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Tube clip Squeezee® and Squeezer®

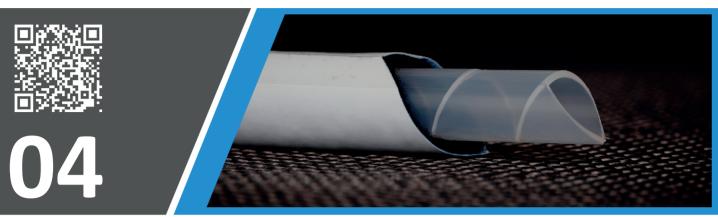
**Evacuation line** 

Vac Checker®

MTI® Valve

The Sticky Can





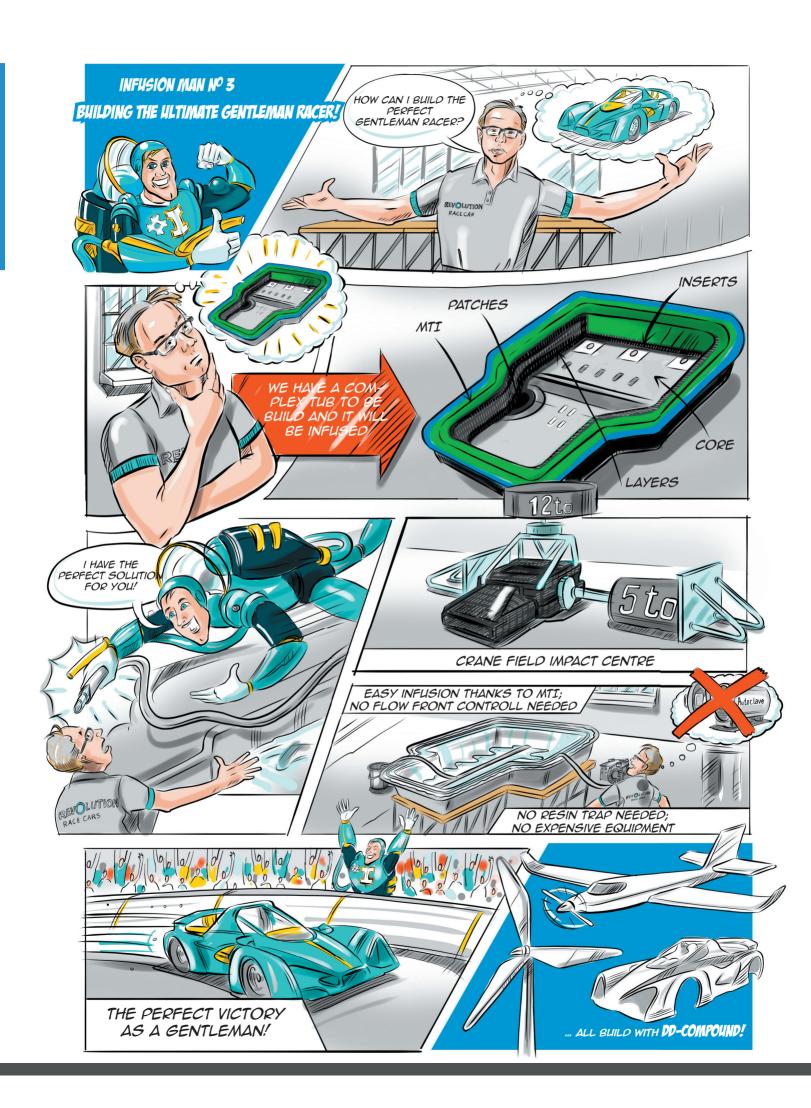
"The MTI® hose: process stability in the appearance of a line"

The MTI® hose replaces spiral tubes or any other media that has been used in any evacuation process. It is a spiral tube coated with an air permeable but resin blocking membrane. MTI® hose is positioned around the mold parameter and the effect of race tracking resin is eliminated. The membrane prevents resin entering the evacuation line. The closed system encreases process stability and laminate quality.

- less effort for preparing the infusion process
- no resin trap necessary
- few investment cost
- visible infusion process
- minimize of resin consumption
- resin allocation independend from evacuation hose
- small molding lips
- reduction of Dry Spots
- complete impregnation of the fabric
- more process stability for single piece production and small series
- minimize material consumption
- high fiber-to-volume ratio, adjustable through injected resin volume

