

Cheoy Lee has been building leisure yachts since the 1930s, latterly specialising in semi-displacement designs, such as this Serenity 90

HAVING SUCCESSFULLY **EXPORTED ITS SUPERYACHTS** PRIMARILY TO THE USA FOR DECADES, CHINESE YARD CHEOY LEE IS NOW LOOKING TO TARGET EUROPE

JAKE KAVANAGH REPORTS

he founding fathers of what would eventually become Cheoy Lee established the company in a Shanghai yard in 1870, and it has remained a family-run firm ever since.

Today, the yacht building division of Cheov Lee has its own offices and maintenance vard in Hong Kong, but continues to share the modern shipbuilding facilities at Cheov Lee's commerical Hin Lee yard in Doumen, just across the water in mainland China.

At Doumen, it currently produces a series of four motoryacht models from 18m-41m (59ft-135ft), and builds other yachts on contract. The leisure craft operation runs in tandem with major commercial projects such as tugs, pilot boats and ferries

The company opened the Hong Kong site in the late 1930s and, after the war, began to supplement its commercial work by building teak motoryachts for export to the USA.

This proved so successful that by the 1960s (when a larger yard was opened on Lantau Island) the output ratio was 90 per cent

leisure, and only 10 per cent commercial. Moving with the times, Cheoy Lee then

switched to manufacturing in GRP.

In 1977, it moulded what it claims was the largest GRP yacht of its time, the 39m (128ft) motoryacht Shango II, followed by the first foam-cored production motoryacht, the Cheoy Lee 48 Sport Yacht. The yard also produced a range of long-distance sailing yachts, typified by sturdy construction and rich teak interiors.

Target markets

Throughout the 1990s, the Dutch based broker De Valk represented the Cheoy Lee brand in Europe but, although this respected and long established broker sold a large number of Cheoy Lee models (mainly sailing yachts), the US continued to be the primary export market.

A long-term export relationship was established through a successful US dealer network (followed by a dedicated office in Ft Lauderdale) which allowed Cheoy Lee to gain a strong following with Americans who were attraced by the rugged build quality, highclass joinery and no-compromise engineering.

Today, though, Cheov Lee has started to take a renewed interest in the potential of the lucrative European market and has created a new business relationship with a dedicated European distribution company - Cheoy Lee Riviera — headed up by MCA-qualified superyacht captain Athos Cleanthous, and marketing guru Nick Lockett, a former director of advertising giant Saatchi & Saatchi.

Broad range of craft

In 1990, Cheoy Lee sold its Lantau Island yard in Hong Kong to the Disney Corporation.

"That's when we stopped building the sailing yacht range," explains Hong-Kong born sales manager Jonathan Cannon.

"The designs were becoming outdated, so the moulds are now part of the infill supporting the new Disneyworld."

Before the Lantau sale, Cheoy Lee bought a smaller repair and maintenance yard near Kowloon after its original Hong Kong yard lost its waterfront. With Lantau gone, the yacht building section relocated to the company's main Hin Lee shipvard at Doumen.

The main facility is around two hours (including immigration procedures) from Hong Kong by fast ferry, or three hours by car, which has to skirt the Pearl River estuary.

Cheoy Lee's ranges of boats start with the Serenity series which is built from 18m-27m (59ft-89ft) and based on displacement hulls.



The Hin Lee Shipyard covers 113,000m² beside the Pearl River near Zhuhai

The yard also builds the Bravo series from 20m-29m (65ft-95ft), the Global at 30m (98ft), and a sporty new Alpha which is currently only available as a 23m (75ft) model.

Cheoy Lee's largest superyacht is the 172ft (52m) Sea Shaw, designed by Frank Mulder.

