incat

2020-2021

Volcan de Tagoro

NAVIERA ARMAS

Trinidad & Tobago

Hull 094 Interiors

INCAT'S PRODUCTION LINE

Jet powered comfort and reliability

THRUST & EFFICIENCY
MAXIMUM CAVITATION MARGIN
SERVICE & SUPPORT

ENVIRONMENTAL FOOTPRINT
UNDERWATER RADIATED NOISE
FUEL CONSUMPTION & OPEX

PERFORMANCE OPTIMISATION TO MEET YOUR NEEDS

Wärtsilä waterjets have been developed in line with the latest operating demands for fast ferries, naval vessels, workboats and luxury yachts. With a portfolio ranging from 500 to 50,000 kW, Wärtsilä waterjets enable vessels to meet and exceed the performance levels required for today's competitive operating environment.

We are proud that Incat has chosen Wärtsilä as a preferred supplier – with 178 waterjets installed on Incat vessels worldwide.

wartsila.com

WÄRTSILÄ

Chairman's Message

Shipbuilding has forever been cyclic.
Good years followed by bad!

There are several reasons to believe that for the next 20 years the cycle will flow from good to very good, and maybe even exceptionally good.

The sensitivity to fuel price fluctuation and in terms of emissions does not affect our lightweight aluminium ship to the same extent as steel ships of twice the weight requiring more powerful engines.

Our expertise in supplying lightweight aluminium ships stands us in good stead to serve the already moving market.
Incat begins the new decade with four confirmed orders to deliver lightweight ships. We also have the prospect to double that number.....good times indeed.

Bigger is better, the larger the ship the more the economies of scale assist. Many existing customers are now considering new and larger vessels.

On the question of fuel and emissions; Incat's lightweight ships are perfectly suited to battery electric propulsion with zero emissions from the ship.

Watch this space – it will be very exciting.

Robert Clifford
Chairman

Head Office & Shipyard,
Incat Tasmania Pty. Ltd.

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Derwent Park, Tasmania, 7009

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Cover Image:
John 'Jock' Burrows
Employee of the Year (left),
Andrew Pickett
Apprentice of the year (right).

Photography – Andrew Maney

2020-2021
DELIVERY PROGRAM

094
100m

093
110m

PRODUCTION

096
130m

Incat is proud to count the world's finest skilled technicians amongst our workforce.

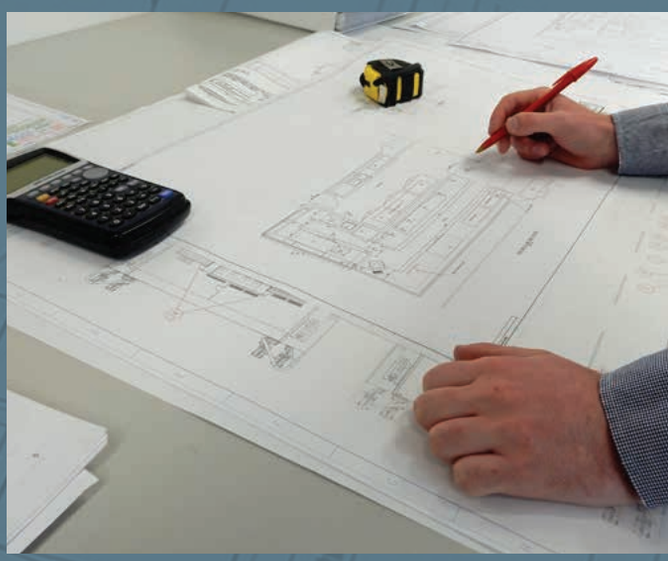
Incat's world beating Wave Piercing Catamarans are created through a production line system at the dedicated 70,000m² undercover facility. Multiple vessels can be handled simultaneously in two drydocks which includes the ability to house construction of larger vessels over 150m in length. Like any thriving business, a core of dedicated and loyal staff can be found at the centre of Incat's success. With a comprehensive training program, high levels of job satisfaction, Incat ensures a skilled workforce and low employee turnover with many team members accomplishing over two decades of service.

PRODUCTION

DESIGN

Revolution Design's team of naval architects, engineers and designers work with the concept and creative team at Incat to develop and refine vessel design.

The team work together from concept stage through research and development, structural design and analysis, drive line technical specification and layout, naval architecture services and complete drafting and design services for Incat vessels.



CEO Report

Like buses there can be a long time between vessel deliveries and then it feels if they are queuing up. 2019 started with the team frantically finishing the 110 metre Saint John Paul II, delivered to Virtu Ferries in February. By July the 111 metre Volcan de Tagoro was ready for delivery to Naveria Armas. In October Incat followed the delivery of the two large vessels with Port Phillip Ferries second ferry, the 35 metre Geelong Flyer. In excess of 20,000 gross tonnes of vessels delivered within one calendar year with a workforce half the size of when this was last achieved 21 years ago.

In May we were very pleased to announce an order from South American operator Buquebus for a 130 metre dual fuel vessel, Buquebus ninth Incat vessel and a testament to the high regard operators have for the high quality our employees produce.

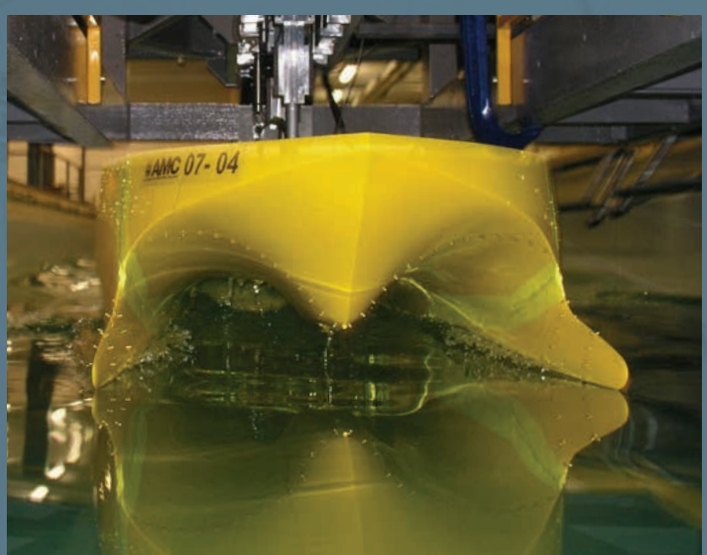
Recognition of our workmanship does not stop with our customers. The highly respected Royal Institute of Naval Architects (RINA) has selected Saint John Paul II for the prestigious notation "Significant Ship". With membership consisting of industry leaders, each year RINA publishes a highly select list of the most innovative and important commercial vessels designs delivered during the year by shipyards worldwide. This is perhaps the highest accolade that can be paid to the Incat workforce.

With an increasing order book comes bigger challenges, including the ever-present need to increase our skilled labour force whilst at the same time increasing productivity. Thankfully, due in no small part, to the ingenuity of our workers we are seeing a continued progression in production innovation resulting in ever larger vessels being built in the quickest possible time.

Perhaps the biggest challenge we face is to how to remain competitive against the growing number of yards in developing countries. Whilst the "wage gap" is significant and we cannot expect customers to pay an unwarranted premium, I am proud to say that we remain committed to expanding our "home grown" workforce and it pleasing to see many operators continue to recognise the quality and expertise of our dedicated team by placing trust in Incat to deliver a superior vessel on time and one that will reward the owner's commitment to quality for many decades to come.

Once more, I would like to congratulate our annual award winners, Jock Burrows and Andrew Pickett as well as all those nominated.

Tim Burnell – CEO, Incat Tasmania Pty. Ltd.



Hull 091

Introducing
Volcan de Tagoro

Bathed in red, white and grey, Incat 091's sleek and modern lines strike an imposing silhouette.

