COMPOSITE DIVISION

TECHNICAL FABRICS MANUFACTURER

AERONAUTIC
AGRICULTURE
AQUACULTURE
BUILDING
COMPOSITE
INDUSTRY SECURITY
EVENTS
SPORT - LEISURE

DIATEX

www.diatex.com

VACUUM MOULDING

VACUUM INFUSION

RTM & RTM LIGHT

VACUUM EQUIPMENT

EN 9100 QUALIFAS **ISO 9001** v2000 BV

DIATEX

EN 9100
QUALIFAS

ISO 9001
v2000 BV

CONTENTS

OUR PARTNERS :

TECHNOLOGY, SKILL AND QUALITY SINCE 1986

DIATEX R&D Department : working towards innovation

From the manufacture of technical textiles to the design of vacuum systems, Diatex has developed its research activities by recruiting specialists and reinvesting a significant percentage of its turnover into the implementation of new processes.

Synergy of Subsidiaries : at the core of development

Diatex works in close collaboration with its technical textile and textile finishing subsidiaries to design new products in aim of facilitating the work of composite material transformers. As requested by its customers, Diatex and its partners draw up specifications which define and optimize the technical features of their products.

Concerned by environmental protection issues and the health of product users, Diatex had designed the PA80 AD adhesive peel ply to avoid COV emission problems in the workshops. The material is covered with glue without styrene, which avoids using sprays.

Technical support based on innovating processes

Diatex offers technical support based on the constant development of innovative products. As a result, productivity is increased and storage costs are reduced for customers.

Dedication to quality is more than a commitment

In addition to ISO certification 9001 (version 2000), Diatex has obtained its QUALIFAS EN 9100 accreditation in May 2007. As a result, the company has become an official supplier of Aeronautic and Spatial Industries. It is a priority for Diatex to guarantee the quality of the products it manufactures and delivers.

DIATEX

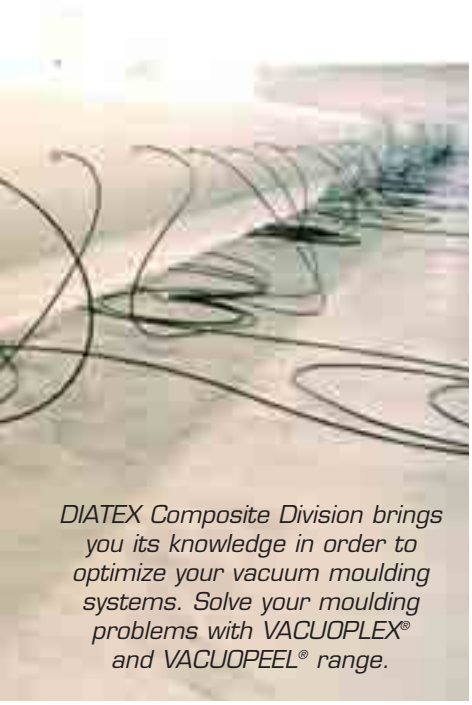
EN 9100 QUALIFAS

ISO 9001 v2000 BV

1. VACUUM MOULDING

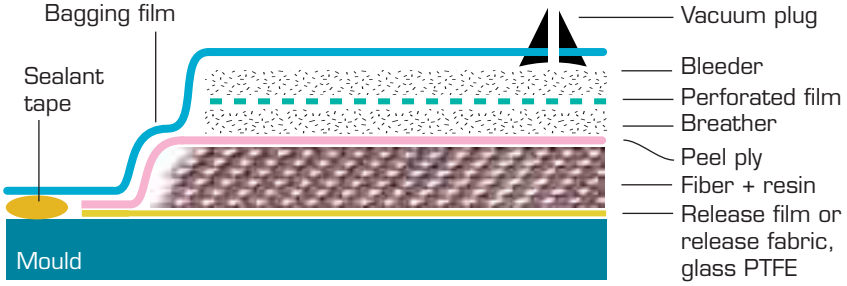
DIATEX has designed a specific range of bagging materials for prepregs and hand lay-up composite materials with vacuum polymerization. The success of DIATEX is based on the manufacture of innovating products, such as Vacuopeel, whose purpose is to facilitate the application of environmental products by users during drape moulding operations. DIATEX also offers all standard environmental products as well as the equipment which is used in this manufacture process in compliance with our quality system (EN 9100 QUALIFAS - ISO 9001 v2000).

WHAT IS VACUUM MOULDING ?

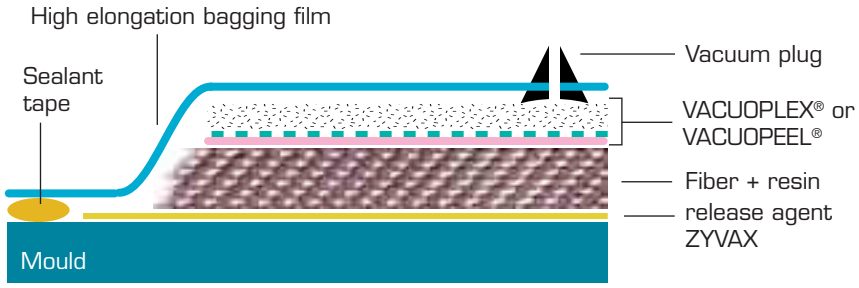


DIATEX Composite Division brings you its knowledge in order to optimize your vacuum moulding systems. Solve your moulding problems with VACUOPLEX® and VACUOPEEL® range.

SPECIFIC SYSTEM



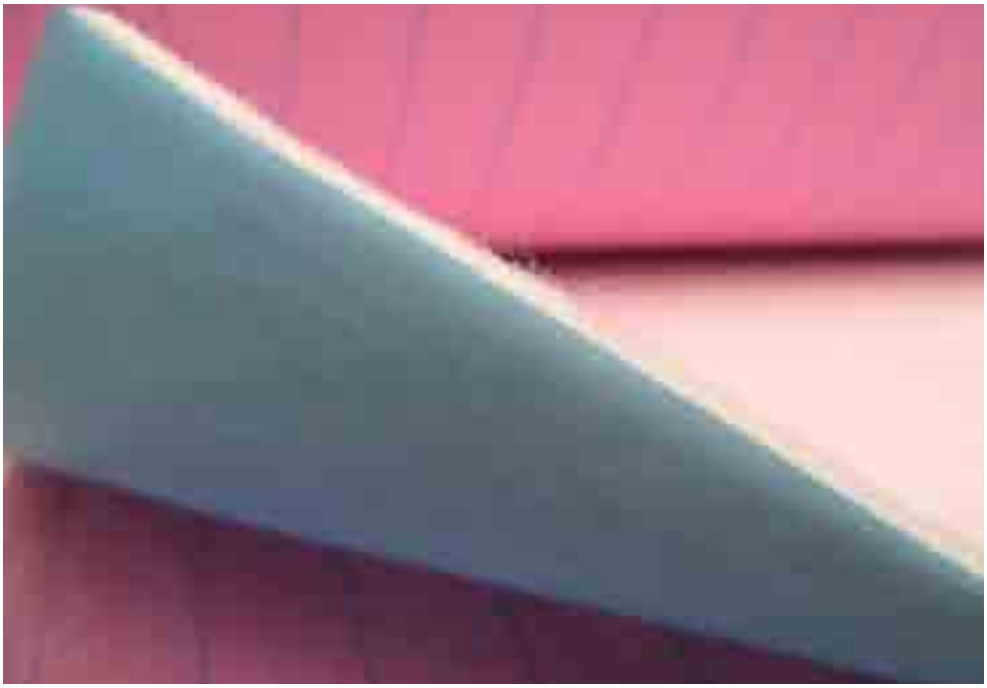
SYSTEM OPTIMISED BY DIATEX



BAGGING MATERIALS

VACUOPLEX®-VACUOPEEL®

Save money, optimise your production !



