

537a An Overview of Gasification Systems for the Production of Syngas from Biomass

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Various reactor configurations are available for the production of syngas. These include fixed bed, fluidized bed as well as auger transformation systems. The quality of the syngas is highly variable and is dependant on the system parameters. The cost of production is also highly variable. In the first part of this paper an overview of the various gasification technologies will be presented.

In addition, Mississippi State University currently conducting studies using a downdraft gasifier. This gasifier has utilized various feed stock materials including hard and soft wood as well as switchgrass. This paper will also present the findings of these studies. Emphasis will be placed on the gas quality with changing reactor conditions.