



THE COMPRESSIVE STRENGTH OF WOODEN BRIQUETTES USED AS RENEWABLE FUEL

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Abstract

The paper presents a new mechanical property of briquettes obtained from wooden biomass, namely compressive strength. It is called compressive strength because of its similarity with the compressive strength of solid wood (perpendicular to the grain), concrete, stone or brick. The definition and methodology for determining this mechanical property of wooden briquettes begins consequently with defining the similarities and adds other distinctive elements. The experiments were carried out, using particular wooden briquettes produced on a laboratory machine with hydraulic pistons. The paper states some of the advantages related to wooden briquettes, a key element in obtaining renewable energy. Furthermore, the functioning principle for briquetting installation is described. The aim of this paper is to propose a new mechanical property to characterize wooden briquettes, the determination methodology and the proper device used.

Key words: briquettes, chips, compressive strength, wooden biomass

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