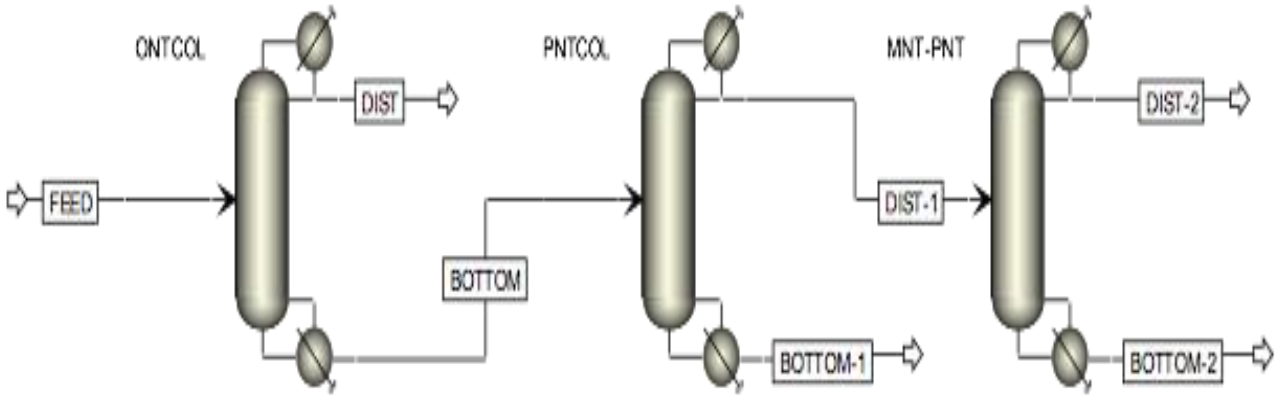
Description -
ONT-MNT-PNT Isomer-Separation-System

Process Flow Diagram



Process Description

Ortho (ONT), meta (MNT), para (PNT) & nitro toluene (NT) mixture is fed to the first column and ONT is removed in first column. Bottom product of first column is fed in the second column to remove PNT as bottom product. The distillate of second column is fed to the third column where rest of the PNT is separated.

The typical feed condition is

ONT	**0.60 % (wt.)**
MNT	**0.044 % (wt.)**
PNT	**0.356 % (wt.)**

Operating Conditions

Operating Pressure Column is operating under vacuum.
Column Internals Structured packing for the column (Type 5.0L).

Design Basis

99.50% Purity of ONT & 99% Purity of MNT, PNT.

Temperature of PNT column should be < 120˚C.

Experience

Finepac® Structures Pvt. Ltd. has supplied separating systems for quit large number of Isomer mixtures. ONT-MNT-PNT mixture is a typical system if not designed carefully, can lead to explosion hazard.