

COMPARISON OF GASIFICATION EFFICIENCY AND STEAM PRODUCTION FOR JULIFLORA WOOD CHIPS, NEEM WOOD CHIPS, TEAK WOOD CHIPS, AND SAW DUST BY USING UPDRAFT GASIFIER

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Abstract

An Experimental study on Updraft Gasifier for Producer gas production and Steam production by heating application is presented in this paper. Updraft Gasifier is developed and tested by using biomass materials are Juliflora wood chips, Neem wood chips, Teak wood chips and Saw dust (Neem&Teak) are fuels for producing Producer gas. The generated Producer-gas is directly used in heating application. In this work a Biomass Updraft Gasifier is designed, fabricated, and tested. The main parameters of gasification process are calculated and listed for different biomass materials.

Keywords : Updraft Gasifier, Juliflora wood chips, Neem wood chips, Teak wood chips and Saw dust (Neem&Teak), Gasification parameters, and Steam production.

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