

Getting started with BatchColumn®

Use Case 1: Simulation of solvents mixture separation

Software & Services In Process Simulation

We guide You to efficiency



ProSim

Introduction

This document presents the different steps to follow in order to simulate a batch distillation using BatchColumn software.

This presentation is based on an example of separation of the following solvents mixture: methanol / acetone / dichloromethane / diacetone alcohol. This example is available on ProSim website (www.prosim.net) or in the BatchColumn example directory.

The summary of this Getting Started is:

Part 1 - Description of the example

Part 2 - General points on the software interface

Part 3 - Description of the different simulation steps

- Description of the example:
 - Objective of the distillation
 - Compounds and thermodynamic model
 - Description of the equipment
 - Operating scenario

Objective of the distillation

The boiler is loaded with a solvent mixture including methanol (19.45 wt%), acetone (21.96 wt%), dichloromethane (56.29 wt%) and diacetone alcohol (2.3 wt%). The initial load is 6090 kg.

The objective is to simulate the recovering of:

- Dichloromethane with a purity of 95 wt%
- Acetone with a purity of 90 wt%
- Methanol with a purity of 98 wt%

Compounds and thermodynamic model

The compounds involved in this distillation are:

- Methanol
- Acetone
- Dichloromethane
- Diacetone alcohol

The thermodynamic model selected is NRTL.

The binary interaction parameters of the methanol - acetone binary are automatically loaded. For a better accuracy, they should be replaced by those of the table below. There are also the other binaries to fill in. The binary interaction parameters, expressed in cal/mol.

Methanol-Acetone	-12.37	290.51	0.3085
Methanol-Dichloromethane	74.14	1517.35	0.4830
Acetone-Dichloromethane	-725.20	641.70	0.35
Acetone-Diacetone alcohol	2127.96	-1624.17	0.2908

Description of the equipment

Four tanks are connected to the condenser for distillation recovery: tank 1, tank 2, tank 3, tank 4.

The column characteristics are:

- 32 theoretical plates (including boiler and condenser)
- Liquid holdups are 15 l for the condenser and 2.5 l per tray
- The heat duty is assumed to be constant at 500 000 kcal/hr
- The condenser is an ideal total condenser.

Operating mode

The column head pressure is 100 mmHg. Pressure drop is 10 mmHg.

Dichloromethane recovery

Step 1: Filling-up the column. Initial load temperature is 0°C

Step 2: Distillate to tank 1 with a reflux ratio = 2

Final event: 2000 kg of product in tank 1

Step 3: Distillate to tank 1 with a reflux ratio = 5

Final event: 2800 kg of product in tank 1

Step 4: Infinite reflux

Final event: time duration = 30 minutes

Step 5: Distillate to tank 1 with a reflux ratio = 5

Final event: dichloromethane weight fraction in tank 1 < 0.96

Step 6: Infinite reflux

Final event: time duration = 30 minutes

Step 7: Distillate to tank 1 with a reflux ratio = 5

Final event: dichloromethane weight fraction in tank 1 < 0.95

Operating mode

Intermediate cut

Step 8: Distillate to tank 2 with a reflux ratio = 5

Final event: acetone weight fraction in distillate > 0.96

Acetone recovery

Step 9: Distillate to tank 3 with a reflux ratio = 5

Final event: 800 kg of product in tank 3

Step 10: Infinite reflux

Final event: time duration = 30 minutes

Step 11: Distillate to tank 3 with a reflux ratio = 5

Final event: acetone weight fraction in tank 3 < 0.90

Methanol recovery

Step 12: Distillate to tank 4 with a reflux ratio = 2

Final event: residual load in the boiler < 150 kg

- General points on the software interface:
 - The main window
 - Using the toolbar
 - Choosing the unit system
 - Creating a new simulation file

The main window

Configuration panel

Toolbar

Selection of the screen

Panel used to describe the scenario

Zoom level

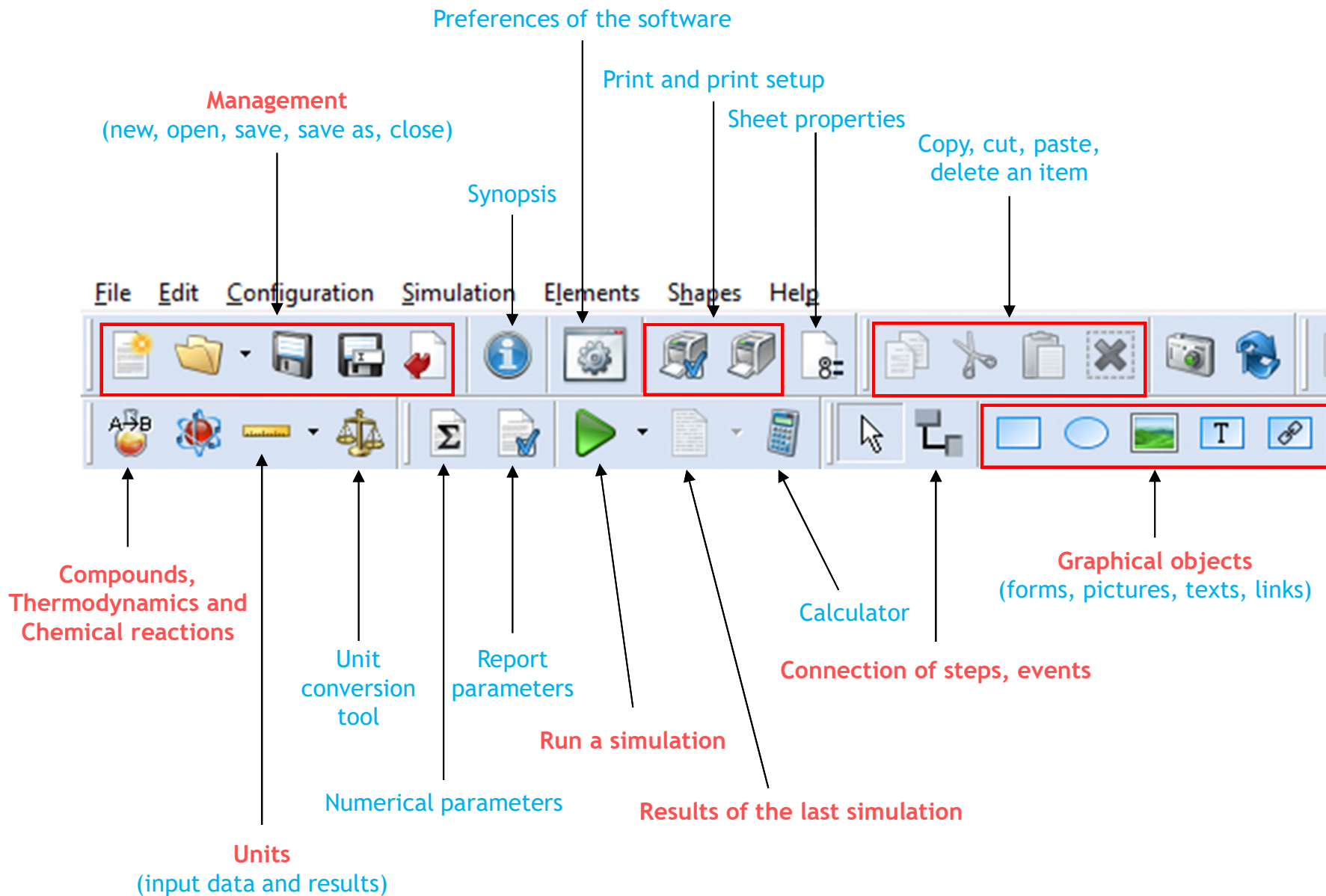
Part used to enter parameters

Zoom level

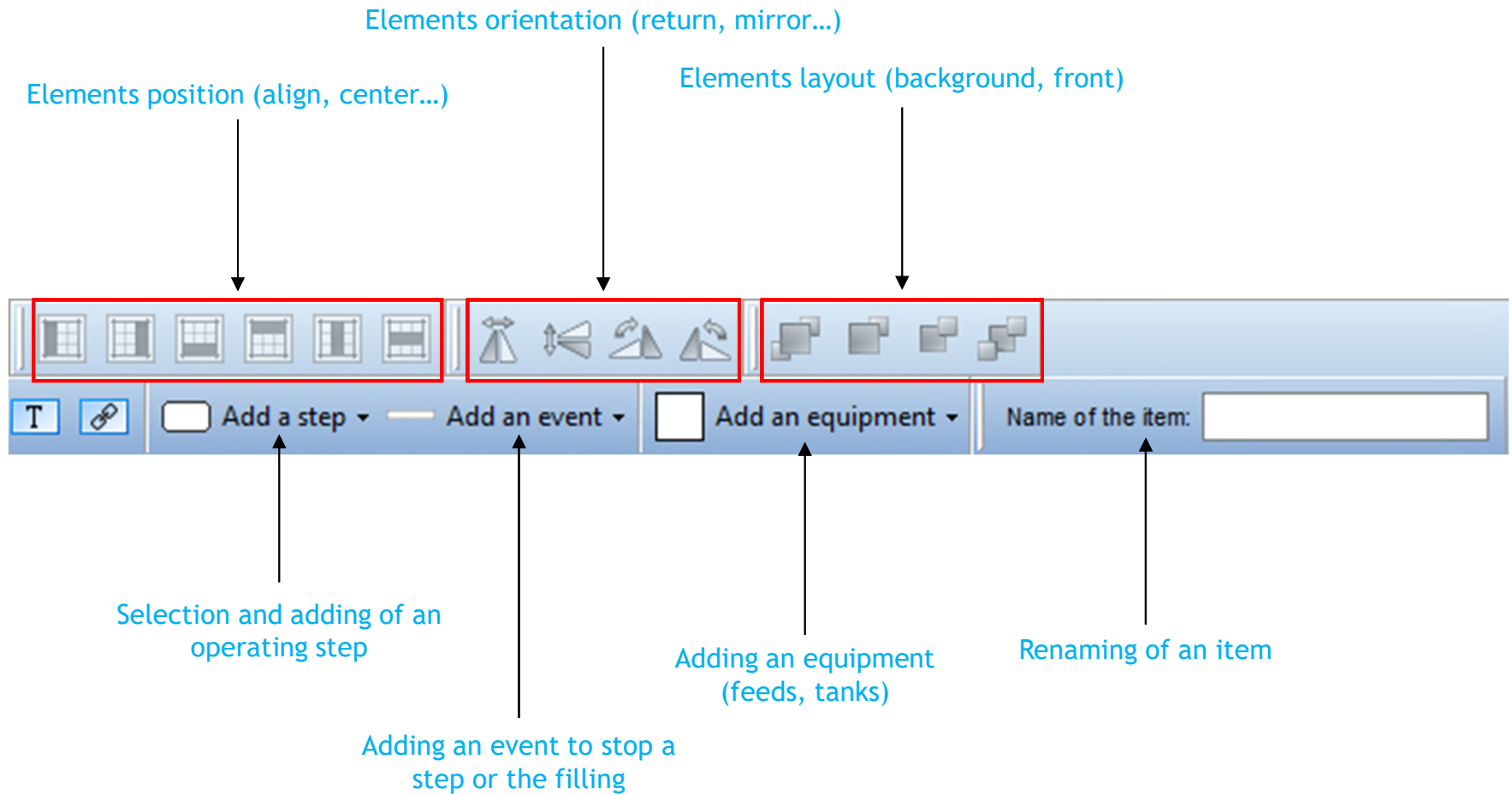
Validation system

The screenshot displays the ProSim software interface. The main window is divided into several sections. At the top is a menu bar with options: File, Edit, Configuration, Simulation, Elements, Shapes, and Help. Below the menu bar is a toolbar containing various icons for file operations, simulation, and editing. The central area is the 'Flowsheet' workspace, which shows a process flow diagram with 12 steps arranged in three columns. The first column contains Step 1 (blue), Step 2 (red), Step 3 (red), and Step 4 (yellow). The second column contains Step 5 (red), Step 6 (yellow), Step 7 (red), and Step 8 (red). The third column contains Step 9 (red), Step 10 (yellow), Step 11 (red), and Step 12 (red). The diagram includes various process units like columns, tanks, and heat exchangers. To the right of the flowsheet is the 'Configuration panel' for the selected 'Step 1'. It contains settings for the number of theoretical stages (32), internal configurations (Plate, Torispherical), and various options for heat exchangers and jackets. At the bottom of the flowsheet workspace is a 'Zoom level' control with a 'Full page' button. The bottom status bar shows a green checkmark and the text 'The validation system reports no error.'

Using the toolbar



Using the toolbar



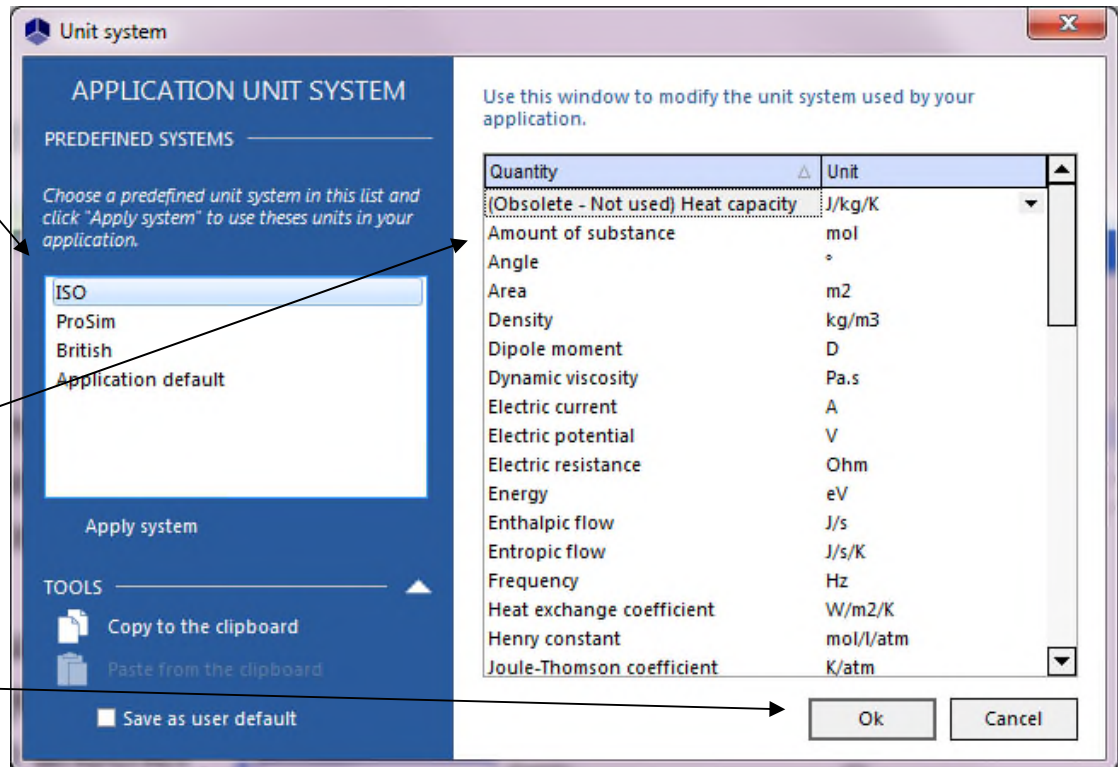
Choosing the unit system



1- Select the predefined system “ISO” and click on “Apply system”