VACUOPLEX® and VACUOPEEL® allow an exceptional economy of time at each level of the administration :

> Purchase and storage departments : only one product to manage.

> Production department : only one product to prepare and apply.

VACUOPLEX-VACUOPEEL™

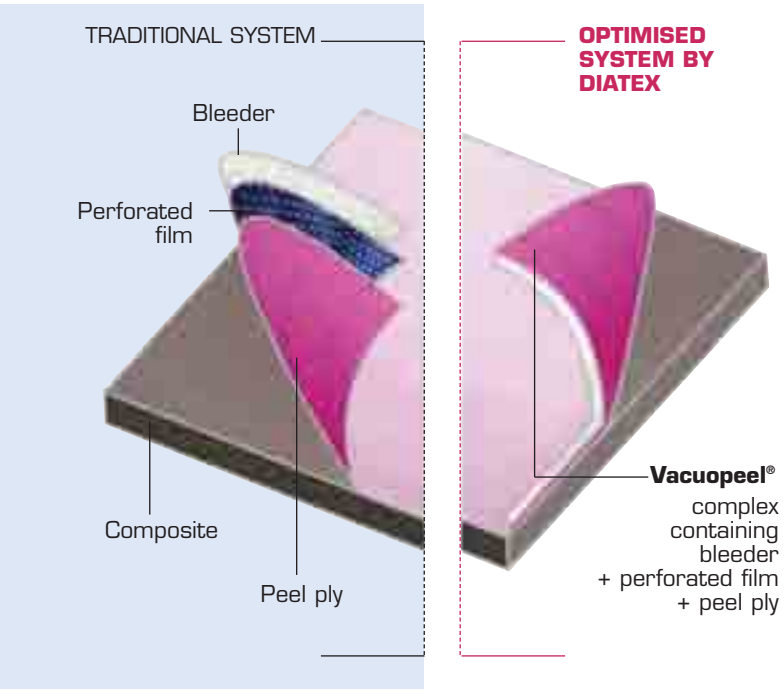
Use VACUOPLEX® on small or big parts in direct contact with the resin (peel ply side in contact with the resin). You can prepare VACUOPLEX® with hot knifes or scissors.
During the curing process, VACUOPLEX™ will degas and remove the excess of resin more efficiently than the traditional method. After the curing process, remove VACUOPLEX® in one time.

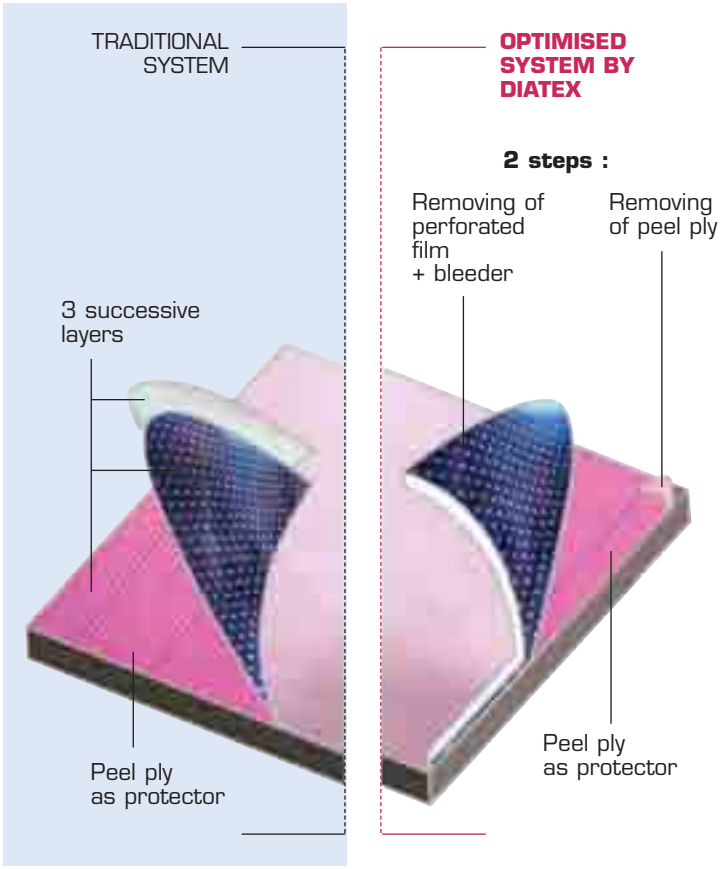
VACUOPEEL™ is an evolution of the VACUOPLEX® : the only difference is that you can
remove the VACUOPEEL® in 2 times after the curing process :

1. you remove the bleeder and the perforated film first.
2. you remove the peel ply.

With VACUOPEEL® you can keep the peel ply on the part in order to protect the laminate against any pollution during its storage.

DIATEX offers different versions of VACUOPEEL® : one for each application :





Designation	Peel ply	Bleeder	Perforated film	Dimensions	Application	Use with resin
VACUOPEEL PA90 PES340	PA90 pink polyamide	PES340 340 gr/m²	P	1,50 x 50 lm	Carbon fiber	E,VE
VACUOPEEL PA80 PES200	PA80 polyamide	PES200 200 gr/m²	P	1,50 x 50 lm	low cost	E,VE
VACUOPEEL PA64 PES200	PA64 polyamide	PES200 200 gr/m²	P	1,50 x 50 lm	Thin surface	E,VE
VACUOPEEL PES85 PES340	PES85 polyester	PES340 340 gr/m²	P	1,50 x 50 lm	Phenolic resin	E, PH, EL
VACUOPLEX PA85 PES340	PA85 polyamide	PES340 340 gr/m²	P	1,50 x 50 lm	Structural bonding	E,VE

E : epoxy VE : vinylester EL : elastomer PH : phenolic

Peel ply

Complete range of peel plies : from 50 to 125 gr/m², dyed or undyed with or without stripes, polyamide or polyester, bands or full Width.
PA85 is the standard quality, taffeta weave, 85 gr/m², undyed with stripes. Those fabrics are used to impart a textured surface to the moulded component to improve adhesion in secondary bonding or painting. We are able to manufacture your own peel ply with specific characteristics. All our peel plies are treated in order to remove any pollutant products (like silicones for example) which could be found on the laminate.

PA80 AD is an adhesive version with only 8gr/m² of glue. Spray is not recommended for the vacuum infusion, as you can't apply it uniformly. Furthermore a large part of the solvent goes in the workshop atmosphere : the vacuum philosophy is to avoid COV emission.

PA80AD

Product	Max. Temp.	weight	Width	Length	Type	Colour	Charasteristics/ Use
PA64	200°C	64 gr/m²	1.57 m	100 m	Polyamide	White/stripes	Thin surface
PA80	200°C	80 gr/m²	1.56 m	100 m	Polyamide	White/stripes	Low cost
PA80AD	200°C	80 gr/m²	1.56 m	100 m	Polyamide	White/red and blue stripes + ADHESIVE	Adhesive
PA85	200°C	85 gr/m²	1.63 m	100/500 m	Polyamide	White/stripes	Standard
PA90	200°C	90 gr/m²	1.56 m	100/500 m	Polyamide	Pink/stripes	carbon
PA95	200°C	104 gr/m²	1.56 m	100/500 m	Polyamide	White/stripes	Bonding
PA95 ST	200°C	104 gr/m²	1.56 m	100/500 m	Polyamide	White/no stripes	Bonding
PA100	200°C	107 gr/m²	1.56 m	100/500 m	Polyamide	Pink/stripes	Carbon
PA100 ST	200°C	107 gr/m²	1.56 m	100/500 m	Polyamide	Pink/sans stripes	Carbon
PA105	200°C	105 gr/m²	1.47 m	100 m	Polyamide	White/stripes	Easy to drape
PES85	210°C	85 gr/m²	1.64 m	100/500 m	Polyester	White	Phenolic
PES120	210°C	120 gr/m²	1.53 m	100/500 m	Polyester	White	Phenolic
DIATEX 1500 EV6	180°C	99 gr/m²	1.74 m	100 m	Polyester HT	White	Structural bonding

N = non perforated - P1 = perforated P1 (large) - P3 = : perforated P3 (small).

