

Join us to
make real
what matters



Careers at Siemens Gamesa Renewable Energy

SIEMENS Gamesa
RENEWABLE ENERGY

Contents

4

Realizing sustainable development goals with Siemens Gamesa

6

Technology

Energy Engineer working with mechanical design

8

Technology

A continually developing career at Siemens Gamesa

10

Manufacturing and Innovation

International manufacturing via teamwork

13

Manufacturing and Innovation

An organisation full of great colleagues

14

Service: Risk Assessment

Complex mathematics to drive future wind power

16

Service: Risk Assessment

Journey throughout a turbine's life cycle

17

Service: Risk Assessment

Jeanette built her career from scratch

18

Procurement

Linking strategy with operations

20

Project Management

Bridging product design to product production

22

Project Management: Finance

Finance is an enabler for project realization

24

Construction

A search for talent in a busy industry

26

Construction

Engineering, from construction to technical support and 3D simulations

28

Construction

The place where your new challenge begins







Realizing sustainable development goals with Siemens Gamesa

We are a company built around sustainable and renewable energy, with our turbines' capacity ensuring that more than 233 million tons of CO₂ emissions are saved each year. Yet, our commitment goes beyond the production of renewable energy; we join the global pursuit of the United Nations Sustainable Development Goals.

Through employee initiatives, we have developed projects to fight poverty and hunger, provide clean water and sanitation, and promote climate action. At Siemens Gamesa, we have also launched initiatives around the world and in our own company to promote:

- Good health and well-being
- Quality education
- Diversity
- And, of course, affordable clean energy

While promoting climate action, we set an example for others to follow by becoming carbon neutral. Working at Siemens Gamesa means advancing towards a sustainable future in a work environment fueled by passion, committed to diversity, full of opportunities with an appreciation of work-life balance.

Energy Engineer working with mechanical design



Signe Møller had only just finished her degree in Energy Engineering, when she found work at Siemens Gamesa, and she experienced a great amount of help and support from her new colleagues to help her settle into her role in mechanical design. She is now part of a seven-person team that designs the rear-end access for nacelles.

Signe, why did you choose to study Energy Engineering?

“You get to work with a lot of different things during this degree. We were introduced to mechanical engineering, worked with aerodynamics, control dynamics, and a fundamental understanding of electrical engineering. So, you aren’t just locked into one role as an Energy Engineer. Of course, it is also a degree that focuses on the environment, and we worked a lot with turbines. I was interested in this industry from the beginning, which also led me to apply for a position at Siemens Gamesa.”

Signe Møller

- Comes from Esbjerg, Denmark
- Studied Energy Engineering
- Got a job at Siemens Gamesa in 2018
- Works as a Mechanical Design Engineer

Signe Møller finds it amazing to develop parts for the turbine and see the working prototype.



What was it like, starting as a new graduate at Siemens Gamesa?

“There are a lot of new things to learn – the IT systems alone had a learning curve. I didn’t feel as though I contributed much for the first few months here.”

Were you expected to contribute much to projects from day one?

“No. As a graduate, you aren’t expected to know everything from the first day. I went through a bunch of courses about the programs I was going to be using and about the company, its processes, and how they work. While completing the courses, I got a small task that I could practice my skills on – a small part of an actual project. When in doubt of something, I had a Technical Project Manager, responsible for the tasks, who I could ask for guidance.

From the beginning, I was also given a buddy. The buddy helped me with all the little questions that you have when starting in a major company. And if the buddy didn’t know the answer to a question, he would know who to ask.

It makes you feel they take good care of you from your first day here.”

And what does daily life look like now that you are part of a team?

“Well, as part of a team, I help design components for some of the newest turbines at Siemens Gamesa. Specifically, the platforms and structures that lead to the nacelle’s rear access.

It is interesting because we get to collaborate with a lot of different people outside the team as well. We talk to HSE people about the safety measures of our designs – and they also help with documentation. We also visit the people in production, where they actually build our designs – we speak about the production of a specific design and what I, for instance, can do to make production faster and easier.”

Your favorite part of the job?

“Seeing your designs materialize in the workshop. It’s a great feeling. You learn a lot from the process, even making mistakes and correcting them. That part of the process is probably my favorite, but in general my job, developing parts for the turbine up until we have a working prototype, is pretty amazing.”

A continually developing career at Siemens Gamesa



Siemens Gamesa employees who decide to try out other industries or companies tend to come back to Siemens Gamesa. Rasmus Holm arrived at Siemens in 2007 as a Civil Engineer with experience from bridge construction. He wished to work in the renewables industry, where the development pace is fast. After nine years at Siemens, advancing from Loads Engineer to Team Lead and Deputy Chief Engineer, Rasmus decided to try something different – working as a Senior Engineer at DTU (Denmark’s Technical University). But why did he come back to Siemens Gamesa? Rasmus explained it in terms of technology readiness level.

Technology readiness level and Siemens Gamesa

“NASA invented the idea of technology readiness levels to formalize concrete ways of evaluating how mature a piece of tech is. The scale goes from 1 to 9. For instance, a scientific paper that describes ideas and principles is low on the scale, like a 1.”

“The scientific fields, including DTU, usually work on the readiness levels between 1 and 3. At level 6, you have a demonstrated prototype. It’s from this stage and onwards I found that I prefer working, which is why I returned to Siemens Gamesa,” Rasmus says.

He goes on to explain how the Siemens Gamesa Technology department works on product development across multiple readiness levels, but in his specific department, Direct Drive, they work from level 6 and develop the product to its final, commission-ready level.

A company for many types of people

Having worked both at a university and at Siemens Gamesa, Rasmus believes the similarities between the two make Siemens Gamesa an attractive option for students: “Development here is close to what students are used to at university in terms of development procedures for engineers.

We are, for example, seeing more and more people at university switching to working with Python for setting up their calculations, and that same tendency is seen here at Siemens Gamesa.”



Rasmus Holm prefers working on technology readiness level 6 and upwards.

Moreover, Rasmus believes that there are many good reasons to work for Siemens Gamesa: “I like the pace of working here. In my role, I am technically responsible for the development of direct drive products, taking them from the conceptual design stage to final process validation. We do this quite quickly; developing a product over the course of one year may not sound fast, but it is, relatively speaking. I also think it is worth mentioning that not all departments are equally full of changes, and Siemens Gamesa accommodates different types of people in various departments. I just found that I preferred the periodically hectic pace.”

International manufacturing via teamwork





Carsten Madsen, Anders Helbo, Maiken Enevoldsen and Martin La Cour Søborg are all involved in developing the next generation wind turbines at the Manufacturing & Innovation Center.

Why are so many candidates attracted to Siemens Gamesa?

Through years of experience in the company, Anders and Martin offer great insight into where the company is heading and why it is a special place to work.

Head of Platform, Anders Helbo: “I believe the attraction is that we serve a higher purpose by creating renewable energy and because you get to work with some of the brightest minds in the industry. The sheer size of the product and the technologies involved are impressive. We constantly push the boundaries for physical size and efficiency to lower the cost of energy and thereby drive the industry.”

Plant Manager, Onshore & Offshore Operations, Martin La Cour Søborg: “Siemens Gamesa is a market leader and has proven itself quite exceptional at keeping its product portfolio up to date and competitive. We can accelerate the development of new products, which is partly how we stay in front in offshore wind power. Our ability to innovate and our position in the market attracts many of our candidates.”

