

Eker B, Akdoğan A, Vardar A (2006) Using of Composite Material in Wind Turbine Blades. Journal of Applied Sciences, 6(14): 2917-2921.

#### Abstract

The turbines manufactured from the mid1980s until the late 1990s were mainly constructed using standard components. After that period, special components started being designed and manufactured for turbine use only. One of the best solutions is using composite materials in wind turbine .Most composites are made up of just two materials. One material (the matrix or binder) binds together a cluster of fibres or the fragments of a much stronger material, and the second material (the reinforcement) surrounds these fibres or fragment. Nowadays, many wind turbine manufacturers are taking a big interest in composite materials which many researcher of wind technology see as “the materials of the future”. The main concern is to get the cost down, so that composites can be used in products and applications which at the present time don't justify the cost. At the same time they want to improve the performance of the composite, such as making them more resistant to impact. In this article the using of composite material in wind turbine blades were investigated. The research was based on the theories material science and wind technology. And also some practical results were exhibited and explained.