

Fusion Q2 2024

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Fusion
Magazine
Editor:
Harvey Taylor



OUR INNOVATION IN ORDERING FASTER | EASIER | EFFICIENT

The fastest, easiest and most efficient stock management and ordering platform.

Get your stores and purchasing teams in sync with the DTC Hub, enabling you to track product consumption with ease and order exactly what you need, when you need it.

Take full control of your product usage and get unparalleled reporting to better understand expenditure, saving you precious time and money. And, streamline your current ordering processes with a host of rapid ordering features,

meaning you can focus on the more important business matters.





RAPID ORDER

Create a pre-made favourites list and use it to quickly place orders from your mobile device or PC. Simply create your list with all your fast-movers or your favourite products, then when you come to order, just enter the quantities you need and add straight to your basket.



SCAN & GO

Compile a list of consumables utilising your mobile device, as if you were purchasing them from a store. Using the mobile app, simply walk around your stock room and scan the barcodes provided by DTC, entering the product quantities you want to order.



COMPLIANCE

Access all your compliance documents in a single location. Upload all compliance documents for machinery and equipment used across the organisation to the DTC Hub. Store documents to the Hub with unlimited storage and 24/7 access. Track expiry dates and get notifications when renewal is approaching, helping manage compliance and certifications without stress.



STOCK TAKE

Order only what is needed to replenish your inventory levels, thereby reducing waste, and avoiding unnecessary expenses. We'll input your maximum stock levels, just scan, and input what you see on the shelf and the Hub will order exactly what you need when you're running low to maintain your desired levels.







STOCK CONTROL

Gain complete control over your product usage and receive comprehensive reports to improve your understanding of output, ultimately saving you both time and money. Simply enter your stock consumption to analyse usage by job, product or team and gain a holistic view of product usage. Then easily create an order to replenish your stock levels.

HUB POINTS



Earn rewards every time you use the *HUB*



Earn points for every £1 spent through the *HUB*



Points automatically added to your customer profile



Redeem points for a wide range of items

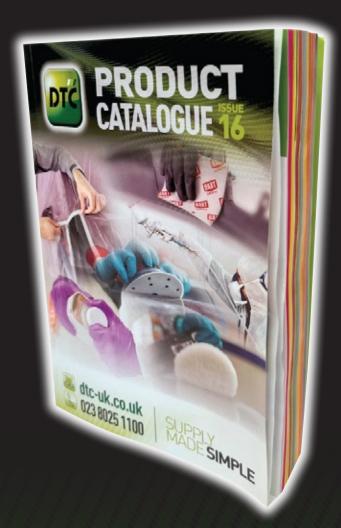
Earn points for every £1 spent through the Hub and redeem against a wide range of items or against your next orders. Points are automatically added to your customer profile and can be self-managed for maximum gain.

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DESCRIPTION SEEDS

ISSUE 16 CATALOGUE

Explore our latest catalogue at DTC, showcasing our expansive range of selected products. Download it directly from our website or request a physical copy to discover practical solutions tailored to enhance your production efficiency. At DTC, we're your reliable partners, committed to delivering what you need, when you need it, and simplifying inventory management for a hassle-free experience.



436 pages of essential consumables

...on screen...to download ...or in your hand











Scan the QR Code to Download or Order Yours TODAY!



THE NEXT ERA OF LUNAR EXPLORATION



space exploration, NASA has unveiled the contenders vying to supply the next Moon rover for upcoming crewed missions. With boundless anticipation, the space agency has enlisted the prowess of three visionary companies to embark on this celestial odyssey.

Texas-based Intuitive Machines, Lunar Outpost of Colorado, and Venturi Astrolab of California stand at the forefront of this monumental endeavour, armed with innovative designs and unwavering determination. Their mission? To develop cutting-edge lunar rovers under a contract with a combined value of \$4.6 billion, propelling humanity toward the lunar frontier.

As anticipation mounts for NASA's Artemis 5 mission slated for 2030, these intrepid companies are poised to demonstrate the capabilities of their Lunar Terrain Vehicles (LTVs) on the

In a thrilling stride toward the future of lunar surface. Jacob Bleacher, NASA's chief exploration scientist, captures the essence of this groundbreaking initiative, envisioning the awe-inspiring vistas that the LTVs will unveil from the lunar landscape.

> While the contracts have been awarded to relatively new players in the aerospace arena, they are bolstered by strategic partnerships with established industry stalwarts. Intuitive Machines, for instance, has forged alliances with industry giants such as AVL, Boeing, Michelin, and Northrop Grumman, propelling its prototype, the Reusable Autonomous Crewed Exploration Rover (RACER), to new heights.

Astrolab, in collaboration with Axiom Space and Odyssey Space Research, embarks on its lunar quest with the Flexible Logistics and Exploration (FLEX) rover, designed to withstand the lunar South Pole's harsh environs. Lunar

Outpost, alongside Lockheed Martin, General Motors, Goodyear, and MDA Space, is charting new frontiers with its Lunar Dawn LTV, poised to revolutionise lunar habitation and exploration.

