



KAEFER

K-WERT 38 2020/21

THE KAEFER MAGAZINE FOR EMPLOYEES, CUSTOMERS AND PARTNERS



LET'S GO DIGITAL!

Explore stories, projects and people from KAEFER in this year's K-WERT.

This document is not a fully designed magazine but intended as a readable copy of online contents for offline use.

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** All pictures shown that do not follow current social distancing guidelines were shot before March 2020. Please note that COVID-19 regulations may vary by country and region.*

Message from the Executive Board Navigating stormy waters



To say 2020 was a challenge is an understatement. Yet thanks to the efforts of all the people at KAEFER, there is a great deal of success to look back upon. Co-CEOs Steen E. Hansen and Dr. Roland Gärber were invited to reflect upon the past year:



Steen Hansen:

A very warm welcome to you from KAEFER in Bremen. We hope you are safe and well!

Roland Gärber:

Thank you for taking the time to read our digital K-WERT. We'd also like to express our heartfelt gratitude for being able to count on you throughout the course of this year. It has been a rocky road, but we're on this path and mastering the challenges together.

Steen Hansen:

It was a rough year, but also a learning year. We have had to deal with a situation we had never imagined would happen and we succeeded.

Now more than ever we value interpersonal connection, which is why we wanted to reach out to you and share our thoughts.

Roland, how would you describe the year 2020 in short?

Roland Gärber:

With the spread of Coronavirus and subsequent global pandemic, the entire world was suddenly dominated by one thing. From our employees and customers to governments and policymakers worldwide – everybody was influenced by that pandemic and nobody was able to directly influence anything by themselves.

So, 2020 was definitely a year like no other and brought immense challenges. We have faced hardship and difficulty before, but this time we had to scrap all our plans and “drive by sight” with the simple focus on keeping the business going. This was a mammoth task, involving securing access to sites and offices, working with clients and regulators to fulfil constantly changing guidelines and, of course, ensuring the health and safety of our workforce and employees.

Steen Hansen:

Yes, and I would like to highlight, KAEFER is very good when it comes to mastering complex, large-scale challenges. Our decades of experience have helped to make us more resilient and have given us the knowledge and insight to know how to handle sudden changes and challenges. From organising crisis teams in all entities at near breakneck speed and focusing efforts on procuring PPE to fostering unconventional solutions. We did what we had to do to make the challenging situation as tolerable as possible. Yet it was still like navigating stormy waters without the aid of navigation.

We had to change course when circumstances shifted and aim for the safest harbours where we could. It was all about finding the right path through the turmoil and keeping our people and our business safe.

Roland Gärber:

Given the sheer volume and scale of the projects we have around the world it was imperative to try and keep things moving where we could and to mitigate issues where we couldn't. We put in the effort to ensure that the new circumstances we found ourselves in were as safe and productive as possible, regardless of whether it was from your home office or construction site.

Steen Hansen:

When thinking back about the year, what makes me proud is the commitment of all our employees, their flexibility to adapt and to get the work done in a completely new environment.

Roland Gärber:

For me, our health and safety record and our safety culture have been one of the top achievements of the year. Despite the huge challenges we faced, we still managed to keep our HSE statistics better than they have ever been, exceeding our own targets for this year. Above and beyond our safety culture, we have clearly seen the benefits of established mechanisms and processes stability to make our work better and more efficient, such as LEAN to name one example. In many cases, this allowed work to continue to function on sites even when only a limited number of people were allowed access.

We also wouldn't have done things as well as we have without the use of digital tools. We've experienced first-hand why this is so important this year and we now have to further accelerate the harmonisation of processes to support digitalisation in the company. There is no digitalisation without prior harmonisation! This is also reflected in our digital roadmap, which we started last year and continuously pursue.

If I look back at what we've achieved, against the odds and in the toughest of circumstances, I'm more than just hopeful that we will prevail – I'm certain.

Many of the successes we have been able to enjoy this year are based on all the hard work we have put in in previous years and it goes to show that working towards common aims bears fruit – especially when faced with challenges.

Steen Hansen:

Our employees have walked the extra mile this year and I have seen the dedication, the flexibility and the resilience shown across the KAEFER Group. This not only makes me optimistic for the coming year, but I am certain we will master the future challenges.

Both:

We can count on you and you can be sure that you can count on us. We are one team. The KAEFER Team!

Statement from the KAEFER Shareholders

“We wouldn’t be able to be on this journey without you.”

Moritz Koch is Chairman of the KAEFER Advisory Board and Spokesman of the KAEFER Shareholders. He would like to thank all KAEFER employees on their behalf and share the following message with the team around the world.



Dear fellow members of our big KAEFER family, I hope you’re all well, safe and healthy!

It feels a bit odd to send out a message this way, but everything has changed at dizzying speeds this year and we’re all getting used to doing things differently – more remote, more digital.

One thing, however, hasn’t changed. And I’ve seen it myself throughout the course of this year: The resilience of KAEFER people.

On behalf of the owner family and our big KAEFER family, I’d like to thank each and every one of you for the hard work you have done this year under the hardest of circumstances.

It heartens me to see how we, together, can cope in the face of adversity and that gives me great confidence for the future of this company and its people. As a family and also as shareholders, we’re invested in the long-term success of KAEFER.

Yet, we must accept that all good times will be punctuated by challenging times. The way we



overcome these challenging times – together – reveals our true character and, in my opinion, makes us even stronger for the future.

Our priority is to build and protect the solid base that thrives upon our ability to overcome adversity as well as our capabilities to achieve our goals and targets for the future.

Sustainability and stability are key, even if it means that at times, we have to accept there will be lows as well as highs. KAEFER has had its fair share of challenges over the last 100 years as a company, but KAEFER has always prevailed.

I personally feel that these challenging times have brought us a little closer to one another and helped us to strengthen our solid base – for our joint future.

Once again, I’d like to thank every one of you, wherever you are, and wish you all the best for the coming year.

Stay safe everyone.

Health & Safety Update

Stay safe...

It's amazing how that simple phrase has made it into our daily language. Yet behind its simplicity is an exceedingly complex challenge that we've all had to deal with in different ways this year.

The key message, however, that health and safety should be a priority, is a most welcome step towards promoting a genuine safety culture and reducing the number of incidents and accidents in an organisation.

Because behind every number and statistic is a person. That's what we must remember when it comes to health and safety figures. Fortunately, the statistics for this year were very good indeed. Even though it was an exceptionally challenging environment, KAEFER managed to stay below the targets of LTIF 1 (Lost Time Incident Frequency) and TRCF 4 (Total Recordable Case Frequency).

cause for celebration. Yet what they signify is perhaps even more important. They point towards the fact that safety culture is already an active part of the KAEFER culture.

So how was this achieved? According to Thomas Eickhoff, Head of Corporate Health, Safety & Environment (CHSE), "first and foremost it's about supporting our people in the most effective and professional way. A decentralised approach in which local needs are prioritised helps to tailor safety measures to individual circumstances on the ground." Also, in a strange twist of fate, the global pandemic has made the concept of keeping safe and healthy an even greater priority than ever before.

Looking out for one another

"We work with sheet metal and wool and in difficult places: where it's cold, hot, confined and very high up. We work in extreme environments where we need to have each other's backs," Eickhoff says. "part of that also

means having a constant conversation with key stakeholders to figure out what works and what doesn't in terms of safety. We have to be there for one another proactively."

From 51 million working hours without a lost time incident in Saudi Arabia to a range of extremely successful safety campaigns in Australia, Brazil and Poland as well as major improvements in France, KAEFER's safety culture is bearing tangible fruits. Furthermore, that makes corporate integration more successful, as seen in Spain and in the UK & Ireland. "It's not just good for us, it's great for our clients," Eickhoff adds. "Working with a company with an impeccable safety record is hugely beneficial in business."

Learning from mistakes

It's not all perfect, however, as everyone makes mistakes sometimes. The key, however, is how those mistakes are handled. Not acknowledging them or

LTIF & TRCF of the KAEFER Group 2020



learning from them is counterproductive. “Part of a safety culture is having an open ‘failure culture’ as well,” Eickhoff says. “We actively encourage our people to report mistakes or problems freely and easily. That’s the only way we can profit from a wide range of experiences and learn for the future.”

Speaking of which, what does the future hold? “We’re constantly improving, that’s part of KAEFER culture as well,” Eickhoff remarks. “Continuous improvement is something that we will continue to expand and add to the KAEFER culture covering quality provision, professionalism and other aspects as well.”

Stress in the spotlight

Health and safety is not just physical, there’s a strong psychological element to our wellbeing. From the stress of spending many months in remote areas and the pressure of performing in difficult environments to the issues faced when working at home without physical contact with colleagues, the work we do every day affects our mental health. This has become a new focal point at KAEFER, and measures have been taken in terms of recognising the importance of our

psychological wellbeing.

In the words of Co-CEO Roland Gärber “we’re on a path to zero and that’s the destination we have to keep in our minds. Health and safety isn’t just a benefit or a numbers game, it’s of primary importance to our success: physical, mental and in terms of our business as well.”



“First and foremost it’s about supporting our people in the most effective and professional way.”



Thomas Eickhoff
Head of Corporate Health, Safety & Environment

Integration Process in the UK & Ireland

Come together

In early 2020, KAEFER acquired Wood Group Industrial Services in the UK and Ireland and the integration took place throughout the year. But how does a marriage work when you can't invite everyone to the party?

It's more exciting to embark on a journey together. And if the going gets tough, it's great to know that there is someone else there to count on. This was especially relevant in 2020 when Wood Group Industrial Services (WGIS) was acquired by KAEFER at the start of the year.

The business brought over 2,000 highly skilled people on board and has catapulted KAEFER to the top 3 of industrial services providers in the UK & Ireland.

Bringing two companies together is always a challenge, but if the process is well-managed it runs smoothly. Things get tricky when there is a pan-European lockdown with different regulations in each country. Yet that's exactly what happened.

Thankfully, despite the unexpected challenges faced, the integration process proceeded as planned. This was thanks to a dedicated integration team that was in place from the outset. Knowing what challenges may come and navigating them is key, as well as constant communication with stakeholders and partners. Also, given the fact that KAEFER and WGIS worked in similar areas but with different clients, there was a great deal of synergy to benefit from.

A warm welcome to the family

There's a business side to integration, but there's an important human element, too. Over 2,000 people across the UK and Ireland would now

become KAEFER employees. To welcome them to the family, a series of town halls were planned and organised by Tegan Owsnett, Marketing and Communication Manager. CEO Chris Foulkes, COO Ian Tattersall and Business & Strategy Director Trevor Woodward toured the UK in early March to introduce KAEFER as a company to the new team.

The town halls were not just for new members of the team. Existing KAEFER people were invited as well to bring everyone together. This was a bonding experience and reinforced the feeling that KAEFER and WGIS were a good match, rather than there being an 'us and them' element to the acquisition. Shortly thereafter, lockdowns would follow and much of the getting to know one another activities were moved online, yet they proved to be just as fruitful.

The big picture is made up of many smaller ones

When unexpected events change things, it helps to keep the big picture in mind as well as keeping an eye on the finer details.

"Throughout the integration process the leadership team were aligned on two key principles. Firstly, that we would be relentless in our focus on maintaining health & safety standards and secondly that we would maintain our service levels at an operational level so that our customers were not negatively impacted by our integration activities," explains Ian Tattersall. "To achieve this, we only involved selected individuals in the integration, ensuring that there was adequate remaining management capability to manage the ongoing works."

This approach was ideal in minimising disruption and maximising the benefits of the integration.

Seizing new opportunities and building upon old successes

From the restoration of the iconic Tower Bridge in London; the painting, cleaning and insulation of Queen Elizabeth Class aircraft carriers; to the painting of the Forth Rail Bridge in Scotland, WGIS worked on large prestigious projects throughout the UK. Now, as WGIS has been merged into KAEFER Limited to create KAEFER in the UK & Ireland, the company will build upon these previous successes, looking toward the shared future journey with ambition. It's a good match and a partnership that will help smooth even the most unexpected twists and turns.



Refinery Shutdown in Germany

The start of the stop

Projects with a lot of external specialists and minutely timed complexity can be held up by any number of things. When you add a national lockdown because of a global pandemic into the mix, partly shutting down a refinery makes it even more complicated.

Refineries run 24 hours a day, 7 days a week. At the PCK refinery in Schwedt near Berlin, they handle 12 million tonnes of oil per year and over 240,000 barrels a day. At that scale, it's a real challenge to shut parts of it down for almost four weeks. KAEFER has been working on site for 30 years, with KAEFER Montage providing insulation services and KAEFER ESG doing scaffolding, so they knew the plant well. However, the shutdown involved replacing an existing aromatics plant, which included 6,500 m² of insulation. That's a great deal of volume in such a short space of time.

In fact, the shutdown of the facility was called into question because of COVID-19. When the decision was finally taken to go ahead with the process, everything had to run like clockwork and all processes had to conform with relevant guidelines and regulations. This wasn't easy, however. Not least because a large number of KAEFER's team for the job was based on the other side of the border in Poland. Initially, there were special permits for commuters, but when lockdown regulations were strengthened, many members of the team had to relocate to Germany temporarily to avoid having to quarantine. For the employees, this meant long periods away from their families. For KAEFER, the challenge was finding enough suitable accommodation close by, as many other companies faced similar challenges.

Working hand in hand

At the peak of the project, there were 60 KAEFER people working at PCK Schwedt. The team are a close-knit group that work together very effectively. Communication functioned well and all the measures necessary to implement safety procedures and make on the spot adjustments were taken quickly and efficiently. The hygiene concept was developed in-house by KAEFER and functioned to keep everyone on the job safe.

There were some challenges to overcome, however. For example, to quickly react to client's clearances at short notice, insulation needed to be on site, yet it was processed in KAEFER's metal workshop in Drebkau, nearly 200 km away. So, the team prefabricated 85% of the insulation and then stored it at the PCK facility so that it could be used 'just-in-time'. In total, 3 columns, 4 containers and several pipelines were insulated and given passive fire protection when the aromatics plant was exchanged – that was no mean feat.

Perhaps the biggest issue though, was the uncertainty of dealing with an infectious disease that nobody knew anything about. This was the start of the pandemic and the pictures coming in from around the world were unsettling.

The team took comfort from one another and knew that they could handle just about anything together. It was a different challenge than usual with regular temperature measurement, masks and social distancing,



but they managed to get through it thanks to regular briefings as well as constant communication.

Strength in numbers

The KAEFER team can be proud of one number in particular: zero. There wasn't a single accident, incident, spillage or a single coronavirus infection during the spring shutdown of PCK Schwedt. "The way we arrive at work is the way we arrive at home," says Branch Manager Rolf-Dieter Bonkatz. "That's our safety strategy, which includes hygiene as well. So, I think we can be very proud of what we as a team have achieved." On top of that, they received a certificate from PCK at the end of the project documenting the success.



