

HIGH ENERGY REDUCTION IN A PROPANE DEHYDROGENATION UNIT BY UTILIZING A HIGH PRESSURE PRODUCT SPLITTER COLUMN

Abstract

A system and process for the production of olefins, and in particular for separation of olefins produced by a dehydrogenation process from paraffin feed stocks, is provided. A high pressure product splitter is used to separate olefins produced in a dehydrogenation plant from residual paraffin feed stocks. The use of a high pressure splitter to separate olefin products from paraffin feed stocks allows for recovery of a high purity olefin product with lower energy consumption compared to prior art processes. The process is particularly suited to separation of propylene from propane.

Fig: 3