

ABSTRACT

Unit CO₂ Removal is one of the important unit in the production process of ammonia Pabrik-3 PT. Pupuk Kalimantan Timur. CO₂ gases should be eliminated because their presence may interfere with performance in the ammonia synthesis unit. This unit serves to remove the CO₂ gas content which can be toxic to the ammonia converter catalyst. The catalyst in ammonia is poisoned because CO₂ gas can reduce catalyst activity in ammonia synthesis.

One of the most important components of the absorption operation is the column contents (packing). The chosen packing should provide the effective contact surface area between the gas and liquid phases, so that the solute gas movement can be well executed. In addition, the selected packing should not provide a large pressure drop in the absorption column.

The packing configuration inside the packed column is divided into two types, namely random packing type, where packing is placed in columns with random arrangement, and structured packing type, where packing elements are placed in columns in a structured and precise manner according to dimensions column.

Kata kunci : CO₂ Removal, Packing, Random Packing, Struktural Packing.



