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Fusion

MAGAZINE



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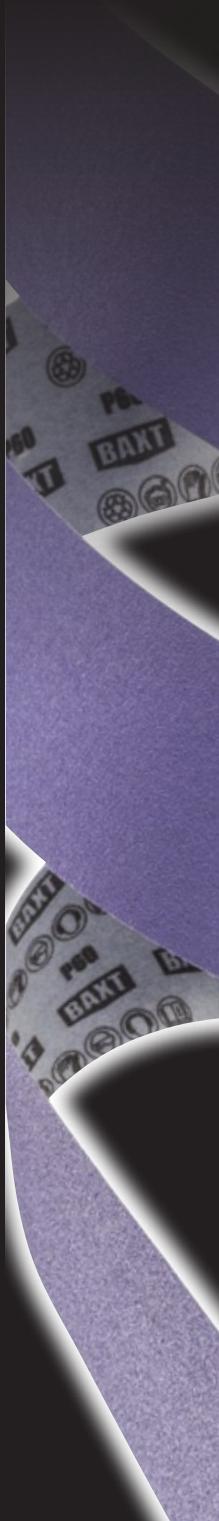
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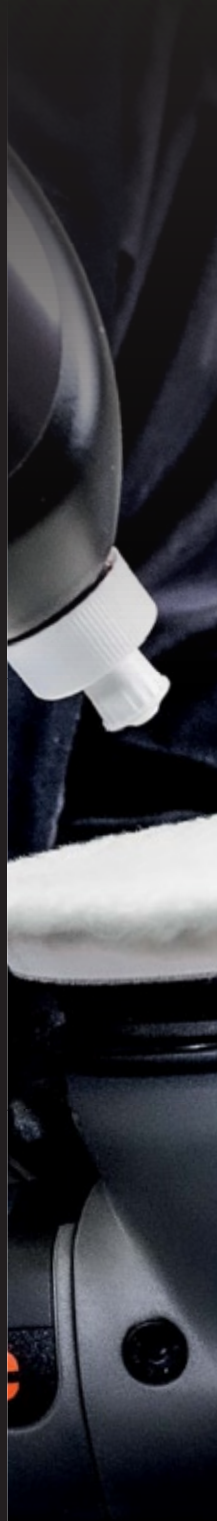
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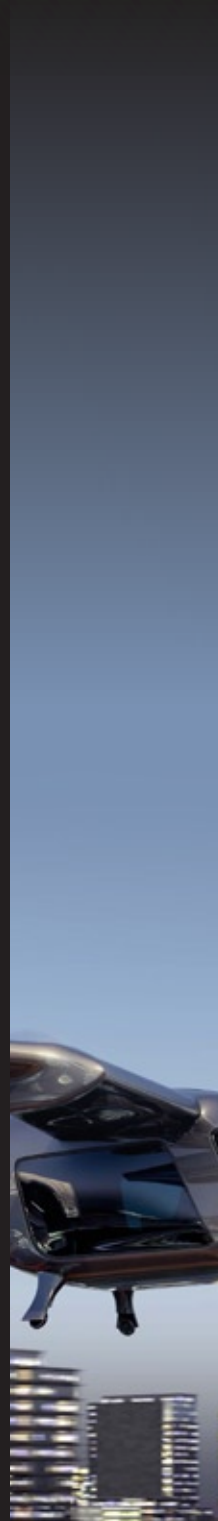
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Your Partner in
Efficient Procurement

OPTIMISING STOCK CONTROL WITH DTC HUB



In the dynamic landscape of modern business, precision in stock management is non-negotiable. Enter the DTC Hub, a powerhouse that redefines how businesses handle stock control. Central to its design, there's a key component intended to modernise how companies monitor product usage and manage their inventory.

The DTC Hub's stock control feature offers a streamlined approach to tracking stock consumption. By inputting usage data, businesses unlock comprehensive reporting that provides a clear overview of product usage by job, team, or product. This insightful analysis arms decision-makers with valuable information to optimise expenses and save time.

By leveraging its exceptional reporting capabilities, the DTC Hub equips businesses with the tools to make well-informed decisions. This functionality offers invaluable insights into productivity, enabling more strategic choices that enhance efficiency and optimise resources.