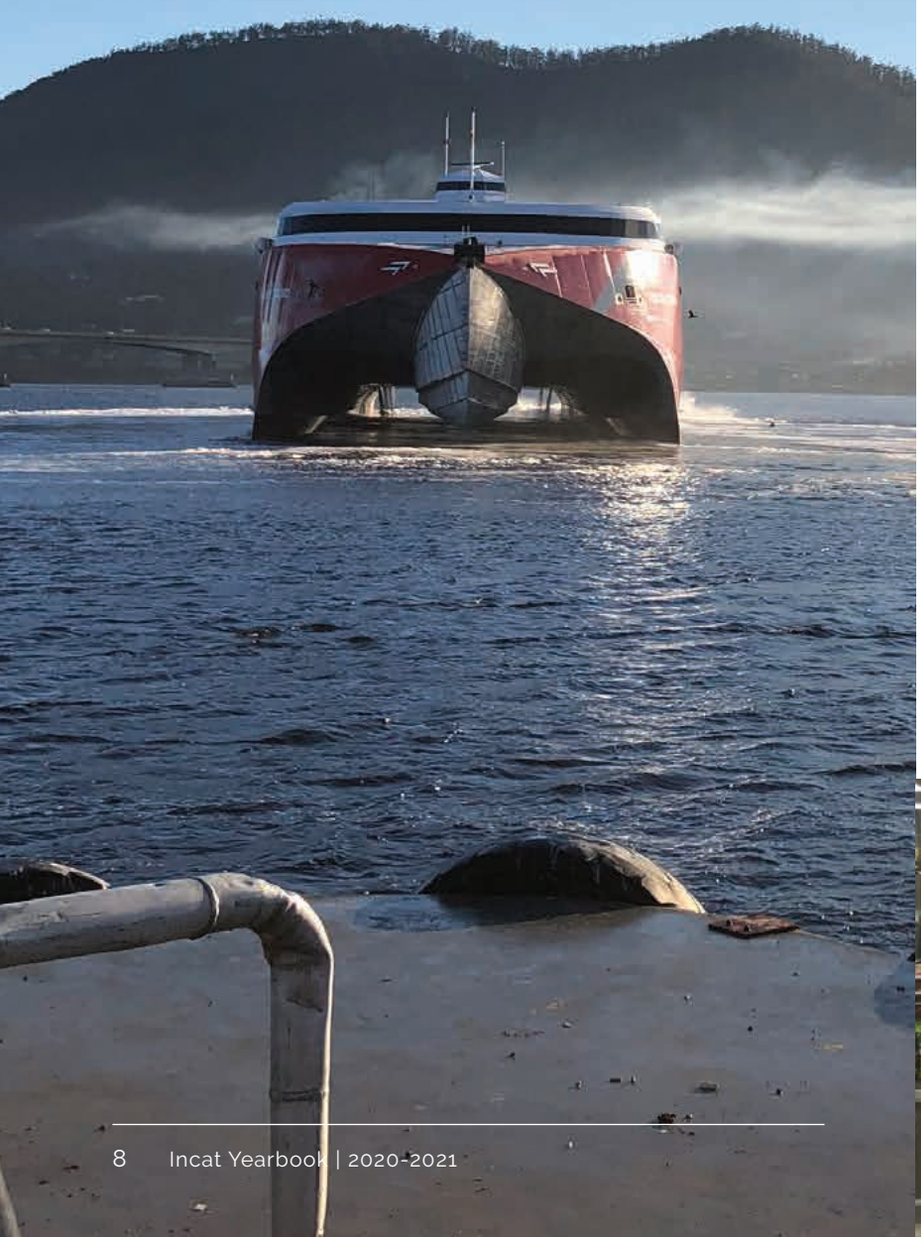
Incat Hull 091, *Volcan de Tagoro*, was handed over to her new Spanish operator Naviera Armas SA in early July 2019. The vessel is now operating on Spanish routes, including the Canary Islands. Naviera Armas SA has an extensive fleet of vessels, with *Volcan de Tagoro* being the fifth Incat vessel operating in the Armas fleet.

Hull **091**

Volcan de Tagoro

A thoroughly modern and purposeful appearance promises speed, comfort and quality for all those who travel aboard.

The vessel can accommodate 1200 passengers and crew whilst offering 595 truck lane metres (TLM) together with 219 cars, or space for 401 cars over two decks. Sporting Wi-Fi, satellite television, integrated CCTV, full climate control and an efficient and clean powertrain, 091 is the perfect example of a vessel for the 21st century.



Internal facilities

Luxurious open spaces and extensive facilities are available to all passengers. An abundance of natural light provides an air of subtle and restrained elegance. Plush carpets, hardwearing wood finish walkways, tasteful coloured wall panelling and stainless steel handrails are featured throughout. All passenger areas offer a flexible mix of seating and tables where travellers can relax, enjoy the scenery, or make use of the onboard entertainment.

A colourful children's playroom, parent's lounge, shop, purser's office, disabled toilet, ceiling mounted televisions and an open promenade deck at the stern are available to all. Toilets feature quartz or marble benchtops and hygienic air blade hand dryers, with the disabled toilet offering a baby change table.

The vessel's bars and kiosk feature stainless steel food grade benches, cabinets and storage. Liberal use of lighting, glass and colourful light panels give a fully customisable, club-like ambience for all first class, business and economy passengers.

Crew are catered for with cabins located on the upper vehicle deck both port and starboard. Lounge seating, refreshment, showering and toilet facilities are also provided in a crew room on the passenger deck. It comes equipped with network access to the kiosk, shop, ship's telemetry and internet access.

Shop

Characterised by its generous use of glass shelving, white oak panelling and quality stainless steel fittings, the vessel shop is a fresh and welcoming space in which passengers can peruse a selection of goods whilst on-board.

Boarding Facilities

Vehicles come aboard via an articulated two-piece ramp at the stern, with traffic directed up the port side. Smaller vehicles can make their way up to the upper deck via a ramp at the bow. Large trucks are able to drive on and off without reversing as the lower deck layout allows them to turn from the port side to the centre and starboard lanes. Foot passengers can also use the vehicle ramp to board when docking at Mediterranean style berths.

The vehicle decks are bright and open with natural light coming from openings in the bow and stern. A durable and low maintenance bead blast is applied to each deck to prevent tyre skid. Structural members are painted in yellow to ensure any obstructions to vehicles or passengers are easily spotted.

Foot passengers coming aboard via port and starboard gangways on the upper vehicle deck are greeted with a clean and inviting entry. Fully enclosed and fire protected stairwells forward, aft and amidships allow easy all-weather access to the passenger deck. A wheelchair accessible lift on the starboard side can transfer up to eight passengers between decks.

Hull **091**

Volcan de Tagoro

First Class Seating

Dark mocha panelling and deep red carpet add a sensation of luxury to the First Class cabin, situated aft on the passenger deck. Well-appointed with cappuccino leather-look seating and beige marble tables, business passengers can enjoy a view of the passage travelled from the stern windows.

Travellers can charge their devices from power sockets and type A/type C USB outlets at each seat table. First Class passengers have access to a private outdoor seating area with high-back bench seating which extends across the stern from amidships to the starboard side.

A generous bar with beer taps, fridge and freezer, secure swipe-card style doorway access and exclusive female and male toilets complement a secluded space away from the activity of the main cabin.

PRODUCTION

PLATE SHOP

High-strength marine grade aluminium is sourced in extruded profile sections and plate from specialist suppliers in Australia, France, Italy, Greece and China. Plate arrives to a dedicated facility where nesting plans are generated and plate is cut to begin vessel construction.

Business Seating

Business passengers are treated to a bright and spacious compartment at the bow of the ship, with panoramic 180 degree views from the forward and side windows.

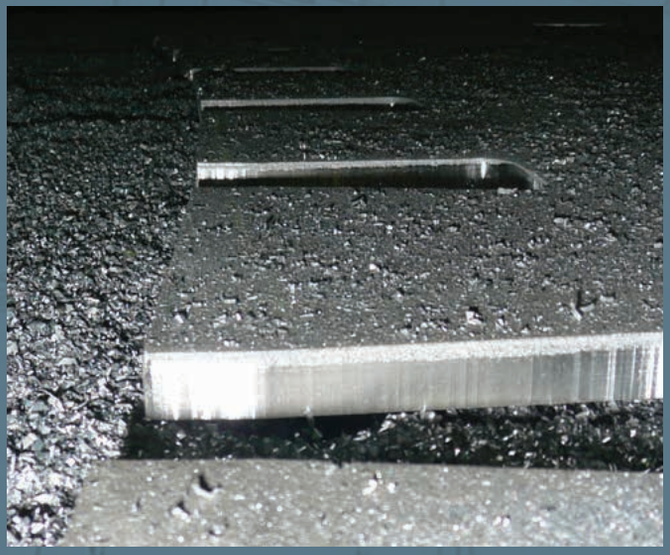
Appointed with both freestanding and integrated tables, comfortable reclining and bucket seats, passengers can unwind whilst having sole access to male and female toilet facilities with distinctive marble and elm finishes.

The Business Class cabin boasts a well equipped bar with beer taps, a fridge and freezer. Business customers can enjoy their trip in a more exclusive and intimate setting.

Economy Seating

Passengers travelling in economy have access to a spacious mid-ship cabin. A tasteful combination of deep red, green and grey seating provides occupants with a light and sophisticated space. Mirror and white surfaces make up the ceilings with decks covered in slate black tiles, blue patterned carpet and chateau oak vinyl planked walkways.

Tired passengers can retreat to an isolated entertainment and quiet area in the aft area of the deck. Users are presented with airline-style reclining seats, tables and two large cinema-style televisions.



Port Phillip Ferries

Hull 095 represents a refinement of Incat's proven small catamaran formula. Building upon the success of its sister ship, *Bellarine Express*, the vessel provides a highly capable platform to transport passengers and their belongings across Melbourne's Port Phillip Bay.