"We are proud to have established synergies between our scaffolding and insulation services for PCK Schwedt. Our performance has led the client to request even more scaffolding services in 2020. This isn't everything, however. It is projected that KAEFER will have the opportunity to invest in a larger scaffolding yard in 2021, that would make us a preferred supplier not just in insulation, but for scaffolding as well. This is part of our strategy to become a strong partner and indispensable on maintenance sites. We are grateful to have such talented, hard-working teams that represent KAEFER perfectly."

Gregor Bochynek, Managing Director KAEFER Industrie



Education & Innovation at KAEFER in Brazil

Getting a head start

What do robots have in common with a refractory school? Find out how RIP Serviços Industriais in Brazil is giving its people advantages.

as well. The initiative has been very popular, as RIP is a respected employer in the area, and it has also enjoyed the support of clients who want to give back to the local community.

Robots taking risk

On the health and safety front, RIP has been



Acquiring new skills is one of the best ways to get ahead in life. So is taking care of health and safety. RIP Serviços Industriais in Brazil has been focussing on both.

RIP has devised an excellent way to not just expand its skilled local workforce, but to also give back to the community by providing opportunities and education: a refractory school in Espirito Santo. In partnership with SINE, the National Employment System, RIP set up a training programme for refractory bricklayers, with a curriculum developed and taught by RIP professionals.

This school provides local people with new opportunities to gain qualifications and learn a trade. Upon successful completion of the programme, they are also able to join RIP projects

working with robots in refractory demolition to mitigate risks for humans, such as burns, injuries and gas inhalation. With the help of these innovative automated devices and LEAN thinking, it was possible to reduce the time employees spent in a potentially dangerous environment from 20 days to 10 days. The employees still work on assembling refractory walls as usual, but the hazardous part of the job in demolition has become safer.

Education and health and safety are key when it comes to employee wellbeing. As RIP and KAEFER invest in their people, it makes perfectly logical sense to foster their development. The refractory school in Brazil and the automation measures used on site both make major headway in giving employees and those in the local community an advantage.

KAEFER Construction - project report

Working our way up to the top of Bonn

Sometimes, sky high ambitions start from the ground up. For a new high-rise in Bonn, KAEFER Construction worked its way up from insulating the parking garage to installing a ground-breaking concept on the floors above.

The former German capital of Bonn isn't known for its towering skyline. There are just a few tall buildings along the city's banks of the river Rhine, including the Post Tower and UN Building. At 28 stories and over 100 metres, the new Kanzlerplatz development is destined to stand out in Bonn as a landmark.

Constructed on the site of the former Bonn-Center, which was famously adorned with an oversized Mercedes-Benz emblem, the new tower will take pride of place in the city's geographical heart.

KAEFER Construction's role in the project actually started at the bottom of the building. The first order was for the insulation of the underground parking. After successfully demonstrating the

company's skills, KAEFER Construction was commissioned for the complete interior outfitting of the floors above ground, including the walls, ceilings and floors all the way up to the 28th story. "High-rise buildings are a special challenge, especially when you're pumping screed at 100 metres!" Head of Interior Outfitting Marc Ulke says. "Then there was the ambitious timing, coupled with challenges brought about by the COVID-19 pandemic."

Rising to the occasion

One might ask at this point whether the concept of a high-rise office building is still relevant in times of increased working from home and enforced social

distancing. The key to that lies in the hollow floor concept. Heating, ventilation, electrical cabling, connectivity and supports are all built into the floor, rather than in a mix of walls and ceilings. This makes the interior of the building infinitely variable, as walls can then be put anywhere to accommodate the widest variety of layouts. From open plan offices to smaller workspaces and individually sized rooms that are distant from others, putting the arteries of a building into the floor adapts perfectly to today's circumstances.

"You have to imagine it like a miniature Autobahn of technology running through the floors of a building. There are various



routes that must be followed, and everything has to be placed in exactly the right spot,” Ulke explains. This was a challenge for the client in terms of planning, as well as for suppliers, as there is a very tiny margin for error and little flexibility when working to such a tightly planned concept.

Fortunately, Ulke and the KAEFER Construction team had a solution for that as well: “We proactively made a model of the floor, which allowed everyone involved to see exactly where the supports were or the path the communication cables would take, for example,” Ulke says.

This model helped not just with the tendering and planning phase, but also made it easier for suppliers, contractors and the rest of the team to work to plan, as there were up to 100 to 150 fitters working on site at the peak of the project.

Reviving the heart of a city

The building will be completed at the end of 2021 and will then be a welcome addition to the budding skyline of the city of Bonn. In fact, it’s a labour of love for Marc Ulke, as his father was an architect who was involved with work on the old Bonn-Center. That building actually belonged to the Bremer Landesbank, who often worked with KAEFER and Ulke was offered a job at the company

while he himself was working in an architectural firm. Now, with the demolition of the old building and the construction of the new one, Ulke can look back with pride at his involvement in defining and breathing new life into the heart of the city of Bonn.



“High-rise buildings are a challenge, especially when you’re pumping screed at 100 metres!”

Marc Ulke, Head of Interior Outfitting

The Mission River Project - Australia

On a mission

Tropical heat, lead and asbestos. High winds over open water, crocodiles and sharks. All in a day's work for KAEFER's team at the Mission River bridge in Australia.



Saltwater crocodiles are the largest living reptiles and can grow to a length of up to 6 metres. Bull sharks are over 2 metres long and are known for their aggressive, unpredictable behaviour. These are just two of the challenges the KAEFER team had to face when revising the steel and remediating the paint on the Mission River Bridge in Northern Queensland, Australia.

Built in 1971, the bridge provides vital road and rail links between the Andoom bauxite mine and the port operations at Lorim Port. Given its age, many of the ferrous surfaces needed refurbishment and replacement as well as corrosion treatment. The structure also contained asbestos and lead in the existing coatings, adding to the complexity of the task. To top it all off, the rail line operates 24 hours a day, with trains crossing every half hour.

Refreshing the parts others can't reach

To overcome these challenges and to breathe new life into the Mission River bridge, KAEFER used a range of methods, including a specific traffic management system to ensure work could be carried out with minimal disruption.

To get to the difficult to reach areas, a jack-up barge was used to give access safely and efficiently.

Compared with a conventional barge, which is also susceptible to tidal movements, the jack-up barge gives access with a lifting platform, making it safer and easier to reach certain areas on the bridge. The platform has all the necessary equipment and facilities, which increases productivity.

The lead and asbestos-containing coatings presented their own, unique challenges, as the area was prone to powerful winds over open water. To overcome these issues, KAEFER used full encapsulation of all the affected areas, with a 200 mm double later BLASTCLAD protective sheet as an enclosure. This meant that all hazardous waste could be collected and disposed of safely.

Playing our part in the community

Despite the many environmental and physical challenges, the team successfully completed the job and also recorded zero injuries or incidents in the process. That wasn't the only part they played, however. Throughout the course of the project, the team noticed that rubbish had washed up on a local beach. They took matters into their own hands and organised an off-duty clean-up operation, collecting more than 14 bags of rubbish to be disposed of.

The path across the Mission River is now clear, safe and ready for another 50 years of use. The local crocodiles and sharks have their natural habitat too, just a little bit cleaner than before the KAEFER team came to complete their project.



Digital Roadmap

The path to digitisation

Every cloud has a silver lining. 2020 may have been a very challenging year, but it has helped KAEFER make even more progress on its Digital Roadmap.



Making digitisation manageable in a large organisation like KAEFER means breaking the tasks up into parts. As there are different levels of progress and various measures in place, KAEFER's Digital Roadmap team has created so-called 'capability areas', which divide the digital journey into sections that make managing the process easier and more effective.

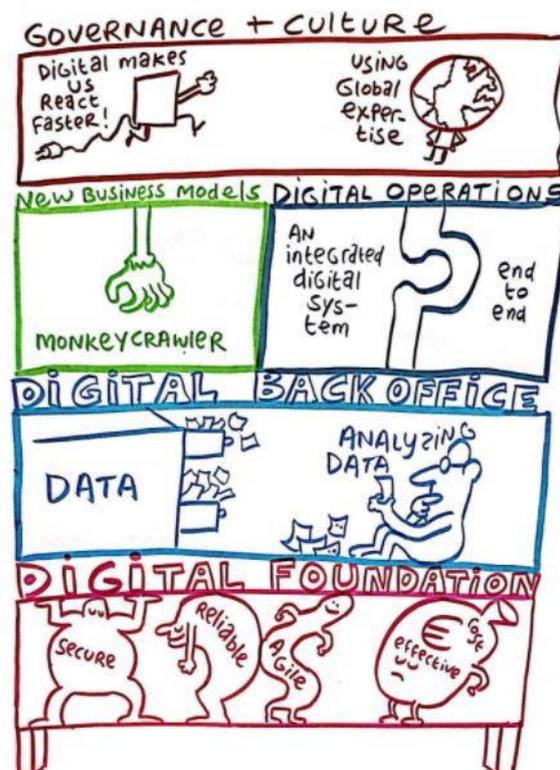
A marathon rather than a sprint

There are three main capability areas: digital back-office, digital operations and new business models.

The back-office area focusses on administrative processes and how new technologies can make work easier and faster. Manual information processing and a large number of different systems in various KAEFER entities can cause delays and errors. Digital tools make it easier to work much more efficiently and simplify communication. Having up-to-date information available at any time at the push of a button – that's what is being worked on.

The operations area looks at digital solutions in the company's operative services. They simplify the organisation of work and make it possible for employees to focus their time and effort on tasks and jobs that actually add value. At the same time, digital tools enable interactive communication with video conferencing, remote problem solving or online training, for example. "In light of the current pandemic, these solutions have gained an immense amount of additional traction," says Niels Gogler, Portfolio Manager of the Digital Roadmap. "The Digital Roadmap has always been important, but now, many clients and colleagues appreciate the need for digitisation even more."

The new business models' area looks at how digitisation can be used in future products and services. At first glance, it may seem like the 'traditional' insulation business is not really suitable for digitisation, a closer look reveals several opportunities. New sensor technology and automation in terms of routine, repetitive processes can help teams work more efficiently and effectively.



© ComHouse
Vadon

Getting everyone across the line

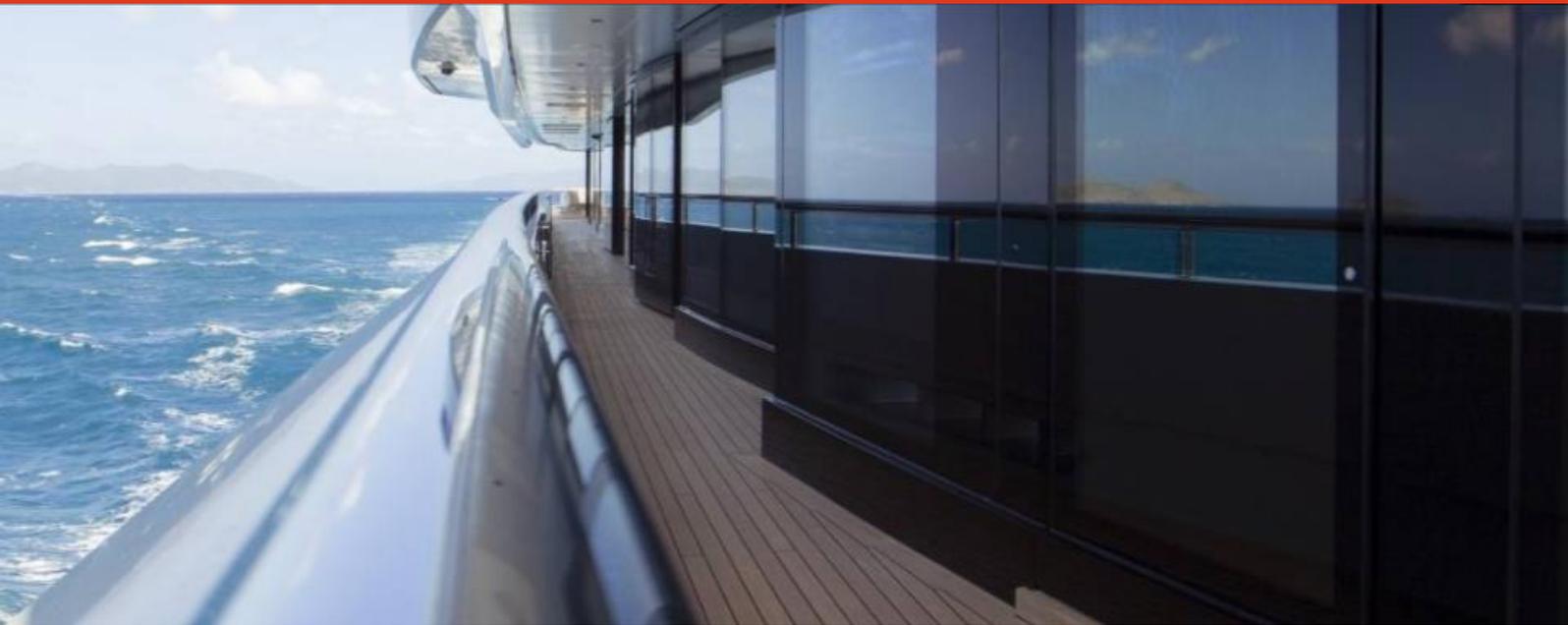
All three main capability areas are supported by a digital foundation, which provides the technical platforms required to deliver digitisation solutions and constantly optimise the IT landscape. Furthermore, digital governance processes coordinate all Digital Roadmap activities and a unified approach to digital skills focuses on building employee ability.

“At KAEFER, digitisation describes a cultural change and stands for transparency in particular,” Gogler adds. “Information must be shared by everyone involved to maximise the cumulative effect of our knowledge. And we need to use that to look beyond our short-term goals and see the future.”



“At KAEFER, digitisation describes a cultural change and stands for transparency.”

Niels Gogler
Portfolio Manager of the Digital Roadmap



KAEFER in the Marine Industry

Setting sail together

KAEFER goes back to the roots – building upon the spirit that led Carl Kaefer to make a name for himself in the maritime industry.

KAEFER's origins are in maritime insulation. But the company would not have gotten very far if it simply stuck with insulating cold storage with peat, as Carl Kaefer did in 1918. As technology and industry has changed, so has KAEFER. And one of the most important sources of impetus and inspiration has come from shipbuilding. The company has developed from an insulator into a service provider with the widest variety of solutions and products for the seven seas. From insulation, interior outfitting to passive fire protection and luxury exterior decks, KAEFER has developed strength in four pillars: cruise new build, cruise refurbishment, naval vessels, and mega yachts. In the process, they have evolved and changed together with its maritime clients and their unique needs.

Charting course through choppy waters

Normally, a storm at sea can be felt brewing. The tempest the maritime industry had to endure this year was both unprecedented and unexpected. Of

the around 400 cruise ships around the world, every single one had to return to harbour or lay anchor just outside. This total stop of the cruise industry had never happened before. On top of that, shipbuilding projects that were still running were substantially affected by social distancing, limits to working shifts and the inability of specialist staff to travel. The KAEFER team is no stranger to a challenge, however, and pulled through together to keep things going even in the face of adversity. "I'm incredibly grateful to the team and they've showed great resilience in this crisis," says Jürgen Trost, Managing Director of KAEFER Schiffsausbau in Germany. "I'm also convinced that the storm will blow over and that the cruise industry will come back in full force. There hasn't been a single new build project that has been cancelled in Europe and some of our clients are aiming to extend their order book to account for a delay in new build orders. The main point is that things will recover, and I think the cruise industry will be larger in 10 years than it was before COVID-19."

