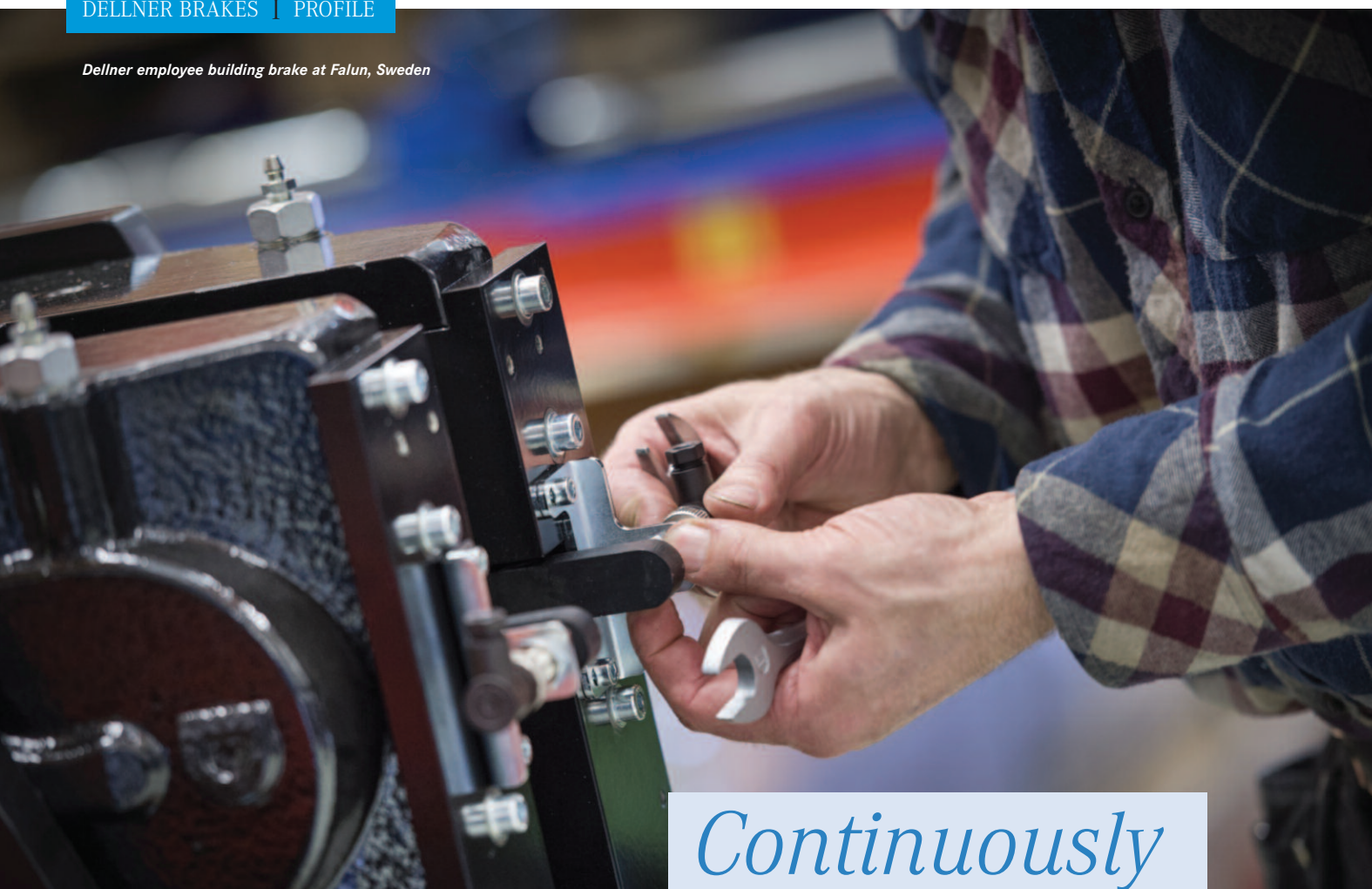


Dellner employee building brake at Falun, Sweden

*Continuously*

TURNING BRAKING'S *Development Wheel*

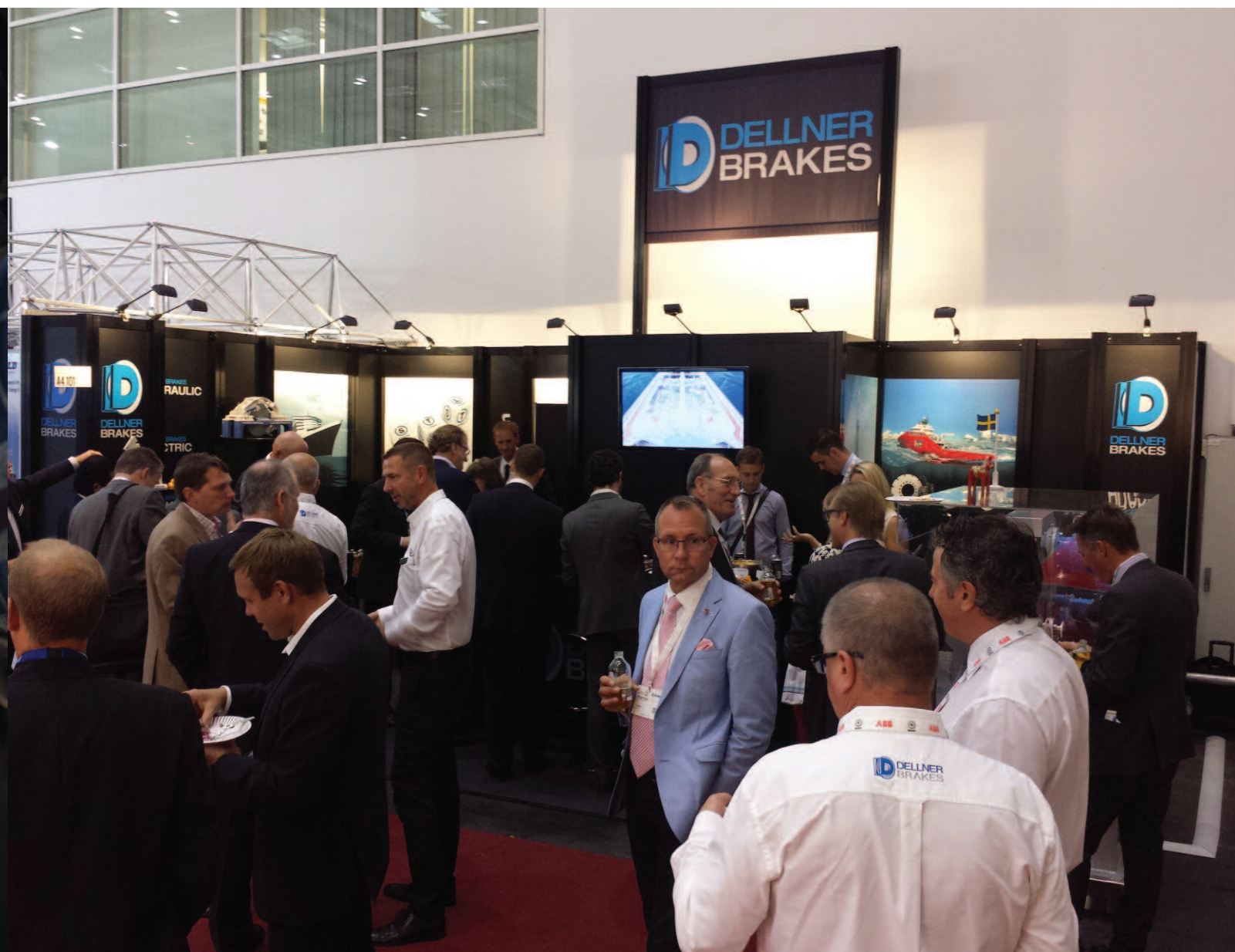
Dellner Brakes chose SMM 2016 as the ideal platform to launch the world's first fully automated, electrical 'Stop, Turn, Lock' (eSTL) braking system. Over a couple of Swedish ciders and a handful of horse shaped chocolates, CEO Marcus Åberg met with Inside Marine's Daniel Barnes at the Hamburg marine fair.

IN one corner of Hamburg Messe's A4 Hall, guests, press and interested parties stayed well after the first day of SMM had officially closed to see Swedish brakes specialist Dellner Brakes launch and demonstrate the world's first fully automated electrical 'Stop, Turn, Lock' (eSTL) braking system to the maritime community.

