

## **BÜFA Composite Systems receives AVK Innovation Award again**

Following its success over the past year, BÜFA Composite Systems once again won the AVK Innovation Award in the “Innovative Products/Components or Applications” category. During Composite Europe, held on 10 September 2019 we received the award for this unique and newly developed special resin system.

**BÜFA®-Resin VE RTM 6520 Class A** surpasses other systems currently available on the market in terms of sustainability and its ability to produce flawless surfaces on GRP components. The innovative resin system reduces surface waviness, means that marks on components that were previously visible to the naked eye, such as metal inserts, perforations, flow channels or sandwich core indentations, are no longer apparent. Furthermore, the resin system not only has exceptional mechanical properties and excellent adhesion to substrates applied subsequently, but also exhibits very low shrinkage: the system has a cure shrinkage of just 0.04 % instead of the previous 2 %, resulting in an extraordinarily homogeneous surface. Another positive effect of the low shrinkage is that it hugely reduces the level of strain usually seen in composite components. These exceptional properties are achieved by using a specially developed low-profile additive to a epoxy vinyl ester formulation.

Compared with other similar products that are commercially available, BÜFA®-Resin VE RTM 6520 Class A also provides additional benefits when it comes to sustainability: the special resin is injected under vacuum into a closed mould carrying fibre layers immediately after the gelcoat has been applied. Due to its low viscosity, BÜFA®-Resin VE RTM 6520 Class A is ideal for the RTM process. This closed-mould manufacturing process not only protects human health and the environment but also ensures higher component quality and faster cycle times, while minimising sources of faults, scrap and the need to rework products.

Besides saving time, BÜFA® Resin VE RTM 6520 Class A offers yet another advantage: processing the special resin does not require materials that have previously been needed in a laminate structure, such as a barrier coat or non-woven liners. As a result, emissions can be cut by up to 50 % and production time by 25 % while the amount of raw materials needed and waste generated are greatly reduced.