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Title: Methods for Determining Thermal-mechanical Wear of Refractory Materials

Authors: Róbert Dzurňák, Gustáv Jablonsky, Augustín Varga, Šimon Staško, Gabriel Sučík, Beatrice Plesingerová, Radka Bakajsová

Abstract: The presented article deals with methods of testing refractory materials that are currently most often used for testing low-temperature corrosion caused by biomass ash. The article deals with the effect of the chemical composition of biomass on melting temperatures and what standards are used to evaluate these processes. The article also discusses the methods of testing the abrasion of the surfaces of refractory materials. The article points out that at the same time the testing methods are not sufficient for evaluation and that the testing conditions do not reflect the operating parameters achieved in real devices.

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FULL TEXT