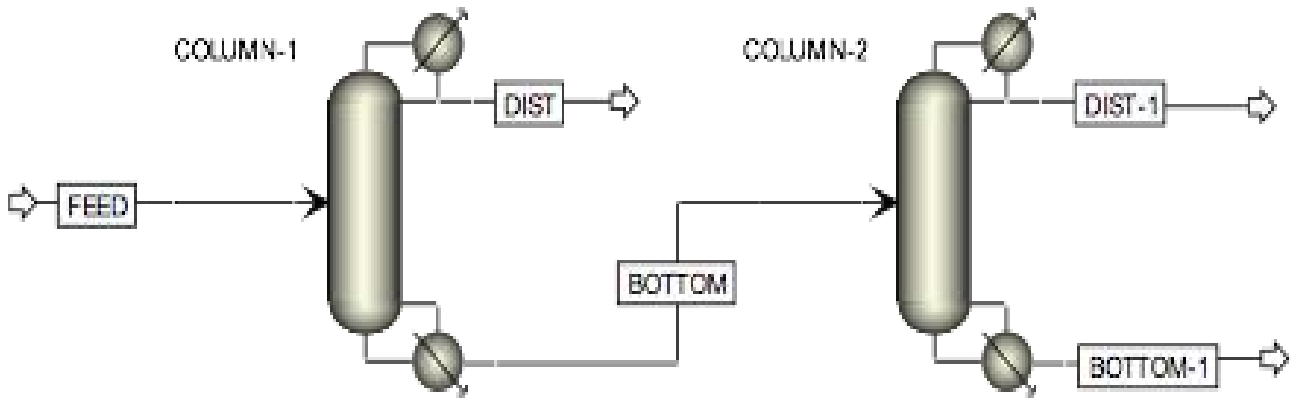
Description -
Pyridine-Picoline-Water Separation System
Process Flow Diagram



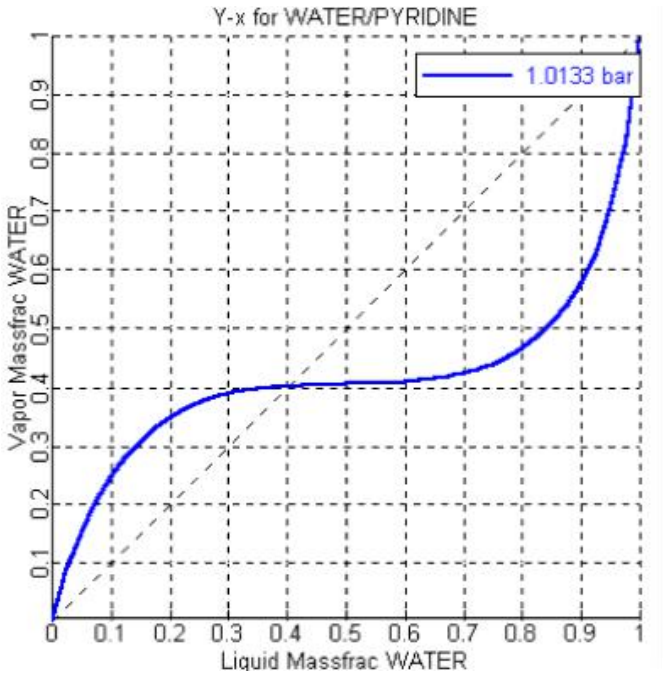
Process Description

A mixture of pyridine, water and γ-picoline (2-methyl pyridine) is fed to the first column. Pyridine-water azeotrope is removed from first column. Bottom stream, containing pyridine and picoline is separated in the second column. Pure pyridine is collected as distillate and Picoline is collected as bottom product.

The typical feed condition is

Water	**05-10 % (wt.)**
Pyridine	**40-45 % (wt.)**
Picoline	**40-45% (wt.)**

Design basis: Pyridine above 99% purity and Picoline above 99.5 % Purity.



Operating Conditions

Operating Pressure	Both columns are operating under atmospheric pressure.
Column Internals	Structured packing for the column.

Experience

Finepac® Structures Pvt. Ltd. has supplied separating systems involving azeotropic distillation. Pyridine, water and p is typical system involving Pyridine-water azeotrope. Also, very high stages are required for the separation of pyridine and Picoline.