

Press Release

Hilger u. Kern GmbH Metering and Mixing Technology Käfertaler Straße 253 68167 Mannheim Germany

Phone: +49 621 3705-500 Fax.: +49 621 3705-200 E-Mail: info@dopag.de

www.dopag.com

Producing rotor blades efficiently and with high resistance

DOPAG supplies metering and mixing technology for the entire manufacturing process from a single source

Rotor blades are subjected to the toughest stresses during operation. They must withstand any weather conditions. At rotor speeds of up to 400 km/h, even rain drops can be a threat. For this reason, the highest quality requirements apply to the manufacturing process - especially to the metering and mixing technology. For all applications, from bonding to infusion and gelcoat to putty, DOPAG offers efficient dispensing systems from a single source. The company will present these at the AMI Wind Turbine Blade Manufacture trade fair in Düsseldorf, Germany, from December 13 - 15. The focus of the event is on the efficient manufacture of rotor blades for large wind turbines. Above all, it is about optimising the manufacturing process as well as the topics of efficiency and automation.

Precise processing of resins and adhesives

For reliable production, the metering and mixing systems has to meet two key factors. The mixing ratio has to be consistent at all times and a high degree of flexibility is required in terms of the flow rate. The production process begins with the manufacture of the upper and lower shells. As the first layer, a gelcoat may be applied using the gelcomix metering and mixing system to give the component a high-quality surface finish. In the following infusion process, semi-finished fiber products are impregnated with infusion resin. For this purpose, DOPAG offers the compomix DI metering and mixing system. The individual rotor blade elements are then bonded. DOPAG has developed the gluemix metering and mixing system especially for adhesive applications in rotor blade production. It processes large quantities of adhesives precisely and in high, consistent quality.

New dispensing system for putty applications

New to the DOPAG product portfolio is the puttymix. The finishing process of rotor blades has become more and more important based on the increasing blade lengths. To protect the surface of the rotor blade particularly well, small unevennesses are filled with putty material at the end of the production



process. With the puttymix, DOPAG has developed a specific system, which perfectly meters and mixes the two-component putty material with its high viscosity variance.

All DOPAG systems for rotor blade production at a glance:

- gluemix: for bonding the rotor blades or blade segments
- gelcomix: for coating the rotor blade surface
- compomix DI: for vacuum-assisted direct infusion (saturation of the fibre mats placed into the mould)
- puttymix: for application of putty for rotor blade surface









compomix DI







gluemix

puttymix

About DOPAG

We are one of the world's most experienced manufacturers of high-quality metering technology. Wherever adhesives, resins, silicones or lubricants are metered and applied in industrial production, we offer reliable, precise solutions. We provide systems and components for highly automated production processes, including for the automotive, wind, household appliances and electrical industries, as well as for aviation and space travel.

DOPAG is part of the HILGER & KERN GROUP, a reliable supplier, development and service partner to industrial companies in a variety of market segments for over 90 years. The group employs around 350 people and has subsidiaries and distributors in more than 40 countries.