Making waves with LNG and heading for a safe harbour

Speaking of the state of the industry in 10 years' time, it's necessary to consider the increasing pressures to become more sustainable and

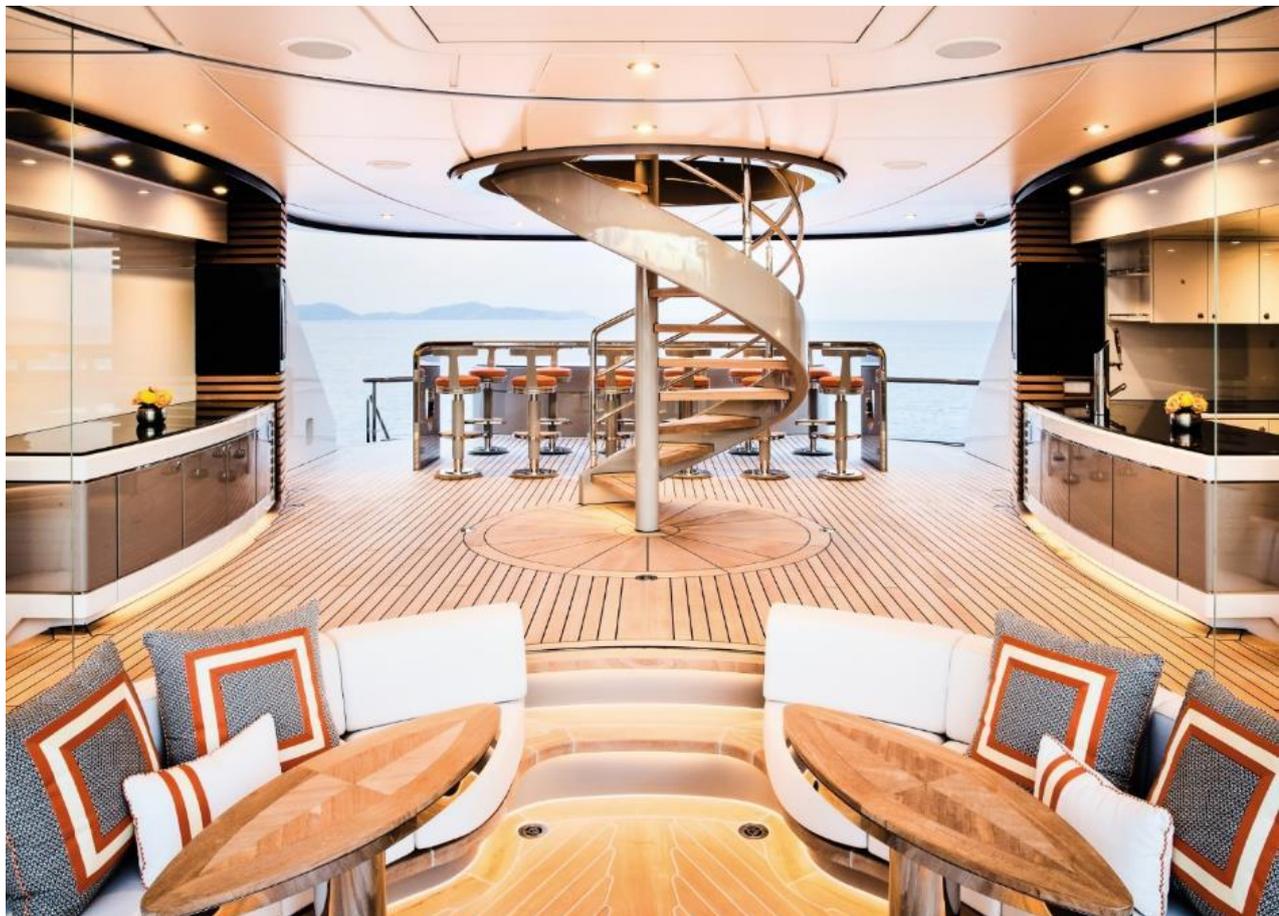
environmentally friendly. The key here is liquified natural gas (LNG), which provides substantial reductions in emissions when used as fuel to propel cruise liners. “Our client Meyer Werft in Papenburg has already launched the first two cruise ships that run completely on LNG,” Jürgen Trost explains. “One ship received a Blue Angel Award for environmentally-friendly design and there are further vessels under construction in Papenburg and Turku.” KAEFER Schiffsausbau has been awarded the contract to insulate the LNG piping in these ships and is contributing to the push for increased sustainability in the whole industry.

When it comes to smaller vessels, KAEFER has managed to fulfil big expectations. Working together with beiderbeck designs in Bremen, KAEFER Schiffsausbau is increasing its activities in the area of luxury yachts with mega yacht refits. From 40 to 140 metres, an experienced, skilled and creative team of naval architects, designers and engineers provides the highest level of services for the widest variety of yacht projects. When it comes to mega

yachts and their captains and owners, it’s down to the last tiny detail and that’s what the team does best.

The tides are turning

Even though 2020 has been a year like no other, the KAEFER marine community has had one another to count on. By working closely together and leveraging strengths in various specialist areas, the teams have found resilience in the face of adversity. “We’re stronger together,” says Trost, “amongst other factors, the cross-selling we can do in the four pillars that we service helps put us in an advantageous position. On top of that, we’re at the forefront of new technology and are continuously expanding our portfolio of services.” As the industry changes, KAEFER Marine will change with it. The aim is to be a good companion and willing first mate to accompany their clients on their global journey, wherever they may be setting sail from.



Cameron LNG

The lone rangers of LNG

Going West: building a new business from the ground up in the booming gas fields of America.



KAEFER isn't as well known in the United States as it is in other parts of the world. This can be an advantage, as it allows the company to start virtually from scratch and define itself on the basis of its competences and services. It's also a challenge, as the US is a mature market, where it can be difficult to gain a foothold.

Choosing the right path is the task of KAEFER LLC's CFO Wolfgang Richter, together with Victor Bogos, Ian Carter and the support of the very experienced management team at KAEFER in Australia. The common goal was to establish KAEFER in the US LNG market.

To give the story some more context, the United States is now the third largest exporter of liquified natural gas and will be considered as the world leader within the next five years, despite only being currently ranked number five according to proven reserves. In short, natural gas, specifically liquified natural gas (LNG), is booming in the US. Yet it's a well-established market, with mature, tried and tested players on the scene. That's why the strategy is to work with existing clients on LNG projects and to leverage the expertise and ingenuity of the company.

Cameron LNG is an export terminal situated along the Calcasieu Channel in Hackberry, Louisiana. The first phase of the terminal, consisting of three liquefaction trains, became fully operational in August 2020. KAEFER secured the cryogenic insulation contract for the valve and flange boxes on train 2 and train 3 on these immense projects with Chiyoda and McDermott being the clients.

"The LNG market in Texas and Louisiana is as big as the market in the rest of the world, it's like nowhere else in terms of its unique potential," Richter says. "This was the ideal place for us to leverage our LNG



expertise from projects in Australia or Southeast Asia, for example, and to gain a foothold in a rapidly expanding, forward-looking market.”



Green fields and new opportunities

In order to do so however, a completely new company had to be established. “We had to adopt a greenfield approach,” explains Richter, “we needed a legal entity, contractor’s licences (which included various hurdles), visas with work permits, insurances, pre-qualification by clients, a payroll, identification of US-suppliers. The amount of work and paperwork was simply staggering.” On top of that, the new venture would be set up in the centre of the insulation world. Houston, Texas is where the who’s who of insulators have a presence and everyone knows one another. When word got out that there was a new kid in town, it spread fast.

Taking up experience from Down Under

KAEFER has an excellent reputation in LNG internationally, much of it based on the exemplary work done in Australia and the Asia-Pacific region. According to Ian Carter at the LNG Solutions Centre in Perth, “The first wave of KAEFER’s LNG business was built over here and we experienced success as well as failure. We learned from those mistakes and this means that other KAEFER LNG

projects and entities can benefit from our experience.”

Wolfgang Richter agrees, “One of the things that I’ve learned in my time in the US is that there is an attitude that says: ‘fail harder’. There’s a pioneering spirit here in which in which failure is considered as a necessary part of success. You cannot be successful unless you learn from the mistakes you make. That’s one of the benefits we have over here – the experience brought over from projects completed in Australia.”

This isn’t to say that Australian LNG projects were marked by mistakes and difficulties, but the reality of cryogenic insulation with LNG gas volumes reducing by 600 times in a liquefying process at temperatures of -163 degrees means there is little margin for error and figuring out what works is imperative.

Making a mark that lasts

The Australian LNG competence centre became the model for the US business. To facilitate the entry into a new market, KAEFER partnered with an American company in a joint venture. The US partner provided local knowledge and much of the manpower needed and KAEFER brought its know-how, project management, supervision and modern technology to the table.

“It was a challenge,” recalls Richter “especially in such an established market but there is a bright future for LNG in the region and KAEFER has the experience and expertise to build a successful business.” Even though you could compare Richter to KAEFER’s lone ranger, he will be the first to tell you that it’s never a one-man job: “we’re all part of a team and a family and we depend on one another to succeed.” Thanks to the very experienced project manager Rick Copping, KAEFER managed to earn the respect of US clients and even reach above-average productivity.

Everything we do is based on creating a business that's sustainable for the long term – for our clients, partners and our people. We're here to stay." And with that, Richter and his team ride off into the Louisiana sunset.



KAEFER Energy in Norway on Innovation

The many faces of innovation

The path to the future is illuminated by bright ideas. KAEFER Energy in Norway is at the forefront of innovation. But it's not just about technology...

When we think of innovation, we usually imagine technological progress and new, exciting engineering. That is, of course, a fundamental element of it, but for the team at KAEFER in Norway, innovation has many further facets as well.

"When we talk about innovation at KAEFER Energy, we think of new ways to bring about

improvements in terms of employee safety, differentiation, the economy and our colleagues' work environment," says Bård Bjørshol, CEO of KAEFER Energy in Norway. "If you consider that many of our people work in challenging environments, full of difficult operations when it comes to ergonomics, as well as exposure to noise, dust and vibration, innovation has to work for them as much as it does for our technology, clients and for our organisation. Innovation is more than just technology. It's about improving working lives as well."

Health, safety and satisfaction

One way in which innovation is a driving force at KAEFER Energy is through the benefits brought about by LEAN. In addition to providing greater efficiency, LEAN has contributed to solid

improvements in health and safety figures as well. On top of that, the involvement of employees in evaluating and improving their own work-processes has been increased, leading to greater satisfaction and pride amongst the workforce. This was clearly demonstrated in the latest employee survey taken in October. So, by adopting innovative methods for efficiency as well as colleague protection and involvement, LEAN has helped KAEFER in Norway to make great progress on its journey of continuous improvement. Furthermore, Bjørshol highlights that one of the main goals for KAEFER Energy is to be "the best company for our clients and for our workforce", which includes the highest possible job security. In terms of developing and implementing new technology "our equipment and methods are directed



towards enlarging our service portfolio and securing jobs by awarding contracts in the current marketplace as well as in new markets segments,” he says.

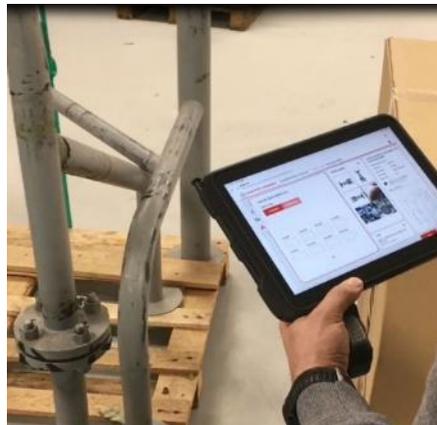
A natural progression has been towards the efficiencies provided by digitalisation. Technology such as robotic process automation (RPA) can facilitate mundane, repetitive tasks such as invoice documentation, the collection and visualisation of HSE statistics or travel cost compilation, for example. On top of that, smart technology and innovative solutions lead the path towards Industry 4.0. “Our aim is to become the most industrialised fabrication workshop utilising and developing smart technology,” says Arve Martinsen, Head of Innovation at KAEFER Energy. “Digitalisation of data, machine learning and automation are key for our future and also represent innovations that we can export to other areas around the KAEFER-world as best practice.”

Braving the path towards ever greater transformation together

Norway is at the forefront of innovative new technology, in part thanks to the support received from a variety of government initiatives.

KAEFER Energy is currently working on several highly complex projects with a

substantial research and development component. The high level of innovation has been widely recognised in the industry, as well as within the financial and public organisation community in Norway. As a Norwegian company, KAEFER Energy is in the position to apply for and possibly receive capital funding through various initiatives supported by the Norwegian government.



These state-run programmes are important instruments that motivate and encourage companies to seek development and invest in innovative solutions, as well as to increase the variety of partnerships that foster new technology. For example, KAEFER Energy is taking the lead on an energy research project together with the renowned independent research organisation SINTEF, which was supported by the Norwegian research council.

“We’re very grateful not just for the financial support, but also for the fact that these types of

programmes foster creativity, and innovation, with greater insight and more recognition,” Martinsen explains. Bård Bjørshol agrees: “It creates a culture of collaboration, research and innovative thinking, which we all collectively profit from.”

Finding the fuel of the future

One product of this innovative mindset is a recent, Lloyd’s approved and certified cryogenic fire box solution. At the end of 2018 a new ISO standard for cryogenic spills was released (ISO 20088). The company’s response was a new kind of insulation box that can withstand liquified natural gas (LNG) leakage onto a pipe for 60 minutes at a temperature of -196 degrees Celsius, directly followed by a jet fire for another 100 minutes. The key lies in the way the layers of insulation are composed to resist extreme cold and heat. It’s a matter of striking the right balance.

This is just one example in insulation and there will be many more in the areas of maintenance, digitalisation and smart machinery. Norway may well be known for its vast reserves of natural resources. Yet the fuel of the future is innovation and everything that goes with it.

LEAN in the Midst of a Pandemic

LEAN – now more than ever

LEAN is about continuous improvement and further development. That's particularly useful when there are substantial challenges to overcome, such as a global pandemic.