2- For a given quantity you can change the default unit to another one by clicking on its name

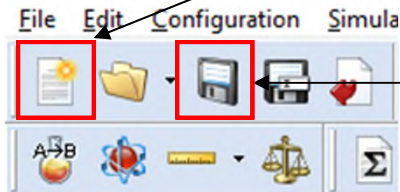
3- Click on “OK” to validate



Creating a new simulation file



1- Click on “Create a new document” icon



2- Save the file

3 - Fill the form of the synopsis (optional)

Synopsis

Titre :

Sujet :

Auteur :

Manager :

Société :

Catégorie :

Mot-clés :

Commentaires :

OK Annuler

Part 3

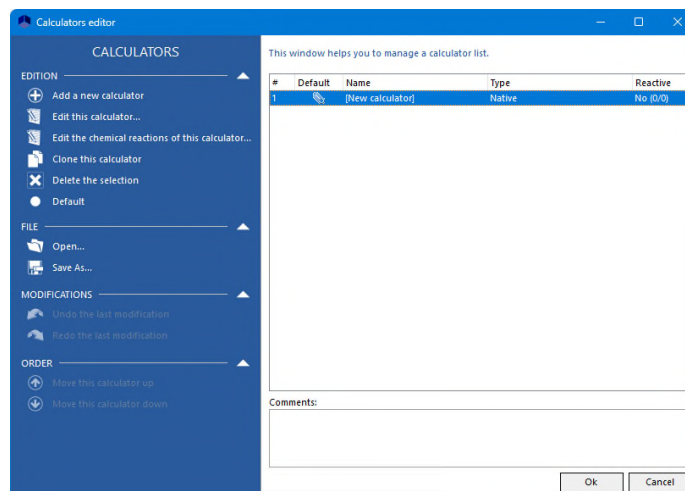
Description of the different simulation steps

- 1: Selecting the compounds
- 2: Selecting the thermodynamic model
- 3: Describing the chemical reactions
- 4: Describing the distillation system
- 5: Describing the operating steps
- 6: Running the simulation
- 7: Reviewing the simulation results

1-Selecting the compounds

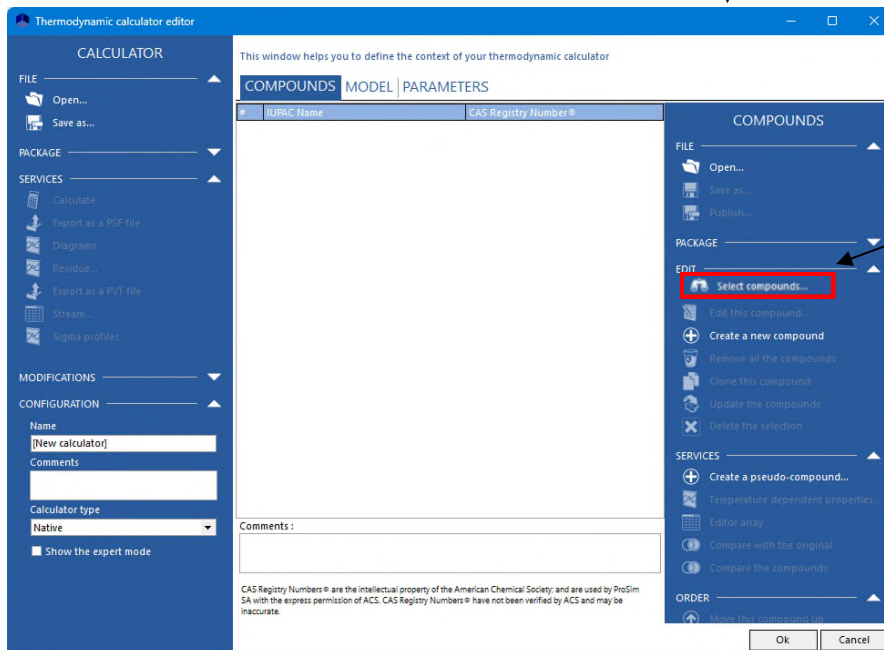


1- Click on the “Thermodynamics and compounds” icon



2- Double click on the calculator.

A calculator allows you to define a list of compounds and a thermodynamic model

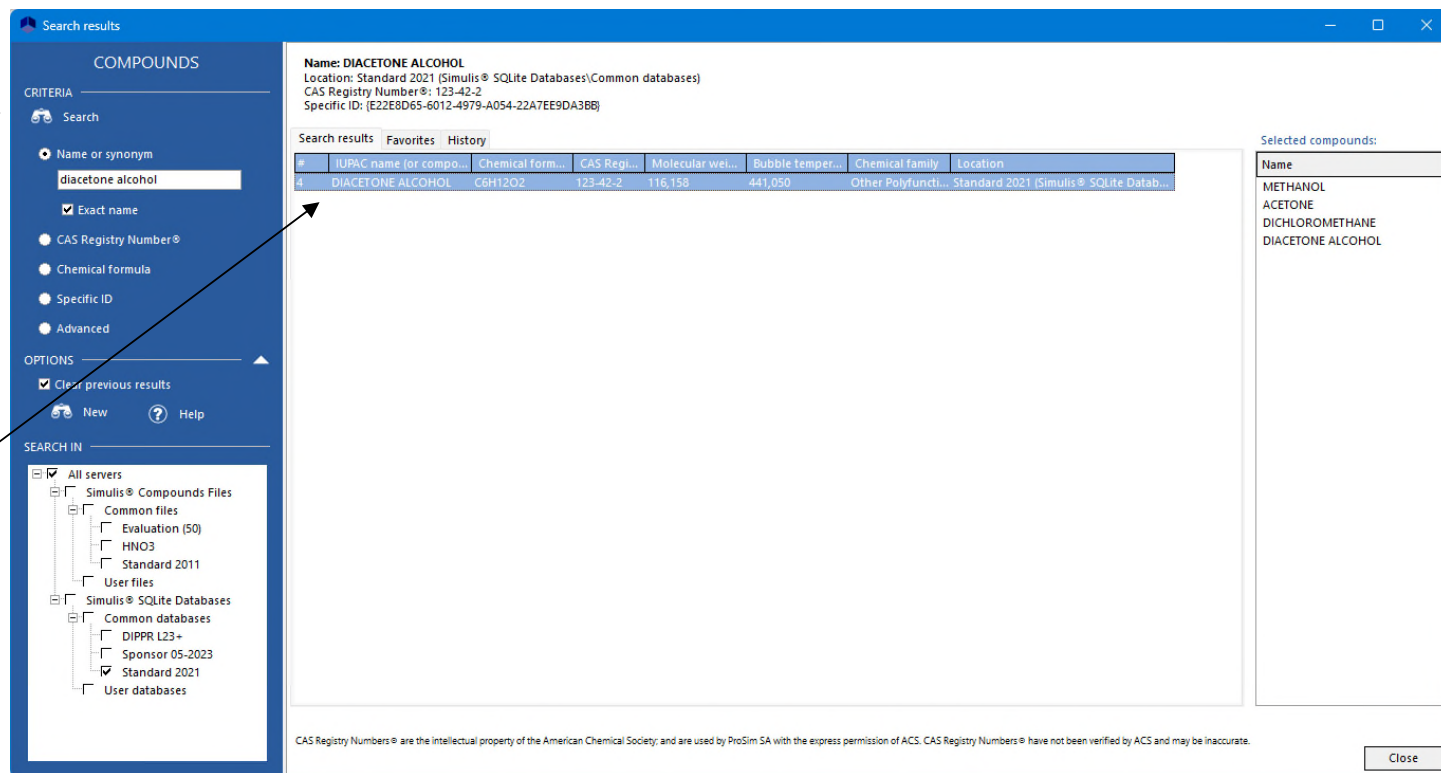


3- Click on “Import compounds”

1-Selecting the compounds

4- Search each compound by name

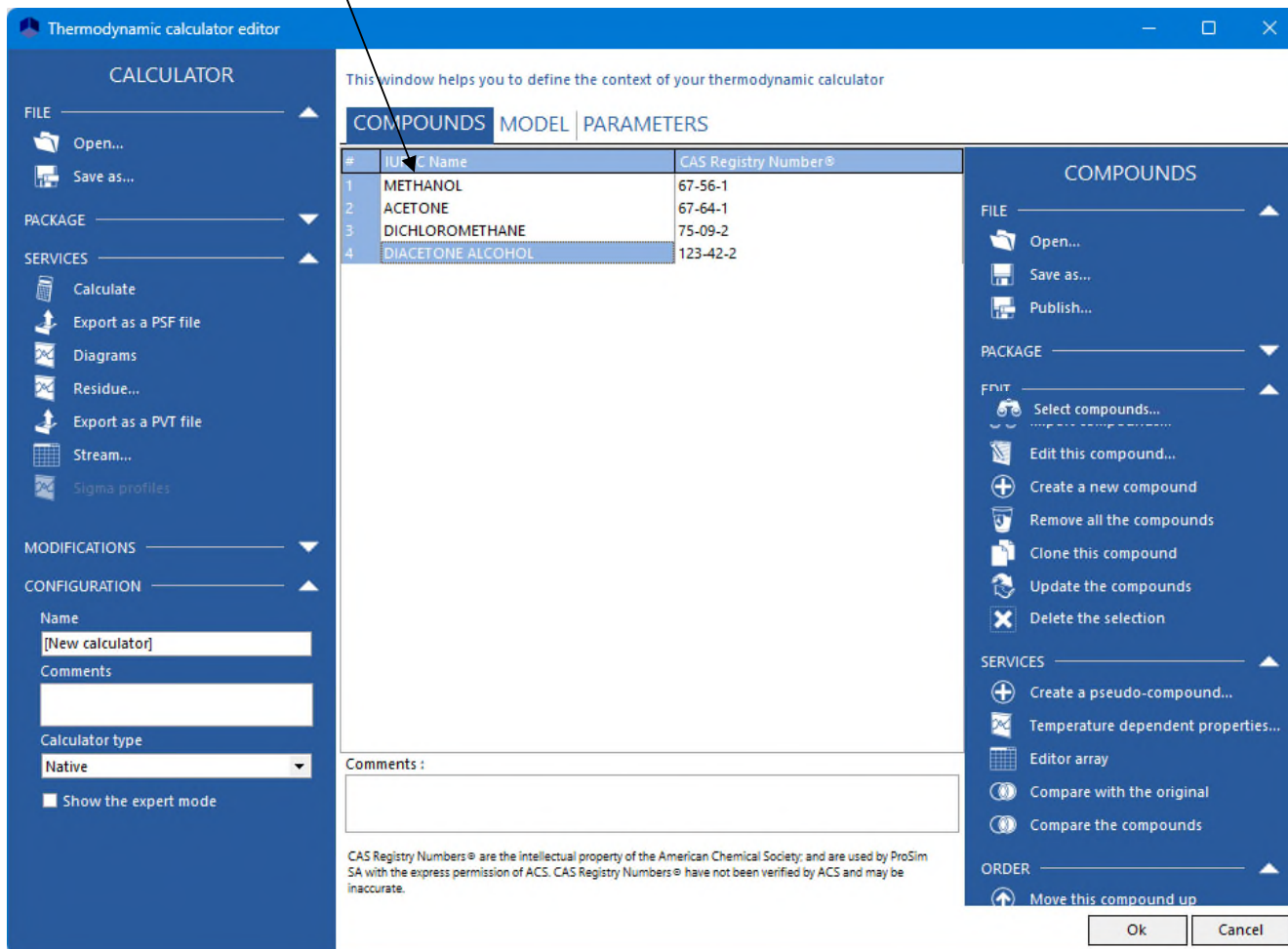
5- Double click on a compound to add it to the list of selected compounds



6- Click on "close" when the 4 compounds have been selected

1-Selecting the compounds

7- The compounds imported from the database are listed here.



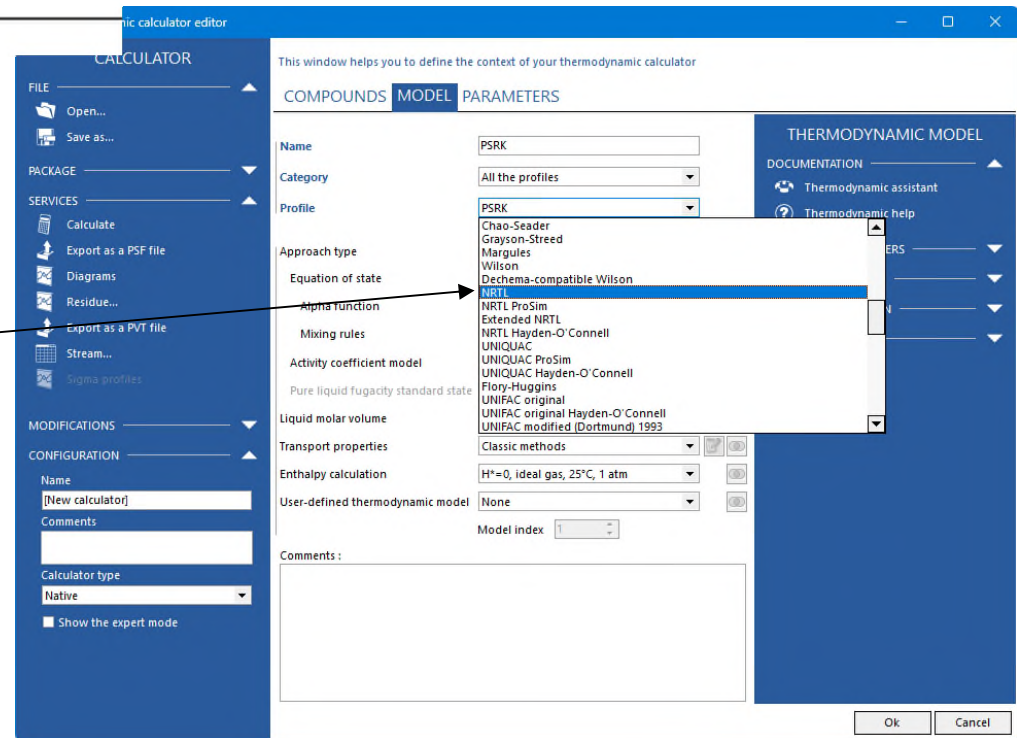
2-Selecting the thermodynamic model

1- Click on the “Model” tab to open the thermodynamic models configuration window.

This window helps you to define the context of your thermodynamic calculator

COMPOUNDS **MODEL** PARAMETERS

2- All thermodynamic models available are listed here. Use the scroll bar to go through the complete list. Select NRTL as the model to be used in this example.



