The diagnosis of the flow in a catalyst granular layer

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Abstract The goal of this work was the characterisation of the flow in a new catalyst granular layer. The catalyst PGC-5, product of Engelhard Co., is a Palladium –on– Alumina spheres catalyst for the mild hydrogenation of the steam– cracking gasoline and it will replace a catalyst with different granulometric characteristics. The hydrodynamic characterisation was made in order to predict the pressure drop in the layer and the axial mixing.

Keywords: flow through a granular layer, pressure drop, axial mixing