

Cheerful and buoyant are the words that come to mind when reading the feedback received in response to our annual fender survey. Claire Instone gives a rundown of the latest news and updates surrounding these strong, high performance advanced marine systems...

Quite simply put, the information garnered from the industry in response to our fender review is hugely positive. The world's principal fender manufacturers are assured and satisfied with the current - and future - market landscape citing a hive of activity. When asked to reflect on sales across 2016 and the first half of 2017 the major fender producers were more than forthcoming and eager to report their good news. "Looking at 2017, our fender sales have increased substantially," affirmed Indian manufacturer of marine rubber and engineering products, Hitech Elastomer.

The same confident and upbeat attitude was echoed by **QuayQuip** who also stated that business was thriving. A representative for the Dutch company, which has been active for over 30 years designing and producing turnkey and custom-made engineered products, confirmed the company was "proud to announce it again secured orders for the supply of fenders on all continents." The opening of a new office in Malaysia further boosted brand awareness and order intake in the Asia Pacific region for German-headquartered ShibataFenderTeam (SFT) which also reported experiencing consolidation in certain markets and regions. "Looking back to the first half of 2017, we experienced an increase in fender sales." The company, which has three regional offices in the U.S., France and Asia and a production facility in Germany, informed WPD that it was able to secure some "large and interesting orders" such as the supply of fender systems for a completely new port in the Caspian Sea.

It's not all fun and games

It's worth noting that it has not been all fun and games for the fender business in recent times. The above referenced successes and solid sales were gained despite some onerous and burdensome challenges. Market fluctuations - which you could argue are the most influential factor on the industry due to the knock-on effect they have on the investment decisions of stakeholders - were underscored by fender makers as key influencers on sales. Issues such as falling oil prices and a mercurial economic climate were amongst the matters



QuayQuip fender supplied at Deepwater Container Terminal in Gdansk, Poland

Favourable fortunes for fenders

called to attention by manufacturers, some of whom lost out on orders as a result. "The marine fender market is a project market and therefore fluctuations are our daily routine. In 2016 and before it was mainly the oil and gas markets that experienced some shifts and fluctuations that negatively impacted certain stakeholders in the market," stated SFT. The repercussions of such shifts were reiterated by Hitech Elastomer which experienced unsteadiness "the cause for which was the oil price crash which resulted in abandoning or postponing many major contracts." When questioning **QuayQuip** on its recent challenges the company highlighted "an increase of raw material prices and the volatility of the exchange market" as key circumstances to overcome. However, in spite of such market difficulties the major manufacturers were still able to pull through with healthy order books and a hopeful outlook. ShibataFenderTeam was pleased to confirm to WPD that it was able to "positively navigate the market." Moreover the constant see-sawing of market trends naturally means that an upswing should follow a downturn. As explained by **QuayQuip**: "In certain regions

there was an increase of volume because of stabilisation of world economics with parties daring to invest again." While the worldwide arena might dictate certain negative ramifications on fender manufacturers, not all problems are bad problems to have. Large order backlogs can be a challenge but orders none the less. ShibataFenderTeam noted facing two main challenges in recent months mainly caused by a large backlog. First of all, the environmental activities of the Chinese government introduced some obstacles with galvanising plants nationwide currently not running at full capacity in order to review or update their environmental standards. "SFT takes the environmental policy of suppliers very seriously and only works with companies that fully meet international standards. However, since all companies are under review delivery times for certain galvanised products are longer than anticipated. In order to meet delivery targets and satisfy our clients we were able to guide some of the affected orders to our production facility in Germany. Due to this unique set up, with our own steel production facilities in Germany, we are able to overcome these difficulties." The second

