



# **Production of Ethylene Oxide**

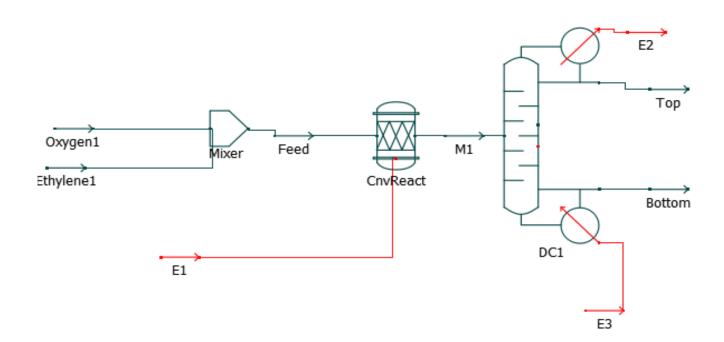
### Malapati Sree Harsha

## Sri Venkateswara University College Of Engineering

## **Background & Description:**

Ethylene Oxide production plant is downstream plant of Gas Cracker. Ethylene Oxide is widely used in production of Ethylene Glycol. In US and also in India, Ethylene Oxide has principle outlet in production of Ethylene Glycol. It also used as other derivatives like glycol polyesters, non-ionic detergents and ethanol-amines. This project relates actual plant production of ethylene oxide using ethylene and oxygen.

#### Flowsheet:





# OpenModelica Flowsheeting Project

# **Results:**

## DWSIM-

	Feed	Тор	Bottom
Oxygen	40	22.498945	0
Ethylene oxide	0	5.0018631	29.999913
Ethylene	50	14.999544	0.000086

	Feed	Тор	Bottom
Oxygen	40	22.4999	0
Ethylene oxide	0	5.07007	29.9299
Ethylene	50	14.93	0.069989