HITEX

VACUUM AUXILIARY

Catalog 2024

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Hitex - The Strength to Innovate: Unveiling the Future with Advanced Composites.

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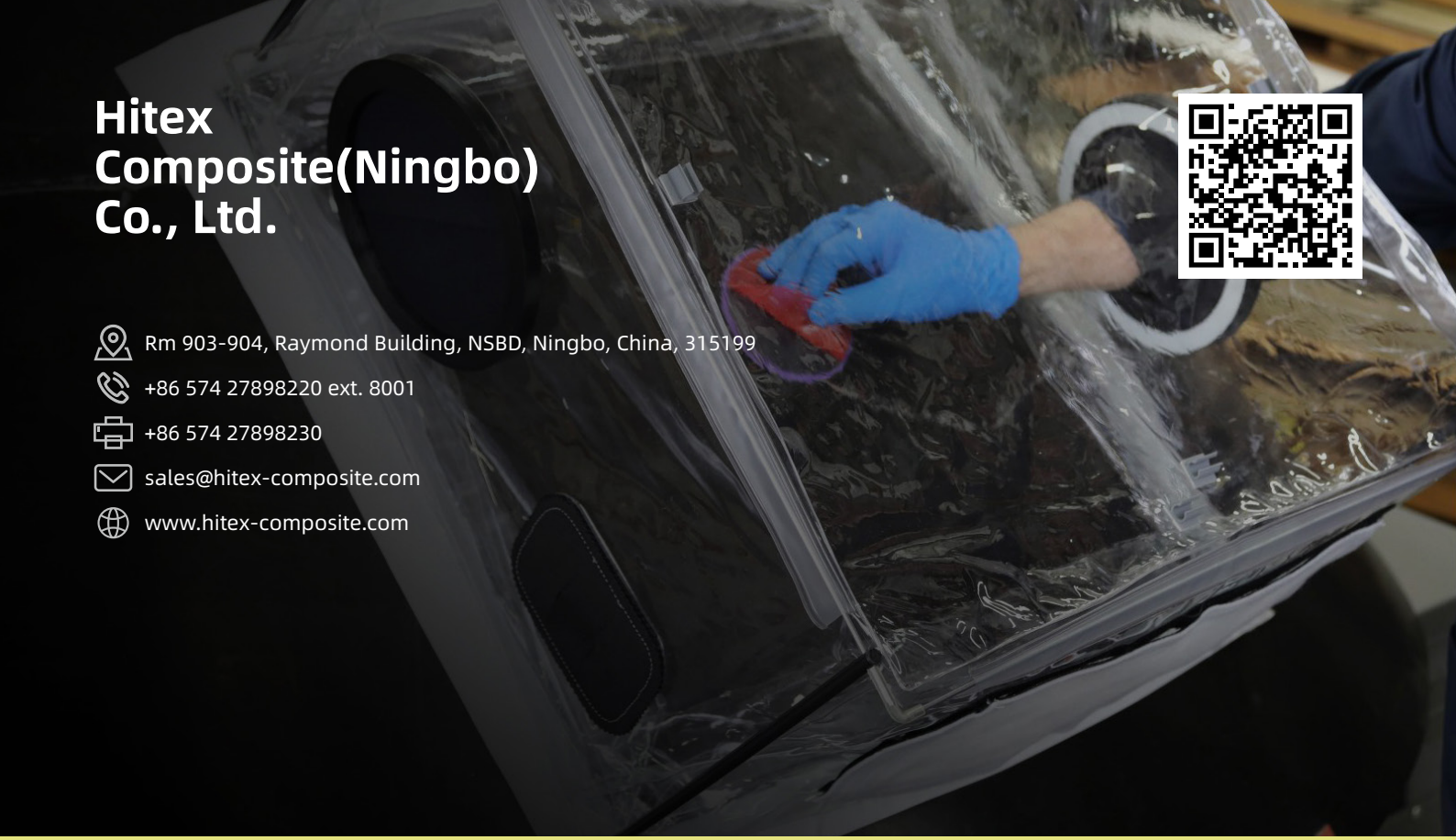
Insulation & Composites



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ABOUT HITEX

Welcome to Hitex Composites, your premier destination for top-quality composites and exceptional service. Our company has been providing high-quality composites to customers for many years, and we take great pride in our ability to consistently deliver excellence in both product quality and customer service.