As NASA embraces a novel approach by purchasing services rather than hardware, the chosen company stands to catalyse a burgeoning space economy, poised to usher in a new era of lunar exploration. With the Artemis program set to redefine humanity's lunar legacy, the stage is set for a celestial odyssey of unparalleled proportions.

Amidst the backdrop of a resurgent space race, the United States and China stand at the vanguard of lunar exploration, fuelled by a collective ambition to conquer new horizons. As the countdown to Artemis 3 commences, the world watches with bated breath, poised on the precipice of a new era in space exploration.

ENHANCING SAFETY& EFFICIENCY

THE IMPORTANCE OF SPRAY BOOTH PROTECTION FILMS

In the realm of industrial painting and coating applications, achieving professional results while ensuring safety and efficiency is paramount.

One essential component in this process is the careful selection and utilisation of protection films, which play a crucial role in safeguarding surfaces and personnel within spray booth environments. At JTAPE, we recognise the significance of choosing the right protection film to meet various needs across industries, offering a comprehensive range of solutions tailored to diverse applications.

Protection films serve a multitude of

purposes, from safeguarding automotive

windows to shielding floors from overspray. Unlike masking films, which primarily prevent paint adhesion on surrounding panels during specific painting processes, protection films offer broader coverage, including the protection of surfaces within spray booths and worktops. Additionally, these films are instrumental in wrapping broken windshields or windows and replacing door skin liners, effectively guarding against moisture intrusion. The advantages of utilising protection films extend beyond surface protection. These films typically offer UV protection, excellent resistance to temperature variations and chemicals, and robust defence against abrasions and scratches. Such attributes are invaluable in maintaining the integrity of surfaces and ensuring longevity in demanding industrial settings.

Spray booths serve as controlled environments essential for both safety and efficiency in painting operations. Apart from containing overspray to prevent environmental contamination, spray booths mitigate the risk of fire and explosions posed by overspray accumulation. Furthermore, they provide a barrier against the harmful effects of toxic paint components, safeguarding the health and well-being of painters.

Market Insights and Analysis

The Spray Booth Protective Film Market is poised for significant growth, driven by escalating demand across various sectors such as automotive, aerospace, building and construction, and metallic materials. The market is expected to witness substantial revenue generation and exponential expansion, with a projected CAGR during the forecast period from 2023 to 2030.

A comprehensive market analysis encompasses various factors influencing the competitive landscape and market dynamics. Porter's five forces framework offers valuable insights into competitive positioning, evaluating factors such as competitive rivalry, threats of new entrants and substitution, as well as bargaining power of suppliers and buyers. Value chain analysis provides a holistic view of the supply chain, identifying opportunities for creating competitive advantages. Pricing analysis, meanwhile, delves into historical and projected pricing trends, aiding in strategic pricing decisions throughout the product lifecycle.



Market Scope and Company Profiles

The Spray Booth Protective Film Market report offers comprehensive coverage of past, present, and future trends, with market estimates derived from meticulous research methodologies. This includes primary research involving interviews, surveys, and expert opinions, supplemented by extensive secondary research encompassing diverse sources such as company reports, industry publications, and government documents. Key players in the market, including industry giants like 3M, Dow Inc., Wacker Chemie AG, and Sherwin-Williams, are evaluated based on their product offerings, financial performance, strategic





approaches, and geographical reach. SWOT analysis highlights the strengths, weaknesses, opportunities, and threats facing these players, providing valuable insights for stakeholders.

Conclusion

In conclusion, the selection and utilisation of protection films play a pivotal role in enhancing safety, efficiency, and surface integrity within spray booth environments. As industries continue to prioritise quality, safety, and sustainability in their operations, the demand for advanced protection solutions is set to propel the growth of the Spray Booth Protective Film Market. By leveraging innovative technologies and strategic partnerships, industry players can capitalise on emerging opportunities and drive sustainable growth in this dynamic market landscape.



Unique 5-layer material for spraybooth walls



Fast and easy application with only a spatula required



No tape needed thanks to the clever overlapping design



Printed with measure gauge for accurate fitting and ensuring no wastage



Each coated layer is statically charged to attract and retain dust particles and overspray



The insulated material also helps to reduce booth heat loss



When each layer becomes dirty, simply peel off for a new and clean environment



Each layer is numbered indicating how many layers are left



Focused on managing a wide range of products across multiple locations, the client sought a solution for cost savings and streamlined inventory management. Looking to partner with a reliable supplier, they adopted the DTC Hub stock management system, facilitating on-site bulk stock holding and enhancing efficiency through seamless ordering processes.



OVERVIEW

CHALLENGES:

Managing 3750 bins across 120 locations across the UK posed logistical problems. The need for cost savings, efficient reporting, and on-site stock availability was a big problem needing to be fixed. They were looking to partner with a reliable consumables supplier who understood their industry and could provide a solution which integrated with their systems and processes.