The Kowloon yard is relatively small, and mostly concerned with fast ferry maintenance and repair. Yachts are therefore usually produced at the Hin Lee yard and delivered to the Kowloon site in order to be prepared for shipping. The Kowloon yard also has a design office, and is the base for Cannon's marketing team, although he regularly

JONATHAN CANNON

onathan Cannon was born and raised in Hong Kong, but trained as a naval architect in the UK. After qualifying he worked for Emsworth Shipvard. near Portsmouth, before returing home to join Cheoy Lee in 1992.

"In the early 1990s, the shipyard was producing good quality yachts, including Dave Pedrick designed sail boats and Seaton-Neville motorsailers, from a large and dusty shipvard on Lantau island. The vacht production ran parallel to a successful commercial operation,

"Whilst there have been many physical changes in the company, the bedrock of family heritage and generations of experience and integrity doesn't alter.

"Our move to the nearby Doumen facility in China brought huge potential, and we were close enough to Hong Kong to enable us to retain all key members of staff - smoothing out the transition.

"Since the move, global recognition of Cheoy Lee's commercial vessels, tugs in particular, has grown exponentially. The quality of our yachts is also reaching new heights, thanks to the strong work ethic of local labour, investment in technology, and our uncompromising approach to research, testing and production.

"I believe that what sets Cheoy Lee apart from other yards is the deep understanding shown by the company's senior staff and directors, stemming from generations of families working in this industry, in this region. This allows them to more effectively tap into the wealth of resources that are available.

"Combining commercial and pleasure craft manufacture within one company brings a broader understanding of systems, construction and engineering innovations, to the benefit of both divisions. Furthermore, the cyclical nature of the commercial and yacht markets is typically not in phase.

"In trying economic times, luxury items



Cannon has spent two decades working at the China-based shipyard

such as yachts are the first to suffer. Commercial boat orders, being a case in point at this time, remain extremely rebust, and maintain stability and financial strength. At other stages in history, booming yacht sales have smoothed over dips in commercial vessel demand.

"One primary difference between Cheoy Lee and many other yards is its financial standing — and this shows when market conditions deteriorate. Where other yards are forced to make cuts. Cheoy Lee uses downturns to invest and develop. Market strength will always return, and our strategies ensure that we will be well positioned when it does.

"Our new Alpha series was launched to an overwhelming response at the Ft. Lauderdale boat show in 2011, in the form of our Alpha 76 Express. The Alpha 76 Flybridge will be unveiled at the 2012 Ft Lauderdale show, and design of a larger Express model has now been completed.

"Cheoy Lee will continue to innovate sensibly, responsibly, and where genuine benefits to the owners can be achieved. Going forward, the yard will maintain momentum in both commercial and leisure markets, and continue to operate on the time-honoured principals that have brought it to where it is today." SB

villb. pleasure craft manufacture within one company brings a broader understanding of systems, construction and engineering" escorts clients across the border to tour the main facility.

With Cannon as our guide, we took a car to the Hin Lee shipyard. China's meteoric growth was evident on both sides of the border, with a sprawling landscape of factories, electricity pylons and brand new high-rise apartment blocks taking shape in all directions. The motorway was crammed with expensive. modern cars — a testament to China's ongoing creation of domestic wealth. There is still no recession in China.

The Hin Lee Shipyard sits beside the Pearl River, and covers a flat site of 113,000m2 with a large and curiously curved 1,000t railway

transfer and launching system at its heart.

On arrival, the first impression was one of scale. Hundreds of bicycles were racked outside the imposing main gate, an indication of the size of the workforce. The facility has already undergone one major expansion.

The yard has a number of tall sheds, each capable of taking a 60m (197ft) commercial project — two of which were being built during our visit. Several imposing commercial vessels were alongside the main quay. contrasting starkly with the sleek lines of the ruby-coloured 45m (148ft) steel yacht Mazu, which was undergoing final completion.

A quick look onboard Mazu revealed an

interior made exactly to the customer's requirements using a macassar ebony wood. Down below there was spacious crew accommodation and a first class engine room. matching anything built in the West. Lessons learnt in the commercial sector have led to systems that are easy to access and maintain.

