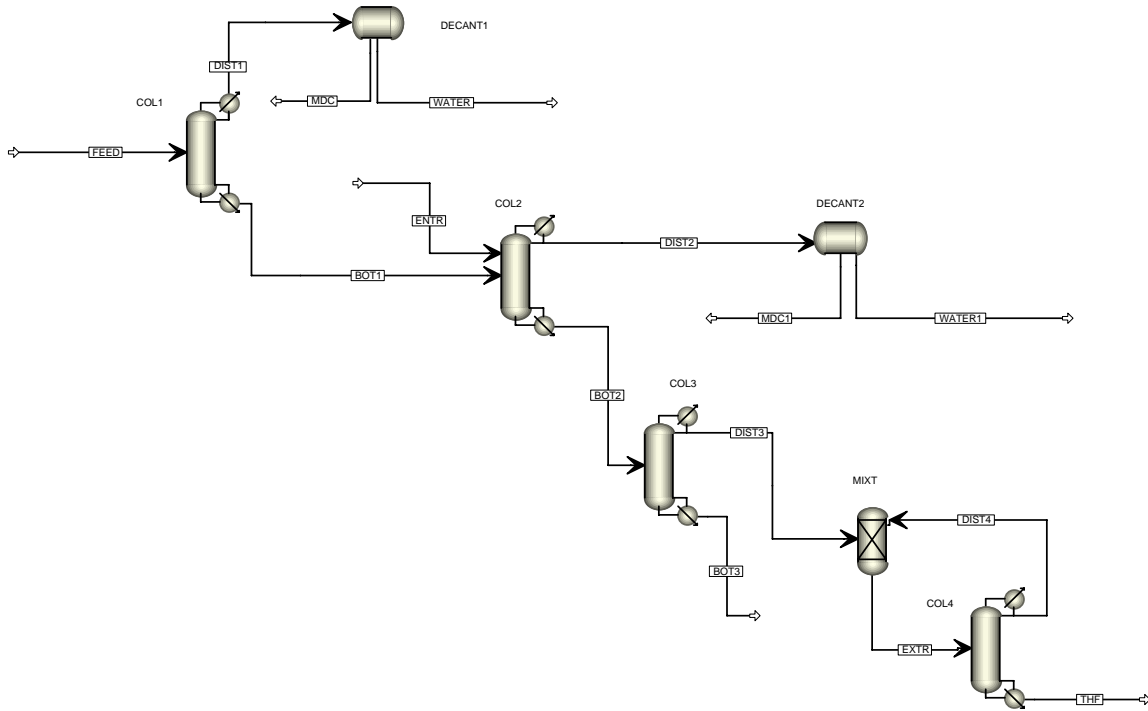


Application Notes

Description : THF-Water- MDC Separation System

Process Flow Diagram



Process Description

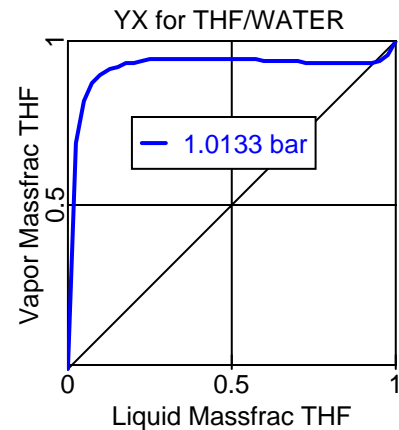
Tetra Hydro Furan (THF), Water and DichloroMethane (MDC) mixture is fed to first column and MDC is removed in first two columns. Bottom product of second column is fed to third column to remove THF at azeotropic composition as distillate. This stream is sent to CaCl_2 mixing and settling tank. The stream from this unit is finally sent to fourth column where the required THF purity of 99 % (wt) is obtained.

The typical feed condition is

THF : 0.50 % (wt)
 Water : 0.01 % (wt)
 MDC : 0.49 % (wt)

Operating Conditions

Pressure : All columns are operating under atmospheric pressure
 Column Internals : Structured packing for all columns



Experience

THF-Water-MDC is typical system involving THF-Water azeotrope. The design involves prediction of azeotrope of THF-Water.