

Structural and morphological characterization of biopolymeric samples through AWJ machining

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Summary: In order to identify the structure and morphology of the resulting surfaces from the abrasive water jet cutting, specialized analyzes were performed. The biopolymers subjected to cold processing were Arboblend V2 Nature and Arbofill Fichte. According to the recorded data from the SEM and EDX analyzes, they highlighted uniformity and structural and morphological homogeneity of the samples and, the effect of the abrasive material, Granat, on the structure and chemical composition of the cut surfaces. The abrasive consequence was found in the form of small streaks that had little influence on the roughness of the cut surfaces. Considering the obtained results, these biopolymers can be processed by cutting with abrasive water jet in the conditions of obtaining a corresponding surface quality.