Institute of Chemical Engineering

Koncepcje autotermicznego reaktora do dopalania substancji organicznych o znacznym rozcieńczeniu

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Calcns. were performed for 2 reactor variants with integrated heat exchangers for post-combustion of volatile org. substances significantly diluted in air. The goal was to achieve the efficiency of autothermal process. In variant I, thermal losses were minimized, while in variant II, the exchanger surface area was increased. Calcns. demonstrated low significance of thermal losses and high impact of the exchanger surface area on the thermal efficiency of the process. Graphs were developed to assess the feasibility of achieving autothermal efficiency and energy recovery, which is possible with MeH content above 0.5% by mass.

Metryczka

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