THE INNOVATOR BARRUS

Premium Brands Partner with Barrus



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X International

PRIMOCON

Alexandra

Barrus and Zodiac Partnership



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Garden Products for Every Season

X International

Interprotect

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HiSun Goes Electric

A growing number of awards

NOSNI







July 2020

Wilkinson Sword Stainless Steel Hand Trowel - BBC Gardeners' World Magazine Best Buy pages 66 - 67

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"An extensive portfolio of premium brands that offer the marine trade a single source of supply"

TALAMEX" X.International. Borton SIMRAD SIMRAD BESTO

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Premium brands partner with Barrus to offer an extensive marine equipment range

The Barrus Marine Equipment Division was set up in August 2018 as a first step in establishing a portfolio of premium brands with a vision to become a leading distributor in the chandlery and aftermarket sectors.

Since announcing it's launch into the marine chandlery sector at Southampton Boat Show 2018 with the core product offering of Talamex, a complete single-branded chandlery range, Besto life-jackets, G-Nautics boat accessories and Stazo boat safety systems, the Barrus Marine Equipment Team has secured the distribution of over 20 new, leading brands.

Extensive range

Barton, Blue Gee, Glomex, Lowrance and Simrad, are just a few of the brands in the line-up, combining a whole range of products to cater for every area of a boat, from small day boats to supervachts. The latest distribution partnership to be secured is with one of the world's largest manufacturers of high-performance yacht coatings, boat paints and marine protective coatings, International Paint Ltd.

"The carefully selected mix of brands and products is part of our continuing strategy to build an extensive portfolio of premium brands that offer the marine trade a single source of supply combined with the support of a company offering over 90-years' experience in the marine industry," commented Ben Allen, General Manager for the Marine Leisure Division at Barrus





Above: International Paint high-performance coatings and boat paints.

Left: Besto life-jackets and buoyancy aids.

Bottom left: Simrad and I owrance marine electronics.

Bottom right: Barton deck hardware.

Complete distribution solution

Barrus has joined forces with SailForce to offer the industry a complete distribution solution with national sales coverage and SailForce's popular merchandising service, supported by the specialised Marine Equipment Team. Offering advice to customers in all aspects of the business, the experienced in-house Merchandising Team can provide tailored in-store display solutions and assistance for new installations.

There is a comprehensive UK stockholding of products across the ranges, and all brands benefit from Barrus's renowned distribution operation based centrally at their headquarters in Bicester.

"The growth and development of the marine equipment portfolio is a primary focus and places Barrus in a unique position as a complete supplier to the marine industry," commented Tim Hart, Director of Sales & Marketing at Barrus. "We are continuing to pursue additional distribution opportunities, and there will be further announcements throughout the year."





LOWRANCE a attwood SWOBBIT

QUICKSILVER

NEWS FROM THE DIVISIONS



Barrus and Zodiac partnership brings together over two centuries of experience

Barrus is pleased to introduce Zodiac and Bombard to its growing portfolio of Marine Leisure products with exclusive distribution of the full range in the UK and Northern Ireland.

As market leaders in the design and manufacture of highquality RIBs and inflatable boats, the Zodiac and Bombard ranges complement Mariner and Mercury outboards enabling Barrus to offer the most technically advanced boat and engine packages to the leisure and commercial user.

Zodiac

Zodiac invented the inflatable boat and have over 120 years of experience in building RIBs that are renowned for resistance and reliability. Zodiac boats have an enviable reputation with leisure boaters alike who rely on their exceptional performance and practicality and have years of experience producing boats to support global exploration. From fishing to water sports and security, the Zodiac range offers unrivalled stability, power to weight ratio and hulls that are designed for crossing waves.

Bombard

Following a scientific expedition in the 1950s, Dr Alain Bombard oversaw the creation of a line of inflatable boats designed for pleasure boating. By offering safe, robust products, Bombard has forged his values of adventure and reliability into the brand that bears his name. Every single Bombard hull is conceptualised using CAD to produce the highest standard of planing ability, resistance points, rigidity, comfort and safety. Bombard is simply the best value for money. To strengthen the existing Zodiac Nautic dealers worldwide, Barrus will be securing authorised dealers within the UK whilst supporting its existing network.

Streamlined range

"The range of Zodiac and Bombard RIBs has been a longanticipated addition to our portfolio," commented Ben Allen, General Manager for the Marine Leisure Division at Barrus. "We are following Brunswick's strategic partnership with Z Nautic with the intention of streamlining our range of inflatables and delivering strong, premium brands to our customer base," Ben concluded.

"We have big ambitions for Zodiac in the UK and would therefore like to take advantage of the synergy between Barrus & Zodiac which include over 220 years of combined experience, Barrus's logistical expertise, the existing dealer network and Z Nautic renewed product range," commented François Renault, EMEA Export Sales Director for Z Nautic Group.



From left to right: François Renault, Z Nautic Group, Ben Allen, Barrus, Tanguy Tertrais, Z Nautic Group



NEWS FROM THE DIVISIONS



(R to L:) Sarah Ashton - Office Coordinator MoD Overhauls and Repairs, Will Stevens - Sales & Technical Engineering MoD Inboard Diesel, Maxine Evans - Sales Office Coordinator MoD Contracts, Lee Darling - Chief Financial Officer MoD Accounts, Robert Muir - Managing Director, Mark Coleman - General Manager MoD Contracts Lead, Robert Glen - Chairman, David Etherington-Smith - Sales Manager & Technical Engineering Lead MoD Outboard Motors & Inboard Diesels, Paul Brownell - MoD Spare Parts Manager, Mike Burge - Sales & Technical Engineering MoD Outboard Motors



Barrus is awarded a new seven-year contract to support the MoD's small boats fleet

Barrus is proud to announce that the company has signed their acceptance of a new seven-year contract with the UK's Ministry of Defence (MoD), 'for the delivery of engine support to maintain the capability of MoD boats'.

The scope of the contract covers the supply, overhaul, and repair of all outboard engines, Yanmar inboard diesel engines, and related post-design services and in-service support.

The contract covers support to more than 1100 boats within the current MoD in-service fleet for craft under 25 metres, including Inflatables and Rigid Inflatable Boats (RIBs), the Mexeflote landing-raft system powered by the Thrustmaster propulsion unit, workboats, and planned future craft.

Critical support



James Melia, Project Manager for DE&S Boats Team, said,

"Boats are an essential capability of the UK Armed Forces and are used for many different operations around the world ensuring that our Navy has the reach it needs to protect our interests around the globe. We are committed to ensuring that engines are effectively managed through every stage of their life cycle and our partnership with EP Barrus will provide critical support to this. DE&S is proud to maintain excellent working relationships with EP Barrus, a valued industry supplier and we look forward to continuing to work together to support our front line with the equipment they need while also maintaining vital British skills and jobs."

Engineering Solutions and patented technologies

Barrus has a long-standing partnership with the MoD spanning over 75-years. The first Post Immersion Restart

Engines (PIRS), were introduced to the MoD back in the late 1970s. The PIRS® System drains water from the engine allowing it to be rapidly restarted following submersion. Over the years, Barrus has developed derivatives of the PIRS® patented technologies including the latest GEN 2 FAST PIRS®, a simpler, more durable and cost-effective FAST PIRS®, and Capsize PIRS®, a four-stroke solution.

In addition to PIRS[®] engines, Barrus will be supplying the latest Mariner mine hunting outboard engines and SOLAS (Safety of Life at Sea) certified engines 15hp to 150hp, an exclusive in the industry.

"The award of this prestigious contract is recognition of Barrus's reputation as the leading custom-engine builder," commented Robert Glen, Chairman, E. P. Barrus Ltd. "Our Research & Development Team work closely with the MoD to understand their specific requirements, and, utilising the latest technological advancements deliver engineering solutions that match the demanding operating conditions of their in-service craft."

Supporting engineering jobs

The contract will support forty jobs within Barrus's Engineering Centre in Bicester, Oxfordshire, and secure future roles both for young engineering students and the company's graduate engineering intake programme. In addition, around 80 jobs across the UK supply chain will benefit from the contract over the next seven years.

Minister for Defence Procurement, Jeremy Quin said: "Our maritime industry continues to grow from strength to strength. This contract will secure an essential capability for our Armed Forces and support over 40 quality engineering jobs in Bicester, plus many more throughout the UK."



BlueBird takes off in the UK

Barrus is pleased to announce the addition of the innovative BlueBird brand to its lawn and garden machinery portfolio.

BlueBird sold its first power rake to a small landscaping company in 1961 and has been producing superior-engineered commercial products built for professionals ever since.

With its new and exclusive 125v Lithium-ion battery and petrol-powered ranges of professional turf care equipment, BlueBird provides some of the most reliable turf care power equipment in the industry; including aerators, power rakes, overseeders, sod cutters, stump grinders and hover mowers.

A growing range

"The agreement with BlueBird to become their exclusive distributor for the UK further strengthens our growing product offering in the turf care market," commented Phil Noble, Sales Manager for the Lawn and Garden Division at Barrus.

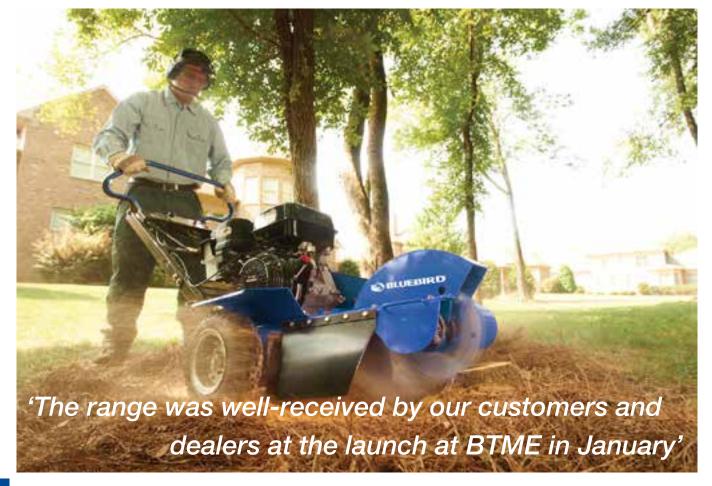
Leading the future of turf care equipment, BlueBird's new range of 125v battery-powered machines offers electric performance equal to petrol. The initial range includes an 18" and 22" power rake, a 17.5" and 19" aerator and a 20" hover mower.



Low cost of ownership

The lower noise level enables operation during noise restricted times and in noise restricted areas. Other key advantages include no exhaust fumes or odour, low maintenance and reduced downtime resulting in significantly improved productivity and profitability with no adverse effects on the environment.

"Our mission is to supply our customers with the best, most durable equipment combined with superior customer service," commented Mike Evan, President of BlueBird. "We look forward to working with Barrus to deliver the brand in the UK."





Barrus distribute Genmark specialist truck mounted genset range

Barrus has secured a new distribution partnership with Genmark to distribute and represent their flexible genset solutions in the UK and Ireland.

Genmark based in Holland, manufacture an innovative range of gensets for the commercial truck refrigeration market providing mobile power where no fixed electricity supply exists. There are four different models available depending on the mounting requirement; fixed chassis, flexible chassis, truck mounted or directly onto the refrigerated container.

Yanmar power

Genmark Gensets are powered by a Yanmar diesel engine, the 4TNV88, which is specially designed for the Genmark units. With a 1000 hour extended running facility, the Yanmar engine is ideal for trailer and vehicle applications. "As we are the UK distributors for Yanmar diesel engines in the UK, the addition of the Genmark product into our portfolio is an excellent fit with





Yanmar 4TNV88

our ability to not only sell the product but also to provide full technical service and support," commented John Day, General Manager of the Industrial Division at Barrus. "This new partnership takes us into a new area of business and presents the opportunity to continue to grow our Industrial Division," John concluded.

Jim Vodegel, Managing Director at Genmark commented, "Barrus is a company that has been around for over 100 years, and the cooperation between Barrus and Yanmar is wellestablished. The extensive experience that Barrus has with Yanmar engines and their dealer network are the reasons why we chose to partner with Barrus. John Day and his colleagues from the Industrial Division are professionals with years of experience, and I am proud to be able to work with them. This step puts us on the right track to take the sales and service in the UK and Ireland to a higher level."

NEWS FROM THE DIVISIONS



Barrus enters the home standby generator market as the UK distributor for Briggs & Stratton

Barrus has partnered with Briggs & Stratton, the world's largest producer of petrol engines for outdoor power equipment, and a leading designer and manufacturer of power generation equipment, to distribute Briggs & Stratton Home Standby Generator Systems in the UK.

With today's modern lifestyles relying on power for everyday essentials, and the increase in home working as a consequence of COVID-19, the impact on businesses can be extremely disruptive and costly. Automatic standby generators offer worry-free protection providing a backup power solution when the power goes down.

Figures from Ofgem for the period April 2018 to March 2019, reported that there were over 1 million unplanned power cuts in the UK affecting around 13 million customers. A significant power cut across the UK in August 2019, caused 300,000 homes and businesses to lose power, affecting a total of 1 million people.

What is a standby generator?

In simple terms, a standby generator is permanently installed outside of the home or business by a licensed contractor and connected to the natural gas line or liquid propane providing continuous power in a power outage or blackout.

How does a standby generator work?

Continuously at the ready, the system senses when mains power goes down. Within seconds, the automatic transfer switch seamlessly transfers the electrical circuits and appliances to backup power. Once the generator senses that mains power is back online, power reverts to mains supply and the standby generator is shut down until needed the next time.



Reliability and durability

Barrus is offering two Briggs & Stratton Home Standby Generator models. The G80 generator is an 8 kW system, suitable for small to medium-sized homes, and the larger G140, 14 kW system is ideal for medium to larger homes and businesses. Both models are powered by Briggs & Stratton air-cooled commercial-grade engines for powerful, consistent performance, reliability and durability.

Briggs & Stratton Standby Generators will be available through Barrus appointed authorised dealers who will advise on model selection depending on the power requirement. Installation will be handled either by the dealer, if they have their own experienced engineers or by Total Electrical & Mechanical Solutions who have a team of fully certified installers around the country. A full site survey will be undertaken prior to installation and commissioning, and the units will require an annual service. The Briggs & Stratton comprehensive warranty of 3-years/1000 hrs, (commencing from the date of final commissioning) backs-up the commitment to deliver quality, reliable power.

"With power cuts occurring more frequently and our daily lives dependent on electricity, backup power is becoming increasingly important to protect our homes and businesses," commented John Day, General Manager of the Industrial Engines Division at Barrus. "Briggs & Stratton is a trusted brand, well-known for reliable engines and outdoor power equipment; we are looking forward to grasping this opportunity and developing and growing this area of business, "John concluded.

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Barrus acquires the Blue Gee brand

Barrus has purchased the intellectual property and legal rights for the Blue Gee brand, following the successful distribution of Blue Gee products since 2019.

Blue Gee was established in 1985 as a British manufacturer of marine construction and repair materials. The brand has become well-known for its innovative product creation with a range of neat, easy to use products perfect for novices and experts alike.

Barrus logistics support

Barrus will now be fully integrating Blue Gee into the company with stock being held at its headquarters, and logistics supported by the Marine Equipment Division with the Barrus transport fleet on-hand to deliver products doorto-door.

In addition to streamlined supply and distribution, the striking presence that Blue Gee currently has in-store will remain consistent. Retailers can continue to benefit from the partnership between Barrus and SailForce to ensure they have the products that they require in-store, in addition to enhanced support from the dedicated marketing and merchandising teams.

"This acquisition can only be seen as a huge move forward for the Blue Gee name as it allows us to not only expand upon the range but also further develop the brand with the full support of Barrus expertise and systems," commented Ben Allen, General Manager for the Marine Leisure Division at Barrus. "Barrus is now in its 10th decade in the Marine Industry and, having moved into the Marine Equipment market, has an established position as a leading distributor. We are now looking forward to including some home-owned brands in the marine portfolio," Ben concluded.



More well-known brands come on-board

MG Duff International - Trust the name

UK based anode manufacturer MG Duff has appointed Barrus as their exclusive National Distributor for the UK leisure marine market.