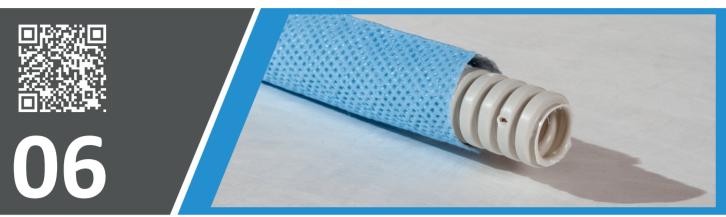
#### MTI® hose

Item number: 10210100 Standard length: 100m



# **RESIN BRAKE LINE®**





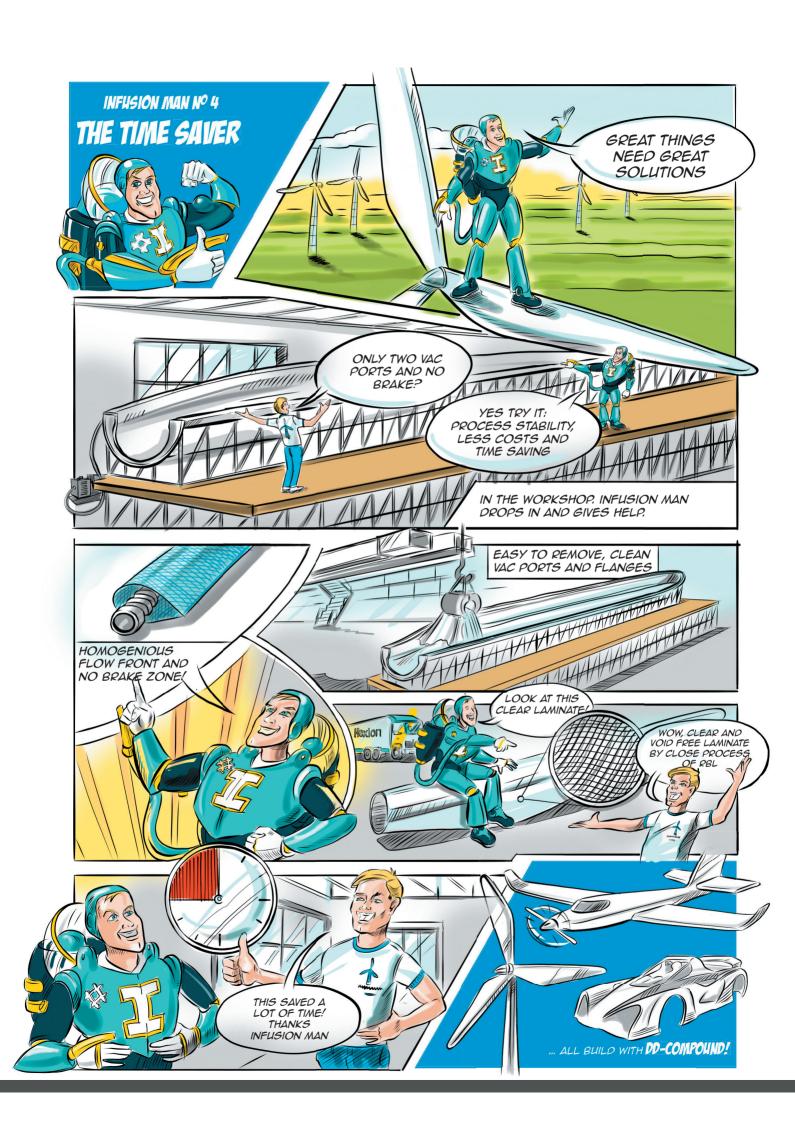
"Membrane hose for Wind turbine blades"

The **Resin Brake Line**® is a cost out product especially developed for big, less shaped parts. It combines the benefits of the **MTI**® **hose** with the requirements of the wind industry.

- less effort for preparing the infusion process
- no resin trap necessary
- few investment cost
- visible infusion process
- minimize of resin consumption
- resin allocation independend from evacuation hose
- small molding lips
- reduction of Dry Spots
- complete impregnation of the fabric
- more process stability for single piece production and small series
- minimize material consumption
- high fiber to volume ratio, adjustable through injected resin volume