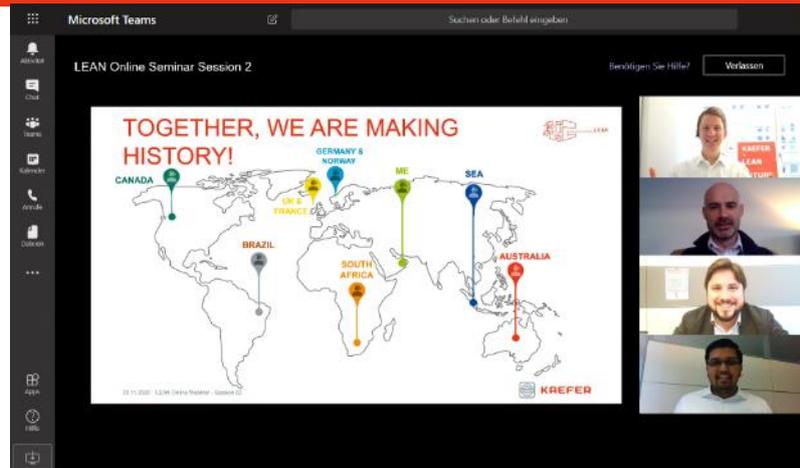
As the old saying goes, when the going gets tough, the tough get going. This couldn't be truer in 2020. And thankfully, KAEFER has a competitive advantage: LEAN.

LEAN is a philosophy that systematically achieves incremental changes in processes at all levels to improve safety, efficiency and quality. The overall aim at KAEFER is to become a 100% LEAN company. We've made significant headway to achieve this and the finish line is in sight, but there are still a few corners to be taken before we get there.

The very nature of striving for improvement and efficiency makes sense in ordinary times and brings even greater advantages in extraordinary ones. "The benefit of having practiced LEAN at KAEFER for so many years is that it organically makes its way into daily working practices," explains Axel Schulz, Head of Corporate Operations Excellence LEAN. "We don't call them 'Lean Projects' as much anymore. Rather, they are projects in which LEAN is naturally practiced." What happens then, when faced with a global pandemic or a collapse in oil prices? Safer and better-quality projects are certainly an advantage in that case, but can LEAN be applied across the board?

Being LEAN means being flexible

"Regardless of whether it's a LEAN project, LEAN



initiative or a LEAN job, LEAN as a mindset changes the behaviour of everyone," Schulz says. LEAN also encourages flexibility, which is how the global team at KAEFER managed to adapt to the circumstances and embrace the digital world in further development even more than ever before. "The thirst for knowledge and need for learning in our employees never stopped. So, we had to respond by building an online version of one of the most popular online training sessions this year," explains Rebeca Talamantes, Global Lean Trainer & Coach. "It wasn't easy, but we redesigned the format and adapted it based on participant feedback."



Going fishing

The positive response from colleagues inspired the global LEAN team to go further and develop 5-minute, e-learning nuggets to generate even more interest in LEAN. They are designed specifically for the broadcast on social media and to be shareable as well.

“The e-learning nuggets were designed to give basic insights into LEAN for those just at the start of their LEAN journey,” says Thiago Silveira, Global Lean Trainer & Coach. “There are also some simple tools, which can improve daily processes, and this leads to a culture of continuous improvement in the whole company.”



In addition to providing insight into the LEAN methodology, this new format is used as a fishing tool to identify those that can be trained to become coaches and LEAN facilitators. The aim is ambitious: to reach and educate 100% of KAEFER. Yet it starts to become more tangible when you break it down into manageable fragments, which is an example of LEAN thinking in action. “We estimate that around 20% of those exposed to the nuggets will develop further and go on to become LEAN facilitators,” Schulz postulates “and by including supervisors, foremen and operators in our efforts, we reach around 20,000 people, which is 90% of our operational workforce.”

This goes to show that KAEFER is at a tipping point when it comes to LEAN and just at the cusp of it becoming integrated into daily work routines rather than an optional extra.

Something for everyone

The LEAN training sessions were due to continue face to face in April of 2020. For obvious reasons, this became impossible. As necessity is the mother of invention, the sessions moved online. Global trainers provided a total of 12 sessions since March

for beginners and advanced participants covering different LEAN topics, supported by local keynote speakers. There were three training levels: a basic one for new starters, advanced sessions and Lean Leader trainings. With 500, 250 and 25 participants respectively, the sessions offered something for everyone. “From large scale webinars and four presenter workshops with two local representatives to more detailed, higher-level skills workshops, the focus was on how LEAN is practically applicable and useful,” Schulz goes on to say. “We made everything relatable and encouraged participants to question how LEAN can be made tangible and connected to their exact job and their specific projects.”

Interestingly, the fact that people were online rather than in groups of people led to greater engagement in discussion sessions, as there was less pressure felt to ‘perform’ in front of others. Also, participants were free to choose whether they want to actively participate or simply listen. Furthermore, the participants were given assignments to complete in between sessions that were directly applicable to their own area of expertise. This provided a high degree of practical relevance.

A rocky road can be navigated better together

We can see the positive evolution of LEAN in many areas around the KAEFER world, which makes our operations more digital, smarter and easier. One example is the digital Lean Site Management, supported by DPMS.

The path to becoming fully LEAN has always been marked by challenges. Yet in an odd twist of fate, the challenges of this year have quite clearly focussed the resolve of KAEFER people and provided the necessary impetus to get ahead. The talk has always been of the KAEFER Lean Journey and many can now clearly see where it is going and looking forward to the destination.

Architectural works project in Thailand

A Thai twist on Scandinavian architecture

There's a whole world in between them, but the KAEFER teams in Thailand and Norway are actually much closer than you'd think.

The Norwegian Johan Sverdrup oil field is a long way away from Laem Chabang in Thailand. Yet in today's globalised world, the distance is actually smaller than ever. This is an attitude the team at KAEFER Thailand took to heart when pitching for the main support frame job for the P2 process platform at the Johan Sverdrup offshore facility.

KAEFER Thailand works in insulation, refractory, technical lining and in acoustic cassettes. These are just some of the areas in which they have demonstrated their competence to Aibel, the company responsible for the offshore platform. But the Thai team had not done an architectural project before and this one involved not just insulation, but the prefabrication of walls and panels, raised access floors, as well as internal architectural rooms, self-suspended ceilings, doors, windows and much more.

Building upon strengths

The main support frame module for the platform weighs 14,200 tonnes. It's also 98 metres long, 67 metres wide and 20 metres high. Building a structure like that requires specialist expertise. The team in Thailand knew that they could count on the help of KAEFER Energy in Norway, who had strong experience in these kinds of projects. Norwegian colleagues supported the team with knowledge transfer and helped to coordinate the necessary

sourcing of materials, project management and, of course, the design. It was a learning process for the KAEFER team in Thailand, but they were hungry for knowledge and managed to adapt effectively and efficiently to the new tasks at hand.

Success by design

Mock-ups were created and models were built to ensure that everything was prepared properly and approved by the client. With around 100 men working on construction, it had to run smoothly with very little room for error.

The preparation work and the careful, thought-through design was a key element for the successful start of this project. The collaboration between entities was also a major factor and goes to show how leveraging synergies in different KAEFER entities can lead to mutual success. The project is due for completion in January 2021 and the Southeast Asian team is keen to use it as a showcase for further architectural projects in the future.



Opening a new KAEFER entity in Mozambique

Taking a chance

Who won the race? The tortoise or the hare? Sometimes, taking the long road means you're in better shape to take advantage of opportunities that come your way.

A winning streak can sometimes be many years in the making. But first you need to get to know the rules of the game. That's exactly what KAEFER has been doing for the last few years in Mozambique: learning to understand the market, making contacts and building up experience. The lucrative prize at the end of the road is the Mozambique Liquefied Natural Gas (LNG) Project, with a planned investment of over \$60 billion in the next 12 years.

The right place. The right time

There's obviously no certainty when it comes to projects on the scale of Mozambique's LNG. Sometimes a leap of faith is necessary to be in the right place at the right time to win a concession. Following the substantial discovery of gas in the country in 2010, there have been delays in legislation, movements of project owners and a division of the undertaking

into various parts and areas.

Yet what's certain is that there are vast resources in the ground and incremental steps will help to unlock the potential of this area. According to Jayson Cleaver, Managing Director of KAEFER in Africa, "this project is very much a KAEFER LIFT2023 strategic initiative. The world is desperate for clean energy. Though by no means ideal, LNG is a necessary step in the energy transition away from carbon. Our work in the field means that we can provide not just profitable growth, but also play a part in transitioning to a more sustainable future."

"We are collaborating with our colleagues across the KAEFER world, and thus really well placed to make a global success of the project. It will not be easy, but it's truly exciting and a great opportunity to extend our KAEFER offering and our innovative solutions to Africa. We can leverage our extensive LNG know-how and deliver a competitive edge," Cleaver exclaims.

On your marks, get set, go.

The KAEFER team in Africa is no stranger to rolling up their sleeves. Having already successfully worked in Mozambique in the past, and with successful mega projects such as the Medupi Power Station in Southern Africa under its belt,

KAEFER can profit from its local reputation and a strong project team and company culture.

There is a great deal of opportunity in Mozambique and recent efforts have been focussed on developing supply chains, qualifying vendors, creating partnerships and training. The Mozambique entity is already fully incorporated but will host an opening event in April 2021.

The primary aim is to participate in the onshore gasification facility works, however other secondary capital project opportunities exist in the LNG space supported by existing and prospective offshoots.

It's an exciting prospect, yet there is always an element of having to roll the dice on a project like this. Thankfully, the amount of preparation and planning will surely mean that the odds are stacked firmly in KAEFER's favour.



"It's truly exciting and a great opportunity to extend our KAEFER offering to Africa."

Jayson Cleaver, CEO KAEFER in Africa

Global KAEFER projects 2020

All around the world, we work on projects that really matter. Not just to our clients but also to us and our colleagues. We take pride in the work that we do and the fact that we're known throughout the globe for being the company you can rely on when a project really counts.



Australia

Project: Hydromet Portfolio – Lasta Filter 3 Installation

Owner: BHP Group Ltd.

Client: BHP Billiton Olympic Dam Corp Pty Ltd.

Executing Company: KAEFER Integrated Services Ltd.

Services Executed: Structural, Mechanical, Piping, Electrical, Commissioning and Instrumentation works, Civil works, Scaffolding

Man-hours: 79,947

The team of KAEFER in Australia has been providing various structural, mechanical, piping, electrical and instrumentation upgrades in the Hydromet area at Olympic Dam in Roxby Downs. Works started in December 2019 and were finished in October 2020.



Austria

Project: MSD Krems

Owner: MSD Animal Health Danube Biotech GmbH

Executing Company: KAEFER GmbH Austria

Services Executed: Interior Outfitting, Passive Fire Protection

Employees on site: 20

MSD is a member of Merck Group and a producer of animal health care products. KAEFER executed the full range of interior outfitting services like dry walls, ceilings, painting, tiles, floors, door-systems, metal works as well as passive fire protection from 2018 to 2020 in different stages of expansion in the production facility near Vienna.



Bahrain

Project: Bahrain LNG Import Terminal Project

Owner: Bahrain LNG

Client: GS Engineering & Construction Corp.

Executing Company: KAEFER Bahrain Securities WLL

Services Executed: Insulation, Passive Fire Protection

Man-hours: 196,860

The Bahrain LNG import terminal comprises a floating storage unit, an offshore LNG receiving jetty and breakwater, an adjacent regasification platform, subsea gas pipelines from the platform to shore, an onshore gas receiving facility, and an onshore nitrogen production facility. It was a premiere for KAEFER in Bahrain to execute its key services on an offshore platform during its construction phase. The team performed intumescent fireproofing of the main LNG pipe rack structures as well as insulation activities of lines of trestle and loading areas, including cryogenic insulation.



Belgium

Project: Insulation C3 Splitter New PDH Antwerp

Owner: Borealis

Executing Company: KAEFER België NV

Services Executed: Insulation, Scaffolding

Employees on site: 35

One of the largest equipment ever delivered to the Port of Antwerp in one piece by ship for Borealis' propane dehydrogenation plant (PDH) in Killo, Belgium. The propylene splitter is a distillation column to split propane from propylene. With a length of 105 metres, a width of 10 metres and a weight of 1,600 tonnes, the splitter is an important element of Borealis' new plant and will eventually define the location's skyline. The plant will have a targeted annual production capacity of 750 kilotons p.a., making it one of the largest facilities in the world. Production is expected to start by the end of 2022.



Canada

Project: Cenovus Christina Lake Construction Work Package 1 & 2

Owner: Cenovus Energy Inc.

Executing Company: KAEFER Integrated Services Ltd.

Services Executed: Aluminum Cladding, Insulation

Man-hours: 32,800

KAEFER in Canada has historically had a strong relationship with Cenovus at Foster Creek for providing pipeline insulation needs. In 2019, we were given an opportunity to complete 17,569 LM of pipeline insulation for their expansion projects over a 1-year period. KAEFER has leveraged this opportunity to foster a stronger relationship with Cenovus, with KAEFER providing technical solutions for heat conservation and technical specification changes for future planned projects.



China

Project: LNG Canada
Owner: Shell Canada Energy
Client: CFHI ModuleYard
Executing Company: KAEFER Insulation (Shanghai) Co., Ltd. & KAEFER Integrated Services Ltd.
Services Executed: Pre-Insulation of Pipework
Employees on site: 50

The team of KAEFER in China worked closely together with their colleagues of KAEFER in Australia on the factory pre-insulation of jetty and run down lines for modules destined for the LNG Canada project.



Finland

Project: 'Mardi Gras'
Owner: Carnival Corporation
Client: Meyer Turku
Executing Company: KAEFER Oy
Services Executed: Interior Outfitting (steel to steel turnkey delivery)
Man-hours: 90,000

Carnival is launching a brand-new ship in 2021 with a familiar name: Mardi Gras™. This ship introduces six themed areas packed with brand-new experiences for eating, drinking and spectacularly getting down to fun. KAEFER in Finland was responsible for interior outfitting areas at Carnival's new flagship and the largest contract in 2020.



France

Project: Structural reinforcement section 3 on EDF Gravelines
Owner: EDF
Executing Company: KAEFER WANNER SAS
Services Executed: Scaffolding

EDF's Gravelines power station is located on the North Sea coast, at an equal distance from Dunkirk and Calais. It is the largest nuclear power plant in Western Europe, both in terms of production capacity and number of reactors. KAEFER WANNER is executing scaffolding works with a dimension of 28m in length, 14m in width and 34m in height. A total of 200 tons of material are being moved.



Germany - Construction

Project: Neuer Kanzlerplatz, Bonn
Owner: Art Invest Real Estate
Executing Company: KAEFER Construction GmbH
Services Executed: Interior Outfitting
Man-hours: approx. 110,000

The team of KAEFER Construction is involved in the complex newbuild of a high-rise building with 27 floors as well as two low-rise buildings in Bonn. Being responsible for complex interior outfitting including screed, terrazzo, system floors, tiles, drywall, painter, plaster, flooring, the execution is planned to be finished until August 2021.



Germany - Industry

Project: Pisa
Owner: Evonik Industries Marl
Executing Company: KAEFER Industrie GmbH
Services Executed: Heat and Cold Insulation
Man-hours: 83,000

Evonik is building a new plant complex for the high-performance plastic polyamide 12. Polyamide 12 is needed in automotive engineering, oil and gas pipelines and 3D printing. KAEFER executed heat and cold insulation in a short time frame while keeping safety as well as quality standards at the highest level.