Established in 1956, MG Duff specialises in producing sacrificial anodes for leisure boats, commercial ships, and offshore structures.

Ben Allen, General Manager for the Marine Leisure Division at Barrus commented, "We are thrilled to have reached this agreement with such a household name in our industry and especially to be partnered with such a successful British manufacturer. Our combined history spans over 160 years and we look forward to being part of the next stage of the journey. The MG Duff name is synonymous with quality, trust and longevity and we will be taking that message out to our dealer network and on to the discerning boat owner."

The MG Duff range joins a growing portfolio of more than 30 new brands under the Barrus Marine Equipment Division and is a further step in their rapid entry into the accessory market.

MG Duff offers a range of over 3,000 anodes across all sectors as well as a bespoke anode manufacturing service and a range of related civil engineering services. MG Duff Commercial Director, James Beale said, "EP Barrus brings a wealth of experience and excellent customer care, that fits MG Duff's core values. We are very excited and look forward to working with them going forward."

The new agreement started in September 2020.



Bostik

Bostik smart adhesives

For over a century, Bostik has developed smart solutions that touch and improve people's daily lives and is one of the largest adhesive and sealant companies. From pioneering waterproof boots to launching the first elastic attachment adhesive used in babies' nappies, their history is filled with smart innovation and are now used in the manufacture and assembly of products in a wide range of sectors including marine.

Bostik's marine adhesive products are used for glass bonding (windscreens and portholes) as well as numerous construction and decorative applications, such as teak and artificial deck bonding, below-deck interior bonding and deck-to-spider hull bonding. Bostik is also a market leader in adhesives for bonding the wide range of fabrics and materials used in the construction of inflatable boats for military, rescue and leisure uses.



Autosol #1 selling metal polish in the world

Autosol is a leading manufacturer of metal polishes, surface care and boat cleaners with three manufacturing sites around the world. Founded in 1929, the brand is known for 'A Brilliant Shine Every Time'.

Since moving into the marine market, Autosol has developed a dedicated selection of marine care formulas. This market-leading range covers the full cleaning process from scratch removal to soap, polish and shine and each product has been scientifically formulated to deliver a high-quality finish for any boat or outboard engine.

> DOMETIC



IceFusion





Dometic – a cool move into marine essentials range

The Dometic Group, a global market leader in solutions for mobile living, has appointed Barrus as a national wholesaler for their marine solutions in the UK.

A single-source supplier of complete systems for HVAC, refrigeration and sanitation, innovative product development has always been at the heart of the company. Its roots date back to 1922 with the invention of absorption technology by two young Swedish engineering students, Carl Munters and Baltzar von Platen which led to the introduction of the world's first refrigerator.

From powerful, quiet marine air-conditioning systems, efficient power and control systems, versatile fridge and freezer options, and space-saving sanitation units, the Dometic range makes life onboard easy and comfortable.

Ben Allen, General Manager for the Marine Leisure Division at Barrus commented, "The Dometic range offers reliable, high-quality products satisfying the essential needs of marine users at sea. "The wide range of products available provides us with the opportunity to grow the brand across both our leisure and commercial Marine Divisions with access to a complete spare parts programme."



Barrus Maintenance and Consumables

Barrus has put together a selection of Maintenance and Consumables including **Ice Fusion** paint brushes, rollers and trays; **ProDec** scrapers, wire brushes and cleaning materials; **Fit For The Job** dust masks and sanding materials.



Mirka surface refinishing solutions, a range of sanding products for boat refurbishment and restoration.



Zinga is a one-component cold-applied zinc coating which contains a minimum of 96% pure zinc when dry. It creates an active anodic zinc layer that provides cathodic protection to submerged metal and a passive zinc coating that resists corrosion above water. The Zinga coating is suitable for repairing worn or damaged galvanising on boat trailers, anchors, chains, keels and underwater fittings.



Mercury Marine wins 2020 Red Dot Design Award

Mercury Marine, the world leader in marine propulsion and technology has been awarded a 2020 Red Dot Design Award for the V-6 and V-8 FourStroke and V-8 AMS Verado outboard engines. The "Red Dot" distinction has become established internationally as one of the most sought-after seals of quality for good design. Mercury won the award in partnership with Designworks, a BMW Group Company, Mercury's long-time product design partner.

"We are honoured to be given a Red Dot Design Award," said Chris Drees, Mercury Marine President." "We know that Red Dot means that we belong to the best in design and business and our V-6 and V-8 engines are well deserving of this honour. Both platforms have been very well received by our customers and their success is a testament to extensive design thinking work that takes place within our product development and world-class engineering team."

Mercury Marine launched the V-6 family during the 2018 Miami International Boat Show and the V-8 lineup in May 2018. Many of the innovations that differentiate these outboards are customer-driven features. Unparalleled comfort and convenience including a top cowl service door that provides easy oil check and fill (if needed) without removing the cowl – is an innovation that has been praised by consumers around the world.

Red Dot stands for belonging to the best in design and business and appeals to companies who want to distinguish their business activities through design. The distinction is based on the principle of selection and presentation. "Design continues to be part of our product development strategy and will continue to drive many of our new product development plans," said Todd Dannenberg, Mercury Marine Director of Industrial Design. "We know our customers love these engines, they have been very well received around the world and now to win another design award for this product is very exciting."

In 2019, Mercury Marine was recognized with an International Forum Design (iF) award in the Discipline Product category, presented to the company for its V-6 outboard lineup. The same product also won an NMMA Innovation Award at the Miami Boat Show in 2018.



reddot design award

Charlies Stores adds Loncin generators and pumps to its extensive range

WILKINSÓN

Loncin engines, generators, and pumps are now part of the extensive range of products offered by Charlies Stores, a company that specialises in seasonal products for the home, garden and the great outdoors.

Based in rural Powys, Charlies has been operating for over 35 years and has expanded to eight stores across Wales and the Borders. An independent, family-run retailer, the company's philosophy has always been to sell products that they would be happy to take home themselves.

"Gwyn Watkin, Buyer at Charlies Stores Ltd, commented, "Our intention was to offer a quality range of affordable generators and pumps available across six of our stores. We have used Loncin engines in our workshops and always found them to be reliable. Many of the machines that we supply including shredders and rotavators are powered by Loncin engines."

ffLoncin

Barrus has been supplying Wilkinson Sword products to Charlies for a number of years, including a selection from their popular gardening tools collection.

Charlies offer an extensive online product offering at



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MERCURY



Easier and more precise boat control

Mercury Marine has introduced a new, innovative product that enhances the experience of controlling a boat using the tiller handle.

The new 40-115hp Tiller is compatible with Mariner and Mercury FourStroke outboard engines in the 40 through to 115 horsepower range. Extensive research revealed that boaters are looking for advanced features for personalising tiller control setup to meet their individual needs. As a result, Mercury developed a more ergonomic, comfortable, responsive and adaptive tiller to improve boating experiences.

The new tiller handle provides the most adjustments available. The 40-115hp Tiller is the only tiller on the market with the capability not only to swap the shift handle to either side of the tiller but also to reverse the throttle grip rotation to the boater's preference. The tiller handle has side-to-side adjustments up to 18 degrees port and starboard from the centre. The handle's vertical angle can also be adjusted through an autotiltlock system or downstop angle microadjustment knob. These adjustments, along with the design of other touchpoints and controls, work together to provide the most customisable steering and throttle controls that adjust to the boater's body proportions and positioning.



"Following the success of the upgraded tiller functionality introduced into Mercury's lower horsepower range of engines, this new 40-115hp Tiller is another option for our network of Mercury and Mariner dealers here in the UK," commented Ben Allen, General Manager for the Marine Leisure Division at Barrus. "It's great to see Mercury Marine introducing new technologies at every step of the way, not only in new product lines but also refining its offering throughout the engine ranges," Ben concluded.

Mercury Marine's all-new 40-115hp Tiller is compatible with the 40-60 horsepower EFI four-stroke family of engines built since 2006, and the 80-115 horsepower EFI four-stroke family of engines built since 2014.

NEWS FROM THE DIVISIONS



Barrus appoints three dedicated dealers to drive sales for Yanmar Dtorque outboard



Barrus has strengthened its UK sales and service network with the appointment of three dedicated dealers for the Yanmar Dtorque 111 Turbo Diesel outboard.

The new Committed Sales Dealers, Inverness-based Caley Marina, Fettes and Rankine in Aberdeen and South Shore Marine in Northern Ireland, are ideally positioned in the market to focus on meeting increasing demand for the Neanderengineered outboard, distributed worldwide by Yanmar.

Dtorque for rescue craft and work boats

Selected to support Barrus's growth strategy in the aquaculture, oil and gas, and fishing sectors, the three established Yanmar dealers will spearhead the drive to promote awareness and expand sales of the Dtorque for applications including rescue craft and commercial boats.

The first serial production diesel outboard with dual crankshaft and the smallest diesel outboard with common rail fuel injection, the Yanmar Dtorque is well suited for workboats, rescue and safety boats, fishing boats, oil and gas and offshore vessels, government and port authority boats, passenger boats and superyachts tenders. Offering the additional safety benefits and minimised fire risk associated with diesel fuel, the 50 hp Dtorque features a range of further benefits, including a remarkable torque output peaking at 111 Nm at 2,500 rpm, fuel economy, reliability, and low noise and vibration. Mike Forman, Sales Manager for the Marine Diesel Division at Barrus, commented, "We are pleased to announce Caley Marina, Fettes and Rankine, and South Shore Marine as our new high-level dealers for Yanmar's Dtorque outboard. They have been identified as best placed to effectively penetrate our target markets, particularly in the thriving aquaculture and fishing sectors in specific regions in Scotland and Ireland. These businesses are a perfect fit for our sales strategy going forward for Dtorque and we look forward to introducing the benefits of this unique outboard to more industry professionals."

Demonstrator boat

Caley Marina, offering a full range of specialist engineering services and technical support from its base on the western side of Scotland, will use its extensive connections in the expanding aquaculture sector to actively promote Dtorque to the fish farm and commercial sectors. A unit has already been rigged to a demonstrator boat to showcase the outboard to customers in the region.



Based on the east coast of Scotland in the heart of the oil and gas support sector, Fettes and Rankine is a leading supplier of engineering services to the marine and offshore industry and prominently positioned within the oil and gas industry. It will focus on partnering with key companies to target fast rescue craft and safety boats that currently fit petrol outboards.

South Shore Marine & Diesel, based at Kinnego Marina, Oxford Island, is a marine parts and service centre for both the commercial workboat and leisure sectors. Well connected in all fishing sectors, South Shore will use its extensive network across the whole of Ireland to promote the Dtorque.

Included in Barrus's comprehensive product portfolio since 2017, the Yanmar Dtorque has an expected life span of more than 10,000 hours, requiring minimal maintenance with less stress on the engine and its suspension. The smooth-running 804cc outboard features torque performance surpassing the leading 70 hp fuel-injected, four-stroke gasoline outboards with better fuel consumption.

Gardening products for every season





Town & Country Women's Flexigrip Gloves

Over 100 new gardening products were launched by Barrus at Glee, the garden and outdoor living trade show for the retail industry.

On an all-new exhibition stand, the Garden Tools and Accessories Division at Barrus brought together the extensive range of new additions including Town & Country gloves, footwear and accessories, Wilkinson Sword cutting tools and secondary display solutions and a range of Energizer 20v battery powered garden tools. Showcased alongside WOLF-Garten's innovative collection of tools including the multi-change® range, the new lines further demonstrate how Barrus can continue to support garden centres all year round.

Spring

Town & Country launched a clean sweep of home and garden accessories, ideal for spring cleaning. The Indoor Broom, Outdoor Broom, and Soft Brush & Dustpan provide effortless sweeping inside and outside the home, with ergonomically designed brush heads and hanging hooks for ease of storage.

Two new kneeler pads have also been added to the range. The Original Kneeler Pad is made with memory foam with a durable, non-slip cover to protect knees and provide comfort when kneeling. The Deluxe Neoprene Kneeler Pad is waterresistant and lightweight, providing superior comfort for a variety of tasks including cleaning, weeding, and planting.





Town & Country Comfort Leather Gloves



Town & Country Women's Fleecy Cloggies

A new range of Comfort Fit Leather gloves provide superior protection from thorns, making them perfect for pruning rose bushes. There is also a thermal-lined version of this glove which is ideal for gardening during the winter months. In addition, the new Cut-Less gloves feature a high strength composite polymer woven into the core of the fabric which protects against scrapes, and abrasions.

A refreshed range of FlexiGRIP gloves are ideal for carrying out light work and have a latex coated palm and fingers to provide added protection and grip for a multitude of tasks. The triple pack features a leaf pattern and comes in teal, purple and red.

Summer

Town & Country's new Buckingham shoes provide total comfort when gardening and walking. Made with natural neoprene, they keep feet cool in the summer and warm in the winter. Dynamic and convenient, these shoes are perfect for anyone who finds longer boots difficult to get on and off.

In addition, Town & Country also refreshed its range of Cloggies – the popular slip on, slip off shoes for keeping by the back door. Following extensive customer research, the cloggies have been updated with new shades of green, navy and aubergine, with a contrasting lining. The fleecy cloggies also have a refreshed colour palette of navy, charcoal, and raspberry, so there is a design to suit every taste. The new variations retain the lightweight, durable and waterproof properties that make them a must-have for all keen gardeners.

TOWN &

COUNTR



Autumn

One of the most exciting new additions is Town & County's range of Light-Up Kids Wellies which will brighten up any rainy day. These brightly coloured PVC boots have LEDs that light up when the kids are walking and playing. Pull on-straps help the little ones pull up their boots themselves, whilst highquality design and materials provide protection, durability, and comfort. The boots provide peace of mind for parents and maximum fun for kids.

Wilkinson Sword expanded its Ultralight Collection with a new pair of 24" Bypass Loppers, ideal for cutting back branches with ease during the Autumn. These are the latest product to be launched in a collection of gardening tools which are up to 50% lighter than standard. The weight saving significantly reduces arm fatigue, meaning that users of all ages and abilities can enjoy gardening for longer. The new loppers feature a larger profile and curved cutting head which allows the user to cut through branches up to 30mm thick, with precision ground blades delivering a clean and precise cut.

Winter

When the weather turns cold outside, attention can turn to indoor plants. Wilkinson Sword's new range of Precision Pruners, Scissors and Snips are available to garden centres with a bespoke display solution to be merchandised within homeware departments alongside indoor plants.

Town & Country's Thermal AquaMAX gloves have been developed to provide maximum thermal and waterproof protection for gardening in cold and wet conditions. They have a durable, 100% waterproof coating and a thermal liner for additional warmth and comfort which is also ideal when de-icing the car on a frosty morning.

Town & Country's Buckingham Boots are made from soft, luxurious neoprene that feels comfortable against the skin and keeps feet warm in the winter. The boots are 100% waterproof and have a high grip tread - great for long, muddy walks with the dog.

Wilkinson Sword Ultralight 24" Bypass Loppers

Town & Country Kids Light Up Wellies

Town & Country Men's Buckingham Neoprene Boots



Wilkinson Sword Precision Mini Pruners (part of twin set which also includes Bypass Pruners)



Mercury keeps boating safety at the forefront



Mercury Marine's 1st Mate is the world's first engine integrated man overboard and proximity-based theft deterrent system. Utilising a wearable device that integrates with Mercury SmartCraft systems, 1st Mate adds another layer of boating safety.

The 1st Mate system includes a wearable wristband, fob or carabiner for the captain and up to seven passengers that sync with the 1st Mate app. If the proximity of the fob is not in range, the system disables or puts the engine into guardian mode. 1st Mate also serves as an effective deterrent to boat-and-engine theft. The Theft Deterrent System can lock the engine(s) to prevent unauthorised use. The three main features operate in the following ways:

Man-overboard monitoring and warning system

If the captain has fallen overboard, the device sends alerts to the system's hub, its app and all the passengers' wearable devices. The system cuts the engines and sends specific instructions to the passengers' smartphones via the app. The instructions guide the passengers through restarting the engines and safely steers the boat back to the location of the man-overboard event. If a passenger falls overboard, in the same way, the system sends alerts to the captain and other passengers.