#### Resin Brake Line®

Item number: 11340433 Standard length: 400m



# **RESIN BRAKE FILM®**



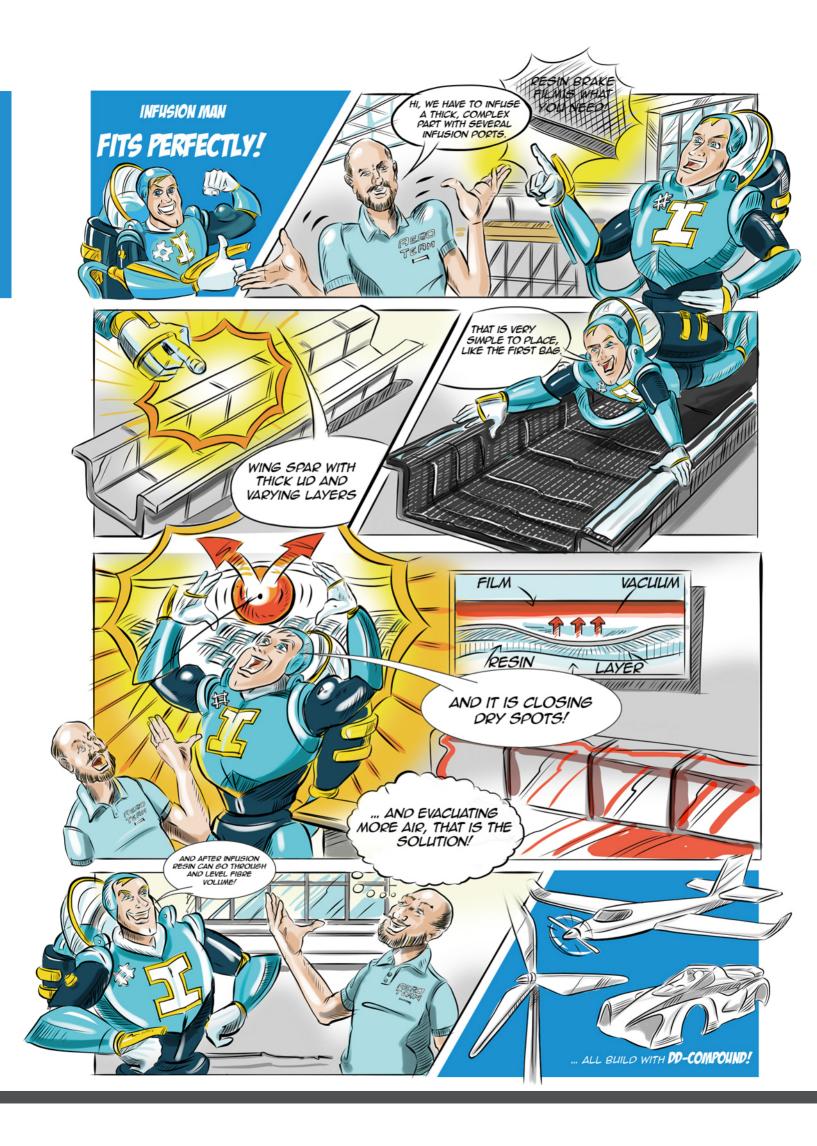


The **Resin Brake Film**® is a multilayer functional film which can be used in the vacuum infusion process. The **Resin Brake Film** is used over the whole surface of the part. The air is evacuated through the film. The resin is slowed down by the film so the airflow on top of the membrane is kept open until the fibres are saturated under the film. The resin can travel through the film after infusion to create a homogeneous laminate and evacuate excess resin. This can be controlled by the applied vacuum after infusion.

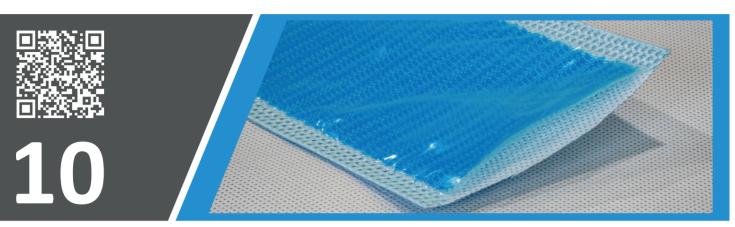
- No Dry Spots
- Equal Fibre Volume Ratio
- Easy Handling
- Can be customized
- · Void free laminate
- · Process stability

Resin Brake Film®

Item number: 11340452
Standard length: customized







"Membrane hose for Wind turbine blades"

