

Calculated developments

Since the inception in 1984 of Machine Support, the company now known as SKF Solution Factory – Marine Services was dedicated to providing machinery grouting services to the shipbuilding industry. Specialising in laser alignment services, the company developed a ground-breaking machinery chocking product, the Vibracon; having patented the product, opportunities for growth in new markets became available. The Vibracon is an accurate and easy tool to align rotating equipment. After obtaining the ISO 9001 certificate in 1997 and establishing subsidiaries in Germany and the US, it was acquired by AB SKF in 2000. With Machine Support operating as a separate unit under the SKF umbrella, the company continued improving its services, introducing the patented SKF Vibracon Low Profile. Based on the original Vibracon, a new product was designed for the repair market, offering an economic solution for repair and retrofit projects where costly shims, epoxy resins or milled chocks have been applied.

Through the addition of 3D measurements, vibration measurements and on-site machining to its service portfolio, the company became capable of providing complete solutions to its growing client base.

“We have operated as a 100 per cent SKF affiliated business since 2000, however the decision was made not to transfer our company name until 2010 and in 2013 we began operating as a business unit under the title SKF Solution Factory - Marine Services. There are a number of benefits to being part of the SKF Group; for example you have approximately 45,000 colleagues spread across the globe, which means we are represented in nearly every country in the world,” explains René Vermeulen, general

manager of SKF Solution Factory - Marine Services. “Furthermore, SKF has existed for over 100 years, and there is a vast amount of knowledge from coming up with solutions to previous challenges in other industries it operates in. This expertise can then be integrated into the marine world to find innovative solutions that are not known to this industry yet, which in my opinion is the biggest strength of SKF.”

As the company’s products and services continued to gain a stronger reputation, SKF became focused on increasing its global client base, particularly in areas with booming shipbuilding business such as India and the Far East. Moreover, the company established marine offices in the United States that enabled it



SKF Vibracon adjustable steel machinery chock



Main picture: 3D measurement
Below: On-site machining



to offer service activities as well as product sales throughout the US and Canada. Today, following almost 30 years of successful operations, SKF Solution Factory - Marine Services has developed an excellent reputation in mounting solutions and alignment services. "To be successful we think global, but act local," says René. "You can't do everything from one country, which is why we have employees working closely with our clients all over the world."

Despite the challenges of remaining a profitable firm in the shipping industry during times of economic difficulty, SKF Solution Factory - Marine Services has continued to flourish due to its global presence, as René elaborates: "We have found that when activities slow down in one part of the world it picks up in another, which is beneficial to us as a company with worldwide coverage. Another thing we have noticed is that there is a trend for using diesel electric propulsion with the products we are selling; this is a product that we have a lot of experience in from using it in power generation. Therefore people are already familiar with using our products and packages and original equipment manufacturers are standardised in these."

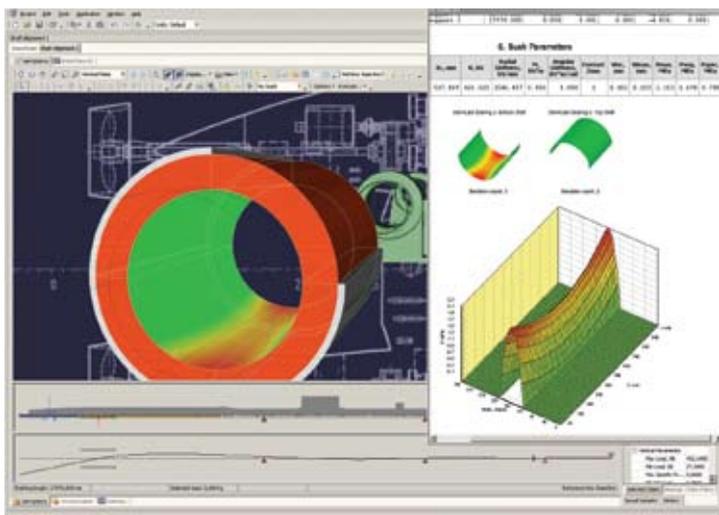
With long-term experience in repair work to dredging, offshore, passenger, general cargo and container vessels working on projects around the world, SKF Solution Factory - Marine Services expanded its services into new-build installation and the development of software to create optimum precision onboard

vessels. In 2009, these developments have been expanded further, with the addition of ShaftDesigner to the company's portfolio. A revolutionary product, ShaftDesigner is the first software package to perform alignment and various vibration calculations under one single base model. "Our core business is focused around the alignment of a propulsion line onboard a vessel," says Geoffrey de Vlaam, marketing and sales manager at SKF Solution Factory - Marine Services. "And this ShaftDesigner software is specialised in calculating the optimum position of the propulsion installation components; it was developed for our service department but over time we have developed modules to sell on the market to allow other companies the ability to execute these calculations."

