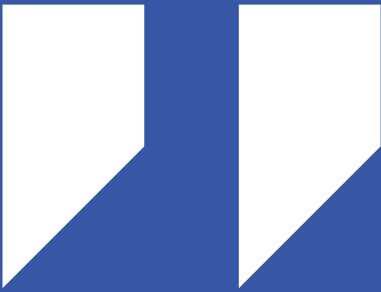


COMPOSITES

Consumables for the composite industry





ONE STOP.
FOR ALL
COMPOSITE
CONSUMABLES.

Valence Advanced Materials

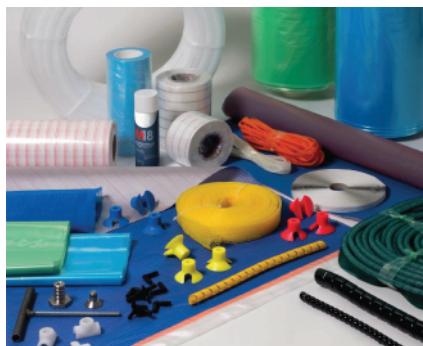


Valence Advanced Materials is an engineering solution provider and a project management company driving growth to a wide array of industries such as wind energy, nautical, automotive, aerospace, food & milling.

At Valence, our seasoned professionals deliver optimum results and profitability to customers through solutions that are technically feasible and commercially viable.

We focus on solving the customers problem by leveraging our expertise and resources to its full potential. Our attitude towards a problem is to solve it profitably thereby increasing the customers value chain.

Composite Business Unit (CBU)



The Composite Business Unit is a strategic arm of Valence Advanced Materials that caters to the needs of the composite industry.

Our products have high operational performance and are sourced from quality conscious suppliers based out of Europe. Our process materials are designed to work in symphony with vacuum moulding, resin infusion and autoclave processes.

We offer value added services such a slitting of rolls to prescribed widths and dynamic inventory control for Just-In-Time supply to our customers.

Product range

- ▶ Vacuum bagging films - All temperatures
- ▶ Release films - All temperatures
- ▶ Resin flow mesh
- ▶ Dualmesh
- ▶ Triplex
- ▶ Peel ply
- ▶ Diamond embossed film
- ▶ Bleeders
- ▶ Combo vacutech
- ▶ Resin absorber
- ▶ Carbon fiber
- ▶ Spiral tubes
- ▶ Spiraltraps
- ▶ Tubular mesh
- ▶ Resin stopper
- ▶ Spray glue
- ▶ Sealant tapes
- ▶ Adhesive tapes
- ▶ LDPE pipes
- ▶ Infusion plugs
- ▶ Connectors
- ▶ Silicone hose and sockets
- ▶ Vacuum valves
- ▶ Vacuum gauge
- ▶ Resin traps
- ▶ Extractors
- ▶ Hose clamp



VACUUM BAGGING FILM - LOW TEMPERATURE

Material type	Co-extrusion of polyethylene and nylon
Maximum working temperature	120°C / 248°F
Thickness	75 µm - 80 µm
Dimension	1.2 - 2 - 4 - 6 - 8 - 10 - 12 - 14 - 16 - 24 mt
Colour	Green

Suitable for vacuum infusion process resistant to traction and maintains flexibility with low humidity.



VACUUM BAGGING FILM - MEDIUM TEMPERATURE

Material type	Multilayer Nylon
Maximum working temperature	170°C / 338°F
Thickness	50 µm - 65 µm - 75 µm
Dimensions	From 86 mm up to 2300 mm - lay flat tube or V sheet From 2400 mm to 3000 mm - tube and gusseted sheet
Colour	Orange

Suitable for advanced composite curing processing and is ideal for use in both oven and autoclave cures.



VACUUM BAGGING FILM - HIGH TEMPERATURE

Material type	Soft and flexible mono nylon
Maximum working temperature	204°C / 399°F
Thickness	50 µm - 75 µm
Dimensions	Up to 2000 mm in tubular / From 4000 mm in V sheet
Colour	Pink

Suitable for oven, autoclave and resin infusion process.