SOLUTIONS:

Our DTC Hub comprehensive stock management system became the linchpin of the supply chain strategy. The implementation included on-site bulk stock holding across four sites, ensuring a streamlined and accessible inventory. The DTC Hub's slick ordering allowed the customer to enhance their efficiency through a streamlined process by bypassing physical processes which would cost time.

RESULTS:

Overall, the solutions DTC provided in the boatbuilding consumables supply chain proved effective. The system's reporting capabilities, coupled with tangible cost savings and enhanced stock availability, have positioned the luxury yacht manufacturer at the forefront of efficiency in the industry.



RESULTS & IMPACT

COST EFFICIENCY IMPACT:

DTC implemented a strong cost-saving programme, leading to substantial annualised savings of over £100,000 on alternative products. This underscores the effectiveness and optimisation resulting from DTC's intervention.

REPORTING CAPABILITIES:

A main issue for the customer was the reporting capabilities on stock usage, this caused cost and time losses which set back project timelines. One of the key strengths of DTC Hub is its reporting prowess. Weekly usage reporting for every location ensures real-time insights, while the full monthly analysis reporting provides a comprehensive overview of the entire supply chain.

Cost savings of 38% were made by a thorough audit of the products that were being used. In addition, the instant availability of stock level reporting from DTC Hub has reduced workload whilst ensuring service and availability has improved.

Scan and go feature on the DTC Hub mobile app. This feature allows for any vendor to quickly book out a product without any other human interaction, thus, eliminating time wastage.

STOCK AVAILABILITY:

With an average 99.4% stock availability across 3750 different bins, DTC has significantly improved the ability to meet demand promptly. This high level of stock availability is a testament to the precision and accuracy of the DTC team and systems.

SUMMARY:

Overall, the solutions DTC provided in the boatbuilding consumables supply chain proved effective. The system's reporting capabilities, coupled with tangible cost savings and enhanced stock availability, have positioned the luxury yacht manufacturer at the forefront of efficiency in the industry.

"The communication from all levels of DTC is great and any requests or amendments are addressed during the next working day. Well done, keep it up."

Simon Smith, Manager



EUROPE

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ELECTRIC

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The tide is turning in Europe as electric boats surge in popularity, positioning the continent as the epicentre of this maritime revolution.

Market experts project robust growth in electric boat adoption, surpassing

North America and the Asia-Pacific region.

Amsterdam, 2023 marks a pivotal moment as electric motors navigate European waters, transitioning from scepticism to widespread acceptance. A recent study has delved into the nuances of this burgeoning market, shedding light on key trends and insights.

Driven by heightened environmental consciousness and technological advancements, the electric boat market witnesses a meteoric rise across Europe. The study highlights a 2.5-fold surge in electric boat listings online over the past two years alone. Notably, countries like the Netherlands and France exhibit eager interest, with robust search queries reflecting promising demand.

While Northern European nations lead in both supply and demand, marked regional disparities underscore a North-South divide. The UK, Netherlands, and Germany emerge as hotspots for electric boat listings, juxtaposed against subdued interest in Southern Europe. Notably, the availability of electric boats spans diverse price segments, with a notable uptick in entry to mid-price range offerings.

Intriguingly, consumer preferences spotlight brands like Silent, signalling a shift towards eco-conscious choices. Electric boats emerge as the preferred mode of water travel, evident in their 40% faster sales compared to diesel counterparts.

Amidst rising seaborne commerce and stringent emission regulations, electric boats emerge as a sustainable solution. Government initiatives and technological innovations bolster market expansion, promising a bright future for eco-friendly maritime transportation.

As Europe spearheads electric boat adoption, the global market moves towards greener horizons. With governments and consumers alike prioritising sustainability, the electric boat market sails towards a future defined by eco-conscious innovation and widespread adoption.

NAVIGATING A SUSTAINABLE FUTURE

As electric boats gain momentum, their environmental benefits catalyse market growth. With a focus on reducing emissions and promoting sustainability, the maritime industry charts a course towards a cleaner, greener future.







Designed with precision for marine applications, the BAXT M100 Fast Cut Polishing Paste is a specially formulated solution that efficiently eliminates sanding marks and imperfections from gel coat surfaces in the marine industry. The result is a high gloss finish without the concern of burns during the polishing process.

What sets the M100 apart is its versatility. Beyond the marine sector, this product proves to be a reliable all-rounder. Ideal for use on polyurethane and polyester paints found on marine composites, the M100 is a universal performer that enhances the final touch across various applications.

Specifically engineered to remove sanding marks and imperfections from production and tooling gelcoat surfaces, the M100 can serve as a one-step solution when working from P800 or P1000. This makes it particularly suitable for efficiently polishing white production gelcoats in areas where a mirror finish isn't necessary.