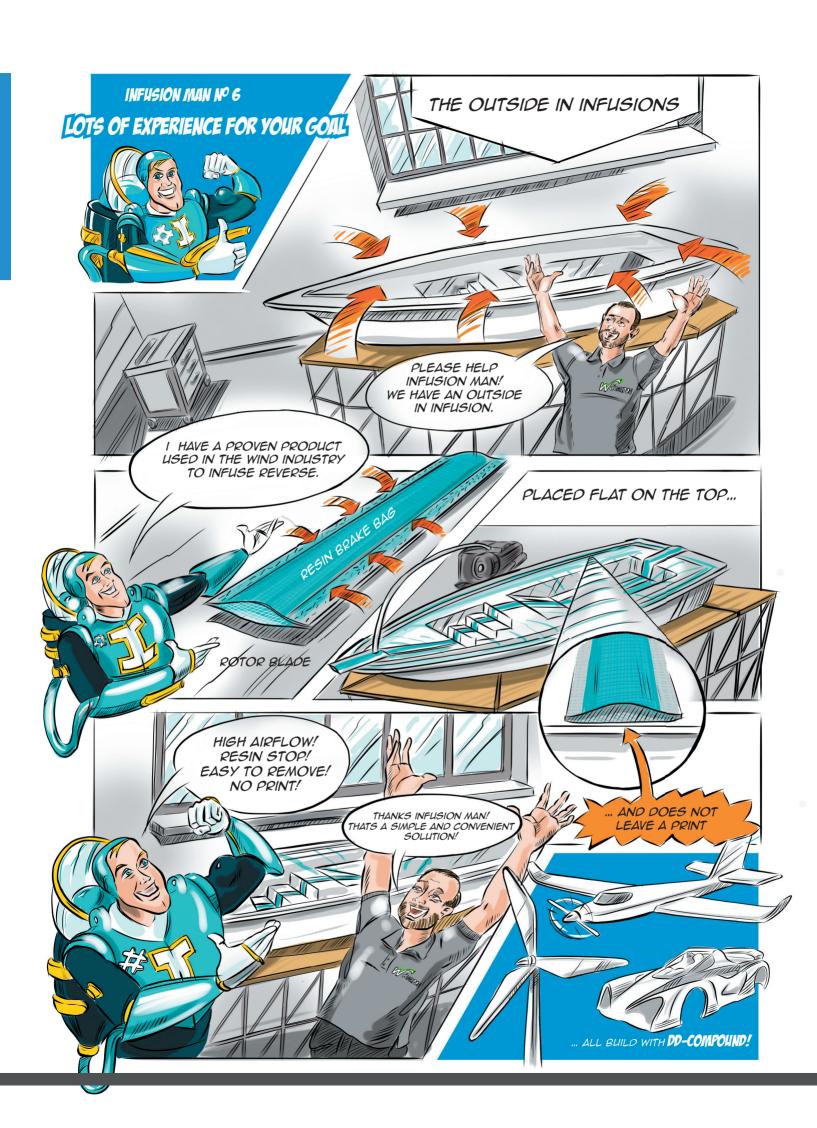
The **Resin Brake Bag**® can be used in the vacuum infusion process to evacuate the air. The Resin Brake Bag has a three-layer construction. It consists of the resin brake film, a flow media and a multilayer bagging film. It is a sealed flat channel.

The **Resin Brake Bag**® is used selective over surface of the part. It must be connected with the evacuation line. The air is evacuated through the film. The resin is slowed down by the film, so the airflow on top of the membrane is kept open until the fibres are saturated under the film.

- Outside in infusion setup
- No print on laminate
- Endless material
- High airflow
- Easy to remove
- No Dry Spots
- Layup time reduction
- Available in standard width 100mm/300mm

