

State-of-the art equipment keeps the work flowing

K&M Laser Alignment Services, which reduces expensive and unnecessary downtime at major marine operations by making use of state-of-the-art laser alignment systems, also undertakes some of the largest marine contracts in Southern Africa using equipment supplied by advanced machine maintenance expert, Engineering Dynamics.

K&M, which is certified to ISO 9001:2008 international standards, specialises in shaft to shaft and sheave and pulley alignment, including vibration analysis of bearings and equipment on vessels owned by the local fishing industry; salvages tugs, container vessels, and even some of the biggest passenger liners visiting the Port Of Cape Town.

K&M's manager, Melvyn Frost, says that Engineering Dynamics has been supplying a range of world-class maintenance and repair equipment to his company for the past two years. "The level of service that we received from our previous suppliers had not been up-to-scratch; however, with Engineering Dynamics, the after-sales and technical support has been excellent, and their prices are competitive too."

K&M recently purchased a range of Easy-Laser shaft alignment machines and vibration monitoring systems. "The Easy-Laser range of shaft alignment systems are specially-developed to withstand harsh conditions, making it perfect for marine operations. The rugged aluminium and stainless steel design guarantees stable measurement values and reliable alignment, even in the most hostile environments, while the versatile design tackles all types of measurements quickly and accurately," comments Engineering Dynamics managing director Christo van der Walt.

Frost notes that the most notable marine repair project carried out by K&M to date is with a marine engineering company that needed to repair a 2000kW shaft-driven alternator onboard a 68 metre Subsea Service vessel contracted to the oil and gas industry. "The vessel had a total failure of

the drive-end bearing on the port shaft alternator during its passage across the Indian Ocean, from Singapore to South Africa. K&M was commissioned to perform laser alignment of the alternator after the bearing repair," he said.

Frost notes that K&M's made use of Engineering Dynamics' Easy Laser range of laser alignment and vibration monitoring equipment to check all the alternators, and managed to identify a problem on the Starboard shaft alternator DE bearing, which after stripping showed static vibration damage. "The alternator was fitted with new bearings, and after a new series of vibration and condition analysis readings were taken, showed the units to be vibration free, ultimately saving the company a possible R500000 alternator failure."

K&M also offers repair services to major oil and exploration ships in Walvis Bay, Namibia. "Many of the ships in the Atlantic are European-owned; however, it is too expensive to send them all the way back to Europe. We are able to offer an affordable solution that is both time and cost-effective," says Frost, adding that his company was commissioned by SMIT Amandla Marine and IMS, to align the recently rebuilt port main engine of the *SA Agulhas* which had damaged its bedplate during its last trip to the ice.

Looking back on 2010, Frost notes that these major contracts have resulted in K&M expanding during the global economic downturn. "Business has been busy in the last two years, and K&M has a number of large contracts still in the pipeline. As a result, we have not felt the effects of the recession," he explains. "I believe that the company has managed to achieve success through difficult economic times by providing a reliable service, and by making use of a dependable supplier."

K&M Laser Alignment was formed in January 2009, and is affiliated to Onsite Machining Services – a micro-optical alignment and onsite machining services company based in Cape Town.