Seamlessly integrated with the stock tracking process, it also simplifies replenishment. Through eliminating the guesswork by enabling effortless creation of orders based on usage patterns, ensuring stock levels remain optimal without manual calculations.

Adaptable to the unique needs of diverse businesses, the DTC Hub isn't just a solution—it's a customisable answer. From managing stock consumption to tracking compliance

and reporting usage, it offers efficiency at your fingertips through a desktop or mobile app.

The DTC Hub emerges as a transformative tool for businesses seeking precise control over product usage. Offering insightful reporting, effortless replenishment, and a user-friendly interface, it's the catalyst for streamlined operations and informed decision-making.



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& Watch
the Video



Warehousing Trends Set to

As the warehousing landscape evolves, 2024 promises a significant transformation driven by technological advancements, changing consumer demands, and industry-specific innovations. Several key trends are poised to shape the warehousing sector, influencing operational strategies, and enhancing efficiency. Let's take a closer look at the upcoming trends that will redefine the warehousing arena in 2024:

1 Automation in Warehouses

The trend of automation continues to revolutionise warehousing operations. Autonomous Mobile Robots (AMRs) and robotic arms are set to take the spotlight in 2024. AMRs will streamline fulfilment activities, enhancing order picking efficiency, while robotic arms will minimise workplace injuries by handling tasks like container unloading. Leveraging sophisticated technologies such as advanced algorithms and machine vision, these smart machines will facilitate precise and swift order packing, optimising distribution centre operations. Although integrating multiple automation technologies swiftly might pose challenges, the rewards of warehouse automation are paramount, catering to the surging demands of e-commerce.

2 Stock Merging for Omnichannel Flexibility

A noticeable shift in warehousing strategies is the merging of stocks to accommodate omnichannel offerings. Brands are now seeking warehouses that allow the consolidation of stocks, enabling efficient management of orders and returns across various sales channels. This trend fosters flexibility and aids in managing buffer stock, thereby curbing unnecessary production, and positively impacting the environment.

3 Enhanced Visibility and Transparency

2024 will witness a heightened demand for visibility throughout the logistics chain. End-consumers increasingly seek detailed information about the status of their orders. Warehouses will be required to provide comprehensive data on packaging, shipping, and order completion to minimise customer service inquiries, fostering a seamless consumer experience.



Define 2024 and Beyond.....

4 Sustainable Warehousing Practices

Driven by the imperative to reduce environmental impact, businesses will rely on integrated logistics service providers to curtail carbon emissions from warehousing operations. This includes adopting sustainable building materials, renewable energy sources, and implementing emissions visibility tools. The pursuit of circular economy principles through reusable packaging and pallets will significantly reduce the carbon footprint within warehouses.

5 Data-Driven Optimisation

Digitalisation will play a pivotal role in warehouse optimisation. Advancements in IoT and AI-operated tools will enable real-time monitoring, ensuring safety and efficiency. Data-led decision-making and predictive maintenance will minimise downtime, enhancing productivity and operational capacity.



6 Warehouse Restoration and Customisation

Older warehouses will undergo retrofitting to align with modern e-commerce logistics. Furthermore, industry-specific customisations tailored to markets like pharmaceuticals and automotive will gain prominence, fostering continual evolution and adaptation.



The warehousing landscape of 2024 presents a dynamic convergence of automation, sustainability, and digitalisation. Embracing these trends will undoubtedly reshape warehouse operations, elevating efficiency, and responsiveness to meet the evolving demands of the industry.

THE FUTURE OF BOATING

Navigating the Horizon of Technological Transformation

The realm of boating stands on the cusp of an unprecedented revolution, propelled by technological advancements and evolving consumer preferences. Peering into the impending years, the trajectory of boating promises a metamorphosis, poised to reshape the industry in unforeseen ways, underpinned by innovation and sustainability.

ELECTRIC BOATS

The imminent years herald a remarkable paradigm shift—widespread adoption of electric boats. Historically niche, confined to inland waterways and smaller domains, electric boats now emerge as an increasingly appealing option for a diverse array of boaters, courtesy of strides in battery technology and electric motors.

Notably sustainable and offering serene, low-maintenance journeys, electric boats are set to redefine norms. As the trajectory of battery technology ascends, the proliferation of electric boats is anticipated to ascend proportionally, poised to establish itself as the norm rather than the exception.