2-Selecting the thermodynamic model

The NRTL thermodynamic profile is automatically displayed

4- Click on the “Binaries” tab to access the binary interaction parameters of the NRTL model

3- Enter a name for your calculator (optional)

The screenshot shows the 'Thermodynamic calculator editor' window. The left sidebar contains a 'CALCULATOR' section with file operations (Open..., Save as...), package selection, and services (Calculate, Export as a PSF file, Diagrams, Residue..., Export as a PVT file, Stream..., Sigma profiles). Below this are 'MODIFICATIONS' and 'CONFIGURATION' sections. The 'CONFIGURATION' section has a 'Name' field with '[New calculator]' entered, a 'Comments' field, a 'Calculator type' dropdown set to 'Native', and a 'Show the expert mode' checkbox. The main area has tabs for 'COMPOUNDS', 'MODEL', 'BINARIES', and 'PARAMETERS'. The 'MODEL' tab is active, showing a list of thermodynamic models. 'NRTL' is selected in the 'Profile' dropdown. Other settings include 'Approach type' (From activity coefficients), 'Equation of state' (Perfect gas), 'Alpha function' (Not defined), 'Mixing rules' (Not defined), 'Activity coefficient model' (NRTL), 'Pure liquid fugacity standard state' (Vapor pressure), 'Liquid molar volume' (Ideal mixture), 'Transport properties' (Classic methods), 'Enthalpy calculation' (H*=0, ideal gas, 25°C, 1 atm), and 'User-defined thermodynamic model' (None). The 'BINARIES' tab is also visible, showing a 'THERMODYNAMIC MODEL' section with documentation and additional parameters. The bottom right has 'Ok' and 'Cancel' buttons.

2-Selecting the thermodynamic model

Thermodynamic calculator editor

CALCULATOR

FILE

- Open...
- Save as...

PACKAGE

SERVICES

- Calculate
- Export as a PSF file
- Diagrams
- Residue...
- Export as a PVT file
- Stream...
- Sigma profiles

MODIFICATIONS

CONFIGURATION

Name

[New calculator]

Comments

Calculator type

Native

Show the expert mode

This window helps you to define the context of your thermodynamic calculator

COMPOUNDS | MODEL | BINARIES | PARAMETERS

These parameters correspond to the general values and are used if the user has not provided specific parameters (buttons to the right of each option in the thermodynamic profile)

Binaries view: ☒ Grid ☐ Matrix

Formulation : $g_{ij} - g_{ij}^0 = C_{ij}^0 + C_{ij}^T(T - 273.15)$, $a_{ij} = a_{ij}^0 + a_{ij}^T(T - 273.15)$

Compound	Compound	C_{ij}^0	C_{ij}^T	a_{ij}^0	C_{ij}^T	a_{ij}^T
METHANOL	ACETONE	-12,37	290,51	0,3085	0	0
METHANOL	DICHLOROMETHANE	74,14	1517,35	0,483	0	0
METHANOL	DIACETONE ALCOHOL	0	0	0	0	0
ACETONE	DICHLOROMETHANE	-725,2	641,7	0,35	0	0
ACETONE	DIACETONE ALCOHOL	2127,96	-1624,17	0,2908	0	0
DICHLOROMETHANE	DIACETONE ALCOHOL	0	0	0	0	0

Unit

cal/mole

☐ parameters will be ignored

☒ parameters are automatically loaded

Not supplied Supplied Imported Estimated Error

Comments :

Ok Cancel

5- You can enter your binary interaction parameters.

Click on “OK” at the bottom to exit the thermodynamic calculator



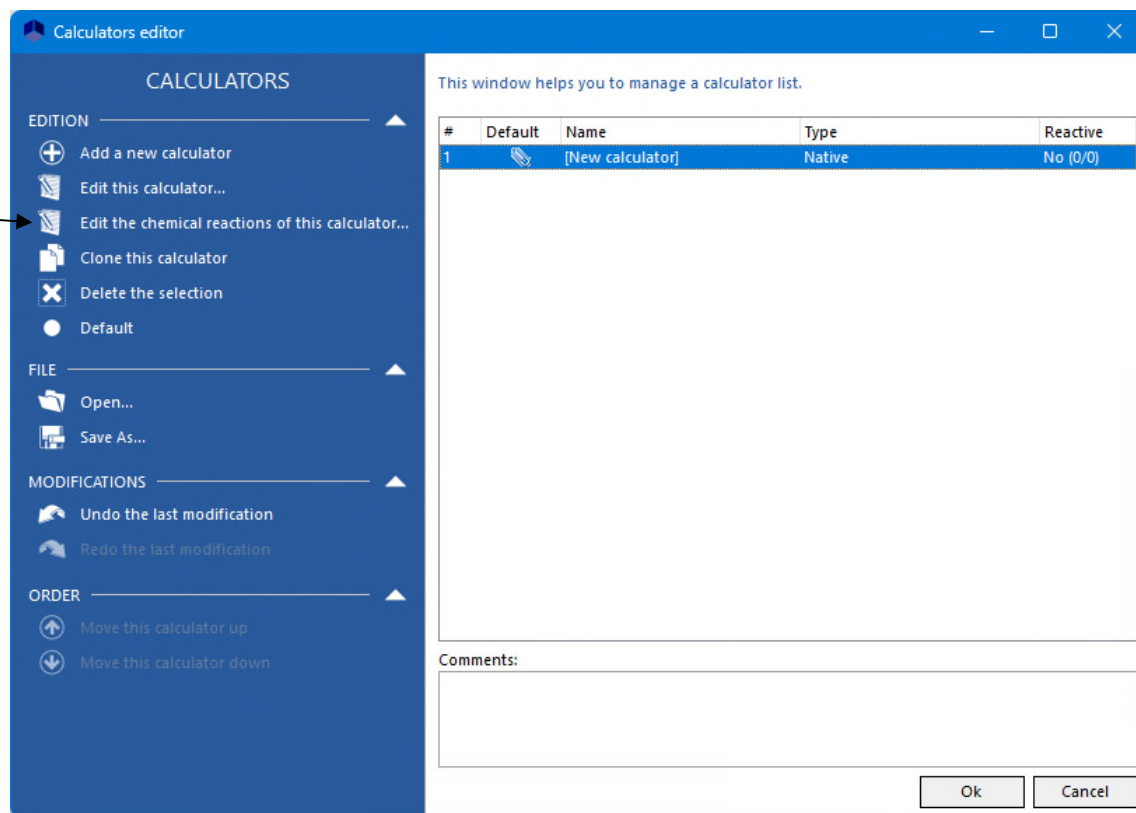
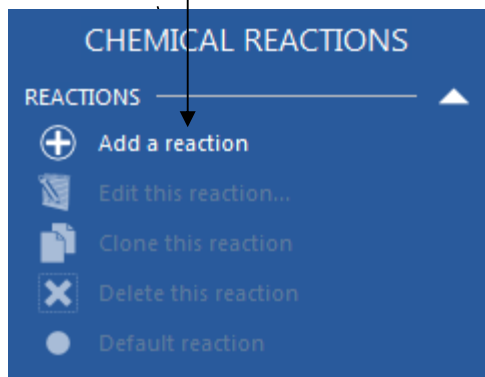
For more information about the compounds selection and the configuration of the thermodynamic profile, please consult “Getting started with Simulis Thermodynamics” documents.

3-Describing the chemical reactions

There is no chemical reaction involved in this example. But if it is the case, they can be described as follows.

1- Click on “Edit the chemical reactions...” to open the chemical reactions editor

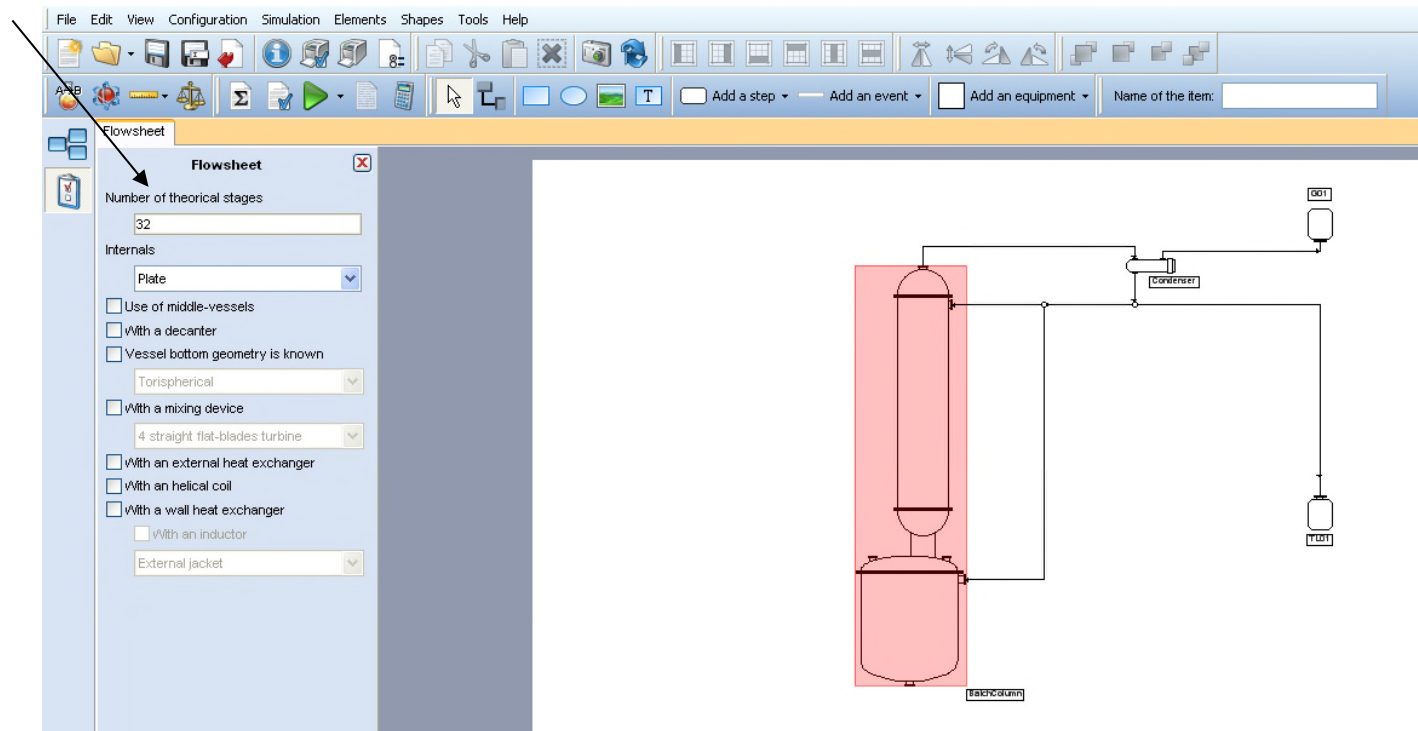
2- Select “Add a reaction”



4-Describing the distillation system

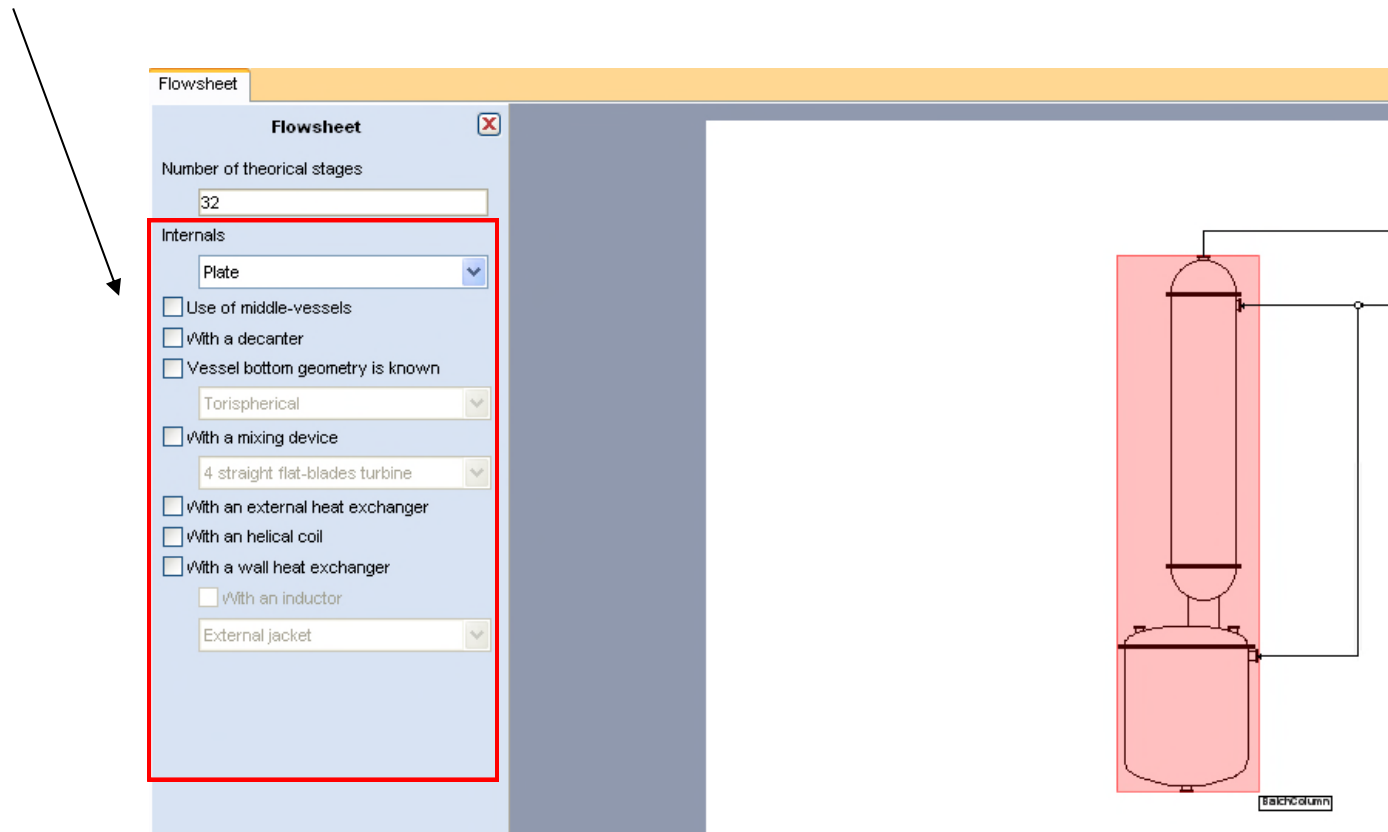
The main flowsheet window allows to display the distillation system (inlet and outlet storages, boiler, column and condensing system) and directly access the different configuration windows.