Distress messaging

If a boat's captain is alone and the system detects that the captain has fallen overboard, it sends a distress message to a list of emergency contacts that the captain has entered in the app. The distress message includes the GPS location and the time and date of the man-overboard incident.

Theft deterrence

The theft-deterrence system provides engine-locking functions. For boats powered by Mercury outboards with Mercury SmartCraft technology, the system not only requires an 'unlock' command from the captain's app or wearable device to operate the engines but also requires engines that have been removed from the boat to detect a 'handshake' from the system before they can be restarted.

"Mercury is really leading the way with not only engine technologies, but also supporting systems," commented Ben Allen, General Manager for the Marine Leisure Division at Barrus. "1st Mate is an important addition to the range of performance-enhancing technologies which ensures boaters can get the most out of their engines whilst feeling safe and protected."





MERCURY

YANMAR unveils new 6LF and 6LT series

YANMAR MARINE introduced its new 6LF and 6LT series of marine diesel engines at Boot Düsseldorf in January this year.

The launch of the advanced six-model powerboat line-up extends Yanmar's portfolio of trusted common rail marine diesel engines to encompass an output range from 40hp to 640hp, the most comprehensive offering available from any marine engine manufacturer.

Enabling Yanmar to supply compact, high-performance solutions for new markets and a wider customer base, the 485hp to 640hp 6LF and 6LT engines are ideal for leisure boats as well as light-duty commercial applications.

High power, low emissions

The two series, consisting of the 3000rpm 6LF485, 6LF530 and 6LF550 engines and 2530rpm 6LT500, 6LT580 and 6LT640 engines, feature Yanmar's next generation VC20 vessel control system for enhanced onboard comfort and easier overall boating experience. The global emission-certified diesel engines also offer leading fuel economy and are compatible with a wide range of fuel types.

Available as a complete Yanmar package including engine, ZF transmission, and VC20 vessel control system, the 6LF and 6LT are supplied with a full range of options.





Enhanced on-board experience

Martijn Oggel, Global Sales Manager of Yanmar Marine commented, "With the launch of our new engines, Yanmar's renowned common rail range now reaches 640hp, representing a significant expansion of our line-up from the previous limit of 440hp. We are excited to bring the efficiency, performance and low emission benefits of the higher power 6LF and 6LT models, alongside the reassurance of Yanmar's reputation for high quality, reliability and technological advancements, to more boat owners and commercial operators."

"Ideal for semi-planing and planing hulls with inboard propulsion systems, the engines offer compact, light-weight and high-performance powerboat solutions. They are also the first new Yanmar range to incorporate our new VC20 vessel control system. Demonstrating our commitment to leading by technology, this next-generation system will feature across our range of common rail engines, playing an essential role in improving the entire on-board experience," Martijn concluded.

New owners of the 6LF and 6LT series can take advantage of Yanmar's global distribution network, including local dealer support and genuine spare parts supply.

New Quicksilver 675 Weekend: Compact and complete

For those who like to extend their leisure time on water into the night, Quicksilver has launched an all-new model, the 675 Weekend, to deliver the performance and style that is perfect for an overnight experience out at sea.

The Activ 675 Weekend gives you the freedom to use the cockpit as you want with a simple conversion from sun lounge to dining area or as seating, all in a leg-free flip-up system. Equipped with a space-saving full galley, spacious double berth, optional premium electronics and stunning views in all directions from the cabin, the Activ 675 Weekend is the ideal size for boating enthusiasts.

The 675 Weekend enhances the range of overnight-capable models and, as the new entry-level model in the range, the features aren't compromised:

- Spacious living area and plenty of open-air seating.
- A versatile cockpit that can be converted from seating to a dining area or a sun lounge in seconds.
- A 360-degree view from the cabin to enjoy the stunning panoramic vista.
- A compact yet full galley in the cabin, ideal for preparing meals out in the elements.
- A private sea toilet and sink.

- Glass sliding doors for easy rear cabin entry and exit.
- A 3-way convertible dinette to be used as dining space, an extra berth, or forward-facing seating.
- Roof-mounted handrails for safe movement between bow and stern.
- An extra-large bow sun lounge.
- Optional premium electronics including Simrad NSS evo3 GPS available.
- Hydraulic steering and SmartCraft capability as standard.
- Multiple Mercury engine configurations from 115hp to 225hp.

Where this vessel truly shines is the vast space for relaxation. Sprawl out on the extra-large bow sun lounge while others gather around the cockpit table or utilise the optional swim platforms for easy access in and out of the water.

The 675 Weekend can be configured with a range of competitively priced packages to suit your time out on the water. For those who want the most popular features, the Quicksilver 675 Weekend offers the SMART Edition equipment.

Options including an electric windlass and a 51L refrigerator, an upgraded cockpit table, and sun lounge, and cabin curtains make your stay at sea more comfortable and pleasant.



The compact ACTIV 675 Weekend

New MerCruiser Bravo Four S forward-facing drive with Smart Tow system delivers total control for tow sports

Mercury Marine has announced its Bravo Four S[™] forwardfacing drive with Smart Tow® controls, a new drive system for MerCruiser engines that perfects the art of creating wakes for wake surfing, wakeboarding and other tow sports. Digital controls that coordinate ballast, surf tabs and propulsion settings under a single and intuitive user interface make it easier than ever before.

Water tow sports like wake surfing and wakeboarding — has gained global popularity. Mercury engineers carefully studied all the refinements that go into optimising a boat's wake for each of the various tow sports and devised a system to make those settings easy for the boater.

Ultimate control

Whether boaters are veteran wake surfers or new to tow sports, the Bravo Four S forward-facing drive delivers the power to do it safely and reliably in combination with proven MerCruiser 4.5 litre V6, 6.2 litre V8 and 8.2 litre V8 sterndrive engines ranging from 250hp to 430hp.

Mercury SmartCraft digital technologies, including an upgraded Smart Tow system, come standard with the Bravo Four S drive. These controls allow customisation of the tow sports experience with just a few taps on a Mercury VesselView touchscreen display. The driver can simply select the desired tow sports activity, and the Smart Tow system will display the appropriate controls to dial in the perfect launch acceleration, towing speed and wake characteristics.

Mercury engineers started with highly visionary legacy designs and added new technologies, digital functionality for the user and seamless integration with the engine and boat controls. This is the forward-facing drive for the new generation of tow sports enthusiasts.



The new energy-efficient VS generator range **from Mase**

Mase has revolutionised energy production onboard vessels with the new VS range; variable speed generators that set a new benchmark in this sector.

Mase's experience and a global reputation for innovative products have enabled the company to design and build new generators that offer shipyards the opportunity to produce more economical, environmentally friendly boats. The new generators produce only the energy required eliminating fuel wastage and reducing emissions.

The new VS range currently consists of five units at both 50 Hz and 60 Hz with a power range from 6 to 15.5 kW. The systems are compact and complete with all the circuits necessary to power any user. The inverter and the large high voltage cables are fully contained inside, unlike traditional systems.

The generators are equipped with circuits that allow parallel coupling offering considerable energy savings and quieter operation as additional power is only activated when required. All Mase VS generators are cooled by closed circuits with refrigerant water/sea water and indoor/seawater exchangers that allow the engine, alternator and other circuits to operate at optimal temperatures.

The power inverters are also water-cooled to improve efficiency and operation. This makes the system very compact compared to others that use external components; in addition, it is electrically safer because it is installed completely inside a single casing which, thanks to an anti-vibration system and soundproofing of the box, has very low vibrations and noise levels. These features also make it ideal for combining the new silent hybrid or purely electric propulsions of boats.





NEW PRODUCT FOCUS



HiSun go electric

Since its introduction to the UK by Barrus in 2018, the Hisun brand of all-terrain UTVs and ATVs has gained considerable momentum, with the electric-powered Vector E1 proving popular in this growing segment of the UTV market.

The Hisun Vector E1 4x4 is a mid-size UTV which provides quiet performance thanks to its powerful 48 volt, 27hp drivetrain. Built for performance and stability, the Vector E1 features include 4-wheel independent nitrogen suspension, 4-wheel drive, and 4-wheel disc brakes. With maintenancefree Discover[™] EV Traction Dry Cell Battery technology, the Vector E1 boasts an industry-best run time, delivering around 45 miles from a single charge. Hisun has incorporated superior critical drivetrain components including the Kinetek[™] Motor, Delta QTM ICl200 Chargers, and 450 Amp Sevcon[™] Gen IV controllers.

"Our strategy is to build a strong dealer network offering expert advice and the highest levels of customer service," commented Roger Suckling, Sales Manager for the Vehicle Division at Barrus. "We now have Hisun sales and service dealers from Scotland to Cornwall and Wales to Southern Ireland."

"The Vector E1 Electric UTV is being sold into caravan parks, yurt, and glamping parks and privately-owned country estates," explained Roger. "Customers like the vehicles compact size and great turning circle, making it agile in tight spaces. The quiet, electric motor is also a key attribute, particularly around animals."

Barrus dealer Hunts Engineering Ltd, a well-established company based in Halford, Warwickshire who provides agricultural, grounds care and garden machinery sales, service and spare parts has reported excellent feedback from their Hisun customers.

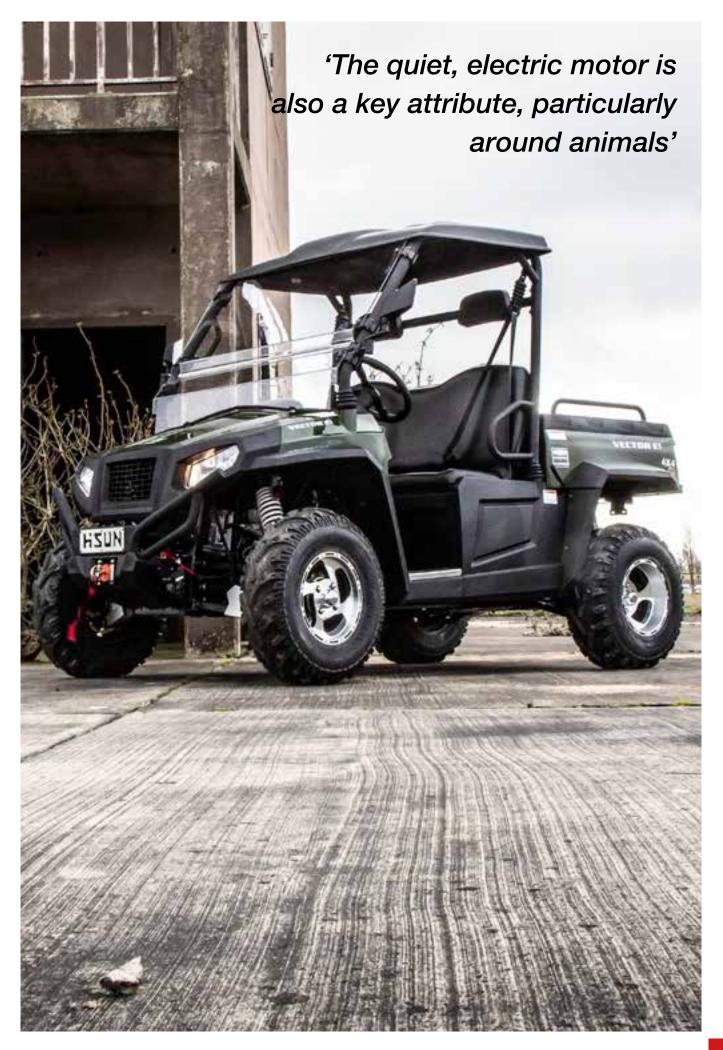
Jeff Deane responsible for General Sales & Customer Support at Hunts Engineering Ltd explained, "We have supplied a Hisun Vector E1 to assist a customer to get around his land. The machine has ticked all the boxes, enabling him to get around safely in the winter and enjoy peace and quiet. His gardener also uses it as a working machine complete with a cargo box."

A local Equestrian Centre has also found the quietness of the machine a real bonus as they can easily talk to visitors as they show them around and the horses are not spooked."

The Vehicle Division has been expanding into the event hire market supplying electric machines into the hire companies who provide their services to shows, festivals, and events throughout the UK.

The Hisun Vector E1 can also be registered for road use. Fitted with road lights as standard, there is the option to fit a glass screen and wiper kit





New Mercury Racing 450R delivers unrelenting outboard performance

The new Mercury Racing 450R outboard has been specifically designed for high-performance applications craving unrelenting power. Oozing Mercury Racing DNA, the 450R features a 4.6-litre V8 FourStroke powerhead boosted by an exclusive Mercury Racing supercharger to produce 450 peak propshaft horsepower and 40 percent higher torque than the powerful 400R.

Latest technology

Designed to thrive in the abusive environment of highperformance boating, the 450R was tested, tested and tested again; both in the lab and on the water. Combining unprecedented acceleration and top speed potential with rugged reliability and the latest technology from Mercury Racing, the new 450R delivers industry leading power-toweight in a compact, efficient package.

At over 130kg lighter than any other outboard rated 400hp and above, Mercury Racing engineers addressed every aspect of performance in designing the 450R outboard, and the weight and design of each component was scrutinised to achieve maximum power with minimum weight. The result is outstanding power density: 450hp from an outboard that weighs as little as 313kg all under the same slim-line cowl as the 300R model.

Personalised styling

Styling options are also available to create the ultimate customised outboard performance package ready to run Wide Open all day long. Cold Fusion White and the Legendary Mercury Phantom Black are finished with Devil Red Eye and Graphite Grey cowl accent panels respectively and additional kits are available to custom-match the engine to any boat's colour scheme.

The 450R is compatible with Mercury Racing Zero Effort Digital Controls or any Mercury Marine digital control system which can throttle up to six outboards with a single lever. Optional Joystick Piloting for Outboards (JPO) is also available for boats rigged with two to six outboards and provides intuitive, fingertip 360-degree boat control for docking and manoeuvring in tight quarters.

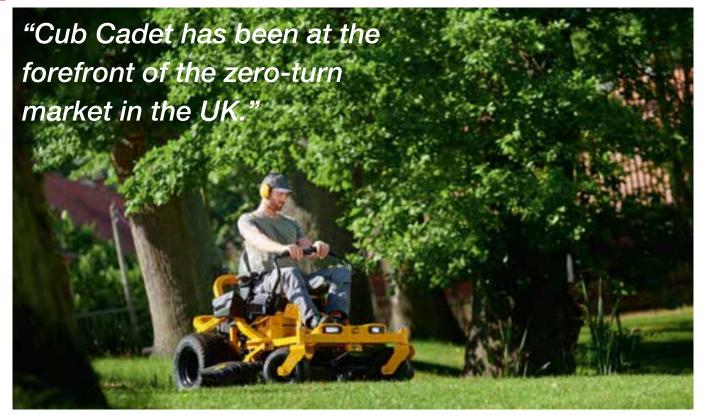
"The launch of the new Mercury Racing 450R outboard has been long anticipated," commented Ben Allen, General Manager for the Marine Leisure Division at Barrus. "This puts us way ahead of our competitors with not only the outstanding power and weight, but also the technologies to back it up. We're very excited to introduce this to our customers, boat builders and authorised dealers alike, and look forward to the opportunities that it brings!"





'Combining unprecedented acceleration and top speed'

PILIT



Cub Cadet XZ5 Ultima Series receives GOOD DESIGN™ Award

Cub Cadet has achieved a GOOD DESIGN[™] award for its new XZ5 Ultima Series zero-turns - for innovative and cutting-edge industrial product design in the tools category.

The awards focus on quality design, awarding products with "design of the highest form, function and aesthetics… a standard beyond ordinary," as stated by the GOOD DESIGN™ Award Program.

Innovative, cutting-edge design

"We knew we had something very special based on how the project came together – from the unique tubular frame design to the best-in-class performance and comfort," said Dennis Fowler, Industrial Design Lead for MTD Products Inc. "We've already expanded the line up to reach new audiences for 2020, and we look forward to continuing our quest for innovation within this product line."

For the last 70 years, the Chicago Athenaeum Museum of Architecture and Design and Metropolitan Arts Press Ltd. have presented GOOD DESIGN™ awards to those who produce the most innovative and cutting-edge industrial, product, and graphic designs produced around the world. GOOD DESIGN™ is an international symbol of a company's commitment to innovation and superior design. The full journey of the XZ5 Ultima took six months, including input from 1,300 customers and more than 63,000 hours of engineering and testing. It was clear that customers wanted strength, durability and a sleek style.