Bagging films

High elongation bagging films are recommended for the moulding of elaborate forms.

Advantages : good mechanical and chemical resistance, important elongation rate, non porous...

Product	Max temp	Thickness	Width	Length or surface	Vacuum Elongation	Auto-release	Use with resin*
P0180	180°C	50 & 75 µ	3, 4, 5, 6, 8, 10, 12 m	+/- 800 m²	360 %	yes	E, P, VE, EL
P0180 Tube	180°C	50 µ	0.31, 0.60, 0.80, 1.20 m	200 m	360 %	yes	E, P, VE, EL
PA205	205°C	50 & 75 µ	0.8 to 4.57 m	250 m	Poor	yes	E, P, VE, EL
PA232	232°C	50 & 75 µ	1.55 to 3.10 m	250 m	Poor	yes	E, P, VE, EL
PTFE260	260°C	75µ	1.22 m	82 m	Poor	yes	E, P, VE, PH, EL
Polyimide	400°C	25/50/75 µ	1.27 m	116 / 58 m	Poor	no	E, TP
P0120	135°C	75 µ	4, 6, 8, 10,12 & 15 m	+/- 800 m²	400 %	yes	E, P, VE, PH, EL
P0150 XD 2	145°C	80 µ	1.75 /3.50 m	100 m	1000 %	yes	E, PH, EL
Diabag 80	135°C	80 µ	1.70 /3.40 m	100 m	750 %	no	E, PH, EL
Diabag 80 HT2	170°C	80 µ	1.50 m	100 m	650 %	no	E, PH, EL
Elastibag	80°C	550 µ	1 à xm	x m	800%	no	P, VE, E, PH, EL

* resin code : E = epoxy - P = polyester - VE = vinylester - PH = phenolic - EL = elastomer - TP = thermoplastic.
P0150 XD, Diabag 80 & Diabag HT2 maximum pressure capability : 4 bars/57 PSI.

Perforated Release films

Low temperature application

Belonging to the polyolefin family, these films have a good chemical and thermal resistance for a low cost.

Release films with a large range of resins.
Do not use with autoclave process.

Product	Max temp	Thickness	Width	Length	Elongation	Colour	Perforation	Type
ELA20	125°C	20 µ	1 - 1.45 - 2 m	400 m	300 %	blue	P1	C. Polyethylene
ELA20	125°C	20 µ	1 m	200 m	300 %	blue	P3 / N	C. Polyethylene
PP40	160°C	40 µ	1.60 m	200 m	700 %	red	P1 /P3 / N	C. Polypropylene

N = non perforated - P1 = perforated P1 (large) - P3 = : perforated P3 (small).

High temperature application

Belonging to the fluoropolymer family, these films have a very good chemical and thermal resistance.

Release with any resin.
Recommended for autoclave process.

Product	Max temp	Thickness	Width	Length	Elongation	Colour	Perforation	Type
PMP 200	200°C	30 µ	1,50 m	200 m	330 %	Purple	N / P1 / P3	PMP
ETFE 230	230°C	13 µ	1,53 m	153 m	300 %	blue	N / P1 / P3	ETFE
ETFE 230	230°C	20 µ	1,53 m	153 m	300 %	blue	N / P1 / P3	ETFE
A5000	260°C	25/50 µ	1,22 m	183 m	300 %	Red	N / P1 / P3	FEP
PTFE260	260°C	25/50 µ	1,22 m	154 /77 m	550 %	Brown	N / P3	PTFE

Bleeders and breathers

Non woven breather and bleeder felts made of polyester fibers. These are recommended for moulding of elaborate forms.

Contact us for specific non woven products : weight, size, packaging...

Product	Max. Temp.	weight	Width	Length	Elongation	Pressure	Type
PES 150	205°C	150 gr/m²	1,55 to 3,50 m	100 m	Very good	3 bars	polyester
PES 200	205°C	200 gr/m²	1,55 to 3,50 m	100 m	Very good	4 bars	polyester
PES 340	205°C	340 gr/m²	1,55 to 3,50 m	50/100 m	Good	7 bars	polyester

Porous/non porous PTFE coated glass fabrics, PTFE coated glass scrim

Porous or non porous PTFE coated glass fabrics, adhesive (silicone and acrylic) or non adhesive, bands or full Width Special PTFE products (seal, bands, treatment...). Non porous adhesive version is used as a release sheet for permanent removal of the components.

Porous version is used as a bleeder.
More than 50 references are available : please contact us.

Designation	Max. Temp.	Width	Length	weight	Porosity	Thickness	% PTFE	Finish	Adhesive option
V1PT76	260°C	1/1.53 m	50 m	165 gr/m²	Non Porous	76 µ	70	Glazed	Yes
V7PT80	260°C	1/1.53 m	30/50 m	140 gr/m²	Non Porous	80 µ	67	Standard	Yes
V7PT125	260°C	1/1.53 m	30/50 m	250 gr/m²	Non Porous	125 µ	65	Standard	Yes
V7PT140	260°C	1/1.53 m	30/50 m	290 gr/m²	Non Porous	140 µ	65	Standard	Yes
V7PT250	260°C	1/1.53 m	50 m	490 gr/m²	Non Porous	250 µ	59	Standard	Yes
V4PT76.1	260°C	1/1.53 m	50 m	70 gr/m²	1-4	62 µ	29	Standard	no
V4PT76.2	260°C	1/1.53 m	50 m	65 gr/m²	6-12	60 µ	23	Standard	no
V4PT76.3	260°C	1/1.53 m	30/50 m	65 gr/m²	20-40	60 µ	20	Standard	no
G1X1 PTFE	260°C	1/1.53 m	30/50 m	530 gr/m²	Stitch 1x1mm	640 µ	65	Scrim	no
G4X4 PTFE	260°C	1/1.53 m	30/50 m	460 gr/m²	Stitch 4x4mm	900 µ	65	Scrim	no

SP2F85 : two-side siliconized glassine paper

SP2F85 providing low release forces on both sides. SP2F85 is used as release sheet, for flat surface.

Designation	Temp. Max.	Thickness	Width	Length	Weight	Elongation	Release force
SP2F85	170° C	80 µ	1600 mm	200	92 gr/m²	0%	4cN/25 mm

Thermoshrinkable fabrics and films

Thermoshrinkable peel plies and films in bands or full width. Hot drying of the laminate.

Designation	Max. Temp.	Width	Length	Porosity m³/m²/min	shrinkage at 150°C	beginning of shrinkage	Charact.	Pressure max. (Mpa)
DIATEX 1000	200°C	2.5 to 155 cm	100 m	21	7.5 %	100°C	Fabric PES 90µ, 50 g/m²	10
DIATEX 1500	200°C	2.5 to 195 cm	100 m	30	14%	100°C	Fabric PES 160µ, 85 g/m²	20
Filament 160	160°C	2.5/5/ 7.5/ 10 cm	950 m	0	5%	80°C	Film PP 40µ, 36 g/m²	5

Sealant tapes

Sealant tapes compatible with most bagging films.

Ideal for use on any type of tools.

Sealant tapes are used to form a seal between the vacuum bagging film and the moulding tool surface.

Designation	Max. Temp.	Dimensions	Roll/box	Colour	Use
LSM6000	90°C	0.3 cm x 1,3 cm x 13 m	22	Brown	Low temp.
LSM1310	110°C	0.25 cm x 1,2 cm x 15 m	22	Black	Low temp. hyper tack.
SM5127	205°C	0.32 cm x 1,27 cm x 7.62 m	40	Black	Standard
SM5126	232°C	32 cm x 1.27 cm x 9.15 m	32	Black	High temp.
SM5160	399°C	0.32 cm x 1,27 cm x 7.62 m	24	Brown	Thermoplastic

Please consult us for other high temperature sealant tapes above 400° C.