Anders and Martin have both spent the past ten years at Siemens Gamesa and have therefore seen the company evolve remarkably over time. The company has gone from a relatively localized company in Brande, Denmark, to a huge, multinational corporation with offices and production on most continents. And they expect this growth to continue: “The installed offshore base is estimated to grow with a factor of five until 2030,” Anders Helbo clarifies. →



“At Siemens Gamesa, you get to work with some of the brightest minds in the industry,” says Anders Helbo, Head of Platform.



To meet increased demand around the world, the Manufacturing and Innovation Centre, MIC, is part of the answer for Siemens Gamesa.

The launchpad for new products

Globalization and demand for offshore wind turbines required one of two product launch approaches, according to Anders and Martin. Either complete local office setups with a parallel level of competencies are needed around the world, or you centralize the competencies for company and product launch in one place and have high-quality production facilities locally to execute according to demand. MIC is Siemens Gamesa’s model for that second, centralized, approach.

Anders explains that, in short, “MIC is truly cross-functional, global, and lean. We centered it around the core scope of safely launching new products with the best-in-class quality, all around the world.” In terms of product development, he goes on to explain how it closely integrates Procurement, Operations, Sales & Projects, and Quality: “These functions are all placed at a single location with an optimized process landscape to ensure fast integration of lessons learned.”

But why have production facilities around the world? Would it not be simpler to produce everything in one place, and then ship out to the world from there? Maybe, but as Martin

explains, this is not a possibility anymore: “When bidding for the rights to provide the turbines for an offshore wind farm, it can win bids to also provide factories locally. Our company is so solid that we can finance the production facilities ourselves, and we have the competencies in-house necessary to plan and build them. These facilities may simply need to produce select parts, assemble the main parts, or possibly sustain the entire production – this comes down to customer requirements and the facility’s distance from our other facilities around the world. In MIC, we don’t just scope and establish the local production, we also follow the production of the product at first to ensure a smooth start.”

Pushing technological boundaries with Siemens Gamesa’s MIC

With its cross-functional approach, MIC is, therefore, the product development accelerator that helps the company ensure a short time-to-market.

“We keep pushing the technological boundary while of course managing the risk,” says Anders, and continues: “If you want to work at a company that is experiencing major growth, want to push the limits of innovative technology that you develop with a hands-on approach, and work with some of the sharpest minds in the business, then this is the right place for you.”

An organization full of great colleagues

Maiken Enevoldsen has worked with the production of turbines for Siemens Gamesa since 2015. Her career at the company began as a temp, which is quite common for the people working in production and assembly. A majority of operators in production start working at Siemens Gamesa as temps through other companies and are then kept on as full-time Siemens Gamesa employees. Maiken started in the department responsible for painting the nacelles and became a Team Lead just about six months later.

Why are so many candidates attracted to Siemens

The role of Team Lead gave Maiken the chance to help many of the new employees settle in and teach them the ropes. Maiken enjoys instructing others and helping them excel at their tasks – a skill that comes in handy again and again, not least when she joins 18 other people on a three-month trip to China. Maiken explains: “The production of some of our onshore turbines is moving to China. Alongside my colleagues, I have been working with the assembly of these turbines for the past few years, and we have an exciting task on our hands; teaching our Chinese colleagues how to assemble them. I enjoy teaching, so I am very much looking forward to this opportunity in 2021. It is also a major vote of confidence from management to be chosen for the task, which naturally feels great. To be specific, I will be teaching them how to assemble the A3 electrical cabinet in one of our turbines.”

Maiken and the team are in China for three months, and at the end of that period their Chinese colleagues should be ready to run the production the same way they have in Denmark.

What makes you happy?

Maiken does not work as a Team Lead anymore; she is very happy to be an operator, working on the turbines. She has worked on different parts of the turbine, previously she worked on the nacelle, she now works on the rotor house of the generator. The operators



Maiken Enevoldsen is a true believer in knowledge-sharing.

work in small teams, which is enjoyable when you have great colleagues, and you have set tasks to perform.

“We are never in doubt of who does what throughout the day – I really like this. Our work is based on the work instructions with detailed specifications,” Maiken adds.

Sometimes Maiken and her colleagues spot areas during assembly where there is room for improvement or changes. These ideas are passed on to the Team Lead and the engineers responsible, and the engineers will then look at the potential for optimizations.

“Sometimes these changes are implemented and sometimes they aren’t. If they aren’t implemented, I think the engineers are generally very good at paying us a visit to explain why changes couldn’t be made,” Maiken says.

Is Siemens Gamesa a good place to work?

“I think so,” replies Maiken. “It’s a great place to work actually, you have some amazing colleagues here. And if you are passionate about something, you can get very far within the organization by following those passions.”

Complex mathematics to drive future wind power



Bodil Finnerup stresses the importance of employees being empowered to make decisions.



Bodil Finnerup is closing in on her 10th anniversary at Siemens Gamesa, but back when she graduated with a Master of Science in Engineering, she would not necessarily have guessed a career in wind power was waiting. Having specialized in applied mathematics and having spent a few years teaching, Bodil started her career in Siemens Gamesa working in a cross-functional project team with the main objective to estimate warranty provisions based on turbine reliability.

Models and calculations led the way

The initial task was both technical, with development of reliability models for the turbine portfolio, but also commercial, with the assessment of related warranty provisions. The calculations were intended to make Siemens Gamesa more competitive in the market by informing decision makers on how much to set

aside for warranty provisions on component level, but also to highlight areas for further optimization. This development has continued over the past 10 years, where Bodil is now heading the Risk Modelling and Assessment team.

A great team of specialists

“The team consists of 15 highly skilled specialists who are either engineers or hold degrees in mathematics, physics or statistics. We spend a lot of time on making predictive models and supporting the organization with product optimization and risk evaluations, related to power and availability performance as well as reliability. The statistical methods have continuously developed over time and, as an example, we are now using Bayesian Hierarchical methods to predict the reliability of our installed fleet. Historically, we also spent a lot of time on data gathering and filtering, but



over the recent years we built our own databases with the main purpose of ensuring the correct data quality in the models – an effort which could not have been made without skilled data scientists in the team.”

“Today there is most definitely a need for people who can work with data and apply mathematics, physics, or statistics in the company,” Bodil says.

“The business is continuously growing and hence there is a massive potential in the solutions we can develop.”

The significance of being a manager

Bodil does not spend her time developing the models anymore. As a manager, a lot of time is spent communicating between her department and others and ensuring that the team is motivated, informed,

and confident to perform the work. She also helps her employees when they face challenges, and it is a major advantage that Bodil started her career performing similar tasks when she first came to Siemens Gamesa. It is a role that suits Bodil, and she is happy with her progression through the company.

Trust in the team is important, and Bodil empowers her employees to make decisions within their areas of responsibility. This is also a part of the company culture, so that no matter where you are from and where you work within the company, you are encouraged to be a thought leader in your area of work and to continuously strive for improving the business.

Journey throughout a turbine's life cycle

Anne Katrine Brink Karner-Gotfredsen has journeyed through Siemens Gamesa from a position in IT implementation to managing risk analysis & warranties – a journey that began in 2010, right after she finished university.