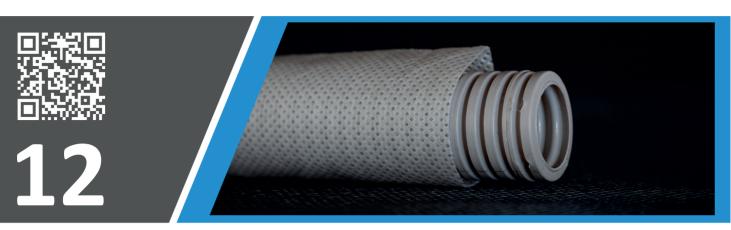
Resin Brake Bag®

Item number: 11340438
Standard length: customized



# **RESIN FEED LINE SIDEWINDER®**



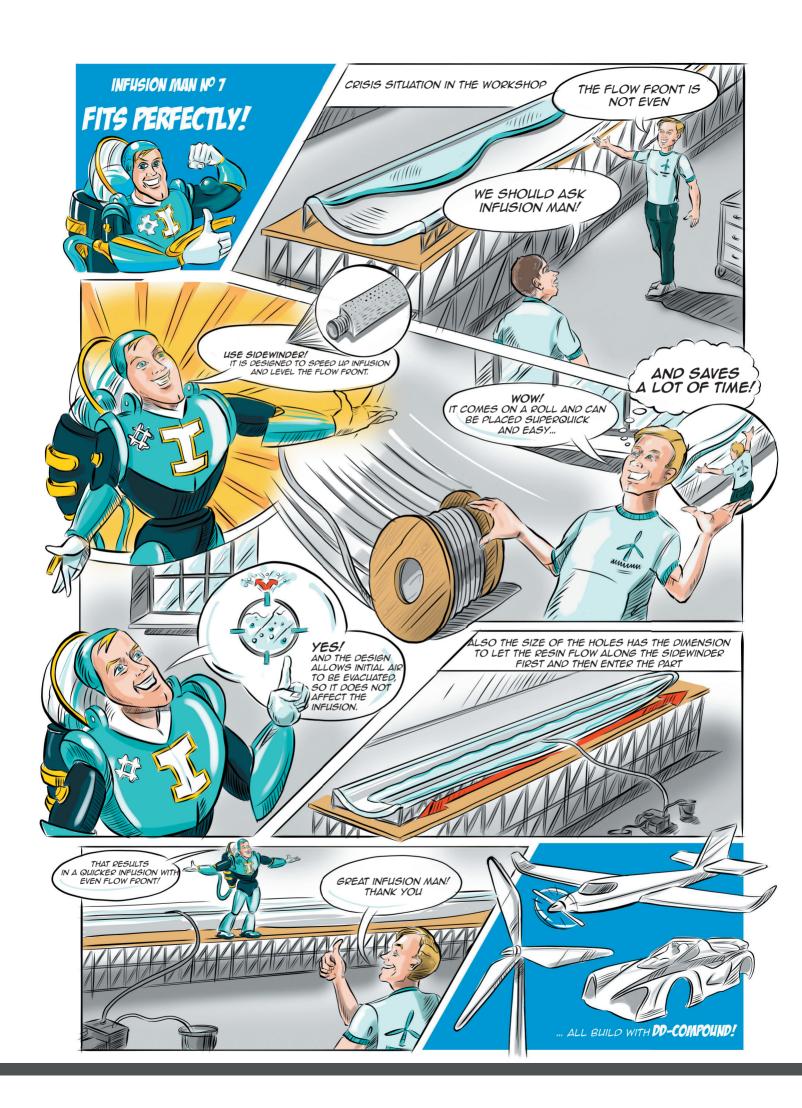


**Sidewinder**<sup>®</sup> is a combination of a corrugated tube and a transport fleece. The resin feed line is very stable by the unique construction and the manufacturing process. Thereby it is easier to place and fix it at the desired place. By the application of **Sidewinder**<sup>®</sup>, working hours for the setup and time for the infusion can be saved.

- · Length customized
- Easy handling
- Equal flow front
- Infusion length up to 100m with 1 inlet
- Easy to remove
- Less air in resin
- Less waste

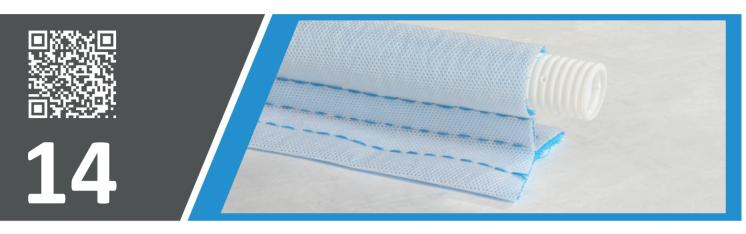
Resin feed line Sidewinder®

Item number: 11340236
Standard length: customized



# **RESIN FEED LINE BOAT RUNNER®**





**Boat Runner**<sup>®</sup> is an infusion line made for boat building. Boat Runner<sup>®</sup> is a patented infusion line that has a high resin flow longitudinal but lows it down into the part. Also it is designed to leave no print and minimize white areas below infusion line.

The **Boat Runner**® up to 150' can be feed with one resin inlet. By minimizing resin inlets the risk of leaks in the infusion process is minimized.

For the infusion of the Donzi 44 Icon hull only 7 resin inlet points were neccesary and could be reduced to 5 in serial production.

Result is a void and dryspot free infused hull.

- · Easy handling
- No print
- · Long feed distance
- Homogenious Flowfront
- No white spots

Resin feed line Boat Runner® L Ø 20mm

Item number: 11340276
Standart length: 150m

Resin feed line Boat Runner® S Ø 16mm

Item number: 11340277
Standart length: 200m



# **BLADE RUNNER® CONNECTOR**





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The **Blade Runner® Connector** has been developed specially for the resin feed line **Blade Runner®**. With this connector, inlet points can be set easily and safely. The **Connector** is placed on the resin line. The matching connection tap is then inserted from above. Two different connection taps are available: One vertical and one angled. Appropriately assembled sealing rings are placed between the connector and the connecting tap. These sealing rings ensure an airtight connection.