Germany – Shipbuilding

Project: 'Odyssey of the Seas'
Owner: Royal Caribbean International
Client: Meyer Werft
Executing Company: KAEFER Schiffsausbau GmbH
Services Executed: Interior Outfitting
Man-hours: 25,000

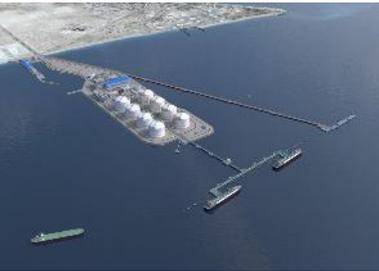
The team of KAEFER Schiffsausbau in Germany was awarded with interior outfitting of the newbuilt cruise ship's theatre, casino as well as medical center.



Indonesia

Project: Tangguh LNG Expansion
Owner: BP
Client: CSTS (Chiyoda, SAIPEM, Triparta, SEA partnership)
Executing Company: PT KAEFER
Services Executed: Material Supply, Passive Fire Protection, Refractory
Man-hours: 32,800

KAEFER in Indonesia is carrying out passive fire protection and refractory material installation in West Papua. Tangguh LNG is a unitized development of six gas fields and started production in 2009. It is now operating at design capacity with work currently ongoing to expand the plant through the addition of a third train.



Kuwait

Project: Al-Zour LNG Import Terminal Project
Owner: Kuwait Integrated Petroleum Industries Company (KIPIC)
Executing Company: KAEFER Kuwait General Trading & Contracting Co. WLL
Services Executed: Passive Fire Protection
Man-hours: 364,000

KAEFER in Kuwait is executing passive fire protection for the steel structures at the top of eight LNG storage tanks at 45m to 60m height. Each LNG storage tank under construction has a capacity of 225,000 cubic metres. KAEFER's services include providing scaffolding to execute the 24,000 square metres of passive fire protection works at 70 meters height at its highest.



Lithuania

Project: Vilnius Combined Heat and Power Plant (VKJ)
Owner: Vilniaus kogeneracinė jėgainė, UAB
Executing Company: KAEFER UAB
Services Executed: Insulation, Scaffolding
Employees on site: 50 workers/month on average

The new combined heat and power plant in Vilnius will be able to produce about 40% of the heat centrally supplied to Vilnius. The built construction is expected to be finished by the end of 2020. KAEFER in Lithuania is responsible for the design, delivery and installation of insulation as well as the electric heating system for technological & auxiliary pipelines and devices. Furthermore, the team is performing scaffolding works.



Luxembourg

Project: TYVEK L8
Owner: DuPont de Nemours
Executing Company: KAEFER Luxembourg S.à.r.l.
Services Executed: Scaffolding
Man-hours: 30,000

The scaffolding works at TYVEK L8 represent the biggest industrial project for KAEFER in Luxembourg since its foundation. Scaffolds, heat shrinkable tarpaulins, handrailing - in a perfect Health & Safety environment, even during the pandemic and its strong constraints - are some of the key topics for this exciting project.



Malaysia

Project: Melaka Refinery Diesel Euro 5
Owner: Petronas
Client: Hyundai Engineering Malaysia Sdn Bhd.
Executing Company: KAEFER (Malaysia) Sdn Bhd.
Services Executed: Insulation, Refractory, Scaffolding
Man-hours: 164,110

KAEFER in Malaysia has been performing insulation, refractory and scaffolding works for the Melaka refinery for our client Hyundai. The entire project was executed as a LEAN project, including a LEAN fabrication yard and scaffolding warehouse, resulting in better efficiency through continuous improvement of existing processes.



The Netherlands

Project: Zeeland Refinery Turnaround 2020
Owner: Total, Lukoil
Executing Company: KAEFER Nederland B.V.
Services Executed: Asbestos Removal, Insulation, Scaffolding
Man-hours: 130,000

The large, plant-wide turnaround was executed despite of the pandemic. This caused for an adjusted execution in terms of Health & Safety regulations. The scope of more than 150,000 m³ of scaffolding as well as insulation and asbestos removal services were achieved by a dedicated and motivated team.



Peru

Project: Talara Refinery Modernisation

Owner: PETROPERU

Client: Técnicas Reunidas (refinery) & COBRA (auxiliary plants)

Executing Company: KAEFER KOSTEC S.A.C.

Services Executed: Electric Tracing, Passive Fire Protection, Scaffolding, Surface Protection, Thermal Insulation

Man-hours: 1,000,000

KAEFER's international approach to the Talara project delivered significant productivity improvements in PFB, thermal insulation and scaffolding. The commitment shown by everyone on the team, whether from Peru, Spain, Brazil or Germany, has led to additional contracts at Talara.



Poland

Project: Żerań Power Plant

Owner: PGNiG TERMIKA S.A.

Executing Company: KAEFER S.A.

Services Executed: Thermal insulation

Man-hours: 20,500

The Żerań power plant is one of the largest cogeneration plants in Poland. Located in Warsaw, it is the second largest power plant in the Polish capital in terms of heat production. KAEFER in Poland has applied almost 10,000 square metres of thermal insulation on pipelines in the newly built CCGT unit Żerań with 497 MW.



Qatar

Project: Call-off Contract at QP Refining Operations Areas

Owner: Qatar Petroleum

Executing Company: KAEFER LLC

Services Executed: Access, Scaffolding

Man-hours: 1,190,500

This project represents the biggest scaffolding maintenance contract for KAEFER in Qatar to date. It is also the first LEAN maintenance project to be carried out in the Middle East at KAEFER. The team has seen a substantial increase in productivity by applying LEAN. KAEFER in Qatar looks forward to demonstrating their clients the value of LEAN in maintenance projects in other projects to come.



Saudi Arabia

Project: Haradh & Hawiyah Field Gas Compression Project

Owner: Saudi Aramco

Client: Técnicas Reunidas

Executing Company: KAEFER Saudi Arabia

Services Executed: Insulation, Passive Fire Protection

Man-hours: 212,000

The Haradh & Hawiyah Field Gas Compression Project is located in the south of Saudi Arabia's Ghawar oil and gas field, the world's largest onshore oil field. The project consists of nine gas compression units in different locations. With all units being approx. 100 kilometres apart, planning and logistics play a crucial role in this project.



South Africa

Project: Eskom Power Station Tutuka

Owner: Eskom

Executing Company: KAEFER Thermal Contracting Services (PTY) LTD.

Services Executed: Scaffolding, Removal of Insulation

Man-hours without LTI: 5,517,976

Tutuka is the Zulu word for progress. Since its completion in 1996, the Tutuka power station is feeding energy into Eskom's 765 kV extra high voltage system. The six boiler/turbine unit giant contributes 3,600 MW supplied to consumers and industries throughout the country. KAEFER in South Africa is delivering supply, erection & dismantling of scaffolding including removal & replacement of insulation materials based on defects and scopes provided by Eskom within its maintenance and outage contract.



Spain

Project: Avante 2200 corvettes (5 units)
Owner: Royal Saudi Naval Forces
Client: Navantia
Executing Company: KAEFER Servicios Industriales SAU
Services Executed: Structural Insulation
Man-hours: 22,140 each

This first construction made for the Royal Saudi Naval Forces is part of a series of 5 corvettes. KAEFER in Spain is putting an emphasis on continuous improvement in this project. LEAN initiatives applied throughout the construction of each unit will ensure the continuous improvement of processes. The team is excited about this opportunity to enter new markets and to provide their services to customers.



Sweden

Project: Repair after fire
Client: Borealis
Executing Company: KAEFER AB
Services Executed: Insulation, Scaffolding
Employees on site: 70

Right before summer holidays, client Borealis got hit by a big fire on one of its sites. Luckily, no one was harmed. The damages required a lot of work for two of our disciplines on site, insulation and scaffolding. KAEFER in Sweden was happy to help their customer get his facility up and running quickly.



Thailand

Project: Johan Sverdrup P2 Topside EPC (MSF)
Owner: Equinor
Client: AIBEL (Thailand) Limited
Executing Company: KAEFER Engineering (Thailand) Ltd
Services Executed: Interior Outfitting
Employees on site: 120

KAEFER in Thailand is carrying out interior outfitting for Equinor's Johan Sverdrup platform on Aibel's yard in Thailand. Services executed include supply & installation of dry wall panels, raised access floor, suspended ceiling, insulation and technical lining for steel deck and bulkhead and other related works. With this project, KAEFER in Thailand is broadening its range of services in architectural works and is developing further skills for future projects.



Norway

Project: Martin Linge Hook-up
Owner: Equinor
Client: Rosenberg Worley
Executing Company: KAEFER Energy
Services Executed: Insulation, Scaffolding, Surface Protection, HVAC, Interior outfitting
Man-hours: 1.7 million

The North Sea Martin Linge field is located 42 kilometres west of Oseberg. Equinor became the operator of the Martin Linge field in 2018 and installed four large modules. A comprehensive hook-up and completion job are currently being done at the field. Around 650 people are at work offshore at any time (rotation scheme) preparing the Martin Linge platform for production. KAEFER Energy is performing numerous services for the platform to a greater extent than planned originally both in volume and time.



Oman

Project: Coke Calcining Plant
Owner: Sanvira Carbon (FZC) LLC
Executing Company: KAEFER Insulation LLC
Services Executed: Refractory Works
Employees on site: 350

Sanvira Carbon's coke calcining plant will be able to produce 500,000MT of calcined petroleum coke per year once the first phase is complete and will cater to Oman's aluminum industry, amongst others in the region. The facility will also feature a power plant able to produce up to 24MW of electricity through internally generated steam. This is the first project of its kind for KAEFER in Oman. More than 18,000 tonnes of brick lining inside eight vertical shaft kilns will be executed with more than 500 employees at its peak within a challenging schedule of five months.



United Arab Emirates

Project: Crude Flexibility Project
Owner: ADNOC Refining, Ruwais
Client: SAMSUNG ENGINEERING
Executing Company: KAEFER LLC
Services Executed: Hot Insulation, Scaffolding
Man-hours: 928,000

The Crude Flexibility Project is an ongoing mega project in the United Arab Emirates. KAEFER's activities are located in two regions, the Green Field and the Brown Field. As the pipelines are placed on pipe racks, almost 80% of the scope of work involves straight lines, with lesser numbers of fittings. The KAEFER team is carrying out 169,000 square metres of hot insulation including prior scaffolding works required (volume of 74,000 cubic metres).



United Kingdom & Ireland

Project: Hinkley Point C - Inner containment liners surface protection
Owner: EDF
Executing Company: KAEFER Ltd.
Services Executed: Access, Surface Protection
Man-hours: 150,000

Hinkley Point C is the first of a new generation of UK nuclear power stations and is the largest construction project in Europe. KAEFER in UK & Ireland are undertaking high specification, specialist surface protection on nuclear protection components. This is the first project in a series of coating activities that KAEFER will undertake during construction of the nuclear island.



United States of America

Project: Cameron LNG
Owner: Cameron LNG
Client: CCJV
Executing Company: KAEFER LLC, USA (through KAEFER LandCoast Insulation, LLC, USA)
Services Executed: Cold Insulation
Man-hours: 93,500

The Cameron LNG liquefaction export project is a €8 billion facility with a projected export capability of 12 million tonnes p.a. Phase 1 includes three trains and all three trains have been producing LNG since May 2020. KAEFER performed the fabrication, installation and insulation of the valve and flange boxes for train 2 and train 3.

Career Paths at KAEFER

You never know which way it's going to go.

The career paths at KAEFER are as diverse as the people who follow them. What they all have in common though, is a focus on personal and professional development and a variety of experiences around the world.

Rafael Bittencourt Machado



The road to success passes through education

Just one month after starting at RIP Serviços Industriais - a KAEFER company - in Brazil, the project manager quit, and Rafael Machado was offered the job. Never a stranger to rising to a challenge, Rafael accepted and his career at KAEFER blossomed from there. He is currently CEO at KAEFER in Canada.

That's the short version. But the longer story involves Rafael's passion for education. While working at RIP, he started studying for an engineering degree, taking classes in the evenings. It took him five years of hard work and he managed to graduate in 2012. That wasn't the end of the story, however. In 2019 he started working on his MBA, which is currently in progress. Rafael greatly values the possibility to study while working. "If I

could have started my academic career earlier, I certainly would have," he explains. "KAEFER has given me the opportunity to expand my horizons and work towards my self-realisation."

The sky's the limit for Rafael and he is certain to continue challenging himself and embracing all of the twists and turns his career path will take.

Ian Carter



My career at KAEFER quite literally took off

When Ian Carter moved 'Down Under' from the UK, he wasn't quite prepared for the amount of time he would spend in the air. "From never flying anywhere in my previous role I was flying somewhere every week, normally somewhere remote and dusty," he says. Far-away places are in the nature of Ian's work as LNG Solutions General Manager in Perth, Western Australia.

There's clearly an aviation theme to Ian's career, as it started on an aircraft carrier stripping the old blue asbestos insulation as a summer job. Over 40 years later, he's still in the industry, having worked in sales, contract management, estimation and gained experience in dockyards, nuclear power, coal and gas fired power stations and large-scale oil refineries.

Ian values the opportunities KAEFER has given him to travel the world and work with a very diverse group of people. For him, a successful career is about “enjoying your work and the people you work with”. And perhaps spending the odd hour with your head up in the clouds.

Petra Hoffmann



Working with a force of nature

In many ways, Petra Hoffmann and KAEFER have grown together. She started as an assistant in construction and then left the office world behind to work in the field as a Project Leader in tunnel protection. That suits her well as she is passionate about the hands-on element of being where the action is.

Having spent over 20 years in the company, Petra feels intertwined not just with KAEFER, but also with the people she’s worked with. “It’s a strong connection and it’s very important to listen to the people you work with so you can learn from each other and improve every day,” she says. Petra is a team player through and through, regardless of whether she’s interacting with colleagues at the

office or being amongst a bunch of guys on the construction site.

Everything she tackles, she does with passion and she never forgets the human element, even for the most technical projects. When it comes to her work ethic, she has earned a reputation as a force of nature. That’s quite handy when her work involves major projects that tunnel through some of the toughest natural challenges.

Paul Grant



Always climbing the ladder

Paul Grant is the UK and Ireland’s Scaffolding Asset Manager and Corporate Access Manager, so he’s no stranger to ascending a ladder. Yet his career has taken him up quite a few different rungs, having worked in India, Saudi Arabia and various countries in the Middle East. He even has an organic farm in Northern Thailand that he hopes will one day be self-sustainable.

Unsurprisingly from his career path, multiculturalism and variety is one of the things he values most. “KAEFER has a unique diversity of people and industry services that they offer globally. This leads to opportunities for everyone in the business,” he

says.

Paul is proud to have contributed towards making the scaffolding industry a safer place to work. Yet his path has also seen the odd twist, changing from scaffolding contract management to asset management late in his career. That didn't faze him, though, because, as he says: "you can always teach an old dog new tricks."

Jonathan Leyland



You can steer things in any direction you want

Jonathan Leyland is sure that digital is the way to go. From introducing a 5D design service to working on innovation and digitalisation, he has moved the Scaffolding and Access department at KAEFER in the UK and Ireland forward into an exciting new future.