Rise in UK sales

Phil Noble, Divisional Manager for the Lawn and Garden at Barrus explained, "These new XZ5 Ultima machines have been on sale in America which leads the market with zero-turns and have smashed all sales records! The sales have been so successful that they have not only increased the line-up of Ultima machines but have also had to increase the production lines to keep up with demand. Cub Cadet has been at the forefront of the zero-turn market in the UK because our tractors have enabled customers to have zero-turn performance but with traditional steering wheel controls. However, in the UK, lap bar tractors are becoming more and more popular, so we are excited to add these machines to our range. We showcased these machines at the end of last year and our dealers have really got behind them, our sales have already increased dramatically!"

The latest steering lever lap bar technology combined with the extremely robust construction of heavy-duty components and high-performance engine makes the XZ5 Ultima series the ideal tractor for any gardener or professional user looking for a machine for large lawn maintenance.

Cub Cadet continuously endeavour to improve their product ranges, from lawnmowers to zero-turns, lawn tractors to robotic mowers, by incorporating new and proven technologies, implementing innovative engineering solutions and offering a dealership sales and service network that delivers real value.

Cub Cadet



Loncin expands inverter generator range

Loncin is now firmly established as a leading player in the industrial, construction, grounds care and consumer markets with an ever-expanding range of engines, generators, and pumps.

The Loncin inverter generator series now includes 8 models ranging from 2 kW to 8 kW, and 6 open-frame generator sets from 1.6 kW to 7.3 kW. Fuel efficient with reduced emissions, the open-frame generator sets offer the ideal, durable and reliable portable power supply. The diameter of the tubes has been increased on all models to strengthen the overall frame, providing protection for the engine and fuel tank. The smooth-running wheels and rubber grip handles on the larger models make these generators much easier to move around. The automatic voltage regulator (AVR) is a feature on all the open-frame models automatically maintaining generator output terminal voltage at a set value under varying load and operating temperatures. There is a Loncin LC10000 in the pipeline rated at 7.3kW which will be available during next year.

There are two new Loncin inverter generator models, the LC3000i and the LC7000i. Lightweight and portable at only 26.5kg, the LC3000i is fitted with a Loncin LC165F-4 single-cylinder, four-stroke engine with a power output of 4.3hp (3.2kW) @ 3600rpm. The larger LC7000i is rated at 8hp (6.0kW).

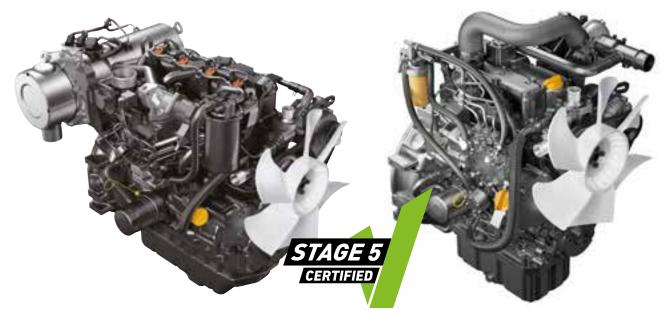
Fuel efficient, these high-quality power output machines have the benefit of low fuel consumption keeping operating costs to a minimum. The LC3000i can last for 4 hours on a tank of fuel running continuously under normal power, and the LC7000i is capable of 6.5 hours. Environmentally-friendly and meeting the latest EU Stage V emission standards, the added benefit of sine wave technology allows these generators to run the most power-sensitive electrical equipment. There is also the option to run the inverters in parallel operation, providing double the power output for more demanding appliances.

Award-winning display

An all-new exhibition stand was designed for 2019 which was launched at Executive Hire Show in February going on to win 'Best in Stand Show' awards at PlantWorx in June and IOG Saltex in October.



Yanmar certified for new Stage V Emission Standards



Two new engines have been added to the existing TNV family of common rail engine models which are EPA Tier 4/ EU Stage 3B and EU Stage V compliant.

The standards for Stage V compliant engines which came into effect at the beginning of 2019 are again more stringent than the previous ones and continue to reduce the emissions of nitrogen (di) oxides (NOx) and particulate matter (PM), such as soot. They also limit the emission of the number of particulates (PN).

The new European emission standards relate to engines installed in non-road (off-road) mobile machinery (NRMM) applicable to Yanmar diesel models between 3kW and 56kW.

Maintenance free DPF

"A key benefit is Yanmar's unique exhaust gas management technology for the Diesel Particulate Filter (DPF)," commented John Day, General Manager of the Industrial Division at Barrus. "Extremely long maintenance intervals of 6000 hours, effectively the lifetime of most machines, can be achieved by eliminating operator downtime."

The two new engines are the three-cylinder 3TNV86CHT (33.3 kW at 2600 rpm) and the four-cylinder 4TNV86CHT (48.5 kW at 2600 rpm). All feature Bosch and Denso common rail direct fuel injection systems, and full authority electronics. They have already proved popular with original equipment manufacturers due to their fuel efficiency, higher power density, compactness, and a DPF which needs practically no maintenance.



"Anyone considering purchasing a Shire electric outboard is encouraged to come and try one out on the water!"

Shire goes electric

Barrus has launched a range of Shire electric outboard motors following many years of extensive research, development and testing.

There are currently three models available; 6,10 and 20hp. These 48V outboards have a variable speed range that can be locked making them an ideal option for commercial and hire-fleet applications.

With an adjustable leg length from short to long shaft, the Shire electric outboards are suited to a range of vessels and the outboard tilt lock and adjustable transom angle position make rigging easy.

Shallow or dirty water is not a problem. The outboards have coolant reservoirs with a re-circulation pump housed within the leg, so no dirt or sand can enter. The system is belt-driven, so no gear or oil changes are required, offering hassle-free maintenance.

Additional options are available to enhance performance and ease of use including lithium-ion batteries and multiple battery packs that can be linked.

First order on the Thames

Following a comprehensive testing programme with the Barrus Research and Development Team, The Electric Boat Company placed the first order for four 6hp Shire electric outboards. The Electric Boat Company operates a luxury self-drive hire fleet on the River Thames based at some of the most prestigious hotels in the area. Recently awarded a new contract by the National Trust to operate a hire fleet at Cliveden Estate, The Electric Boat Company were looking for a reliable electric outboard capable of withstanding daily use throughout the season.

The clean, quiet propulsion of electric power delivers a unique boating experience that The Electric Boat Company are keen to promote as visitors can hold a conversation without raised voices over the engine and get closer to wildlife.

Electric outboards have a practical impact on the service too. Fuel does not need to be transported or stored and a welldesigned electric boat will provide a full day's cruising after a single charge with minimal ongoing maintenance costs.

Sam Harris from The Electric Boat Company Ltd, explained the benefits of using electric propulsion, "The 6hp Shire electric outboards provide enough power to bring the boats to hull speed when we are on-board and allows us to easily reduce the power settings for our hire customers. The closed-loop cooling system and the ability to adjust the maximum speed so easily make these outboards ideal for a hire operator. The battery being independent of the motor is also a huge advantage as we can customise the capacity to suit our needs rather than having to swap batteries over during the day. With a remote steering set-up, the boats are extremely responsive and intuitive to handle. Anyone considering purchasing a Shire electric outboard is encouraged to come and try one out on the water!", Sam concluded.

The new fleet from The Electric Boat Company is branded as Boating at Cliveden. For more information, visit www.boatingatcliveden.co.uk.



BARRUS BRANDS IN ACTION



Hostile conditions in the Polar Regions call for reliable equipment



The British Antarctic Survey (BAS) delivers research that uses the Polar Regions to advance our understanding of the earth as a sustainable planet with skilled science and support staff based in Cambridge, Antarctica, and the Arctic.

Barrus has been involved in supplying engines for a number of projects over the years including marine engines for support vessels operating in the Antarctic, and industrial engines providing generated power for a number of research stations.

Dependable Mariner outboards

Mariner 40hp 2-stroke outboard engines were chosen by Humber RIBs for their high-performance offshore RIBs supplied to BAS.

Rob White, Senior Marine Engineer for BAS explained the considerations when choosing a suitable engine, "We have two main issues with engines for the boats that we use; the first being able to start them in cold climates and the second is to reduce emissions whilst operating in the south of 60 degrees in the Antarctic territories."

Reliable starting

Boating operations by BAS below 60 degrees within the Antarctic territories are less frequent and the risks of a non-starting boat could be severe in such hostile conditions. The size of the engine is a compromise between having sufficient power to operate in and around the island bases, where kelp beds can be quite large, and being able to manhandle engines on and off boats whilst on deck. The RIBs transport passengers or cargo to island bases that have no other means of access and for deploying science parties on islands around Antarctica that are uninhabited.

Mercury provides the vital link

Mercury engines are powering two 7.5m RIBs built by Isle of Wight boat builder Island RIBs. The vessels are operating out of Rothera Research Station, the UK's Antarctic Hub, located on the Antarctic Peninsula. The Mercury 115hp Command Thrust outboards deliver a significant gain in performance and fuel economy. The larger torpedo, combined with a biggerdiameter prop, complements the efficient hull design and can lift a fully laden boat with large cargo capacity onto plane more easily and hold it there at lower speeds without impacting top speed.

Essential data

Fitted with digital SmartCraft gauges which link to Mercury VesselView app, BAS technicians have access to the boats' digital data in the palm of their hand including fuel information, maintenance reminders, mapping, performance summary, and fault code diagnostics. The fault code diagnostics enable the technicians to gain detailed information to feedback to the Barrus Technical Team for support from a remote location.

The Island RIBs boat is assisting in the Rothera Time Series (RaTS), a long-term study in its 21st year looking at a specific site on the Antarctic Peninsula that is suffering from a rapid rate of climate change. This increase in temperature and ice loss is measured, and the impact on marine productivity is assessed to improve the current predictive models of global warming.

Hostile conditions in the Polar Regions call for reliable equipment - cont.



🕼 MERCURY 🛛 💓 YANMAR 🛛 🛃 John Deere

Yanmar engines for 'Erebus'

The latest project was the supply of Yanmar inboard diesel engines for Mainstay Marine Solutions vessel build; the intuitively named 'Erebus'. Mainstay Marine has been designing and building workboats for over 30 years in Pembroke Dock, on the Milford Haven waterway in South West Wales.

The original 'HMS Erebus' was built in 1826 at Pembroke Dock, which was made famous by two polar expeditions including the voyage embarked on the Franklin Expedition to find the North-West passage later deemed one of the greatest disasters in British polar history. In 2014, the sunken wreck of Erebus was finally discovered.

'Erebus', is a 10.5m self-righting RIB which will be used on the UK's New Polar Research Vessel RRS Sir David Attenborough. Designed and built by Mainstay in accordance with MCA Workboat Code, the vessel is fitted with Barrus customised twin Yanmar 6LP2-STP 315hp engines and is capable of a

maximum speed of 25 knots with a full power duty cycle of 1500 hours per year. The vessel can accommodate eight crew at any one time and is able to self-right in the event of a capsize. Erebus will be used to transport personnel and supplies to and from BAS island stations as well as undertaking some scientific research.







Nothing runs like a Deere

The importance of reliable standby power when you are living and working in the freezing, harsh conditions of the Antarctic is paramount, which is why BAS place so much importance on the choice of engine-powered generators to keep their research stations running.

The Signy Station is located in the remote South Orkney Islands group in the Southern Ocean, 604 km north-east of the tip of the Antarctic Peninsula, with half of the island covered by a permanent ice-cap. Signy is home to eight staff, mostly penguin scientists whose primary task is the long-term monitoring of the local penguin colonies. Penguins are the most common birds in Antarctica and live in colonies that are larger than some cities.

Core life support system

The station is powered by two generators run by John Deere PowerTech[™] 3029DFU29 and 3029TFU20 industrial diesel engines, renowned for their lasting, dependable performance and rugged reliability in operation. The Barrus Industrial Engines Division first became involved in the project running



service training courses for the original generator sets. Barrus went on to supply new, superseded engine models for the Signy Station, and the delivery of units in December last year for Bird island.

BAS fit ancillary engine components including oil pump for sump drainage, external oil level switch, block heaters, double gauges for redundancy, and an engine vent oil recovery system.

"The John Deere engines are used as duty and standby power units for the station running 24/7," commented Paul Cousens, at BAS. "As Signy is a summer-only station, the engines are left to winter temperatures of minus 35 degrees centigrade, before being gradually warmed up and started in the spring when the station is opened. Last year's spring start-up went well with the engines firing without issue. As the core life support system for the station, we take great care in maintaining them," Paul concluded.

Without reliable equipment for scientists to use this vital research would be hampered.



UK boatbuilders choose latest Yanmar engines

A full line-up of Yanmar 4LV sterndrive marine diesel engine models now completes the highly-acclaimed 4LV series of common rail engines.

The new 150 to 250 mph five-engine range combine with the Yanmar ZT370 sterndrive to offer exceptional acceleration, fuel efficiency, remarkably quiet operation and low vibration to suit a wide variety of craft.

Ease of installation

The new 4LV sterndrive models feature the very latest in electronically managed common rail fuel injection systems. The next-generation system uses Thermo Swing Wall Insulation technology to provide maximum thermal efficiency leading to more complete combustion adding efficiency in fuel consumption, torque and lower emissions. The 150 to 250hp power range marine diesel engines are all based on an identical engine block with the same dimensions and weight making it easy for boat builders to install various options.

The new models are fitted with the Yanmar ZT370 sterndrive with a hydraulic multi-disc clutch for exceptionally smooth and quiet gear engagement, plus standard EXO hard-anodisation to provide effective protection against corrosion. The ZT370 sterndrive is available in various gear ratios, ensuring optimum performance across a wide range of boats. Other features include precision-forged gears with extra-long service life, the choice of either electrical or mechanical shift models, and an integrated exhaust system.

The ideal power solution for new builds and repower, the Yanmar 4LV addresses the needs of many boating applications for motorboats and light-duty commercial vessels in both single or twin installation.

Barrus has been successful in working with UK boat builders on Yanmar 4LV engine project applications overcoming technology challenges to ensure suitability and ease of installation.





WILLIAMS TENDERS JET

Williams Jet Tenders Williams Jet Tenders was the vision of two young brothers, Mathew and John Hornsby, who turned a passion for the water into a thriving tender business with quality engineering and craftsmanship at its core. From its first vessel built in a garden shed, Williams has become the UK's most prolific boat builder, outputting around 1,000 units per year.

A successful partnership

Since the conception of the 'Dieseljet' range, the relationship between Barrus and Williams has flourished. "As yachts have become larger, we have followed as a tender manufacturer," commented John Hornsby, who heads up Williams' in-house technical department. "During our initial research, we looked at several engine manufacturers. It quickly became apparent that the Yanmar range was well-engineered, with an excellent power-to-weight ratio. Since we began our working relationship with Barrus, we have designed multiple boats using Yanmar power packages. Our relationship gets stronger every year." This view is shared by John's brother Mathew, who is keen to stress the special partnership existing between the two companies. "By definition, the engine is at the heart of our tenders. So new product development and the installation of that engine is a collaborative process with Barrus and Yanmar."

The established four-model 'Dieseljet' line-up is available for yachts over 25 metres in length and designed with a choice of sizes, Yanmar engine configurations and seating for between 7 and 11 people. An exciting new addition to the fleet, reflecting the latest 'super-sizing' market trend, is the 7-metre EVO-JET, William's most advanced and luxurious tender to date - designed for superyachts over 40-metres and powered by Yanmar's 230/250hp 4LV diesel engine.

"As people are increasingly choosing the comfort and space a bigger yacht offers, Williams' partnership with Yanmar is helping to deliver the associated fun and thrills that a powerful diesel tender offers," concluded Mathew.



