

CFD Study on Pressure Drop of Distributor in the Catalytic Fixed Reactor

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In the chemical process, to control a pressure drop is important part in the process. Especially, chimney distributor type largely affects pressure drop and pressure pulsation in the catalytic fixed reactor. We develop computational fluid dynamics (CFD) model to predict the numerical value of pressure drop in two types of chimney distributor. Case studies are carried out with operating conditions. The simulation results can determine whether a venturi inserts or not. And also we are able to suggest which chimney distributor type is the most proper type in the catalytic fixed reactor.