Read me

Files

- AdvancedProfitFunction: The advanced profit function file include the advanced and modified advanced profit function. The optimization is done by OptimizationSystem1.ZOP.
- AdvancedProfitfunctionImproved: The model with improved values from the case studies
- AdvancedProfitFunctionThreeReactors: The file for the three reactor (40 m^3) system tested as an opportunity to the original model
- EnergyCostFunction: The file for the model with the energy function
- FirstReactorResponse is a file including only the first reactor for study of reactor behaviour
- OneReactor include a file with one reactor of volume 120 m^3
- SimpleProfitFunction is the model with the simple profit function

Chemcad tips

It is always recommended to start with a steady state model to get initial values in Chemcad.

Sensitivity analysis is done by going into the menu bar → run → sensitivity study.

Optimization is done by menu bar → run → optimization. For the optimization the objective function, independent variable and constraints must be set. Under settings and derivatives the choice between forward and central difference should be done. By using print level 4, the most information about the optimization will be given back.

To get the results in Excel: Menu bar → Options → Preferences → Connections → Report viewer : Excel

To set reference temperature: Format → Engineering Units → Options and references: the vapour reference temperature is set to 15°C

In Explorer under Data Maps → Execution Rules it can be found which datamaps are in use.

Thermodynamic model to get some units in another thermodynamic model than the rest of the file. If wanting to use the UNIFAC-LLE for separators: Menu bar → Thermodynamical → Thermodynamic Settings → folder K-value Models → Set local Thermodynamics