Geelong Flyer can accommodate 409 passengers and crew, offering seating on two decks, both in and outdoors. This state of the art vessel features public access Wi-Fi, satellite television, integrated CCTV, air-conditioning, large kiosk, active ride control with a clean and efficient drivetrain. Built to Incat's renowned high standard, the vessel complies with AMSA Survey Reg IC F2 Fast Craft to NSCV and DNV rules.

Hull 095

Geelong Flyer

Passenger facilities

Passengers board amidships via large and inviting double doors port and starboard. Additional access is provided aft for those wishing to access the kiosk, toilet facilities, bike racks and upper promenade deck via the rear stairs. The fully accessible aft deck and foredeck allow passengers to observe the passage travelled or journey yet to come.

All passengers aboard are treated to a spacious and natural light filled main cabin. Incat has paid particular attention to ensure an inviting and stylish ambience for passengers and crew. Public spaces mix wood-finish walkways, luxurious grey carpet and classic walnut, maple and glacier wall panelling. Use of large tinted glass on both decks, arranged in Incat's signature 'glass only' form, allows expansive views of the harbour whilst shielding occupants from glare.

Interior seating features a tasteful colour palate of deep blue, red and grey. The passenger areas offer a flexible mix of aircraft style seating and tables where travellers can relax and enjoy the scenery. The enlarged televisions, Bose speakers, personal charging stations and aluminium bar tables on the upper promenade deck further complement the features on offer.

A range of facilities cater for disabled passengers with eight dedicated wheelchair securing points in the main cabin, a hearing augmentation system, braille signage throughout and a spacious and fully equipped toilet built to ICAP standards.

The vessel's kiosk features stainless-steel food grade benches, cabinets, dual sinks, Hydroboil hot water cylinder, coffee machine, three door display fridge and an under counter ice-cream freezer for those sunny days. Liberal use of grey quartz benchtops, wood-style panelling, glass fronted fridges and neutral white lighting gives a bright, inviting and airy atmosphere for crew and customers.

By shifting the aft stairwell outboard and aft, the designers have created internal cabin access to the toilet facilities, fully protected from the elements. The change from her sister ship also allows for a larger upper promenade deck, additional seating on the aft deck with improved rope and equipment storage. Handrails around fairleads ensure passengers near mooring areas are protected.

Toilets feature clean glacier panelling, hardwearing grey flooring, hygienic air-blade dryers, porcelain hand basins and high quality stainless-steel fittings. The enlarged disabled toilet also offers baby changing facilities.

Wheelhouse

The wheelhouse features the latest Furuno FMD 3200 navigation, CZONE control equipment and operational systems with fully independent wing stations to control vessel positioning during docking and departure procedures. Remote release safety systems and CCTV contribute to a high level of operational safety at all times. The crew have an uninterrupted view across the bow from raised black leather helm seating with integrated cup holders. All control instrumentation is fully visible and a dark grey and black fitout to the main console minimises distraction and light reflection. A stand-up desk, full height cupboard, safe, VIP lounge and purser's desk provide a highly usable space for crew.

Hull 095

Geelong Flyer

Security features

An integrated alarm system with motion sensors, a large array of cameras and remote locking on all exterior doors ensure the vessel is secure when unattended. Swipe-card style access is fitted to prevent unauthorised access into the main cabin. The security monitoring system permits monitoring and control of the vessel security directly from the wheelhouse with remote access control from onshore security built-in.

Emergency systems

In the event of an emergency, passengers can disembark into one of the seven life rafts deployed from cradles on the vessel roof. A rescue dinghy is provided at the transom should crew need to access someone fallen overboard whilst at sea. In addition, detachable man overboard ladders can be fitted to both port or starboard sides of the main deck to allow a crew or passengers to climb aboard from water level.

The engine rooms feature an aerosol fire-suppression system operated from the wheelhouse. Heat, smoke and fire detectors are fitted in machinery spaces. Passenger areas have break-glass call points, fire extinguishers and emergency lighting in case of emergency. Dedicated fire-fighting stations are located near the aft doors on both the port and starboard sides to control engine room extinguishers and shut-offs.

Bellarine Express & Geelong Flyer,
Hulls 090 and 095 at Docklands, Melbourne

PRODUCTION

PREFAB

Inches construction hall is used for the prefabrication of vessel components for large vessels and the construction of smaller vessels.

Prefabrication of vessel components provides immense benefits for both worker comfort and production efficiency.

Components can be rotated to allow ease of fabrication and welding techniques which in turn minimises vessel construction time.

Passenger comfort

Multiple ceiling mounted air-conditioning units provide efficient and effective climate control of all passenger and crew areas. Temperatures can be adjusted via access points in the main cabin and wheelhouse.

All toilets and the kiosk are fitted with exhaust fans to ensure a constant circulation of air.

Propulsion and ride control

Propulsion power is provided by two MAN D2862 LE463 marine diesel engines rated at a maximum output of 1029 kW at 2,100 RPM. Thrust comes via two five blade fixed pitch propellers connected to each engine via Twin Disc MGX6620 gearboxes.

The drive train allows the vessel to achieve over 28 knots at 100% MCR with 35 tonnes of deadweight. A fully integrated Humphree ride control system provides improved comfort and stability for the often-rough conditions of Port Phillip Bay. The active interceptor blades, combined with the centre bow design, ensure vessel motions are kept to a minimum whenever possible.

Written by Project Officer – Callum Finney

Constellium

Constellium is a global leader in aluminium solutions whose business is to materialise today's and tomorrow's ideas.

For more than two decades Constellium has enjoyed a close partnership with Incat. Dedication to innovation has fostered collaboration, where products are uniquely suited to the company's needs. Constellium is proud to be a key partner with Incat, in supplying a range of **Sealium®** products which includes sheets, plates and extrusions for the construction of high speed lightweight catamarans.

For Constellium, aluminium is more than a metal. It is part of the solution for tomorrow's lighter, faster economy. Abundant, endlessly recyclable and reusable, aluminium's unique properties mean that, together with our partners, we can shape a future of infinite possibilities.

Constellium's aluminum products represent the most sustainable design solutions for our oceans. Aluminium has infinite possibilities. It can be endlessly melted down and recast with no loss of its inherent properties or downgrade in material integrity. This means that an aluminium product made with scrap cannot be distinguished from a product made of virgin aluminium. Creating new metal from recycled aluminium only requires 5% of the energy needed to produce primary aluminium from bauxite ore.

We endeavor to work to support Incat on the journey of excellence in an environmentally consciousness manner, with the goal of designing ships that are swift and more efficient.

Altogether more sustainable!

Sealium®, the specialised marine solution for building the fastest and longest-lasting ships.

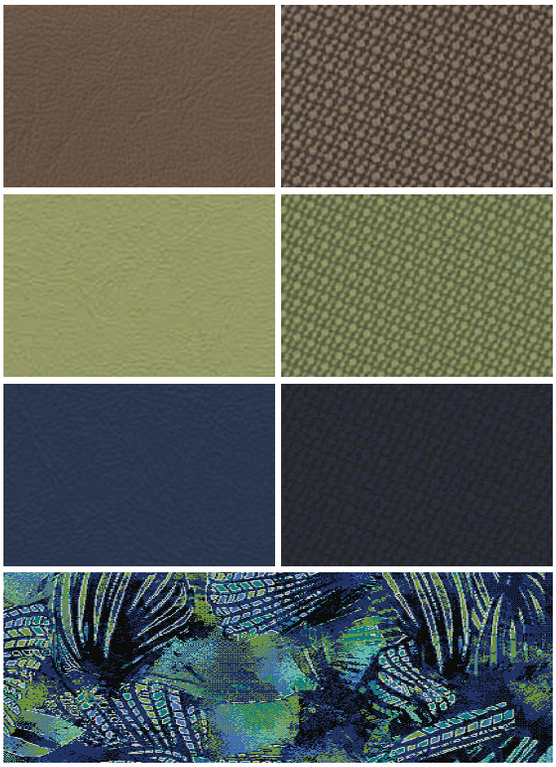
- Stronger (down gauge for weight saving)
- Superior resistence against corrosion
- Higher strength in welded joints