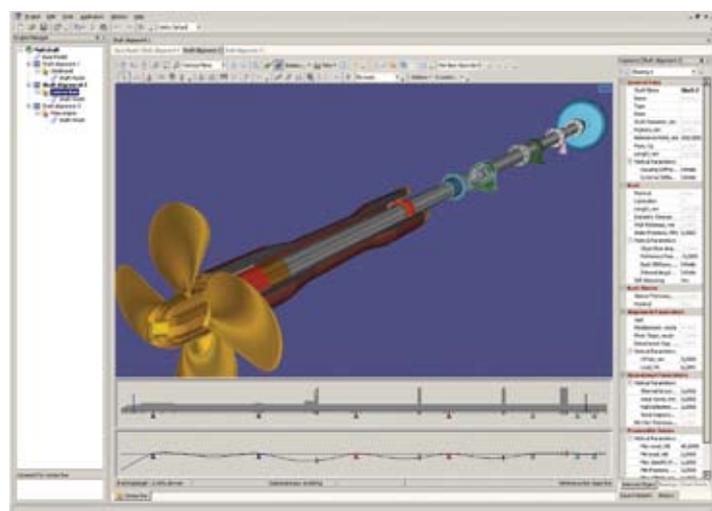
Geoffrey continues: "A very strong combination in our service offering is the extensive experience with trouble shooting onboard vessels and our knowledge of the theoretical background on alignment and vibration calculations. Furthermore, the software is beneficial to different phases of a ship's life cycle, for instance it is useful in the design, construction and maintenance and repair phases of a vessel, so there are a lot of different clients that can benefit from this." Aided by a 3D graphical interface that enables simple visual checks, the ShaftDesigner's main features include a



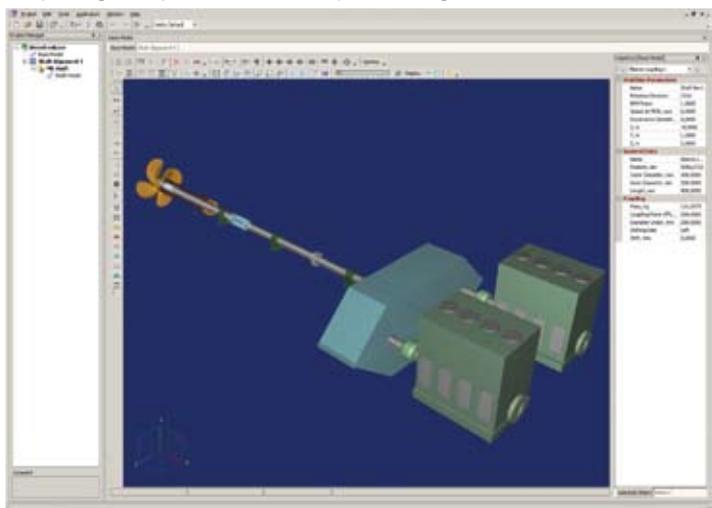
ShaftDesigner software screenshot of contact pressure in bearing bush



ShaftDesigner software screenshot of shaft alignment application window



ShaftDesigner software screenshot of double engine installation



base model for quick recalculations, calculations for alignment and whirling, bending, axial and torsional vibrations. The alignment module includes an offset explorer, jack load graph, geometric alignment, contact pressure, lubrication and hull deflections. The software is capable of generating customisable reports with various export options. “The ShaftDesigner can prevent problems as it can perform checks in the design phase, it can also solve problems

during repairs. Solving issues is something we do ourselves; besides selling the software we also sell the service to make calculations and find a solution for our customers. Not only do we supply a solution, we also have the ability to complete the modifications when it is related to alignment,” says Geoffrey.

Paul Vermunt, product manager at SKF Solution Factory – Marine Services, adds: “In relation to our alignment services, we have a highly successful re-adjustable chock, called SKF Vibracon, that is used for optimal alignments of propulsion shaftlines, main engines, generator sets, fifi-installations and pumps. SKF Vibracon is a renowned piece of instrumentation that makes realignments by readjustment of a shaft arrangement very easy; we have sold more than 1,000,000 of these and have a long, successful history of offering this solution to customers.”

Dedicated to innovation, the company develops everything in-house, where it applies innovative thinking and expertise to critical machinery. Furthermore, as part of SKF, the organisation is connected to another research centre that has a large focus on producing environmentally friendly bearings, as René highlights: “Employees are working on friction reduction and optimal alignment in bearings, which results in a lot of energy savings for customers.”

The company’s innovative, customer focused way of working has been enhanced further with SKF’s acquisition of German-based ship components provider Blohm + Voss Industries (BVI), a well reputed name in the marine world that boasts an excellent network of representation around the world. In line with SKF’s plan to assert itself as the leading application development partner to offer full asset life cycle management services to the shipping and marine industry, the acquisition of BVI complements the company’s existing service range, contributes to its market presence and establishes SKF as one of the major suppliers of marine sealing arrangements and bearings.

Discussing the acquisition, René highlights: “This strategic development was demonstrated at Marintec 2013 in Shanghai from 3-6 December, where the increased package of products and services was displayed. For example, SKF took the opportunity to show the SIMPLEX product range. SKF Solution Factory - Marine Services taking part in Marintec 2013 shows our customers that developing this division is serious business for SKF; it has made people aware that SKF now has an extended portfolio and the expertise. We have already utilised the strength of BVI as a brand and generated a lot of attention at the exhibition; our next step is to follow up leads from connections we made to set up contracts in the future,” says René.

Looking ahead, SKF Solution Factory – Marine Services will continue activating its large marine network, while also seeking out further opportunities for potential growth, as René concludes: “In 2014 we will look around for interesting companies that could strengthen SKF’s position in the marine industry while also focusing on our think global, act local concept. Looking further ahead, we want to create a competence centre with centralised engineering where we can spread our knowledge all over the world.” ●

SKF Solution Factory - Marine Services
www.skf.com/marine

- Leading worldwide solution provider
- Part of SKF Group
- Believe in ‘thinking global, acting local’