Forging her own path

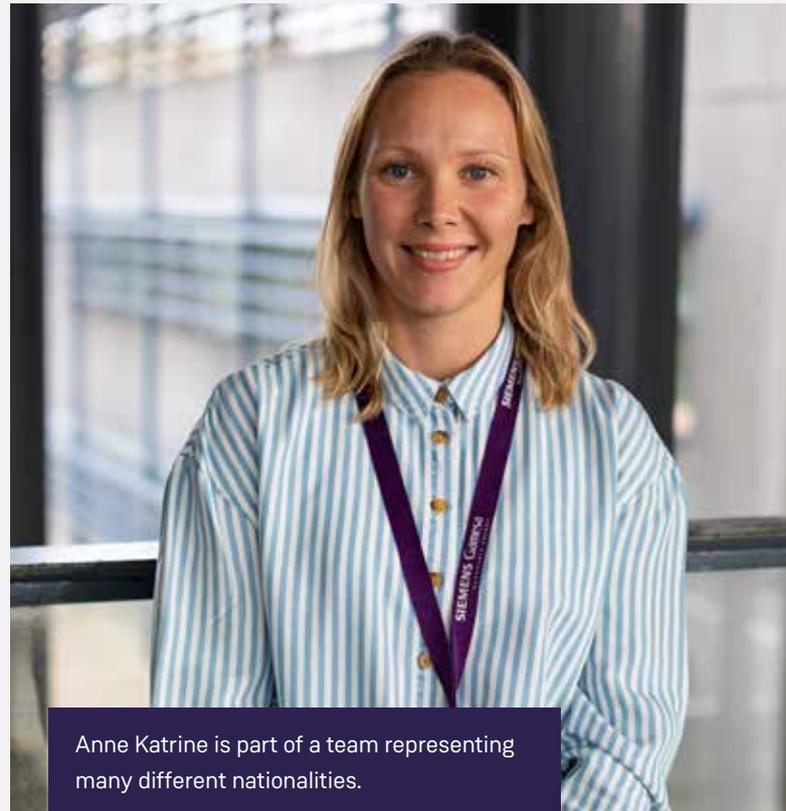
“I first met a Siemens Gamesa representative at a job fair and via that got into talks with employees in recruiting. After some back and forth negotiations, I gained employment in what at that time was simply called Engineering. It was my responsibility to implement a new project management system called Primavera for projects. I worked on this for a couple of years maybe, and then another couple of years with project portfolio management systems and processes. By that time, I had had enough of support work and wanted more direct influence in developing core areas of the company's business,” Anne Katrine says.

To reach this goal, Anne Katrine looked to use the network that she had built within Siemens Gamesa and changed her career trajectory. She knew some project managers that worked on risk and warranty projects and asked them if they could use a Junior Project Manager. Luckily, they could, and Anne Katrine moved from the Engineering department to Product Integrity (PI) & Warranty Management (VM) where she has been ever since. Anne Katrine is no longer a Junior Project Manager, but has risen through the ranks to become a Program Manager.

Working with warranties

“In my role as Program Manager for Blades, I am responsible for blades on Siemens Gamesa's fleet of wind turbines, which includes keeping an eye on our warranties, risk factors, and the provisions we set aside to handle warranty cases.

“The goal here is to avoid major, costly surprises in terms of blade defects and failures on Siemens Gamesa's products throughout their lifetime, and instead identify potential challenges before they materialize and deal with them accordingly. How they are handled and how they are avoided



Anne Katrine is part of a team representing many different nationalities.

in future platforms is exactly what Anne Katrine and her colleagues are responsible for in their daily work.

A diverse department

“The PI & WM department is rather technical focused and we have a 50/50 split of men and women working here. Moreover, we have a high percentage of female managers. This equal split simply makes working here very exciting.

We are a small department of about 70 people, but we span many different nationalities. It is super interesting, but you also grow so accustomed to the diversity that you stop thinking about where people originate from – as we're just daily colleagues and all a part of the Siemens Gamesa family,” Anne Katrine says.

Jeanette built her career from scratch

Jeanette Buur has an education as a trade and wholesale assistant, which in fact had very little to do with her first position at Siemens Gamesa or her following advancement. Jeanette shares her career journey with us.

Opportunities present themselves

“I started off in a maternity leave position working with central planning – planning travels for technicians. That was in 2006. In 2007, the company wanted to establish its own Internal Travels department, and I was asked if I wanted to be a part of this – an offer I accepted. So, I worked there, getting courses to become a travel agent as well as general internal courses. I worked there until 2012, when the department was outsourced.

What happened next was very much thanks to good connections. It was an advantage that I had worked a lot with

the technicians, that I had good working relations with them, and a lot of mutual respect. One of my previous technician colleagues asked me to join him as an assistant in the Service Engineering for Blades department. Here I performed all sorts of assistant tasks for the engineers. A team lead soon joined this department – and he turned out to be pivotal to my future career.

Working towards project management

I was placed in the Career Support Program to help shape my career moving forward. We figured out I should work towards project management.

I was therefore given the chance to become a member of the project team working on the Leading Edge Erosion (LEE) project within the PI & Warranty Management department. The project manager was extremely accomplished and I learned a ton from her while working with the development part of her LEE project. I led the Process Design Development track. I also pursued an internal project management course, PM4.

When the project manager went on maternity leave, I was awarded the responsibility for the LEE project, including the development of new solutions. Edge erosion is a problem across the entire industry - all manufacturers are working on this challenge. However, we have already implemented solutions in the factories and in Service Engineering. Alongside my responsibilities, I am also participating in the Project Management C-level course and plan to be certified as a project manager by 2021.

Belief is key

The belief in me, the belief that I could perform the role of project manager, even though I don't have official credentials, has meant a lot to me. Having managers who will actively help you develop your career really makes a world of difference. Of course it requires you to speak up and express what you would like to work with. And you should speak up – because managers will want to invest in your growth as it will, in turn, ultimately benefit the company's growth.”



The Career Support Program helped Jeanette Buur realize her wishes for career development.

Linking strategy with operations

With an international background, Raphael thrives in the global work environment of Siemens Gamesa. Different cultures can have different attitudes to deadlines, for instance, and Raphael finds challenges like these are fun to solve.

It is important to find the right supplier

His work includes finding suppliers and preparing them to supply Siemens Gamesa. Ramping up suppliers in terms of their technological solutions and abilities to deliver is something Raphael is perfectly positioned to do with his engineering degree.

The advantage of processes

Moving a supplier and components through the Siemens Gamesa system requires a good eye for management and processes.

“There is a process for everything, which is great of course, as there is always a procedure for a situation and to move things forward. The challenge arises

when you are under time pressure, and this is the point where you must get a little creative in the use of your processes, but only if you know the limits of your process. You never want to escalate without good reason. Unique components can also be tricky to get through, but there is always a solution – and I enjoy finding solutions.”

Diversity in the workplace

Raphael has also found himself in a very diverse and international team, which could not suit him better, and he sees his future here.

“There are so many different positions and roles at Siemens Gamesa that I definitely see myself here ten years down the road. It is a tremendous advantage working for different departments – you get a better understanding of how different areas work and how they can support each other. I cannot stress enough the uniqueness of the opportunity to work here.”

“I enjoy working with project management, and with my engineering background I am well-equipped to help teams move forward and be more efficient.”

Raphael Knaub,
Senior Strategic Buyer,
Offshore Procurement,
enjoys finding solutions.





Bridging product design to product production



Jesper Buskov has experienced the changes in Siemens Gamesa firsthand over the past 11 years, while simultaneously developing his own career from Project Manager to Senior PMO Specialist. Not only has the company grown during the past decade, the products have grown as well. When Jesper started his career at Siemens Gamesa, the turbines produced around 3 MW – now the newest turbine can produce 14 MW. The blades have grown from around 50 meters to nearly 108 meters long. The developments in technology never cease to amaze him.

Linking many different people and functions

Jesper works in Offshore Operations Technology & Standards (TES), which he explains builds the bridge from product design to product production. The Technology & Standards organization currently has over 20 nationalities in its staff, which very well illustrates the cultural diversity benefits. Offshore Operations is continuously moving products from design and development to operational production around the globe. The Project Management Office (PMO) plays a central role here.

