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## **COMPACTION COEFFICIENT OF WOODEN BRIQUETTES USED AS RENEWABLE FUEL**

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### **Abstract**

This paper aims to analyze two types of wooden briquettes made from different raw material, in order to determine the compactness of the wood used, namely their compaction coefficient. This factor is a new feature of briquettes that defines more precisely the quality of them. The density of raw material and briquettes causes the compaction coefficient, namely the ratio between them. Relevance of research and scientific innovation results from the fact that European standard of wooden briquettes states the density as the main physical characteristic and does not take into account of raw material characteristics from which the briquettes are made (for example, a denser wood species will produce a more dense briquette, but not always exist high density materials). Previous researches about other features of wooden briquettes (as the compression strength could be) and the similarity with the other similar coefficient of wooden composites are two strong points of resolution. In this way, all results are reflected in the definition and presentation of method for determining the coefficient of compaction, in laboratory tests, concerning the obtaining and testing of various briquettes, analyze and compare their features and the establishment of different influences on the compaction coefficient of other features of briquettes, such as compressive strength. The compaction coefficient can be considered a new property of wooden briquettes, which will better characterize the quality and compactness of briquettes.

*Key words:* briquette, compaction coefficient, density, technological chip

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