNOC SOUR handed Health and Safety Awards to KAEFER in the Middle East during 2017 and 2018 – hardly surprising given KAEFER’s record in the region, including more than 40 million man-hours without LTI in the Kingdom of Saudi Arabia.

An even more extraordinary achievement when one considers the extreme weather conditions...

Sharath Shetty: *“In summer, our employees work in over 50 degrees of heat – that’s the average! In addition, we have to cope with frequent storms and sudden cold fronts, all while operating in remote desert areas where communications and connectivity are poor. We conduct region-wide heat stress campaigns at the beginning of each summer, reminding people to take frequent drink breaks. In addition, we recently carried out a traffic safety campaign for all employees which has reduced road traffic incidents by 25%. And then, of course, we’ve been busy putting 100% of our line-managers through the Safety Culture training, which has really allowed us to show how everything is connected – from traffic and hand safety, to beating the heat, emergency preparedness and regular health checks. It’s all part of the same pro-active approach to well-being.”*

Max, safely back in Bremen:

“It’s been a great trip.

The most inspiring thing has been seeing people’s determination to take a proactive approach, not only in terms of accident prevention on site, but also of employees’ well-being more generally. Next year, hopefully there will be time to visit a few more countries around the KAEFER world!”



HSE milestones 2018

Canada
2.6 million man-hours without LTI

Hungary
6 years without LTI
(KAEFER Turbine Insulation)

Kuwait
10 million man-hours without LTI

Lithuania
1 year without LTI

Malaysia
8 million man-hours without LTI

Oman
2 million man-hours without LTI

Qatar
34 million man-hours without LTI

Saudi Arabia
40 million man-hours without LTI

South Africa
9 million man-hours without LTI
(Medupi Contract)

Spain
1 year without LTI in Cartagena Branch

Sweden
1 year without LTI

Thailand
20 million man-hours without LTI

United Arab Emirates
40 million man-hours without LTI



Talking about Mental Health – the key to beating prejudice

Statistics suggest that one in four of us will experience a mental health problem, and that of every ten people who have suffered problems, nine have experienced negative treatment as a result.

This is a global phenomenon, which explains why mental health initiatives have sprung up simultaneously at KAEFER in Canada, the UK, the Netherlands and Germany. KAEFER CEO Peter Edelmann set the tone in 2017, when he announced that money traditionally spent on Christmas gifts for senior managers would be donated to the KAEFER FOUNDATION instead, specifically to fund mental health initiatives.

“We have an obligation to support campaigns aimed at ending mental health discrimination. Everyone should feel comfortable talking about these issues with colleagues or supervisors.” KAEFER CEO Peter Edelmann

‘The Working Mind’ is a KAEFER Canada initiative, incorporating training sessions designed to help KAEFER managers and employees reduce stigma and promote mental health in the workplace. Launched in July 2017, the programme consists of a series of strategies, activities and policies developed in consultation with KAEFER employees and the Mental Health Commission of Canada.

“Rather than trying to hide from this very real issue, we want to be part of the solution, actively identifying and minimising hazards that might contribute to poor mental health.” Chris Porter, Managing Director of KAEFER in Canada

The programme’s main component is the ‘Mental Health Continuum Model’, which categorises mental health according to a four-colour spectrum: green (healthy), yellow (reacting), orange (injured), and red (ill).

“It works as a stigma reduction tool because it removes the labels. If someone says ‘I’m orange today’ you know what they mean, but it doesn’t necessarily have to be associated with any kind of diagnosis.” Chris Porter

“A problem shared is a problem halved.”

British saying

Fighting prejudice is a team effort, which is why the Board of Directors at KAEFER UK decided to take a public lead on the issue. In late 2017, a team (made up of senior members of the Human Resources, Social Impact and Marketing departments) was asked to create a detailed action plan, which was then submitted to the specialist charity Time to Change. Once it had received their stamp of approval, Ian Tattersall (MD, KAEFER UK) signed the Time to Change pledge in November 2017 at KAEFER’s West Lakes office in Cumbria.