Flash tapes

Joining, masking or protection tapes.

Good mechanical and chemical resistance.

Designation	Max. Temp.	Width	Length	Adhesive support	Colour	Remark
K0107	180° C	25 mm	66 m	Polyester / acrylic	Yellow	High temperature
K7666	180° C	25 / 50 mm	66 m	Polyester / Silicone	Blue	Standard use
PTFE-2	260°C	25,4 / 51 mm	33 m	PTFE / Silicone	Grey	High deformability
K7338	300° C	25 mm	33 m	Polyimide / Silicone	Orange	High temperature

ACCESSORIES

Vacuometer + silicon cup
QAC 001

Vacuometer 1/4" M
QAC 002

Vacuum plug
QAC 004

Vacuum regulator
3/8" M
QAC 005

Quick plug
10 mm no return
QAC 006

Quick plug on
3/8" F no return
QAC 061

Connector M
1/4" no return
QAC 007

Connector M
1/2" no return
QAC 071

Connector F
1/4" no return
QAC 008

Adapter
1/4" M – 3/8" M
QAC 009

Adapter
1/4" – 1/4"
QAC 090

Adapter
1/2" F – 3/4" M
QAC 091

Adapter
1/4" F – 3/8" F
QAC 010

Adapter
1/4" M – 3/8" F
QAC 011

Adapter
1/4" F – 3/8" M
QAC 012

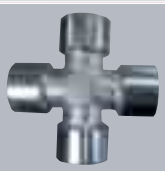
Y Double Plug
1/4" F
QAC 013

T Double Plug
1/4" F
QAC 014

X Triple Plug
1/4" F
QAC 015

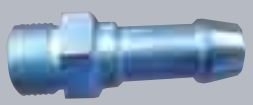
Y Double Plug
3/8" F
QAC 016

T Double Plug
3/8" F
QAC 017



X Triple plug
3/8" F
QAC 018

Pipe 10 mm
1/4" M
QAC 019



Pipe 10 mm
3/8" M
QAC 020

Silicone pipe
Ø : 10/23 mm - 220°C
QAC 021

Cap 1/4" M
6 Sided
QAC 023

Cap 1/4" M
6 Sided
QAC 024

Reinforced silicone pipe
Ø : 10 mm - 10 bars - 200°C
QAC 026

2. VACUUM INFUSION

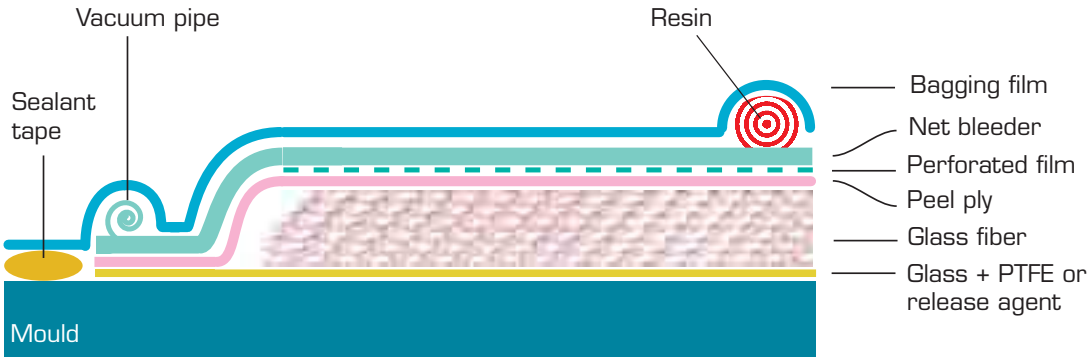
DIATEX has designed a range of bagging materials for vacuum infusion, a transformation process which is often employed in boat industry and wind turbine sector. Positioned at the forefront of technology, Diatex is constantly developing new solutions for increasing the productivity of market operators.
The INFUPLEX product is the perfect answer as it consists of a bleeder and a separated film.
DIATEX provides a whole range of ecological products and the vacuum equipment required for the infusion process in compliance with our quality service (EN 9100 QUALIFAS - ISO 9001 v 2000).


PHOTO : JEAN-YVES POIRIER

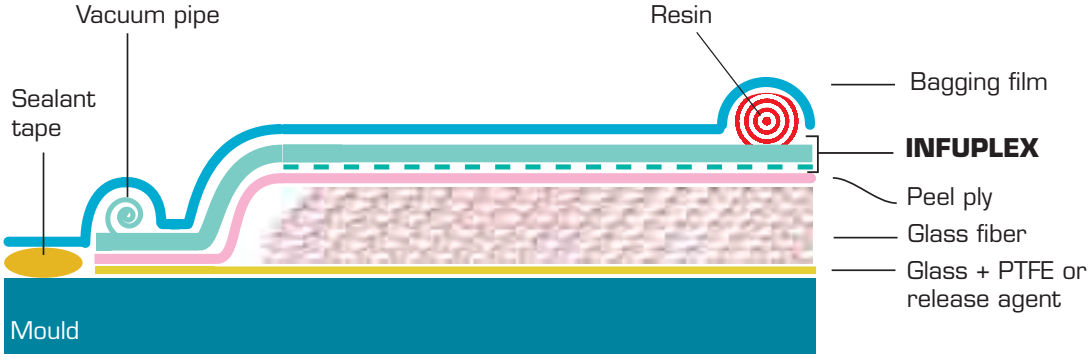
WHAT IS VACUUM INFUSION ?

Optimize your vacuum infusion systems. Solve your moulding problems with our calibrated net bleeder and DIANET