RELEASE FILM - LOW TEMPERATURE

Material type	HDPE polyethylene - MDPE polyethylene
Maximum use temperature	125°C or 127°C / 257°F or 261°F
Thickness	25 µm - 28 µm
Perforation patterns	P3 - P16 - P31 - No perforations
Colour	Orange - Blue

Obtained through hot needle perforation process and used in vacuum infusion process.
Good mechanical property and high tensile strength.



RELEASE FILM - MEDIUM TEMPERATURE

Material type	Polypropylene
Maximum working temperature	150°C / 302°F
Thickness	30 µm - 45 µm - 50 µm
Perforations	P3 - P31 - No perforations
Dimension	Roll 150 cm x 250 mt
Colour	Yellow

Can be used for medium temperature infusion process.



RELEASE FILM - HIGH TEMPERATURE FEP

Material type	Fluorinated thermoplastic (FEP)
Maximum working temperature	260°C / 500°F
Dimension	1220 mm - 1530 mm x 250 mt
Perforations	P3 - No perforation
Thickness	13 µm - 25 µm
Colour	Red

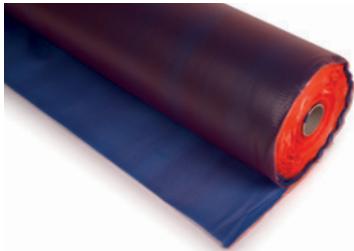
Suitable for processing advanced composite components such as prepeg.



RESIN FLOW MESH

Material type	HDPE
Maximum working temperature	120°C / 248°F
Dimension	Roll 150 cm x 100 mt / customizable
Weight	135 gr/m ²
Colour	Blue

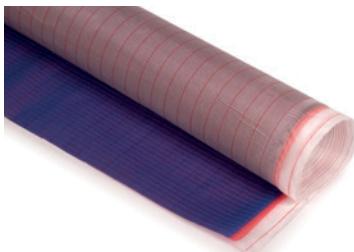
Resin flow mesh is used in vacuum infusion systems to distribute the resin flow.



DUALMESH

Material type	Resin flow mesh + perforated release film P31
Maximum working temperature	120°C / 248°F
Dimension	Roll 145 cm x 100 mt / customizable

Combo 2 in 1 : Resin flow mesh is joined with a perforated release film to facilitate resin flow and easy removal from the laminate.



TRIPLEX

Material type	Resin flow mesh + perforated release film P31 + peel ply
Maximum working temperature	120°C / 248°F
Dimension	Roll 152 cm x 100 mt

Combo 3 in 1 : Resin flow mesh is joined with a perforated release film and peel ply to reduce working time and labour costs.



PEEL PLY

Material type	PA 6 or PA 66
Maximum working temperature	120°C or 180°C / 248°F or 356°F
Standard width	From 5 to 152 cm x 100 mt / customizable
Density	85 gr/m ²
Colour	White / Red

Peel ply is a plain weave nylon fabric with red trace lines.



PEEL PLY 68 GREEN

Material type	Nylon
Maximum working temperature	150°C / 302°F
Melting temperature	180°C / 356°F
Density - thickness	68 gr/m ² - 10 µm
Colour	Green

Smooth finish and excellent drapability. No sanding required post application.



DIAMOND EMBOSSED FILM

Material type	Polyethylene
Maximum working temperature	114°C / 237°F
Thickness	90 µm
Density	93 gr/m ²

Suitable for prepreg protection and storage.



BLEEDER

Material type	100% non-woven polyester felts
Maximum working temperature	200°C / 392°F
Height	1000 mm - 1500 mm x 50 mt
Weight	From 100 gr/m ² to 450 gr/m ²
Colour	White

Product designed to drain air, solvent and excess resin during vacuum molding. Can be used in Oven, Autoclave & Vacuum Infusion.



COMBO VACUTECH

Maximum working temperature	120°C / 248°F
Dimension	Roll 150 cm x 50 mt
Release film thickness	25 µm
Bleeder	330 gr/m ² - customizable
Colour	Orange & white

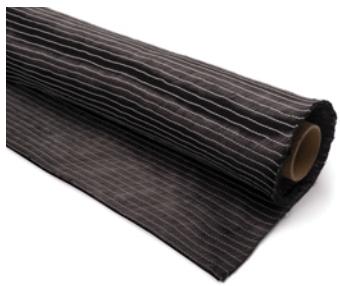
A non-perforated and non-woven bleeder (different weights) are joined as a single product designed for vacuum moulding technology. Can be used in Oven, Autoclave & Vacuum Infusion.