issue relating to their major backlog - especially for foam products - is scheduling. "SFT has received many orders for foam fenders which are manufactured at our foam fender production facility in Germany. The challenge is to schedule all orders in a way that achieves the best plant utilisation, while meeting customer delivery requirements. We are running at almost full capacity in Germany and at our JV partner MFI in the U.S. but there are always some gaps in between to make sure that important orders at short notice can be slid in to serve our clients." We know that all fender makers have to work hard to offer the best design, boasting low maintenance, a long service life able to withstand wear and tear and ensure quality as well as accommodating customised solutions. It goes without saying therefore that there are many challenges in terms of technical and design factors. Specifically, Hitech Elastomer told WPD it has been working hard recently to overcome the challenge of making pneumatic fenders sensor-friendly so that maintaining internal pressure and temperature becomes easy and remotely possible.

Order update

Having requested details of recent contracts secured and deliveries made we were pleased to receive numerous order updates from the fender market kingpins. **QuayQuip** shed light on myriad projects from across the globe. It supplied 49 sets of its QCNI 600 cone fender system for Kingston Container Terminal, together with wheel fenders, safety ladders and mooring bollards. The company also secured multiple orders in the United States, such as QME element fenders for new terminals in New Jersey and Georgia, for which both require performance testing of the fenders to be done at an independent testing facility in the U.S. Also doing well state-side was Shibata Fender Team which provided 34 sets of CSS 1250 systems for the Port of Houston as well as 65 sets of SPC 1150 cone systems for a ferry terminal

upgrade in Canada. Moreover, the company also benefitted in Turkmenistan with more than 300 cone fender systems contracted including specially-designed ferry pier fender systems, PU corner fenders and wheel fenders for ship lift entrance. "The demand for safety critical fender solutions is especially growing for ferry terminals. The interaction between vessel, fenders, ramp, passengers' safety, and mooring systems is crucial," stated SFT. Fender supplies for ferry-related projects was also on the cards for **QuayQuip** in Denmark where the group delivered a variety of QME element fenders for new E-ferry terminals at three different locations. Latin America provided both SFT and Hitech Elastomer with orders. The latter received a request from Panama Canal Authority, whilst the former contributed 55 SPC 1400 cone fender systems and bollards to the major PSA expansion at the operator's container terminal facilities in the country. Hitech Elastomer also boasted recent requests from Kenya Port Authority, Kolkata Port Trust (for parallel motion fenders) and Chennai Port Trust (for 2000H cone fenders). As for Southeast Asia, **QuayQuip** is supplying 53 sets of QCNI 1100 cone fender systems and all mooring bollards and quick release hooks for the solid product handling jetty at Tanjung Setapa in Malaysia. While in the same region, for Shell, the organisation has secured an order for the delivery of over 200 sets of QGF foam fenders for an upgrade of the customer's petroleum jetty in Brunei. **QuayQuip** also saw its strong foothold in Africa continue with the supply of a complete set of quay furniture like QCNI 200 cone fenders, cope edge protection, safety ladders and mooring bollards for the Freetown Container Terminal in Sierra Leone. In the Middle East, SFT were able to secure a large order for ocean guard fenders for Saudi Arabia, which it delivered with just 2 weeks turnaround time by putting all other work aside and switching to 24/7 manufacturing. The 6 large fenders were produced in the

company's foam fender production facility in Germany. A further 17 ocean guard fenders will follow at the end of this year. Back in January, in the same neck of the woods, the company reported delivering more than 500 cylindrical fenders for Mina Rashid Port in Dubai. And finally, after 3 years SFT's long term contract with the Port of Gdansk came to a successful end with the last partial shipment of cylindrical fenders. In total, the group supplied 264 units which were mounted diagonally to cover more area of the quay wall. The world was part of the refurbishment of berth "WOC I" which is dedicated for bulk carriers.