1- Enter the number of theoretical stages



4-Describing the distillation system

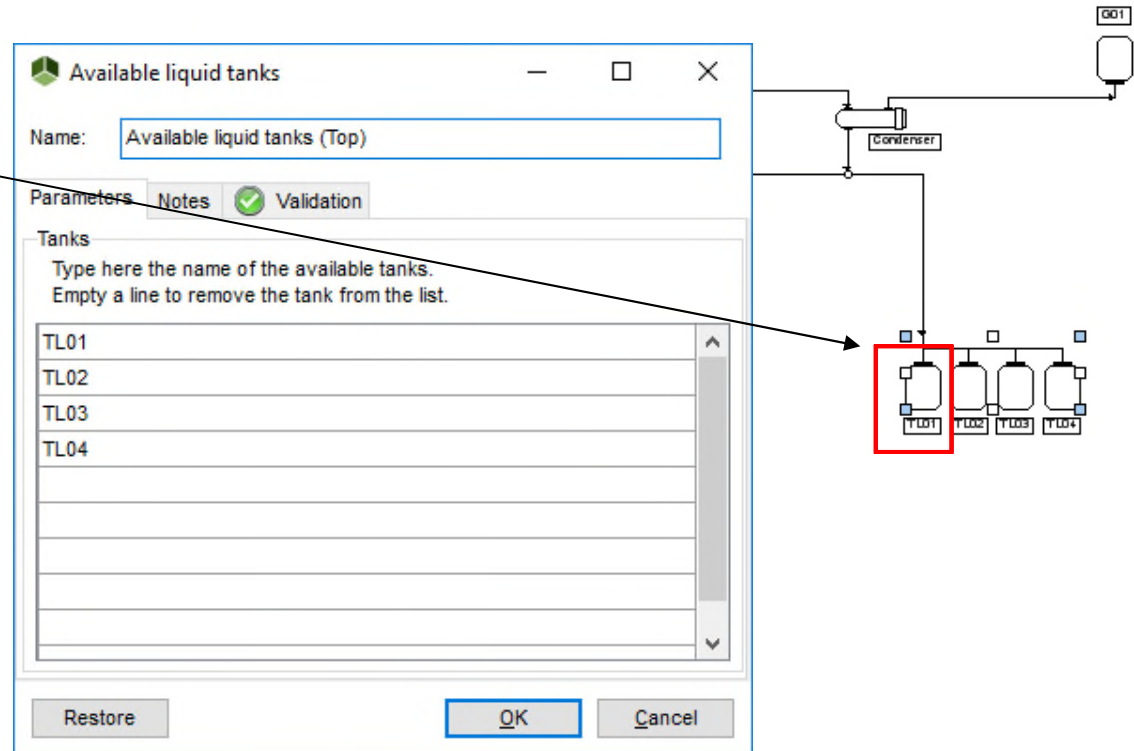
2- Select the main items of the column:



4-Describing the distillation system

4.1- Liquid tanks

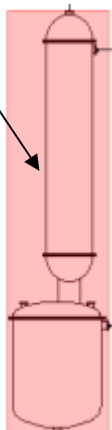
- 1- Double click on the first liquid tank to open the configuration window and add the other tanks TL02, TL03, TL04



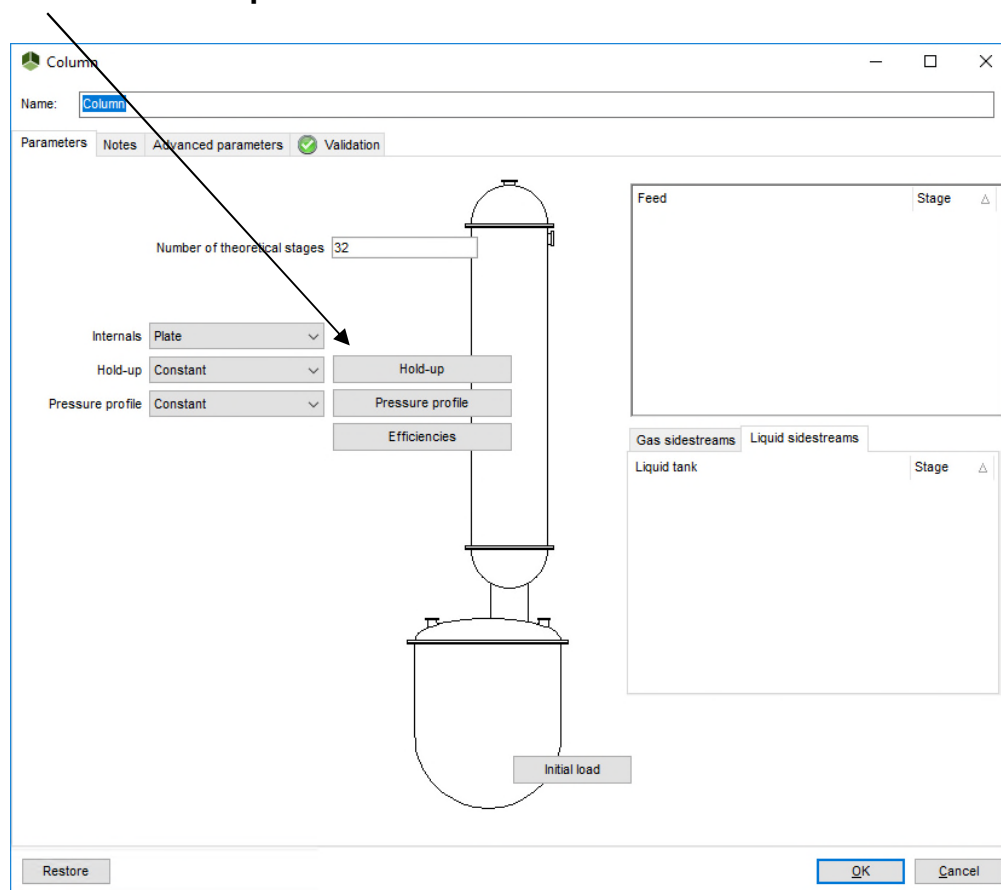
4-Describing the distillation system

4.2- Column

1 - Double click on the column icon



2 - Click on “Hold-up”



4-Describing the distillation system

4.2- Column

Enter hold-up for the condenser and the stages (hold-up per stage)

Hold-up

Parameters Validation

Hold-up type: Volume

Condenser: 15 l

☐ Use of middle-vessels

Stage 1	Stage 2	Value
2	31	2.5 l

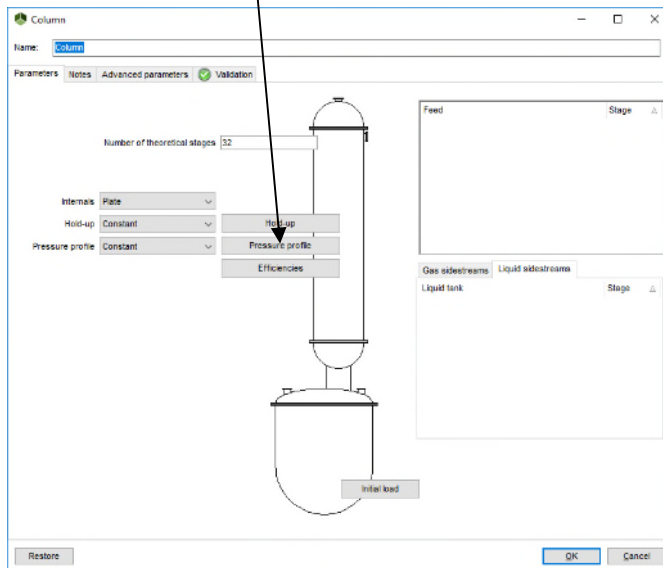
Stage

Restore OK Cancel

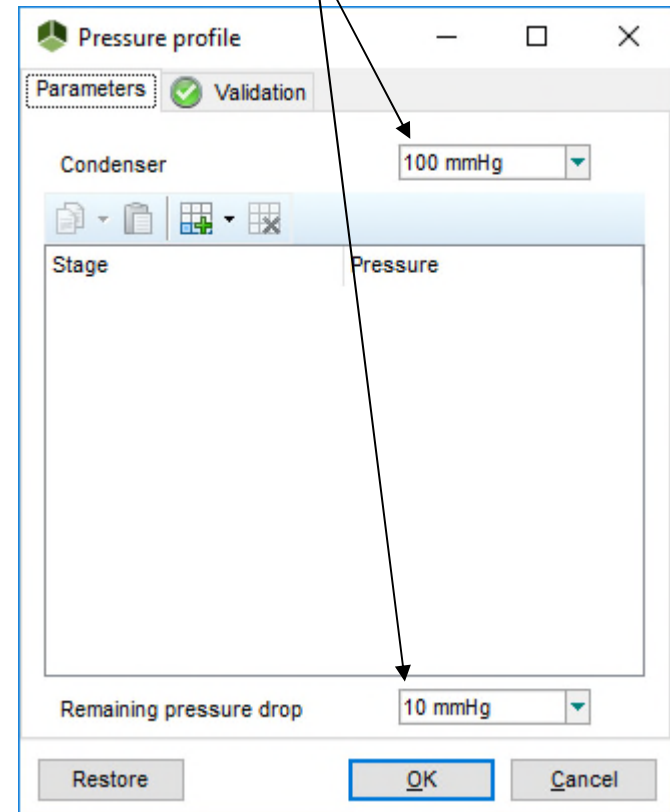
4-Describing the distillation system

4.2- Column

Click on “Pressure profile”



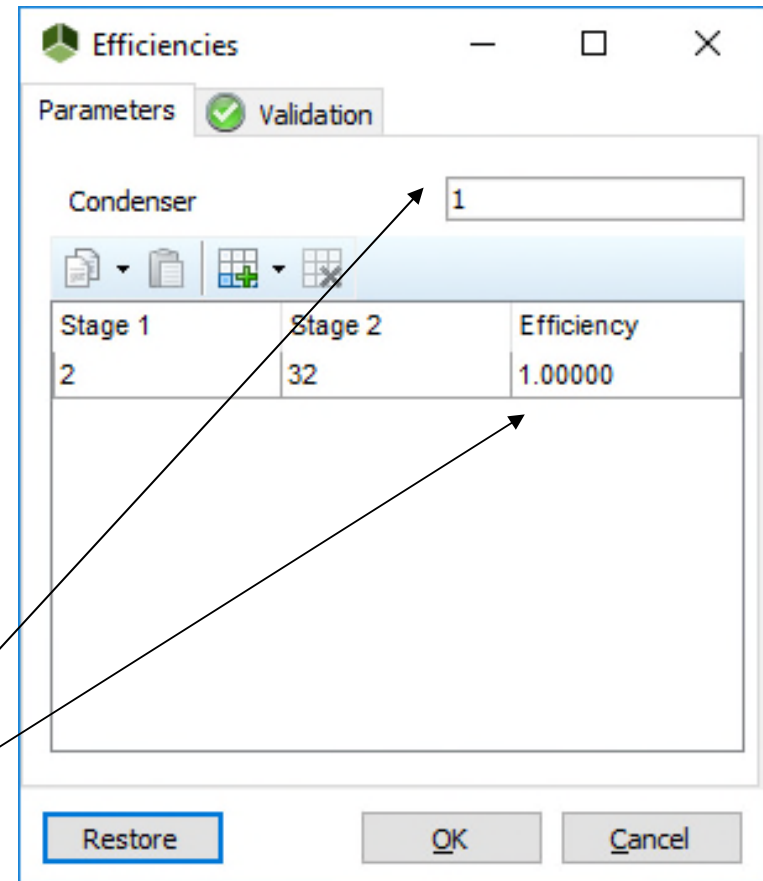
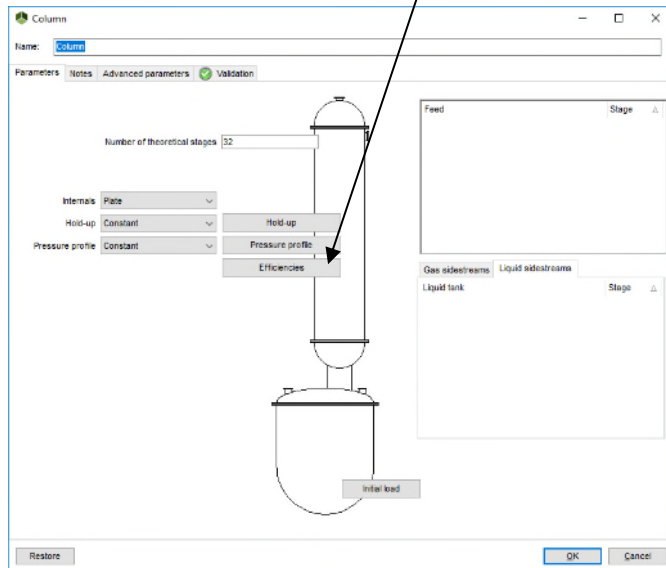
Enter the condenser pressure and the pressure drop



4-Describing the distillation system

4.2- Column

Click on “Efficiencies”

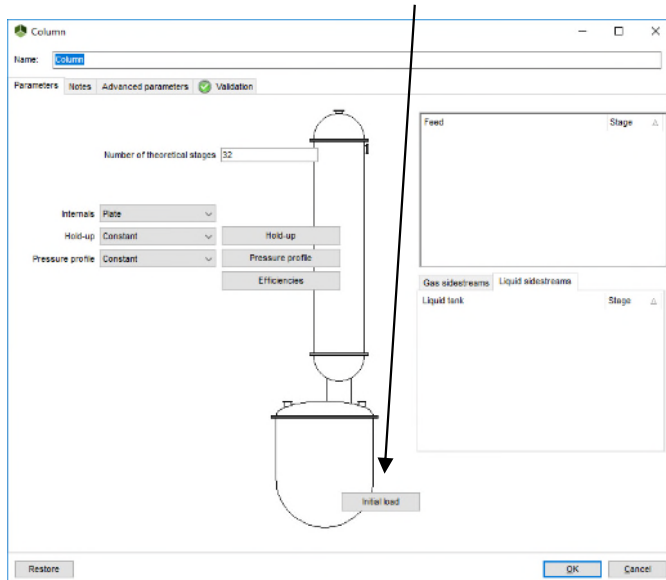


Condenser and plate efficiencies are set to 1
(Warning: in any case, the boiler efficiency should be kept equal to 1)

4-Describing the distillation system

4.2- Column

Click on “Initial load”



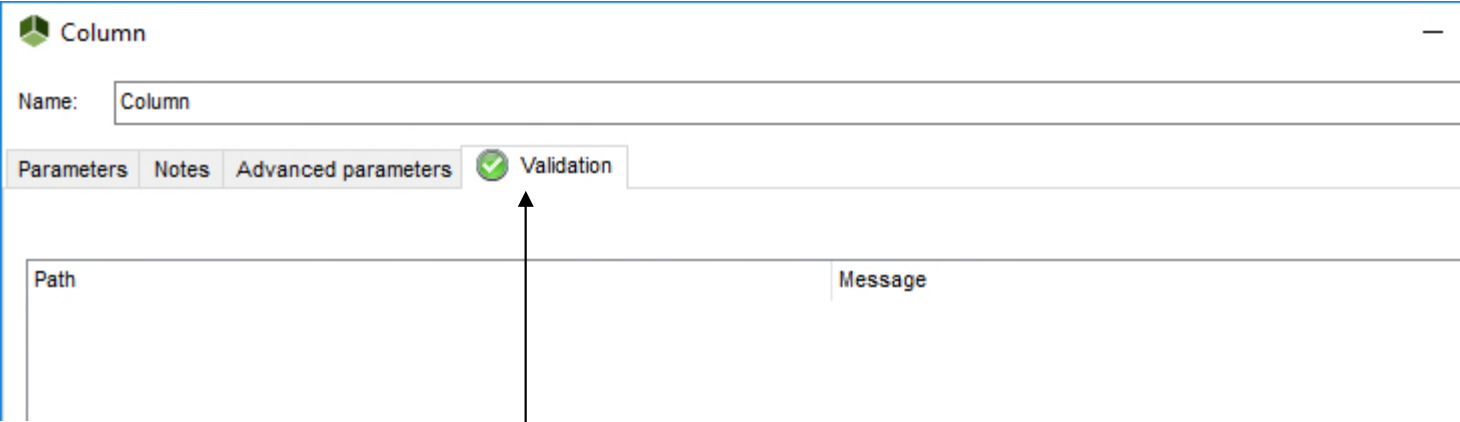
Enter composition and mass of the initial load