AUTONOMOUS BOATS

A groundbreaking trend destined to revolutionise the boating landscape is the integration of autonomous boats. While autonomous cars have dominated headlines, autonomous boats emerge as a novel concept. As technological sophistication advances, a future marked by boats entirely navigated by computer systems beckons.

This paradigm shift reverberates across boat design and safety protocols. The promise of autonomous boats lies in their capacity for efficient navigation, collision avoidance, and real-time responses to weather dynamics. While technical and regulatory challenges persist, the advent of autonomous boats signifies a monumental transformation in boating methodologies.

VIRTUAL REALITY

Virtual Reality (VR) emerges as a potent technology poised to exert a profound influence on the boating industry. With the proliferation and potency of VR technology, boaters are poised to explore the water in unprecedented ways.

VR offers immersive, simulated environments mirroring reality, enabling boaters to experience diverse sailing conditions, explore uncharted territories, and engage in virtual competitions. This technological integration is poised to ignite interest among younger demographics, fostering a newfound appreciation for boating culture.





CHARTING THE FUTURE

In essence, the forthcoming era of boating is emblematic of heightened connectivity, sustainability, and innovation. As waterways allure enthusiasts

for leisure and work alike, boating stands poised for an era propelled by technological prowess and cultural evolution.

While the path forward might bear challenges, the sailing industry stands at the brink of a transformative decade, characterised by innovation and sustainability. The journey ahead promises an exhilarating trajectory, embracing change and embracing a more connected, sustainable future.



SUPPLY MADE SIMPLE

P8



WIND POWER

The Unstoppable Force Driving the UK's Clean Energy Revolution

In the realm of renewable energy, the United Kingdom stands tall with the world's largest offshore windfarm, a testament to its commitment to sustainable power sources. However, as other nations rapidly embrace wind energy, the UK faces a pivotal juncture—advancing to stay competitive while aligning with climate targets.

A challenge arises as the UK government halts the construction of new onshore windfarms in England, with most on-land facilities thriving in Scotland. Despite this, both offshore and onshore wind energy have become remarkably cost-effective, often surpassing traditional fossil fuels in affordability, even when accounting for wind variability and emissions.

Surprisingly, constructing onshore wind farms is now more economical than utilising gas for power plants. The stark cost comparisons highlight the economic viability of wind power, amplifying its potential to drive a cleaner future.

Public support for wind energy in the UK is robust, with a significant 83% and 78% in favour of onshore and offshore wind, respectively. This backing remains steadfast despite occasional political and media scrutiny, underscoring widespread enthusiasm, particularly among rural residents.

Contrary to common belief, wind power's reliability is impressive, contributing electricity nearly 98% of the time. The challenge of intermittent wind can be mitigated through a holistic approach, leveraging other renewables, grid enhancements, and superior energy storage solutions.

In essence, wind power emerges as the beacon of hope for a sustainable energy landscape in the UK, offering a feasible and widely embraced alternative to fossil fuels. With overwhelming public support and proven reliability, the case for scaling up wind energy seems unequivocal paving the way for a greener and more prosperous future.

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SOFT BACKED SANDING SPONGE

Introducing the BAXT Soft Backed Sanding Sponge Series, a range of specialised foam pads meticulously crafted for precision hand sanding in diverse applications. From confined spaces and along edges to rims and intricate surfaces, each sponge within this series is designed with a soft construction that minimises the risk of surface damage.

Tailored for wet or dry applications, the BAXT Soft Backed Sanding Sponge Series offers versatile flexibility for use across various environments, including marine and composite settings. Whether you're tackling challenging spots on paint, metal, and fibreglass these sponges ensure optimal results and a smooth finish.

No matter the specific task, the BAXT Soft Backed Sanding Sponge Series stands as a reliable tool for achieving a professional finish. Confidently address intricate areas with this comprehensive and versatile range of sanding solutions.



- ABSP260MF** BAXT Soft Backed Sanding Sponge Micro Fine (20)
- ABSP310SF** BAXT Soft Backed Sanding Sponge Super Fine (20)
- ABSP310UF** BAXT Soft Backed Sanding Sponge Ultra Fine (20)
- ABSP389F** BAXT Soft Backed Sanding Sponge Fine (20)

SAILING SMOOTHLY

How **DTC** Rescued a Superyacht Project in Germany



In the world of superyacht refinishing, every minute lost can be critical. Recently, a yacht refinisher in Germany faced an urgent need for specific products not readily available in the country. Turning to DTC, a reliable partner known for its streamlined services, proved to be a game-changer.