"This is the first time I have hosted a media launch and I'm pleased to say that it went like clockwork!" smiled Marcus Åberg, before giving his personal level-headed description of the company he has been Managing Director of since October 2015: "We are down to earth, hard-working Swedes, who like to perform the best we possibly can for our customers."

From its workshops in the small, rural, picturesque Swedish city of Falun, Dellner Brakes' latest innovation offers technically advanced and precision-made braking solutions developed in response to increasing environmental issues throughout the maritime sector, and a need for smaller, more flexible systems.

The patent pending Dellner eSTL system's compactness, combined with the fact it requires no additional piping, ensures quick, easy and cost effective installation – especially where space is at a premium. Fully automated, the Dellner eSTL system can also be operated from an optional remote hand held control, giving operators the freedom to inspect the complete system during maintenance and testing.



At the SMM launch of the product in early September, Technical Director and Product Realisation Manager Peter Mikaelsson demonstrated the main benefits of his engineering team's copious hours of hard work, leaving Mr Åberg to happily stand in the crowd with the many interested parties once his own introductions were finished.

eSTL's Industry Firsts

Those in attendance heard how the eSTL's disc brake system can quickly stop the shaft in any position; and once the brake has stopped the disc, an electric motor rotates the pinion so it aligns with the gear wheel on the disc automatically and accurately. A second mechanism then engages the pinion with the gear wheel and the electric motor allowing the disc and connected shaft to be rotated at a variable speed to any exact position. Finally, an electrically operated mechanical locking system locks the brake disc and shaft safely and securely.

As Mr Mikaelsson explained, the continuous turning function of the system means the shaft can be moved precisely to any position without the need for indexing, making maintenance a whole lot easier. The variable speed motor can also run continuously for hours, so checking and testing can take place over long periods.

Depending on the size of the system, stopping torque can be up to 900 kNm, turning torque up to 600 kNm and locking torque up to 1,650 kNm. Even Dellner's small and mid-range eSTL systems can deliver stopping torque up to 300 kNm, turning torque up to 150 kNm and locking torque up to 700 kNm.

The unique and modular system is available in a range of standard sizes but it can also be customised for different applications, allowing customers to choose one, two or all three functions to create a bespoke solution for their needs.

Mr Åberg said: "Our new ground-breaking eSTL system is a world first, offering terrific power in a compact configuration for customers in offshore and onshore industries alike and fully complements Dellner's world beating hydraulic solutions."

Global Outreach, Local Feel

In isolation, Dellner Brakes is an ISO 9001:2008 certified manufacturer of brake solutions for marine and industrial applications with a modest 22 employees, around 1,100sqm of facilities and a history dating back to 1941 when it was founded by Master of Science Jan Dellner. But collectively, as part of the 700-employee, global Dellner Group, the company is able to utilise production, sales and service offices from around the world. ➤

DELLNER BRAKES | PROFILE



CEO Marcus Åberg (left) with Inside Marine's Daniel Barnes

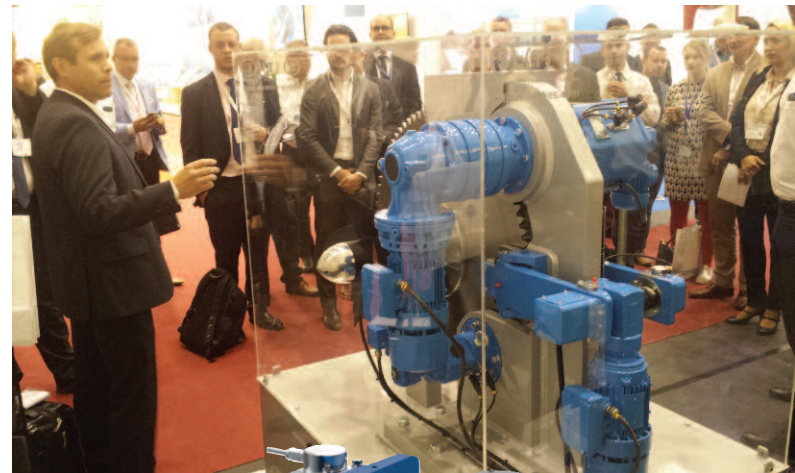
"We have all the advantages of being part of this big company with its team of people, but we are still a small company with the flexibility to easily adjust everything we do to the customer. I think it's a perfect combination," said Mr Åberg.

