



رؤية 2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

Project Members:
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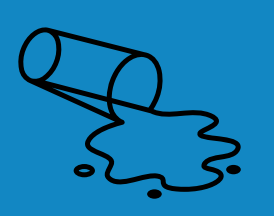
Supervised By:
Dr. Abdullaziz AL-Ghamdi



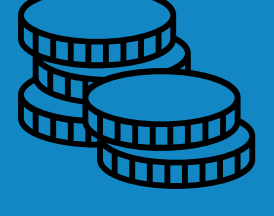
Production Design of Ethylene Glycol by Hydrolysis Process



Goals



High
purity &
Yield



Cost
Efficiency



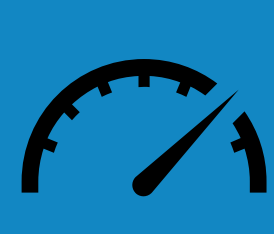
Environmen
tal Safety



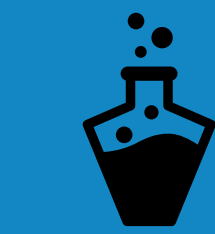
Key advantages



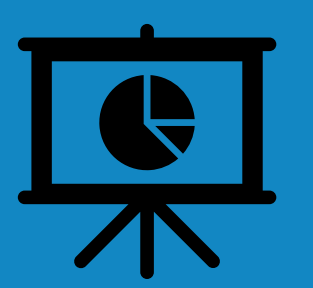
Antifreez
e (lowers
freezing
point)



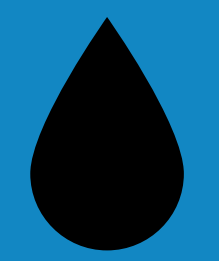
Coolant
(HVAC
systems)



Industrial
solvent
(resins)



