A Novel Producer Gas Scrubbing System

**Mahida Hirenkumar Ranjitsinha\*, Girish Bramhakshatriyab, Dr. Nikhil Parekhc**

*a,bDepartment of Mechanical Engineering, SRICT, Vataria-393135, Gujarat, India*

*cDepartment of Maths Science & Humanity, SRICT, Vataria-393135, Gujarat, India*

\*Corresponding author Email: hiren.mahida@srict.in

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Producer gas is the gas that is generated due to gasification of Biomass which is normally used for thermal as well as power generation requirement. Good quality of producer gas is very much essential for power generation application and for obtaining this good quality of gas scrubbing system is essential. Existing scrubbing system is very much costly and not suitable for small scale application. This paper reveals some misconceptions related to production of qualitative and cost effective producer gas scrubbing system. Using ordinary wood as biomass, some nominal scrubbing and change in various governing parameters one can produce excellent quality of gas with low cost. In this research tar removal cum CO2 scrubber and moisture removal scrubber has been developed and from visual observation it has been observed that flame colour has been changed from orange to bluish which indicates that quality of flame has improved. Effect on scrubbing material has been also recorded after certain time of trial run and changes in the colour of scrubbing material reveals that effective scrubbing has taken place. More than that the scrubbing material that has been used in scrubber is byproduct or waste which is cost effective and is easily Biodegradable which is environment friendly

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