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The Tribological Properties of PTFE Composites Filled with Carbon Fiber, MOS2, Bronze Reinforcement

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Abstract: *PTFE that is Polytetra fluoroethylene has wide increasing demand because of its unique properties like low coefficient of friction, high chemical resistivity, and high temperature stability. However, PTFE exhibits poor wear resistance, especially abrasion. The wear resistance of PTFE can be significantly improved by addition of suitable reinforcement (filler) materials. Among the most common filler materials are glass fibres, MoS2 and bronze. In this paper, it is presented a review of tribological properties of composite materials with PTFE matrix and above-mentioned filler materials. Now a day there has been a significant growth in the large-scale production of polymers and polymer matrix composites. Polymer composites mostly used as structural components that are very often subjected to friction and wear loadings under use. In some situations, the coefficient of friction is of the highest importance, but mostly the mechanical load-carrying capacity and the wear life of components that determine their acceptability in industrial applications under different operating conditions*

Keywords: Turbo-Ventilator, Electric Generator, permanent magnet, Axial Flow, Wind Energy, Ventilation