Discovery Yachts

Luxury UK yacht builder, Discovery Yachts are using the Yanmar 4LV in the Discovery 54, 55 and 58 and the Southerly 54 and 55 models. Oliver Hayes, Marketing Manager at Discovery Yacht's Group, explained the reasons for choosing Yanmar, "The power-to-weight ratio minimises additional displacement in the yacht, and the compact engine dimensions maximise usable living space. Fuel efficiency is also important as this provides a longer cruising range and the smaller the tanks, the less space they take up. Yanmar is also well-known for reliability, serviceability and longevity."



Pascoe International

Pascoe International, renowned for their world-leading supervacht tenders, has a long association with Yanmar engines. The Pascoe Limousines are crafted from the finest materials with award-winning naval architecture platforms and the latest technology. Amber Cheshire, Sales & Marketing Assistant at Pascoe, explained, "We have a long history of installing Yanmar engines and have been using the Yanmar BY Series in our Limousine tenders since their inception. The release of the 4LV engine represents the perfect opportunity to continue with Yanmar supply, whilst also installing the latest global market engine. The engine suits our application well due to its compact size, smooth operation, high torgue and flexibility of options. Yanmar has long been our preferred supplier due to the reliability of their products and the quality of their in-service support."



BARRUS BRANDS IN ACTION



Latest Mercury V-8's for Police Dive Cheetah

Cheetah Marine has designed and built a second dive and patrol vessel for specialist police operations.

The 10.2m Cheetah has been built for the Yorkshire and The Humber (YATH) Police Regional Underwater Search and Marine Unit to provide 24-hour coverage and replace two vessels which were previously used by the Force. The vessel follows the success of the smaller trailerable 7.2m Cheetah built for the Cheshire Police Department in 2012.

Whilst acting as a visible Police presence, the core duty of '5 Bells' is to provide a versatile craft to facilitate the many roles of the Underwater Search and Marine Team which includes diving operations in the inland waterways and the North Sea. Both the vessel and Officers undertake wide and varied tasks including security patrols and border control whilst assisting in searches from intelligence-led operations.

Fast response

With twin 300hp V-8 Mercury Verado outboards producing top speeds in excess of 40 knots, the 10.2m can be mobilised rapidly between areas covering the coast of Yorkshire and Lincolnshire together with rivers and estuaries. These all-new engines are more powerful than ever before and deliver refined performance and efficiency in the first application of its kind. With even more torque at cruising speed, the V-8 engines out-accelerate and outpace all other engines in their class and maintain a desired rpm level regardless of changes in load or condition. The easy maintenance, top cowl service door keep YATH Police out on the water for longer and allow the team to carry out basic maintenance as required. Five Bells has demonstrably good slow speed manoeuvrability as well as a very soft cushioned ride, removing the need for heavy and costly suspension seating. Keel bands fitted to the hulls provide protection during shallow draft operation and multi-terrain landings.

PC Roger Bennett, Yath Police Regional Underwater Search and Marine Unit commented, "The reasons why we chose Cheetah Marine is based around the quality of the vessel and feedback we had received from past and present Cheetah customers. The vessel has been designed around our complex requirements and has exceeded our expectations. We are looking forward to many years of service from the new Cheetah Marine vessel in conjunction with the Mercury engines and Simrad electronics."



Twin Mercury SeaPros prove themselves as the right partner for Heritage Charters

Exmoor has 37 miles of spectacular, sheltered coastline that tumbles into the Bristol Channel and is full of fish. Heritage Charters has taken advantage of this and offers experienced, good quality fishing along Exmoor's coastline and the Bristol Channel.

The team take pride in making each trip an experience and can arrange specialist visits to destinations including the stunning Lundy Island. The day begins from Watchet, an ancient port of 1000 years, where you can be instantly on the fish: Rays, Eels, Smoothhound, Bass and even Cod during the winter months.

Heritage Charters has built a brand-new, state-of-the-art vessel to make its fishing trips even more of an experience. In 2019, Lorna Doone was launched; a purpose built, 11.4m Swiftcat on foils powered by twin Mercury SeaPro 300hp V8 outboard engines.

Stunning Mercury power

These 4.6 litre four-stroke outboards provide everything needed for fishing: plenty of displacement, power, efficiency and durability. The impressive muscle of the powerheads has

been specifically designed for commercial duty and delivers a one-two combination of ample torque and low weight which makes the engines ideal for heavily loaded boats.

Even better, the Advanced MidSection virtually eliminates vibration being transmitted to the boat whilst joystick piloting provides maximum control and manoeuvrability – perfect for a successful day out on the water.

Combine all this with the latest Simrad electronics, a full walk around deck offering loads of fishing space, WC, seating inside and out plus plenty of tea and coffee, you have the perfect recipe for a top day afloat.

"Heritage Charters runs angling charters for all. From absolute beginners to highly experienced anglers, we pride ourselves on meeting the needs of everyone," commented Tom Wright, Principal Director at Heritage Charters. When we were building this brand-new vessel, the brief was simple: it had to be special. And that's exactly what we've achieved. A state-ofthe-art vessel with stunning Mercury power. Simply awesome!"



BARRUS BRANDS IN ACTION



New firefighting vessel makes a splash with John Deere Engines

One of the UK's leading aluminium vessel manufacturers, Aluminium Marine Consultants Ltd (AMC), has launched a high performance, first-in-class firefighting vessel.

A tri-partnership agreement was signed between AMC, Naval Architect Walker Marine Design and Firefighting supplier Angloco Limited to design and build the firefighting vessel, formally named Barracuda.

Built at AMC's Shipyard in Cowes, Isle of Wight (UK), Barracuda is the first build of a new generation of firefighting vessels which have been specifically designed and built to undertake multiple roles to meet the risks and hazards of modern-day marine firefighting.

First firefighting vessel in UK

AMC Director, Nigel True commented, "The order was a vote of confidence for the UK Marine Industry, the UK economy and emerging export market for firefighting and multi-role vessels."

The 14m vessel will deliver speeds of up to 32 knots and, with pumps powered by John Deere Marine engines, supply up to 4,500 litres of water per minute from each monitor. The twin John Deere 6090SFM85 inboard engines were supplied by Barrus and have a power rating of 242kW (325hp) at 2100 RPM. The engines are M1 duty rated – the heaviest duty available – and can be used at full wide-open throttle 24 hours a day.

"Barracuda has been an interesting and exciting vessel to work with," commented Sam Pearson, Sales Engineer for the Special Products Division at Barrus. "Although we have worked on firefighting vessels before, this is a first for us in the UK, so it was great to be part of the project and carry out successful sea trials with the Aluminium Marine Consultants Team."

The water is fired from three monitors with a range of up to 120 metres and the vessel carries a full set of firefighting equipment to tackle marine-based emergencies, so these heavy-duty engines are essential to deliver the performance required.

The Barracuda vessel has been successfully delivered to Angloco Limited who has recently celebrated a 50thanniversary milestone for designing, manufacturing and supplying special purpose firefighting and rescue vehicles and equipment globally.



Norfolk boat builder unveils the UK's first hybrid pilot boat

A ground-breaking vessel in the vanguard of transforming pilot boat technology made its maiden voyage from its Norfolk workshop to a new home in the capital.

Leader, the UK's first hybrid pilot boat, has been built by Goodchild Marine Services Limited for the Port of London Authority in a deal that paves the way for dynamic improvements to the carbon footprint of cutters.

The order was placed as part of the PLA's commitment to promoting the adoption of new, green technology in the recently published Air Quality Strategy for the Tidal Thames, the first of its kind for any UK port. This strategy aims to reduce river-based air pollution whist also facilitating future growth of waterborne freight and passenger transport.

Combined power

The parallel hybrid pilot boat combines both diesel and electric power and has been designed to be completely emission free whilst operating in electric mode. Marine and Industrial Transmissions Limited (MIT) in collaboration with its manufacturing and technology partners, Transfluid, have provided the plug-in hybrid system, alongside Barrus as suppliers of the Yanmar inboard diesel engines.

Custom-build

The twin Yanmar 6LY400 common rail engines have been

modified by the Barrus Special Products Team to suit Leader and operate on a 24v system with electromagnetic water pumps driven from the engine. The operating system on both engines was converted from 12v to 24v twin pole, isolated return and a large Jobsco electromagnetic water pump was fitted to both engines on custom-built support brackets designed in-house.

Both engines are controlled by Yanmar's VC10 flyby wire system with the integration of Transfluid's control head. The control head has been specifically adapted to operate both the engines and hybrid system from the touch of a button. Goodchild Marine's flagship ORC range is renowned for its unique beak bow hull design, making it lighter and capable of higher speeds. Leader is expected to reach up to 15 knots under hybrid power and the Yanmar engines achieved 19 knots at 3300 RPM during sea trials.

Alan Goodchild, Managing Director at Goodchild Marine commented, "The project has been a privilege and an honour. There are other hybrid boats on the market but, to the best of my knowledge, there isn't another one like this." The vessel will be used by PLA for the transfer of pilots to and from vessels in Gravesend Reach and made its debut at Seawork International last year where it was officially handed over to the PLA.



Barrus – a trusted supplier to the UK's professional rescue services

Barrus has a long association with the UK's national and independent maritime search and rescue organisations spanning over 60-years.

From custom-built Mariner outboard engines to Zodiac and Mercury Inflatable boats and Besto Lifejackets, there is a comprehensive portfolio of market-leading brands offering complete, reliable packages to cater for the requirements of these life-critical rescue organisations.

Over the years, Barrus has developed close relationships with these organisations. All engines are bespoke to customer specifications and the dedicated Research and Development Team have produced patented technologies to enhance their equipment which includes the latest Generation 2 Fast PIRS® and Capsize PIRS® developments. A four-stroke adaptation of the Post Immersion Restart System (PIRS®), Capsize PIRS® is fully automatic and integrated within the engine's electronic control unit. The system ensures no water can enter the internals of the engine and is operated without removing the engine cover, unlike a two-stroke engine, which can contaminate the oil and can cause serious component failure.

The Capsize PIRS® technology was recognised in the 2018 European Commercial Marine Awards as a winner in the Innovation Showcase category Marine Equipment, Electronics and Materials.





Mariner 150hp Capsize PIRS® for new Sidmouth Lifeboat

Sidmouth Lifeboat has proudly announced the name of the town's new lifeboat, which will continue to cover the area from Axmouth to Budleigh Salterton, in an official naming and blessing ceremony on the Esplanade.

A crowd of valued supporters from the local community and further afield gathered at the Lifeboat Station to wish the vessel well as it begins its career of saving lives at sea.

The new boat, 'Peter and Barbara Truesdale', has been named after its generous benefactors, the late Surgeon Captain Peter Jeffrey Truesdale and his sister Barbara, whose donation in trust allowed Sidmouth Lifeboat to replace its existing Arctic 24 after 15 years of service.

"Pride of Sidmouth was launched on 274 callouts; rescuing or assisting 226 people in the process. Although no longer on station here, Pride of Sidmouth continues to service the south coast of the UK as we were able to donate it to our neighbouring Independent Lifeboat organisation, Solent Rescue," commented Phil Shepperd, Operations Manager at Sidmouth Lifeboat.

15 years of Mariner

Barrus has supported Sidmouth Lifeboat for over 15 years, updating engines as new technology emerges and providing technical support and training when required. The team has always chosen Mariner outboard engines and, with their new lifeboat, upgraded to the latest post immersion model.

Peter and Barbara Truesdale is powered by the 150hp inversion proof Mariner outboard engines. "Our new vessel provides our volunteer crew with the latest technology and equipment required for the vital work they do at sea, commented Phil. We expect it to be on service with us here in Sidmouth for the next 15-20 years." Exclusive in the industry, all the Barrus supplied outboard engines between 20hp – 150hp are SOLAS approved with some PIRS® engines being capable of meeting the LSA code for fast rescue boats.

"Having worked with the Sidmouth Lifeboat Team for a number of years, it has been great to see their new vessel rigged with a pair of the latest generation Mariner outboards," commented Mike Burge, Sales Engineer for the Special Products Division at Barrus.

"Although the team has historically used Mariner engines, the 150hp Capsize PIRS[®] model was a momentous move forward for Barrus, so it was a proud moment to see the first pair go to them."

Legacy helps save lives

Sidmouth Lifeboat is an independent organisation and exists solely on the many charitable donations from the local community and beyond. All money raised is used to keep its boats maintained, and crew trained and equipped.

The arrival of 'Peter and Barbara Truesdale' and the donation of 'Pride of Sidmouth' to Solent Rescue means the generous bequest will benefit not just one, but two UK independent Lifeboat organisations.

"Peter would be thrilled to think that his legacy would do so much good both in Sidmouth and on the Solent, helping those in difficulty," commented Barbara Truesdale.

Sidmouth volunteer Lifeboat Crew, which includes boat crew, shore crew and tractor drivers, is currently almost 30-strong. The Crew is ably assisted by its 22 Support Team members and six Trustees.

Barrus - a trusted supplier to the UK's



Mariner 115hp Capsize PIRS® engines power latest SARA Lifeboat

The first Mariner 115hp Capsize PIRS[®] engines supplied by Barrus are powering The Severn Area Rescue Association's (SARA) latest lifeboat in operation at the Sharpness Lifeboat Station.

The craft has been specifically designed to cope with the challenging conditions of the UK's tidal waters which have the second-highest tidal range in the world capable of damaging the most robust craft.

Hendy Marine based in Swanwick Marina, Southampton were selected to supply a bespoke version of the Highfield 760 Aluminium Hull Self Righting RIB. The design features Ullman Shock Mitigating seating to lessen the impact of the conditions on the crew and an enhanced electronics package including Raymarine 'Doppler' Radar and FLIR heat-seeking camera systems to increase the number of successful rescues.

The twin Mariner 115hp outboard motors have been customised with the latest Capsize Post Immersion Restart System® (PIRS®), and they have been supplied complete with a Command Thrust option for precise control and improved performance in all conditions.

PIRS[®] a huge leap forward

Geoff Dawe, Sharpness Lifeboat Station Operations Manager has made his gratitude known to Mark Coleman and the Barrus Special Products Team for the massive support of SARA Lifeboats over the years and commented, "PIRS being developed for four-stroke power units is a huge leap forward, without which, would have had led to the whole lifeboat project being put on hold for an indeterminate timescale."

"PIRS has become a must-have technology for professional rescue services, and we have worked closely with SARA to ensure the engines suit their application perfectly. SARA has used Mariner outboard engines fitted with PIRS for a number of years, so we are delighted to be able to supply them with our first pair of 115hp Capsize PIRS[®] engines and to support the team with this project," commented David Ethering-ton-Smith, Sales Manager for the Special Products Division at Barrus.

professional rescue services - cont.

Southport Lifeboat upgraded with new Mariner Capsize PIRS[®] engines

The main Southport Lifeboat, Heather White, has been fitted with new 150hp Mariner Capsize PIRS[®] engines.

Southport Offshore Rescue Trust is the registered charity that runs the Southport Lifeboat, an Independent Lifeboat Station in the North West of England that operates a rescue service between the River Ribble and the River Mersey.

The Southport Lifeboat formed in 1988 following a series of tragedies on the Sefton Coastline which led to bereaved relatives and local activists raising enough funds to start a lifeboat service separate to the RNLI but with the same goals; to save lives at sea. Run entirely by volunteers, the charity has helped in the safe return of over 350 lives in its history.

Thirty years later, the charity has grown from strength to strength and now operates two lifeboats, two ATV Quad Bikes and a Mud Rescue service from their base in Southport. The main lifeboat, Heather White, is an Arctic 24 RIB that was built in 2007 to comply with the MCA regulations set out in the Rescue Boat Code of Practice; a standard that all lifeboats in the UK must meet.

Latest Mariner technology

In 2018, after 11 years' service, Heather White had a major refit. Having originally been fitted with 135hp Mercury twostroke OptiMax outboard engines and later with 150hp versions, Barrus offered the Southport Lifeboat twin 150hp Mariner four-stroke engines fitted with the latest Capsize PIRS® technology. The SOLAS approved, counter-rotating engines provide the lifeboat with a top-end speed of around 45 knots and a range of over 150 nautical miles.

