

Going global with Australian innovation

THE COMPELLING COMBINATION OF HIGHER RETURNS WITH ENHANCED SAFETY HAS PROVIDED THE PLATFORM FOR SYDNEY BASED INNOVATOR, **OMNI TANKER**, TO LAUNCH THE OMNITAINER – THE WORLD’S FIRST CARBON FIBRE COMPOSITE ISO TANK CONTAINER – INTO THE GLOBAL MARKET, IN PARTNERSHIP WITH TANK CONTAINER LEASING POWERHOUSE, **EUROTAINER**.



The OmniTAINER is designed for the safe transport of corrosive chemicals and high purity.

In late 2018, Omni Tanker and Eurotainer finalised a global supply agreement with the launch of the OmniTAINER in Houston, Texas, to the major chemical producers and transport companies in the US. The export of tank containers from Omni Tanker’s plant in southwestern Sydney has now commenced, with the first units heading to the US and Europe earlier this year. Over the past decade, Omni Tanker’s ground-breaking composite technology has been widely deployed in the Australian road tanker market where it is used by the major chemical transporters for aggressive

Class 8 corrosive cargoes. With a track record of strong performance in Australia, the company focused its R&D efforts on the development of the OmniTAINER for the global tank container market. Introducing a new product to a traditional marketplace comes with its challenges, however, Omni Tanker CEO, Daniel Rodgers, senses the global market is primed for change. “Globally we are seeing significant growth in both the number of tank container transporters, and the number of tanks being brought to market,” he says. “Operators are

under pressure to find new ways to improve safety and drive profitability.” In the tank container industry, steel tanks are the norm, and the adoption of advanced polymer composite materials from the aerospace industry, such as

Fast Fact

“Omni Tanker’s proven break-through technology will transform the tank container industry.” – Vincent Martin, CEO Eurotainer

carbon fibre, is in its early stages. Omni Tanker is leading the charge in this respect with aerospace engineer, Dr Luke Djukic, heading up Omni Tanker’s engineering department. “It is exciting to be at the forefront of this process,” he says. “We are engaged with international regulatory bodies and are also privileged to be part of the United Nations working group of the Sub-Committee of Experts on the Transport of Dangerous Goods, developing the recommendations for fibre-reinforced polymer (FRP) portable tanks.” The high strength to weight ratio of carbon fibre reinforced polymer (CFRP) material has been applied by Omni Tanker to create a lightweight tank container suitable for pressure applications. The mass of the tank itself is around half that of a steel tank and provides significantly higher safety factors. The resulting payload increase provides compelling economic and environmental benefits to transporters via reduced costs and emissions. Where corrosive or high purity chemicals require lining inside a steel tank, the OmniTAINER’s technology advantage stands out. The seamless interior of chemically resistant thermoplastic within the OmniTAINER is connected to the CFRP structure with a high integrity union resulting in an ‘armoured thermoplastic’ vessel which provides exceptional chemical resistance and durability with aggressive corrosive chemicals. Omni Tanker’s ground-breaking technology advance has been recognised with international awards from the composites industry in the US and Asia as well as transportation innovation awards in Europe. The OmniTAINER creates new commercial opportunities for transporters with its versatile composite technology which is approved for road and rail transport of dangerous goods in Australia, the US and Europe. It can also provide high value to industries transporting hard to clean liquids such as MDI and Latex due to the smooth, seamless thermoplastic interior which is easy to wash-out. With safety high on the agenda of transport



Omni Tanker’s Rob Stubbs (COO), Dr Luke Djukic (CTO) and engineer Chris Powell.

regulatory bodies worldwide, the Chain of Responsibility (CoR) is especially relevant to the transport of goods of high consequence. The exceptional chemical resistance provided by the seamless interior of the OmniTAINER is given additional security from the CFRP structure which itself has a high degree of chemical resistance. This is in contrast to traditional lined steel vessels, where a breach in the lining results in rapid failure of the non-resistant steel structure, with potentially catastrophic results. “As the safest tank for aggressive Class 8 liquids, the OmniTAINER provides peace of mind to transporters of these high consequence cargoes, where the cost and impact of an incident can be extreme,” Rodgers says. The process of removing and renewing a lining within a steel tank is costly and time consuming with a heavy environmental burden associated with the disposal of the lining material. The durability of the internal thermoplastic tank in the OmniTAINER in harsh chemical applications provides significant benefits from the perspective of reduced repairs and maintenance cost burden, and time out of service. As Omni Tanker moves into the global market, the company is scaling to meet its growth plans. “Looking forward, new models are planned and the next technology developments are in

the works,” Rodgers says. With a highly committed management and a team of highly skilled engineers and technicians, this Australian company embodies the new era of advanced manufacturing where technology differentiation is the key to success in the world market.

Fast Fact

The first iteration of the OmniTAINER has a tank volume of 23,000 litres in a 20’ ISO frame with CSC approval stamps from Lloyds Register. The tank container is approved for the transport of Dangerous Goods in Australia under ADG7, in the USA by the Pipeline and Hazardous Materials and Safety Administration (PHMSA) department of the US DOT under 49 CFR, and in Europe by the German Federal Institute for Materials Research and Testing (BAM) in accordance with the European ADR, the first such approval by BAM.

Contact

Omni Tanker
65-71 Hartley Road
Smeaton Grange
NSW 2567
Ph: 02 4647 7557
Web: www.omnitanker.com