Results



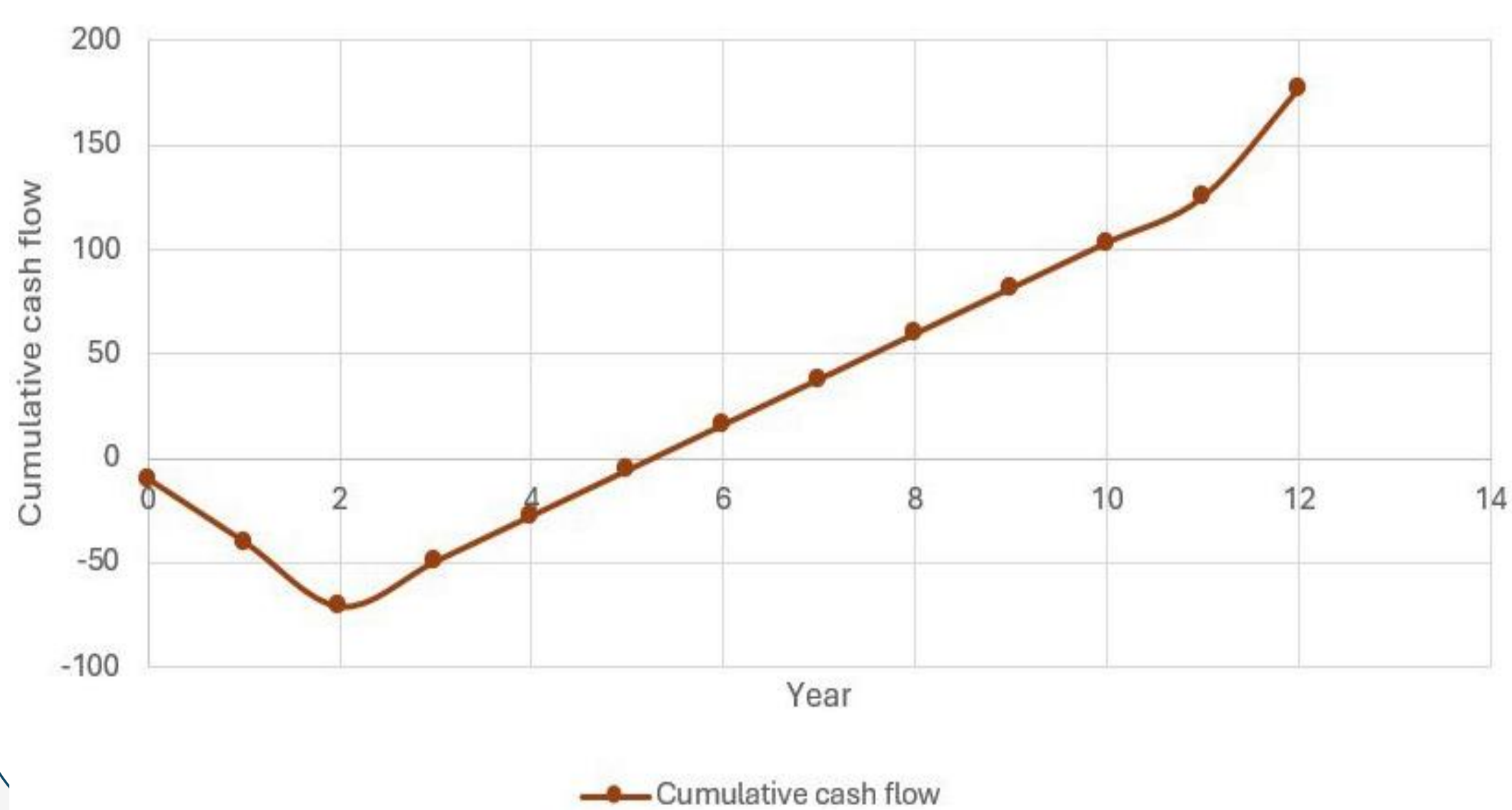
98%
purity



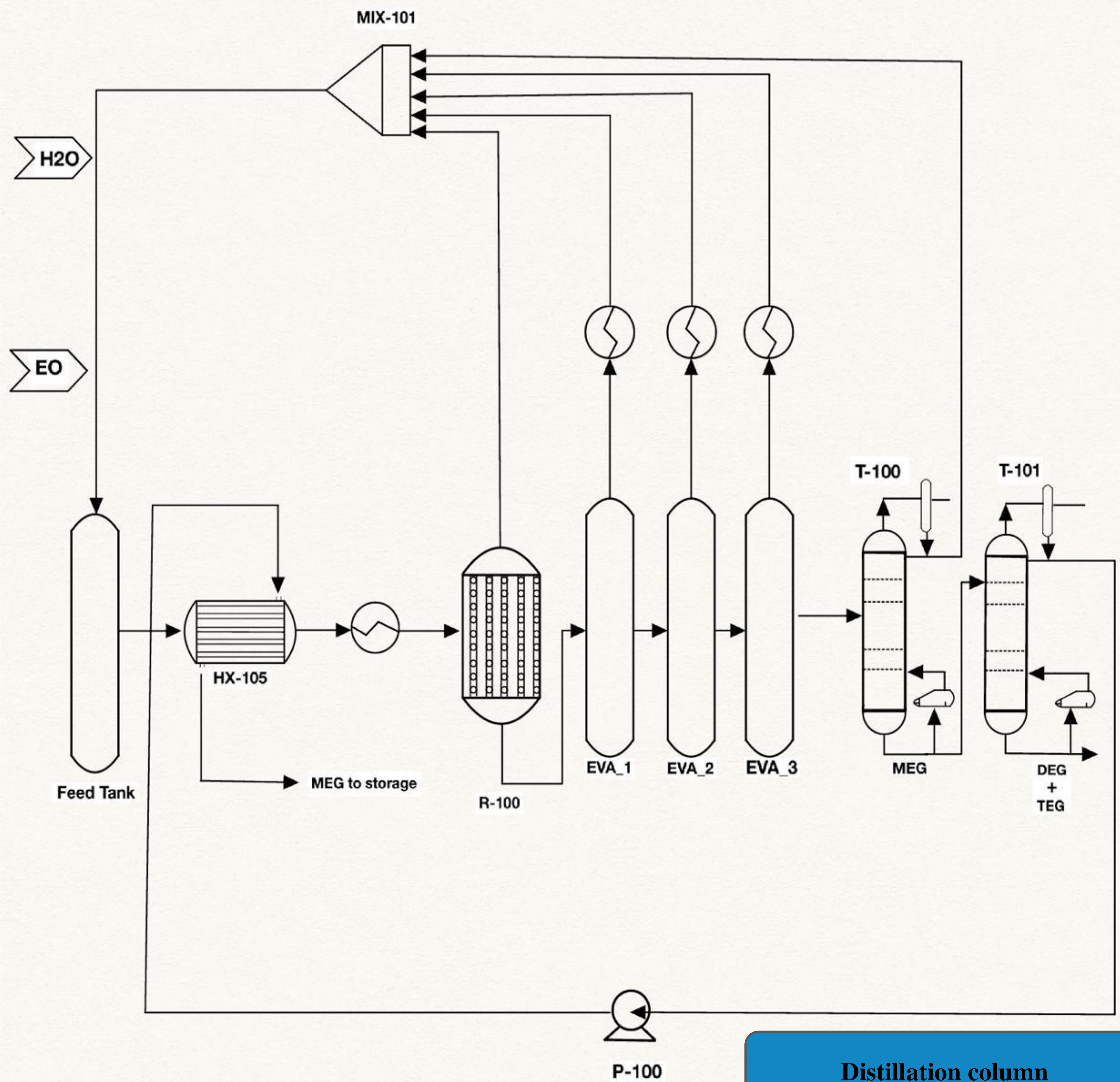
79.34M
SAR/ year

Economical Analysis

