



A VISIT TO THE AQUILA FACTORY

With the first Australian owned Aquila 44 powercat arriving in Fremantle and a further two ordered, Multihull Central's Brent Vaughan takes a timely visit to the Sino Eagle production facility in China to witness first hand their big plans for the future.

As my last trip abroad for 2015, I was looking forward to seeing our first Aquila prior to shipping and handover in early 2016. I was accompanied by another customer and his family who have ordered the third Aquila 44 destined for Australia in mid-2016. Being the first Aquila charter boat in Australia, it will operate between the Whitsundays and Sydney Harbour. I was also keen to inspect number two boat that is currently midway through

construction and due to arrive for her debut at the Sanctuary Cove Boat Show in May 2016.

My customers were eager to witness the production facility and test the newest Aquila 44 on the water, good timing as the boat was being tested prior to her shipment. With the factory located on the shores of a river flowing through Hangzhou (to the south west of Shanghai), each Aquila is thoroughly tested on

the water prior to shipment, with a detailed quality control process being checked off, followed by testing by Volvo mechanics and an independent surveyor.

Before we sea trial the boat, a factory tour is organised where we witness again the very impressive quality control process. The build is closely monitored through all the various production milestones. All those visiting the Sino Eagle Factory

are always pleasantly surprised by the incredibly professional approach this facility and its operators take, quality control is at the very heart of this vast production facility.

Sino Eagle's Executive Director, Frank Xiong explains the approach, "From day one of building the Aquilas, we wanted to set ourselves apart by having the highest quality control possible, this started with the production facility and fibreglassing techniques using resin infusion in humidity and temperature controlled lamination bays."

Resin infusion not only provides additional strength through a precise mix of resin to fibreglass reducing weight by extracting excess resin,

it also has the added benefit of minimising fumes. The smog in China is pretty thick at the best of times, this change in attitude reflects a major move in China's approach to manufacturing as the surging middle class burst through the old third world era of yesterday and into a leading developing nation.

Evidence of this is everywhere with the staff dressed in full protective wear, extraction fans fitted and a factory floor that you could eat off. This is also evident as you walk the streets of Hangzhou, filled with modern luxury cars, on new roads and freeways and lined with up market stores. It's clear to see the

Resin infusion not only provides additional strength through a precise mix of resin to fibreglass reducing weight by extracting excess resin, it also has the added benefit of minimising fumes



future, China is becoming a high tech manufacturing hub rather than a cheap labour zone and is starting to assemble the technology and resources to rival Europe's manufacturing plants.

Frank concludes, "With Aquila, we have a vision to be the world's number one powercat manufacturer, this will only come through a very high quality for a global market, innovative design and facilities to scale up".

It's clear to see this vision as Sino Eagle have invested millions setting up an enormous 110,000sqm state of the art production facility, with full length gantry cranes, stores warehouse, dedicated development factory, drafting studio and a new marina currently under construction. Only a small portion of this facility is currently utilised by the existing Aquila production line which in

2015 built 23 power catamarans. However this number will almost double in 2016 with 44 planned for construction with most already sold. Staff will increase from a comprehensive 120 to over 200. New models are already planned and are currently in development and testing including the new Aquila 36, a high speed powercat due for release mid-2016.

Previously Sino Eagle were the OEM production facility for Leopard Catamarans, but decided to go out on their own with the Aquila power catamaran brand and the guidance of Lex Raas, ex CEO of Moorings/Sunsail who now heads up Marine Max Vacations based in Florida USA. With bases in the British Virgin Islands Lex and the team are the driving force behind the Aquila strategic direction and design, using J & J Design as the naval architects, who have a plethora

of production brands on their CV including Azimut, Bavaria, Beneteau, Dufour, Jeanneau, Monte Carlo and Greenline.

The Aquilas stand out from most production power catamarans available on the market because they have been designed from the keel up as a power boat rather than designing from a sailing catamaran perspective, which often means reusing existing sailing catamaran moulds/thinking to develop a power cat in an effort to save development costs. The end result of course is of noticeable contrast, resulting in the Aquila's greater volume, superior load carrying capacity, ergonomics and overall sea going characteristics.

"Following from our experience in joint venture building sailing catamarans, we decided that we would not compromise, so we introduced the technology currently

in use in other areas of the Sino Eagle Group," Frank says.

The Sino Eagle Group builds thousands of kayaks and Olympic class rowing boats each year. We have become the preferred Olympic class supplier as we build a 17ft row boat that weighs only 14kgs with a variance from one boat to the next of just 50 grams. This precision is thanks to a technique called pre-preg carbon infusion, the boats are baked using an autoclave oven producing a super lightweight craft. Frank tells me there are now six ovens in operation.

We move from the factory to the water and a new Aquila 44 and 48 are tied up side by side on the river's edge ready for our sea trial. The twin 300hp Volvo D4 motors start up and we pull out into the river. These purpose built commercial grade engines are connected to a V-drive gear box taking the shaft out under the motor. The engine rooms are neat, spacious and impressively sound proofed.

As the skipper hits the throttles we top out at about 21kts at 3,600rpm. When in cruise mode at 7.5kts the Aquila 44 will achieve almost a 1,000nm range consuming just 10.5 L/hour. Even at 12kts the boat consumes only 60 L/hour. There may be some power catamarans on the market who purport lower fuel use, however it will be unlikely they will have the volume or accommodation the Aquila owner enjoys. That's because they are using a semi-displacement hull that cuts through the water rather than riding over it, this is a real problem when you try to cut into oncoming seas, the bows pop out over the waves causing an aggressive hobby horse action. The Aquila hulls are considered super-displacement with a V-shape, large bouldous bows, hard chines and a

centre wave breaker that allows the boat to ride up over the sea.

It was an impressive ride and we were very pleased to see some new additions for our Aussie customers, including a built-in esky under the cockpit seat, a stainless steel barbecue plate on the stern, and the starboard bathroom/head for the guest cabin converted into a utility room including a full height fridge, washing machine and additional storage, perfect for the live aboard cruiser.

Multihull Central and Sino Eagle have worked closely to ensure that all Aquilas coming to Australia will meet the stringent Australian standards before they leave the factory including full 240Volt AC electrical certification and Australian commercial survey construction standards. This has required Australian surveyors and marine electricians being flown to the factory to inspect the construction and equipment and where necessary supplying some Australian certified components. This is a very unusual practice for some production boat builders who most often rely on importers to try and retrofit systems and equipment to meet our standards, or worse still, leave an unsuspecting owner to deal with the local authorities and suppliers when the boat arrives in Australia.

With three boats enroute to Australia in 2016, there will be an Aquila 44 on display at each of the Gold Coast, Sydney and Perth boat shows. I feel this extra effort will not go unnoticed as Australians will witness first hand a new generation of production power catamarans opening up the world of cruising to non-sailors, in a package emulating a modern luxury apartment on the water.