Declared facility status

In 2019, Southport Lifeboat became the first Independent Rescue Boat Organisation to be recognised by the UK Coastguard as a Probationary Declared Facility for Provision of Inshore Search and Rescue. The HM Coastguard is currently monitoring the activities of the Southport Offshore Rescue Trust on call outs and through training exercises to ensure the required standards are maintained with a view to becoming the UK's first independent lifeboat to be a recognised declared facility. In the past this status has been an assumed right but once completed, the scheme will be rolled out to all other independent lifeboat stations.

Work is also underway on a new \pounds 1.4 million lifeboat station for the charity with all funds raised in the local community over the past 10 years. It will be the largest lifeboat station in the North of England Mariner helps the unsung heroes of the UK volunteer rescue boat teams



Charity units that provide volunteer rescue boat services in the UK have been awarded a boat grant fund to provide new equipment helping to save lives more quickly and easily.

The Department for Transport awarded 57 successful UK charity units with £1 million of government funding. The inshore and inland rescue scheme was launched in 2014 to provide £5 million over 5 years to independent search and rescue teams working on inland waterways.

Vital funds

Over the past 4 years, the fund has helped a total of 98 search and rescue charities. The money has already paid for many new boats in addition to launch vehicles, rafts, safety gear, and other costs to support rescue teams. The funds provided 15 new boats and a hovercraft in 2019.

A number of these lifeboats have been provided by Barrus dealer Rescue Boats Europe. The Arancia A380 inshore lifeboat is powered by a 30hp Mariner outboard engine fitted with special accessories to assist their role, including a prop deflector.

The fund has enabled "Serve On", a Salisbury based Rescue Unit, to purchase an Arancia A380 for flood rescue. This was put into action when first responders from the Unit were patrolling the River Avon to highlight to students the dangers of drowning. They spotted and rescued a 22-year-old man who had fallen into the river and was at risk of hypothermia.

Some of the other recipients have included Surf Life Saving GB Beach Search and Rescue Clubs and Flood Response Units around the UK, who perform vital volunteer search and rescue (SAR) services on beaches and for flood rescue. During the Cumbrian floods in Carlisle caused by Storm Desmond in December 2015, Wessex Flood Rescue volunteers who operate an Arancia A380 with a 30hp Mariner outboard engine participated in saving 186 lives.

BARRUS BRANDS IN ACTION



Clean, powerful Yanmar engines for new **Delta RIB on Lake Windermere**

The Barrus Special Products Division, in conjunction with UK based commercial boat builder, Delta, has delivered an eco-friendly power solution for the Windermere Lake Wardens.

Operating a patrol and rescue service on Windermere, the Lake Wardens are fully trained in first aid and provide RYA powerboat training for other agencies such as Cumbria Fire and Rescue, Cumbria Constabulary and the RSPCA.

The Wardens were looking for an eco-friendly, flexible package that suited their varying roles on the water, which also includes emergency rescue services, water safety days and support at events.

Flawless operation

First up was the Delta Typhoon NG; a commercial RIB designed for high manoeuvrability, ease of handling, the ability to operate flawlessly in the harshest environments and a modular deck arrangement to suit various operations. With a choice of propulsion systems, the Delta team worked with Windermere Lake Wardens and Barrus to deliver the most suitable power solution and provide a state-of-the-art RIB that meets their specific requirements in the field.

One of the benefits of choosing a Delta is that they design and manufacture all their boats in the UK, so they were able to customise every element of the craft at the design process and ensure that each aspect has been tailored to achieve the exact operational requirements. The Yanmar inboard diesel 440hp - 6LY440 engine was the chosen power source, a perfect complement to the RIB. The engine not only optimises the craft's performance, namely speed and manoeuvrability but also delivers improved emissions ratings and environmental benefits.

Yanmar - a popular choice

The 6LY is one of the most efficient, refined and easy-to-livewith marine diesel engines centred around the 5.8-litre in-line six-cylinder engine block which has cemented its popularity with boat designers, builders and owners alike. This latest common rail model delivers exceptionally finely atomised fuel to the cylinders for better power-to-weight performance, fuel economy and smooth running. All functions are also now managed by state-of-the-art electronic precision systems for even better all-round performance.

The Barrus Special Products Team modified the engine to fit the footprint required and suit the application seamlessly. Following installation, Sales Engineer, Will Stevens, visited Windermere Lake Wardens to sea trial their new vessel and ensure all was running smoothly. The vessel performance was found to be exceptional, enabling the operators to continue their much-valued service on England's largest lake.

The Windermere Lake Wardens have completed a bespoke engine introduction and maintenance course in the purpose -built training school at Barrus. This ensures the RIB not only meets its expected 20-year life span, but it is also a requirement for commercial use.



BARRUS BRANDS IN ACTION



Mercury DSI diesel outboards power Ring Powercraft's high-performance RIB

Specialist builder of high-speed defence craft, Ring Powercraft, has introduced the 10.5 metre RP-M1050 Ultra-High-Performance Tactical RIB fitted with a triple Mercury 3.0 litre 180hp Diesel Spark Ignition (DSI) outboard rig; the first set up of its kind in the UK.

Developed and refined into a purpose-built commercial and military design, the RP-M1050 facilitates high-speed defence functions and has attracted recognition for its handling, soft riding and excellent rough water capability.

Commercial choice

The RP-M1050 has been paired with industry-exclusive Mercury Diesel outboard engines, supplied and supported by the Special Products Team at Barrus. These engines have been specifically engineered to address the needs of military and other specialised commercial applications where petrol is either not available or carries a fire risk. The high-performance DSI outboard differs significantly from a normal diesel engine which uses compression to cause the fuel to combust. DSI motors, much like petrol engines use a spark plug to ignite the fuel which has been finely atomised by a small charge of compressed air. Additionally, a glow plug supports the spark plug to ensure consistent, reliable cold starting. An on-board Propulsion Control Module (PCM) optimises fuel and spark timing delivering enhanced running and performance. SmartCraft® Engine Guardian provides real-time, self-protection engine fault diagnostics and messaging.

Utilising Ring Powercraft's depth of experience in hull design, the Series 3 hull is core to RP-M1050's performance. The stepped hull delivers enhanced performance and highly responsive tracking which, although now commonplace, was first introduced to production sports boats by Ring in the late seventies. This enhancement has achieved speed records at Windermere, as well as championship wins in the UK and Europe, and delivers a fuel efficiency that offers considerably enhanced mission range.

The RP-M1050 is a Commercial off the Shelf solution that can be adapted to meet envelope and delivery requirements for land, air or sea transportation with the flexibility to customise seating configurations, equipment mounting and technology options to suit specific requirements.



Yanmar – a perfect fit for award-winning compact screener

Herbst Machinery is using Yanmar to power their award-winning Compact Tracked Screener.

Herbst Machinery Ltd based near Omagh, County Tyrone, has built a reputation as a leading manufacturer of trailers and machinery for the agricultural and construction sector for transporting plant, machinery, equipment, and aggregates.

The Herbst Compac S52 is a robust and versatile screener with a high performance 2 deck screen box, designed for a wide range of materials and aggregates. With hydraulically folding conveyors and unique compact build, the screen can be folded up and tracked directly into a standard shipping container in just a few minutes. The forward-facing, aggressive screening box is capable of processing up to 250 Tonne/Hour, and can be adapted for a variety of applications, including recycling, demolition, crushed stone, sand and gravel, soil and compost. The screen has unrivalled mobility, allowing effortless transportation from site to site.

Yanmar has the power

The Yanmar 3TNV88-DS is a true heavy-duty industrial engine yet compact in size making it a perfect choice for the new Herbst Compac machine. The 1.64 litre capacity engine develops a gross output of 28.2 kW @ 3000 rpm and 107 Nm of torque @ 1800 rpm resulting in a unit that delivers excellent power density.



Ashley Crawford, Sales Manager at Herbst Machinery Ltd explained why they chose Yanmar, "Yanmar has the power units to suit our needs. The small, compact engines, 19kW and 27kW, have the power and torque to meet the demands of our compact screen. Dan Taylor, Area Sales Manager and the Industrial Engines Team at Barrus have been excellent, providing a wealth of information, along with technical support and back-up."

Herbst was awarded Gold in the Diversification category of the LAMMA Innovation Awards 2019 for the Compac S52. The Judges' comments: A brand new category this year, which must fire the imagination of entrepreneurial engineers and business people producing a clear winner with the Herbst Compac Screen showing innovation and application at its best with a machine that can be used in many different circumstances.



BARRUS BRANDS IN ACTION



WOLF-Garten lends a helping hand to our NHS

WOLF-Garten, has donated a selection of high-quality tools to NHS staff for their communal garden, which is used to relax in after difficult call-outs.

The Chelmsford Ambulance Station, in Essex, reached out to the company asking for tool donations after it created a large pond and garden area. The space is used by around 200 staff who work for the service.

To regenerate and expand the garden, staff were needing first-class, reliable tools to undertake basic daily tasks, such as weeding, planting and pond cleaning.

Emergency medical technician, Stuart Wilkinson, who has worked at the station for over five years has been at the forefront of this campaign. He also helped build the outdoor area at the station during his time on leave with PTSD.

A tool for every task

Stuart explained, "Since we built this area, a lot of the staff use it regularly to relax, especially after particularly traumatic calls. We now have a space but want to bring it to life. We have been contacting various gardening companies for help with things like seeds, tools and storage spaces. As we have no steady stream of funding for this project, a lot of the things we need we have to hope people will be kind enough to donate." WOLF-Garten decided to help this cause as its tools provided the solution for many of the tasks Mr Wilkinson and his team needed to tackle with over 170 gardening tools to choose from, including the innovative multi-change[®] system.

After assessing what the ambulance team needed, WOLF-Garten sent a selection of tools; including a pond net, rake, dutch hoe, fork, trowel and patio brush.

Mr Wilkinson added, "We can't thank Barrus enough for its donation. We now have a whole repertoire of gardening tools that we can use to make our garden space even more beautiful. We all have challenging jobs within the NHS, and I think there should be a space at every ambulance station to help staff through the tough days. I feel immensely lucky that we have a garden that we can call our own and I look forward to getting stuck in during the summer with the team."

Ian Seager, Marketing Manager for the Garden Divisions at Barrus, commented, "NHS workers do incredible work day-to-day, so we felt it was only right to give back to them. The staff at Chelmsford Ambulance Service work tirelessly to keep people safe, and their communal garden allows them to take a pause after a challenging day. We are thrilled to be part of such a positive project and can't wait to see how the team get on with their garden in the summer."

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Dorset School wins Wilkinson Sword and Town & Country's Countrywide Gardening Competition



Hazelbury Bryan Primary School in Dorset won the 2019 Wilkinson Sword and Town & Country Gardening for Schools Campaign.

The competition invited schools from across the nation to design a fruit and vegetable garden for a prize of $\pounds150$ to spend on Wilkinson Sword tools and $\pounds150$ on Town & Country gloves. More than 50 garden designs were entered from all around the country.

This fantastic school in Dorset runs a weekly after school gardening club every Tuesday with the help of volunteer Samantha Sedgbeer. The club is attended by pupils of all ages and the winning design for the garden takes pride of place in the school hall for all to enjoy. Samantha Sedgbeer commented, "It has been a privilege watching the children so engaged with the garden. It promotes well-being and selfesteem and it helps with literacy and maths, not to mention encouraging patience, resilience, team working and nurturing qualities".

Inspiring creative design

Representatives from Wilkinson Sword and Town & Country visited the club on their last day of term to see the results of their efforts. The judges were impressed by the school's design which highlighted the importance of wildlife, the environment and the benefits of gardening.

Samantha expressed her excitement on winning the competition, "We were thrilled to win the competition, proving that although we are a small rural school, we are mighty! The tools and gloves have encouraged the children with their project and helped to make it all possible. We are so proud of each and every one of them and what they have achieved, and we very much look forward to continuing with the project in the new term".

Abbie Warner, Marketing Executive for Garden Tools and Accessories commented, "We had no idea how popular this competition would be, but we were so impressed with the standard of design that the Hazelbury Bryan Primary School children came up with. They impressed all of the judges with their imaginative and competent design, which made them the natural winners of this competition."





Yanmar helps eco-friendly cleaning

The demand for herbicide-free weed control system alternatives across the world continues to increase with public and private organisations favouring safe, and sustainable options.

Weedingtech, based in Wellingborough, Northamptonshire, has addressed this with the development of Foamstream Municipal state-of-the-art delivery systems which offer organisations a herbicide-free approach to controlling unwanted vegetation, as well as sanitation and cleaning solutions.

Barrus and Stephill

Stephill Generators, the UK's largest volume manufacturer of portable generating sets and a customer of Barrus for many years has built the diesel generator fitted with the Yanmar L70 engine which is the power pack for the Foamstream machine. Weedingtech incorporates the generator during the manufacturing process of the Foamstream machine.

The Foamstream machines provide options for all users and spaces, largely in municipal areas such as parks, playgrounds and, inner-city environments. Suitable for use on hard, soft and artificial surfaces, the environmentally-friendly, patented process combines hot water and biodegradable foam used to insulate the heat in the hot water. This kills unwanted vegetation quickly and efficiently, without the use of chemicals.

Multi-functionality allows the machines to be used for more than just weed control with a range of tools that can cope with street cleaning, power washing, and gum removal.

"Robert Cutting, After Sales, Supply Chain & Warranty Manager for Weedingtech explained why they chose Yanmar engines, "Yanmar engines have a reputation for quality

and performance. Wellestablished in the market and with a fantastic worldwide support network, they are an excellent choice for powered equipment. The high-quality support and engineering service provided by the Yanmar sales network is second to none, and Barrus was extremely helpful in providing the engines we needed to suit our application."



Growing success with PMC Harvesters



The latest John Deere Stage V engines have been chosen by PMC Harvesters to power one of their new vegetable harvester machines.

PMC Harvesters Ltd, based in Fakenham, Norfolk has almost 50 years' experience in the production of self-propelled machines for the harvesting of peas, broad beans, green beans, soya and other leafy products such as spinach and parsley. Working closely with growers and processors, PMC Harvesters machines have been developed to increase levels of capacity, reliability, and efficiency, delivering a high-quality end product as economically as possible.

Stage V technology

The new 7150 Bean Harvester is fitted with a John Deere PowerTech[™] PSS 6.8L Stage V engine, which is the first of PMC's machines to be powered by John Deere's Stage V technology.

PMC machines are exported to numerous countries around the world including the USA, Brazil, Europe and Japan, and each territory has different emission standard requirements. John Deere Stage 3 and Stage IV emission compliant engines have been supplied by Barrus to satisfy these requirements and Barrus applications engineers have supported PMC to ensure the best engine configuration from each emission stage to the next.

"We have been supplying John Deere engines to PMC Harvesters for a number of years and worked closely with them to ensure a smooth transition through each stage of consecutive emission regulations," commented Graham Dunn, Area Sales Manager for the Industrial Engines Division at Barrus.

Julian Smith, Manufacturing Manager for PMC Harvesters, commented, "We chose the John Deere engine as the power rating fitted the needs of the machine and being in the agricultural market many of our customers are familiar with the brand and the service available through the local agents."





Loncin is a trusted brand for Key Services

With 45 years' experience serving the construction industry, Loncin dealer, Key Services is an innovative company who prides itself on the supply of high-quality products combined with a reliable, personal service.

Based in Coventry, Key Services is a family-owned business established by William Jordan in 1975 and now run by his son, James Jordan. Celebrating 25 years working in the business, James completed an apprenticeship in automotive products and toolmaking becoming a fully qualified engineer and then spent his first 10 years in sales for the company. He was also a keen professional cricketer playing County Cricket for Warwickshire Juniors before moving up to the Men's league.

Main Partner

Today, the business provides a range of products including vibrating pokers, poker drive units, compactor plates, engines, and pumps, with repair and reconditioning as a key focus. James is a great ambassador for Loncin and explained, "We know how important speed is to the construction business and our team focuses on keeping our most popular small petrol engines continuously in stock. Our main partner is Loncin who manufacture reliable and efficient small petrol engines for numerous industries. The quality of Loncin products, coupled with the wide choice at a reasonable price makes them superior in our opinion. We have worked with all other established brands, but Loncin wins on all fronts."

