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Effect of the Oxygen Concentration in the inlet Air to the new Operating on the Sulfur Components in the TailGas

S. Asadi¹, M. T. Hamed Mosavian, A. Ahmadpour

Chemical Engineering Department, Engineering Faculty, Ferdowsi University of Mashhad, Mashhad, Iran.

Abstract

Concentrations of the H₂S and SO₂ in the TailGas in response to high concentrations of oxygen in the air oven (for the four oxygen concentrations in the air entering to the new design) have minimum amount of their own. But the SO₂ concentration in the TailGas (At high concentrations of oxygen input into the reaction furnace) is a maximum. Concentration of the CS₂ in the TailGas, in the oxygen concentration equal to 21% molar is lower with than other concentrations. Concentrations of the S₂, S₃, S₄, S₅, S₆, S₇ and S₈, in the concentration of oxygen in the air inlet to the reaction furnace above 70 mole%, were minimal.

Keywords: Oxygen Concentration, TailGas, Sulfur Components, reaction furnace, Claus unit.



¹ Corresponding author: <u>samer.asadi@yahoo.com</u>