CLASSIC SYSTEM



SYSTEM RECOMMENDED BY DIATEX

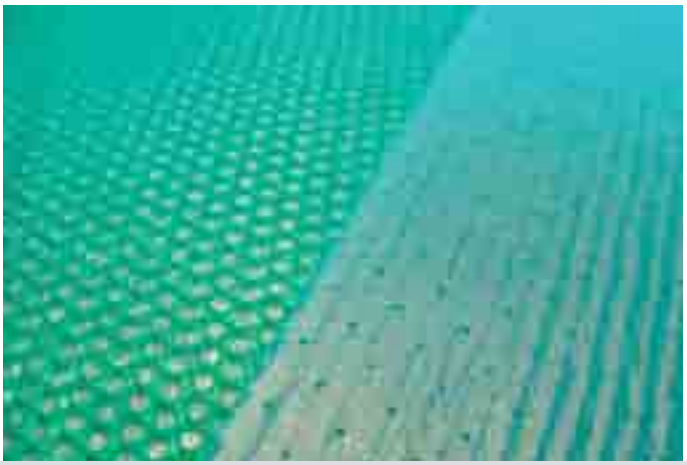


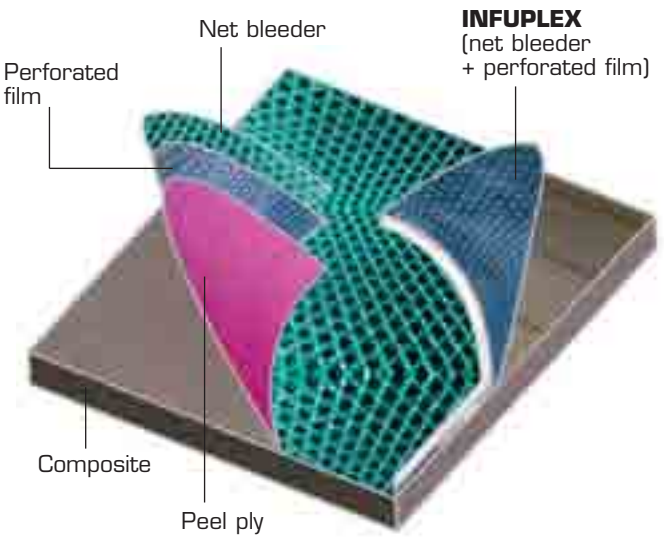
BAGGING MATERIALS

INFUPLEX

A multilayer system for vacuum infusion

INFUPLEX is a multilayer system used in manufacturing processes for vacuum infusion of composite materials. Process which involves using several vacuum consumables having an effect on the fabrication and quality. Some of these are used in successive layers, such as peel ply, perforated film, net bleeder, and vacuum-bagging film. Standard procedures involve applying each one separately (e.g., peel ply, perforated film, net bleeder), which can be difficult, especially when moulding is done against a vertical mould (spray glue is required). This type of procedure can result in overlapping on very large parts, or even in the omission of a layer. Overlapping can cause deformation on thin parts, creating weak areas, or it can affect the porosity of subsequent layers. Omissions can have dramatic consequences on the moulded part's final properties. The solution to these problems was created by Diatex in 2007 in the form of INFUPLEX a multilayer system to be laid down on one side of the fiber or on top of the peel ply. The system combines the two above mentioned vacuum consumables into a two-layer unit : the perforated film, permeable to resin and gases; and the net bleeder on top. This easy-to-use solution eliminated the risk of overlap or of omitted layer.
INFUPLEX is also a very simple solution to apply bagging materials. Save time and optimise the production with INFUPLEX.
DIATEX offers different versions of INFUPLEX :
an INFUPLEX for each application :





Reference	Net Bleeder	Perforated film	Resin Flow Speed	Use with Resin
INFUPLEX ISONET	ISONET – 115 gr/m²	ELA2OP1	average	E,VE,P
INFUPLEX OM7O	OM7O - 180 gr/m²	ELA2OP1	speed	E,VE,P
INFUPLEX DIANET135	DIANET135 - 135gr/m²	ELA2OP1	high speed	E,VE,P
INFUPLEX DRAIKO	DRAIKO - 105 gr/m²	ELA2OPO	very high speed	E,VE,P

E : epoxy VE : vinylester P : Polyester

Bagging films

P0120 is the new generation extra large extruded advanced copolymer. It has exceptional conformable characteristics, particularly when applied to awkward shapes with deep recesses or undercuts.
It allows the moulding of complex forms. It has release properties and can be used in direct contact to the resin.
This film includes 3 coats :
2 auto-release copolymer coats and copolyamide coat in the middle. Maximum width 15m !

This is a styrene resistant and non porous.i.e. film could be used for both vacuum moulding or vacuum infusion technologies with epoxy or polyester. PA205 and PA232 are the standard polyamide bagging films.

Designation	Max.Temp.	Thickness	Width	Length or surface	Vacuum elongation	Auto-release	Use with resin*
PA205	205°C	50 & 75 µ	0.8 to 4.57 m	250 m	Poor	YES	E, P, VE, EL
PA232	232°C	50 & 75 µ	1.55 to 3.10 m	250 m	Poor	YES	E, P, VE, EL
P0120	135°C	75 µ	2, 4, 6, 8, 10, 12 & 15 m	+/- 800m²	400 %	YES	E, P, VE, PH, EL
P0180	180°C	50 & 75 µ	3, 4, 5, 6, 8, 10, 12 m	+/- 800m²	360 %	YES	E, P, VE, EL
P0180 Tube	180°C	50 µ	0.31 - 0.60 - 0.80 - 1.20 m	200 m	360 %	YES	E, P, VE, EL

*** resin code :** E = epoxy - P = polyester - VE = vinylester - PH = phenolic - EL = elastomer - TP = thermoplastic.

Perforated films

Belonging to the polyolefin or fluoropolymer family, this perforated film have a good chemical and thermal resistance for a low cost.

Release films compatible with a large range of resins.
Do not use with autoclave process.
For specific application we can supply this film without perforations.

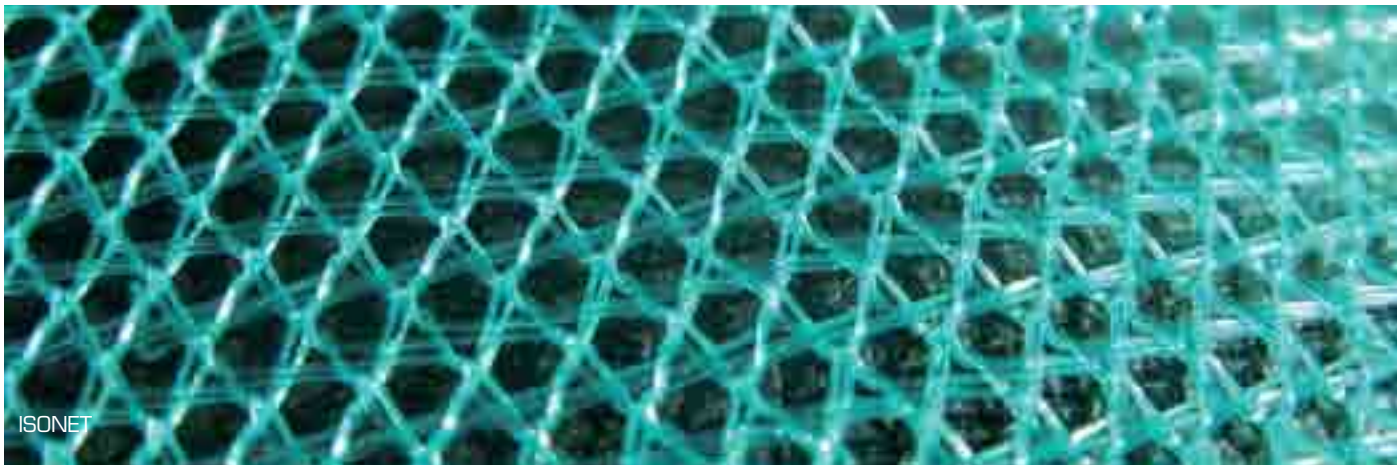
Product	Max. Temp.	Thickness	Width	Length	Elongation	Colour	Perforation	Type
ELA20	125°C	25 µ	1 and 1.45 m	400 m	300 %	blue	P1	C. Polyethylene
PP 40	160°C	40 µ	1.60 m	200 m	700 %	red	P1	C. Polypropylene
PMP 200	200°C	30 µ	1.50 m	200 m	330 %	purple	P1	PMP

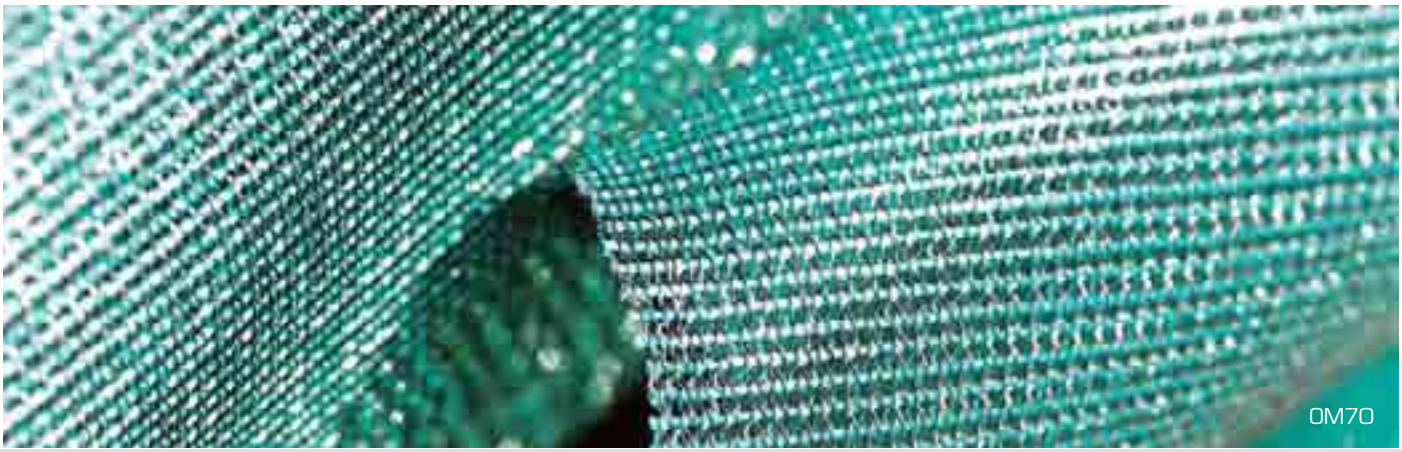
N = non perforated - P1 = perforated P1 (large) - P3 = : perforated P3 (small).