Key Services customers are nationwide, but a large proportion of their business is with concrete formwork companies based in London who use their high-frequency poker sets in the process of concrete compaction. These sets are powered by one of the most popular Loncin generators, the LC3500-AS.

Loncin G200F-G engines have also been incorporated into a mechanical package designed and built by Key Services which includes the generator and the vibrating poker unit.

As well as local builders and sub-contractors, Key Services also supply Jewson Builders Merchants nationwide with Loncin engines and spares.

Promoting the business has always been important to James, and he has invested in an e-commerce website not only presenting a professional shop window but also offering information and practical advice in the form of blogs. He is also using social media channels to engage with his customers and to promote the wide range of products and services the company has available.



BARRUS BRANDS IN ACTION



Altrad Belle rely on Yanmar engines for their new 'best-in-class' dumper

Altrad Belle's new, award-winning DX1000HT 1-Tonne, Hi-Tip Dumper, designed specifically for use in the plant hire sector, is fitted with a reliable, Yanmar water-cooled diesel engine.

Barrus has been supplying Yanmar diesel engines to Belle, which became part of the Altrad Group in 2009, for over 20-years. An established British manufacturer of high-quality light equipment for the building and construction markets, Altrad Belle uses Yanmar engines in their Premier and Commodore cement mixers, rollers, rammers, and pressure washers.

Aimed at the rental company or professional operator, the DX1000HT sets new standards for safety, strength, operator comfort and convenience and productivity on site. Altrad Belle's message for this machine is, "Dump the rest.... try the best".

The DX1000HT features a full 4-wheel drive hydraulic system that gives increased traction on poor terrain and excessive mud. The result is improved gradeability, increased productivity and less servicing. Powered by a 3-cylinder, 1100cc, Yanmar 3TNV76 diesel engine with low fuel indicator warning light and low hydraulic fluid level warning light, the DX1000HT is unrivalled in its category.

The machine also features extensive use of hose clamp retainers to prevent pipe fretting and rubbing, reducing hose failures and maintenance costs.

The Dumper was launched at the Plantworx Construction Exhibition in 2019 and impressed visitors with its superb manoeuvrability in what were very challenging weather conditions. The machine also achieved recognition in the Speedy Services 2019 Expo Innovation Awards 2019 being 'Highly Commended'.

📚 YANMAR

Racing ahead with Loncin

Loncin is the engine of choice for Mini Super Twos, a competitive stock car racing formula for beginners taking their first stock car racing steps, and an affordable class for the more experienced drivers.

Pauline Smith, Founder and Managing Director of Mini Super Twos explained, "Racing has always been a huge part of my life, and it was while watching a Superstox race that the idea of a 'mini' stock car came about. I wanted to create a formula where all cars were equal, putting the emphasis on close, competitive driving."

The oval racing world is very family-orientated, and Mini Super Twos has been created as a class that the whole family can be actively involved in. There are two age groups; younger drivers aged ten to sixteen years and one for drivers aged sixteen and above.

"The Mini Super Twos are ideal for competitors from a variety of racing backgrounds", continued Pauline. "We are a friendly and welcoming class for beginners taking their first stock car steps and an affordable class for the more experienced drivers who may have thought about retiring but just can't give up. And with some of the most competitive running costs to be found anywhere in oval motorsport, you can race these brilliant cars for as little as £17 per meeting!

Mini Super Twos are a scaled-down version of Superstox and an F2 stock car, hence the name Mini Super Twos. Built on the same chassis but half the size, the cars were originally fitted with a Honda GX 390 engine. "We found the Honda engines made the cars expensive which went against our concept of a race car that was affordable and cost-effective to run," Pauline explained. "This was the reason why we chose the Loncin engine, and they have proved to be better."

Now powered by a Loncin G420F-EP, 4-stroke horizontal petrol engine with electric/recoil start, the Loncin engine has been modified for race use to achieve the best possible power and performance.

To find out more about Mini Super Twos visit www.minisupertwos.com.



Loncin engines to power Scottish Pro Kart Championship

Loncin is providing the power for karts competing in the Scottish Pro Kart Championship run by The East of Scotland Kart Club (ESKC).

The circuit located at Crail Raceway, Fife holds many events with the Scottish Pro Kart Championship running over ten rounds throughout the year.

Barrus has supplied 68 single-cylinder, 4-stroke, 5.5hp G200F-P5 Loncin engines. The engines are standard production engines which are modified and tuned by ESKC in line with race use.

Barrus Dealer, Multiplant Ltd will be supplying any additional engine requirements and spare parts support.





E. P. Barrus Limited announces new appointments to its Board of Directors



Left to right: E. P. Barrus Limited Board Members 2020 - Lee Darling, Chief Financial Officer; Keryn Clarke, Operations Director; Andrew Feilden, Non-Executive Director; Robert Glen, Chairman E. P. B. Holdings Ltd and Director E. P. Barrus Ltd; Tara Glen, Chairman of the E.P. Barrus Ltd Board, Robert Muir, Managing Director; Neil Thompson, Non-Executive Director; Tim Hart, Sales and Marketing Director.

E. P. Barrus Limited is delighted to announce the appointment of four new members to the company's Board of Directors with immediate effect.

A great British company with over 100 years in business, Barrus operates across the four main market sectors of Marine, Garden, Industrial and Vehicle.

Joining the board are Tim Hart, Keryn Clarke, Lee Darling and Neil Thompson, returning E. P. Barrus Limited's total board membership to eight. Highly regarded in their respective fields, Tim, Keryn, Lee and Neil have different skill sets, knowledge and insight which perfectly complements and supports the diverse nature of the business.

Tim Hart, Sales and Marketing Director, joined Barrus in 1995 taking up the role of Marine Diesel Divisional Manager. His career began in auto sports engineering leading to extensive experience within the marine industry. In 2005, Tim took on the additional responsibility of managing the Marine Leisure Division and completed an MBA at Henley Business College. Tim agreed to lead all eleven Barrus Sales Divisions, Spare Parts Operations and Marketing as part of an Executive Team that was formed in 2010.

Keryn Clarke, Operations Director, joined the company in 2007 in the position of Business Process Manager having previously worked as an Operations Director in the manufacturing, distribution, and mail order industries. Keryn has grown and developed into her role and she now has responsibility for warehousing, distribution, human resources, information technology, health and safety and quality systems. In 2010, Keryn joined the newly formed Executive Team leading operations.

Lee Darling, Finance Director, joined the company as part of the Executive Team in 2018 taking up the role of Chief Financial Officer. A qualified Chartered Accountant, Lee has a very wide and varied experience of accounting, business processes, markets and systems working within the property, fast-moving consumer goods and retail sectors.

Neil Thompson, Non-Executive Director, brings with him a wealth of pioneering product strategy experience in the consumer durables and engineering sectors. Following a 27 year successful career with Microsoft, as Vice President EMEA, Neil has joined our board with a broad experience in launching and driving



Neil Thompson

innovations from a product perspective, as well as innovations in business model changes required to meet the new demands of customers and market dynamics. "Each director brings with them their unique approach, different skills and expertise," commented Robert Muir, Managing Director, E. P. Barrus Limited. "Tim has a first-class in-depth knowledge of our business, suppliers, our varied customer base and the diverse markets within which we operate. Keryn possesses a broad range of business skills and a determination, tenacity and appetite to deliver continuously evolving operational improvements to satisfy customer needs and to support our sales efforts. Lee's strong financial ability enables us to meet all of our corporate, financial institution and regulatory requirements. Neil has a wealth of experience and expertise in business transformation, sales, marketing and communication".

"On behalf of the board of E. P. Barrus Limited, I am delighted to welcome Tim, Keryn, Lee and Neil to our board, and I look forward to their valuable contributions to the board's strategic vision," said Robert Muir.

E. P. Barrus Limited is also delighted to announce the appointment of Tara Glen as Chairman of the Board of Directors. Tara has a degree in Engineering Science from Oxford University and is a Chartered Accountant. She has worked within Barrus in roles from Engineering to COO and, more recently has been undertaking a role of Non-Executive Director of the Board. Tara is the daughter of Robert Glen and great-granddaughter of Mr E. P. Barrus, who founded the Company in 1917. Robert Glen remains as Chairman of E. P. B. Holdings Limited, the holding company, and is an active director and mentor to the board of E. P. Barrus Limited. Andrew Feilden is the eighth member of the board. In the past, Andrew has been Chairman of E. P. Barrus Limited. He is a valued Non-Executive Director of E. P. Barrus Limited, E. P. B. Holdings Limited and represents the trustees of the Glen Life Settlement Trust.



Brunswick Senior Management Team visit Barrus

David Foulkes made his first visit to Barrus following his appointment as Chief Executive Officer of the Brunswick Corporation in 2019.

Accompanied by members of his Management Team, the visit included presentations from Barrus's Management Team covering an overview of the company and the latest developments across the Marine Divisions.

There was a tour of Barrus's production and engine test facilities which included Mariner and Mercury outboard engine developments; the Mariner mine hunting outboard engine, Post Immersion Restart engines (PIRS®) and the Mariner 50hp outboard engine capable of running on four fuels (diesel, petrol, and both military kerosene fuels) developed to satisfy the MoD's single-fuel policy.

"We were delighted to host the visit of David Foulkes and his team and to be able to demonstrate our capabilities as the leading custom-engine builder and how we play our part in supporting the MoD and other vital specialist organisations," commented Robert Glen, Chairman of E. P. Barrus Ltd.

Operating in 24 countries and serving customers in over 170 markets, the Brunswick Corporation brings together renowned global brands including Mariner and Mercury outboards, and Quicksilver Boats.

Barrus is developing a hydrogen fuel cell battery hybrid power plant for inland waterways applications



Responding to the UK's 2019 Clean Maritime Plan (CMP), Barrus has partnered with Hypermotive and HPi-CEproof to develop a fuel cell battery hybrid power plant for inland waterways vessels. Supported by a recently awarded Niche Vehicle Network (NVN) grant, this proof of concept programme builds on a previous successful technical and commercial feasibility study undertaken by Hypermotive, supported by Barrus.

Zero-emissions by 2050

The 2019 Clean Maritime Plan sets out the aim that by 2050 all vessels in UK waters must be zero-emissions. Barrus will be using knowledge gained by Hypermotive, fuel cell and battery integration specialists, in other industries, to develop a hydrogen-powered zero-emissions power plant to support the move towards zero emissions for the inland waterways market. Barrus already supply over 30% of the inland waterways power plants so are uniquely placed to understand the needs of the industry. Project partner HPi-CEproof, the UK's only notified body licensed to certify small marine craft for the European market, will help ensure that the project meets the developing standards for marine electrification. The project will be overseen by a steering committee of industry stakeholders including BoC Linde (hydrogen gas), Beacon Park Boats and Mothership Marine.

Strong partnership

Tara Glen, Director at E P Barrus said, "Barrus has been involved with low-emission marine power plants for a while, in the form of diesel-electric hybrid systems and pure electric. Barrus has always been at the forefront of bringing new ideas to the marine industry. A fortuitous meeting with Hypermotive at a British Marine/MIA gathering, led to our ideas becoming this project. We are delighted to partner with Hypermotive who have expertise in fuel cells from other sectors and HPi-CEproof, with whom we have worked many times concerning marine certification. We could not have two stronger partners for this project".

Adam Huckstep, Managing Director at Hypermotive said, "Hypermotive are really pleased to be collaborating with EP Barrus and HPi-CEproof on this project. Our previous feasibility study work has shown a good technical fit between the proposed fuel cell battery hybrid power plant and the marine duty cycle, and operationally the inland marine industry is already familiar with gaseous fuels. We firmly believe fuel cells will play an important role in decarbonising our waterways."

Fuel of the future

Alasdair Reay, Managing Director at HPi-CEproof said, "Many industries are increasingly adopting hydrogen as the fuel of the future and with this project, the boating industry is doing the same. One of the perceived impediments to the industry adopting hydrogen is that the gas is not currently addressed in any boating standards and so there is no explicit compliance path to follow. HPi-CEproof, however, has formal accreditations to certify both boats and pressure equipment and using our knowledge from these areas, we look forward to ensuring the product that the project will realise, is compliant with the requirements of both the UK and EU markets."



Cub Cadet hits a million..

Leading lawn care machinery manufacturer Cub Cadet has seen its millionth XT Enduro series lawn tractor come off the US production line in Martin, Tennessee.

This comes off the back of the earlier story this year whereby there are now more than 10 million Cub Cadet engines in use worldwide.

Because of its global expertise and competitive products, Cub Cadet has become the fastest growing riding mower brand in the US.

"We're very proud of our team in the US building 5-star tractors, they're already starting on the next million, but we couldn't have done this without the support of our customers and dealers here in the UK" said Phil Noble, Divisional Sales Manager for the Lawn and Garden Division at Barrus. More than 250 dealers in the UK support Cub Cadet. "Our customers give us excellent feedback on Cub Cadet machines. We are truly proud to have been a trading partner of this great brand here in the South of England since 1985" said Steve Cann, George Cann Garden Machinery.

Powerful performance, agility and market-leading innovations have made the XT Enduro series the best lawn tractors Cub Cadet has ever built. Designed for expert gardeners the XT2 and XT3 boast the tightest turning circle on the market, at just 17cm, for unbeatable efficiency even in confined spaces. With a market-leading cutting, collecting and mulching 3-in-1 system, these machines allow customers to finish their work faster and with better results.

Cub Cadet always strives to exceed a customer's high expectations as regards innovative engineering, maximum efficiency, ease-of-use and comfortable mowing.

For more information on Cub Cadet go to www.cubcadet.co.uk

Open days focus on electric propulsion



Barrus inland waterways dealers, boat builders and members of the press visited Bicester in a week-long series of open days during February.

The presentation covered the updated Shire Canal engine range from 30 to 400hp and the Shire and John Deere Workboat engine range from 15 to 750hp. The latest Barrus Marine Equipment range was also introduced highlighting chandlery products and accessories tailored to the inland waterways.

Barrus's Research and Development Team has been developing alternative methods of propulsion long before the announcement last year by the UK Government that all new vessels for UK waters ordered from 2025 should be designed with zero-emission capable technologies.

Engines that address the Governments Maritime Clean Air Policy were showcased to visitors including the Shire electric outboards and inboards for leisure and commercial users, and parallel and serial hybrid engines, developed in collaboration with Hybrid Marine based on the Yanmar marine diesel engines.

The visit concluded with a tour of the warehouse, workshops, and engine test facilities, plus the opportunity to discuss all the new developments with members from the Barrus R&D and Hybrid Marine Teams.



Barrus helps to bridge skills gap with support of new Maritime Engineer course

For the first time in the marine industry, a new Maritime Engineer Technician course has been launched in the South East of the UK. Barrus is proud to be supporting this huge step forward in the industry and helping to train marine engineers of the future with the donation of engines and spare parts.

Following several employers on the Thames voicing concerns to Thames Skills Academy (TSA) that marine engineering courses were only available in Southampton, the Isle of Wight and Hull, the TSA approached South Essex College to build a dedicated course in the South East of the UK.

A first for the South East

The employer cohort were crying out for a course that would keep vessels running 24/7 and focus on the engineering of the engine and systems rather than boat building. This course is the first of its kind in the South East and Simon Lofting, Marine Engineering Lecturer, was approached with the specific task of building the right course to suit employers and apprentices alike.

Following 20 years serving afloat on police boats and teaching, Simon has returned to the industry to give back to the younger generation and commented, "This new course

opens the doors to deliver bespoke training to the marine engineering industry and will see a new, younger generation of marine engineers filling existing gaps in the trade. Marine engineers are becoming very sought after and the industry has been given the chance to build on that expertise once again."

Barrus has donated inboard and outboard engines and spare parts to South Essex College to support this new course and help train the marine engineers of the future. A number of employers on the Thames are Barrus customers which gives the satisfaction that their apprentices will be familiar with the engines they will be faced with in a working environment.

The College is in a prime position to offer the course, with Essex boasting 360 miles of coastline and 95 marinas, bringing the much-needed training to apprentices' doorsteps. The course has been designed for students to leave the college with well-rounded understanding and practical experience of mechanical, electrical, hydraulic and welding, and specialist skills technicians and lecturers have been brought in to cover non-marine specific areas.