In summary, the BAXT M100 Fast Cut Polishing Paste delivers professionalgrade results in the marine sector while proving to be a versatile asset for a range of applications. Elevate your finishing standards with this precision-crafted solution.

P12

Composite materials have long been integral to the aerospace industry, transforming the way we conceptualise aircraft design and performance. As we stand on the brink of a new era, the demand for lighter, more resilient materials is guiding aerospace engineers toward innovative solutions. In this exploration of the future, three key advancements are poised to shape the aerospace landscape—Ceramic Matrix Composites (CMCs), Carbon Nanotubes (CN), and Metal Matrix Composites (MMCs).

THE UNSEEN ADVANTAGES OF **COMPOSITES IN AEROSPACE**

For decades, aerospace engineers have been meticulously balancing the thrustto-weight ratio, driving them to explore materials that are not only lightweight but also possess exceptional strength and durability. Composite materials have emerged as a key player in this pursuit.

Beyond the obvious benefits of weight reduction, composite materials bring added advantages. With thermal stability, resistance to damage, and high impact tolerance, composites outperform traditional metals in several critical aspects. Their resistance to fatigue and corrosion makes them a reliable choice for building aircraft that withstand the rigors of flight.

Additionally, the ease of assembly with composites streamlines the manufacturing process, resulting in lighter aircraft that are inherently safer, more fuel-efficient, and boast reduced cabin noise.

PEERING INTO THE FUTURE OF **COMPOSITES IN AEROSPACE**

The journey continues as the aerospace industry strives for even greater heights and efficiency.

Ceramic Matrix Composites (CMCs): Overcoming the traditional brittleness associated with ceramic materials. CMCs utilise ceramics' excellent thermal qualities. This innovation is tailored

for constructing more powerful and heat-resistant engines, expanding the boundaries of aerospace technology. Carbon Nanotubes (CN): This muchhyped technology introduces a new

frontier in composite materials. Retaining the tensile strength of carbon fibre while offering greater flexibility, CN technology finds applications in electromagnetic shielding and costeffective wing manufacture, paving the way for more technologically advanced aircraft.

Metal Matrix Composites (MMCs): Bridging the best of both worlds, MMCs incorporate reinforcing materials into a metal matrix. This breakthrough is under scrutiny for use in helicopter rotor blades and turbine engine fan blades, promising enhanced performance, and durability.

EMBRACING A FUTURE OF POSSIBILITIES

The evolution is in progress, bringing the aerospace industry closer to a future reminiscent of science fiction. As the demand for lighter materials continues to rise, collaborative efforts within the industry are contributing to the development of aircraft and spacecraft that were once confined to the realms of imagination.

In this transformative journey, companies like DTC, a professional supplier of composite products, play a crucial role. Embracing industry advancements and contributing to growth, DTC stands as a silent force, driving innovation and thought leadership within the aerospace sector.

As the aerospace landscape evolves, DTC remains dedicated to pioneering composite solutions that propel the industry forward. The journey into the future has just begun, and with companies like DTC supporting these advancements, the possibilities are vast. The sky's not the limit—it's an exciting beginning!



in Acrospace





ABRASIVE DISCS

BAXT presents a comprehensive array of abrasive disc solutions, each engineered to address the multifaceted needs of modern surface finishing professionals. From the ground breaking technology of BAXT Carbonite to the precision of BAXT Crystal Cut, BAXT offers a complete package of excellence in surface refinement. With a commitment to innovation, quality, and performance, BAXT ensures that professionals have access to a diverse range of abrasives, tailored to meet the challenges of various industries and applications. BAXT's holistic approach to abrasive solutions sets a new standard in surface finishing.

All BAXT products are available exclusively at www.dtc-uk.com

BAXT S6
SPONGE DISC



- Multifunction Application the S6 disc is a specialist product developed for sanding not only smooth flat surfaces but also rounded surfaces, corners and sharp edges. Its flexible design creates a smooth sanding pattern on angled surfaces and edges but reduces the risk of pressure marks
- Wet and Dry Sanding the unique structure
 of the S6 disc withholds water in the disc
 whilst sanding providing a clean process and
 resulting in less liquid being used. It is mainly
 used for wet sanding but can be used dry as
 air and water also pass freely through the
 product





- With a unique combination of sanding grit, material bonding, and surface technology to minimise clogging, the D6 lasted 30% longer than comparable products under intensive testing
- The 15 hole pattern and anti-clog coating ensures faster removal or dust. This means less airborne particles, which results in fewer stoppages and longer tool life
- Tough abrasive grains The abrasive grit is the core part of the D6, and here top quality aluminium oxide grains are used for exceptional performance
- Also available in 50mm and 75mm

BAXT

N2XU33000™

- Specifically for the crucial paint keying stage before the blending process, these discs are poised to transform your paint preparation workflow
- With their innovative pyramid or triangular block structures, these discs incorporate multiple layers of fine-grade abrasive mineral
- With each pass, the abrasive wears away, revealing fresh, sharp mineral. This continuous exposure ensures a consistent and ultra-smooth finish while delivering exceptional longevity





150MM ABRASIVE DISC



- Premium Quality Produced to the highest quality standards in the EU, the abrasive material is consistent and durable.
- Dust Extraction Multi-hole design delivers excellent dust extraction and a clean working environment.
- Fast Cut The specialist coating resists dust ensuring the grains stay sharp for longer.