“As a link between many different people, functions, and backgrounds, our role in PMO is quite broad. I tend to say that we are specialists on a general level,” Jesper says. As he continues, Jesper offers a few examples of their work: “One of our tasks is to ensure transparency for management and stakeholders in terms of our product portfolio and how we are doing on resource management. We also help our project managers by improving our project frameworks. One example is that we take learnings from production facilities we already built and apply these to our project framework for future facilities. Generally, we are in touch with a lot of people on a daily basis, from management and team leads to the individuals working on the projects.”

Opportunities to develop yourself and the company

Siemens Gamesa was Jesper Buskov’s first employer after finishing his degree in Civil Engineering. His decision to stay was due in part to the challenges his job offers, the work environment and the opportunities for advancement. The latter has come from his own desire to improve and from managers



Working in a culturally diverse setting brings out so many benefits to the business and to the individual; it truly is amazing to be part of an organization of this size and feel that we are all walking in the same direction – towards the next generation of wind energy!

– Jesper Buskov

encouraging him to utilize his skills within various areas. From the beginning, Jesper attended courses on project management, and later attended conferences as well, which offered new input and inspiration. Transitioning into the Project Management Office, he took courses relevant to this type of work – but he also explains that what helps the most when starting in a new department is talking to your new colleagues and learning from them.

“Why would I recommend Siemens Gamesa as a workplace? It is exciting here. Because of our growth, there are constant changes and improvements. People here are passionate, friendly and nice. I have met great friends here,” Jesper concludes.



The development of wind technology continues to amaze Jesper Buskov.

Finance is an enabler for project realization

As a young person, starting your career in a large company such as Siemens Gamesa may seem a bit intimidating; Maciej Kmita certainly thought so. However, he quickly saw a different side to the company, and more than anything else, he sees opportunities to grow and contribute.

Tell us about your first impressions of Siemens Gamesa

“It was honestly quite intimidating coming into one of the largest companies in the world. My presumptions were that everyone would be super strict and serious, you know, long hours and a company just driven by numbers and quantity. But I quickly experienced that my assumptions were wrong. People were smiling and good at making my first days feel informal. They’ll ask how you are doing, make sure you are settling in okay – being only 19 at the time, this meant a lot.”

What do you think contributes to the company’s atmosphere?

“Well, it’s clear to see that people really enjoy working here. Many of us are drawn by some of the same values, such as contributing to improving our climate. I think diversity contributes positively as well. Our various cultures carry different behaviors that can positively affect each other. For example, Danes may sometimes not be great with small talk and maybe don’t share as much about themselves and their thoughts. But a Mexican colleague is more talkative and more direct; bringing more people into conversations, I have experienced, can improve our ability to find good solutions.”

What does your job as Commercial Project Manager entail?

“Part of my work is to consult and aid the project managers – lend them my specific expertise in driving projects from start to finish. Sometimes, this means advising on the commercial and financial matters, but at other times it entails acting as a project manager myself to ensure we reach our goals. I quite enjoy talking to the engineers, gathering information, and pushing the project forward and towards better solutions, not just technically, but also commercially.

Working with finance has changed in my opinion. People used to think of us a bit like the tax authority; either we want money from you, or you contact us because there is a problem. Now, we are more like enablers in a company such as Siemens Gamesa. We help projects get realized.

I try to be there for the engineers – they are the brains and I am the hands that can help with the finances through open conversation, dialogue, and ideas. If as an engineer you have a good idea, I am the one who can help make the idea proposal sound as appealing as possible to upper management. An example could be a project manager and a team of engineers who have found an innovative but untested solution that should work. With my guidance, we can put forward a case to ensure this idea gets implemented by first getting it tested thoroughly. I can show how the expense of testing the idea now is much cheaper than rectifying an untested idea that didn’t work later – which is why we are careful to test our products so thoroughly at Siemens Gamesa, not just because of me, but because this is the company approach. Safety comes first.”





Maciej Kmita

- From Poland, came to Denmark to study
- BSc in Economics, MSc in Finance
- Student worker at Siemens Gamesa in Controlling & Finance
- Now works as a Commercial Project Manager

A search for talent in a busy industry

Mikkel Krogh works in the Offshore Business Unit as Head of Equipment Engineering for Siemens Gamesa, a company he has worked at for more than 13 years.

Mikkel, could you start by telling us what the Head of Equipment Engineering does?

“Well, in simple terms, I manage five Team Leads. My time is split between being a manager to these people and following all the projects that we are responsible for, which means I also get into the nitty-gritty technical details and challenges at times to properly support the Team Leads and their teams.”

You are kept busy then?

“Very much so. We all are – it’s a busy industry that is constantly evolving. This is also why I am continually looking for new people to join the company. There is a constant need,

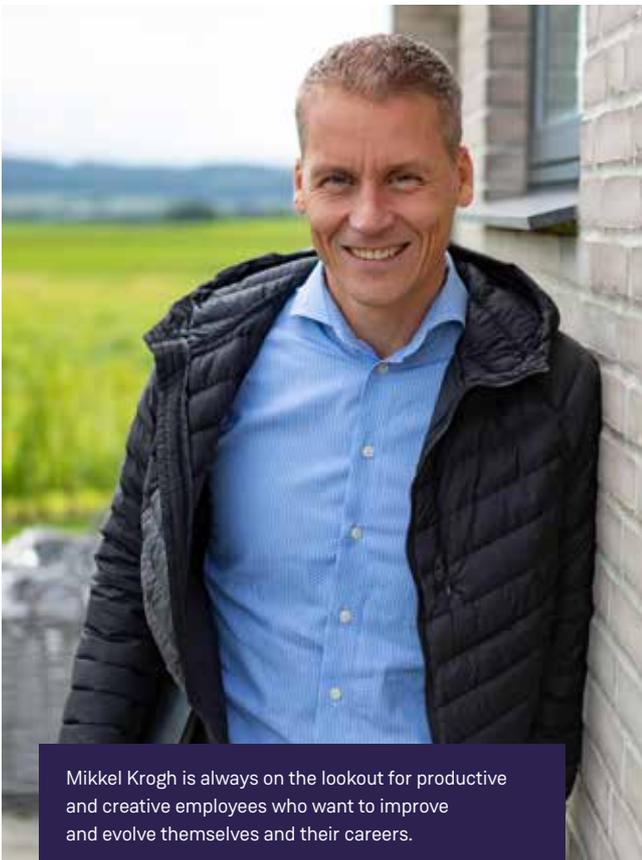
especially in my department, for productive and creative employees who want to improve and evolve themselves and their careers.”

What then can you expect, as an employee in your department?

“You will develop transportation, installation and lifting equipment. My teams are located in various places where they perform different functions.”

So, the type of work depends on your location then?

“That is correct. For instance, we have two teams in Brande, Denmark. This is where our colleagues in the Technology departments develop brand new turbines. Every newly-developed part of the turbine needs tools for lifting, transportation and installation, which must be ready when



Mikkel Krogh is always on the lookout for productive and creative employees who want to improve and evolve themselves and their careers.



customers begin ordering the turbine – we are, therefore, involved quite early in the development process. I have one team working on structural engineering and calculations and another team dedicated to the mechanical design using CAD software.

In Vejle, Denmark, we have Offshore Construction, responsible for executing our sales projects – to get the turbines to their offshore location and get them assembled. My teams support with equipment used during this execution phase. This could be equipment used at the docks, like tower frames, or special equipment required for tower and turbine assembly. I also have people in Vejle that look at the soil profiles and some who create documentation packages for Marine Warranty Surveyors regarding the sea-fastening of our equipment.”