AN URGENT REQUIREMENT MET

Amidst a crucial phase of a superyacht finishing project, the refinisher urgently sought products that were unavailable locally. DTC, known for its comprehensive inventory, had these products in stock, demonstrating their commitment to maintaining a diverse and accessible product range.

SWIFT DELIVERY, IMPACTFUL RESULTS

DTC's exceptional service didn't stop at having the necessary products—it extended to timely and complete deliveries. The urgently required goods were swiftly dispatched and arrived in Germany the following morning. This prompt response became instrumental in helping the refinisher regain lost time on their project.

GETTING BACK ON COURSE

The superyacht project, which had faced delays due to product unavailability, swiftly regained momentum, thanks to DTC's efficient support. This incident highlights how DTC's commitment to reliability and efficiency can make a significant difference in crucial project timelines.

SIMPLICITY IN COLLABORATION

The experience of working with DTC was defined by its simplicity and efficiency. The seamless process and swift resolution of the urgent requirement underscored the ease of partnering with DTC.

The partnership between the yacht refinisher and DTC showcases the power of efficient collaboration in the demanding world of superyacht refinishing. DTC's commitment to offering solutions rather than just products ensures that businesses can navigate complex challenges, ensuring projects stay afloat and on track.





Elevating Aerospace Performance

The Crucial Role of Aerospace Paints

Unveiling the Vital Role of Aerospace Coatings

In the realm of aviation, the significance of aerospace paints emerges as a silent yet indispensable force in safeguarding aircraft performance and durability. These specialised coatings, meticulously crafted for the aviation industry, transcend mere aesthetics, offering a protective shield that ensures the longevity and resilience of airborne vehicles. Aerospace coatings, fortified with nano-scale additives and specialised polymers, are engineered to withstand the rigours of the skies, battling wear, corrosion, and extreme temperatures.

The Core Functions of Aerospace Paints

Primarily engineered to combat corrosion, mitigate wear and tear, and diminish drag resistance, aerospace paints play a pivotal role in enhancing overall aircraft efficiency and safety. Their unique formulations are tailored to adhere steadfastly to diverse substrates, resist the deleterious effects of UV radiation, and retain their properties over prolonged periods.



Innovations Propelling Aerospace Coating Advancements

In this landscape of innovation, companies like Flora Surfaces and Henan Holywell are pioneering transformative solutions, revolutionising aerospace paint technologies.

Flora Surfaces: The US-based startup specialises in crafting sustainable materials, particularly for aerospace and automotive coatings. Leveraging surplus natural oils, Flora Surfaces engineers biobased polymer resins, which are then transformed into biodegradable films and coatings. Their flagship offering, FLYCO, stands as a single-component, solvent-based aerospace paint solution. Drying in ambient conditions, FLYCO accentuates high surface energy for top coats. Employing proprietary hybrid polyurethane resin, these coatings harden through internal crosslinking, eliminating the need for toxic isocyanate-based hardeners. Flora Surfaces' innovative solutions bolster dirt resistance and curtail drag on aircraft surfaces.

Henan Holywell: This Chinese startup specialises in manufacturing hollow glass microspheres (HGMs) specifically tailored for aerospace vehicle painting. Utilizing ultralight, inorganic materials in hollow, spherical forms, Henan Holywell's HGM-HL, HGM-HK, and HGM-HS paint and coating series elevate surface survivability under rigorous conditions.

Offering reduced thermal conductivity, heightened compressive strength resistance, and optimal high-temperature resilience, these coatings cater to the stringent demands of aerospace applications. Their clientele extends beyond aviation to encompass aircraft manufacturers, service providers, and industries spanning oil & gas and automotive domains.

Shaping the Future of Aerospace Coatings

As aerospace technology continues to evolve, these innovative advancements in aerospace paints stand as a testament to the industry's commitment to resilience, efficiency, and sustainability. The strides made by companies like Flora Surfaces and Henan Holywell underscore the fusion of innovation and sustainability, propelling aviation towards enhanced performance and environmental responsibility.





