README

Brage Master Project Data

For any aspen files, all assumptions are made inside the model. It is easily navigable through the Aspen GUI.

# Aspen\_Column\_Bidir

Aspen V14

* Steady-state/model definition: sim1.apwz
* Dynamic model: sim1\_SIMPLE\_13\_1.dynf

# Aspen\_Column\_Ratio

Aspen V14

DYCOPS paper 2025 simulation

* Steady-state definition: sim1.apwz
* Dynamic model: sim1\_DYCOPS\_B{1-4}.dynf

# Aspen\_EthylBenzene

EthylBenzene model from Nithin & Aayush: EB.apwz

EB4\_17.dynf is the latest dynamic model revision used in the thesis.

# Figures

All formatted figures

BIDIR is bidirectional control for a single distillation column

EB is bidirectional control for an ethyl benzene plant

Sim1\_B1-B4 are simple control schemes for a distillation column (ifac paper)

# Simulation\_data

Raw data from the simulations

File\_dict.py: reads all file names and corresponding variable names, and stores as dictionaries.

Parse\_clc.py: extracts data from the .clc (table) files from Aspen dynamics (form: show as table)

Plot\_results.py: plots the files specified on line 355 that matches the “handles” input. It is possible to add a list of strings here.

1. Input name handle and press “Ctrl+S”

A computer screen with white text

Description automatically generated

1. Check if the handle matches with file names (marked in red)

A screenshot of a computer program

Description automatically generated

1. Run file

A screenshot of a computer program

Description automatically generated