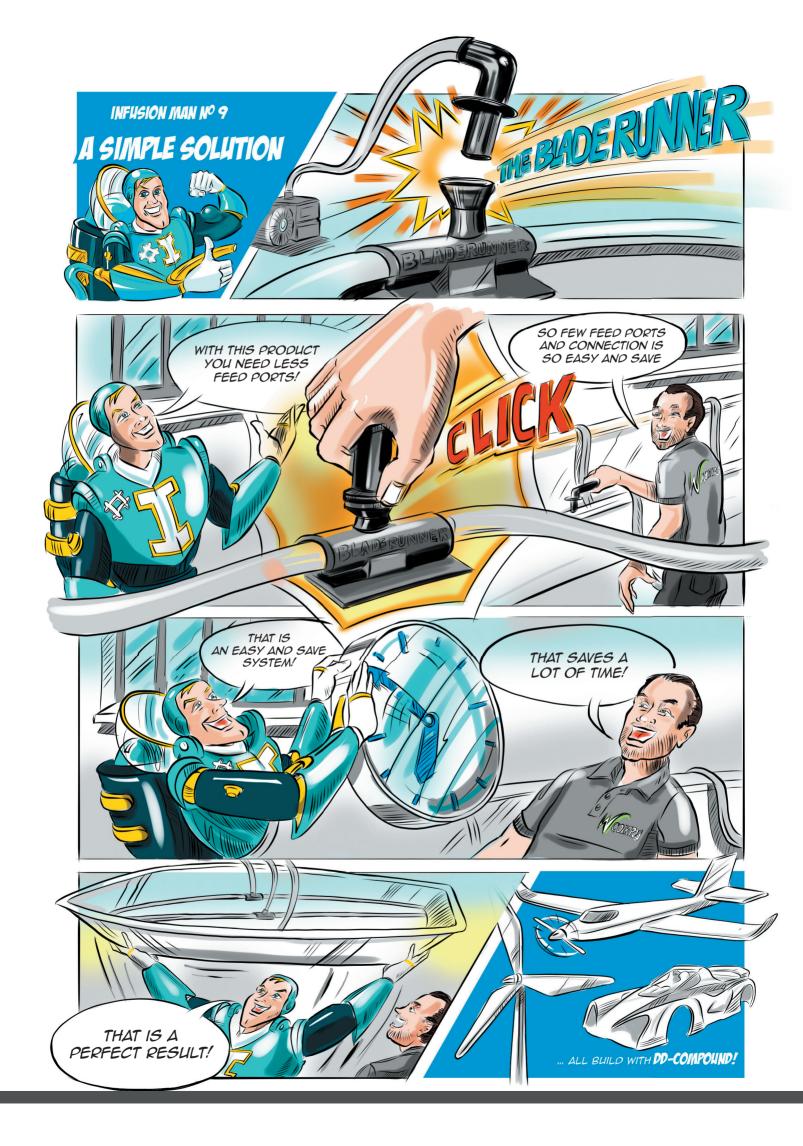
- Safe infusion point
- · Easy handling
- Secured connection
- Push through bag design
- 0° or 90°
- Saves time

#### **Blade Runner Connector**

Item number: 10219900 Minimum Ordered Quantity: 10 pc.

#### **Blade Runner-sealing ring**

Item number: 10219920 Minimum Ordered Quantity: 265 pc. / 1 Box



# **VAC CHECKER®**





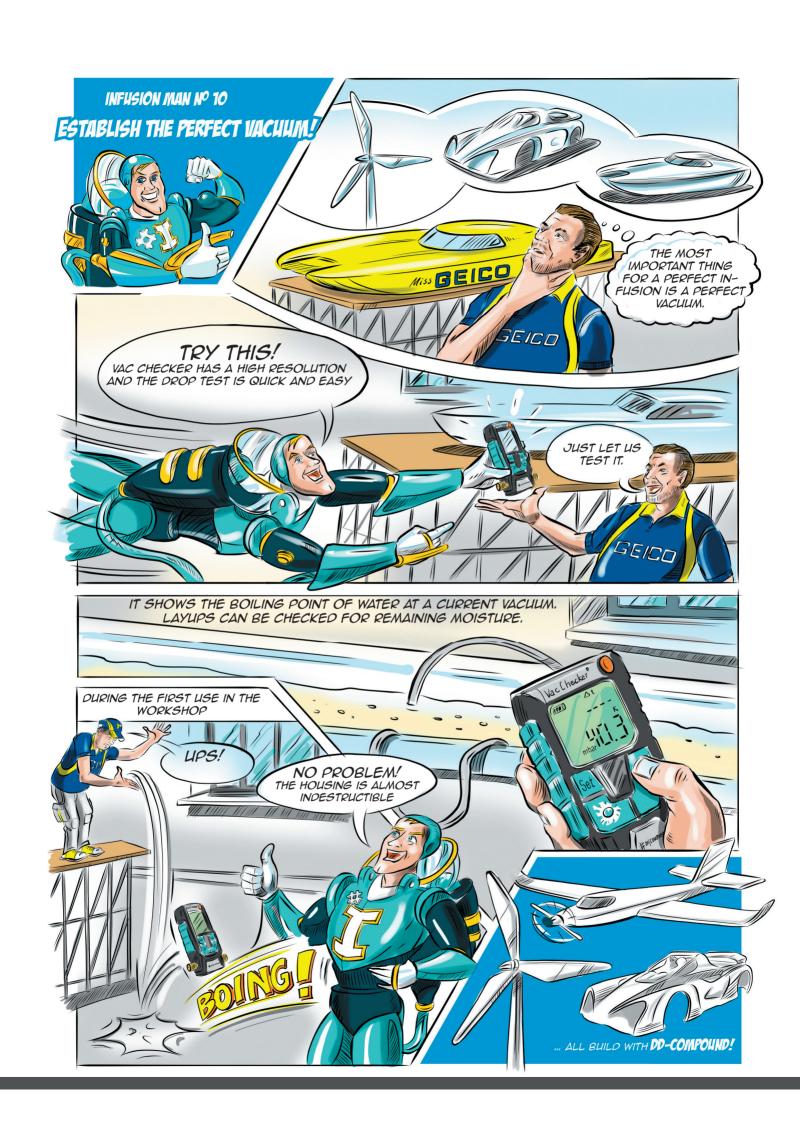
Digital vacuum gauge **Vac Checker**® from DD-Compound is a very robust tool. **The Vac Checker**® does not only show the absolute pressure, it also shows the boiling point of water inside the laminate. This helps when infusing with hygroscopic materials like Balsa or Aramid. Also the high resolution below 20mbar make quick leak tests possible within the first 30 seconds and helps to find leaks.