Are all your teams located in Denmark?

“No, I also have a large team in India that we are establishing. This team is larger than the teams in Denmark, and they solve the same types of tasks as the people in both Brande and Vejle. There is a lot of interesting collaboration and alignment of work methods between the teams, and we periodically have people from India coming to Denmark to work for a time or people from Denmark going to India. This type of exchange is a great way of improving cooperation, improving our employees’ competencies, and sharing knowledge.”

Could you tell us more about the challenges a candidate will help solve at Siemens Gamesa? What makes this type of work exciting?

“Being at the front of the pack, in terms of wind turbine development, means developing products of increasing complexity and with a higher demand for precision. To be more concrete, the installation of turbines is extremely costly, not least because of the ships. For instance, if we can save just 30 minutes on performing a lift during the transportation or assembly of an offshore turbine by developing a new piece of lifting equipment, that 30 minutes per turbine makes it many times worth the investment in development. This is the reason why we are also seeing a shift towards more complex equipment generally. What we build is no longer ‘simple’ steel constructions, but machines that make use of controls, hydraulics, and the like. Complexity in development is fine if it can save time in operation.”

How would you summarize in a single sentence?

“We solve a lot of different tasks and challenges, and we are always looking for ways to improve our business and products, which means many different types of candidates and professionals can contribute and find their place in Siemens Gamesa.”





Engineering, from construction to technical support and 3D simulations

Niels Kjaer Jensen is an engineer through and through. He began working for Siemens Gamesa 20 years ago, back when the company was called Bonus Energy. He has progressed steadily throughout his tenure, but always stayed in engineering. Staying within a single area of work, such as engineering, does not mean you are short of options.

Plenty of options within the organization

“I’ve tried quite a lot of different things,” Niels says with enthusiasm. “I started out working on design and construction of the nacelle and tower – did that for quite a while, actually. Then I became Team Lead for a group of engineers in nacelle design. This was within Technology product development. Four or five years passed, and

I wanted to try something different, so I became technical support for the Procurement Department. This job included helping colleagues in Procurement when they were sourcing new suppliers. I offered a deeper technical insight and could help make sure that the suppliers we were in dialogue with had the competencies required to deliver. This was a fun job.”

“What else have I worked with? Cost-out projects, meaning reducing the cost of components. I also spent a few months in Hutchinson, Kansas, in the USA, supporting their technical department. Siemens Gamesa offers lots of options, and it’s a fun and diverse place to work. Every job is interesting and full of interesting people. You rarely get bored in my experience.”



Mehdi Zaman and Niels Kjær Jensen work with equipment for handling and installation of turbines in execution projects and equipment for transportation of lifting of wind turbine components in harbors, respectively.

Niels helps visualize solutions

Niels now works primarily with harbor logistics. His team creates 3D simulations in Siemens NX to visualize the transportation and lifting of components from the dock to the installation ships. The simulations aid in optimizing the flow of components and checking a component's clearance during a lift, for instance. Working in 3D, the team also checks component placement on the ship and the feasibility of a given order in which the components are thought to be brought onto the ship.

"We don't do the calculations for the certain lifts, but departments will come to us and ask whether the lift is



Niels Kjær Jensen creates 3D simulations to visualize lifting of components from the dock to installation ships.

possible in terms of clearance or order for example. We can see and catch more potential issues in 3D compared to 2D drawings. It's pretty cool for us, not just in my team but in many different departments, to be able to visualize planned logistics in 3D," Niels concludes.

The place where your new challenge begins



Mehdi Zaman chose to return to Siemens Gamesa.



Mehdi Zaman and Niels Kjær Jensen highly appreciate the collaborative mindset at Siemens Gamesa.

Mehdi Zaman had his first experiences with Siemens Gamesa as an external consultant – he was employed by a consultancy firm and hired by Siemens Gamesa to perform structural calculations and be the technical lead on projects. He then gained employment at a different company in the wind power industry. However, he chose to return to Siemens Gamesa – this time as an internal employee. Mehdi had reached a conclusion: this was where he really wanted to be.

Special atmosphere and special challenges

Upon his return, Mehdi quickly advanced from a position as a Mechanical Engineer to that of an Advanced Engineer. He has the role of lead engineer – to drive the equipment for handling and installation of turbines in execution projects. This includes figuring out what equipment is needed to handle an execution



project, how much can be reused from earlier turbines, what needs to be developed and constructed, as well as participation in technology road map projects for future turbines.

As to why he returned, Mehdi explains: “I came back because of the atmosphere. The way we go about our work here is very collaborative – we help each other. We all face daily challenges at work, this is the case at Siemens Gamesa as in every other company. However, here you feel certain that there are people who can and will help you resolve your challenges. In my experience, this means I have rarely felt isolated in solving problems and rarely been under unbearable pressure. It’s a great feeling, knowing you can rely on your colleagues.”

Working in Offshore

What tends to draw people to this industry is the challenge of working with cutting edge technology in a challenging field such as offshore wind turbine construction. Mehdi emphasizes the challenges of offshore development: “I love working with offshore wind power. It is an industry that just keeps growing. Six years ago, I wouldn’t have imagined the kind of output we see in today’s turbines. Siemens Gamesa is an industry leader in offshore – and why wouldn’t you want to work for the industry leader? The playing field here is simply bigger, and the complexities are growing, which really boosts your competencies and motivates you.”

“Siemens Gamesa offers an innovative and creative work environment that is dominated by positivity and ambition. I can recommend both graduates and experienced engineers to join me here at Siemens Gamesa.”

– Mehdi Zaman



Esbjerg Survey Ltd. was founded in 1975 by Master Mariner and Master of Law, LL.M., Poul Jørn Petersen.

Over the years the company has achieved a position as one of the leading independent survey companies in Denmark and has an experienced staff with a broad range of expertise.

The headquarters is located in Esbjerg, Denmark with branch offices in Shanghai and Lianyungang, China.

Our surveyors mainly operate in Europe and the Far East, but we offer our services worldwide.

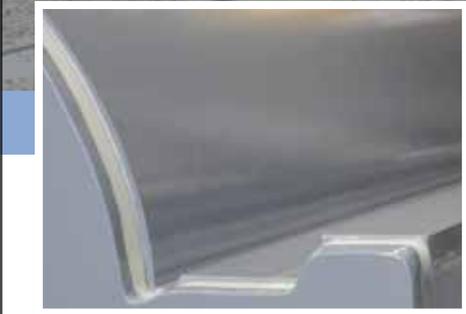
Our main activities are in the windmill industry, where we, since the beginning in the 90s, have worked out the best possible solutions for safe and efficient transports in close cooperation with manufacturers and carriers.

However, we also offer our assistance in connection with many other tasks, such as:

- Warranty Surveys on Heavy Cargo Shipments
- Issuing Guidelines for Safe Stowage
- Lashing and Securing
- Risk Assessments for Open Storage
- P & I Condition Surveys, Pre-Purchase Surveys
- Bunker and ON - OFF Hire Surveys
- Cargo Surveys
- IMCA CMID Inspections
- Tailor-made surveys according to client's requirements.

For further information regarding our activities etc., please give us a call on **+45 75 13 46 66**, send us an email on esbjerg@esbjergsurvey.dk or visit our website on www.esbjergsurvey.dk.





DENCAM COMPOSITE

Is the preferred partner when it comes to reliable and cost-effective composite tooling solutions where time-to-market plays a key role.

With many years of experience in the composite industry, skilled and competent staff and top-level quality assurance, we guarantee our customers first-class products that are extremely accurate, consistent and durable in operation.