Designed by Ron Holland, Mazu is the second of the Marco Polo series, and is intended as a long range explorer yacht with low running costs and an impressive range. Powered by a single Caterpillar 3512B 1911hp diesel, the yacht features a bulbous bow and twin rudders. The hull is steel, but the superstructure is a lightweight composite from High Modulus, meaning Mazu weighs in at less than 500grt — freeing the owners from onerous regulations. A second engine room in the bow, over the large thruster, gives the yacht back-up power, with a Schottel pump jet as auxiliary propulsion.

Each project has its own dedicated team who are overseen by Lo family directors and western managers, the latter living in private bungalows nearby.

"Choey Lee is run by eight brothers from the Lo family, all of whom have been Western educated," Cannon explains, "Many of the Chinese managers have also had a western education, and a considerable number of our

FINE BOW

All Cheoy Lee supervachts feature a fine entry bow, which sets interior designers a challenge with the forward third of the yacht. Fine entry avoids the discomfort and structural stresses of pounding in heavy seas, so is always given priority. Cheoy Lee tank tests scale models extensively to ensure an efficient and dry-riding hull



LIGHTWEIGHT MARBLE

The yard slices marble granite to around 4mm thickness, and then mounts the stone onto foam cored composite panels. This results in considerable weight saving, yet still gives the appearance of heavy solid stone surfaces. The company uses a lot of stone on the Global 100 particularly for the floors, walls and counters in the heads







production supervisors originated from the Hong Kong operation, so good English is widely spoken. It makes communication with American designers and customers very easy."

In one of the sheds erected during the recent expansion was the production line for the new Alphas. The second of the series was nearing completion, and a third was taking

shape towards the back of the large, climatecontrolled shed. In total, six Alphas will be built each year on a semi production line basis. The mould tools were in the same building, and Cannon pointed out the solidness of the supporting frames.

"We massively reinforce the moulds to ensure there is no distortion," he says. "We

"Cheoy Lee has plans for a larger version of the Alpha, creating a new generation of high performance superyachts — although realisation is a long way off

SPLIT HULL MOULD

Glass is being laid in the split hull mould for the Global 100 prior to bagging film being applied. The mould is specifically tooled for lamination by resin infusion, and split to avoid vertical or overhanging surfaces. Resin infusion ensures optimum resin to fibre reinforcement ratios for added strength and reduced weight





INTEGRAL TANKS

The GRP tanks are laminated into the hull to form a double bottom. This contributes to the strength of the hull by creating a stiff box structure. Liquids are carried at the lowest part of the boat to lower the centre of gravity, and allow for increased tank capacity. The tanks offer a second line of defence if the hull shell is holed, plus there is minimal sweating and no corrosion from GRP

The CNC-cut joinery is made using highly detailed plans, from which the skilled workers create pieces with very fine tolerances

also go to great lengths to ensure that all of the moulded components are created within very tight tolerances - especially when it comes to weight."

Alternative design

The Alpha, with its medium-to-deep-V performance hull, wide decks and aggressive styling, is a departure from the usual Cheov Lee line-up. The project manager is US powerboat champion Gene Weeks, who explains that director Lo But Yang had been



The Cheoy Lee factory is in the middle of a specialist marble region, so good quality stone is available along with the latest cutting machinery

inspired by the number of express-style cruisers he saw cruising past his condo in Port Everglades, Ft. Lauderdale.

As we toured hull number three, its monocoque-constructed form taking shape in a heavily supported mould, we were struck by the generous amount of stiffening afforded by deep, carbon-capped stringers.

"All our hulls are vacuum infused," says Weeks. "Most builders will drop their glass vertically from the gunwale to the keel, and so have a series of overlapping strips, but we run our glass longitudinally.

"This gives a better energy transfer along the hull, and reduces noise and vibration. Cheoy Lee's lamination team is exceptionally good at glasswork."