- Absolute pressure sensor, 6 bar / 87 pis
- Measuring range: 1.100 to 0 mbar
- Vacuum resolution: 0,01 mbar / 10 micron
- Parameter: mmHg, Torr, mbar, hPa, micron, inH2O, inHg, Pa
- Overload (rel): 5 bar (rel) / 72 psi (rel)
- Attachments: Connection adapters for pipes with an internal diameter of:
  - o 6 mm
  - o 8 mm
  - o 10 mm

#### Vac Checker®

*Item number:* 11340148

Minimum Ordered Quantity: 1 pc.



# **TUBE CLIP SQUEEZEE® AND SQUEEZER®**





The tube clips **Squeezee®** and **Squeezer®** of DD-Compound are the solution for adjusting the resin flow and disconnecting resin- and vacuum lines. The tube clip will convince by the easy use and exact dosing of the resin flow. Both allows disconnecting the resin feed line without much force. Because of the solid construction the tube clips are suitable for the everyday, industrial use.

**Squeezee**® is suitable for different kind of tubes with an outer diameter up to 15mm.

**Squeezer**® is suitable for different kind of tubes with an outer diameter up to 25mm.

- The perfect line clamp
- Lifetime warranty
- Two finger flow control
- Designed for everyday industrial use
- For resin and vacuum lines
- Perfect infusion results

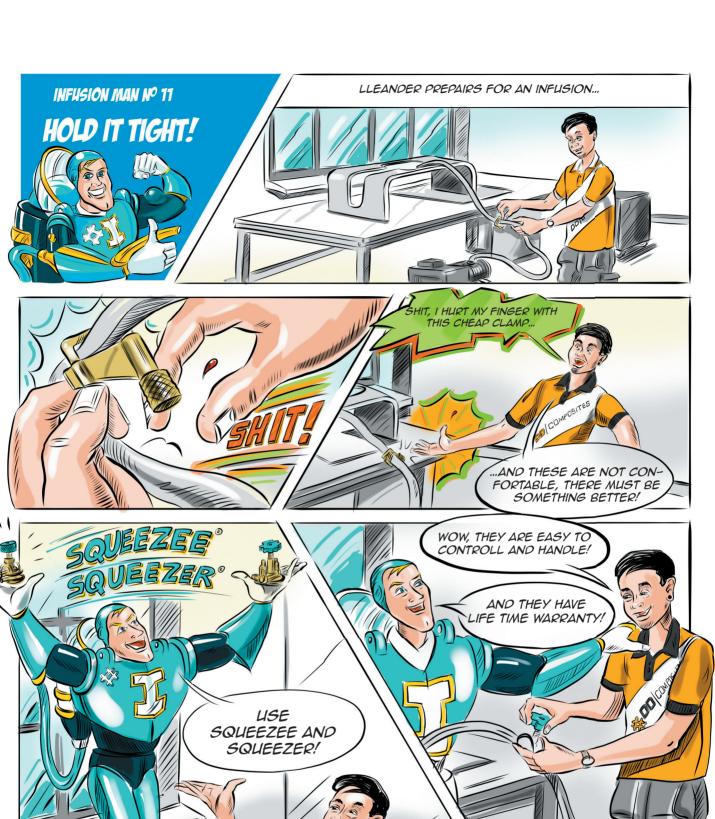
#### Squeezee®

Item number: 10430010 Minimum Ordered Quantity: 10 pc.

#### Squeezer®

*Item number:* 10430020

Minimum Ordered Quantity: 5 pc.