CARBONite™

**DESIGNED FOR SPEED.
ENGINEERED FOR EFFICIENCY.**

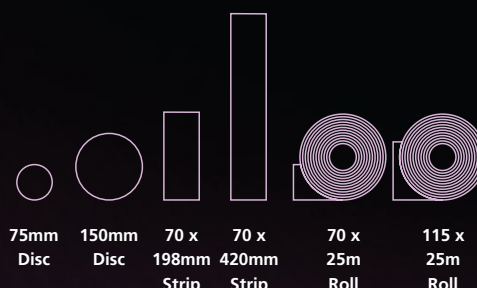


A premium range of abrasives designed specifically for the sanding of high strength composite materials.

Extremely hardwearing, the ceramic and aluminium oxide blend of grains stay razor sharp for longer.

Flexible, paper backed abrasive with a precision coating designed to repel dust and prevent clogging.

Improved hole configurations for maximum extraction.



70 X 420MM STRIP

Available in Grits:

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P60	P240	P600	P1500
P80	P320	P800	
P120	P400	P1000	



70 X 420MM STRIP

Available in Grits:

P80	P320	P1000
P120	P400	P1200
P180	P500	P1500
P240	P800	



**70 X 198MM STRIP
or 70 X 420MM STRIP**

Available in Grits:

P40	P180
P60	P240
P80	P320
P120	P400



**FILM ROLL 70MM
or FILM ROLL 115MM**

Available in Grits:

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P60	P240
P80	P320
P120	P400

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The full range of abrasive is now available, including; Discs, rolls and strips.

Designed for maximum sanding efficiency, the CARBONiteTM range is available in a wide range of grits, making them ideal for a variety of applications and materials.

The tough material is tear and wear resistant and a range of hole patterns ensure easy application for the majority of sanders.

THE POWER OF PURPLE

SUPPLY MADE SIMPLE

P16

EXPLORING CHEMISTRY'S ROLE IN

A Pathway to a Greener Future

Composite materials have emerged as integral components underpinning the advancement of renewable energy technologies and the quest for lighter, more fuel-efficient transportation. These materials, crucial to reducing carbon emissions and extending infrastructure lifespans, are pivotal in the UK's pursuit of net-zero emissions by 2050. Forecasts indicate a substantial growth in their utilisation, highlighting their pivotal role in diverse sectors.

Despite their prominence, sustainability challenges loom over the composite sector, particularly concerning supply chain dynamics. A glaring issue persists: over 95% of composite materials originate from virgin fossil-fuel-derived sources. Moreover, recycling rates remain alarmingly low, fostering a linear industry model that haemorrhages valuable materials. This linear system poses immense challenges for sustainability and necessitates urgent solutions.

At the heart of composite materials lies the chemistry dictating their properties and behaviours. The robust chemical bonds within resins confer durability, yet also pose hurdles in recycling processes. Traditionally, these materials have been engineered for optimal performance without due consideration for their environmental footprint, culminating in end-of-life challenges.

This article signifies the need to better understand the pivotal role of chemistry in addressing sustainability issues within the composite industry. By delving into chemical solutions, avenues emerge for a more sustainable future. Advancements in composite chemistry promise reduced environmental footprints, enhanced durability, and streamlined end-of-life pathways.

This comprehensive article aims to spotlight chemistry's dual role: both a challenge and a solution in the sustainability narrative. Through collaborations across industries and academia, the transformative potential of chemistry in revolutionising the composite sector becomes evident. It underscores the need for innovative chemical solutions and wider adoption of existing sustainable practices.

While the focus is on the UK composite market, global stakeholders play an essential role in the composite supply chain. The report's findings highlight opportunities that could positively impact the UK market, albeit requiring collaborative efforts on a global scale.

This article has discussed the interplay between chemistry and composite sustainability, it has shown the vital role of chemistry in fostering a sustainable composite industry. Embracing chemistry-driven innovations offers a promising path toward a more sustainable, environmentally conscious composite future.



SUSTAINING COMPOSITE MATERIALS



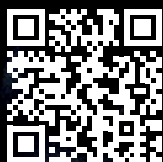
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We've turned one of the most feared steps in automotive repair into one that any technician can master on their first go. Experience a system designed to work together — an easy-to-use polishing tool with specially-formulated liquids and pads. Your technicians should have no more fear of swirls, burn through, or other pitfalls common with traditional rotary buffing systems. Don't let paint finishing control you. It's time to take back control of the finish.



