

Evidenčný list publikácie – monografia/vysokoškolská učebnica

Meno autora/autorov	Peter Križan
Názov publikácie	The Densification Process of Wood Waste
Typ publikácie (M- monografia; VŠ- vysokoškolská učebnica; S- skriptum)	M
Jazyk publikácie	Anglický jazyk
Rok vydania	2015
Zaradenie publikácie podľa CREPČ	AAA- Vedecké monografie vydané v zahraničných vydavateľstvách
Citácia publikácie (podľa CREPČ)	KRIŽAN, Peter. <i>The densification process of wood waste</i> . 1.st ed. Berlin De Gruyter open 2015. 184 s. ISBN 978-3-11-044002-7
Označenie publikácie*	M_PK_01
Abstrakt/anotácia	<p>This monograph is dedicated to research in the densification processes of saw dust from pine and its mathematical description for uniaxial pressing into compact briquettes. This publication shows an experimental strategy to determine the effects of individual parameters on the resulting density of the formations. This publication also includes the construction of an experimental pressing stand that measures the effects of the technological, material, and structural parameters on the resulting density of the briquettes. This work specifies parameters and identifies their effects on the quality of the briquettes. These effects were experimentally verified and described through a mathematical model. The mathematical model serves to predict the density of briquettes for some predefined pressing conditions. The pressing conditions include the temperature, compaction pressure, humidity, and size of raw material fractions. This mathematical model can aid in the design of pressing machines. For the simplified and clearer use of the mathematical model, application software was developed for the optimization of technological parameters and their resulting effect on the quality of the briquette. The monograph also provides the results of experiments performed by the author on different types of wood biomass. These results demonstrate the dependence of parameters effecting the final</p>

	quality of the briquettes and their resulting influence on the densification process itself. This publication also defines the level of importance of the results in terms of optimization of the pressing chamber.
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Poznámka:

* Označenie publikácie z dôvodu odlišenia viacerých publikácií, keďže príloha tohto evidenčného listu je aj scan prvej strany publikácie. Scan vo formáte .jpg by mal byť uložený pod týmto označením. Toto označenie je iba pre potreby internej komunikácie.

Vysvetlivky k označeniu: X_YZ_PČ

X – typ publikácie (M- monografia; VS- vysokoškolská učebnica; S- skriptum);

YZ – Iniciály autora z nášho pracoviska (napr. PK – Peter Križan)

PČ – poradové číslo publikácie