150MM NET ABRASIVE DISC



- Minimal clogging and pilling ensures the disc delivers speed and efficiency when
- Excellent initial aggressivity reduced edge wear in finer grits and a versatile range to suit any application
- Designed for dry sanding, by machine or by hand, the true dust-free sanding characteristics result in a cleaner work environment, as well as a better surface finish





- Progressive catalyst coating to ensure zero pilling and clogging, while virtually eliminating dust. Swirl marks are no longer
- Superior tear and wear resistance, by its flexible paper backing, enhancing performance and product longevity
- Extremely hard wearing, the ceramic and aluminium oxide blend of grains stay razor sharp for longer
- Also available in 50mm and

BAXT CRYSTAL G 150MM ABRASIVE DISC

- A versatile solution for all finishing applications such as blending, paint preparation, and paint defect removal
- Featuring aluminum oxide mineral cutting surfaces ranging from P600 to P2000, all backed by a durable film material
- For high quality sanding tasks requiring precision and superior finishing, our discs combine the durability of film backing with the fast-cutting, long-lasting properties of aluminum oxide mineral abrasive







Belt sanders are a great way to remove bulk material at a high speed and are also very effective for removing gel coats if required. Sanding belts are available in grits as coarse as P40 and are highly effective at rapid material removal. The most common sanding belts have a cloth backing for extra flexibility and longevity.



Finger files are belt sanders with very narrow belts (as narrow as 10mm) and are great for getting into very tight spaces that regular belt sanders can't reach. Sanding belts for finger files are also available in grits as coarse as P40. Like regular belt sanders, finger file belts are normally cloth-backed. Using belts with a zirconia grain will ensure a long-lasting belt and a quicker cut.

Depending on the part of the process, the choice of sanding tool and abrasive has a massive impact on the time taken and finished result.



Grinders (in this case referring to coarse abrasive discs of various kinds on a backing pad, mounted on a grinder) are great for shaping and for areas where a belt sander is too big, and a finger file is too small. These grinders can often be fitted with on-tool extraction to reduce

dust and increase operator safety.

Paired with a grinder, fibre abrasive discs are cost effective, long lasting and heat resistant. Ceramic fibre abrasive discs offer all the benefits of regular discs but with added speed and longevity. Flap discs offer unrivalled speed but are more expensive than standard discs.



This is where things get a little bit more specialist and depends on the specific requirement or stage of the fairing process:

Hard Hand Sanding Boards for Fairing Boats

For shaping by hand, hard hand sanding boards produce a true flat surface and





are normally used with hook and loop sandpaper. They're a great choice when paired with on-tool extraction for a dust free experience.

Flexible Sanding Boards

Available in a range of sizes up to almost two metres in length, flexible sanding boards curve to the shape of the surface being sanded and are great for finer shaping.

Flexible Sanding Boards with Extraction

An upgrade to the flexible sanding boards, they can be connected to extraction and used with a net-style abrasive for maximum cleanliness and operator safety.

Abrasives for sanding boards are normally supplied in rolls or pre-cut strips, and most will come with hook and loop backing for rapid changes.

If you're looking for maximum speed and long-lasting products, some abrasives have a blend of ceramic and aluminium

oxide grains which are "self-sharpening" for a long life and less frequent changes. For the best safety and cleanest working environment, sanding boards can be paired with mesh- or net-style abrasives for maximum dust extraction and minimal clogging.



Long bed orbital sanders are ideal for large, flat surfaces where the smoothest surface is required and are available in electric or pneumatic versions.

Abrasives used with long bend orbital sanders are the same as with sanding boards, except using a quality abrasive with good extraction is even more important when the process is mechanised.



Orbital sanders are used for finer finishing work when the initial smoothing and shaping has been completed, and for between coats of primer and topcoat. They're available in many different models, including pneumatic, electric and battery versions. Because disc sanders are one of the most common type of sanders, there's a

huge range of abrasive discs to choose from.

Hook and loop sanding discs are a great cost-effective option and excellent for quick disc changes. If operator safety and a clean environment are a priority, then mesh- or net-style abrasive discs are the best choice when paired with a good dust extractor.



