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A new fluid - dynamic model of the absorption columns with structured packing

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Abstract New bench scale measurements of the gas-side pressure drop have been carried out using columns equipped with two different packing: conventional Raschig rings, and a structured packing of Mellapak 750 Y type. The pressure drop per unit height, at the same loading, was about twenty folds smaller in the structured packing. The data have been further correlated on the basis of a new fluid-dynamics model, valid for any type of packing. It has been found that the packing constant C_p is not dependent only on the texture of the packing. It linearly increases with the liquid load.

Keywords: dynamic model, absorption column, structured packing

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