

doi: 10.21307/ACEE-2019-042

A CONCEPT OF THE GASIFICATION PLANT FOR SELECTED ORGANIC WASTE

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Received: 18.06.2019; Revised: 24.06.2019; Accepted: 24.06.2019

Abstract

It is observed that in the world economy the consumption of the natural resources increases which results in the growth of a stream of municipal and industrial waste. Both of these phenomena belong to the most important civilization problems. One of the potential directions of the waste management should be the recovery of energy from the combustible fraction. One of the possibilities to convert energy from waste into usable power is gasification, i.e. transformation of the municipal waste into syngas. The paper presents a concept of a gasification plant for gasification of selected organic waste. Tests were conducted for selected fractions from the stream of municipal waste. Simulation calculations of the gasification process were performed with the help of software ChemCAD 7.0.0.

Keywords: Waste; Management; Municipal; Plastics; Energy; Gasification; Conception.