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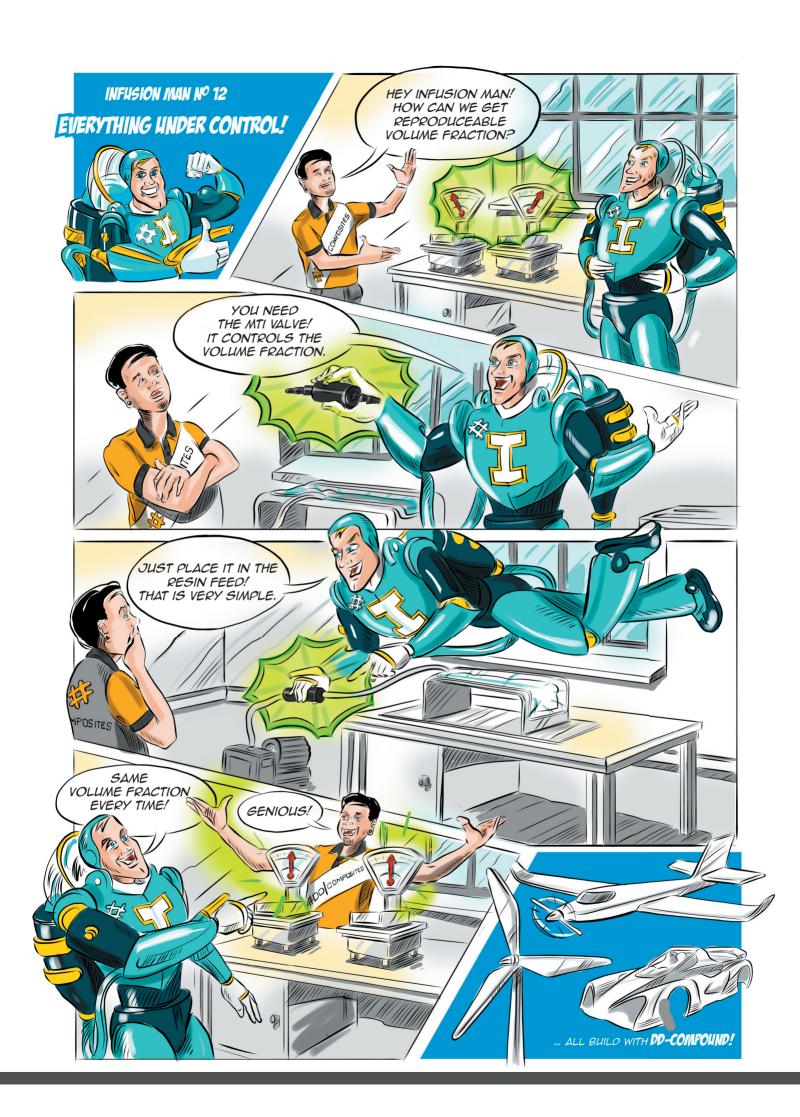


The MTI® valve is used in the resin line and controls the resin infusion by means of pressure. During the infusion it represents for the resin infusion a counter-pressure to the under pressure in the part. If this counter-pressure is too big, the MTI® valve closes and the resin infusion stops. No more resin enters the part. The MTI® valve is adjusted that the counter-pressure becomes too great for the resin at precisely the point when the necessary vaccuum in the part for the fibres to reach an optimum height to be covered in resin is achieved - thut also achieving an optimum fibre volume ratio. Supervising the resin supply is not necessary any more, provided that enough resin exists. The MTI® valve provides for the steady infusion of the resin in the part.

- Regulates itself the infusion of resin
- No resin pooling at inlet point
- The fibers are evenly covered with resin
- · Optimum fibre volume ratio
- Highest quality of parts with reproducible results
- Vacuum infusion becomes easier
- Working hours and with it costs can be saved

MTI® valve

Item number: 10312101
Minimum Ordered Quantity: 10 pc.



# THE STICKY CAN®





**The Sticky Can**® is a spray adhesive developed by DD-Compound. It is used to fix dry fibres in the mould for infusion setups. It sprays very fine and can be used for visual carbon parts. The Sticky Can does it transparent and will be embedded in the matrix after infusion. The tack is strong but it is still repositionable.

- High tack
- Small quantities needed
- Repositionable
- Transparent
- No impact on infusion

The Sticky Can

Item number: 11340373 Standard length: 24 pc. / 1 Box





# SERVICES

- technical know-how in using the MTI® process
- professional training for vacuum infusion (beginners and advanced)
- consulting in vacuum infusion processes (technical and economical)
- fault analysis
- conversion of production to vacuum infusion
- mold construction
- prototyping
- single piece production/ limited lot production



Lengericher Straße 8 49479 Ibbenbüren Germany fon: +40 (0)5451 50447-0 fax: +40 (0)5451 50447-10 info@dd-compound.com www.dd-compound.com