Net bleeders

Loop knitted net bleeders made of polyethylene fibers. Our new ISONET alows a perfect resin flow in all directions.

These nets are recommended for the polyester or epoxy infusion with vacuum process. Porosity of those net bleeders is calibrated. We can cut the rolls in different widths.


ISONET


OM70

Designation	Max Temp.	Thickness	Width	Length	weight	Colour	Type	Resin flow speed
ISONET	90°C	900 µ	2/4 m	100/50 ml	115 gr/m²	Blue	CO PE	average
DRAIKO	90° C	1066 µ	2/4 m	100/50 ml	105 g/m²	Black	PE	high speed
OM 70	90° C	1117 µ	2/4 m	100/50 ml	180 g/m²	Black/green	PE	speed
DIANET 135	90° C	1190 µ	2/4 m	100/50 ml	135 g/m²	White	CO PE	high speed
OM 70 PA	200°C	1100 µ	1,45 m	100 ml	220 g/m²	White	NYLON	speed
DIANET PA	200°C	1050 µ	2 m	100 ml	125 g/m²	White	NYLON	high speed

Peel ply

Complete range of peel plies : from 50 to 125 gr/m², dyed or undyed with stripes, polyamide or polyester, bands or full Width PA85 is the standard quality, taffeta weave, 85 gr/m², undyed with stripes. Those fabrics are used to impart a textured surface to the moulded component to improve adhesion in secondary bonding or painting. We are able to manufacture your own peel ply with specific characteristics.

All our peel plies are treated in order to remove any pollutant products (like silicones for example) which could be found on the laminate. We control porosity of our peel plies in order to guarantee the repetitiveness of the infusion process.

PA80 AD is an adhesive version with only 8gr/m² of glue.
Spray is not recommended for the vacuum infusion, because you can't apply it uniformly. Furthermore a large part of the solvent goes in the workshop atmosphere : the vacuum philosophy is to avoid COV emission.

Product	Max. Temp.	weight	Width	Length	Weave	Auto release	Type	Colour
PA64	200°C	64 gr/m²	1.57 m	100 m	Taffetas	YES	Polyamide	White
PA80	200°C	80 gr/m²	1.56 m	100 m	Taffetas	YES	Polyamide	White/stripes
PA80AD	200°C	80 gr/m²	1.56 m	100 m	Taffetas	YES	Polyamide	White/red and blue stripes + ADHESIF
PA85	200°C	85 gr/m²	1.60 m	100/500 m	Taffetas	YES	Polyamide	White/stripes
PA90	200°C	90 gr/m²	1.56 m	100/500 m	Taffetas	YES	Polyamide	Pink/stripes
PA95	200°C	104 gr/m²	1.56 m	100/500 m	Taffetas	YES	Polyamide	White/stripes
PA95 ST	200°C	104 gr/m²	1.56 m	100/500 m	Taffetas	YES	Polyamide	White/no stripes
PA100	200°C	107 gr/m²	1.56 m	100/500 m	Taffetas	YES	Polyamide	Pink/stripes
PA100 ST	200°C	107 gr/m²	1.56 m	100/500 m	Taffetas	YES	Polyamide	Pink/no stripes
PA105	200°C	105 gr/m²	1.47 m	100 m	Serge 2.2	YES	Polyamide	White/stripes
PES85	210°C	85 gr/m²	1.64 m	100 / 500 m	Taffetas	YES	Polyester	White
PES120	210°C	120 gr/m²	1.53 m	100 / 500 m	Taffetas	YES	Polyester	White

Porous/non porous PTFE coated glass fabrics, PTFE coated glass scrim

Porous or non porous PTFE coated glass fabrics, adhesive (silicone and acrylic) or non adhesive, bands or full Width Special PTFE products (seal, bands, treatment...).
Non porous adhesive version is used as a release sheet for permanent removal of the components.

Porous version is used as a bleeder.
More than 50 references are available : please contact us.

Product	Max. Temp.	Width	Length	weight	Porosity	Thickness	% PTFE	Finish	Adhesive option
V1PT76	260°C	1/1.53 m	50 m	165 gr/m²	Non Porous	76 µ	70	Glazed	Yes
V7PT80	260°C	1/1.53 m	30/50 m	140 gr/m²	NonPorous	80 µ	67	Standard	Yes
V7PT125	260°C	1/1.53 m	30/50 m	250 gr/m²	Non Porous	125 µ	65	Standard	Yes
V7PT140	260°C	1/1.53 m	30/50 m	290 gr/m²	NonPorous	140 µ	65	Standard	Yes
V7PT250	260°C	1/1.53 m	50 m	490 gr/m²	Non Porous	250 µ	59	Standard	Yes
V4PT76.1	260°C	1/1.53 m	50 m	70 gr/m²	1-4	62 µ	29	Standard	no
V4PT76.2	260°C	1/1.53 m	50 m	65 gr/m²	6-12	60 µ	23	Standard	no
V4PT76.3	260°C	1/1.53 m	30/50 m	65 gr/m²	20-40	60 µ	20	Standard	no
G1X1 PTFE	260°C	1/1.53 m	30/50 m	530 gr/m²	Stitch 1 x 1mm	640µ	65	Scrim	no
G4X4 PTFE	260°C	1/1.53 m	30/50 m	460 gr/m²	Stitch 4 x 4mm	900µ	65	Scrim	no

Sealant tapes

Sealant tapes compatible with most bagging films.Ideal for use on all type of tools. Sealant tapes are used to from a seal between the vacuum bagging film and the moulding tool surface.
Can be used to bond 2 bagging films.

Designation	Max. Temp.	Dimensions	Roll / box	Colour	Use
LSM6000	90° C	0,3 cm x 1,3 cm x 13 m	22	Brown	Low temp.
LSM1310	110° C	0,25 cm x 1,2 cm x 15 m	22	Black	Low temp. hyper tack.
SM5127	205° C	0,32 cm x 1,27 cm x 7,62 m	40	Black	Standard
SM5126	232° C	0,32 cm x 1,27 cm x 9,15 m	32	Black	High temp.
SM5160	399° C	0,32 cm x 1,27 cm x 7.62 m	24	Brown	Thermoplastic

Please consult us for other high temperature sealant tape above 400°C.

Adhesive Glass Screen Tape

GLAS50AD is an adhesive glass screen made to set fibers, bagging materials and the core materials during vacuum infusion process or vacuum moulding process. This double side adhesive screen can be used in direct contact with the fibber. GLAS50AD doesn't modify the resin flow.
100% non hazardous, solvent free, this adhesive tape is the best solution to set safely the fibbers. With GLAS50AD you know exactly the quantity of glue used per m^2, furthermore you can control this quantity which is not the case with spray. GLAS50AD is made of non hazardous glue 100% soluble with resins. After infusion, the glass screen works like a reinforcement.

GLAS50AD was made to replace hazardous aerosols or glue spray guns.

Designation	Temp.Max.	Thickness	Width	Length	Weight	Type	Weave
GLASS50AD	180° C	450 µ	50 mm	50 m	135 g/m^2	Glass + AD	Glass
GLASS25AD	180° C	450 µ	25 mm	50 m	135 g/m^2	Glass + AD	Glass

INFUTAC : High Strength Moulding Spray Adhesive

INFUTAC is an infusion adhesive specifically designed to hold reinforcing fibers in place.