Compound	Fraction
METHANOL	0.1945
ACETONE	0.2196
DICHLOROMETHANE	0.5629
DIACETONE ALCOHOL	0.023

Total mass load: 6090 kg

4-Describing the distillation system

4.2- Column



Column

Name: Column

Parameters Notes Advanced parameters **Validation**

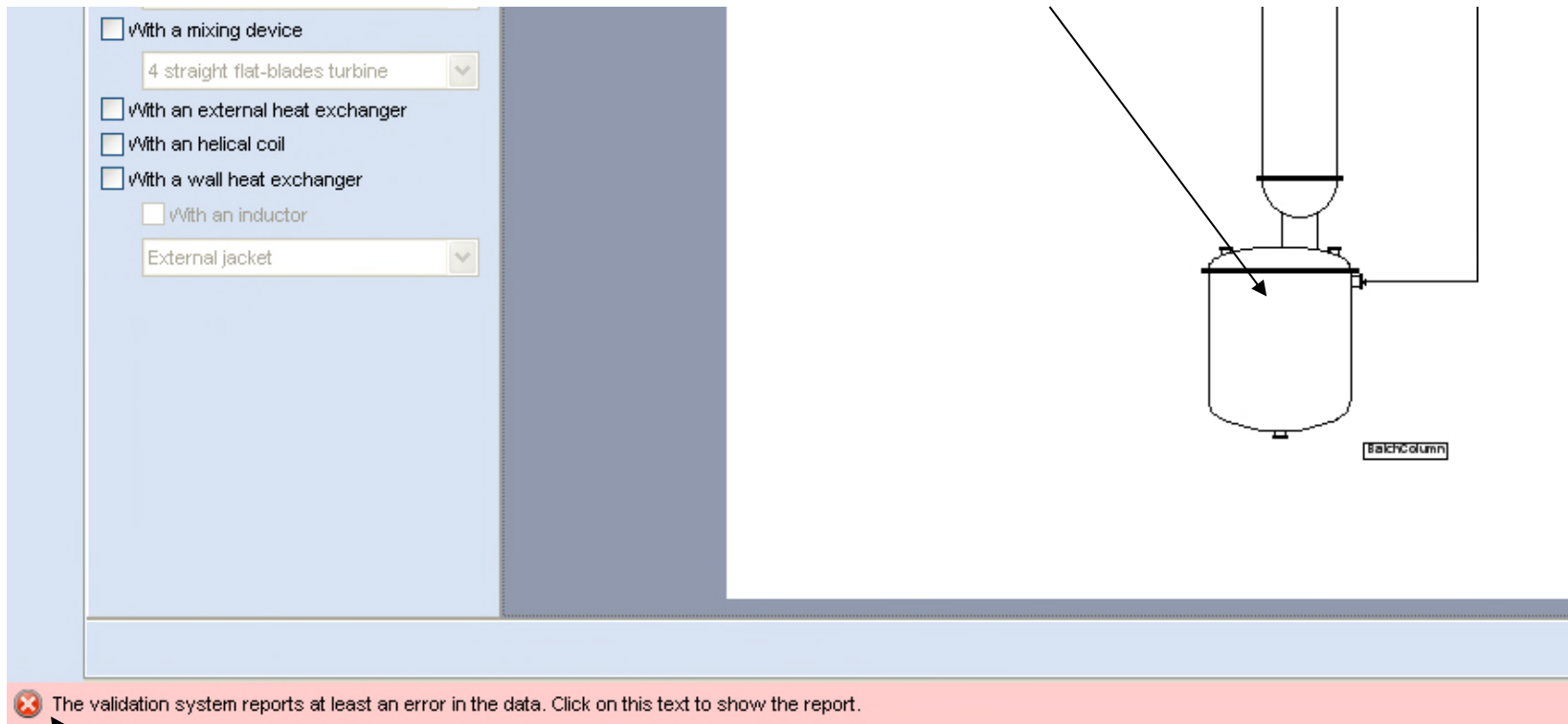
Path	Message
------	---------

Select the validation tab.

This tab displays the warning and error messages. If the input data is correctly provided, this tab should be empty and the distillation icon should not be highlighted anymore.

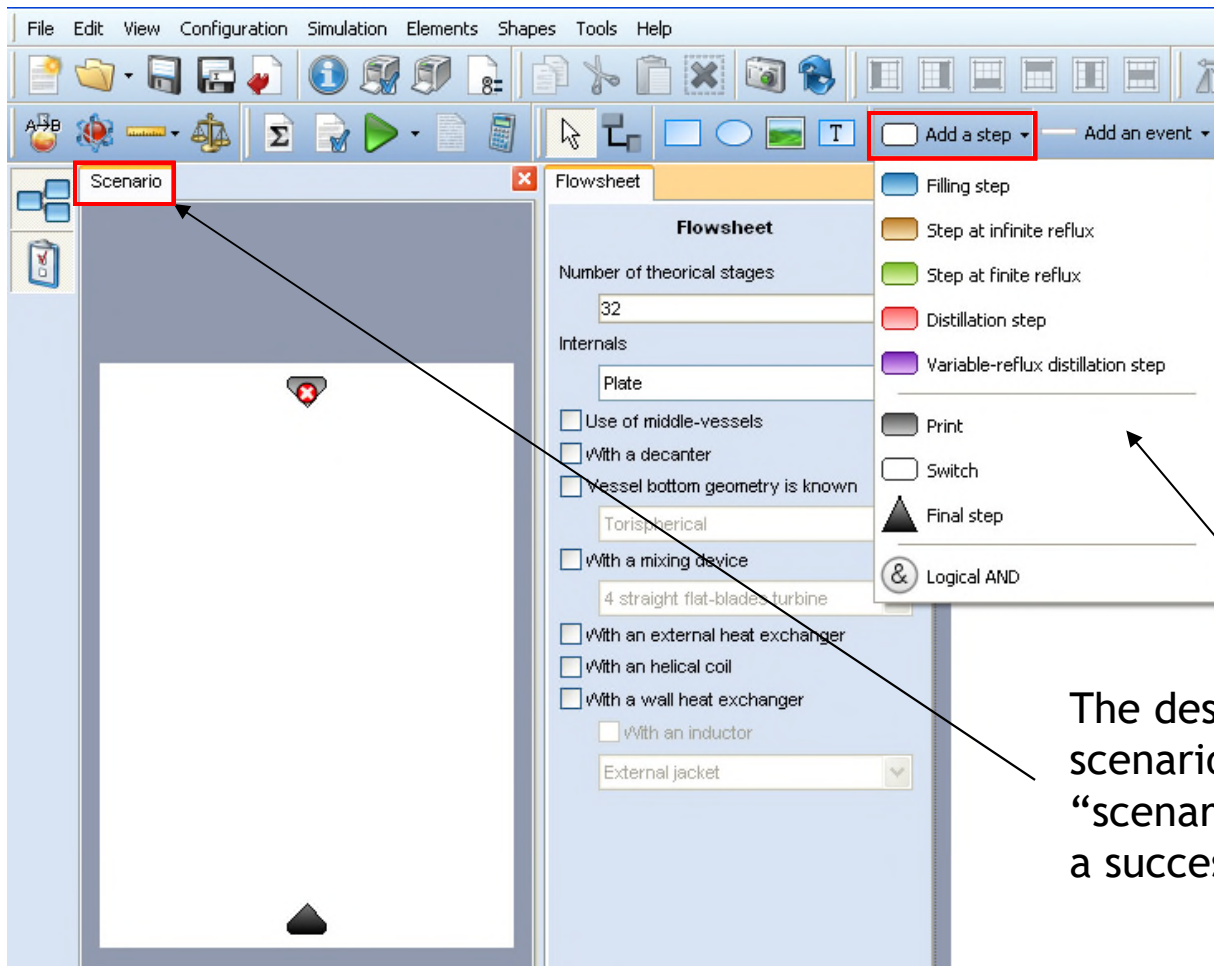
4-Describing the distillation system

4.2- Column



The global validation system reports other missing or inconsistent information. It is normal since your file is still being configured.

5-Describing the operating mode

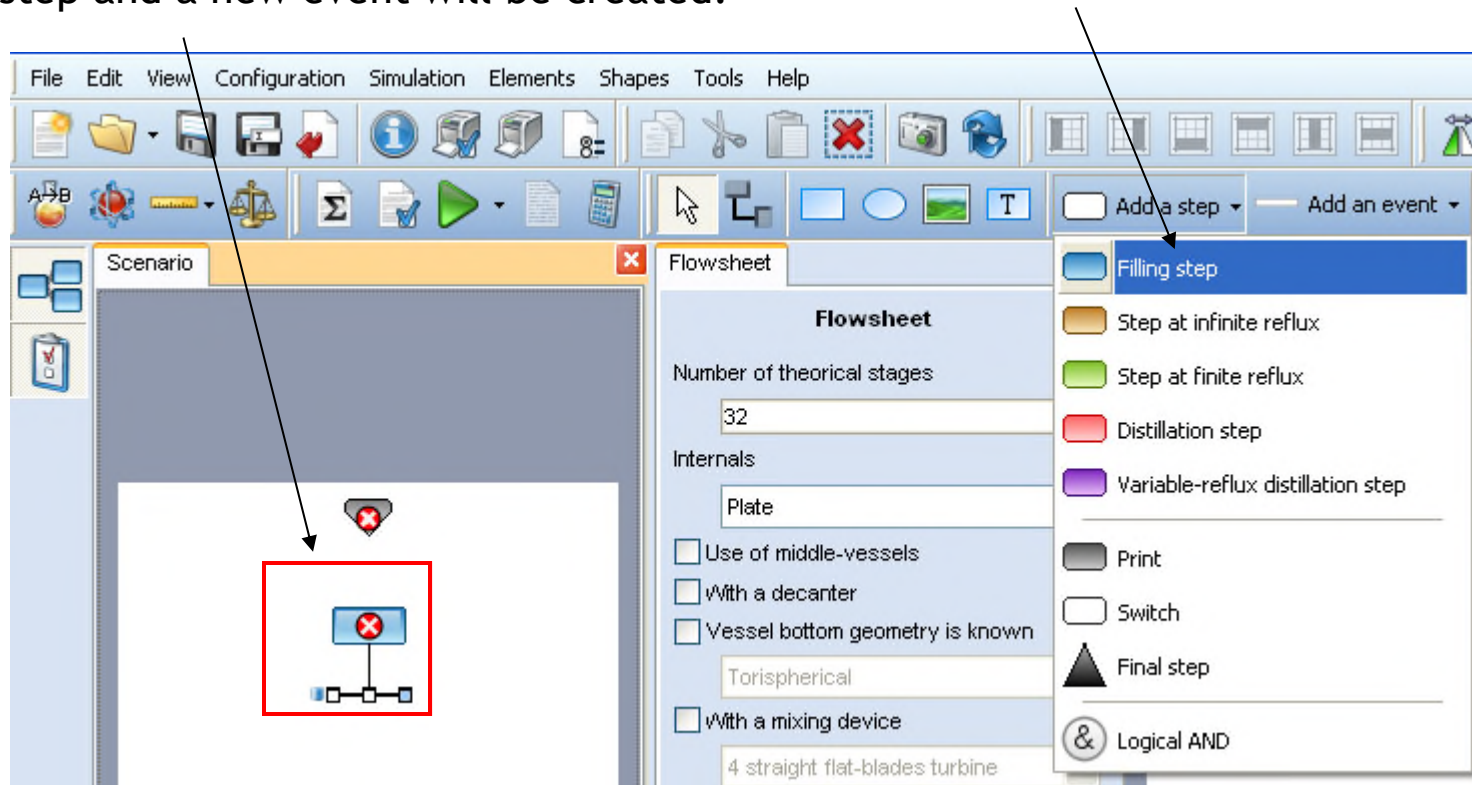


The description of the operating scenario is made in the “scenario” window. It consists of a succession of steps and events.

5-Describing the operating mode

2- Click on the “scenario” window.
A new step and a new event will be created.

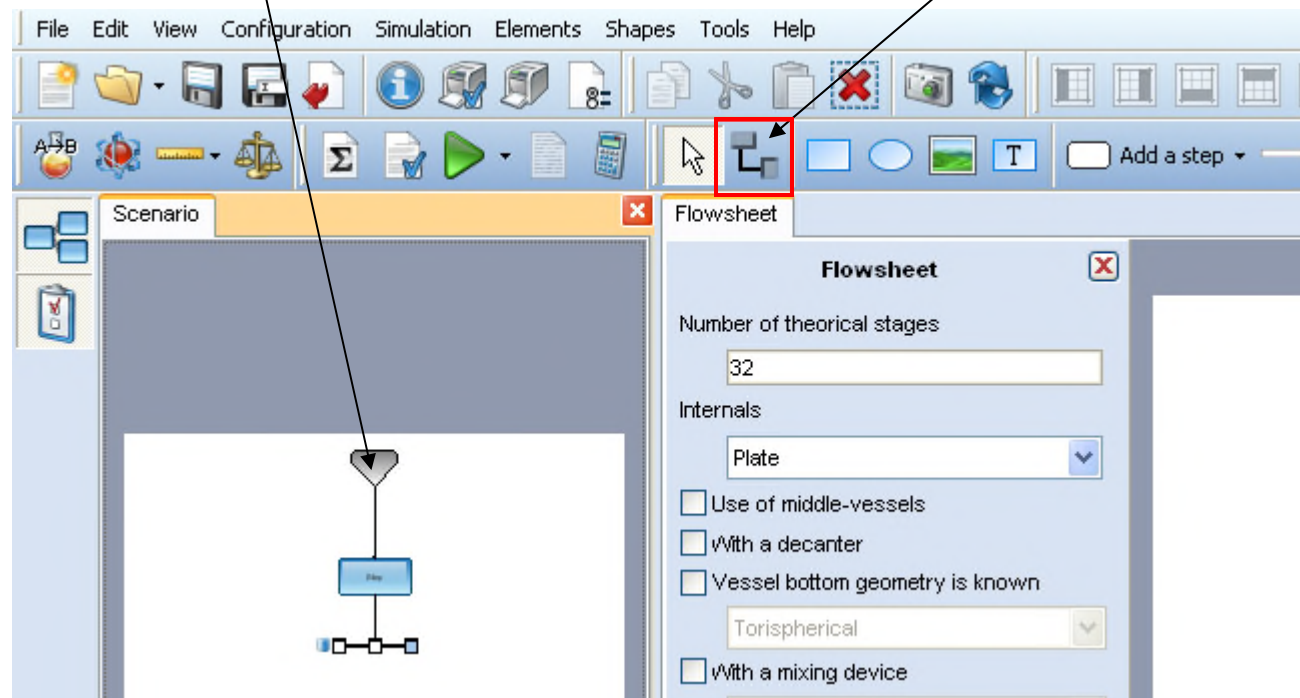
1- Click on the “Filling” step.



