

A glorious throaty roar from the exhausts signals we are in full throttle mode as the dual 1,300 hp Cummins KTA38 engines pour on the power, punching the vessel through the swells on the South China Sea.

The smiling skipper of Super Bien Dong 2 gives the thumbs up as he unleashes the 38-litre V16 Cummins engines, knowing he can hit 30-plus knots if he wishes.

Super 2 Bien Dong is one of three new fast passenger ferries built for operation between central mainland Vietnam and the popular tourist destination of Ly Son Island, their efficiency underpinned by the legendary robustness of Cummins' KTA38 engine.

Two of the new 32-metre ferries entered service in December 2018 while the third was due to begin operating late in 2019.

Each of the three vessels is owned by different companies but they work as a cooperative, ferrying tourists from Sa Ky port in Quang Ngai Province – 150 km south east of Da Nang – to the popular Ly Son Island, thought to have been created from five volcanoes during the prehistoric age and now home to over 50 Buddhist temples, pristine beaches, and garlic farms.

Slashing travel time.

The three vessels are identical, their propulsion coming from the twin mechanically-injected Cummins KTA38 engines, each rated at 1,300 hp. They generate a top speed of 32 knots at 1,800 rpm, while typical operating speed is 28 knots at 1,600 rpm, cutting travel time by half – down to 30 minutes – compared with the older ferries that previously serviced the route.



Cummins DKSH marine business manager Ngoc Minh Tran (left) with Super 2 Bien Dong chief engineer Tran Huu Thach.

Cummins has a very good reputation for reliability."

CASE STUDY



Cummins DKSH marine business manager Ngoc Minh Tran (right) at Z189 shipyard with shipyard director Pham Hung Cuong (centre) and deputy technical manager Nguyen Tuan Anh.



An Vinh Express... also propelled by dual 1,300 hp Cummins KTA38 engines.

The long-established KTA38, along with its V16 stablemate, the 50-litre KTA50, are two of the most successful diesel engines ever produced by Cummins, their mechanical simplicity having wide appeal in tough commercial marine and industrial applications in SE Asia.

The ferries provide seating for 152 people, and each carry 80,000 to 100,000 passengers a year on a sea passage that is 17 miles (27 km) long. The Cummins engines will clock up around 2,500 hours a year, doing six return trips a day during the peak summer period.

Robustness, power density.

Competitor engines were considered for the task but, in the final analysis, the robustness and power density of the Cummins KTA38 gave it a clear advantage. These were also key factors endorsed by Vietnam's state-owned Z189 shipyard that built the aluminium-hulled vessels.

Z189 shipyard is operated by the Ministry of Defense in the northeastern port city of Hai Phong and gained an international reputation for ships – submarine relief vessels – it built for the Royal Australian Navy in a joint venture with Dutch shipbuilding giant Damen.

Cummins DKSH marine business manager Ngoc Minh Tran worked closely with Z189 shipyard to ensure complete customer satisfaction with the performance of the engines.

Chief engineer on Super 2 Bien Dong, Tran Huu Thach, expresses his satisfaction with the performance and fuel consumption of the KTA38 engines to date. He has no concerns about reliability. "Cummins has a very good reputation for reliability," he says. "The material quality of the Cummins engines is top level."

He points out that the KTA38 engines propelling Super 2 Bien Dong are each using around 200 litres/hour – better than two other engine brands operating in the fleet. ■



Super 2 Bien Dong skipper reads Cummins Commentary before unleashing the 38-litre V16 Cummins engines.



Celebrating the launch of Super 2 Bien Dong at Ministry of Defense Z189 shipyard.

