IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 2, Issue 3, June 2022

Design and Development of Biomass Briquetting Machine

Bhushan Deshmukh^a, Nikhil Khubalkar^b, Palash Pathak^b, Manish Narwade^b, Fardin Ali^b

^a Assistant Professor, Department of Mechanical Engineering

^bStudents, Department of Mechanical Engineering

Jhulelal Institute of Technology, Nagpur, Maharashtra

Abstract: Human waste, agricultural waste and animal waste will always be available in abundance as long as living upon the surface of the earth is permissible. This will certainly constitute some form of nuisance if not effectively managed and utilized. Briquetting is one useful way to manage the rubbish generated by human and their activities on the earth surface, especially in this generation where the desire for energy is ever in geometric progression.

Briquetting is a method of compacting the wastes into a single solid rod or brick with the use of briquetting machine. These briquettes are utilized as alternative source of energy for cooking and general thermal energy supplement. Consequently, a manually operated simple briquetting machine was designed and fabricated. The machine is made from locally available materials. The assembling was done through welding and machining processes. The simplicity and performance evaluation of this machine justify its efficiency, ease of operation as well as suitability for small scale production of briquettes.

DOI: 10.48175/IJARSCT-4947B

Keywords: Briquettes, Briquetting machine, Alternative energy, Small scale briquetting