The build time for an Alpha is around 40 weeks, but the production team hopes to reduce that to 36. Cheoy Lee has plans for a larger version of the Alpha, creating a new generation of high performance superyachts - although realization is a long way off. Adjacent to the Alpha hall are the

SPACIOUS UPPER DECK

The new Global 100 features an upper deck beneath a solid hard top. flanked by substantial guardrails and featuring an overhang to shade the windows below. The emphasis of this MG Burvenish Inc flybridge design is for socializing, with a bar, central helm station, Jacuzzi and storage for the tender. The rear of the flybridge also acts as a verandah for the stern deck



project's joinery shops, which are spread out over three storeys. Here, highly skilled workers build the interior modules to the customer's specifications.

In the interests of weight, the joinery consists mostly of laminates bonded onto a honeycomb core of either card or aluminium. The factory has its own plywood-making facility so they can guarantee the quality, although Cannon admits it would be cheaper to source the material externally.

Cheoy Lee uses the most advanced CAD design software, linked to CNC milling machines that cut components for the furniture to tolerances of 0.002mm.

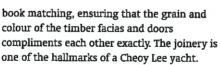
"We use GRP backing pieces on some veneered components," says Cannon. "These are not formers, they are the actual pieces that will be used in the boat.

Painstakingly clad in veneer, the finished pieces look like solid wood, but at a fraction of the weight, and are not susceptible to cracking or warping. The lamination department can create exquisite shapes in apparently solid wood, such as the singlepiece, twisting handrail in the Serenity 61's spiral staircase. Great care is also taken with



SHIPBUILDING DNA

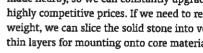
Typical of all Cheoy Lee yachts, the commercial-style systems are evident throughout the Bravo 95, making them easy to maintain. Here, a number of pipes are held in vibration-proof rubber grommets and clearly labeled. Cheov Lee prides itself on its shipbuilding heritage, which directly enhances the practicality of every design



Across from the joinery department is the marble cutting centre where large slabs of natural stone are cut, shaped and polished for the yachts' decorative and wipe-down work surfaces. Colour-matched pieces are cut from the same slab for uniformity.

"This area of China is renowned for its marble and granite industry," Cannon says.

"All the machinery needed for this work is made nearby, so we can constantly upgrade at highly competitive prices. If we need to reduce weight, we can slice the solid stone into very thin layers for mounting onto core materials."



Building moulds

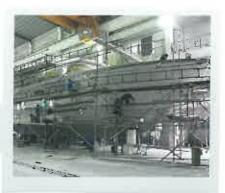
Technology also means being able to make accurate mould tools from 3D designs, and in another shed three CNC milling machines were hard at work shaping a series of composite foam plugs for various mouldings. The machines are controlled from a dust-free and soundproof control cabin set into one wall, although masked operatives were also manually resetting machines and removing the finished pieces.

Taking a walk through the main shipbuilding facility to reach the next yacht shed, we passed the business end of two ships under construction. The hulls being assembled

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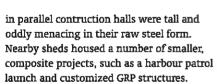


FAIRED HULL

To ensure a seamless finish, each hull is fully filled and faired before being painted with Alexseal. This yacht is dwarfed by the large shipbuilding production hall, and has three levels of workshops alongside it. The average build time for the Bravo 95 — one of a six model series - is around 14 months

HIGH QUALITY METALWORK

The factory has a large stainless steel and aluminium fabrication department capable of creating the most complex and intricate of shapes. Many of the bespoke tools are made on-site, with the workers able to swap between rugged commercial work and top quality yacht finishes, depending on the order book



Dwarfed by its shed, a Bravo 88 had reached the halfway point of its construction. The semi-planing Bravo was a hive of activity, with teams of workers long-boarding the hull. The topsides on all the yachts are filled and faired prior to painting with Alexseal, allowing for a custom hull colour and a far smoother finish.