- Used for Infusion, vacuum moulding or RTM
- Provides Superior Holding During Forming Process
- Allows Resin to Obtain Maximum Tensile Sheer Srength
- Low Shrinkage in Curing
- Fine Mist Adhesive with green tracer for accuracy in application
- Fast Tack
- HAPS Free
- Packaging : Aerosol 610 ml - 425 g

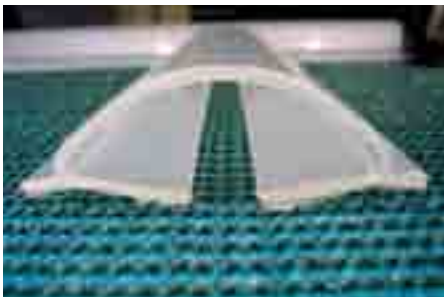
ACCESSORIES AND CONSUMABLE PIPES

Combine with our vacuum plants or vacuum pumps; manufacture your own infusion system thanks to our new range of accessories. We developed a new infusion system : INFUSION BOX. With this new connector you avoid silicone accessories which are very expensive and not very reliable after few uses.

Infusion box System : resin and vacuum profile and connector

Infusion BOX : PE foam input Ø = 25 mm
Part : ACIBOX25PE

Resin & vacuum profile : PP Profile
Part : ACIP50



Standard consumable connectors

T	
Part. : ACIT 10PP	Ø : 10 mm
Part. : ACIT 16PP	Ø : 16 mm
Part. : ACIT 20PP	Ø : 20 mm

L	
Part. : ACIL 10PP	Ø : 10 mm
Part. : ACIL 16PP	Ø : 16 mm
Part. : ACIL 20PP	Ø : 20 mm

Standard consumable connectors

Reduced T union	
Part. : ACITR 16-10PP	Ø : 16-10 mm
Part. : ACITR 20-16PP	Ø : 20-16 mm
Part. : ACITR 20-10PP	Ø : 20-10 mm

I combination male thread connection 3/4	
Part. : ACIIF 10-3/4PP	Ø : 10 mm
Part. : ACIIF 16-3/4PP	Ø : 16 mm
Part. : ACIIF 20-3/4PP	Ø : 20 mm

Connection I	
Part. : ACII 10PP	Ø : 10 mm
Part. : ACII 16PP	Ø : 16 mm
Part. : ACII 20PP	Ø : 20 mm

Reduced I	
Part. : ACIIR 16-10PP	Ø : 10-16 mm
Part. : ACIIR 20-16PP	Ø : 20-16 mm

L combination male thread 3/4 for infusion box	
Part. : ACILF 20-3/4PP	Ø : 20 mm
Part. : ACILF 25-3/4PP	Ø : 25 mm

Correspondence with connectors and inside pipes diameters d (mm) :

ACI Ø10 = pipe d10 ACI Ø16 = pipe d15
ACI Ø20 = pipe d19 ACI Ø25 = pipe d23

Consumable Valves

Economic and very useful, those valves avoid the clamps which are not very effective. Airtight with vacuum and resins.

Other diameters are available : please contact us.

Valves with connectors	
Ref. : ACIV 10PP	Ø : 10 mm
Ref. : ACIV 16PP	Ø : 16 mm
Ref. : ACIV 20PP	Ø : 20 mm

Translucent spiral tubing

PE spiral tubing	Inside Ø	Outside Ø	Length
ACIGS 09-12	9 mm	12 mm	25 m
ACIGS 12-14	12 mm	14.6 mm	100 m
ACIGS 14-17	14 mm	17 mm	25 m
ACIGS 19-22	19 mm	22 mm	25 m

These spiral tubings can be used as resin distributor or as vacuum line. For standard application use the 12-14.6 : very economic.

Diadrain : Resin or vacuum channel

Designation	Temp.Max.	Thickness	Width	Length	Weight	Free flowing space
DIADRAIN050	80° C	4 mm	50 mm	100 m	25 g/m²	> 75 %
DIADRAIN100	80° C	4 mm	100 mm	100 m	50 g/m²	> 75 %

Translucent PE pipes

This pipe can be used as resin distributor or as vacuum line.

Roll of 100ml

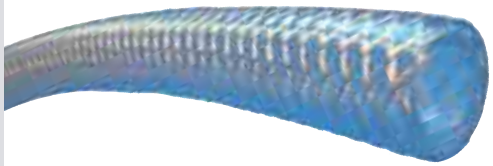
PE pipe	Inside Ø	Outside Ø
QAC 97	8 mm	10 mm
QAC 98	10 mm	12 mm

Reinforced PVC pipe

These PVC pipes can be used both with resin and vacuum.

Pipe	Inside Ø	Outside Ø
ACIGR 12-19	12 mm	19 mm
ACIGR 15-23	15 mm	23 mm
ACIGR 19-27	19 mm	27 mm

Roll of 25m



Expandable braided sleeving

This expandable braided sleeving can be mounted on a spring pipe.

Expandable braided sleeving	Ø Min	Ø Max
ACIGE15	15	27

Roll of 300m

3. RTM & RTM Light

Created in 2002, Composite Integration Ltd has 28 years of experience in the field of the RTM injection. Composite Integration Ltd has used the best techniques to develop a new generation of RTM machines and equipments. The RTM CIJECT range of machines combines technology and innovation in addition to a proven and innovative design : Composite Integration Ltd proposes the safest and most ergonomic machines on the market.

During the past five years, Composite Integration Ltd has extended its range of products as well as its offer: machines, fittings, tools design... The co-directors of Composite Integration Ltd have worked in close collaboration with DIATEX since 1992 and have chosen this company to exclusively represent their range on the French market and to ensure equipment maintenance.

Overlay

This overlay is a non woven fabric.
It improves the aspect of laminates when applied on direct contact with the mould or on a gel coat.

This non woven overlay has a high porosity and elongation which improves good air and resin flow.

Items	Colour	Weight	Weave	Width	Length	Elongation
ACR 65	White	65 gr/m²	Non woven	From 1,50 to 3.5 m Standard 1.5m	200 ml	110 %

In-Mould Air Ejector

The valve is designed to provide maximum air-flow with the minimum of interference with mould surface. The 17mm flush end surface is considerably smaller than most other currently available units. The high opening force created by the larger integral piston at the rear of the valve ensures reliable and powerful operation. The valve is machined from steel and is treated to provide a hardened and corrosion resistant surface. The valve terminates in a standard metric thread and so can be threaded into the mould structure and is easily removable. A threaded metal insert is included for bonding into composite moulds. The closing force is provided by an internal spring but air pressure can be applied if working against high in-mould pressures. Both air connections are positioned in the end-cap surface to enable easy access once installed. The valve is operated remotely by a pneumatic push-button switch connected via 6mm pipes and fittings (Part No. XE-0021). A single push-button may be used to operate multiple ejectors.