www.constellium.com

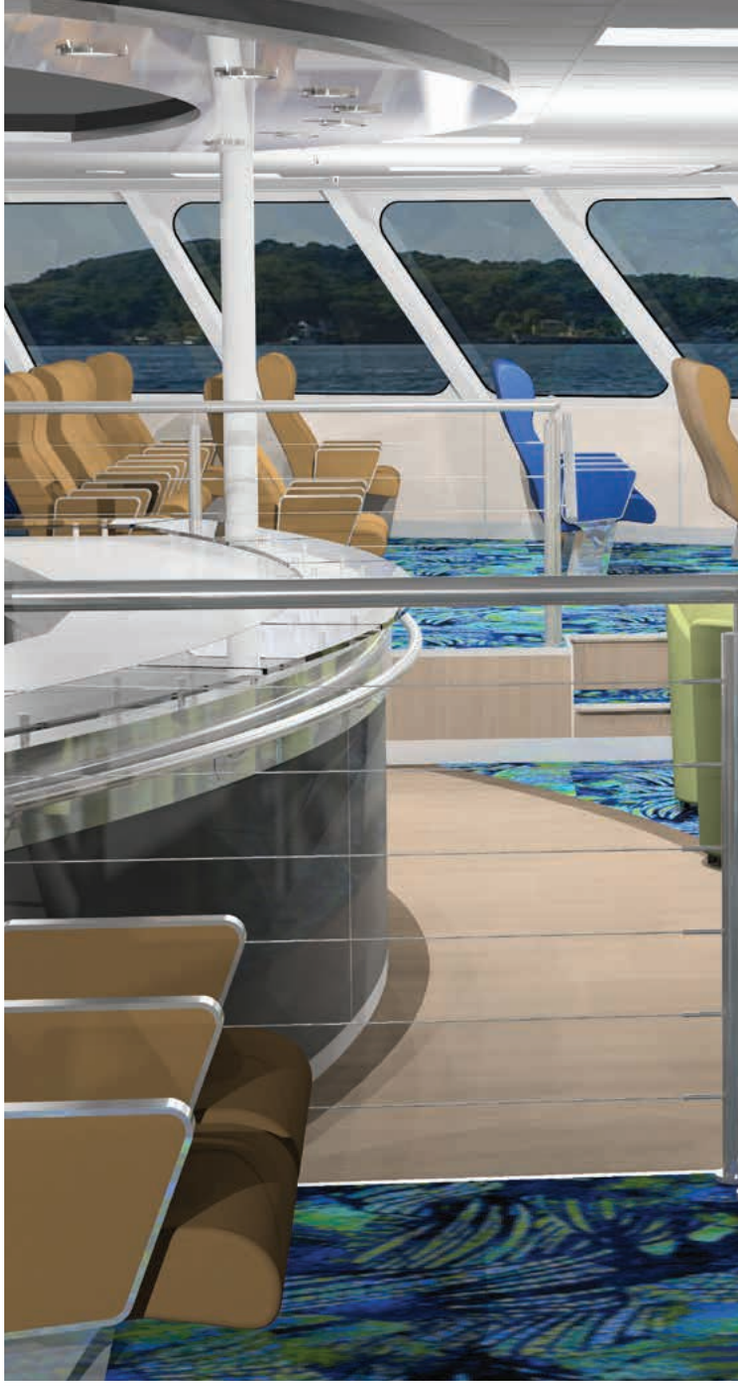
Hull 094

Trinidad & Tobago

Construction of Incat Hull 094 is well underway with delivery in the final quarter of 2020.



The 100 metre vessel for Trinidad and Tobago has capacity for 239 cars and carries 1,000 passengers including 224 VIP seats.



3D Visual representation of VIP Class

Hull 094

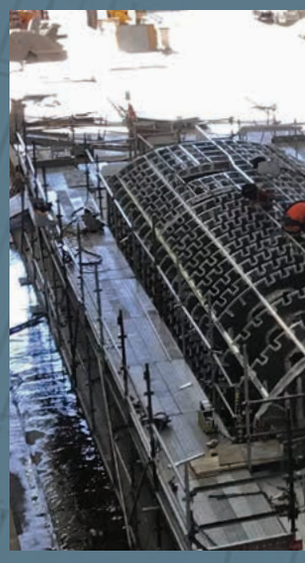
Trinidad & Tobago

The colourful Caribbean theme of the interior is reminiscent of the vibrant blue waters, golden beaches and brilliant sunsets of the tropical region.

PRODUCTION

ASSEMBLY 1

Continued refinement of the prefabrication and module construction process has seen the Stage 1 positions of both the main assembly halls also transform into prefab areas for large components such as fuel tanks, engine rooms, jet rooms and superstructure modules.

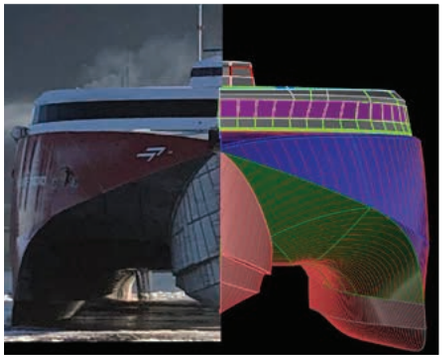


3D Visual representation of Economy Class

CENTRE BOW *refinement.*

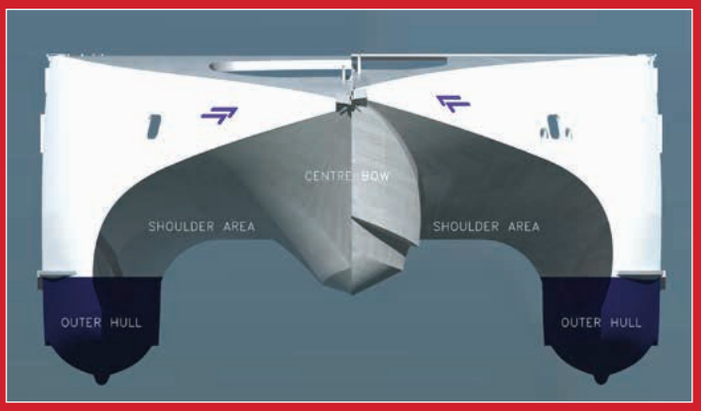
The recent 110 metre and 111 metre vessels from Incat have been fitted with the latest generation of centre bow technological design. The new design was developed through cutting edge experimental testing and computer analysis and has been proven through reports received from these vessel operators.

Photo - Ricaurte Rodriguez



The centre bow on Incat vessels is key to their superior seakeeping performance. It has undergone constant and gradual evolution to allow Incat vessels to remain world leaders in high speed ferry performance.

A radical change has been adopted, primarily to further reduce the maximum vertical accelerations. Achieved by shifting effective bow volume forward to provide a greater lever arm to control pitch motions and through a change in the bow geometry.



Adoption of hard chines and near vertical sides to the bow aids in separating water run-up flows on the bow and demi-hulls and allows a larger underside flat area than was previously possible.

This reduces the number of slamming incidences by increasing the effective bow clearance through a larger open area between the centre bow and the demi hulls.

THE WORLD'S LARGEST ALUMINIUM SHIP

PRODUCTION

ASSEMBLY 2

Modules completed at the various pre-fabrication locations at Incat are then moved into position in Stage 2 of the construction hall applicable to that series of vessel. Construction begins in the centre of the vessel allowing rapid growth in a controlled manner. As the fabrication and welding teams progress throughout the vessel, our quality assurance/control departments and survey authorities check and approve the completed sections of the structure.

On completion of this process the fitters, fitout electrical and electronic teams move in and install services and equipment. The vessel continues to grow in this position until it is approx 70% of its completed light ship weight, at which time the vessel is rolled back to the next stage of the production sequence. With Stage 2 cleared, modules for the next new build are able to fill this spot.

