

**DEVELOPED  
FOR**



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**SERVICES**

- technical know how in using the MTI process
- professional training for vacuum infusion
- fault analysis
- conversion of production to vacuum infusion
- mold construction
- prototyping
- single piece production/ limited lot production



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**VACUUM INFUSION  
IN A STABLE WAY**



# PROCESS STABILITY

The MTI® hose replaces ordinary spiral tubes or any other evacuation media used for manufacturing carbon fiber parts.

## INTEROPERABLE



**MTI valve**  
by DD|COMPOUND  
**SQUEEZER**  
by DD|COMPOUND  
**SQUEEZEE**  
by DD|COMPOUND



## ADVANTAGES

- 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



## Membran Tube Infusion

The MTI® hose consists of an evacuation hose, non-woven and an air permeable membran. The sandwich construction leads to optimize the evacuation process and quality. Thus the MTI® hose will minimize costs using the vacuum infusion process.

One step for manufacturing high quality products by vacuum infusion while minimizing costs compared to other processes producing fiber parts.

The MTI® hose is placed around the mold lip like an annular piping. The barrier effect to the membran avoids that resin could enter the evacuation hose. When resin reaches the membran it will stop there and will flow through the dry rest of the fabric.

Thus cost intense and complex calculations of resin injection points are redundant.

By using the MTI® hose the complete impregnation of the fabric is guaranteed. The resin allocation can be arranged independently from the MTI® hose, so it is possible to manufacture complex fiber parts by vacuum infusion. The MTI® hose can be located directly on the fiber part. e.g. at critical points or fields with material accumulation (thicker layers).

The risk of Dry Spots will be remarkably reduced.

The fiber to volume ratio can be exactly calculated, because no resin can discharge the mold. An additional advantage; the infusion process is visible and can be monitored at any time.

The process qualifies for small fiber parts and single piece production as well as for big fiber parts and serial production. The MTI® process reduces costs while increasing the quality. The MTI® process is suitable for conversation of production from hand lay up lamination to vacuum infusion, because for using the MTI® process no molding lips are necessary. The MTI® hose can be located directly at the edging of the fabric, thus conventional molds can still be used.