“We wanted to make our commitment as public as possible. When the message comes from the top, that helps it reach everyone, including site operatives.” Ian Tattersall, Managing Director KAEFER in the UK

KAEFER in the UK is taking part in various events and campaigns:

→ via the hashtag #TimetoTalk, encouraging sites and offices to take 5 minutes to talk about mental health issues, either during team meetings or Tool Box Talk sessions

→ via the ‘Hug a Mug’ initiative, offering vital support to individuals in local communities around the Sellafield site. The name reflects the British instinct to put the kettle on in the face of almost every problem. Anybody can come along to daily drop in sessions for confidential advice on employment issues, healthcare, or simply for a chat. In addition to helping with refurbishment, two members of the KAEFER team regularly volunteer at the centre, having first completed training in communication and mental health awareness.

One important first step in reducing the pressure on employees is understanding the influence of the workplace on poor mental health, which is why the Corporate Health, Safety & Environment (CHSE) department is conducting a long-term study – in partnership with Bremen University and various KAEFER companies – into the assessment and management of workplace psychological stress at KAEFER.

“For reasons both compassionate and commercial, and as a family company with a strong sense of our social responsibilities, it’s vital that we at KAEFER address the topic of mental health openly, making sure we have robust procedures in place to combat discrimination wherever it’s found.” Thomas Eickhoff, Head of CHSE



Updates from Headquarters

Making KAEFER a better place to work – our focus on professional development, corporate responsibility and sustainability

Launched in 2018 – KAEFER’s updated Code of Business Conduct



Read the KAEFER Code of Business Conduct in your language by scanning the QR code.

KAEFER values may be timeless, but the environments in which we operate are in a state of constant flux, which is why the Corporate Compliance & Audit (CCA) team have spent considerable time updating the KAEFER Code of Business Conduct and developing e-learning modules to support its introduction.

“KAEFER has grown substantially in recent years, expanding into parts of the world which traditionally have quite different ways of doing business. It simply made good sense to take another look at our Code, given our current value and risk profile.” CCA Compliance Manager Petra Markwardt

The next stage involves making sure that people are aware of their rights and responsibilities under the new Code, by providing appropriate compliance-related training to all employees. Everyone at KAEFER is expected to participate in the ‘basic training’ module over the next months, with specific groups of employees due to complete additional modules on topics including anti-corruption and anti-trust law.

Designed in collaboration with an external supplier, the training modules are straightforward, comprehensive and culturally sensitive. Most importantly, by informing all employees of our responsibilities and obligations in the field of compliance we are ensuring KAEFER’s future security and ability to operate with confidence wherever in the world our services are required.



THE KAEFER ACADEMY Because people are our most important asset

KAEFER ACADEMY – Your future, your chance, your choice

“World-class professional development is a key strategic goal for KAEFER. People are our most important asset; to succeed, we need to make sure we attract and retain the best. The Academy is our principle vehicle for making this happen, an in-house training scheme offering tailor-made development programmes for KAEFER employees around the world.” Jana Meitzner, Senior HR Manager, Corporate Human Resources

The way people learn has changed dramatically since the KAEFER Academy was launched in 2002, when hardly anyone had heard of wikis or video tutorials. Of course, Academy courses have been continually updated over the years, but the task of fully integrating new teaching methods requires a more substantial overhaul. After consulting widely on how to improve and refresh the Academy’s learning infrastructure, in line with the needs and preferences of participants and stakeholders, the team is currently rolling out a more contemporary mix of formats, including e-learning and open exchange technology. Additionally, feedback from regional managers has led to significant content improvements in our Junior Leadership and Advanced Management Programmes, as well as the introduction of entirely new topics such as Compliance, Innovation, and Managing Change.

“As a KAEFER Academy alumni and mentor on several JLP projects, I highly recommend that everyone take advantage of the programmes on offer. They’re a one-off chance to further your career, develop professional networks, and explore your own potential.” Francisca Gorgodian, Head of Corporate Responsibility & Communication (CRC)

Taking action against water scarcity

Water scarcity is a real and growing problem, one which KAEFER is acutely aware of via its operations in regions including Africa, the Middle East and Australia. That's why access to water is so often a focus of the company's sustainability activities.

