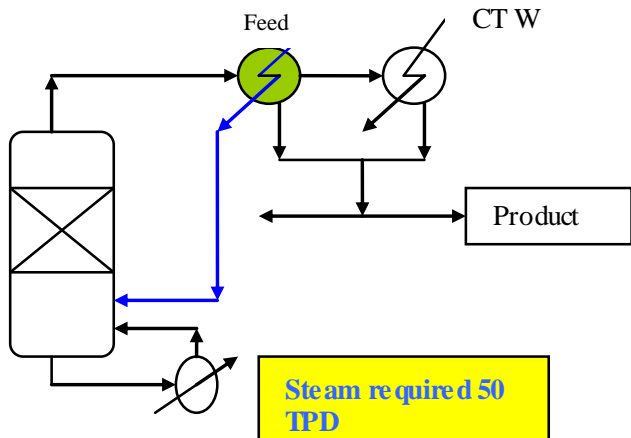


Thermal energy saving By product heat recovery technique in continuous distillation



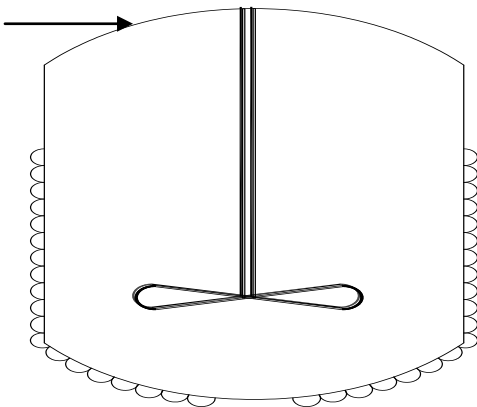
The heat energy from the vapors of the distillation is used for feed pre heating.

Steam saving :1800 Tons/year

Investment : 50 Lacs

Savings : 20 Lacs

Optimization of Specific solvent usage quantity in Bulk drug intermediate production.



Optimization of solvent usage quantity in API manufacturing (50% Reduction in solvent used)

Investment: Nil

Savings: 72 Lacs/year

CTW used for condensing MDC (Low boiling solvent) instead of “+10” water. There is a reduction in Specific Power consumption/TR from 1.15 to 1.0 using semi welded PHE

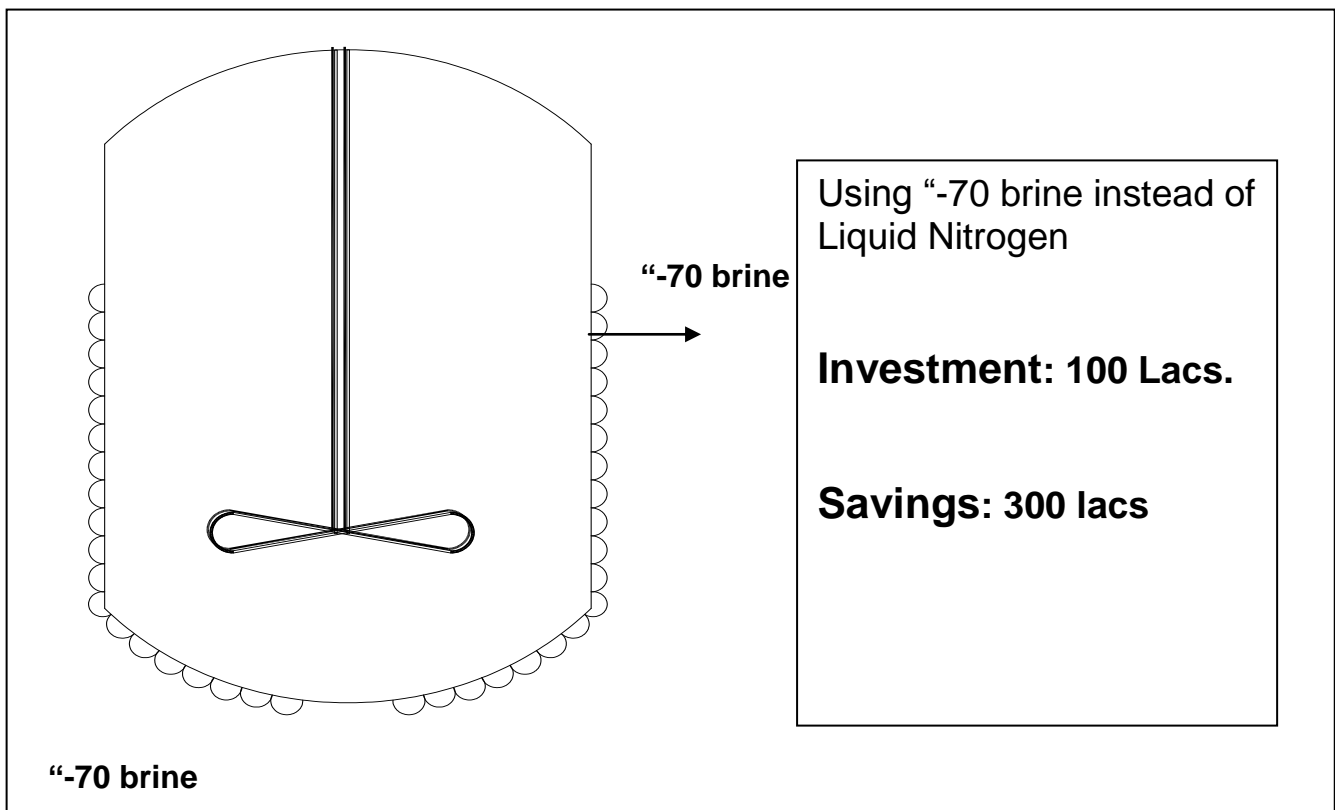


Low Boiling solvent MDC was condensed using CTW instead of “+10” water. 100 TR load reduction.

Investment: 10 Lacs.

Savings : 30 Lacs

Usage of “-70 brine from compressor (SPC : 6.6 Kw/TR), instead of Liq. Nitrogen (SPC : 45.6 Kw/TR)



Usage of Solar water heaters instead of Electrical heaters for Hot water generation in canteen



Solar water heaters instead of electrical heaters in Canteen

Investment : 10 lacs

Savings : 6.6 Lacs/vera