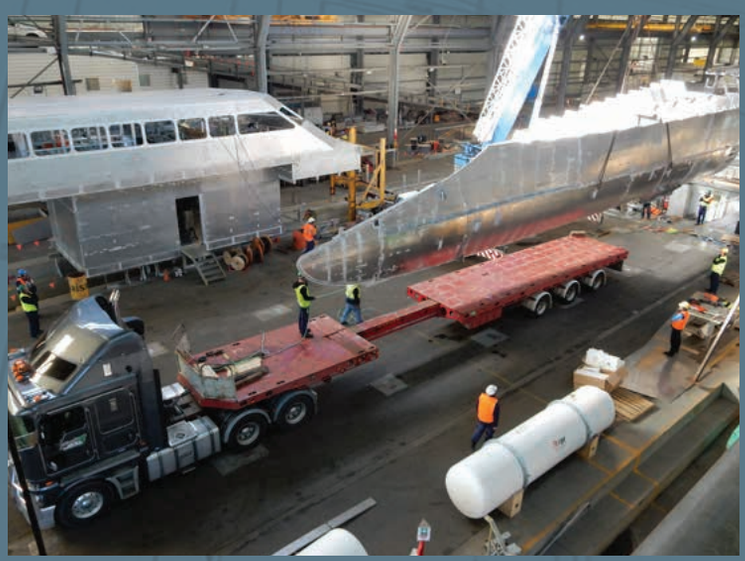
BUQUEBUS

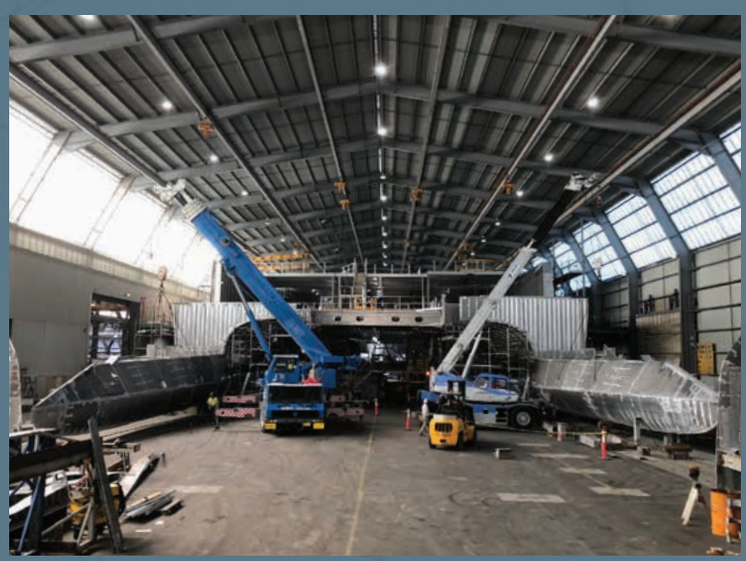
Incat has secured a contract to build the world's largest aluminium ship.

Incat Tasmania Pty Ltd will build the 130 metre long ship for long standing customer, Buquebus to operate between Argentina and Uruguay. The completed vessel will be the largest aluminium ferry ever built and the ninth vessel for Incat's valued South American customer.

The 130 metre ferry will join the other Incat ships already serving various ports on the River Plate (Rio Plato) between Argentina and Uruguay. At a probable 13,000 gross registered tonnes the 130 metre long, 32 metre wide vessel will carry 2,100 passengers and 220 cars with an expansive duty-free shop.

The new Buquebus ship, Incat hull 096, is predicted to have a maximum speed of over 40 knots. The 130 metre ship will be powered by four dual fuel engines that will burn environmentally friendly LNG while in service between Argentina and Uruguay. Work is underway on design and engineering.





BEURTEAUX

Customised Seating

Beurteaux have supplied a variety of seating solutions for 47 Incat vessels which operate around the world.

Beurteaux are proud to have been a supplier of seating solutions to Incat since 1995 when they were invited to develop a unique range of concept seating for Hull 40, *'Stena Sea Lynx* III'. This required a great deal of 'faith and trust' from Incat to invest and trust in a young company looking to establish themselves in a very new and demanding environment. For Beurteaux it was a case of being invited to 'dive in and swim – or drown'. It wasn't easy but fortunately they didn't drown – and they are continually working on their swimming style.

Since then Beurteaux have supplied a variety of seating solutions for 47 Incat vessels which operate around the world.

Many of these vessel interiors required new designs and unique solutions. This resulted in the research and development for many of the seating options that now make up the comprehensive range that has established Beurteaux as one of the world's leading suppliers of seating solutions to the International Fast Ferry Industry.

Most clients seek a custom look for their vessels, for a variety of passenger and crew environments as well as meeting all of the surveying and certification requirements. The Beurteaux catalogue offers a full range of seating with an extensive range of accessories, exterior seating, pedestal seats, crew and helm seating. The modular components that make up a Beurteaux seat assembly allow the client considerable flexibility to design and create a diverse set of seating arrangements to suit their specific requirements. The total weight of components is evaluated carefully to deliver the lightest seating possible while guaranteeing the strength and integrity of each assembly.

The current high demand for Beurteaux seating is proof of their reliability and reputation in an industry that continues to establish new levels and expectations for passenger and freight transport.

Working with builders & operators for more than 28 years Beurteaux have developed a comprehensive service that delivers all of the essential components relating to seating.

Hull 047
Catalonia

Then

Built in 1998 for South American operator Buquebús, the 91 metre *Catalonia* was making a name for herself even before entering service.

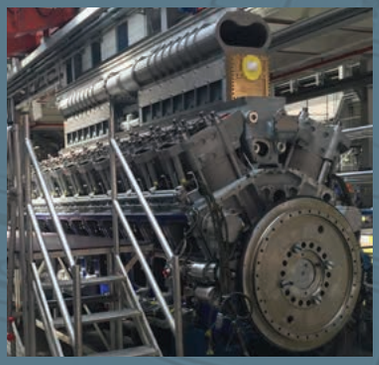
Challenging Incat's pioneer Hoverspeed *Great Britain* for the Blue Riband of the North Atlantic, *Catalonia* successfully set the record for the fastest Atlantic eastbound crossing, making the 3,125 miles run from Manhattan to Tarifa, Spain in 3 days 7 hours 54 minutes, travelling at an average speed of 38.877 knots. Initially entering Spanish service, Buquebús added the vessel to their charter fleet and soon after she was deployed in P&O service on the English Channel. The craft later went on to operate on the company's services between Northern Ireland and Scotland as *Express*, remaining there until 2015 when she

PRODUCTION

ASSEMBLY 3

With the vessel now in its final stage before launch, the forward end of the vessel is completed and the unique Incat catamaran shape starts to become recognisable.

At this stage main machinery such as engines, jets, thrusters, T-foils are installed. Once the equipment is carefully positioned and secured, the vessel's structure is closed off for the final time before painting and livery requirements are addressed.

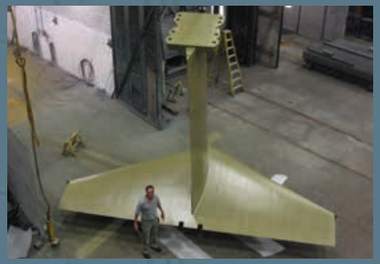


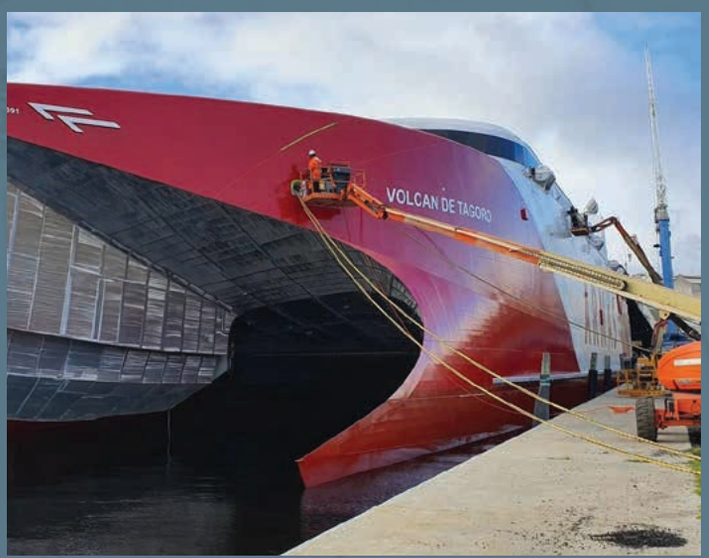
Now

Hull 047
SuperExpress

Under the flag of Golden Star Ferries, *SuperExpress* now links islands of the Cyclades with the mainland port of Rafina.

was sold to Nordic HSC of Sweden. Retaining her name, *Express* was subsequently chartered to Viking Line for Baltic service between Helsinki and Tallinn marketed as *Viking FSTR*. A further charter brought her to the Canary Islands for the summer of 2018 operating for Naviera Armas before Nordic HSC sold her for service in Greece in 2019. Written by Marine Journalist – Justin Merrigan