"We have five different sales offices throughout the world, and we have large, permanent stock facilities in the US and Sweden. If we need stock in China or South America or different locations in Europe or the US, we have the sites and stock available for us to react to these requests quickly and efficiently."

The company's large delivery capacity, speed and flexibility are in no small part thanks to Dellner Brakes utilising a small group of talented and carefully selected contractors within a few hours' drive of the Falun factory.

And according to Mr Åberg, who personally made the transition from a career working for companies serving land-based customers before his switch to Dellner last year, the importance for the company to remain flexible to both marine and industrial applications is most certainly not lost on him.

"I believe we can be strong in several market segments – the marine industry is an important one for us and always has been,



but we also apply our considerable expertise as a supplier to the industrial sector. All our customers across both these sectors are equally important for us."

To date, the company's brake systems have been supplied to the energy, mining, crane and winch, offshore, propulsion and paper industries, with the occasional special vehicle, machine or test rig thrown in for good measure too.

Customer Focussed

"We are searching for new customers every day," affirmed Mr Åberg, "focussing on those two areas; the marine industry and the industrial industry. We've chosen to launch the eSTL braking system at SMM to explain the concept, and then we can really start to explore opportunities, test it in new markets and gauge the reaction.

"In terms of the future applications of eSTL, a lot of it will be dictated by customer feedback, and that's how Dellner always works; we take the product out, talk to our customers and react to their questions and requirements."

As for marine applications – ferries, tugs, oil tankers, large military ships, multipurpose vessels, luxury yachts and cruise liners



Dellner employees building brake at Falun, Sweden



have all received the Dellner Brakes treatment over the years, including the installation of propulsion brake systems on what was, back in 2004, the largest passenger ship ever built – the 150,000gt Queen Mary 2 (which incredibly, no longer makes the top 10 largest cruise liners list little over a decade later).

Aboard Queen Mary 2, the propulsion brake systems consists of four Dellner model SKD 100 hydraulic pressure applied brakes working on a brake disc ø1300 mm (51.18 in). Each of the vessel's mermaid pods use this system which also includes a mechanical device that locks the propeller shaft after the brakes are set with no rotation. The cruise liner's braking torque capacity is 290kNm. Carrying on with the regal theme, Dellner Brakes' STL-system is also installed in the Royal Navy's HMS Queen Elizabeth and HMS Prince of Wales aircraft carriers.

Swedish Charm: Precision Engineering

To think all of this is carried out in a region of Sweden mainly famous for cross-country skiing and bizarre little horse-shaped chocolates (that were proudly there to be sampled at SMM) adds to the charm of this precision engineering firm.

"That's the beauty of working in this company," smiled Mr Åberg. "Falun is a city with just 50,000 people and we're located on the outskirts of that, in a small village where 400 to 600 people live. We may be a big global company, but our head office is in the middle of the beautiful Swedish countryside."

And Mr Åberg said it is this local feel with a global outreach that he hopes to replicate as he works with his team to take the company forward over the upcoming years.

"We can still have our production facility and technical innovation teams here in Sweden, but we are looking to become more 'local' all over the world; I believe that's one of the keys to success. But there isn't any magic to achieving this; it's all about hard work from early morning until late at night, then you do it again, and then a little bit more."

Before his time at Dellner, Mr Åberg was Export Manager and CEO of all subsidiaries outside of Sweden for a house building company that made pre-fabricated wooden houses – "not a natural transition into shipping, I confess, but I also worked as a consultant for one of the biggest firms in the world, PWC, so I had shifted gears before."

"Also, when I was asked to come to Dellner Brakes and I began to understand more about the company, it was clear to me there was not such a big difference between the two business models. My previous company built unique pre-fabricated houses for each customer – we listened to customers' needs, worked from their drawings and invented new things for them when necessary; and here at Dellner Brakes, our dedicated and experienced team has exactly the same customer-centred mentality. And we are all really looking forward to hearing what our customers think about the eSTL braking system."