At Hitex Composites, we specialize in the design, development, and manufacture of advanced composites for a wide range of industries, including aerospace, automotive, marine, and construction. We take advantage of our location in China to provide our customers with a competitive edge in terms of pricing, quality, and lead times. We have extensive experience in sourcing the highest quality raw materials from trusted suppliers, ensuring that we can offer our products at a competitive price without sacrificing quality.

Moreover, our state-of-the-art manufacturing facilities are equipped with the latest technology and staffed by skilled workers who are dedicated to producing the highest quality composite materials and products. This enables us to deliver products that meet or exceed the expectations of our customers.

In addition to our manufacturing capabilities, we offer fast turnaround times and flexible production schedules to accommodate the needs of our customers. Whether you need a small batch of custom products or a large-scale production run, we can deliver your order quickly and efficiently.

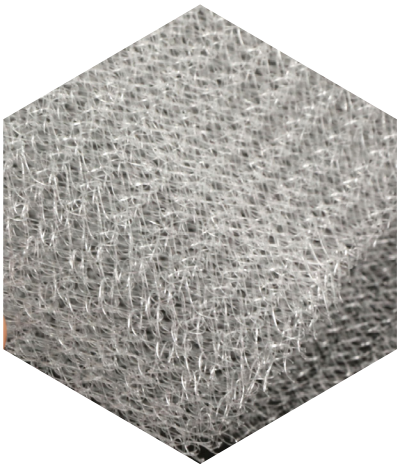
We believe that customer satisfaction is key to our success, and we go above and beyond to ensure that our clients receive the best possible service. Our team of experienced professionals is dedicated to providing personalized solutions tailored to your specific needs, and we work closely with you to ensure that your project is completed on time and within budget.

Whether you are looking for custom composite materials, high-quality composite products, or expert advice on composite design and engineering, Hitex Composites is your trusted partner. We are committed to providing you with the perfect service, high quality, and professionalism you deserve. Contact us today to learn more about our services and how we can help you take your project to the next level.

MAIN APPLICATION AREAS OF VACUUM AUXILIARY

- Boats
- Machinery
- Aviation
- Automobile
- Electrical appliances

Here is an introduction to **the characteristics and applications of vacuum auxiliary** products:



High Vacuum Performance

Vacuum auxiliary materials are designed to maintain a high vacuum level in vacuum systems. They possess excellent gas-tightness and low outgassing properties, ensuring minimal loss of vacuum pressure.

Low Vapor Pressure

Vacuum auxiliary materials have a low vapor pressure, which means they do not readily evaporate into the vacuum environment. This property helps maintain a clean and stable vacuum, preventing contamination or interference with sensitive processes.

High Temperature Resistance

Vacuum auxiliary materials are engineered to withstand high temperatures without compromising their sealing and insulation properties. This characteristic is crucial in applications where the vacuum environment may reach elevated temperatures.

Chemical Compatibility

Vacuum auxiliary materials are chemically compatible with a wide range of substances typically encountered in vacuum systems. They exhibit resistance to corrosion or chemical degradation, ensuring long-term durability and reliability.

Vacuum Bagging Film

Vacuum bagging film is a flexible, high-strength material used to encase composite layups, applying uniform pressure and removing air to enhance the quality and strength of cured composites in industries like aerospace and automotive.

Code	Material	Film Color	Resin Compatibility	Working Temperature
55 Microns	PA-PE-PA	Green	Styrene+Epoxy	Max up to 180℃
65 Microns	PA-PE-PA	Green	Styrene+Epoxy	Max up to 180℃
75 Microns	PA-PE-PA	Green	Styrene+Epoxy	Max up to 180℃

Vacuum Bag Sealant Tapes

Vacuum bag sealant tape is an adhesive substance used to create an airtight seal between the vacuum bagging film and the tool or mold surface, ensuring proper pressure application and resin infusion in composite material manufacturing.