ACCESSORIES

INJECTORS : 3 OPTIONS

10 mm

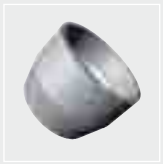
XM-0404

+

10 mm

XM-0305

+



MM-0014

VALVE

XE-0015

+

MM-1501

VENTS : 3 OPTIONS

0,5 L

XE-0400

2 L

XE-0211

+

MM-0014

8 L

XE-0500

RESIN FLOW PROFILE

RD20-4530

LOCATION CONE

MM-0020

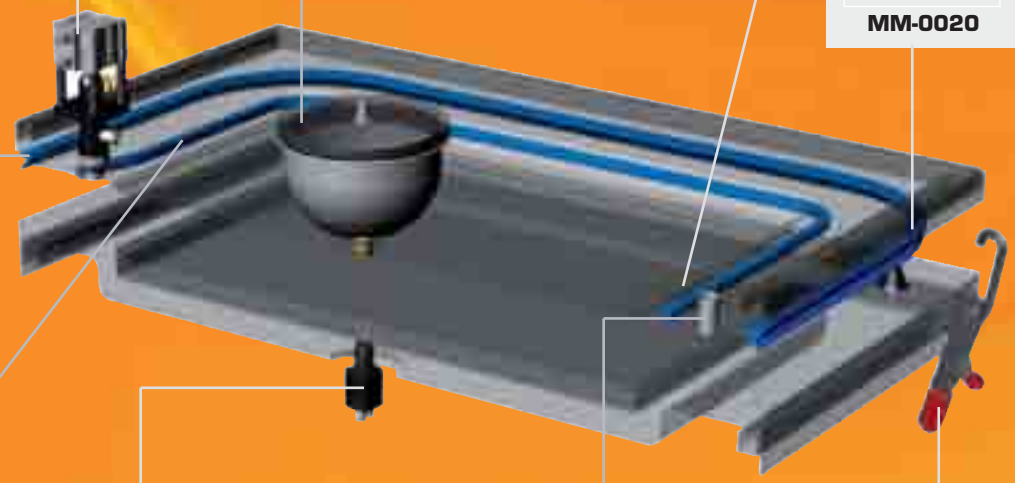
VACUUM SEALS

RD476-003

RD20-5895

CALIBRATION SEALS

RD20-3391



RESIN SEALS : 2 OPTIONS

CALIBRATION SEALS

RD-001-002

RD20-3340

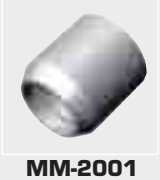
SILICONE SEALS

RD420-0092

RD421-001

AIR EJECTOR

20 mm



MM-2001

+

XE-0020

VACUUM CONNEXION

20 mm

QAC94F

+

QAC93

10 mm

+

XM-0404

CLAMPS

SA-0351

or

SA-0331

4. VACUUM EQUIPMENT

DIATEX provides all vacuum equipment. In addition to developing a specific range of products for the industry of composite materials in close collaboration with its MIL'S partner, DIATEX also offers a complete range of pumps with lubricated paddles and vacuum plants with different vacuum levels adapted to vacuum applications. DIATEX also proposes measuring devices for monitoring pressure, temperature and leakage.

VACUUM PUMPS

The automatic vacuum pumps, are perfectly adapted for to composite industry : vacuum moulding, vacuum infusion and RTM or RTM LIGHT.

> Lubricated rotary vanes vacuum pumps
> Standardization of spare parts for an easier maintenance
> Possibility to have a personalized covering plate
> Continuous running from atmospheric pressure to end vacuum
> Air cooling
> Standard motor coupling
> IP 55 Motor - F class

Type	Nominal capacity/pump (m^3-h) 50 Hz	Power/pump pump (kW) 50 Hz	Receiver capacity (L)	Weight (kg)
PS5	0,08	0,17	100	9,00
PS7	0,1	0,25	100	9,00
Rotomil's C8	8,00	0,25	3,00	10,00
Evisa E17	17,00	0,55	0,50	34,00
Evisa E25	30,00	0,75	0,50	35,00
Evisa E40	47,00	1,10	0,50	45,00
Evisa E65*	65,00	1,50	0,50	70,00
Evisa E100*	96,00	2,20	0,50	80,00
Evisa E150	150,00	3,00	0,10	102,00
Evisa E200*	190,00	4,00	0,10	115,00
Evisa E300*	288,00	5,00	0,10	190,00

***ATEX version available for explosible atmospheres regarding to INERIS Certificate (standard temperature security).**

VACUUM PLANTS INDUSVAC

Vacuum moulding and vacuum infusion.

The vacuum tank allows a better optimisation of the vacuum level and an economy of the vacuum pump.

> Compact and independent vacuum plant
> Lubricated rotary vanes vacuum pump
> Regulation by mechanical vacuum switch
> Starting board and integrated hour meter
> Different available regulation modes

Consult us for vacuum plants with 2 or 3 pumps.

wType	Nominal capacity/pump (m^3-h) 50 Hz	Power/pump pump (kW) 50 Hz	Receiver capacity (L)	Weight (kg)
Indusvac 1 E25	30,00	0,75	300	85,00
Indusvac 1 E40	47,00	1,10	300	110,00
Indusvac 1 E65*	65,00	1,50	300	145,00
Indusvac 1 E100*	96,00	2,20	300	210,00
Indusvac 1 E150	150,00	3,00	500	260,00
Indusvac 1 E200*	190,00	4,00	500	280,00
Indusvac 1 E300*	288,00	5,50	500	370,00

***ATEX version available for explosible atmospheres regarding to INERIS Certificate (standard temperature security).**

VACUUM PLANT COMPOSITVAC

RTM & RTM LIGHT

These vacuum plants delivered 2 different vacuum levels with only one vacuum pump :
> One vacuum to close the mould.
> One vacuum to assist the injection
The vacuum tank allows a better optimisation of the vacuum level and a economy of the vacuum pump. The 2 vacuum levels are adjustable in function of the resin systems used and of the applications. The vacuum plants COMPOSITVAC are design to be used with most of RTM machines.

> Mobile or static vacuum plant with 2 vacuum levels
> Lubricated rotary vanes vacuum pump
> Running with vacuum switch for maxi vacuum and with vacuum operated solenoid valve for regulated vacuum
> Activated carbon filter for odors and aggressive vapour removal
> Several outlets for maxi and regulated vacuum

Type	Nominal capacity/pump (m^3-h) 50 Hz	Power/pump pump (kW) 50 Hz	Receiver capacity (L)	Weight (kg)
Mobil Compositvac E25	30,00	0,75	70	120,00
Mobil Compositvac E40	47,00	1,10	250	245,00
Mobil Compositvac E65*	65,00	1,50	250	265,00
Static Compositvac E 65*	65,00	1,50	580	260,00
Static Compositvac E100*	96,00	2,20	580	280,00

***ATEX version available for explosible atmospheres regarding to INERIS Certificate (standard temperature security).**

CONTROL OF LEAKS LOCATION

ULTRASONIC LEAK DETECTOR

Ultrasonic detection...
As a gas or liquid passes through a small restrictive opening, ultrasonic noise is created. While this noise is imperceptible to the ear it is very easily located by the Leak Detector using the ultrasonic probe.

The ultrasound is indicated by an LED-array and an audible tone through the earphone headset. As the instrument is moved closer to the ultrasonic source more LED's will light up.
Simultaneously, the frequency of the tone rises.
The ultrasonic leak detector is particularly adapted to the control of the flexible airtightness during the vacuum processes like vacuum infusion, vacuum moulding and RTM or RTM LIGHT

IN-MOULD PRESSURE SENSOR (IMPS)

Ceramic sensor and readout unit

A pressure monitoring system designed for use with vacuum or pressure composite injection/infusion processes.

Pressure Sensors

Robust ceramic sensor. Can be mounted in any position or orientation. Resin can be cured directly against sensor face. Includes 10 m cable and connector for attachment to either a readout/control unit or a CIJECT injection machine.

Control unit with twin LED display. Upper display shows current pressure reading in bar. Lower display is set by the operator in bar. If the set pressure is exceeded, an electro-pneumatic valve is actuated. Valve has N/O (normally open) and N/C (normally closed) ports.

INFRARED THERMOMETER GUN

With this infrared thermometer gun, you just have to aim the laser guide at the target and shoot to acquire temperature readings of any surface in less than a second. A laser sighting beam enables precise aiming at the target surface, while a data-hold function freezes the display reading.

This infrared thermometer gun is a very convenient solution to check the resin temperature or the RTM mould temperature.

The unit also features backlighting at the touch of a button, a low-battery indicator, automatic maximum recording, selectable °F/°C button.

DIATEX

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AERONAUTICS

AGROTEXTILE

COMPOSITE

TECHNICAL USAGE TEXTILES

EN 9100
QUALIFAS

ISO 9001
v2000 BV