Not to be overlooked, dust extractors are a vital part of the sanding process and can be connected to almost all of the sanding tools we've discussed and greatly increase the quality of the working environment and operator

The Final Cut

Selecting the best sanding tools and abrasives for boat fairing is a nuanced decision, influenced by a myriad of factors including the size and construction of the boat, the specific fairing needs, and the desired finish. We've explored the various options available, from hand sanding tools and electric sanders to a range of abrasive materials, each with their unique benefits and applications. It's clear that making the right choice can significantly impact the efficiency of the fairing process and the quality of the final outcome.

When making an informed decision, there are some important questions to

- 1. What is the size of the area to be faired? Larger areas might benefit from powerful electric sanders, while smaller or more intricate areas might require the precision of hand sanding.
- 2. What is the condition of the boat's surface? Different levels of surface imperfection require different grits or abrasives.
- 3. What finish is desired? The choice and method of sanding makes a big difference to the quality of the finish.
- 4. How much time and budget is available for the project? Some tools and abrasives may be more costeffective but require more time, and vice versa.
- 5. How important is dust management? Depending on the working environment,

tools with dust extraction capabilities might be preferred to maintain a clean workspace and reduce health risks.

Choosing the best tools and abrasives for boat fairing is not a one-size-fitsall scenario. But by considering these questions you can tailor your approach to meet your specific needs, ensuring a high-quality finish that protects and enhances your boat's appearance.



MODERNISING SCM

Strategic Design and Planning: Craft a supply chain blueprint infused with modern technologies and responsive to ever-evolving market demands.

Execution Excellence: Implement the plan with a keen eye on the latest technological advancements, carefully controlling variables to maximise efficiency.

Real-time Monitoring: Employ cuttingedge analytics to monitor and fine-tune the performance of each supply chain component in real-time.

Collaborative Communication: Leverage digital communication tools for seamless collaboration with supply chain partners, ensuring agility and adaptability.

In the modern marine market, SCM is not just about moving goods; it's a forward-thinking strategy optimising profits and ensuring flawless yacht production.

THE MODERN SCM ADVANTAGE IN THE YACHT INDUSTRY

In an era where innovation and speed dictate market dominance, effective supply chain management becomes a strategic lever for success. Here's why SCM is crucial for yacht companies operating in the modern market:

AGILE SCM MECHANICS: COORDINATION IN THE DIGITAL AGE

Modern SCM orchestrates the dynamic movement of procurement, suppliers, manufacturing facilities, retailers, distributors, and tech-savvy customers. It's an active management system responding to external factors such as fuel prices and market trends, with digital precision. Tightly controlled inventory, production, distribution, sales, and vendor inventory are the digital hallmarks of effective SCM in the contemporary yacht industry.

THE ROLE OF THE DIGITAL SUPPLY CHAIN MANAGER

A skilled supply chain manager in the modern yacht industry is not just a logistical expert but a digital navigator.

Their role involves:

Strategic Digital Planning: Develop a tech-infused strategy for the supply chain, leveraging the latest in digital innovation.





Digital Material Sourcing: Oversee digital platforms for sourcing materials, embracing e-commerce and cutting-edge procurement technologies.

Smart Manufacturing: Employ smart manufacturing technologies for swift and responsive market entry.

Digital Logistics and Delivery: Manage digital delivery mechanisms, leveraging automation and data analytics for efficient product transport.

Tech-driven Return Management:

Implement a tech-savvy system for handling defective or unwanted products, maximising efficiency.

In the modern yacht industry, effective digital supply chain management positions companies for a competitive

edge by enhancing speed, flexibility, and responsiveness to market trends.

DIGITAL SCM BENEFITS: SAILING INTO MODERN PROFITS

Cost Efficiency through Digital

Innovation: Lowering purchasing and production expenses through digital procurement and manufacturing.

Strategic Digital Partnerships: Building lasting digital partnerships that support mutual growth and expansion in the techdriven market.

Digital Market Demand Balance: Utilising data analytics to adjust product supply in real-time, aligning with dynamic market demand.

Enhanced Digital Customer Service:

Leveraging digital tools for swift product delivery, ensuring efficient and effective customer service in the fast-paced market

In the modern maritime market, where innovation and luxury converge, supply chain management emerges as the digital compass guiding companies towards swift and successful navigation. As technology continues to shape the future, SCM stands as the wind in the sails of marine companies, propelling them towards new horizons of profitability and market leadership.

CARBON UBING A SHOWCASE OF ENGINEERING **EXCELLENCE**



In the orchestra of materials, where the composition of strength, weight, and versatility plays out, one element takes the lead — carbon fibre tubing. Picture a substance defying norms, lighter than aluminium yet resilient enough to halt a speeding bullet. This is not a tale from the realms of science fiction: this is the saga of carbon fibre, reshaping industries with its extraordinary properties.

Carbon Potential

Carbon fibre tubing is not just a material; it's a revolution. Its ascendancy spans industries like bicycle manufacturing and camera equipment, marking a paradigm shift for engineers seeking optimal performance without compromise.