5-Describing the operating mode

- 2- Click on the first triangle (corresponding to the beginning of the simulation) and then click on the first step.
A new connection will be created.

- 1- Click on “connection”.

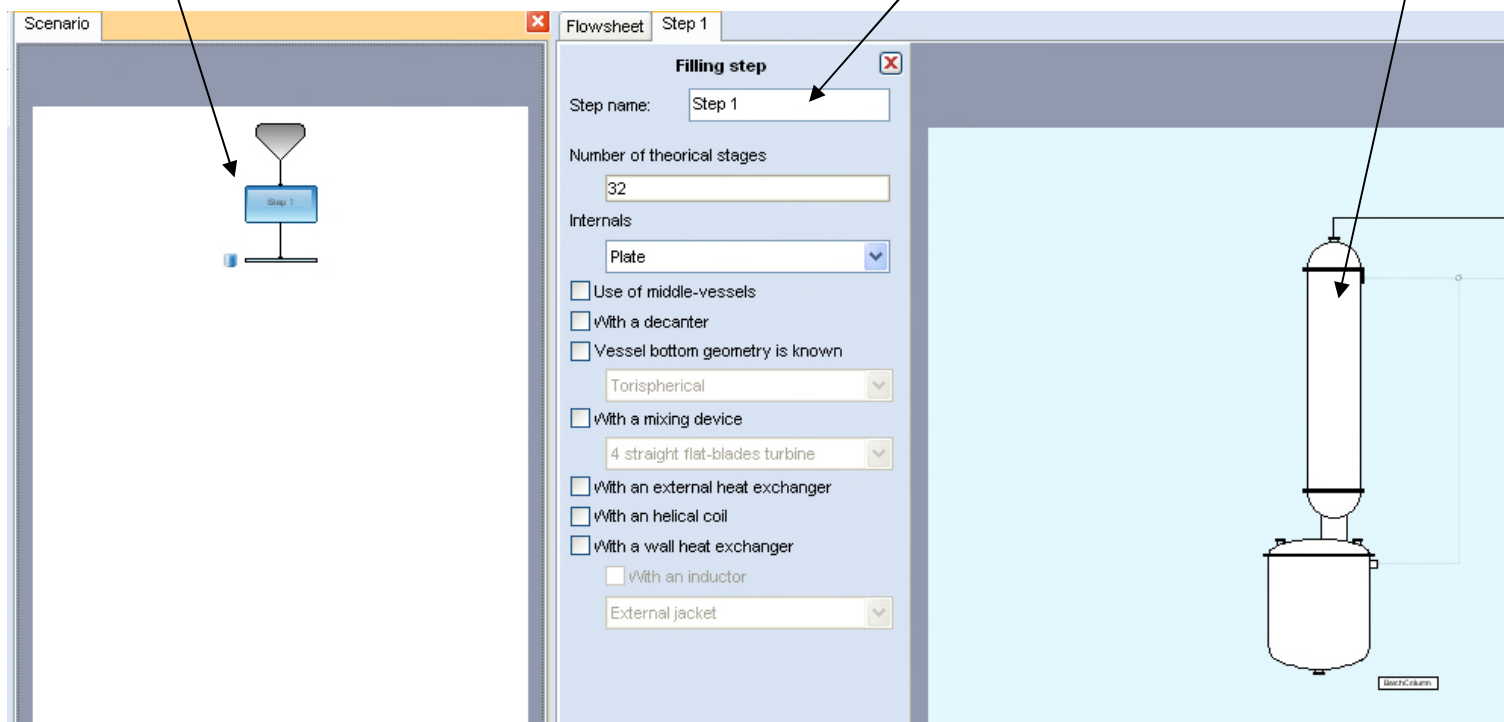


5-Describing the operating mode

- 1- Select the first step (double click on the icon).
A new tab appears, for the configuration of the step.

- 2- Change the default name by Step 1

- 3- Double click on the column icon



5-Describing the operating mode

1- Select “constant heat duty”
(default option)

2- Enter the initial temperature

3- Enter the boiler duty

4- Click on “OK”

Column

Name:

Parameters Notes Advanced parameters Validation

Filling step

Operating mode
Constant heat duty

Pre-filled stages

Reactive stages

Initial temperature

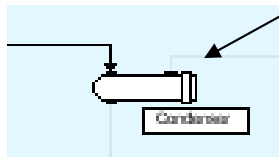
Boiler duty Constant value

Tolerances

Thermodynamic calculator Default calculator

Restore OK Cancel

5-Describing the operating mode



Double click on the condenser to access the configuration window.

1- Select “Ideal total condenser”
(default option)

Condenser

Name: Condenser

Parameters Notes Validation

State parameters

Condenser type: Ideal total condenser

In use stages: 1

1st used stage

Calculation type: At specified area and exchange coefficient

Exchange coefficient: 0 W/m2/K

Exchange area: 0 m2

Pressure drop: 0 Pa

Utility fluid

Fluid type: Water

Inlet temperature: 298.15 K

Point #1

Reference temperature: 298.15 K

Mass specific heat: 0 J/kg/K

Density: 0 kg/m3

Dynamic viscosity: 0 Pa.s

Thermal conductivity: 0 W/m/K

Point #2

Reference temperature: 298.15 K

Mass specific heat: 0 J/kg/K

Density: 0 kg/m3

Dynamic viscosity: 0 Pa.s

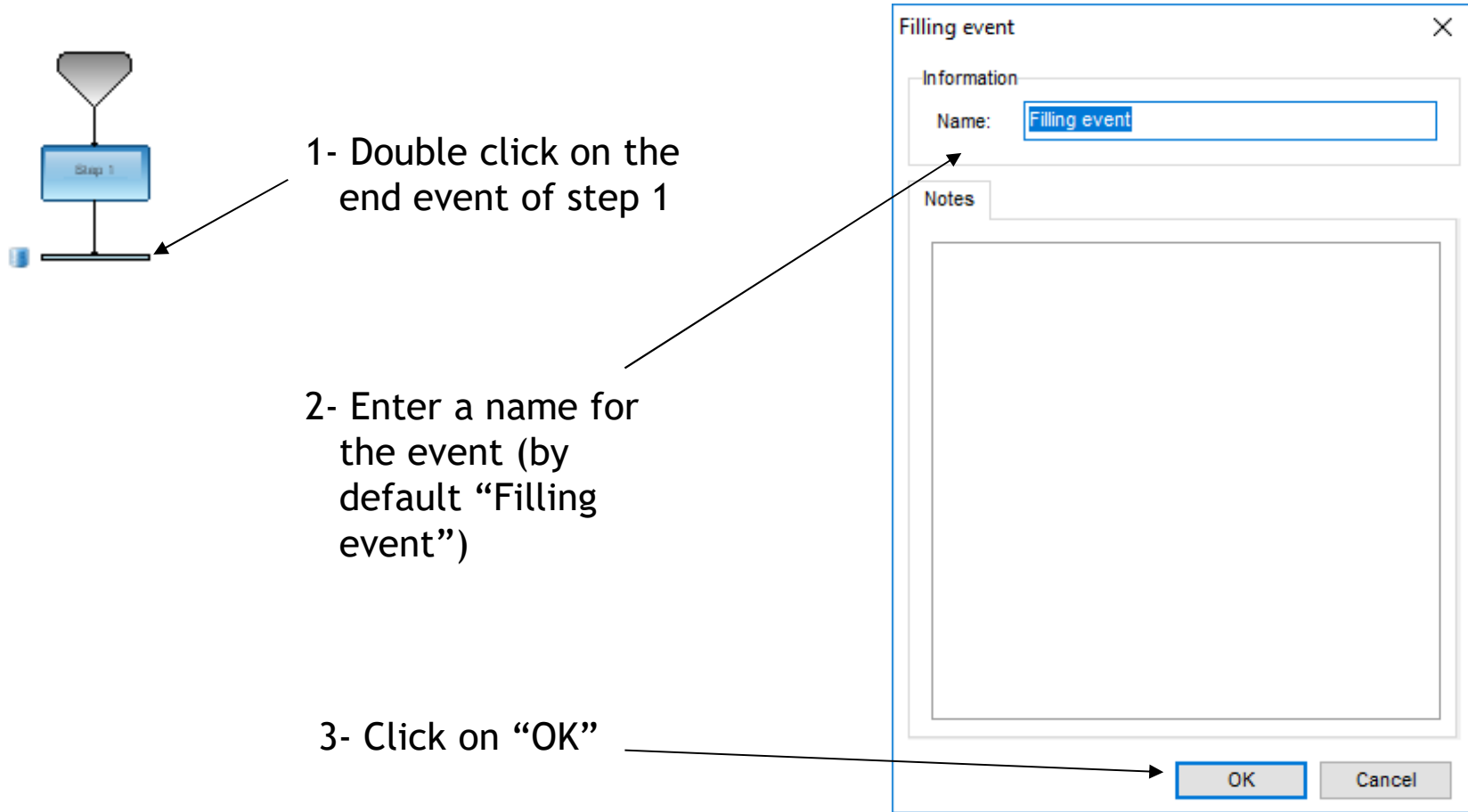
Thermal conductivity: 0 W/m/K

Technology

Thermodynamic calculator: Default calculator

Restore OK Cancel

5-Describing the operating mode



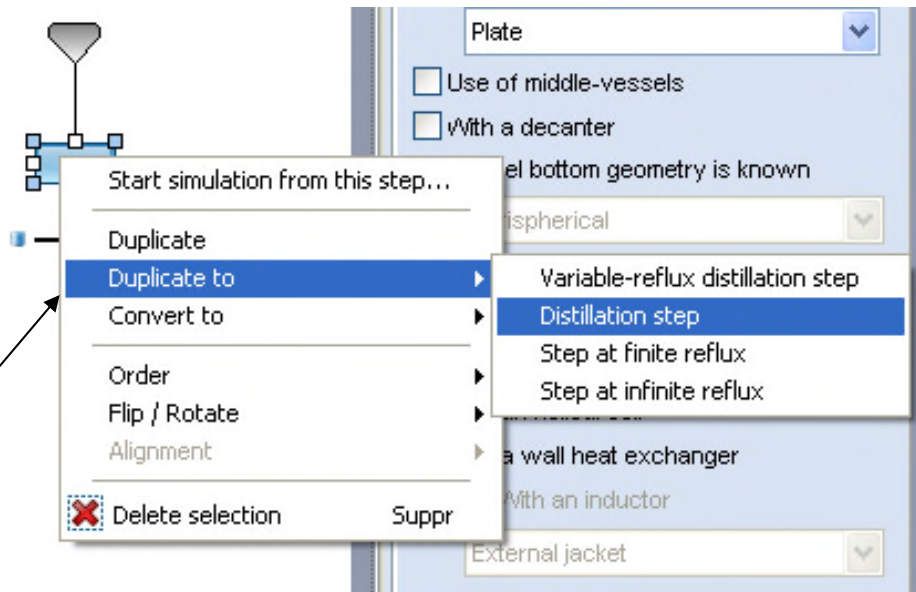
The diagram illustrates the process of configuring an event in a simulation. On the left, a process flow diagram shows a grey funnel icon connected to a blue rectangular box labeled "Step 1". Below the box is a horizontal line representing an event, with a small blue square icon to its left. An arrow points from the text "1- Double click on the end event of step 1" to this event line. To the right, a "Filling event" dialog box is shown. It has a title bar with a close button (X). Inside, there is an "Information" tab with a "Name:" label and a text box containing "Filling event". Below this is a "Notes" tab with a large empty text area. At the bottom right are "OK" and "Cancel" buttons. An arrow points from the text "2- Enter a name for the event (by default 'Filling event')" to the "Name:" text box. Another arrow points from the text "3- Click on 'OK'" to the "OK" button.

1- Double click on the end event of step 1

2- Enter a name for the event (by default "Filling event")

3- Click on "OK"

5-Describing the operating mode

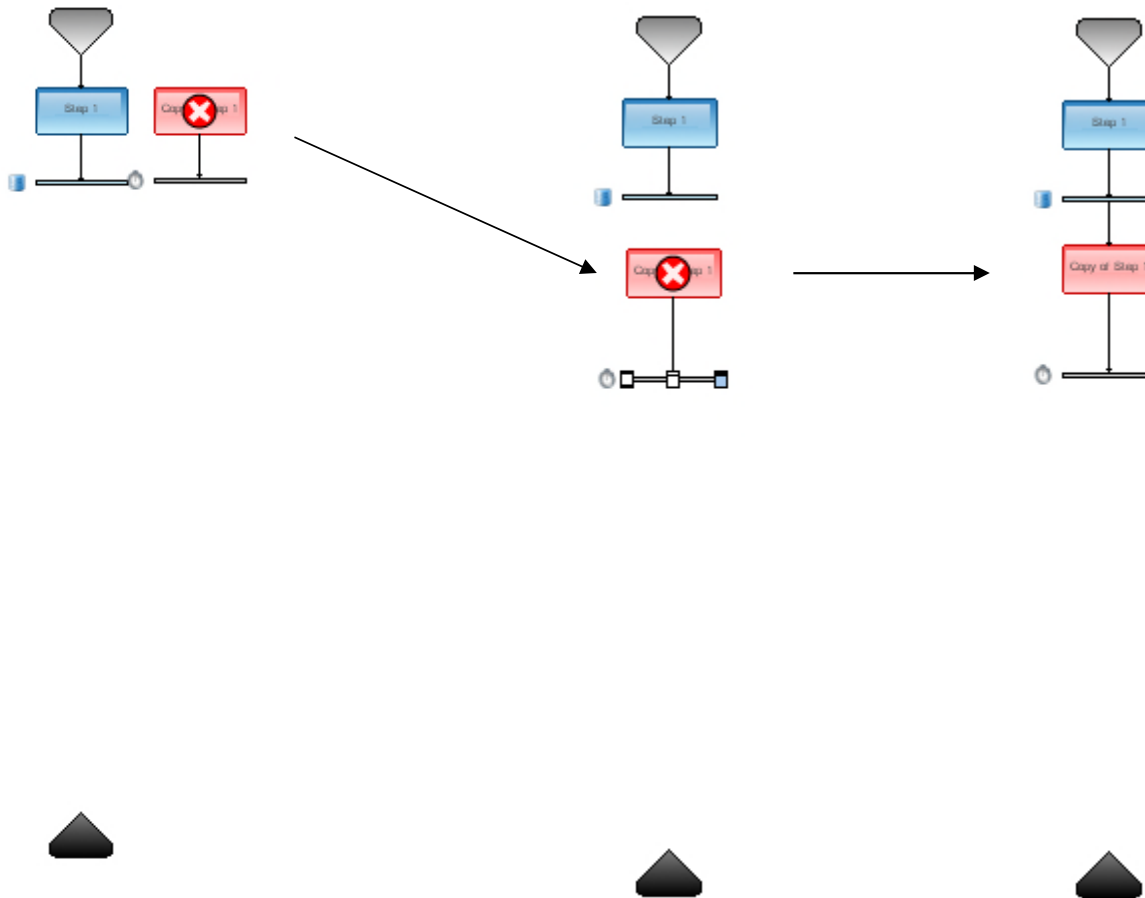


Right click on the first step, select “Duplicate to” sub-menu and then select “Distillation step”.

