The Effect of Height and Diameter of Clay Furnace Mixture of Rice Husk ash on Furnace Efficiency

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ABSTRACT

This study aims to test clay furnaces with a mixture of rice husk ash related to the best combustion efficiency of the three furnace models made. The percentage of mixture used in the furnace is 90% clay and 10% rice husk ash. The test meter of the study is the percentage efficiency of the furnace using the Water Boiling Test (WBT) method. The furnace to be studied is divided into three variations in diameter and height, with the furnace volume being equalized. Furnace 1 has a height of 20.9 cm with a diameter of 17.4 cm, furnace 2 has a height of 23.1 cm with a diameter of 16.6 cm, furnace 3 has a height of 25.3 cm with a diameter of 15.8 cm. for the thermal efficiency of the furnace from this test, the results obtained from the first furnace are 16.7%, the second furnace is 15.68%, the third furnace is 15.41%.

Keywords : *Clay Furnace, Efficiency, Rice Husk Ash*