He greatly values the opportunities he has been able to take advantage of, including the Junior Leadership Programme. "It was a life changing

experience," Jonathan says. "With the full backing of management, I have been able to develop the department, which has ultimately led to the new role of Corporate Access Engineer, which is what I am now, in addition to working as the Design Manager for UK and Ireland."

For Jonathan, success comes from knowing you have improved in the roles you've worked in and supported and helped those around you. "And most of all," he says, "having enjoyed every minute."

Vijay Kumar



The power of positive thinking moves you forward

Vijay Kumar, General Manager Operations at KAEFER in Thailand, is an optimist. He believes that if a team focusses on working positively, responsibly and full of mutual support, success will come from itself.

Vijay joined KAEFER in Qatar in 2004 as an Estimation Engineer and throughout his career, he has worked on major LPG and LNG projects in the

Middle East region, eventually helping to establish KAEFER in Kuwait and winning their first major project. He was then able to develop his operational skills, providing support when the Middle East region was merged with Southeast Asia. He is now based in Thailand and in addition to being General Manager, is also responsible for the support of estimation and procurement for Malaysia and Vietnam.

For Vijay, he values the support from top management and is grateful for the change and development he has seen in his career. "We should never be scared of change in terms of locations and new responsibilities as they can bring new opportunities as well," he says.

René Wenzel



My path was never straightforward. That's exactly what I love about it.

René Wenzel wasn't even sure if he wanted to work for KAEFER. He had just been made redundant and applied to many different places. Having already

started in another job, he received a reply from KAEFER and decided to quit and take a chance.

We can see that kind of spontaneity throughout René's career. And that's precisely what he values: "I never had a 'five-year plan' or anything like that, everything was unstructured," he says. "I do things in a flexible way and even if I chose the same path twice, it might lead to a different destination."

René has been to several interesting places with KAEFER, starting in Germany and then taking an opportunity to work in Australia, followed by a stint in Turku, Finland. Throughout that time, he has been exposed to various different industries and honed his leadership skills in the Junior Leadership Programme. Most of all, however, he has valued the chance to fail and embrace, learn and grow from the experience. "Everything is an opportunity," he says. We'll be interested to see where his path takes him next.

Going the extra mile for a good cause

Venuslauf 2020

On the 20th of September, hundreds of KAEFER employees around the world took part in the “Venuslauf” (Venus run) to cycle, walk or run for cancer charities. The idea was to collectively cover the distance to the planet Venus and every kilometre travelled raised money for the good cause.

KAEFER people and their families in 21 countries covered an incredible 11,971 kilometres, raising more than 20,000 Euros, showing the world our KAEFER family spirit.



800 participants



from 21 countries



11,971 km covered



20,800 Euros donated

Corporate Innovation & Technical Excellence

Leave it to the experts

Great minds may well think alike. But what happens when you bring diversity of experience and intellect together to come up with exciting new ideas?

There's theory and there's practice. Both are equally important when it comes to developing new and innovative solutions to technical challenges. That's what makes KAEFER's expert networks so special – there are people who excel in both areas and, unique to the company, there are opportunities to perform practical tests in dedicated laboratories as well.

KAEFER's Corporate Innovation and Technical Excellence (CIE) department is responsible for organising and leading the meeting of experts from around the organisation. The goal is to develop, evaluate and promote so-called Best Applicable Technology (BAT). This helps KAEFER achieve technological leadership and provide clients with innovative solutions. It works not by demanding innovation at all times from everyone, but rather by creating a culture where ideas are nurtured, and creativity is fostered. The experts are encouraged to share knowledge,

scout for new technology and trends and engage in exchanges with their colleagues.

Mind over matter

That's the theory, but what does it mean in practice? Sometimes the simplest ideas have the greatest impact. On the Mission River bridge refurbishment project in Australia, a clever bit of engineering devised by the expert network led to substantial material savings. By upgrading existing sandblasting machines to eliminate waste, it was possible to save tens of thousands of Euros in costs for the entire project. This was only possible thanks to the involvement of team members in the expert meetings and approaching the challenge from as many different angles as possible.

Another example is in liquified natural gas (LNG). The pipes that transport LNG to engines as fuel or for processing are extremely cold. -163 degrees centigrade to be precise. This means that ice can form in critical locations where there are moving parts, such as valves, for example. To counteract this, the expert team developed a solution that was as simple as it was brilliant: as the pipes are housed in places with normal ambient temperatures, with a trick the environment was used to stop the freeze around the areas where it matters. This is a solution that works as well on

a cruise ship as it does in a processing facility and brings great value to clients.

Going beyond technology, there can be benefits to productivity by using the expert network as well. The Al Ghanim insulation project in Kuwait was a prime example, demonstrating a perfect interaction of LEAN and technical excellence. This combined approach was able to reduce the number of man hours per square metre of insulation fitted from 4.9 to 2.1 in a matter of three months. It was achieved by collectively discussing and implementing an action plan that optimised technical specifications and streamlined working processes on site to make them more efficient.

Isn't it great when things just work?

"Now that the expert group has actually become a group it will be easier to call a co-expert or write an e-mail to ask for help or advice. I would not have done this before," said one insulation expert. A fire protection expert found that the network "contributes to the effect of eliminating borders and functioning as one". A surface protection expert said that the meetings "increase my ability to gain experience and knowledge in fields where my country has "weaknesses" and increase efficiency."

This anonymous feedback was gathered from across the organisation and goes to show that the concept works and brings about the desired benefits.

Head of Innovation and Technical Excellence Thomas-Peter Wilk is pleased with the progress the expert group has made, “we try to solve things with ingenuity and intelligence rather than simply throwing money at a challenge,” he says. “Also, it’s about acknowledging what doesn’t work as much as it is about praising the projects that did work. It can take a lot of courage to report things that didn’t run particularly well, but I think we now have a

culture in which we can learn from our mistakes and use the insights to do better.”

Yes, we can

There are currently 83 experts, nominated by their respective Managing Directors, across the areas of insulation, surface protection, passive fire protection, access technology and non-destructive testing. They’ve become close-knit and trusting, with a collaborative ethos. They may not currently be able to meet up face-to-face, but that doesn’t stop them from working together to find ground-breaking technology and new ideas. There’s a positivity to exploring

what’s possible and beneficial for the future. KAEFER’s very own group of experts takes this spirit to heart and will be the first to tell you so.



Investing in high level training by **KAEFER WANNER** in France

The art of scaffolding and insulation

Can scaffolding be beautiful? France is well known around the world for its artisanal skills. What happens when they apply this talent to erecting structures?

In France, substantial civil engineering structures, such as bridges, railway crossings, tunnels, canals or dams are called 'ouvrages d'art'. They're considered 'art' because their design and construction involve knowledge and experience in addition to theory. And that is the art of the engineer.

In many respects, scaffolding can be an art as well. KAEFER WANNER knows this detailed and delicate work well and, in addition to its well-known services including industrial scaffolding, has been making headway on getting into scaffolding for 'ouvrages d'art' in France since 2011. It has been a long road, as KAEFER WANNER has a comparatively small presence in the marketplace and does different work than the classical industry players. Yet the opportunities were worth pursuing for KAEFER WANNER, not just from a business point of view, but also in terms of showcasing their competence in scaffolding.

Accessible artistry

Another particular area of access solutions that

requires exceptional skill is using ropes. The nature of the work is getting into hard-to-reach places and there's an art to doing that as well. It's a challenge getting to these areas in accordance with safety rules that are as strict as they are specific to carrying out work at height. KAEFER WANNER representatives took advantage of the company's synergies by travelling to KAEFER in Newcastle, UK, to profit from their knowledge and apply that in France. That fateful journey led to the establishment of a KAEFER WANNER rope access division in 2019. Now the company can offer clients a single point of contact for all kinds of access solutions.

The rope access experts of the 'Nucléaire Sud Est' region demonstrated best practice to new recruits during an internal evaluation session before being sent on training. One of the specialists responsible for quality and risk prevention was particularly grateful to the insights provided. "The instructors were second to none, both in terms of their pedagogical skills as well as their technical abilities," he says. "They helped our aspiring climbers keep their feet on the ground and focussed on safety at all times. We're looking forward to the next stage of development."

The visionaries of the future

In addition to KAEFER WANNER's push into civil engineering and rope access, the company has invested in academies to foster and nurture future talent. Believe it or not, there are no professional training courses for insulation or scaffolding available in France. That's why KAEFER WANNER has created its own:



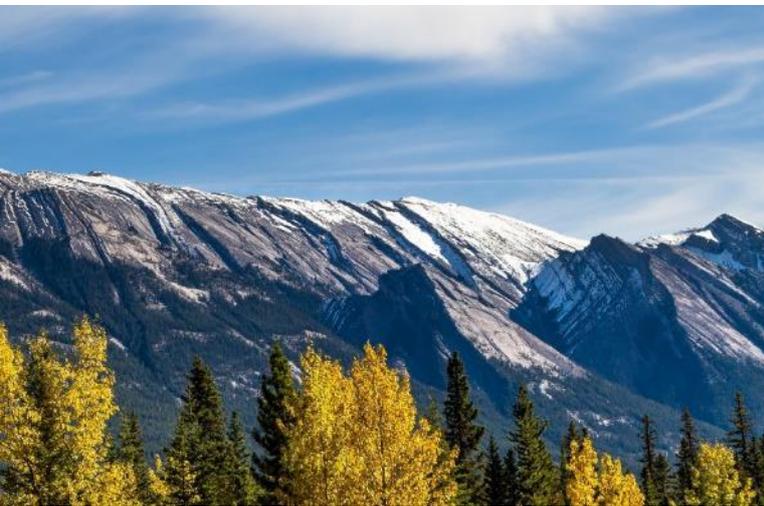
the Académie Calo that specialises in insulation and the Académie Échaf, which teaches scaffolding. Around 200 people are trained each year and the programmes are ideal to teach both existing and new employees a range of skills. Other companies have followed the example and set up their own insulation academies, but KAEFER WANNER is the only one to offer scaffolding training.



LNG projects in Canada

Connecting with the 'People of the Snow'

It's cold and it snows a lot in remote parts of Northwest Canada. But underneath the pristine white landscape lies a wealth of natural treasure. How can a balance be found between the needs of the local people and the rapid pace of industrial development in the area?



When it comes to working in remote parts of the world, it's not quite the same as a day in the office. You have to get to know the territory and form a connection with the land and its people.

Kitimat, on the North Coast of Canada's British Columbia, is a small municipality surrounded by wilderness, mountains and dense forests. It is also the home of the Kitsumkalum, Gitxaala and Haisla ('People of the Snow' in their own language), who have occupied these lands for over 9,000 years.

Forging a connection with the First Nation people and building a partnership with them is a substantial factor in the sustainable and equitable exploitation of the area's natural gas deposits.

There's cold, then there's LNG cold.

Canada may be known for its cold weather, but when it comes to liquified natural gas (LNG), the numbers are on a completely different level: -163 degrees centigrade. That's the temperature natural gas must be cooled down to in order to become liquid.

Adjusting to even slightly sub-zero outdoor temperatures was a challenge for Rafael Machado, Chief Executive Officer at KAEFER Canada, as he originally hails from a much warmer part of the world: Brazil. Yet that has proven to be beneficial in terms of his interaction with the local indigenous community. "I've learned a lot about respect for the land from the First Nations communities," Machado explains "we have similar rituals in Brazil and the fact that I am an outsider in this remote part of Canada also allows me to have a different kind of connection with the First Nation people as they perceive me as a kindred spirit."

KAEFER Canada's indigenous policy stipulates that the company needs to understand First Nations culture and work towards mitigating the impact of projects on their communities. Furthermore, KAEFER endeavours to employ a certain percentage of First Nations workers and contribute to the local community by helping to build schools and hospitals and providing healthcare.

Forging new paths for Canadian LNG

The community is set to grow substantially in the future, as Kitimat is the centre of Canada's new LNG boom. Billions of dollars are being invested into a new terminal for the liquefaction, storage and loading of LNG, which will be exported around the world. With its experience and expertise in cryogenic insulation, as well as its modular pre-insulation system, KAEFER is well positioned to play a key part in this new and exciting project.

We've developed a system where we perform pre-insulation at our facilities in China. These so-called modules' are completely pre-fabricated and can be the size of a small power station – up to 10,000 tonnes. We then load them onto ships and transport them to an application destination where they are then interconnected and ready to go," explains Ian Carter from the LNG Competence Centre in Perth, Western Australia. "Our system is proven technology and we know that it works on the basis of our experience here in Australia and other locations, such as Papua New Guinea, for example. This specialist system is ideal for LNG Canada as well."

Rafael Machado agrees, "one of the unique challenges in the Canadian LNG market is logistics, since the natural gas is often found in remote, difficult to reach areas, like in the Montney Formation, which is one of the largest known gas resources in the world. Liquefaction and processing at Kitimat for further transport by sea is a major step towards establishing an export market for Canadian gas. Our technology can help make this possible and more efficient."

Striking the right balance

LNG is a rapidly expanding industry in North America, not least as a result of its lower environmental impact when compared with other fossil fuels. This will become increasingly important in future exploration and exploitation, as well as the necessity to balance large-scale industrial projects with the needs of local communities and indigenous peoples.

"This land has so much to give and we need to respect it as much as we respect the people who have called it their home for generations," Machado says. "But the path is clear and beneficial for all if we take opportunities together and go into the future with optimism."

Health & Safety in the Middle East

Creating a safety culture is paying off

People from all over the world come to the Middle East to work on tremendous projects. That makes safety a key priority, as well as a challenge to overcome.

There's big, then there's big in the Middle East. The industrial projects in this part of the world often boast dozens of superlatives. And when employees from different cultures speaking many different languages come together in oftentimes extremely hot, humid and dusty places, safety on site can indeed be a challenge. On top of that, people are working at height, in confined spaces or braving other physical challenges on a daily basis. That's where a

deeply rooted safety culture comes in as the glue that keeps everything together.

Health and safety goes beyond ensuring that employees are not adversely affected physically. As many team members come for extended work contracts, this often means being away from their families for long periods of time in remote areas. That's why it's important to focus on mental health as well. From 'camp uncles' that people could always talk to one-to-one, cinema evenings and fitness programmes to dinners with management and yoga programmes, health and safety is looked at holistically and proactively.

Safety from the ground up and the top down

Under the leadership of CEO and Regional Director of KAEFER in the Middle East, Ramneek Datt, management has regulated

safety norms across the projects in the region and developed safety leadership in line management. On sites, the workforce was empowered to raise issues and concerns in safety committees, which went a long way in creating a culture of openness and transparency. Then there was the CHSE Safety Culture Training Programme aimed at line management and local management. In addition to raising awareness and fostering safety at managerial level, it has led to a trickle-down effect and was supported by a variety of safety awareness campaigns, such as COVID-19 related programmes, water drinking initiatives and mental health and sports programmes.

This has paid off, resulting in many safety awards from clients and, to name just one example, KAEFER in Saudi Arabia has managed 50 million Lost Time Incident Frequency-free working hours in 2020.



