

The Traditional Stove Efficient Box Tipe With Cylinder Tipe with Clay Material
And Rice Husk Ash

Gagak Budi Arso

Renewable Energy Engineering Study Program
Engineering Department

ABSTRACT

Traditional stoves are traditional cooking tools that use wood as their main fuel. The majority of traditional stove making uses clay. It should be noted that traditional stoves in the community are in the form of boxes and tubes. This study aims to determine better combustion efficiency between box-shaped furnaces and tube-shaped furnaces. The ingredients of this traditional stove are clay and rice husk ash with a mixed percentage of 90% clay and 10% rice husk ash. The testing parameter of this study is the efficiency of the furnace produced using the Water Boiling Test (WBT) method. Stoves used as research are divided into two forms of stoves with two variations namely box-shaped stove with no modification, box-shaped stove with modification, stove-shaped stove without modification and stove-shaped stove with modification. The results show that the efficiency of the test box furnace without modification is 10.61%, the box furnace with modification obtained an efficiency of 12.13%, the tube furnace without modification obtained an efficiency of 14.05% and the modified tube furnace obtained an efficiency of 19.96 %.

Keywords: Traditional Stoves, clay, rice husk ash, efficient.