BLADE MOULDS

Blade moulds are one of Dencam's core competencies. Our moulds are known for their high integrity, their simplicity in operations and durability. With more than 35,000 m² across 3 locations in Southern Denmark, we have the capacity to handle even the biggest projects and mould sizes for both onshore and offshore blade moulds.

CNC-MILLED MASTER PLUGS

With four 5-axis CNC milling machines, Dencam builds master plugs with extreme accuracy and speed. Due to our advanced modular production

technique, we are able to handle all sizes – also plugs for today's large offshore blade moulds.

Dencam Composite has extensive experience in production of plug and mould parts for the wind industry, with a wide array of successful projects.

- We work closely with our customers to understand their needs and find the optimal solutions.
- Among our valued customers, we appreciate the corporation with a market leader like Siemens Gamesa and the constructive and positive partnership in developing the products to supporting the continuous growth of the wind industry.
- We can deliver standardized Dencam products or supply customer-specific turn-key solutions, everything between the blade geometry to the finished blade mould – engineering and design services, welding and composite work, project management, implemented heating systems, logistic solutions, installation and service.
- Our dedicated service department offers an extensive range of services worldwide, among others mould and plug repair and renovation, measuring service, relocation, measuring and blade service. Our focus is always high quality, flexibility and time-to-market.

Modular buildings and pavilions to buy or rent

Temporary or permanent space solutions – no matter the purpose, FOCUS Moduler A/S fulfils your requirements perfectly and offers a variety of well-designed options, using high-quality and environmentally friendly materials.

APPLICATION AND USES:

- Pavilions
- Custom modular buildings
- Residence and accommodation
- Offices and administration
- Construction sites and crew cabins
- Toilets and showers, etc.



FOCUS Moduler A/S
Vandværksvej 42
DK-8960 Randers SØ

+45 87 10 90 99
info@focusmoduler.dk
www.focusmoduler.dk



Wind Power Applications: Bringing it on air!



WINDENERGIE
WIND ENERGY



VERBINDUNGSTECHNIK FÜR DIE WINDKRAFT WELTWEIT!

- Windschraubensortiment HV M12 - M72
– Fundament, Turm und Rotorblatt
- Technische Beratung, Planung und Konstruktion

FASTENING SYSTEMS FOR THE WORLDWIDE WIND POWER!

- Wind Fasteners range HV M12 - M72
– Foundation Fasteners, Tower and Rotor Blade
- Technical Support, Planning and Construction



MADE IN GERMANY

AUGUST FRIEDBERG GMBH, GELSENKIRCHEN



AUTOMOTIVE



STAHL- UND HOCHBAU
STEEL CONSTRUCTION



SPEZIALVERBINDUNGSTEILE
SPECIAL APPLICATIONS

www.august-friedberg.com

Lifting equipment, service & customized solutions

130 years
KnowHow

Based on many years of experience and KnowHow within lifting, load tests and engineering, CERTEX Danmark A/S is your safe and reliable partner and supplier of steel wire rope, lifting applications and related services.

Global standards, local service

Our long-ranged experience in the Renewable industry along with our high level of expertise in the offshore market, makes us one of Europe's strongest suppliers when it comes to lifting equipment and services for the wind industry. CERTEX Renewables Division offers products and services to support the wind industry throughout the world, while offering local presence and expertise.

We have stock and production facilities in more than 50 locations around Europe, and we are able to customize and design products exactly for your company's specific needs. CERTEX has been a leading supplier to the Renewable industry for more than 30 years and we work closely with the leading wind turbine manufacturers.

We do not compromise on Health, Safety, Environment and Quality. Our certificates:

- ISO 9001:2015 (quality)
- ISO 14001:2015 (environment)
- ISO 45001:2018 (health and safety)
- The Danish Maritime Authority (Competent person category A)
- MSA R-1970 DNV approved steel wire rope sling according to DNV 2.7-1

- Achilles certificate
- Full member of LEEA

Some of our products and services

- Design, Engineering and Production of customized lifting tools
- Cranes
- Chain, Wire Rope and Polyester Slings
- HMPE Lifting Slings
- Hoists and Trolleys
- Lifting Beams
- Loose Lifting Equipment
- Fall Arrest Equipment & Inspections
- P(F)PE Inspections
- Loose Lifting Gear Inspection
- LOLER and PUWER Inspections
- Crane Inspection
- Proof Load Testing
- Lift and Ladder Inspection
- MPI Testing
- Training and Technical Support
- Real time data Management with CertMax+
- Lifting Equipment Maintenance and Repair
- Rental Equipment



Lifting Solutions Group
Axel Johnson International

Virkelyst 17b
DK-9400 Nørresundby
Tlf.: +45 98 13 18 88

Jernholmen 43-47D
DK-2650 Hvidovre
Tlf.: +45 36 77 40 30

Olievej 4
DK-6700 Esbjerg
Tlf.: +45 75 13 08 44

CERTEX Danmark A/S
Trekanten 6-8
DK-6500 Vojens
Tlf.: +45 74 54 14 37
E-mail: info@certex.dk
www.certex.dk