Code	Max Temperature	Color	Solids	Roll Size
LTS90	150℃	Black	100%	15m*12mm*3mm
SM5130	204℃ continuous	Grey	100%	9.14m*12m*3mm

Release Film

Release film is a non-stick film applied between a composite laminate and its consumable materials to allow easy separation after curing, facilitating the production of defect-free parts in manufacturing processes.

Code	Raw Material	Thickness	Temperature Resistance	Type
SF-PP-35	PP/PE	35±5μm	150℃	Non-perforated
PF-PP-35	PP/PE	35±5μm	150℃	Perforated (customized)

Peel Ply

Peel Ply is a release fabric that is applied to composite materials to create a textured surface finish and provide a clean, ready-to-bond surface by easily peeling off after curing, promoting adhesion in subsequent layers of composite structures.

Raw Material	Weight (g/m^2)	Color	Temperature Resistance
Polyester	85	White with red Stripe	≤ 180℃
Nylon	85/105	White with red Stripe	≤ 230℃

Infusion Mesh

Infusion mesh is a fabric-like material placed within a layup to enhance resin flow during the vacuum-assisted resin transfer molding process, ensuring even distribution and complete infusion of the resin in composite constructions.

Code	Areal Weight (g/m^2)	Temperature (℃)	Thickness (mm)	Color
MPEW-145	145	120	1.0	Green/Black
MPEW-180	180	120	1.3	Black
MPEE-105	105	120	1.0	Green
MPEE-200	200	120	1.3	Green

Breather Fabric

Breather fabric is a lightweight, porous material used in vacuum bagging processes to allow the escape of excess air and volatile gases from the laminate, ensuring uniform pressure and aiding in the compaction and consolidation of composite materials during curing.

Code	Fiber Content	Weight	White	Recommended Working Temp	Width	Roll Size	Shelf Life	Color
BF-150	100% Polyester	150gsm	White	White	1.5 meter	100 meters	N/A	MPEE-200
BF-340	100% Polyester	340gsm	White	White	1.5 meter	50 meters	N/A	Green

Infusion Block

Infusion block is a specialized device or tool designed to regulate and control the flow of resin into a composite layup during the vacuum infusion process, ensuring precise resin distribution and preventing premature curing.

Code	Inner Diameter(mm)
INB16	16
INB35	35

L-Connector

L-Connector in vacuum bagging is a shaped fitting used to create a tight seal between the vacuum bag and the vacuum source, facilitating the removal of air and volatiles to compact composite materials and ensure a uniform resin infusion during the curing process.

Code	Outside Diameter(mm)
L12	12
L18	18

Infusion Valve

Infusion valve is a device integrated within a vacuum bagging or resin infusion system that allows for controlled regulation of resin entry into the laminate, ensuring optimal infusion rate and pressure for the composite manufacturing process.

Code	Outside Diameter(mm)
IV10	10
IV12	12
IV18	18
IV35	35

T-Connector

T-Connector in vacuum bagging is a T-shaped fitting that allows for branching of the vacuum line within the bagging setup to facilitate multiple points of vacuum application, streamlining the de-airing process for more complex composite molds.

Code	Outside Diameter(mm)	Temp. Resistance(℃)
T10	10	≤ 120
T12	12	≤ 120
T18	18	≤ 120

Omega Profile

Omega Profile is a specially-shaped extruded profile that is used to create a rigid and durable edge or to maintain separation between the vacuum bag and the breather layer, ensuring consistent vacuum pressure and facilitating resin flow during the composite fabrication process.