G-CORE

Material type	Non-woven polyester
Maximum working temperature	140°C / 284°F
Thickness	2 mm - 3 mm - 4 mm - 5 mm
Weight	50 gr/m ² - 75 gr/m ² - 95 gr/m ² - 110 gr/m ²

Optimized resin absorption with good tensile strength when wet.



CARBON FIBER

Material type	Carbon fiber biax 0-90° ± 45°
Tensile strength	AVAILABLE ON REQUEST
Fibre weight	AVAILABLE ON REQUEST
Thickness	AVAILABLE ON REQUEST
Density	AVAILABLE ON REQUEST

Suitable for prepreg process. Compatible with epoxy and vinyl ester resins.



SPIRAL TUBE

Material type	LDPE or HDPE
Maximum working temperature	120°C / 248°F
Standard length	20 - 25 - 100 mt - Customizable
Dimension	09/12 mm - 12/14 mm - 14/17 mm - Customizable
Colour	Neutral / Black / Yellow

LDPE spiral tube can be used as resin or vacuum channel.



SPIRALTRAP LD

Material type	HDPE / LDPE
Maximum working temperature	120°C / 248°F
Standard length	20 - 100 mt - Customizable
Dimension	09/12 mm - 12/14 mm - 14/17 mm
Colour	Green & White

LDPE spiral tube wrapped with a resin flow mesh for smooth resin distribution.



SPIRALTRAP HD

Material type	HDPE
Maximum working temperature	120°C / 248°F
Standard length	50 mt
Dimension	12/14 mm
Colour	Green & Black

HDPE spiral tube wrapped with a resin flow mesh for smooth resin distribution.



TUBULAR MESH

Material type	HDPE
Maximum working temperature	80°C / 176°F
Dimension	10/20 mm Orange 40/60 mm Yellow 20/50 mm Blue

Can be used as resin or vacuum channel.



RESIN STOPPER

Material Type	G-Core / Peel ply PA 66 / Tubular flow mesh
Maximum working temperature	120°C / 248°F
Dimension	100 mm x 20 mt

Removable flange designed to avoid wasting resin during infusion process maintaining the same degree of vacuum.



BASE COAT FABRIC

Material type	Non-woven polyester + PA 66
Maximum working temperature	120°C / 248°F
Dimension	5 cm x 1 mt
Thickness	3 mm
Colour	White

Applied between the gel coat and the laminate. Once removed, it creates a base layer suitable for binding two portions of a mould thereby eliminating the grinding phase of the product.



DOUBLE SIDED ADHESIVE TAPE

Material type	Siliconized polypropylene
Maximum working temperature	150°C / 302°F
Peak temperature for short periods	180°C / 356°F
Thickness	200 µm

Suitable for applications where great resistance to UV rays, solvents and plastifiers is required.



SEALANT TAPES

Material type	BUTYL
Maximum working temperature	180°C / 356°F
Dimension	9 mm X 3 mm X 15 mt
	12 mm X 3 mm X 15 mt
	10 mm X 2 mm X 22.5 mt
Colour	Black

Preformed sealants used to seal vacuum bagging films to the mould or join bagging films.



HIGH TEMPERATURE ADHESIVE TAPES

Material type	PET
Thickness	61 µm - 81 µm
Long term working temperature	120°C / 248°F
Maximum short term working temperature	228°C / 442°F
Dimension	25 mm x 66 mt - 50 mm x 66 mt

Adhesive tape suitable for autoclave curing process.



VACUUM BAGGING SELF RELEASING FILM

Material type	Multilayer nylon/polyolefin
Maximum working temperature	160°C / 320°F
Dimension	From 50 mm to 800 mm tube
Thickness	70 µm (Width: 86 mm - 800 mm) 100 µm (Width: 50 mm - 86 mm)
Colour	Green

A self releasing multilayer nylon/polyolefin vacuum bagging film designed for processing hollow advanced composite structures. Facilitates easy removal of the bag following the cure so as to avoid damage to the component.



SPRAY GLUE M18

Box	16 Pcs
Size	600 ml
Best working temperature	18-20°C / 64-68°F
Colour	Translucent

Superior holding and accurate positioning perfect for vacuum infusion process.
Can be used for temporary or permanent bonding application.