Brittany Ferries

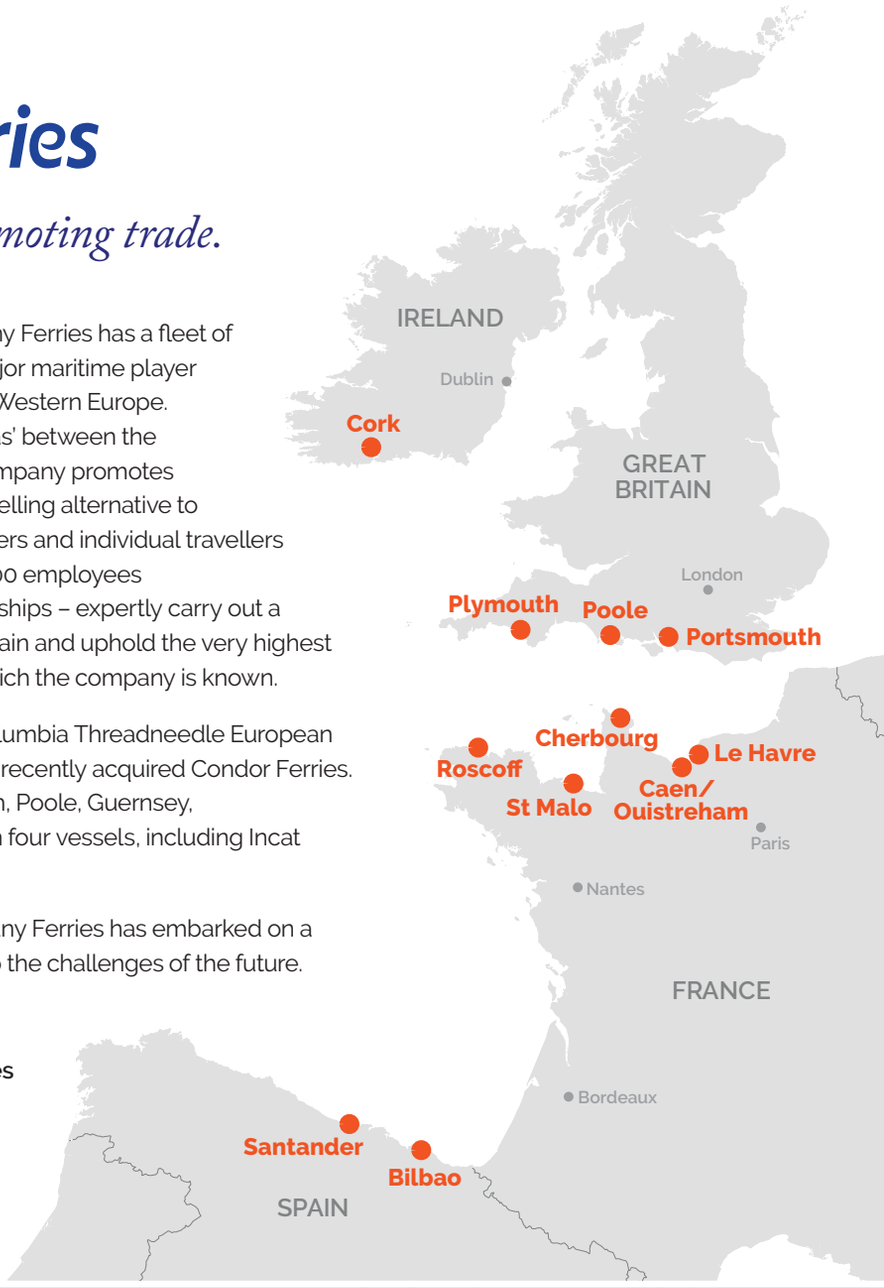
Connecting people, promoting trade.

Founded by Alexis Gourennec, Brittany Ferries has a fleet of twelve vessels and has become a major maritime player in the development of the regions of Western Europe. By establishing 'motorways of the seas' between the four countries directly served, the Company promotes intermodal transport, offering a compelling alternative to long-haul road routes for freight hauliers and individual travellers and tourists alike. Brittany Ferries' 2,800 employees – including 1,700 serving on board its ships – expertly carry out a range of specialist roles in order to attain and uphold the very highest standards of safety and quality for which the company is known.

Brittany Ferries, together with The Columbia Threadneedle European Sustainable Infrastructure Fund, have recently acquired Condor Ferries. Condor currently services Portsmouth, Poole, Guernsey, Jersey and St Malo, and operates with four vessels, including Incat Hull 045 *Condor Rapide*.

In a world that never stands still, Brittany Ferries has embarked on a wide-ranging transformation to rise to the challenges of the future.

A well-established, stable and sustainable company, Brittany Ferries has a network of reliable maritime routes linking French, British Irish and Spanish ports.



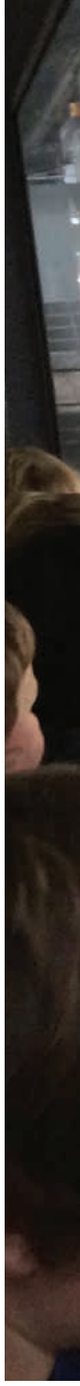
PRODUCTION

FITOUT

The majority of the fitout work is completed by the yard's highly skilled tradespersons in the Stage 3 position. Fitters, plumbers, electricians, electronics, fitout, hydraulics, pneumatics, painters and structural fire protection personnel all set about completing the various components and systems on board.

For more than 45 years Brittany Ferries has been connecting people, promoting trade and contributing to the economic lifeblood of the coastal regions of Western Europe.

In recent years Brittany Ferries has grown its network by developing daily links between the UK and Spain. Incat Hull 057, *Normandie Express* services the Cherbourg to Portsmouth and the Le Havre to Portsmouth routes.



TASMANIAN
FAST FERRY MUSEUM

What do you do when you find you have too many "items of interest" taking up space in your office? Start a museum of course.

Over the years Incat and its associated companies have accumulated many items of significance to the history of maritime innovations and the fast ferry revolution. The Tasmanian Fast Ferry Museum was established in 2012 and showcases the history and memorabilia of one of Tasmania's most successful businesses, started by Hobart born Robert Clifford.

As you walk through you will see the larger objects of the collection, including an engine block converted to a conference table, a crankshaft, a T-foil and also the original prototype of a wave piercing catamaran. There is a viewing platform where visitors can see the current vessel in production. Inside the museum is an assortment of artefacts from over the years, showing the history from the early passenger–only ferries, through to the current 100m+ vehicle and passenger ferries, military memorabilia, company history, interiors, and general maritime objects.

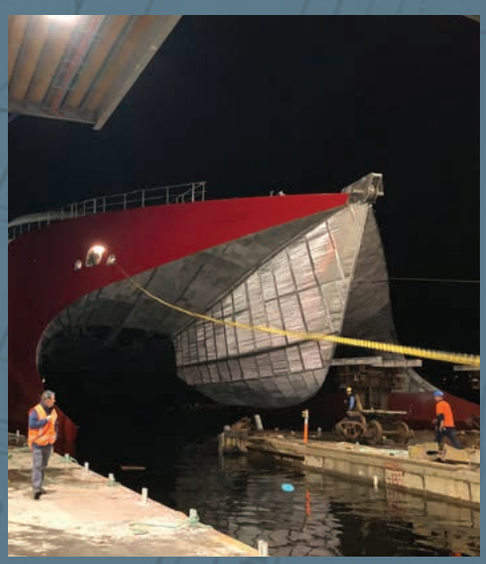
Incat has been hugely successful the world over. This is well known amongst those in the industry, but the museum is now showing the people of Tasmania and visitors from far afield just what Incat has been able to contribute not only to the local economy, but to the whole global ferry industry.

