OMC’s real-time e-Nav DUKC® technology wins a Governor of Victoria Export Award

Winning a prestigious 2018 Governor of Victoria Export Award further cements OMC International’s reputation as an industry leader in under-keel clearance (UKC) management, Executive Director Dr Terry O’Brien AM said in a communique issued on 17 September.

Dr O’Brien received the Business Services Award trophy from the Governor of the State of Victoria, Australia, the Hon Linda Dessau, at a reception at Government House on the night of 14 September.

The award was ‘For outstanding international success in the professional business services including …engineering…”

In Dr O’Brien’s words: ‘This is a fitting win for our company. Our DUKC® technology is widely recognised as World’s Best Practice in under-keel clearance management and OMC continues to be awarded contracts due to our extensive experience and unmatched expertise in this field. DUKC® systems have been proven to offer greater efficiency which increases our export dollars while ensuring safety.

‘DUKC® remains the most sophisticated UKC system and is recognised as the global standard in UKC management. Every 45 minutes somewhere in the world a ship sails under DUKC® advice.’

OMC’s DUKC® systems are installed in 30 ports around the world, including most Australian ports, and in New Zealand, Europe and North America, as well as in important waterways such as Torres Strait.

This Australian-developed technology – which allows the shipping of more cargo, more safely, more often – is celebrating 25 years with an unblemished 25-year safety record of no groundings or incidents. In that time, DUKC® technology has helped more than 160,000 ships worldwide to safely transit depth-restricted waterways and port approach channels and delivered more than US$10 billion in economic benefits to port users.

DUKC®’s proven track record is vital because any grounding, for example, in the narrow channels serving Western Australia’s Pilbara ports, could block a departure channel with significant economic impacts. It is estimated that the iron ore exported from Port Hedland alone, under DUKC® advice, contributes about 2% of the national GDP.
These customised systems have enabled shippers such as BHP, Rio Tinto and Fortescue Metals Group to achieve record export tonnages from the ports of Port Hedland, Dampier and Cape Lambert.

OMC continues to work in partnership with Pilbara Ports Authority (PPA) and on 22/23 August, under DUKC® advice, a new 24-hour throughput record was recorded over two tides and 14 ships.

The new record of 2,478,219 tonnes was 79,796 tonnes more than the previous record of 2,398,423 tonnes which was recorded on 2 June this year.

In the international waters of Torres Strait, OMC’s DUKC® technology – commissioned by AMSA and operating since 2011 – has been tested in successful deep-draught trials over the last two years, resulting in trial Rio Tinto bulk ships transiting deeper than the current maximum draught limit of 12.2m.

To further contribute to the deep draught trials, AMSA has issued a conditional exemption to allow a limited number of targeted container ships to transit at 12.5m. At the time of writing the deepest eastbound container ship is due to transit on 18 September 18 at 12.5m.

In its home state of Victoria, OMC’s technology is helping some of the world’s largest container ships safely navigate the treacherous entrance to the Port of Melbourne with maximum cargo. And at the Port of Geelong, DUKC® is helping enable larger ships to import and export extra cargo, without requiring any changes to the channel infrastructure.

Dr O’Brien said the economic benefits of DUKC® to the exporter can be enormous. In some cases, at certain stages of the tide, DUKC® can provide large ships with up to an extra one metre of draft. For a typical container, this equates to about an extra 600 boxes and more than an extra 10,000 tonnes of solid or liquid cargo on a large bulk carrier or tanker.

OMC’s business offerings also include the integration of its latest web-based DUKC® Series 5 technology with its Dynamic Port Capacity Model (DPCM®) which enables ports and port users to make more informed investment decisions such as the optimisation of high spot dredging and the number of tugs or pilots needed, as well as assess the impact of shore-side developments on port throughput. Installed at Port Hedland, it has enabled PPA to increase the predicted capacity of the Inner Harbour by 16%. This maximised throughput has deferred the need for a $20 billion Outer Harbour Development.
And last month (August), Lyttelton Port Company announced that DUKC® had significantly reduced the volume of dredging required to upgrade the port’s entrance channel.

Melbourne-based OMC continues to be a world leader in UKC technology with a highly qualified team of more than 60 maritime engineers, naval architects, scientists, software developers, IT experts and pilots adapting its core product to new software technologies and industry challenges.

O’Brien concluded by saying: ‘OMC pioneered the real-time UKC concept with its first operational system installed at the Port of Hay Point in 1993 and has been at the forefront of innovation in this field ever since. We have a dedicated R&D team which is tasked to prototype new technologies and applications which keeps us ahead of the curve.

‘We are also in partnership with ports and relevant institutions such as the University of Melbourne, Metraweather and the Australian Maritime College on joint R&D projects.’

OMC and the other category winners in the 2018 Governor of Victoria Export Awards now automatically progress as national finalists and the winners will be announced in Canberra on 27 November.

In June this year, OMC received the inaugural International Harbour Master’s Association (IHMA) Award for its contribution to port efficiency taking account of safety and security. This ‘Safe, Efficient and Secure Port’ award was made conjunctively with PPA for UKC management at Port Hedland. It was presented at the 2018 IHMA Congress at the International Maritime Organization (IMO) headquarters in London.

Picture captions
Dr Terry O’Brien, centre, with at left Victoria’s Minister for Trade and Investment, the Hon Philip Dalidakis, and to the right HM Governor of Victoria, the Hon Linda Dessau at the Government House presentation on 14 September.

The 2018 Governor of Victoria Export Award.