

DUKC® helps Port Hedland set ship loading record

Port Hedland Port Authority (PHPA) has approached OMC International to investigate how its proven DUKC® technology can help the port regularly repeat its recent record of five ships sailing on the one tide, says OMC chief Dr Terry O'Brien.

PHPA grabbed media headlines when it announced that it had sailed five capsize bulk carriers (four BHP Billiton Iron Ore and one Fortescue Metals) on the morning high tide on Friday, June 26, with a combined total cargo of 841,062 tonnes.

PHPA Harbour Master Lindsay Copeman said: "DUKC® played a major part in our setting a new record for Port Hedland."

The previous single tide record was in 2005 with a combined total of 657,029 tonnes. PHPA believes the iron content within this combined shipment of iron ore would be sufficient to build 10 Sydney Harbour bridges.

OMC's computer-based DUKC® system maximises the cargo-carrying capacity of large vessels while ensuring safe navigation through shallow, depth-restricted waterways.

Dr O'Brien, OMC's Founder and Executive Director, said PHPA and OMC were working together to see how the port could maximise cargo throughput from Port Hedland, which is Australia's largest iron ore port.

"PHPA is keen to work with OMC to see how we can optimise the sailing drafts and times of multiple vessels on each tide. At the moment the average is two to three ships on a tide but this will need to increase to four to five ships per tide, as export volumes grow," Dr O'Brien said.

DUKC® has been operating in Port Hedland since 1995, delivering the port significant safety and economic benefits in the past 14 years. An additional 8,000 tonnes can be loaded in good conditions (90% of the time) and a greater margin of safety is provided during periods of high swell. It has been estimated that DUKC® adds 10% to the capacity of the port, 30% of which is achieved through additional drafts and the balance from increased sailing windows



and opportunities that flow from this.

This technology, which has a 16-year proven, incident-free track record, is the only under keel clearance system worldwide that has taken large vessels deeper than static rules. Now in 19 ports worldwide, DUKC® systems have successfully assisted more than 50,000 bulkers, tankers and container vessels in depth restricted ports and waterways around the world and provided more than A\$10 billion in economic benefits to port users. It has been a busy time in WA for OMC which is about to celebrate the first anniversary of its Perth office. "It is no longer a fly-in, fly-out office and this reflects our growing workload in WA," Dr O'Brien said.

DUKC® technology, which was introduced to WA 15 years ago, is successfully operating in the WA ports of Port Hedland, Dampier, Geraldton, Fremantle and Bunbury.

OMC has been busy in WA working on several new software development projects, including WaSP (wave spectrum predictor),

which was introduced into Geraldton Port in April last year and Port Hedland in February this year.

Following the Geraldton installation, the Harbour Master Captain Martin North reported that "Recently though we have had a break through with a DUKC development which essentially considers forecast swell rather than just relying on actual and historic data. The results here have been very useful and we are now able to give good accurate departure drafts 36 hours out where previously if swell built up near the end of a ships loading programme the consequences of that swell only became apparent as it was happening and being recorded."

Dr O'Brien said: "It is exciting times for OMC in WA. We are also working on a feasibility study for a channel design of a proposed port. Our WA workload is increasing as more ports recognise the proven safety and economic benefits of our world-leading and award-winning DUKC® technology."

*OMC's world-leading DUKC® technology is continuing to win recognition in prestigious international shipping awards. OMC's DUKC® In-Transit technology won the Marine Civil Engineering and Construction category at the 2009 Seawork Awards in the United Kingdom in June. (This award was sponsored by Marine South East and the University of Southampton.) A month earlier, in May, OMC was Runner-Up in the Ship Operations Innovation category at the 2009 Seatrade Awards, also held in the UK.

For further information, please contact:

Dr Terry O'Brien
Executive Director
OMC International
Tel: +61 3 9412 6524
Mobile 0418 378 822
Mr Peter O'Brien
Managing Director
OMC International
Tel: +61 3 9412 6507
Mobile 0400 870 601