BEFORE

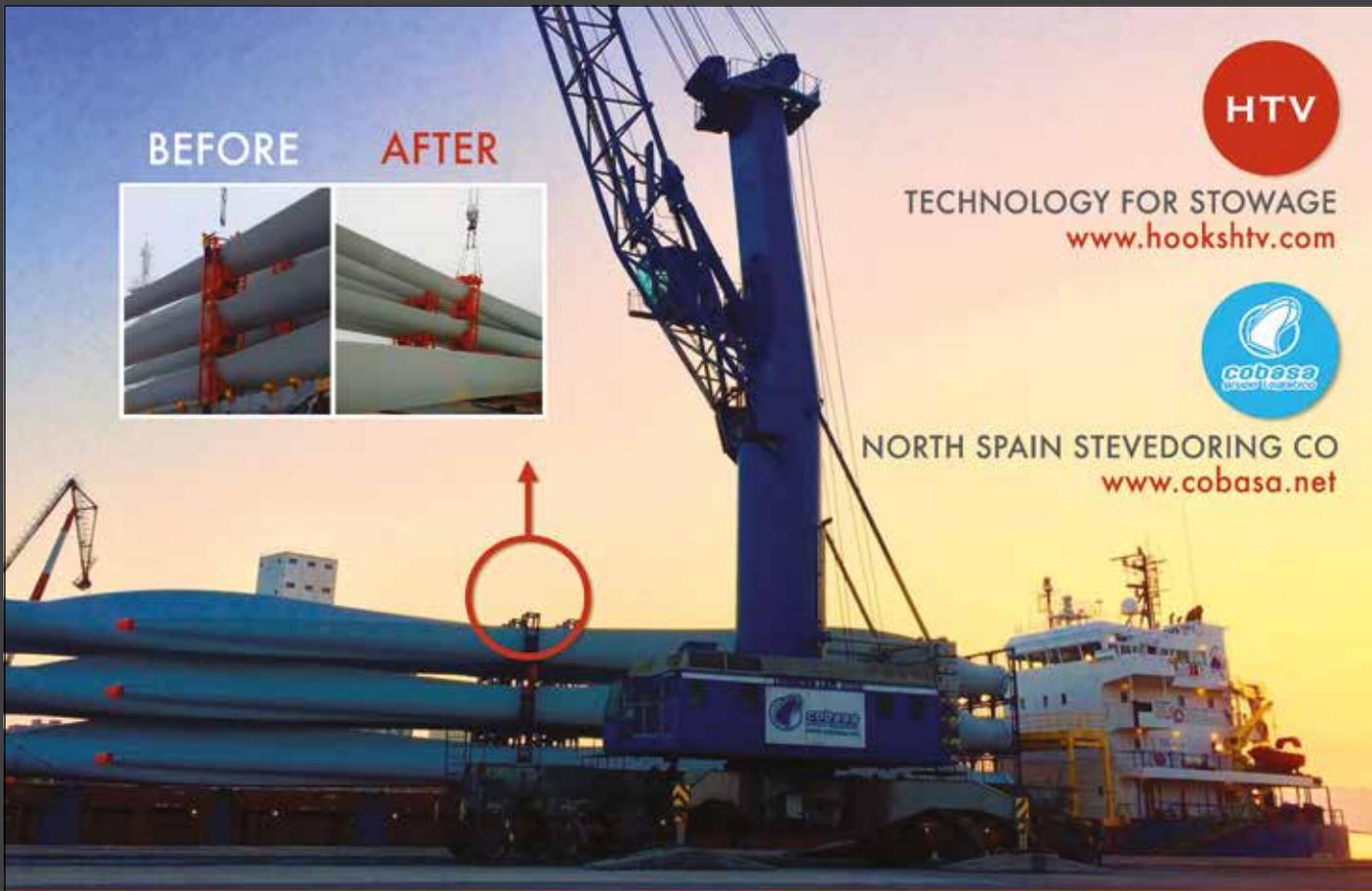
AFTER



TECHNOLOGY FOR STORAGE
www.hookshtv.com



NORTH SPAIN STEVEDORING CO
www.cobasa.net



100% SAFE
OPERATIONS

INCREASE OF
HANDLING RATIOS

NO ONE
HAS TO CLIMB

AVOID CARGO
DAMAGE

Keeps your Turbine under control
.... in any circumstance



Wind Sensors from **Thies Clima**



Accredited acc. to
DIN EN ISO 9001
DIN EN ISO 14001

Thies Clima offers a full range of wind-measuring equipment, from anemometers for control purposes, through IEC 61400-12-1 Class A anemometers for various applications, up to the ultrasonic 2D and 3D anemometers. All sensors especially suited for cold climate and harsh weather conditions.

ADOLF THIES GMBH & CO KG
Meteorology-Environmental
Technology
Germany
Phone +49 551 79001-0
info@thiesclima.com
www.thiesclima.com

THE WORLD OF WEATHER DATA

Private Lease Special Deal

LeasePlan

A benefit with 4 wheels

Looking for a new car? LeasePlan offers exclusively for our clients this special deal for private lease. If you don't have a company car or need an extra car at home – this deal is for you.

LeasePlan Free is hassle-free and loaded with benefits

- + Service and maintenance
- + End of contract insurance
- + No down payment
- + Roadside assistance
- + Insurance



→ Interested?

Get the secret link to see the cars by contacting us at +45 3673 8305 or privatleasing@leaseplan.dk

leaseplan.dk



CUTTING EQUIPMENT

RASOR'S CUTTING PROGRAM CONTAINS

- Hand-held cutters with wire.
- Hand-held battery cutter.
- Bench cutters with great power.
- All cutters are suitable for all kinds of technical fabrics, composite material, glass fiber mats and Kevlar.

SW100



SW12M



ZERO 702



OPTIMA 703



Carbide blade is suitable for abrasive and composite materials, like fiberglass, carbon fiber or Kevlar.
We can supply carbide knives for all kind of cutters

B. THORNBERG AS - Klørvangen 17 - 8410 Rønde - Denmark - 0045 86 379379 - mail@thornberg.dk - www.thornberg.dk



THE LEADING SAFETY PARTNER FOR THE RENEWABLES SECTOR

We empower performance

With +30 years of experience and being the leading supplier in the world within kitting, we call ourselves experts. To keep this position in the market, we always strive to be better, more innovative and have the right global team.



Do you want to join us?

At JSB, we make core material kits for the wind turbine industry. The core material kits consist of up to 1600 unique items used to increase the durability and performance of wind blades.

Our core material kits are made from the customer's choice of PET foam or balsa wood. Both are materials with a high stiffness-to-weight ratio, but while balsa is a natural wood grown in Ecuador, PET is a foam made of recycled plastic from all around the world.



"JSB provides a diverse corporate culture that allows me to grow personally and professionally. I work within technical operations and my focus is on sustainable improvements that must be carried out globally. The ongoing development and challenges within sustainability secures an exciting working environment." Óscar, JSB Falces (ES), joined in 2003.



"The best part about my job is seeing people coming together to make projects succeed." Jacob, JSB Ringkøbing (DK), joined in 2003.

We are always looking for the right colleague to join our global team



jsbglobal.com

When we have news, updates and new open positions, we always post it on LinkedIn.

By following our company page "JSB – We empower performance" on LinkedIn, you will make sure to see our new open positions directly in your news feed.

JSB – We empower performance

MACHINE FACTORY WITH GREAT EXPERIENCE IN CNC MACHINING

Since 1991, Maskinfabrikken Horsens Spån Teknik A/S in Ølsted has provided quality within CNC machining – both turning and milling – for, among others, the wind turbine and offshore industry throughout Denmark and abroad.

We are proud recipients of the ISO certifications ISO 9001 for our high quality and ISO 14001 for our high environmental and management standard.

We are a subcontractor in machining in all types of materials, and our equipment for CNC turning

and milling is optimal for meeting stringent technical requirements.

As a machine factory, we also know the importance of good quality, delivered on time and at the agreed price. As we believe quality means delivering "a little more than expected", we try to meet this with the utmost respect.

Contact us today if you have any questions, and we will get back to you as soon as possible.



Ny Kirkevej 2 · Ølsted · Dk-8723 Løsning
Tel: +45 75 65 24 69
salg@hst.dk · www.hst.dk



Maintenance Free Bolting Concept

ITH is the global leading system supplier in bolting technology, providing tension and torque tools, engineering, fasteners and service.

Under its brand IHF Fastener Systems, ITH develops innovative fasteners up to M80 due to the specific demands of bolted joints on onshore and offshore wind turbines.

The technical coordination of ITH tools and IHF fasteners enables us to reduce maintenance intervals on wind turbines significantly.

The Maintenance Free Bolting Concept is multi-certified and proven by digital in-field measurements over 7 years - still ongoing.

Benefit from more efficient bolting solutions and visit www.ITH.com.



ITH GmbH & Co. KG | Steinwiese 8 | 59872 Meschede | Germany | www.ITH.com

Behind every great turbine there is a great wind sensor.



FT wind sensors are used as a part of the G5 Energy Thrust program aimed at boosting AEP by 5%. FT sensors provide reliable wind speed and direction data to more than half of the world's installed turbine capacity. **12 of the world's top 15 turbine manufacturers** specify FT wind sensors for their turbines.

Available now:

Our latest model, the **FT742-DM50**, fits a 50mm mast pipe. It includes air temperature measurement and features an optional alignment tool to ensure accurate, repeatable installations.

Coming soon:

Our new **FT752 sensor for typhoon regions** reading wind speeds up to 90m/s.

Tested to the extreme:

FT wind sensors have passed **over 30 independent tests** including ice, corrosion, sand, dust, hail, vibration, drop and lightning protection.



To learn more about our unique Acu-Res technology, and our extensive testing program, visit www.fttechnologies.com



THE WORLD'S TOUGHEST WIND SENSORS



Much more than a control panel workshop



FH Automation has decades of experience with design and construction of electrical and control panels. We can develop prototypes, make customised solutions and offer serial production. It all takes place at our workshop in Horsens.