SAFETY PERFORMANCE IN THE MIDDLE EAST



156.9 Mio safe man-hours achieved!



This has paid off, resulting in many safety awards from clients and, to name just one example, KAEFER in Saudi Arabia has managed 51 million Lost Time Incident Frequency-free working hours in 2020.

The safety culture in the Middle East and at KAEFER in the region has improved substantially in the last several years. Much of this is down to the concerted effort made to get the entire organisation to work towards vision ZERO. It's an ambitious target, yet when health and safety is looked at holistically and integrated into the company culture, it can become second nature. And the people working not just in the Middle East, but throughout the organisation are better off as a result.



Passive fire protection

Safety is the best policy

A new client, a fresh approach and a focus on safety. KAEFER in Spain tackles the cost of insurance at the Sines refinery in Portugal.



It's always good to have an insurance policy. This applies as much to the cars we drive and houses we live in as it does to major industrial facilities. Galp Energia's Sines refinery in Portugal is one of the largest refineries in Europe, with an annual processing capacity of 10.8mt. You'd imagine they'd need to have quite a bit of insurance to cover that.

Every policy can be optimised and that's where KAEFER comes in. Having proven competence in these types of projects, the KAEFER team in Spain was contracted to provide the passive fire protection of cable trays and steel structures for the Sines plant. The aim was to reduce the insurance premium by investing €4 million into the new safety system.



Slimming down with LEAN

Vermiculite-based concrete was used for the steel structure and intumescent coating was applied to the cable trays. This is regular good practice when it comes to the passive fire protection on this kind of project. What's special about KAEFER's approach was using LEAN. With a different technique, the number of times the coating was sprayed onto the cable trays was reduced. The thickness remained the same, so this was a substantial increase in efficiency. Furthermore, the time needed to perform the job was reduced as well. Looking for areas in which improvements can be made was an integral part of this project and is a fundamental part of LEAN.

Making inroads

Galp Energia is a new client for KAEFER in Spain. On top of that, the Sines project is located in Portugal, an area in which the Spanish team had not yet gathered experience. By ensuring that the right subcontractors were used and applying LEAN principles, KAEFER in Spain has satisfied the client and gained a foothold in the area. This goes to show that LEAN works as well in principle as it does in practice.



A personal perspective on sustainability

Sustain the ability to make a difference

Sustainability is a mentality that should pervade everything we do. KAEFER's Head of Corporate Sustainability & Communication Francisca Gorgodian reflects upon the company's commitment.



The year was 2008. Al Gore's 'An Inconvenient Truth' was a little over a year old and Leonardo Di Caprio's "The 11th Hour" was still making headlines. The UN Global Compact was hitting its stride and more and more large corporations were realising the need to focus on themes and issues that went beyond the yearly balance sheet. This was also the year I was approached by our then CEO to build the sustainability department at KAEFER. To quote one of our Norwegian colleagues: "I never did this before, but it sounds like fun!"

At KAEFER, we're fortunate enough to be able to put sustainability at the top of the agenda. This was as true back then as it is now. On the one hand, we can champion the benefits of our services for energy efficiency. And on the other, we expect our people around the world to embrace sustainability as a way of working, acting and living.

We've been promoting this for the last 12 years and we're certainly on the right track, but much more can be done. Our business has expanded from where we started more than 100 years ago and we've begun to introduce more and more services that prolong the lifetime of industrial facilities, for example. We also have a Corporate Innovation and Technical Excellence Department that focusses on developing and finding new and smarter technologies to safeguard all kinds of assets. These are just a few examples, but it clearly shows that sustainability is a core element of our business model and we're grateful for this to be an area where we can earn our money.

We've also worked on our internal sustainability strategy and increased our efforts to become a more sustainable company. Our Sustainability Report has been published for several years and we have used it to showcase examples of how our sustainable approach works all over the KAEFER world.

Today, we can say that we are at a tipping point. Our clients are developing new policies related to sustainability and as part of their supply chains, we are slowly but steadily expected to commit to specific targets. On a regulatory level, the European Union is working hard to mitigate the impact of climate change and to reduce carbon footprints. At the same time, the UN is renewing its focus on its Sustainability Development Goals.

The pressure to act sustainably is coming from all sides and we see this as a positive development. That's why earlier this year, we decided to approach sustainability from an even more strategic point of view. What can KAEFER do to become more sustainable? What are the material issues we need to address? What do we need to do on a group level and what do we need to leave to the country entities? What do our clients expect from us? What can we ask our supply chain to deliver? These and many other questions are being openly discussed

on an ongoing basis in our Sustainability Working Group.

We've just started to surf the second big sustainability wave and we still have a long way to go. Chances are, we will encounter challenges along the way that must be overcome. But our commitment is strong, and we are certain that KAEFER will make its mark as a company that truly cares about the environment as well as the social and governance elements of sustainability.

To support our work and engage in stakeholder dialogue, please participate in the next stakeholder survey in January 2020. All details will be published on our website and social media channels and we look forward to receiving your input. Together we can forge a path to a better and more sustainable future.



Project report Belgium

Even the biggest projects have the smallest nooks and crannies.

When one of the world's largest single pieces of chemical engineering arrives by ship to be transported further by land, it's bound to raise a few eyebrows and block a few streets on its way. With all eyes on this mammoth project, KAEFER in Benelux knew the pressure was on.



The Borealis propane dehydrogenation plant in Antwerp, Belgium is one of the largest engineering projects in Europe. One of the biggest parts of it is the splitter, which is a distillation column used for splitting propane from propylene. It is 109 metres long, 10 metres wide and was the largest appliance ever delivered to the port of Antwerp in one piece by ship.

But even such a big piece of equipment has small

areas where thermal energy can escape, leading to lower efficiency. This is exactly where KAEFER comes in. Since the company has a maintenance contract with Borealis in Europe, KAEFER was tasked with the cryogenic insulation of the new splitter.

Cutting things down to size

For the Borealis project, KAEFER used Cryogel. Compared to others, it is extraordinarily thin, requiring just two layers 2.5 centimetres wide to be effective. Normal insulation material would need to be at least 100 mm thick in these circumstances. "It brings much more efficiency," says Jan Buys, Business Unit Manager. "It gets into even the



hard-to-reach areas, meaning that we can provide better, more efficient insulation."

Given the sheer scale of the project and the ambitious timing, there was little room for error. On top of that, all eyes were on the team doing the work. "It is such a huge, high profile project that made it the talk of the town in the Antwerp chemical world," says Operations Director at KAEFER in Benelux Johan Buys.

Everyone now knows that KAEFER is insulating this tremendous piece of engineering and we're using unconventional, innovative ways to do it. But with that kind of pressure, the trick is to break the job down into manageable parts, cut things down to size and do each bit as well as we possibly can."

Lending a helping hand

The entire insulation of the splitter needed to be done in just 8 weeks. That includes the planning, organisation, scaffolding and the actual insulation work itself. For that kind of timeframe, you need good colleagues you can count on. Manpower for this project was provided by KAEFER in Lithuania who have highly skilled insulators to support this complex project. This demonstrated, once again, the benefits of collaboration within the KAEFER Group.

The Borealis project shows what is possible when KAEFER makes the most of innovative technology, detailed planning and skilled manpower. Each team needs to be able to count on the other, so that the client can count on them. When the stakes are as high as with the splitter in Antwerp, it's a strategy that works.



KAEFER's Scaffolding School in Poland

The sky is the limit

One of the keys to climbing the career ladder is education. KAEFER's school in Tarnów, Poland has now added the ultimate option for ascending to new heights.

KAEFER in Poland has been educating industrial insulation fitters, sheet metal workers and refractory workers at its school in Tarnów for 52 years. This is a facility that is, quite literally, at the peak of its game. So, how would it be possible to top the work they have already been doing? By providing training in scaffolding.

In July 2020, the Scaffolding Centre at KAEFER S.A. was certified by the Institute of Construction and Rock Mining Mechanization in Warsaw. This is the only institution in Poland that certifies the position of a scaffolding fitter. That is high praise indeed and underscores the educational centre's professional standing in Poland and beyond.

Certification allows the centre to offer courses in the assembly and dismantling of scaffolding for students of the basic vocational school as well as for other employees. This means that both students working on a three-year training course and other members of the KAEFER team in Poland can expand their horizons by gaining an additional qualification. If they pass the state examination at the end of the process, they become qualified scaffolders.



Reaching new heights

Good scaffolders are in short supply not just in Poland, but throughout Europe. In just one, in-house example, the KAEFER team in Belgium working on the Borealis project had to rely on KAEFER in Lithuania to provide support. This makes it an attractive career prospect not just for new recruits, but for seasoned staff as well.

“Developing our own qualified and certified staff is a great way to optimise results,” says Mariusz Łotowski, Vice President of KAEFER in Poland.

“We’re convinced this is the right approach and it allows us and the greater KAEFER organisation to build upon our strengths and aim higher.”

Education for collaboration

A scaffolder needs to be disciplined, composed and well aware of their responsibility for the safety of others on the construction site. They should also be fearless at height and have a good sense of balance. Not to mention the ability to work in a team.

That’s one of the great advantages not just of training as a scaffolder, but of training as a scaffolder at KAEFER. There are opportunities to work with colleagues in other countries on several national and international projects. The new qualification will make this easier and is a welcome addition to the educational centre at Tarnów – training the scaffolding talents of tomorrow.



Innovative Solutions for Scaffolders

Tomorrow's technology, today

Who wouldn't want to have superhuman strength? When it comes to physically demanding work, exoskeleton technology could potentially make that reality.

From the original 'Aliens' film to the Iron Man franchise, Hollywood has fuelled our fascination for the concept of the exoskeleton. It's mostly based on its ability to give us superhuman strength and power. Yet you'd think that with a real-life exoskeleton, the reality would be different. It's actually remarkably similar.

Modern exoskeleton systems support the human body's movement and reduce stress from lifting heavy things or moving large objects around, for example. There are two types: active and passive. Active exoskeletons have motors that support movement and passive ones use springs or expansion strips to relieve physical stress. In both cases, however, there is no exoskeleton system that is as flexible as the human body itself. They are used, rather, to support specific movements and tasks.

Helping us to reach higher

In KAEFER's case, there could be a potential benefit to using exoskeleton technology in scaffolding. A scaffolder moves several hundred kilograms of material every day. This can be very physically demanding and the potential for injury should also not be neglected. In fact, an official occupational health report for scaffolders indicates that musculoskeletal ailments are the most common diagnosis in scaffolders at 26.4%. That makes the case for exoskeleton support systems even stronger.

Back to the drawing board

Within its Junior Leadership Programme, KAEFER has performed a detailed study into the advantages and disadvantages of exoskeleton technology as well as the various use cases and differences in approach. The findings have shown that there is no one exoskeleton that covers every movement a scaffolder makes. This means that the solution would have to be flexible or used in a targeted fashion. The study also found that some movements and exoskeleton functions boost productivity (such as lifting heavy material) and others are more geared towards fostering health and safety and reducing employee downtime due to illness and injury, like jobs that require arms to be above heads, for example.

Will it support the work of tomorrow?

In any case, exoskeleton technology is an exciting development and the market is growing at an exponential rate. In 2017, investment in Europe totalled €130 million. In 2025, it's projected to reach €1.88 billion. That's an increase of over 1,000%. Yet the TRL (Technology Readiness Level) is currently too low for the highly manoeuvred movements needed in the scaffolding industry. For other, more limited work scenarios, such as in the automotive manufacturing industry, exoskeletons have already begun to make their way into workplaces.

As an innovative, forward-thinking company, KAEFER will continue to blaze the trail for new technologies to help the many scaffolders and other employees who work in physically demanding areas. Partnerships with others will also play a part, especially in terms of interacting with other companies and working with universities. With the support of an exoskeleton, physical loads can be distributed better and can make lifting or working arm overhead less stressful and demanding. Even for those with super strength.

Corporate Supply Management on Collegial Coaching

It's not magic, but sometimes it can feel that way

Information, data and insights are objective and rational things. But in the right hands, they can turn into something almost inexplicably special. Find out how Corporate Supply Management gives KAEFER people a unique edge.

When all the stars fall into alignment, a successful deal can have a magical element. Yet the path to get there is always a matter of negotiation and having the right insights. The people in the Corporate Supply Management (CSM) department know this. They also know that there are many different ways to negotiate, depending on culture, ways of doing business as well as the actual substance of the deal itself.

“It’s about having as much data on hand as possible and coupling that with effective argumentation,” says Head of CSM Tobias Sasserath. “We like to offer a kind of collegial coaching to help put our people in the best possible position and to extract the greatest benefit from their discussions.”

This also involves cultural understanding as well. “Naturally, the way people do business in the Middle East can differ from how things are done in Western Europe, to give a very basic example,” Sasserath explains. “We provide guidance and point our colleagues towards things they should consider, like what another company values, for example.”

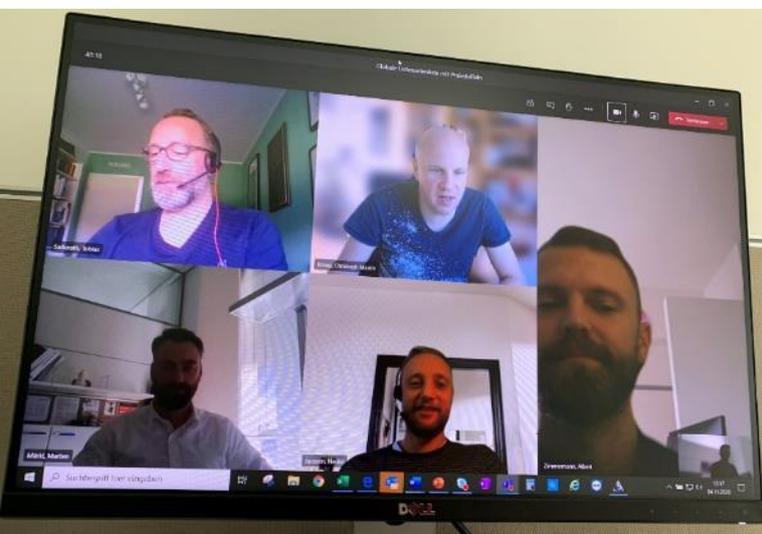
A good deal is as much a science as it is an art

Whilst there is a strong interpersonal element to effective negotiation and supply management, success often comes from the quality of the information at hand. That makes it a science. For Sasserath: “We have to be transparent in everything we do, so there’s nothing underhand happening, and our facts and figures are plain for all to see.” Acting as an information hub for KAEFER, the CSM team tries to determine when it makes sense to purchase centrally and when it doesn’t. Furthermore, they work towards finding and making the most out of synergies that exist within the organisation.

By communicating with colleagues regularly, the team can work out where certain materials are available, how they can be moved if necessary and what future demand might be in different areas. “We employ a proactive and collaborative methodology,” says Sasserath. “We can approach colleagues and provide them with conditions, prices or offers to either fulfil a current or future need. Also, we can point out if one market has already developed a successful tool that can be used effectively elsewhere.”