Onboard, more teams of workers were busy in all parts of the yacht, with the plans pinned up on each bulkhead for ready reference. The work at the yard is all carefully co-ordinated, with a great deal of crossover in skills. Foremen dressed in grey overalls, as opposed to 'worker blue', seemed to be everywhere. There is no slacking in a Chinese shipyard.



Social responsibility

There are approximately 1,200 workers at Cheoy Lee, nearly all of whom live on-site in accommodation blocks, and are fed en-masse in a large staff canteen.

"A heat recovery system in the kitchen exhaust is used for hot water in the dormitories," Cannon explains. "We used to need 8,000lt of heating fuel per year, but since implementing the heat recovery system five years ago, we halved the yards requirements.

"More recently, we added solar heating on the roof, so now we need just over 1,000lt in total. As well as striving to produce efficient products to minimize environmental impact, the yard aims to do the same in production."

The production staff is mostly male, and while some female staff are used in catering and administration roles, a significant number work in the moulding shops as laminators.

Lunch break is the highlight of the day,

with the workers descending on the canteen to bolt their food and grab a few minutes of sleep (hence the joke about new recruits being asked what size pillow they would like). In China, where a large bulk of the workforce has migrated from the countryside, the secret to staff loyalty, and the critical retention of high skill levels, is to look after them, with food and accommodation as part of the package.

"The climate in China isn't really conducive to the leisure activities enjoyed in the West," says Alle. "Instead, their energies are focused on work, education and networking. This is why China has become so successful,"

Hand crafting

Our final visit was to the stainless steel department, where bespoke items for the yachts were being hand made. Within the same shop, a small team was hand crafting a complex tender launching system for the Alpha. This proved to be a well-made and ingenious device, which largely accompanied the tender into the water to facilitate launch and recovery. Despite the high level of skill with stainless steel, Cheoy Lee still prefers to import the majority of its deck fittings.

"Aside from engines, generators and navigation gear, we import almost everything that goes into building our boats," Cannon says. "Chinese-made components may be improving, but they do not have the pedigree or back-up of established marine suppliers which is essential for a world class product."

Finishing our tour in the administration building, we were left with the impression of a well-run yard with a multi-skilled workforce, proudly producing top quality yachts.

With a renewed marketing drive into Europe via Cheoy Lee Riviera, combined with

exciting new models such as the Alpha, it would appear that this long established shipyard is set to become much better known outside its traditional US markets. SB



TO SEE SB'S interview with new European dealer Nick Lockett as he tours the

Cheoy Lee yard, simply use your smartphone to scan the QR code (right). A QR reader app will automatically redirect you to our informative links and exclusive videos.





SPECIFICATIONS

TECHNICAL SPECIFICATIONS

DLOA: 45m (148ft) **▶ Beam:** 9m (30ft)

▶ Draft: 3m (10ft)

▶ Fuel capacity: 62,600lt (14,067gal)

▶ Water capacity: 14,000lt (3,146gal)

▶ Engines: Single Caterpillar 3512B 1,911hp

▶ Aux propulsion: Cat C7/315hp with Schottel waterjet

Generator: 2 x Northern Lights 90kW 50Hz. 1 x Northern Lights 65kW 50Hz

▶ Construction: Steel hull with composite superstructure

▶ Top speed: 15kt

Cruising speed: 13kt

▶ Range: 6,000nm @ 10.5kt and 3,300nm @ 13kt

▶ Berths: Eight guests plus eight crew

▶ Naval architect: Ron Holland

Delassification: MCA Large Yacht Code 2

YACHTS IN BUILD OR PLANNED

Delivery: 2012 ▶ 1 x Alpha 76 Express cruiser

1 X Alpha 76 Flybridge Delivery: 2012

1 x Bravo 88 Series Delivery: 2012

▶ 1 x Marco Polo 150

Delivery: 2012

▶ 1 x Global 103 (100+3) Delivery: 2013

▶ 1 x New Alpha series Delivery: 2013

(Details confidential)