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Achieving your ideal finish has never been easier. Whether you're a painter, detailer, novice or seasoned expert, the 3M™ Perfect-It™ Random Orbital Polishing System was designed to help deliver sleek, consistent results — at any skill level. Let your pride reflect in every polish.



The Era of Advanced Air Mobility



TRANSFORMING URBAN TRANSPORT

In the aerospace landscape, Advanced Air Mobility (AAM) emerges as a groundbreaking paradigm, poised to revolutionise urban transportation through the utilisation of electric vertical take-off and landing (eVTOL) technology. This innovative approach integrates flying cars and cargo drones, reshaping the possibilities of urban mobility.

Recent years have witnessed remarkable advancements in the AAM domain, with organisations dedicating efforts to meticulous research and development, culminating in the testing phase of these visionary aerial vehicles.

The year 2024 is positioned as a pivotal moment for the AAM sector. Notably, several entities have unveiled a range of aircraft tailored to diverse urban transport needs:

Urban Air Taxi: A flagship model designed for swift and efficient aerial commutes within urban environments.

Long-Haul Passenger Aircraft: Tailored for extended journeys, this aircraft exemplifies the fusion of comfort and connectivity for seamless long-haul urban transport.

Heavy-Lift Cargo Drone: Pioneering the domain of aerial logistics, this robust drone presents a solution for the efficient and timely movement of heavy cargo.

Now we are in 2024, these strides in AAM are set to unfold, with plans to launch commercial flights and provide all-electric air mobility services during significant events, including the Olympic Games.

This pivotal moment marks the culmination of years of relentless innovation, signifying a notable leap forward in reshaping the urban transport narrative. The integration of AAM into the fabric of everyday life promises to unlock unprecedented opportunities, revolutionising urban commutes, enhancing logistical efficiency, and seeing new benchmarks in sustainable mobility.

The prospect of an all-electric, aerially interconnected urban landscape beckons—a testament to the transformative potential of AAM. As the contours of urban mobility evolve, the promise of a future seamlessly intertwined with the skies holds immense potential, heralding an era where the bounds of aerial exploration dissolve into the fabric of everyday life.





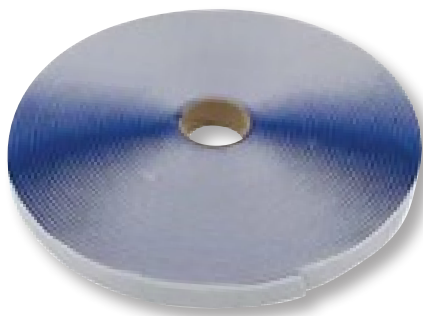
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the world's first
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sealant tape –
low temperature

3mm x 12mm x 15m x 20 rolls

Used to create an airtight seal within your vacuum processing operations, this butyl rubber tape is ideal for sealing vacuum bags, moulds, tools and patterns. Designed to give good levels of tack at low ambient temperatures, ensuring that you get a vacuum-tight seal no matter where you are.



vacuum
sealant tape –
high temperature

3mm x 12mm x 15m x 20 rolls

Used to create an airtight seal within your vacuum processing operations, this butyl rubber tape is ideal for sealing vacuum bags, moulds, tools and patterns. Designed to give good levels of tack at high cure temperatures, ensuring that you get a vacuum-tight seal no matter where you are.

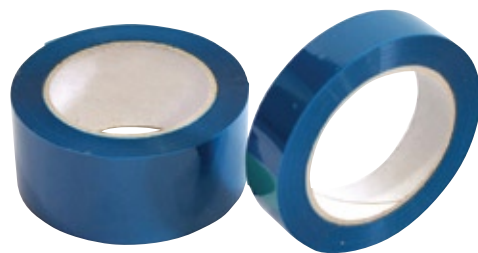


flash
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25mm x 66m & 50mm x 66m

Easy to use, pressure sensitive PET tape, capable of withstanding high temperatures and can be used for a wide variety of composite manufacturing applications, such as securing consumable items in place, blanking off holes and creating non-stick barriers.

Highly conformable this tape is ideal for sealing moulds and once finished with, is easy to remove and leaves little to no residue.



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