Innovative methods

Each fender manufacturer has their own innovative design features and unique technical offerings that sets them apart. For SFT its number 1 selling fender type is typically the cone fender due to its superior performance and efficiency. "As clients are buying energy absorption, the price per kNm or ft-kip should be considered in the selection of the rubber unit," explained an SFT representative. The company also cites their foam products and donut fenders as having experienced interesting development of late. The foam fender production - which takes place at their established facility in Germany is a joint venture with Marine Fender International based in the U.S. As such, SFT are able to experiment with different designs and simply try new ideas allowing the group to provide individual solutions to the most diverse requirements. Top of the sales list for Hitech Elastomer are pneumatic fenders and hydro-pneumatic floating fenders which offer a higher capacity of energy consumption and less reaction force. The manufacturer was keen to share details of their latest newly developed pneumatic fenders which offer inbuilt sensors - the i-9 series. Conventionally, pneumatic fenders are required to be taken out of the water to check the pressure and temperature which involves



Hitech Elastomer boasted a number of recent orders



ShibataFenderTeam (SFT) delivered more than 500 cylindrical fenders for Mina Rashid Port, Dubai

much effort and cost. This new innovation makes it possible to read these values from a distance of 10 meters giving much benefit to customers. "Our latest pneumatic fenders with i-9 series have made a revolution by enhancing safety, assuring design performance and giving an economical solution for easy maintenance," explain Hitech. Moving ahead when it comes to further increasing fender performance combined with ultra-low reaction fender systems is always a priority for manufacturer **QuayQuip**. The company will be making further advances with the addition of their brand new steel construction plant in Tianjin, China. The factory was built according

To 2018 and beyond!

In conclusion, the coming years look set to be fruitful for fender manufacturers. In the short term, the industry leaders share a positive outlook for 2018 with **QuayQuip** "expecting a further increase of turnover volume" and Hitech Elastomer believing that "next year should be good for the industry." In terms of markets and regions, SFT see an uprising trend in the cruise industry with new and larger ships combined with more calls in certain regions. With more than 100 successfully completed projects for cruise terminals, SFT has a profound experience in this sector which bodes

with clients with the opening of 2 new offices in as many years - one in Malaysia (2016) and one in Spain (Oct 2017). "Clients around the world expect more and more customised solutions for their applications and direct contact to engineers and decision makers to streamline projects and increase efficiency," confirmed a SFT representative. The addition of the new offices is impressive for a company that only recently celebrated its 10th anniversary. ShibataFenderTeam has developed from a total newcomer with a small office in Hamburg to a multi-national group with offices and production sites in America, Europe and Asia, having successfully grown the business and completed over 4500 projects worldwide.



SFT secured a large order for ocean guard fenders for Saudi Arabia



QuayQuip's brand new steel construction plant in Tianjin, China

to all international standards and is certified ISO9001 and EN1090. Commenting on the news a **QuayQuip** representative explained: "By this certification we are capable of manufacturing the most complex steel constructions within the highest level of QA/QC requirements and able to provide our clients a one-stop-shop in quay equipment."

well for them going forward. Looking further down the line SFT confirms: "In summary, we can say that we are well prepared and set-up for the challenges of tomorrow and look forward to the next exciting decade of fender challenges around the globe." Such a statement is backed up by the company's strategic decision to strengthen local contact

Commenting on the outlook over the next 10 years Hitech Elastomer says: "We see a good future for the fender market as new ports and terminals come up all around the world. Further to this, those who have been using fenders for around 10-15 years will need replacements. Moreover, various facilities will need to augment their berthing capacities." This opinion is shared by **QuayQuip** who believe there will be further orders due to new investments and an increase in refurbishment projects. The company stated: "Due to the fact that customers require more quality and a longer lifespan from their fenders, we expect a positive trend for fender suppliers who have their own production facilities and in-house engineering capacities. This separates the wheat from the chaff by eliminating the traders who supply inferior fender quality without any proper design basis." An increasing demand in the need for safety and highly customised fender solutions is also noted by SFT as a driving force behind the positive industry development. "Fenders are safety equipment and the demand for safety is constantly growing. Fenders play an important part in protecting people, ships, and port infrastructure." 