Cumulative cash flow

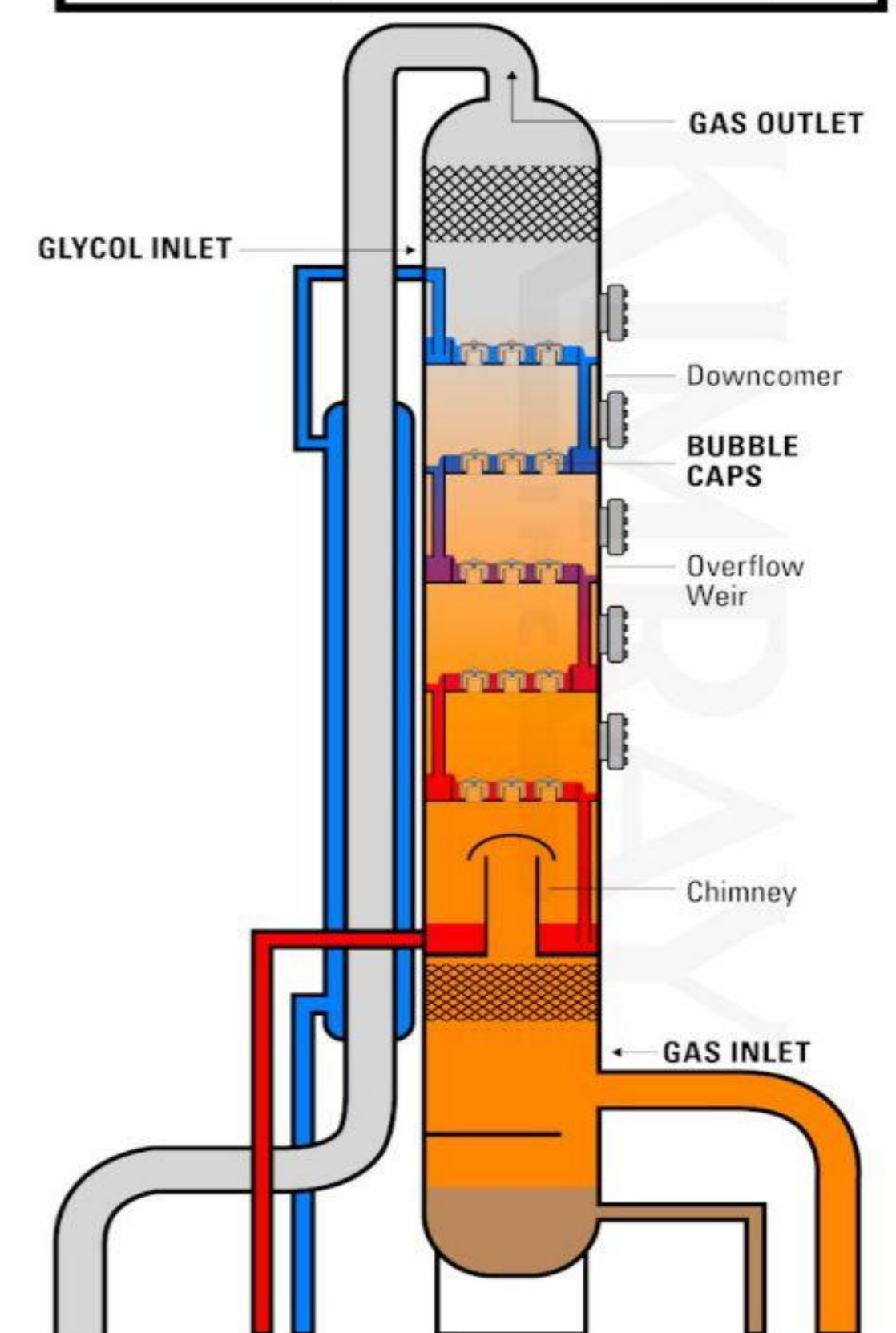


Flowsheet

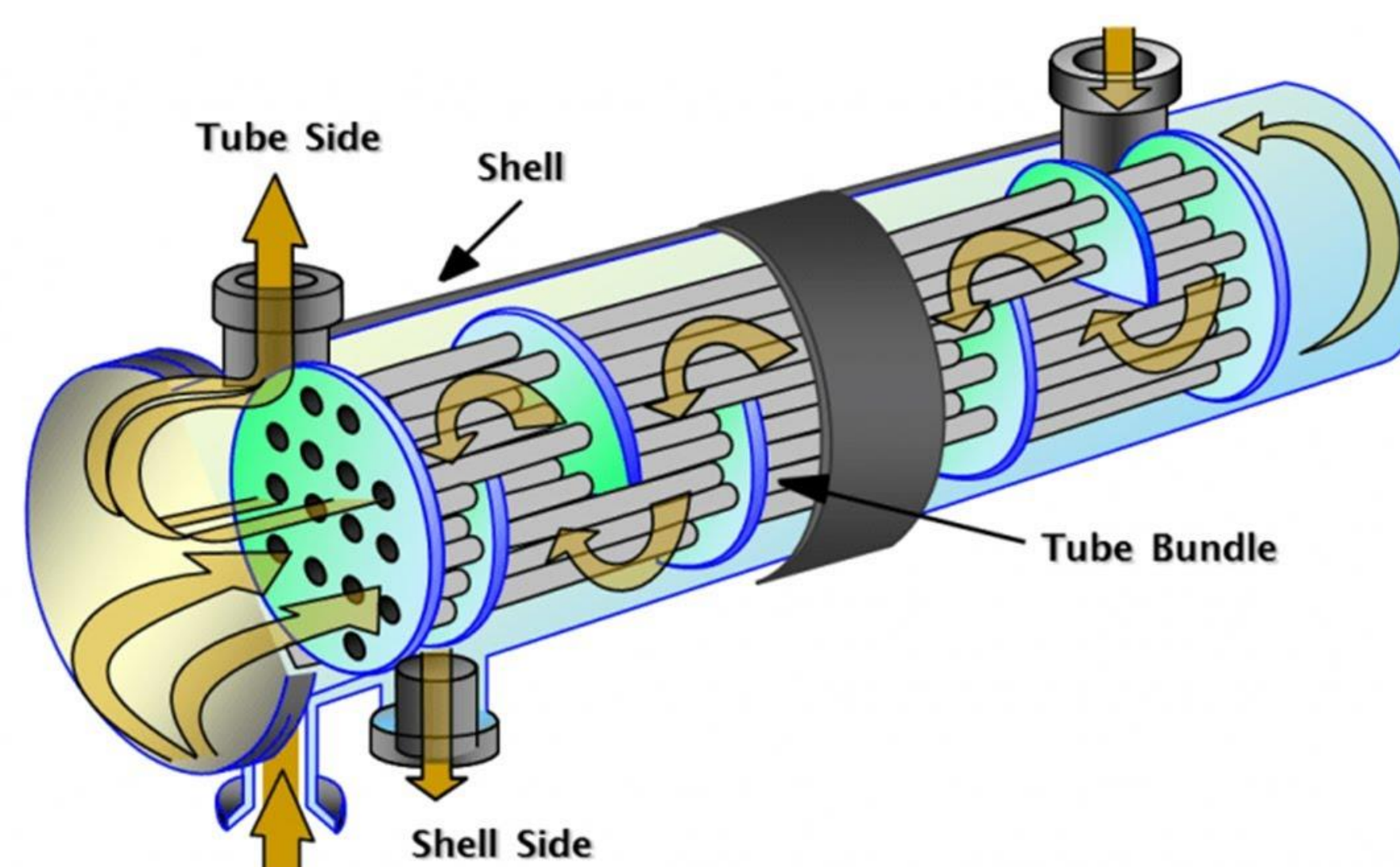


Distillation column

TRAYS (WITH BUBBLE CAPS)



Heat exchanger



Applications

Saudi Arabia's main ethylene glycol producers



سابك
SABIC

بترو رابغ
Petro Rabigh