

# Rhepro 21



## VAP® highlights

- Complete fabrication of hull and deck in the VAP® process
- Extremely high process stability
- Excellent structural properties and non-porous surfaces
- Complete air evacuation over entire component surface
- Optimum infusion without dry spots
- Achievement of required target weight thanks to precise determination of resin amount and no need for flushing
- Swift VAP® process implementation with existing molds



# Rhepro 21

The Rhepro 21, a RHEproducible boat designed by Hamburg's Rhe Sailing Club, is a modern dinghy characterized by high performance potential as well as excellent stability and strength reserves. The lifting keel offers a variable draft for flexibility in the choice of sailing waters and enables a comfortable fit on a trailer. The Rhepro 21 is thus suitable for sport and regatta sailing throughout Europe.



# VAP® in practical use

A team from the Academic Sailing Club at Aachen University of Technology (ASV) is fabricating the hull and deck of the Rhepro 21 (construction no. 3) according to the VAP® method for the first time, provided technical support by the university's Institute of Plastics Processing (IKV). As has become apparent, the VAP® membrane system by Trans-Textil GmbH and the process engineering support furnished by Composyst GmbH enable swift implementation of the technology, while use of the sailing club's existing molds avoids the necessity for additional investments.

Thanks to use of the VAP® process, the Rhepro 21 team in Aachen has achieved complete air evacuation over the entire surface of the hull as well as optimum infusion without dry spots (the deck is to be made in a second step). Along with offering a high degree of process stability, the VAP® method is proving impressive thanks to the excellent structural properties and non-porous surfaces it delivers.



In comparison to traditional resin infusion methods, the VAP® process enables precise determination of required resin amounts. This, and the fact that it obviates the need for flushing, add up to the required target weight.

## Dimensions

- Length overall: 6.40 m (21 ft.)
- Beam: 2.40 m (trailerable)
- Draft: Lifting keel up to approx. 2 m
- Target weight: 500 kg
- Keel ballast weight: 230 kg

## Hull and deck (sandwich construction)

- Fabrication: According to the VAP® process
- Reinforcement: Carbon fiber scrim
- Matrix: Epoxy resin
- Core: PET foam (10 mm)