Barrus also prides itself on offering a comprehensive range of courses for engineers and technicians which are available to all dealers and specialist partners. The company headquarters



"Barrus, and in particular, Tim Bennett, have been fantastic in assisting me to set this course up from nothing"



in Bicester features a purpose-built Training School which is used to facilitate the majority of training courses, supported by regional courses throughout the UK and Ireland.

With technology improvements being introduced more frequently and the level of electronics involved in engine management increasing rapidly, Barrus training courses are essential to ensure the highest levels of support. Simon completed the Up to 60hp Diagnostic Training Week at Barrus last year which enables him to pass on his knowledge in areas less familiar.

Tim Bennett, Service Manager, recognised the importance of Simon's request for equipment and training, and commented, "Barrus has always been committed to assisting colleges with



further education and a big part of this is making sure that lecturers are familiar with the latest technologies."

"Having worked in the marine police for 20 years, I have known and worked with Barrus for a long time," commented Simon. "Barrus, and in particular, Tim Bennett, have been fantastic in assisting me set this course up from nothing. So many similar courses teach by video demonstration which does not allow the hands-on approach that Barrus has kindly helped me with. Being able to use items that would otherwise have been scrapped allows me to teach the course how I should."

The current apprentices have now completed the first year of a four year course. For more information, visit **www.southessex.ac.uk/apprenticeships.**



A voyage of discovery for young people

Barrus is proud to support The Cirdan Sailing Trust, an organisation that has provided around 33,000 young people from across the UK with self-development, integration and learning opportunities through the challenge of life at sea aboard its fleet of large sailing vessels.

Established in 1983, the Trust's work is mainly with groups of young people who suffer from disadvantages related to social deprivation, exclusion, have learning difficulties or find school life challenging and need added direction.

Life at sea

Sailing for up to 7 days at a time and accompanied by their youth leaders, the young people work alongside the professional crew and are involved in all aspects of running and sailing the vessel, both above and below deck. They also have to adapt to living in harmony with their shipmates in a confined space and appreciate how to conduct themselves when ashore.

Leonie Black, Chief Executive of The Cirdan Sailing Trust, commented, "The unique opportunity of being at sea, within the confines of a boat, creates an atmosphere and environment that will help to build the traits and characteristics essential for young people to thrive in today's society."

Essential funding

The Trust's Voyage of Discovery Fund scheme supplements the limited monies raised through organisations' and individuals own resources to ensure the experience can be made available to their young people. With a focus on the provision of voyages for disadvantaged groups, Cirdan, in turn, rely on the generous support of benefactors for the successful operation of the scheme.

"For many years, Cirdan has received the support of Barrus through the provision of Mariner outboard engines for our sailing vessel's dinghies," Leonie explained. "This equipment is not only an essential for safety purposes, but it also allows us to enhance the young people's experience with trips ashore. This may be to swim from the beach, play games, barbecue, sightsee, get provisions or just exercise on dry land. There is also the opportunity to get in small boat handling practice which the young people really enjoy. Having reliable Mariner engines and the helpful and friendly service from Barrus has been of enormous value to Cirdan's work over the years for which we are very grateful."

The photograph shows young trainees who are part of the Wettest Classroom Project. Eight different groups of young people, most of whom are on the autistic spectrum, sailed around the UK.

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Cub Cadet - a website to inspire gardeners and professionals



In response to customer feedback and to support its expanding product portfolio, including the brand new XZ5 Ultima series of zero-turns, Cub Cadet has developed an updated website.

Highlights include an improved product search and clear and concise features and benefits for each machine. A comparison feature and YouTube videos provide inspiration and help with the process of deciding which machine is the most suitable. In addition, the display has been refreshed with a bright and modern homepage, lifestyle photography and there is a responsive version for mobile users.

The built-in dealer locator makes it easy for customers to find

the nearest Cub Cadet dealer using their postcode. New machines launched by Cub Cadet and now available on the website include:-

- XZ5 Ultima series of zero-turns; The latest steering lever lap bar technology combined with the robust construction and high-performance engine make the XZ5 zero-turns the ideal professional machines for large lawn maintenance.
- XT3 lawn tractors; Now available with Tight Turn Xtreme, the smallest turning circle on the market at just 17cm these lawn tractors are brimming with power, capable of mowing dense grass and transporting larger loads

To find out more about these new machines and to check out the full product range go to **www.cubcadet.co.uk**

Barrus supports charities with Christmas gift donation

From cakes sales and raffles, garden tool sales and dress-down days, Barrus has been raising money for charitable organisations.

Barrus employees were asked to nominate a charity of their choice to benefit from the monies raised. The nominations were put into a draw and picked out of the Christmas hat during the end of year presentation. The three lucky charities were UCARE (Urology Cancer Research & Education), CRY (Cardiac in the Young), and NSPCC (National Society for the Prevention of Cruelty to Children)

"As our staff were involved in making these events happen, we thought that is was fitting that they should nominate their favourite charity and one that is close to their heart," commented Amanda Walden, Human Resources Manager at Barrus. "Please convey our thanks to the person who nominated CRY and everyone at Barrus for their kind support. It means a great deal to us and will help to continue our campaign to reduce the



number of young sudden cardiac deaths and the heartbreak that follows such a tragedy."



"For a small charity such as UCARE, this will make a huge difference to the work we are doing. We are committed to improving the treatment and care of urology cancer patients through research and education."

NSPCC

"By supporting the NSPCC, you are all giving a very important gift to children at risk the chance to live their lives free from abuse and fear. Over 90% of our funding comes from people like you and without that support, we simply would not be able to continue our work."

All three charities were delighted with their donations:

Rewarding success

A growing number of awards

WOLF-Garten and Wilkinson Sword garden tools and Town & Country garden footwear have all been recognised by the garden media and their readers with several awards.

WOLF Garten WPCM-F Hand Push Cylinder Mower BBC Gardeners' World Magazine Best Buy (Budget Lawnmowers)

The experts found this hand-push mower easy to assemble from the clear instructions provided. They found it lightweight, easy to move around and it has four, simple to change cutting heights. It has a small 15-litre grass collector and comes with a warranty of three years.



Best Garden Tool Range (Silver) Grow Your Own Great British Growing Awards

The WOLF-Garten range was awarded silver by the readers of Grow Your Own magazine in the 'Best Garden Tool Range' category.



WOLF-Garten Multi-Purpose Scissors

Kitchen Garden Magazine Top Pick (Scissors) KG's verdict - We found these compact scissors very comfortable and light to handle. This combined with strong blades makes this an excellent choice for all-round gardening tasks.





WOLF-Garten 4-IN-1 Leaf Rake Kitchen Garden Magazine Top Pick (Leaf Collection)

KG's verdict - A unique and inventive tool which can be adapted for use in different areas of the garden, depending on the task in hand. The side extensions slot in very securely and within seconds you can change the size of the head – large if you have a lot of ground to cover or small for getting into those narrower areas.







Wilkinson Sword Ultralight Digging Spade - BBC Gardeners' World Magazine Best Buy (Spades)

The verdict was that this digging spade is easy-to-use, stainless steel pointed spade performs well and is light but substantial. Ideal for long jobs and less



able gardeners, it comes with a 10-year warranty.



Wilkinson Sword Stainless Steel Hand Trowel - BBC Gardeners' World Magazine Best Buy (Hand Trowel)

A BBC Gardener's World Best Buy winner, this traditional-style trowel has a comfortable shaped handle and a scooped stainless-steel head that



performs all digging, weeding and planting tasks well. It comes with a ten-year warranty.



Town & Country Curbridge Boot Kitchen Garden Magazine Top Pick (Garden Footwear)

KG's verdict - These look chunky but are actually very light and very easy to slip on and off. The fleece lining makes for a comfortable fit and will keep feet warm on cold winter days. They have a good tread, attractive lacing and the padding around the ankle part makes for further comfort. A very good pair of boots for leisure walking and general gardening tasks.



Town & Country Kids Light Up Wellies Kitchen Garden Magazine Top Pick (Garden Footwear)

KG's verdict - Younger children will without a doubt enjoy wearing these cheeky and cheerful PVC boots. They are sure to love the LEDs that flash on and off when they are walking and running, and they will also find the pull-on straps a good practical feature for pulling on their boots themselves. The soles have a good, thick tread so, in all, a very good children's wellie, combining fun with practicality.



Product selection made easy with Town & Country's brand-new website

CLOUES FOOTWLAP REMAINING
COMMAR AND CANCING

CLOUES FOOTWLAP REMAINING
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Leading gardening gloves and footwear brand Town & Country has developed a new website in order to support its expanding product portfolio.

The new website features a task-orientated navigation, improved search functionality, a simplified checkout process and an easy to use stockist locator. In addition, the display has been significantly improved with updated branding, lifestyle photography and a responsive design which has been developed with smartphone users in mind.



Womens Footwear



Make the right choice

Users can either buy direct through the website or use the built-in stockist locator to find their nearest Town & Country

retailer. Town & Country products are widely stocked and available throughout leading garden centres across the UK and customers can now easily obtain further product information when out and about on their phones and tablets.

The new mega-menu allows users to navigate by product area, user and task. Each product is clearly grouped into a variety of gardening and lifestyle tasks, so if the user is looking for a glove to use for weeding, they are presented with all relevant products in one single click from the homepage. The new search function allows users to search the product library by product name, product code and task, providing another quick and easy way of locating the exact product they need.

To ensure that the customer makes an informed decision, the materials and technical features of each product are explained in a concise product description, alongside a size guide and care instructions. With so many products on offer, Town & Country wanted to help their customers understand more about them before they make a purchase.

New branding

The overall look and feel of the website has been refreshed with a modern design and updated Town & Country branding. Each product in the range has been photographed in a lifestyle setting, demonstrating how the product is used and further enhancing the task-orientated approach.

Visit the new website: **www.townandco.com**. Town & Country is also active on social media and keeps customers up to date and informed of its product range on both Twitter and Facebook at @townandco.

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Craig takes part in COVID-19 Operations

Barrus is supporting RAF Reserve, Craig Boswell as one of the on-standby reserves being deployed by the Armed Forces providing Coronavirus aid across the UK.

Craig's usual role at Barrus is working as an Application and Technical Support Engineer for the company's Industrial Engine Division. He became a Reserve for 501 sqn, a squadron that provides trained logistics personnel prepared for mobilisation to support the RAF on operations, both home and abroad.

From April to September, Craig was part of Operation Rescript, the Tri-Service operation running the COVID-19 Mobile Testing Units (MTU). "My MTU carried out 5000 tests at locations in Oxfordshire and Buckinghamshire," explained Craig. "We were trained by the Army and given the responsibility of obtaining samples, preserving them and delivering them to the Regional Test Centres (RTC). The work was very challenging, however, we received very good support and did our best to make the test safe, fast and stress-free."

Craig was then re-assigned to RAF Lossiemouth, one of two RAF Quick Reaction Alert (QRA) Stations which protect UK

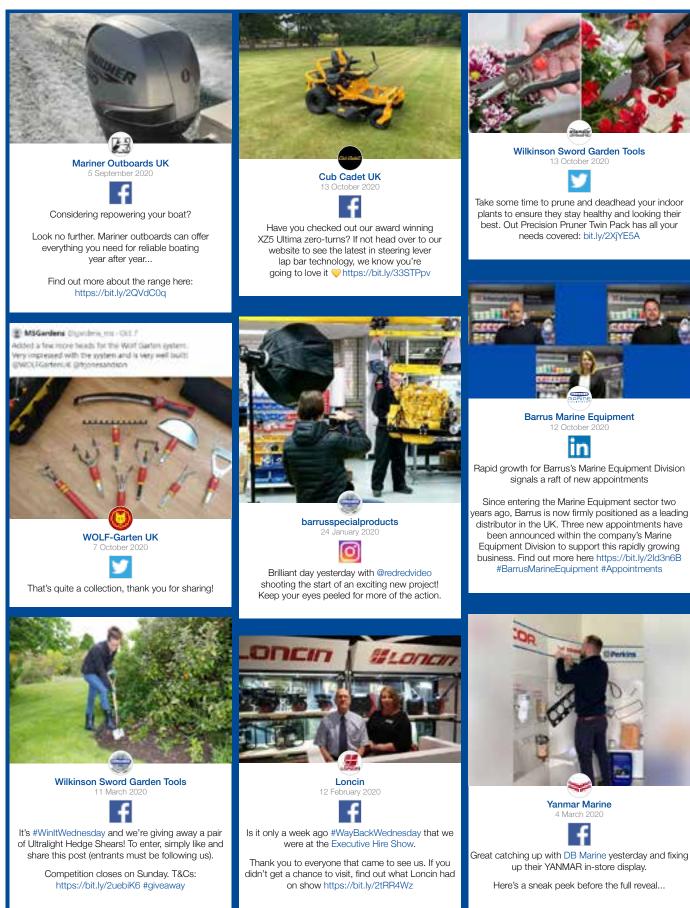
airspace. Aircraft and crews are maintained on high alert to scramble and intercept unidentified aircraft approaching UK airspace.

Craig continues, "My most recent task has involved Britain's newest aircraft carrier HMS Queen Elizabeth, which has recently been on Exercise Joint Warrior in the North Sea. The RAF and United States Air Force (USAF) loaded HMS Queen Elizabeth to capacity with F-35B multi-role combat aircraft. This allowed the services to fully test the ship's capabilities, demonstrate our adaptability, work with other countries and allow our pilots to gain valuable experience."

"Barrus supply Yanmar and John Deere diesel engine ranges to many key military equipment manufacturers and I have seen first hand a lot of this equipment being used on RAF bases," commented Craig. It makes me very proud to know that our products are used in the protection of our airspace and allow us to provide aid across the globe, Craig concluded.

Craig is currently working on another Exercise and is booked to be remobilised for the next few months.

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To find all our social media sites visit: https://www.barrus.co.uk/about-us/find-us-on-social-media/

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Are you ready for the autumn tidy-up? 🔌

Be prepared for fallen leaves with a rake from our lawn care range.



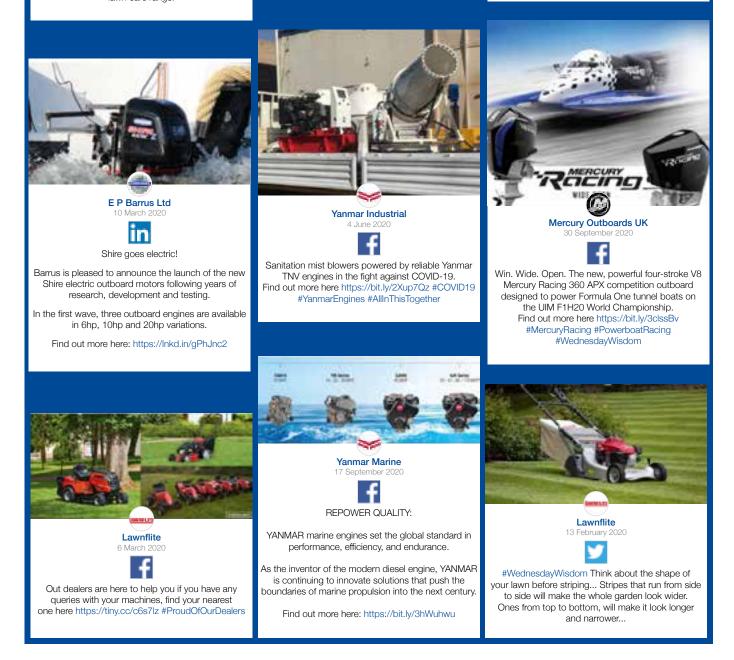
Town & Country 13 November 2019

Have you tried our Mastergrip gloves? The collection has nine styles to choose from and provides the whole family with up to 100% more grip whilst gardening. Click here to learn more: bit.ly/39Me8Ft



Cub Cadet 2 March 2020

Is it time to start thinking about mowing your lawn? Check out our full range of lawnmowers, ride-on mowers, lawn tractors, zero-turns and robotic mowers to find your ideal 2020 machine bit.ly/38e5iPx



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Should you require further information on any of the items featured in this issue of The Innovator, please contact Karen Clarke: karen.clarke@barrus.co.uk



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