“The more we know, the more we can help”

Whether people use the information and insight provided by CSM or not, Sasserath is adamant that



it will help them in one way or another. “Sometimes we can point out the type of statistics or figures needed in a presentation to seal a deal. Other times we provide market data to support a decision that has already been taken. In these cases, knowledge really is power,” he says.

Nowadays, having the right information about supply and demand is more important than ever and the sharing of data as well as insights can only profit an international company such as KAEFER. Gathering and proactively sharing insights is key to ensuring that everything falls into place every single time.





Our 40-year anniversaries 2020

Congratulations on forty years!

Four decades is a long time by any measure, so we'd like to thank you for your many years of commitment and your contribution to KAEFER's success. We wish you all the best on this outstanding anniversary, which also fills us as a company with great pride.



KAEFER Montage GmbH, Germany

Thomas Biedritzki

began his training as an insulator with KAEFER in Hanover on 1 August 1980. During his long professional life, he has worked on many different construction sites around Hanover as well as for other KAEFER branches on various projects in the nuclear power plant sector. Thomas Biedritzki is a very conscientious and reliable worker. He keeps calm, even when faced with critical challenges, and always has an open ear. Known as a gifted footballer at FC Burgdorf, Thomas Biedritzki also proved his skills at the KAEFER Soccer Cup.

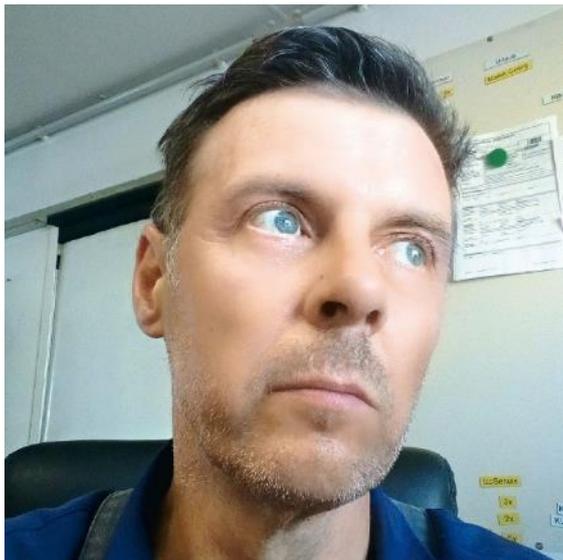


KAEFER Construction GmbH, Germany

Werner Duwe

joined the company in November 1980, initially working as a fitter for what was the acoustics department at the Lürssen shipyard. In what is today the interior fitting department in Bremen, his activities covered the whole of Germany – first as a fitter, then as a foreman, and since 1996 as project manager. Notable projects, in which he has been involved, include the complete interior fittings for the Ministry of Justice in Berlin; the technical and, in particular, acoustically very demanding work in the theatre at Goetheplatz in Bremen; as well as the interior fittings for public areas and restaurants on a 5-star cruise ship at the Lloyd shipyard in Bremerhaven. In the last 15 years, Werner Duwe has very successfully supervised the Airbus plants in Bremen and Nordenham as project manager. Known for his fair manner, he is particularly committed to the rights and duties of fitters. One of

several reasons why he is held in high regard by his colleagues and the management. For years he has been available to customers and architects in word & deed and has developed into a supporting force of the interior outfitting department in Bremen. In his free time, he enjoys deep-sea fishing in Norway and goes on motorbike tours with friends and colleagues.



KAEFER Industrie GmbH, Germany

Gerald Fankhauser

started his career at KAEFER on 25 August 1980 with a three-year apprenticeship as an insulator in Hamburg. After successfully completing his training, he worked on various construction sites, e.g. for DOW, Po-PG, UMAG HH, Beeck Feinkost, Kinetics Germany in Denmark, DEA Heide (Vacuum III), Holcim Lägerdorf, HEW Wedel Yara Brunsbüttel, Shell Heide shutdown Pyrolysis (site manager) and for a longer period for PCK Schwedt. Since 2001 Gerald Fankhauser worked at the DEA Heide, first as insulation foreman and later in the role of deputy site manager in charge of project management. Since 2005 he has been accountable for KAEFER Industrie as foreman / site manager. We value Gerald Fankhauser as a reliable employee who is highly recognised by all our colleagues and customers.



KAEFER Industrie GmbH, Germany

Lothar Frenkler

was trained as an insulator at KAEFER from 1974 to 1977. After a stopover at another company and completing his military service, he returned to KAEFER in 1980. There he initially worked on various industrial construction sites in Bremen. Lothar Frenkler has now been working as a site manager for our permanent client swb in the entire Bremen area for over 30 years. His area of responsibility includes technical surveying, coordination of the numerous individual construction sites as well as project execution and invoicing. Lothar Frenkler is reliable, helpful and is highly valued by his customers. His friendly nature makes him very popular amongst colleagues and peers.





KAEFER Industrie GmbH, Germany

Jörg Lemke

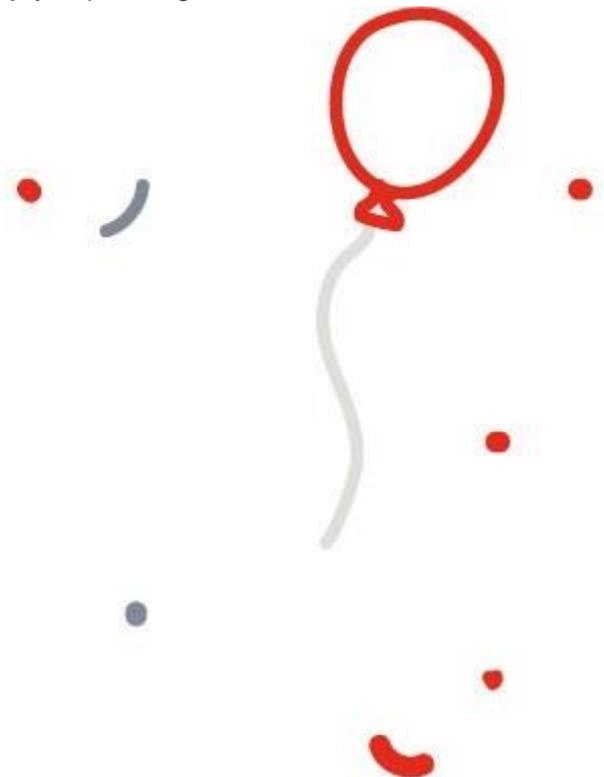
served a three-year training apprenticeship as an insulator at KAEFER Isoliertechnik GmbH & Co. KG in Hamburg starting on 25 August 1980. Upon successful completion, he was taken on as a skilled construction worker in 1983. After two years of military service he returned to KAEFER. Jörg Lemke then worked for KAEFER Industrie on various construction projects in Germany and abroad, including in the field of building services, on nuclear power plant projects and as site manager for projects at HEW Kraftwerke, Esso Flexicoker Rotterdam-Europort, NAM Badger in Emmen/NL, Nordfrucht and the Silkeborg thermal power plant, Denmark. Jörg Lemke passed his examination as works foreman in 1999 and became safety officer in 2003. Since 2005 he has been responsible as site manager at Vattenfall. Jörg Lemke is a reliable employee who is highly valued by his colleagues and customers.



KAEFER Construction AS, Norway

Ronny Løkkevik

started his career as an insulator in 1980. Over the years the company has changed its name several times until it became a part of the KAEFER family. Today Ronny Løkkevik works in the position of project manager. He always looks for the best solutions and has a very good relationship with our customers. He has even secured labour for the future introducing his son to the trade and the company. In his spare time, Ronny loves the sea and enjoys spending time on his boat.





KAEFER Energy Projects (Pty) Ltd., South Africa

Elias Thabo Moboya

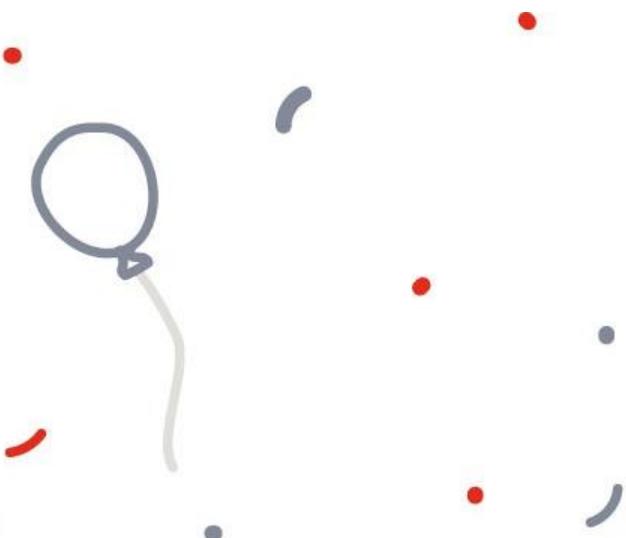
who is originally from Qwaqwa in the Free State Province, joined KAEFER in South Africa on 23 January 1980. His working life has been characterised by long-term assignments, starting at the Sasol Secunda site for ten years, followed by the works at the Johannesburg Brewery for twelve years. He then worked at the Petro SA site for three years and at the East London Mozetgas site for the following four years. Since 2014, Elias Thabo Moboya has been on another long-term project as he started working at Medupi where he is still based. Elias Thabo Moboya is married with eight children.



KAEFER Thermal Contracting Services (Pty) Ltd., South Africa

Boy Johannes Mohlala

“My journey with KAEFER started on 25 May 1980, thank you so much for this honour. I am truly humbled to be in a company of people who have inspired me, who have helped shape my thinking, who have helped me realise the potential of our profession to truly make a difference. I want to salute the South African Management and Team as well as the global team at KAEFER. The diversity of culture, styles and points of view make KAEFER people some of the greatest people I could ever wish to have as colleagues. I keep asking myself this simple question: “What have I learned on this incredible journey?” I can sum it up in three key points: Accepting responsibility, embracing change, and respecting humanity. Thank you KAEFER.”





KAEFER Energy Projects (Pty) Ltd., South Africa

Thembile Mzukwa

was 24 years old when he began working for KAEFER South Africa in 1980. The last 40 years with KAEFER have been an exciting journey for him, starting as an insulator at the Sasol 2 site and moving on to Sheet Metal Applicator in his next position. He has travelled to many places in South Africa with KAEFER, working at Phalaborwa, Eastern Cape, Butterworth, Bloemfontein, Mafikeng and Kimberley, as well as Pretoria. He is now on a long-term contract at Medupi. During his travels, Thembile Mzukwa has met a lot of people and made many friends on the different sites. As a family man, he enjoys working for KAEFER and is looking forward to many more years to come in the KAEFER family, up to his retirement. We asked Thembile Mzukwa what he likes about KAEFER and he summed it up in one word: Respect. He deeply appreciates the respectful manner in which both colleagues and customers interact with each other.



KAEFER Schiffsausbau GmbH, Germany

Hinrich Rodow

joined KAEFER in June 1980 as an insulator in the shipbuilding division. His first job was in Emden, where he worked for Nordseewerke on the frigate F122. After a stopover on various navy ships at the Lürssen shipyard in Lemwerder/Bremen, he returned to Emden, where he worked in the insulation and sheet metal cladding of walls and ceilings. He was also involved in the construction of container ships and the corvette K130 (ships 1-5). On the combat support ship (EGV) "Bonn", Hinrich Rodow became site manager for the first time in 2010. He has now been working mainly for the Hamburg branch for several years. At tkMS (former HDW Kiel) and Blohm + Voss, he runs projects on frigates and submarines acting as site manager. We appreciate Hinrich Rodow very much as a reliable and likeable colleague. He is described as a "great guy".





KAEFER Industrie GmbH, Germany

Jens Röttger

started his journey with KAEFER on 1 September 1980 when he began his apprenticeship as an insulator in Bremen. Subsequently, he worked on numerous industrial construction sites in Bremen. Longer assignments abroad as a construction or project manager in the Netherlands, Turkey and Uzbekistan, as well as assignments on major shutdowns such as BP Lingen show his far-reaching commitment for KAEFER. In 2002 he successfully completed a course as works foreman. When dealing with colleagues and customers he is always friendly and courteous. He takes on management tasks, is proactive and works constructively in the execution of projects.



KAEFER Industrie GmbH, Germany

Thomas Wanschura

has worked for KAEFER for 40 years, starting with an apprenticeship as an insulator on 1 September 1980. Upon successful completion, he was on assignments on various industrial construction sites both in the Bremen area and in the Netherlands. He has been working on the permanent construction site INBEV Brewery for more than 20 years – currently in the position of site manager. Thomas Wanschura is highly appreciated by our customer for his technical competence in the area of industrial insulation and fire protection. He is calm, matter of fact, courteous and very thorough in carrying out his activities.

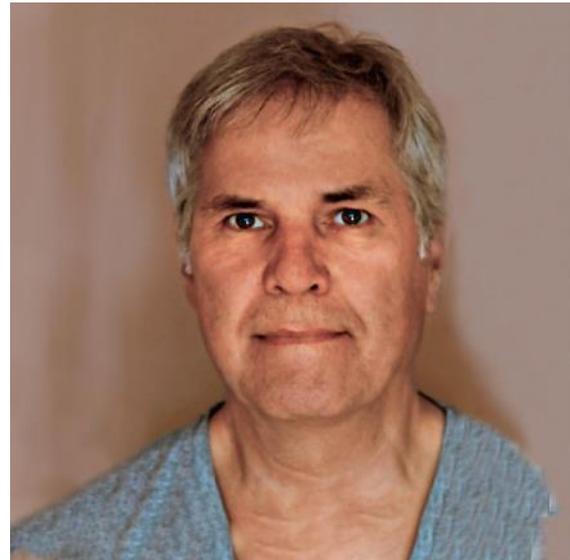




KAEFER S.A., Poland

Janusz Wiśniewski

has been affiliated with KAEFER S.A. since 1980, when he started his professional career with IZOKOR-INSTAL. During his long work life, he was on numerous assignments in Poland and abroad. In Poland, Janusz Wiśniewski worked on various plants, such as paper mills in Kwidzyn, a refinery in Gdańsk, chemical plants in Police and ORLEN in Płock. His work also took him to Iraq, Kuwait, Norway, Belgium and the Netherlands - where he is now in charge of the position Branch Director. Janusz Wiśniewski has a wife, Edyta, and two daughters.



KAEFER Industrie GmbH, Germany

Thomas Wylegala

was trained as an insulator at our competitor G+H from 1974 to 1977. After successfully completing his apprenticeship, Thomas Wylegala did his military service and then worked for various insulation companies until Mr. "Kuddel" Beermann introduced him to KAEFER in 1980. Thomas Wylegala first joined as an insulator and on 1 April 2001 became an insulation foreman. He was deputy site manager at DEA Grasbrook and handled several smaller construction projects. For example, he worked on the Norddeutsche Affinerie, DEA Grasbrook, Sasol WAX Plant 1 + 2 projects and on the Shell project shutdown. Thomas Wylegala is a reliable employee who is highly appreciated by his colleagues and our customers.



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