

ADVANTAGES AND PROBLEMS REGARDING THE APPLICATIONS OF GLASS-FIBRE-REINFORCED-POLYMERS

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Abstract: The use of fiber materials is on a growing trend, due to their special properties. The paper presents aspects of the production process of fiber reinforced plastics, concentrating on glass-fiber-reinforced polymers (short, GFRP) and the advantages that arise from the characteristics of this material. GFRP profiles are used for industrial purposes, wind turbines, windows and facades or as structural profiles. The purpose of this paper is to show how the properties of GFRP can be combined in manner, which makes it a good replacement for traditional materials. More aspects were taken into consideration: the mechanical properties, environmental impact and the economical factor.

Key words: advanced composites, glass fibers, reinforced plastics, environment