This copy avoids to specify again most of the input parameters for this new step.

5-Describing the operating mode

Connect appropriately the new step to the ending event of the first step



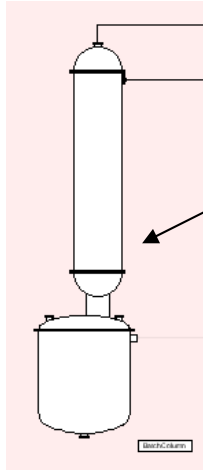
5-Describing the operating mode

1- Double click on the second step

2- Enter the name: Step 2

The screenshot shows the 'Distillation step' configuration window in ProSim S.A. The window has tabs for 'Flowsheet', 'Step 1', and 'Step 2'. The 'Step 2' tab is active, showing the 'Distillation step' configuration. The 'Step name' field is set to 'Step 2'. The 'Number of theoretical stages' is set to 32. The 'Internals' dropdown is set to 'Plate'. There are checkboxes for 'Use of middle-vessels', 'With a decanter', and 'Vessel bottom geometry is known'. The 'Vessel bottom geometry is known' dropdown is set to 'Torispherical'. There is a checkbox for 'With a mixing device'. The background shows a flowsheet diagram with a funnel, a blue box labeled 'Step 1', and a red box labeled 'Copy of Step 1'.

5-Describing the operating mode



1- Double click on the column icon

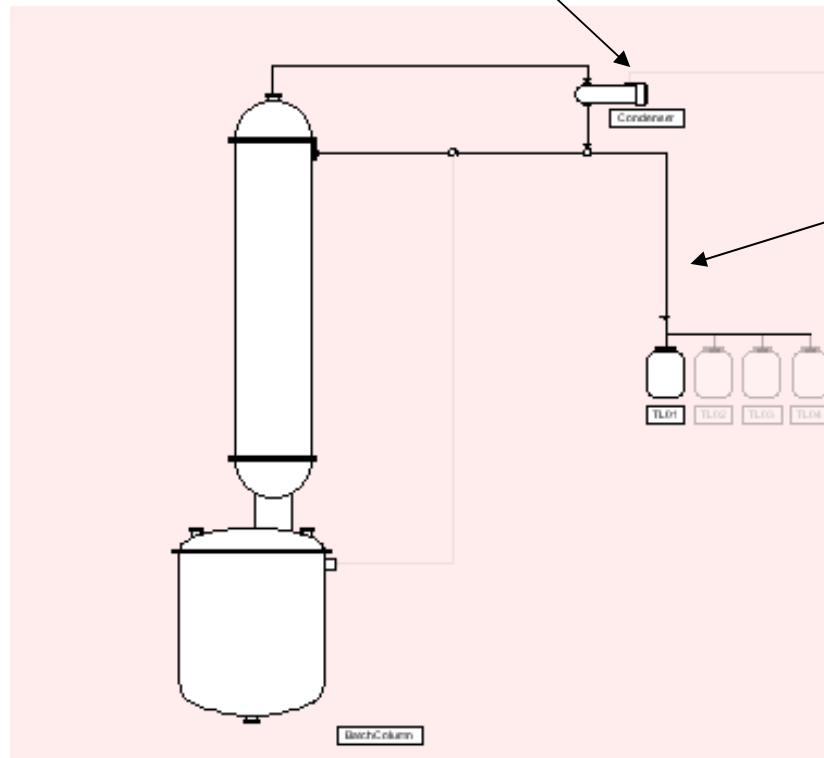
2- Select “constant value” and enter the reflux ratio

3- Select “Constant heat duty”
(default option)

4- Select “constant value” and enter the boiler duty

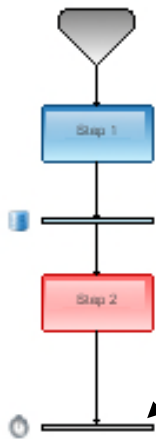
5-Describing the operating mode

5- Nothing to change for the condenser



6- Distillate is sent to the first tank, as indicated on the flowsheet

5-Describing the operating mode



1- Double click on the event at the end of the second step

2- Enter a name for the event

3- Select “total production inside a tank”

4- Enter the desired production

5- Click on “OK”

Event

Information

Name: End of second step

Parameters Priority Notes Validation

Event type

- ☐ Time spent since beginning of simulation
- ☐ Time spent since beginning of step
- ☐ Reflux ratio
- ☐ Production of a component inside a tank
- ☒ Total production inside a tank
- ☐ Temperature at a stage
- ☐ Fraction inside the distillate
- ☐ Fraction inside a tank
- ☐ Fraction inside the boiler
- ☐ Fraction at a stage
- ☐ Load of a component inside the boiler
- ☐ Total load inside the boiler
- ☐ Liquid distillate flowrate

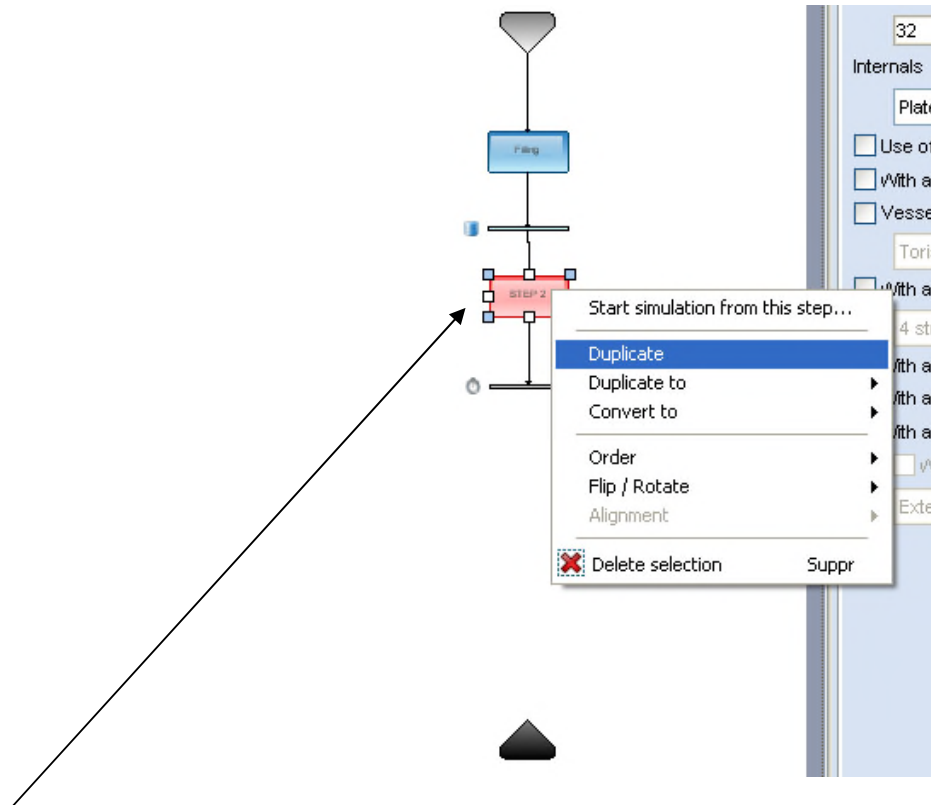
Parameter(s) of the event

Total production inside a tank TL01

Mass 2000 kg

OK Cancel

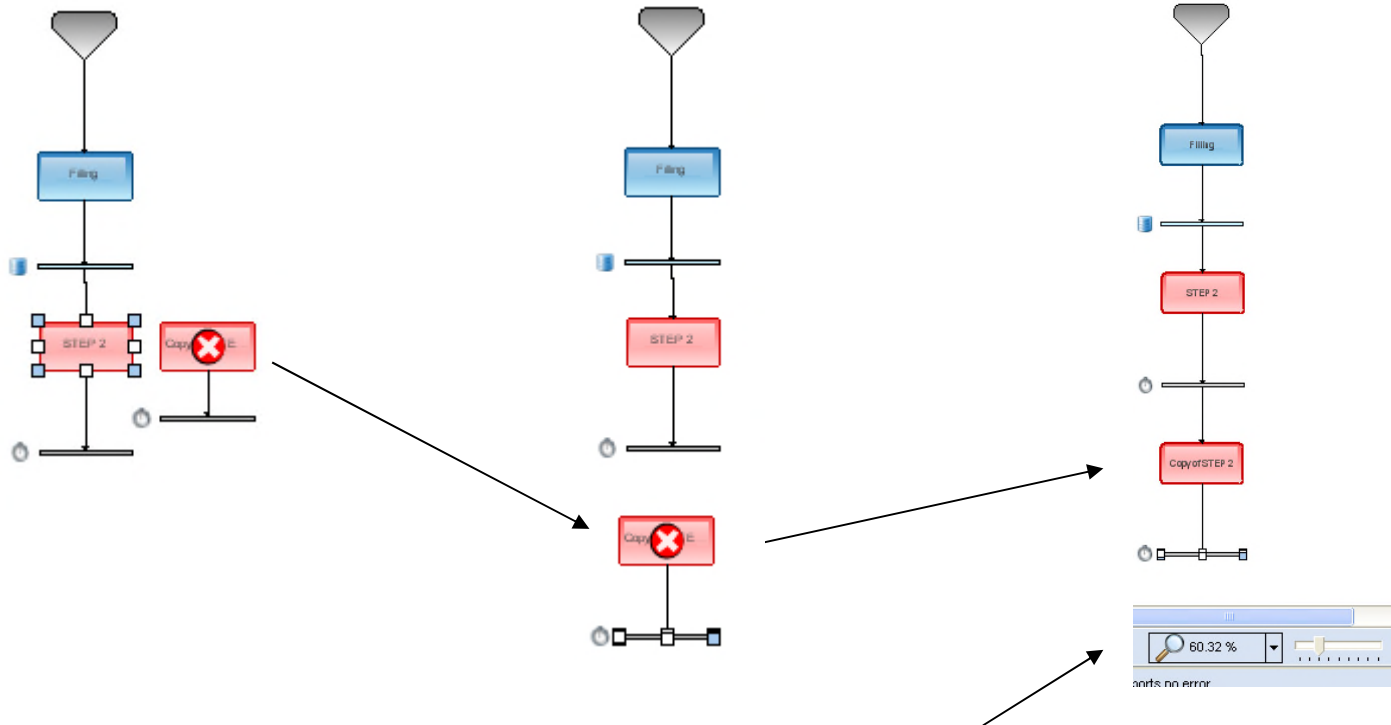
5-Describing the operating mode



Right click on the second step and select “Duplicate”
This copy avoids to specify again most of the parameters for this new step.

5-Describing the operating mode

Connect the new step to the ending event of the second step



You can zoom in to ease the connection of the blocks

5-Describing the operating mode

1- Double click on the third step

2- Enter the name: STEP 3

3- Double click on the column

The screenshot displays the ProSim S.A. software interface with three main panels. The left panel shows a process flow diagram with a vertical sequence of units: a funnel, a 'Filling' block, 'STEP 2', and 'STEP 3'. An arrow points from the text '1- Double click on the third step' to 'STEP 3'. The middle panel is the 'Distillation step' configuration window, titled 'STEP 3'. It contains the following settings: 'Step name: STEP 3', 'Number of theoretical stages: 32', 'Internals: Plate', and several checkboxes for additional features like 'Use of middle-vessels', 'With a decanter', 'Vessel bottom geometry is known', 'With a mixing device', 'With an external heat exchanger', 'With an helical coil', and 'With a wall heat exchanger'. An arrow points from the text '2- Enter the name: STEP 3' to the 'Step name' field. The right panel shows a detailed schematic of a distillation column with a reboiler at the bottom, a condenser at the top, and four product receivers. An arrow points from the text '3- Double click on the column' to the distillation column.

5-Describing the operating mode

4- Select “constant value” and enter the reflux ratio

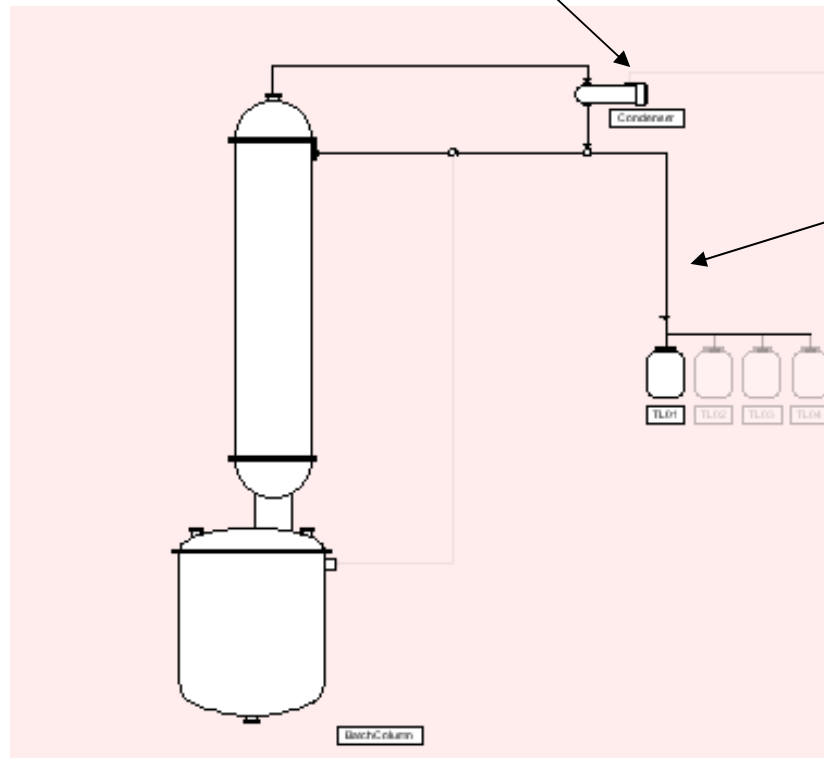
5- Select “Constant heat duty”
(default option)

6- Select “constant value” and enter the boiler duty

The screenshot shows the 'Column' software interface. The 'Name' field is set to 'Column'. The 'Parameters' tab is active, and the 'Validation' status is confirmed with a green checkmark. In the 'Distillation step' section, the 'Operating mode' is set to 'Constant heat duty'. The 'Reflux ratio' is configured as 'Constant value' with a value of 5. The 'Boiler duty' is set to 'Constant value' with a value of 500000 kcal/h. The 'Thermodynamic calculator' is set to 'Default calculator'. The interface also includes a central diagram of a distillation column and various control buttons like 'Profile of heat losses', 'Profile of heat inputs', 'Reactive stages', 'Middle-vessels', 'Volume', 'Controls', 'Tolerances', 'Restore', 'OK', and 'Cancel'.