Code	Inner Diameter (mm)	Temp. Resistance (℃)	Color
OE16	16	≤ 120	Transparent
OE22	22	≤ 120	Transparent
OE24	24	≤ 120	Transparent

Enka-Channel

Enka-Channel is a tool that offers a groove-shaped channel for consistent and effective removal of air and volatiles during the vacuum consolidation process in composite material manufacturing, leading to enhanced quality and integrity of the final product.

Code	Width(mm)	Temp. Resistance(℃)
Enka-Channel 100	100	≤ 254
Enka-Channel 50	50	≤ 254

Flow Tube

Flow Tube is a conduit designed to facilitate the even distribution of resin across the material being consolidated in composite fabrication, ensuring a more uniform and efficient impregnation process.

Code	Inner Diameter (mm)	Temp. Resistance (℃)	Color
E8	8	≤ 100	Transparent or White
E10	10	≤ 100	
E12	12	≤ 100	Transparent with Reinforcing Rib
E18	18	≤ 100	
RV35	35	≤ 100	

Spiral Warp

Spiral warp allows for the consistent flow of resin or the removal of excess air during the vacuum bagging process, ensuring a more even and defect-free consolidation of composite materials.

Code	Inner Diameter (mm)	Temp. Resistance (℃)	Color
SWP10	10	≤ 100	Transparent or White
SWP12	12	≤ 100	
SWP18	18	≤ 100	

Tooling Products

Series	Code	Size
Forceps	DLQ8	8 inch
	DLQ10	10 inch
Dry Sandpaper	P40-51×50	51mm×50m
	P40-115×50	115mm×50m
	P40-200×50	200mm×50m
	P60-51×50	51mm×50m
	P60-115×50	115mm×50m
	P80-115×50	115mm×50m
	P80-200×50	200mm×50m
	P100-100×50	100mm×50m
	P100-115×50	115mm×50m
	P100-200×50	200mm×50m
Water Sandpaper	W280-280×230	280mm×230mm
	W320-280×230	
	W360-280×230	
	W800-280×230	
	W1000-280×230	
	W1500-280×230	
	W2000-280×230	
Membrane Sandpaper	MU150-280×230	280mm×230mm
	MU180-280×230	
	MU240-280×230	
	MU320-280×230	
	MU600-280×230	

Series	Code	Size
Pressure Sensitive Adhesive Tape	PST3×55	3mm×55m
	PST4×55	4mm×55m
	PST5×55	5mm×55m
	PST6×55	5mm×55m
	PST10×55	10mm×55m
	PST15×55	15mm×55m
	PST18×55	18mm×55m
	PST24×55	24mm×55m
	PST48×55	48mm×55m
Double-faced Adhesive Tape	DAT15×20	15mm×20m
	DAT20×20	20mm×20m
Transparent Tape	TT24×50	24mm×50m
	TT36×50	36mm×50m
	TT48×50	48mm×50m
Colorful Adhesive Tape	CT48×50	48mm×50m
	CT72×50	72mm×50m

Series	Code	Size	
		mm	inch
Aluminium Paddle Roller	AR101	44×140	13/4×5.5
	AR102	21.5×140	3/4×5.5
	AR103	21.5×70	3/4×3
	AR104	15.5×105	2/3×4
	AR105	15.5×50	2/3×2
	AR106	21.5×225	3/4×9
	AR107	44×225	13/4×9
	AR201	12.5×37.5	1/2×1.5
	AR202	12.5×75	1/2×3
Aluminium Radial Roller	AR203	12.5×100	1/2×4
	AR204	12.5×150	1/2×6
	AR205	25×75	1×3
	AR206	25×100	1×4
	AR207	25×150	1×6
	AR501	12.5×50	1/2×2
Aluminium Radius Roller	AR502	12.5×75	1/2×3
	AR503	12.5×100	1/2×4
	AR504	25×50	1×2
	AR505	25×75	1×3
	AR506	25×100	1×4
Aluminium Bubble Buster Roller	AR901	25×75	1×3
	AR902	25×100	1×4
	AR903	25×150	1×6
	AR904	25×200	1×8
Aluminium Slotted Paddle Roller	AR801	17×152	7/10×6