INFUSION PLUGS

Material type	Polypropylene
Maximum working temperature	120°C / 248°F
Dimension	For pipe 10/12 - 12.5/15 - 13/16 - 14/17 - 15/18
Colour	Blue - Green - Orange - Yellow - Red

Round – edge infusion plugs to protect vacuum bags. Suitable for resin infusion process.



T – SHAPED INFUSION PLUG 17/20

Material type	Co-extrusion of polyethylene and nylon
Maximum working temperature	125°C / 257°F
Dimension	For 20 mm external diameter pipe
Colour	White

Round – edge infusion plugs to protect vacuum bags. Suitable for resin infusion process.



CONNECTORS

Material type	Polypropylene
Maximum working temperature	120°C / 248°F
Dimension	For pipe 10/12 - 12.5/15 - 13/16 - 14/17 - 17/20 mm
Colour	Black

Suitable for connecting all resin infusion supply lines.



To be used as resin distributor or vacuum line.

LDPE PIPES

Diameter mm*	Thickness mm*	Reel Length mt*	Material
08 X 10	1.0	100	LDPE
10 X 12	1.0	100	LDPE
12 X 14	1.0	100	LDPE
12.5 X 15	1.2	100	LDPE
13 X 16	1.5	100	LDPE
14 X 17	1.5	100	LDPE
15 X 18	1.5	100	LDPE
17 X 20	1.5	300	LDPE



Suitable connection between vacuum hose and vacuum valves.



Ergal twist lock vacuum valve.



Threaded vacuum valves suitable for autoclave and oven.

TWIST LOCK VACUUM VALVES

Material type	Ergal / Fluoroelastomer
Maximum working temperature	260°C / 500°F
Maximum working pressure	10 Bar
Base diameter	60 mm
Final coupling	Male 1/4 di inch

THREADED VACUUM VALVES

Material type	Aluminum / Fluoroelastomer
Maximum working temperature	190°C / 374°F
Maximum working pressure	10 Bar
Base diameter	60 mm
Final coupling	Male 1/4 di inch
Colour	Aluminum



SILICON HOSE

Material type	Silicone / Fiberglass / Stainless Steel
Maximum working temperature	250°C / 482°F
Maximum working pressure	10 Bar
Internal and external diameter	9.5 mm - 17.5 mm
Wall thickness	4 mm
Length	Available from 1 mt to 10 mt

Fiberglass reinforced silicone vacuum hose with steel spring, suitable for autoclave and oven.



INOX VACUUM GAUGE

Material type	Stainless Steel / Brass / Glycerine
Maximum working temperature	Environment
Quadrant	ø 63
Scale	0 - 1 Bar
Final coupling	Male 1/4 inch

High resistance vacuum gauge suitable for an autoclave or vacuum pump.



RESIN TRAP

Material type	AISI 316 Stainless Steel / Polycarbonate / Ergal
Maximum working temperature	90°C / 194°F
Total volume	9.168 lts
Internal diameter	200 mm
Total diameter	250 mm
Height	292 mm

Stainless steel vacuum container designed to facilitate the resin infusion process.



FG RESIN TRAP

Material type	Fiberglass catch pot / Polyethylene top / Brass fittings
Maximum working temperature	90°C / 194°F
Total volume	16.51 lts
Internal diameter	290 mm
Height	300 mm

Fiberglass vacuum container designed to facilitate the resin infusion process.



EXTRACTOR KITS (EXTRACTOR PLUS HANDLE)

Material type	Stainless Steel / Galvanized Iron
Dimensions small extractor	Base 22 X 22 mm / Height 3 cm / Thread ø 10 mm
Dimensions medium extractor	Base 45 X 45 mm / Height 5 cm / Thread ø 10 mm
Dimensions large extractor	Base 45 X 37 mm / Height 4.5 cm / Thread ø 20 mm
T-shaped handle	According to size

Mould extractors with O-rings



DOLPHIN INFUSION HOSE CLAMP

Material type	Chromium-molybdenum alloy steel
Plier length	21 cm
Flange width	8 cm
Thickness at flange	0.3 cm

Professional resin line clamp, fully adjustable and ergonomic.



INDIA

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