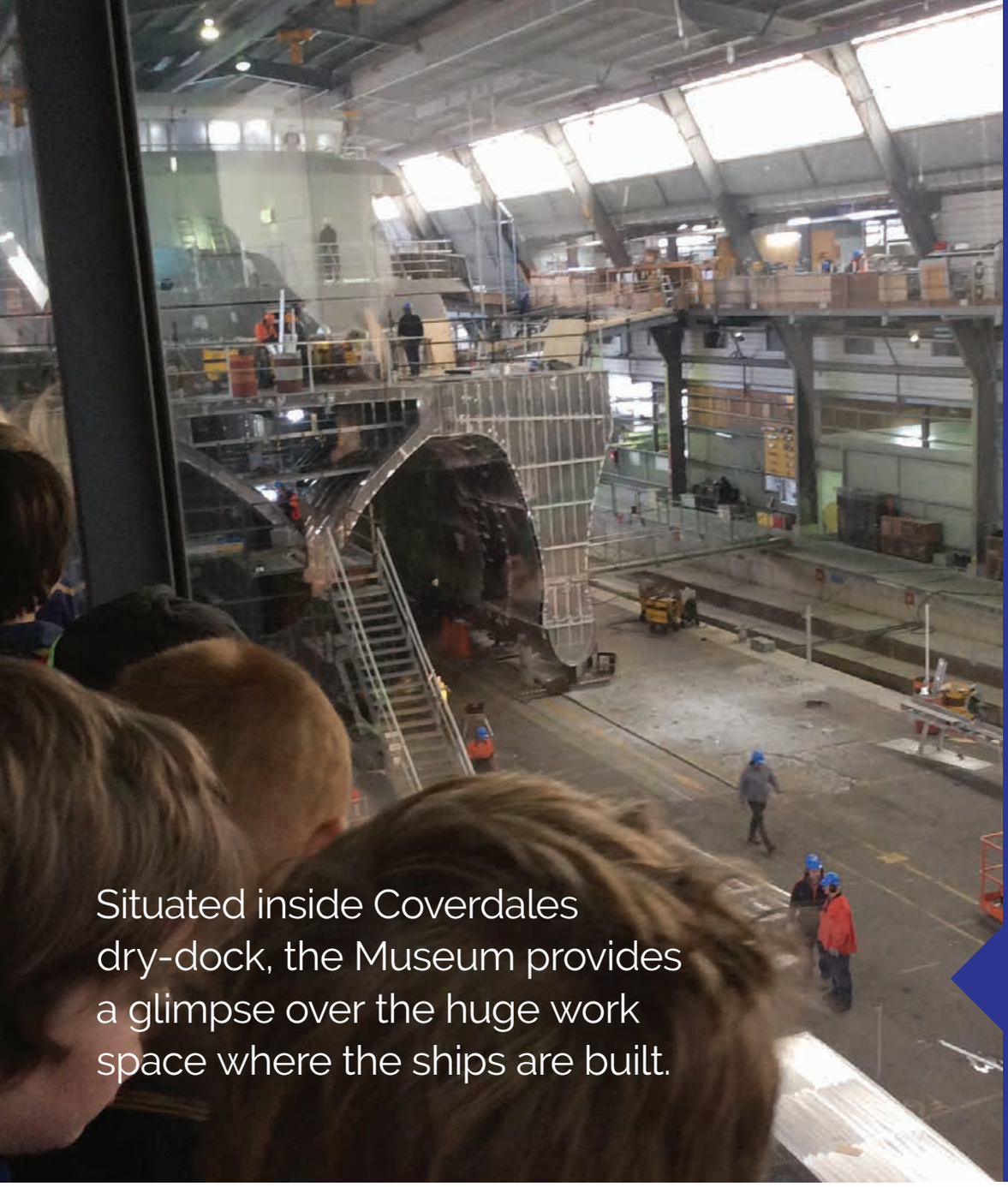
tasfastferrymuseum.com.au

PRODUCTION

LAUNCH

With machinery installation and outfitting completed the vessel is ready for launch. Once the vessel is launched and secured dockside, radars and aerials are fitted and final commissioning of systems takes place. Builder's trials and sea trials for the customer are completed and the vessel is ready for handover and delivery to her new home.





Situated inside Coverdales dry-dock, the Museum provides a glimpse over the huge work space where the ships are built.

INTERFERRY

45th ANNUAL CONFERENCE

Hobart, Tasmania
Oct. 24-28, 2020

Incat looks forward to hosting the Technical Tour, including our Fast Ferry Museum for the delegates

NAIAD® DYNAMICS

The Science of Ship Motion Control®

NAIAD DYNAMICS® (ND®) is a premiere equipment manufacturer and the recognised world leader in Ship Roll Stabilisation and Active Ride Control Technology, with over 14,000 systems fielded to date. Operating from seven locations across five countries, plus a global dealer network, ND® specialises in the design, manufacture and through-life support of actively controlled AtSpeed® and AtRest® Roll Stabiliser Systems and Total Ride Control® systems for commercial ships, naval ships and luxury yachts.

www.naiad.com

For 30 years, NAIAD DYNAMICS® has worked closely with Incat to produce the most reliable and comfortable passenger vessels for the fast ferry market.

Incat Hull 091 *Volcan de Tagoro* featuring NAIAD® Active Ride Control Technology.
Photo - Ricaurte Rodriguez

Alongside Incat's development and refinement of its wave piercing catamaran designs, ND has developed and refined its unique Ride Control Systems to provide the ultimate motion damping and reduction in roll, pitch, heave and yaw in these advanced hull forms in a seaway. Applying leading edge digital control technology to simultaneously and accurately position a variety of underwater effectors – such as T-foils, interceptors, trim tabs, fins and canards – ND® Total Ride Control® Systems significantly dampen vessel motions and improve the passenger experience.

Seakeeping and passenger comfort have long been fundamentally important factors in the fast ferry business. Ridership depends heavily on providing a consistently comfortable voyage. On-board revenues such as from food concessions or gambling are also greatly reduced when passengers are uncomfortable. Moreover, adverse sea conditions limit the operational capability of ferries where delays and cancellations can cause significant loss of revenue. Vessels not equipped with ND®'s Total Ride Control® system also consume more fuel and have longer point-to-point times due to running inefficiencies from pitching and rolling in heavier seas, while crew functions and work performance onboard become impaired from fatigue. These are just some of the reasons why ND® has supplied more Ride Control Systems for fast ferries than all other brands combined, and why ND® is the equipment of choice and proud partner to world-leading Incat ferries.

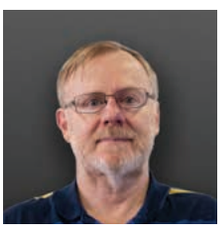
Today, the collaboration and partnership between Incat and NAIAD DYNAMICS® continues, along with both companies' enduring objective to provide fast, efficient, reliable and comfortable vessels to ferry operators throughout the world.

PUTTING FACES TO NAMES

Kerry Prentice – *Works Coordinator, Welding and Fabrication*

31 years and counting … Being the longest serving Incat employee is a position Kerry holds proudly. Incat hull 025 was the first vessel Kerry worked on when he joined Incat in 1989. He has seen everything since then. He quickly worked his way up to Works Coordinator, which is a role he plans to keep doing for some time to come.

Incat's 'Walk of Fame' continues to grow. There are now over 40 employees who have reached their 25 year milestone, which Incat recognises with a commemorative star along the entry walkway.



Senior Design Team

Gary Davidson, Gordon Stewart and Tim Roberts.

The senior design team at Revolution Design Pty Ltd is made up of the highly and uniquely skilled Gary Davidson, Tim Roberts and Gordon Stewart, who have been designing Incat vessels for over 25 years.

Gary has been responsible for implementing state of the art structural analysis techniques in conjunction with software suppliers and Classification Society, Det Norske Veritas. He is now a Director and Senior Structural Design Engineer responsible for structural design and concept development.

As Concepts Engineer, Gordon provides technical support and concept design services for the Incat Sales and Marketing team. He has worked on many of the Incat commercial and military projects over the past 25 year which include primary concept design work, vessel general arrangement drawings, technical specification writing, vessel styling and 3D rendering and animation both for marketing and customer review.

Tim has worked as Incat's, then Revolution Design's Research and Development Manager. He has particular experience in the collection of performance, structural load and motions data from vessels in service. Tim's position involves the co-ordination of the design drafting, marketing and construction groups in the development of existing and future designs of aluminium fast ferries.

Both Gary and Tim have presented, and had published, numerous papers in their field.

Stuart Graney
Payroll Administrator

When Stuart started in the payroll department some 30 years ago he had no phone or computer, and employees were paid in cash. He has seen many changes over that time, from the manual timecard system through to electronic banking. He has been Incat's Payroll Administrator since 2000 and is showing no signs of retiring. Stuart has a wife, four daughters, and two dogs.

Lea Morgan
Accounts Officer

Lea joined Incat in 2009. She has a variety of roles and responsibilities in the Finance department. A day can be anything from coordinating accounts workflow, preparing monthly financials, staff mentoring to involvement with project initiatives focusing on process and operational improvements with other departments. Lea loves being with her children and enjoys on-water activities and spending time in the great outdoors.

Malcolm Farmilo
Purchasing Officer

Malcolm is a relative newcomer to the Incat team, starting in January 2018. He comes from a sales and purchasing background in the marine industry and continues these skills in his current position where he procures new products and negotiates with suppliers. Outside of work he enjoys working on his hobby farm and playing table tennis.

Nina Dickson
Training Officer

Nina worked as a qualified boat builder and then TAFE teacher in Queensland, prior to moving back to Tasmania in 2006. She started with Incat as a Training Officer that same year. Nina is responsible for the progress of apprentices both on and off the job, ensuring they are working towards a successful trade outcome within their training plans.

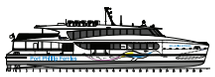
John 'Jock' Burrows
2019 Employee of the Year

Jock began his carpentry apprenticeship in 1970 gaining experience both in Tasmania and on the mainland where he began working on boats. Prior to joining Incat in 1994 he worked in shipyards, a highlight of this time was competing in the 1988 Tall Ships Race.

Initially mentored by Incat shipwright Bruce Darcy, Jock soon progressed to Leading Hand and then Team Leader. He has enjoyed several unusual projects including construction of an aluminium house, his early timber experience well utilised in a project building a wooden Couta Boat for Incat founder Robert Clifford. Jock has enjoyed working with a great team for 25 years and now mentoring younger workers but hopes to retire in the not too distant future.

Andrew Pickett
2019 Apprentice of the Year

A very confident apprentice, Andrew has a great attitude to his work. His Team Leader Tim Petrie nominated Andrew impressed by his natural ability for welding, Andrew is also a very capable fabricator and fitter. Always ready to go that extra mile to help with production needs Andrew should complete his apprenticeship next year and looks set to progress to leadership in his area of expertise.