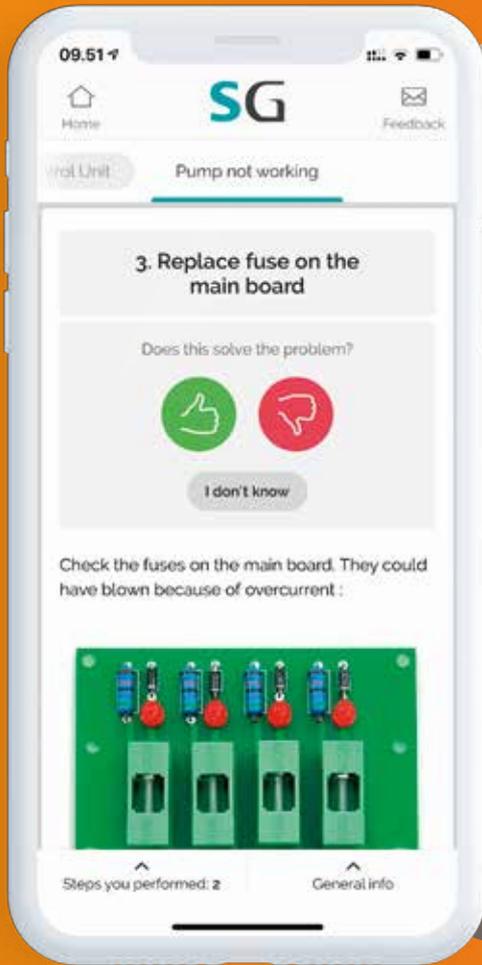
We can help you every step of the way. Our electrical engineers can prepare diagrams and documentation based on your designs, or you can supply the final drawings yourself. We can produce special sub-components or turn-key control panels. We can round off by downloading software for programmable components and running a final test to ensure that the device is ready for SAT. This way, finished control panels can be sent directly from our workshop to the place where they will be used.

When you face a challenge for which no standard solutions exist, we can take over and help you find the optimal solution.

We are UL certified, so we can also make finished control panels for the US and Canadian markets. Naturally, we comply with all European standards as well.

We make everything from the smallest terminal box to the most complex machine control panel. It would be our pleasure to make a flexible and innovative solution for you.

FH Automation is certified according to ISO 9001:2015.



We have proven that our technicians could solve a problem up to 70% faster using Dezide's AI-powered troubleshooting technology combined with our technical expert knowledge.

Ulrik Henriksen

Head of Diagnostics at Siemens Gamesa Renewable Energy



Reduce trouble-shooting time



Fix issues on the first visit



Instantly transfer skills to new talent



Use fewer spare parts and reduce dispatches

THE SUSTAINABLE DIFFERENCE

CASTROL OPTIGEAR – THE WORLD'S FIRST CARBON-NEUTRAL GEAR OIL FOR WIND TURBINES

At Castrol, we believe sustainability is essential for a better quality of life. Which is why we've devoted our expertise to making clean energy that much cleaner.

Castrol Optigear Synthetic CT 320 and Castrol Optigear Synthetic X 320 are the world's first carbon-neutral gear oils for wind turbines, designed to help you reduce your carbon footprint, meet UN's Sustainable Development Goals, and make the world a more sustainable place.

Opt for Castrol Optigear and we can make a sustainable difference, together.

Find out more on: www.castrol.com/windenergy



bptargetneutral.com

The Castrol logo consists of a red and white shield with a green 'C' inside, followed by the word 'Castrol' in red. Below it, the word 'OPTIGEAR' is written in a bold, white, sans-serif font with a black outline.

COVIZMO

COVIZMO IS SUPPORTING SIEMENS GAMESA WITH HERMES, A NEW ONLINE INSPECTION PLATFORM



The Hermes Project

Drones capture images of wind turbine blades and Hermes performs fully automated blade condition analysis to boost productivity of maintenance engineers in their assessment of necessary repairs.

"We work with Computer Vision, Knowledge Representation Deep Learning and more. Our team of data scientists, IT specialists and testers support a global team of Siemens Gamesa domain experts".

Ruben Mikkelsen, Project Manager, Hermes



At Covizmo, we are participating in various projects within the energy sector. We are specialists in **Computer Vision**, **Data Visualisation**, **Maintenance** and **Master Data Management**. We have many years of experience working with major energy companies.

"Integration of new technology like computer vision into ERP systems like SAP, IFS and Maximo is a very interesting job. It is not only about software skills but trying to understand what creates real value for the various clients that we have".

Artem Ruzak, ERP Consultant





FLEKSI A/S
- wood supply

Johnni Juul Jakobsen,
Director



Our carpentry process is very flexible and adaptable, and it can therefore handle both large and small projects, e.g. ramps, slits, transport adapters, sorting boards, belts for sorting plants, transport items for wind turbines. Common for all the projects/ product lines are the company's quality requirements and focus on precision and flexibility, not to mention on-time delivery. We are simple and straightforward, which allows agreements to be made quickly so that production can begin. As a subcontractor, we are very quality-conscious and value good craftsmanship highly.





HIGH ACCESS SYSTEM TECHNOLOGY BY **goracon®**



www.goracon.com

THE SKY'S OUR LIMIT!



G-servicelift®

G-trac® G-lock®

G-smartrac®

G-worklift®

G-platform®

INNOVATION IS OUR KEY TO THE CHALLENGES OF THE TIME

goracon® is:

- technical market leader for hoist systems
- supplier in over 40 countries around the world
- the only manufacturer of assembly platforms for wind turbines worldwide
- the company with the world's largest product range in the area of access systems
- with regular training, goracon® stands behind the personal advancement of its employees.

goracon systemtechnik gmbh

Färberesstraße 4 | D-48565 Steinfurt | Germany | +49 2552 99750 | info@goracon.com | www.goracon.com

YOUR ONE-STOP SHOP TO THE WIND INDUSTRY

Blue Water is providing 24/7 one-stop shop solutions including port set-up, tailor-made IT systems, track & trace and handling and transport of turbines and foundations

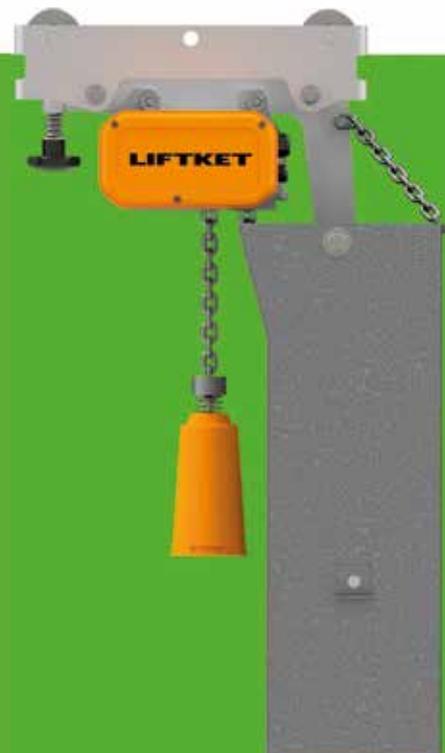


**BLUE
WATER
SHIPPING**

Blue Water Shipping A/S | www.bws.net

LIFTKET

WORKS SINCE 1948



THE ORIGINAL

In the 1970s we already focused on safety.

D. Hoffmann designed and patented the safety clutch/brake unit where the brake holds the load - not the clutch. Since the early 1990s we are a leading provider of wind turbine cranes.

Made in Germany

liftket.de

deugro 

We Always Find a Way.

At deugro, our approach for difficult and challenging projects is based on partnership— at the highest operational standards! Our experts in the wind industry work toward the same goal at all times: your success.

deugro.com
a company of the deugro group 

