Are reactive thermoplastic polymers suitable for future wind turbine composite materials blades? - DTU Orbit (23/12/2018)

Are reactive thermoplastic polymers suitable for future wind turbine composite materials blades?
The present article reviews the potential use of reactive polymers for manufacturing of composite materials for a wind turbine blade. Composite industry attempts to use the benefits of processes like resin infusion for developing large structures. After careful review in the literature, it was found that only two potential reactive thermoplastic resin systems qualify for different processing requirements for blade manufacturing. Hence, the article focuses on the issues with the use of reactive polymers like APA-6 (Caprolactam) and CBT (Cyclic Butylene Terephthalate) resin systems for composite materials.

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