INCAT'S **WORLD FLEET**

HULL	TYPE	TRADING NAME	OWNER/OPERATOR	DESIGNATED ROUTE/LOCATION
095	35m	Geelong Flyer	Port Phillip Ferries	Geelong - Melbourne
094	100m	TBA	Port Authority of Trinidad & Tobago	Port of Spain - Scarborough Trinidad and Tobago
093	111m	TBA	TBA	TBA
092	33m	Ocean Adventurer	Manly Fast Ferry	Sydney Harbour
091	111m	Volcan De Tagoro	Naviera Armas SA	Las Palmas - Tenerife, Canary Islands
090	35m	Bellarine Express	Port Phillip Ferries	Melbourne - Portarlington
089	110m	Saint John Paul II	Virtu Ferries	Malta – Sicily
088	109m	Express 3	Molslinjen	Aarhus – Odden Ebeltoft – Odden, Denmark
087	35m	May Gibbs	Transport for NSW	Sydney Harbour
086	35m	Bungaree	Transport for NSW	Sydney Harbour
085	35m	Pemulwuy	Transport for NSW	Sydney Harbour
084	35m	Victor Chang	Transport for NSW	Sydney Harbour
083	35m	Fred Hollows	Transport for NSW	Sydney Harbour
082	35m	Catherine Hamlin	Transport for NSW	Sydney Harbour
081	33m	Ocean Flyer	Manly Fast Ferry	Sydney Harbour
080	33m	Ocean Surfer	Manly Fast Ferry	Sydney Harbour
079	24m	Ocean Wave	Manly Fast Ferry	Sydney Harbour
078	24m	Ocean Tracker	Manly Fast Ferry	Sydney Harbour
077	-	Brooke Street Pier	Brooke Street Pier Development Co. Pty Ltd	Hobart, Tasmania
076	35m	Neptune Clipper	MBNA Thames Clippers	River Thames, London, UK
075	35m	Galaxy Clipper	MBNA Thames Clippers	River Thames, London, UK
074	70m FCB	Muslim Magomayev	Caspian Marine Services	Baku – Caspian Sea, Azerbaijan
073	34m	MR-I	Navigators (Secheron Holdings)	Berriedale - Hobart, Tasmania
072	15m	MV Lindoy	Stava Bat & Dykkerservice AS	Haugesund, Norway
071	Barge	The Barge	Tas Marine Constructions	Hobart, Tasmania
070	17m cruising ketch	Gwenhwyfar	Private Ownership	Hobart, Tasmania
069	99m WPC	Francisco	Buquebus	Buenos Aires, Argentina - Montevideo, Uruguay
068	85m WPC	Akane	Sado Kisen	Naoetsu - Ogi, Sado Island, Japan
067	112m WPC	Express 2	Molslinjen	Aarhus - Odden Ebeltoft - Odden, Denmark


This information is correct to the best of the editor's knowledge at the time of printing.

HULL	TYPE	TRADING NAME	OWNER/OPERATOR	DESIGNATED ROUTE/LOCATION
066	112m WPC	Express 1	Bornholmslinjen (Molslinjen)	Ronne, Denmark - Ystad, Sweden
065	112 m WPC	Natchan World	Tsugaru Kaikyo Ferry	Hakodate, Japan
064	112 m WPC	Natchan Rera	J & T Shipping Co Ltd, Wagon Group	Keelung - Taipei, Taiwan
063	17 m Liveaboard	Sixty Three	17m Projects Pty Ltd	Hobart, Tasmania
062	98 m WPC	Volcan de Tirajana	Naviera Armas SA	Puerto de la Estaca - Los Cristianos, Canary Islands
061	98 m WPC	Swift	Seajets	Greece
060	98 m WPC	T&T Spirit	Port Authority of Trinidad & Tobago	Port of Spain - Scarborough, Trinidad & Tobago
059	98 m WPC	Hai Xia Hao	Fujian Cross Strait Ferry Corporation	Taichung, Taiwan - Pingtan Island, China
058	98 m WPC	Ciudad de Ceuta	Trasmediterránea	Algeciras, Spain – Ceuta, Morocco
057	98 m WPC	Normandie Express	Brittany Ferries	Cherbourg, France – Portsmouth, UK Le Havre – Portsmouth, UK
056	96 m WPC	Volcan de Teno	Naviera Armas SA	Ceuta, Morocco - Algeciras, Spain
055	96 m WPC	Bentago Express	Fred. Olsen, S.A.	Santa Cruz de Tenerife - Puerto de las Nieves
054	Wing	R & D Craft		Hobart, Tasmania
053	96 m WPC	Bencomo Express	Fred. Olsen, S.A.	Santa Cruz de Tenerife - Puerto de las Nieves
052	96 m WPC	Villa de Agaete	Trasmediterránea	Las Palmas - Tenerife, Canary Islands
051	96 m WPC	Bonanza Express	Fred. Olsen, S.A.	Las Palmas - Arrecife, Canary Islands
050	96 m WPC	Manannan	Isle of Man Steam Packet Company	Douglas – Liverpool, UK
NF08	80 m K50	Harmony Flower	H Ferry (Dae-A Express Shipping)	Incheon - Socheong - Daecheong - Baekryoung Island, South Korea
049	91 m WPC	Fjord Cat	Fjord Line	Kristiansand, Norway – Hirtshals, Denmark
048	91 m WPC	Max	Bornholmslinjen	Ronne, Denmark - Ystad, Sweden
047	91 m WPC	Super Express	Golden Star Ferries	Rafina, Syros, Mykonos, Paros, Naxos, Koufonissi, Katapola, Amorgos – Greece
046	91 m WPC	T&T Express	Port Authority of Trinidad & Tobago	Port of Spain - Scarborough, Trinidad & Tobago
045	86 m WPC	Condor Rapide	Condor Ferries	Channel Islands - St. Malo, France
044	86 m WPC	Champion Jet1	Seajets/Naviera Armas SA	Multiple routes, Canary Islands
043	86 m WPC	Tarifa Jet	Ferrys Rapidos del Sur	Tarifa, Spain - Tangier, Morocco
042	86 m WPC	Champion Jet2	Seajets	Multiple routes, Greece
041	81 m WPC	Jaume III	Baleària	Ibiza - Denia
040	81 m WPC	Rapidlink Jet	Seajets	Multiple routes, Greece
039	Solar	R & D Craft	Tasmanian Fast Ferry Museum	Permanent Display, Hobart, Tasmania



HULL	TYPE	TRADING NAME	OWNER/OPERATOR	DESIGNATED ROUTE/LOCATION
038	81 m WPC	Jaume II	Baleària Caribbean	Fort Lauderdale, Florida – Grand Bahama Island & Bimini
037	78 m K50	Sun Flower	Dae-A Express Shipping	Pohang - Uleung Island, South Korea
036	70 m K55	Juan Patricio	Buquebus Aliscafos	Buenos Aires, Argentina – Colonia, Buenos Aires
035	78 m WPC	Mega Jet	Seajets	Multiple routes, Greece
034	78 m WPC	Fares 2	Maritime Company for Navigation	Saudi Arabia
033	78 m WPC	Jaume I	Baleària	Algeciras - Tangier Med
032	74 m WPC	Atlantic III	Buquebus	Buenos Aires, Argentina – Colonia, Uruguay
031	74 m WPC	Seacat Moorea		Phnom Penh, Cambodia
030	74 m WPC	Incat Tiger	Tiger Shipping Company	South Korea
029		R & D Craft		
028	74 m WPC	Naxos Jet	Seajets	Multiple routes, Greece
027	74 m WPC	Atlantic Express	Colonia Express	Buenos Aires, Argentina – Colonia, Uruguay
026	74 m WPC	Master Jet	Seajets	Multiple routes, Greece
025	74 m WPC	High Speed Jet	Seajets	Multiple routes, Greece
024	74 m WPC	Pinar Del Rio	Baleària	Retired from service
023	74 m WPC	Sea Speed Jet	Seajets	Greece

VESSELS PRIOR TO 1990 (Original names)

HULL	YEAR	ORIGINAL TRADING NAME
022	1988	Sea Flight
021	1986	Our Lady Pamela
020	1985	Our Lady Patricia
019	1988	2000
018	1987	Genesis
017	1986	Tassie Devil 2001
016	1985	Spirit of Victoria
015	1984	Margaret Rintoul IV
014	1984	Pybus Rutherglen Punt
013	1982	Little Devil
012	1983	Thunderbird
011	1984	Keppel Cat 1
010	1983	Trojan

HULL	YEAR	ORIGINAL TRADING NAME
009	1982	Spirit of Roylen
008	1982	Quicksilver
007	1982	Green Islander
006	1981	Amaroo II
005	1981	Tangalooma
004	1981	Fitzroy
003	1980	AK Ward
002	1979	James Kelly
001	1977	Jeremiah Ryan
BUSHRANGER FLEET		
	1975	Lawrence Kavanagh
	1975	Martin Cash
	1973	James McCabe
	1972	Matthew Brady

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FRANCISCO

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