Chemical Resistance:

Unlike its metallic counterparts susceptible to corrosion, carbon fibre boasts impeccable chemical resistance. Consider bicycle frames, battling salty air and water exposure. Carbon fibre frames not only resist corrosion but endure in the harshest environments, a testament to their longevity.

2 Low Weight, High Impact: Weighing a fraction of aluminium or steel, carbon fibre has become the linchpin in bridge construction and repair. In a delicate dance of strength and weight, carbon fibre emerges as the secret weapon. Its strength-to-weight ratio ensures structural integrity without the burden of excess weight.

In medical device engineering, carbon fibre's low atomic number and density make it a beacon for applications requiring X-ray transparency. Unlike metals obstructing X-rays, carbon fibre offers stiffness without compromising diagnostic imaging quality. A breakthrough for

X-Ray Transparency:

4 Heat Resistance:

Many applications hinge on carbon fibre's ability to withstand high temperatures. Coupled with heat-resistant epoxy resin, it becomes the epitome of engineering excellence in high-temperature environments. While cost considerations loom, the durability and lightweight nature of heat-resistant carbon fibre make it an investment worth exploring.

5 Strong and Safe:

Carbon fibre tubing isn't just a choice; it's a declaration. A declaration of strength, durability, and adaptability. From medicine to architecture, its unique amalgamation of properties positions it as the material of choice for applications under the duress of elements and heavy-duty stress.

Future with Carbon Fibre

As you start your next engineering odyssey, consider the symphony that is carbon fibre tubing. Its versatility makes it not just a choice but a statement — a testament to innovation and engineering excellence.



SHOW 2024

A MARITIME EXTRAVAGANZA ON THE HORIZON



In a testament to Qatar's commitment to fostering economic growth and promoting tourism, Doha is poised to host the Qatar Boat Show from November 6th to November 9th, 2024. This monumental event, a collaboration between Old Doha Port and Gulf Marine Services LLC, is set to unite maritime enthusiasts from around the world. As an integral part of Qatar's Vision 2030, the Boat Show aims to showcase the pinnacle of luxury yachting and innovation while contributing to the nation's economic development.

The recent launch event on March 5th offered a glimpse into the grandeur and scale of what promises to be the most impressive boat show in Qatar's history. The international and regional exhibitors, media representatives, and prominent figures in attendance heightened anticipation for the event, emphasising its significance on the global maritime calendar.

The Qatar Boat Show 2024 is not just a display of luxury vessels; it's a strategic collaboration that aligns with the

long-term vision of Old Doha Port and Qatar as a maritime hub. The event is expected to attract over 20,000 visitors, showcasing 495 exhibitors and brands, with 95 boats and watercraft on display both on land and water.

The launch event featured insightful panel discussions, including a 'Middle East Yachting Overview' and a 'Qatar Yachting Overview,' bringing together key industry leaders to discuss the strategic importance of the Qatar Boat Show within the broader context of Qatar's maritime investment and its global influence.

Supported by the Ministry of Transport as the Strategic Partner, Qatar Tourism as the Destination Partner, Al Kass Channels as the Media Partner, and with Mwani Qatar as a Gold Sponsor and QTerminals as the Silver Sponsors, the Qatar Boat Show 2024 is well-positioned for success.

Reflecting on the launch, Mohammad Al Mulla, CEO of Old Doha Port, expressed enthusiasm for the upcoming event, calling it a "strategic milestone." With 800,000 square meters and 450 berths for boats up to 160 meters in length, Old Doha Port provides a premier venue for the Qatar Boat Show, showcasing the nation's maritime heritage and attracting the global yachting community.

Qatar's reputation as the safest country in the world, coupled with its robust tourism and economic indicators, positions the Qatar Boat Show as a significant international maritime event. With six marinas and expanding marine infrastructure, Qatar is making waves as a leading destination for luxury maritime activities.

As November approaches, industry leaders and maritime enthusiasts are invited to Doha for the Qatar Boat Show 2024—a spectacular showcase of the marine world and unparalleled luxury, set against the backdrop of Old Doha Port's vibrant and innovative landscape.



Enhancing Safety in Automotive Parts Manufacturing

Harnessing the Power of Computer Vision Ai

In the high-stakes world of automotive parts manufacturing, prioritising safety is paramount.

Personal Protective Equipment (PPE) compliance stands as a cornerstone in safeguarding workers from potential hazards. As we embark on a journey to explore the intersection of PPE compliance and technological innovation, let's first underscore the significance of PPE in workplace safety.

Within the automotive parts manufacturing realm, the utilisation of heavy machinery and power tools underscores the inherent risks faced by workers. PPE serves as a vital line of defence, encompassing specialised clothing and equipment designed to shield workers from potential hazards. Not merely a regulatory obligation, PPE embodies a cornerstone of workplace well-being, significantly mitigating the risk of injury and illness. From safeguarding against chemical splashes to averting electrical shocks, the efficacy of PPE in enhancing workplace safety cannot be overstated.

