

SULFURIC ACID ALKYLATION ACID PROCESS

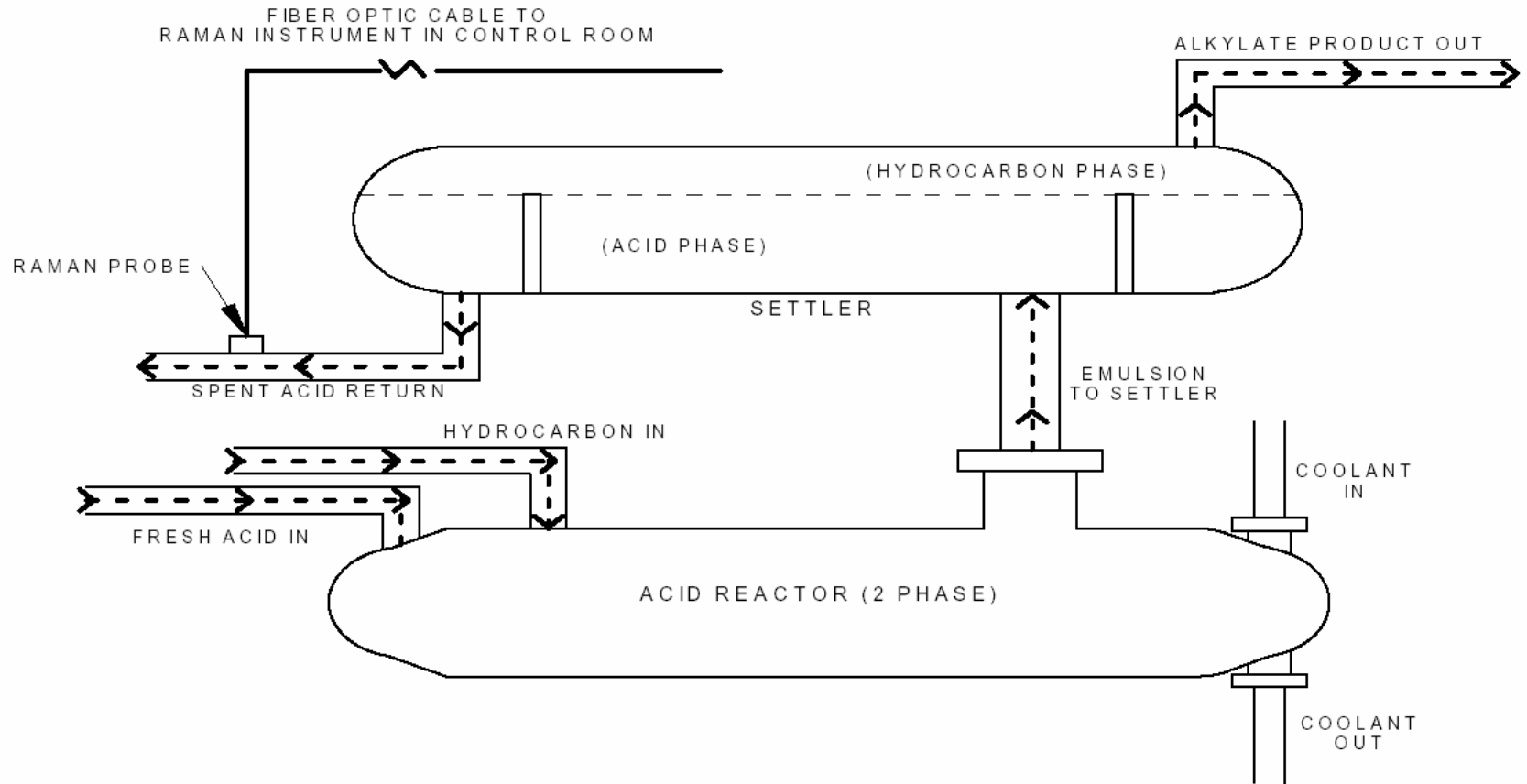


Figure 1. Illustration of a typical sulfuric acid alkylation unit. The hydrocarbons are mixed with the concentrated sulfuric acid and allowed to react in a cooled reactor. This two phase system is then allowed to settle with the light hydrocarbon (alkylate) removed from the top of the settling tank and the acid recirculated. The acid concentration cannot be allowed to fall below $\sim 86\%$ or the system will catastrophically fail.