- In February 2018, the KAEFER FOUNDATION supported a sponsored run organised by the German School in Nairobi. More than 150 teenagers took part, raising money for a 50,000l water tank urgently needed at a local public school. The tank has since been purchased and installed.
- In June, 84 KAEFER runners took part in the 11th BMW company run in Bremen. €5 per runner has been donated to a well-construction project in Uganda.
- Located 45 km from the nearest town in the Arabian Desert, where water scarcity is a major issue, aquaponics and hydroponics farming have long been a feature of life at KAEFER's Jubail facility. In November 2017, the system was adapted to make it possible for the team to grow organic vegetables, at the same time as actually reducing overall water consumption.
- Finally, Energiesparmeister (Energy Savings Master) is a Germany-wide competition aimed at encouraging climate protection projects in schools across the country. Proudly sponsored by KAEFER, the Bremen school Schule am Halmerweg is using the opportunity to run a series of water projects with the pupils aimed at encouraging the responsible use of water and other natural resources.

For a more comprehensive report on KAEFER initiatives, many administered with the involvement of the KAEFER FOUNDATION, please see our Sustainability Report (available via the QR code below).



No risk, more fun

The value of a perfectly executed project can be undermined in a second if the initial risk management was carried out with less than perfect care. Project Governance describes the work that goes into ensuring that our resources are focused on the right projects, in the right way, and at the right time.

Given the increasingly complex environments in which we operate, and the fact that substantial losses can occur even on small projects, a new system was launched at KAEFER in June 2018 which considers additional risk factors such as time pressure, organisational complexity, and relevant past experience. Projects are now assigned to an appropriate risk category – each with different degrees of mandatory checks and balances – and implemented through Quality Gates to ensure that all necessary steps are taken throughout the project's life cycle.

The motivation for these changes is clear – to reduce losses and provide support for KAEFER project managers in the field. More broadly, the new system will increase overall risk awareness and give greater autonomy to individual regions and business units on low risk projects.

AQUAPONIC FARMING The Jubail facility at KAEFER Saudi Arabia



The KAEFER Vision

As global pressure on natural resources continues to grow, we at KAEFER believe we have an important part to play in building a sustainable, energy-efficient future, which is why we have redefined our Vision.

In everything we do, we aspire to be RED – recognised, efficient and different. While we will always continue “to eliminate the energy waste”, KAEFER’s new vision also needs to reflect the scale of our ambition – to take a global lead on redefining the boundaries of resource management.



REDefining Energy Efficiency

Through developing innovative solutions for our customers and committing to excellence in execution to ensure no energy is wasted; our service portfolio has been designed to ensure that plants are highly efficient and can be operated sustainably – throughout the entire life cycle!

REDefining Heat Efficiency

Through applying our expertise to the efficient use of heat. This enables us to explore new possibilities, such as capturing waste heat and reusing it wisely – in other words, ‘reduce and use’.

REDefining the efficiency of gases and more

Through committing to alternative and innovative technologies in the treatment of gases and other materials, which allows us to transform so-called waste products into energy, feeding them back into the resource cycle.

REDefining Manpower Efficiency

Through supporting our employees all over the world by ensuring they have the right tools in hand. As a family-owned company, we understand that people are our most important resource; that’s why we continuously optimise KAEFER processes in pursuit of a better working environment for our employees and better results for our customers.

Our vision in a single word?

RED-USE!



Watch the new KAEFER RED-USE Vision movie by scanning the QR code

Making the vision a reality – Efficiency Services by KAEFER

Determined to seek out innovative solutions on behalf of our customers AND help build a more sustainable future, KAEFER recently began promoting products available from leading CleanTech company Orcan Energy which effectively and profitably transform waste heat into CO₂-free electricity.

→ For more detailed information, please contact Maren Schmidt at Maren.Schmidt@kaefer.com



COME HERE AND GIVE ME A HUG
Safety Max at RIP Serviços Industriais in Brazil



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As always, we are eager to know what you think of the K-WERT.
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