NAVIGATING PPE COMPLIANCE STANDARDS

Navigating the labyrinth of PPE compliance standards is imperative to ensure the holistic safety of workers. The Occupational Safety and Health Administration (OSHA) provides indispensable guidelines, delineating the requisite PPE for specific job roles and hazards. Additionally, industry-specific standards, such as those set forth by the National Institute for Occupational Safety and Health (NIOSH), offer tailored directives for the automotive manufacturing sector. Upholding these standards mandates meticulous training and adherence to protocols, fostering a culture of safety and compliance.

INTRODUCING COMPUTER VISION AI: A Paradigm Shift in Safety

As we pivot towards the integration of cutting-edge technologies, computer vision AI emerges as a game-changer in revolutionising safety protocols. Leveraging the prowess of computer vision AI, manufacturers can transcend traditional monitoring methods and usher in an era of real-time PPE compliance enforcement.

UNLOCKING THE POTENTIAL OF COMPUTER VISION AI

Harnessing the potential of computer vision Al necessitates a multifaceted approach encompassing hardware setup, model training, and seamless integration into manufacturing operations. By deploying Al-infused cameras across factory floors, manufacturers can monitor PPE compliance in realtime, empowering managers to swiftly address noncompliance issues. Moreover, Al-driven insights offer invaluable data-driven feedback, enabling continuous improvement and optimisation of safety protocols.

THE DAWN OF A SAFER TOMORROW

Embracing computer vision AI for PPE compliance heralds a new era of workplace safety and efficiency. By bolstering real-time monitoring, enhancing reporting capabilities, and driving cost-saving efficiencies, Al empowers manufacturers to forge ahead on the path to unparalleled safety standards.

NAVIGATING CHALLENGES. EMBRACING INNOVATION

While the journey towards AI-driven safety protocols is rife with challenges, including privacy concerns and technical hurdles, the transformative potential of computer vision AI remains undeniable. By surmounting these challenges through meticulous planning and collaboration, manufacturers can harness the full spectrum of benefits offered by Al-enabled safety solutions.

EMBRACE INNOVATION, ELEVATE SAFETY

As the automotive parts manufacturing landscape evolves, the imperative to embrace innovation and elevate safety standards becomes increasingly pronounced.

By embracing the transformative potential of computer vision Al, manufacturers can pave the way for a safer, more efficient future, where worker well-being takes centre stage.

SEIZING THE FUTURE WITH CHOOCH AI VISION PI ATFORM

Discover the transformative potential of the Chooch AI Vision platform in revolutionising safety protocols. With cutting-edge AI models tailored for PPE compliance, Chooch empowers manufacturers to navigate the complexities of workplace safety with confidence and precision. Join us on this journey towards a safer tomorrow, powered by innovation and driven by a shared commitment to worker well-being.

Mobility 1



Defining 0: A Climate-Neutral Moonshot Goal by 2030

At the core of Polestar's vision lies the Polestar 0 Project, an audacious mission to achieve a truly climate-neutral production car by 2030. This project aims to eliminate all greenhouse gas emissions across the supply chain and production process, challenging industry norms and setting an ambitious precedent.

Project Phases: Journey to Zero CO₂e

The project unfolds in three phases, each meticulously designed to address challenges in achieving climate neutrality:

1. Level 3 CO2e: Identifying and establishing collaborations to innovate solutions until 2025.

- 2. Building and Running Pilot Lines: Validating concepts for materials, functions, and supply chain.
- 3. Designing Manufacturing Sites: Finalising a complete supply chain for high-volume production.

More Than a Car: Catalyst for Change

Polestar 0 goes beyond crafting a climate-neutral vehicle; it's a catalyst for change. Every partner joining this journey contributes not only to groundbreaking cars but also to broader societal impacts.

Developments in Focus: Sourcing Unprecedented Materials

Achieving climate neutrality requires rethinking sourcing materials. Polestar is actively researching materials like Cobalt, Mica, and Lithium with collaborative partners who share their climate-neutral ambitions.

Previous Developments: Milestones Toward Zero

Reviewing past milestones, the Polestar 0 Project has been an open call for collaboration since its inception in 2021, aiming to challenge and innovate within the industry.

Stay Informed: Stay Green

Polestar is dedicated to transparency, acknowledging that the Polestar 0 Project is a moonshot goal, challenging the industry and creating a sense of urgency. The journey is about galvanising innovation and exponential thinking to lead to significant leaps in the right direction.

Conclusion: A Green Revolution in the Automotive Horizon

Polestar's commitment to the Polestar O Project sets a new standard for the industry. As they redefine the path to climate-neutral mobility, every Polestar vehicle becomes a testament to a future where sustainability and luxury coexist.

Connect with Polestar: Discover, **Drive, and Define the Future**

Explore the Polestar lineup, stay informed on sustainability efforts, and join the green revolution. Polestar is not just driving change; they're steering towards a zeroemission horizon.

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industry

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