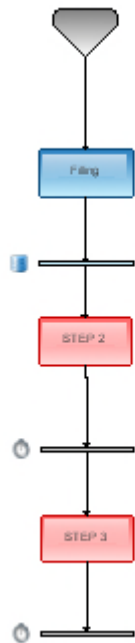
5-Describing the operating mode

7- Nothing to change for the condenser



8- Distillate is sent to the first tank, as indicated on the flowsheet

5-Describing the operating mode



- 1- Double click on the event at the end of the third step
- 2- Enter a name for the event
- 3- Select “total production inside a tank”
- 4- Enter the desired production
- 5- Click on “OK”

Event

Information

Name:

Parameters **Priority** **Notes** ☒ **Validation**

Event type

- ☐ Time spent since beginning of simulation
- ☐ Time spent since beginning of step
- ☐ Reflux ratio
- ☐ Production of a component inside a tank
- ☒ Total production inside a tank
- ☐ Temperature at a stage
- ☐ Fraction inside the distillate
- ☐ Fraction inside a tank
- ☐ Fraction inside the boiler
- ☐ Fraction at a stage
- ☐ Load of a component inside the boiler
- ☐ Total load inside the boiler
- ☐ Liquid distillate flowrate

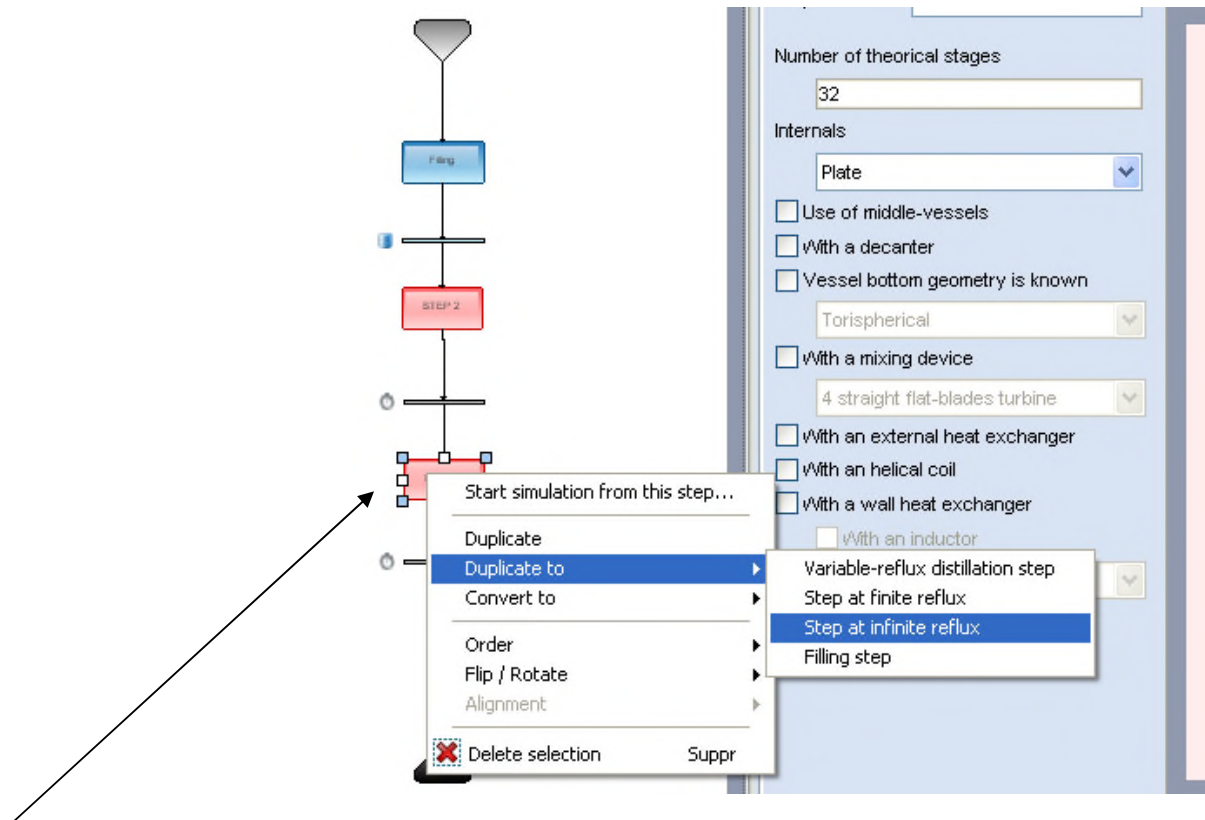
Parameter(s) of the event

Total production inside a tank

Mass

OK **Cancel**

5-Describing the operating mode

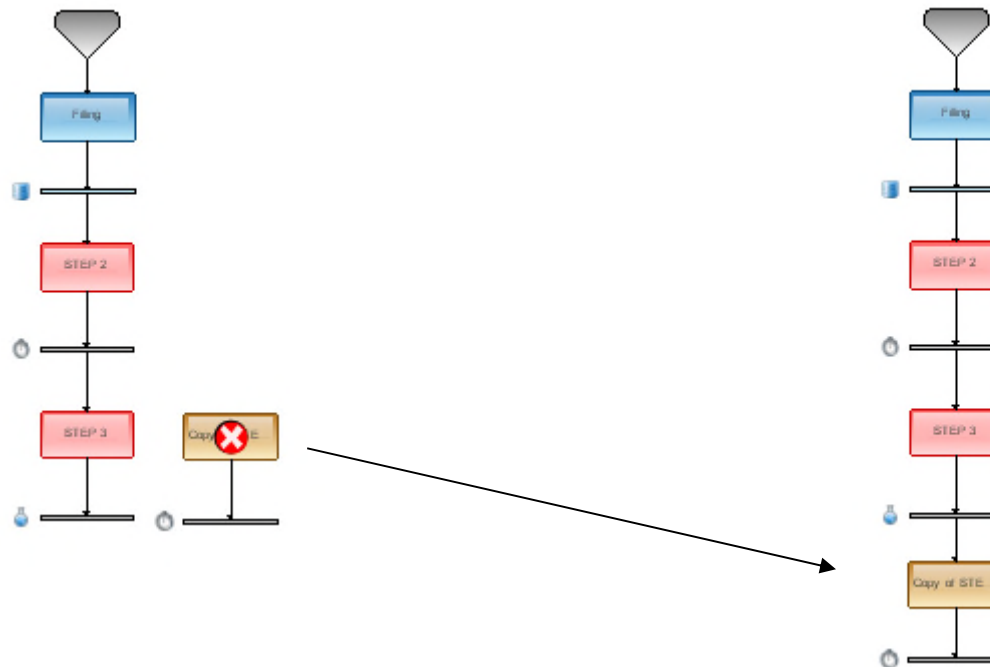


Right click on the third step and select “Duplicate to”, then select “Step at infinite reflux”.

This copy avoids to specify again most of the parameters for this new step.

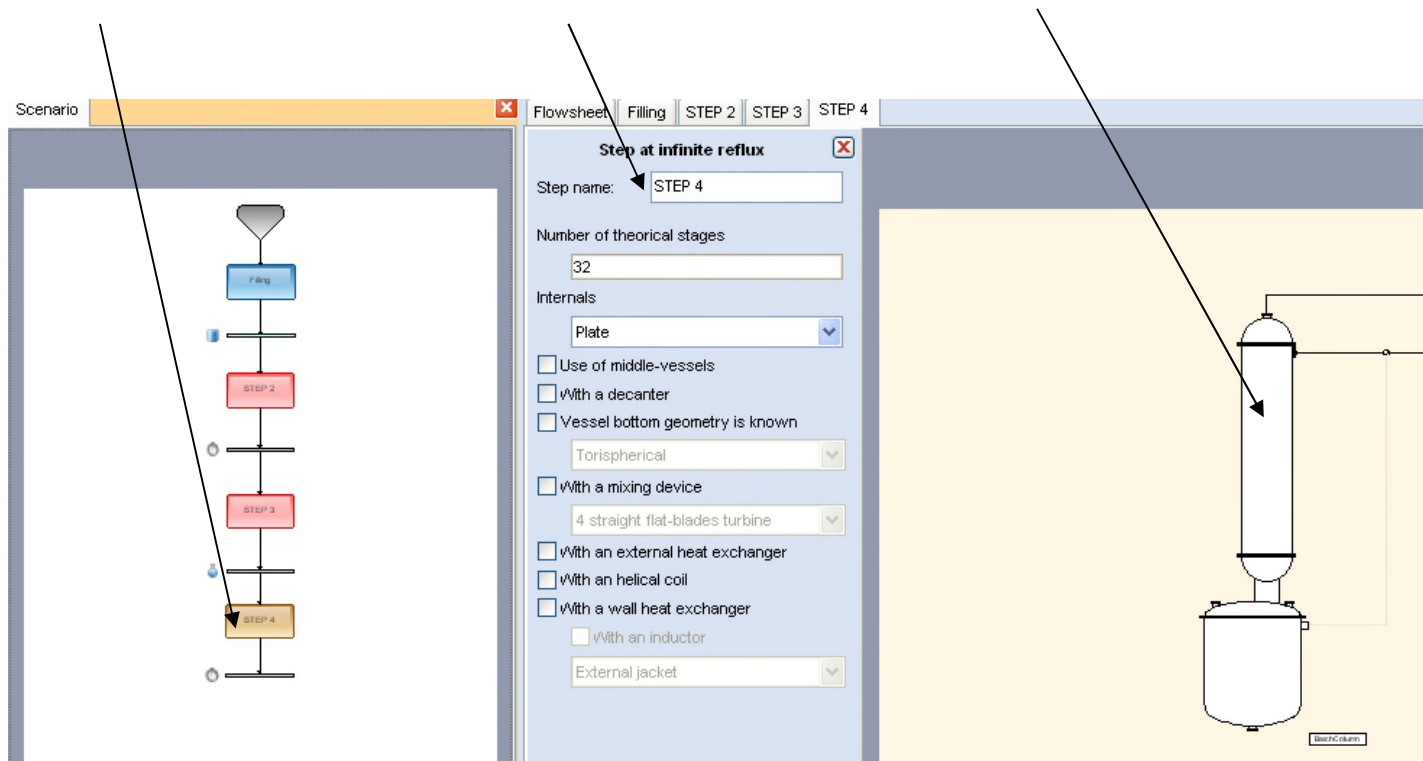
5-Describing the operating mode

Connect the new step to the ending event of the third step.



5-Describing the operating mode

- 1- Double click on the fourth step
- 2- Enter the name: STEP 4
- 3- Double click on the column



5-Describing the operating mode

4- Nothing to change in this window since this step has been duplicated from the previous one, the boiler duty is already defined as for the step 3

Column

Name:

Parameters Notes Advanced parameters ☒ Validation

Step at infinite reflux

Operating mode
Constant heat duty

Reflux flowrate

Profile of heat losses

Profile of heat inputs

Reactive stages

Middle-vessels

Gas sidestreams Liquid sidestreams

Flowrates Molar

Liquid tank Used Flowrate

Volume

Controls

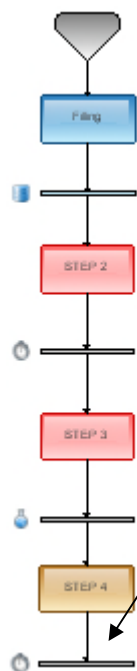
Boiler duty Constant value 500000 kcal/h

Tolerances

Thermodynamic calculator Default calculator

Restore OK Cancel

5-Describing the operating mode



1- Double click on the event at the end of the fourth step

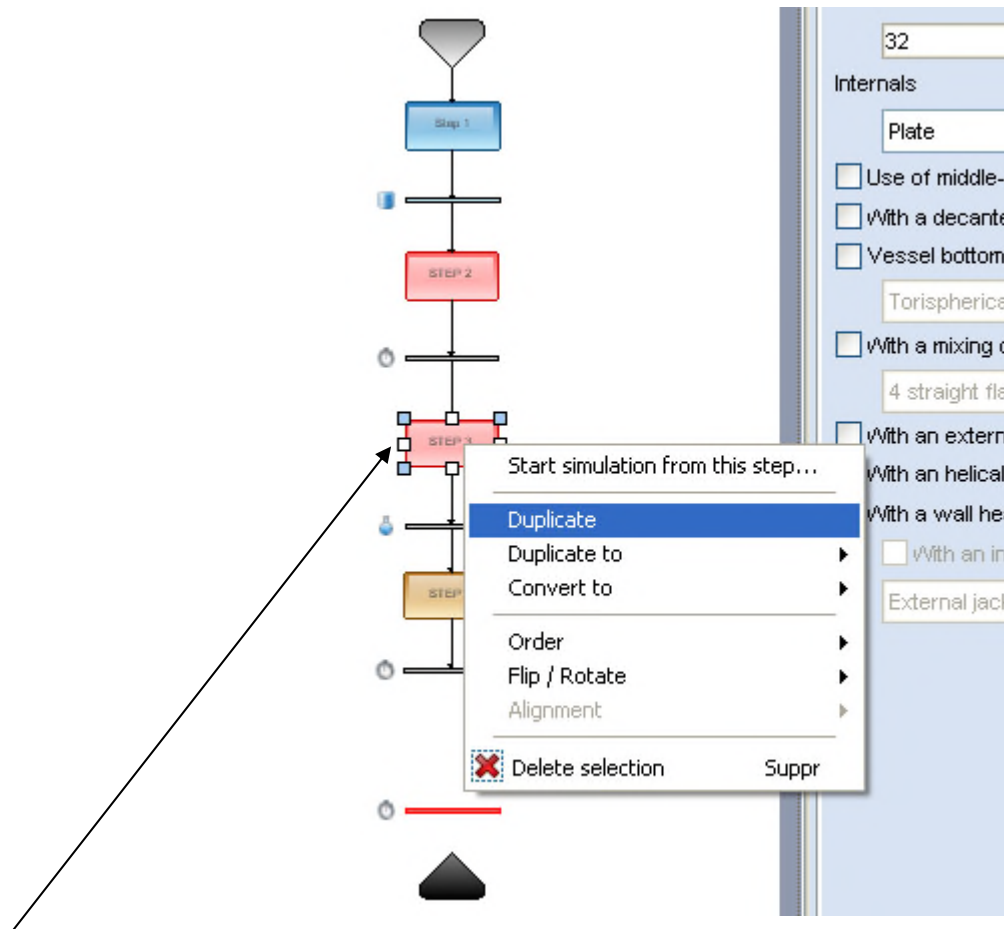
2- Enter a name for the event

3- Select “time spent since beginning of step”

4- Enter the desired time for this step

5- Click on “OK”

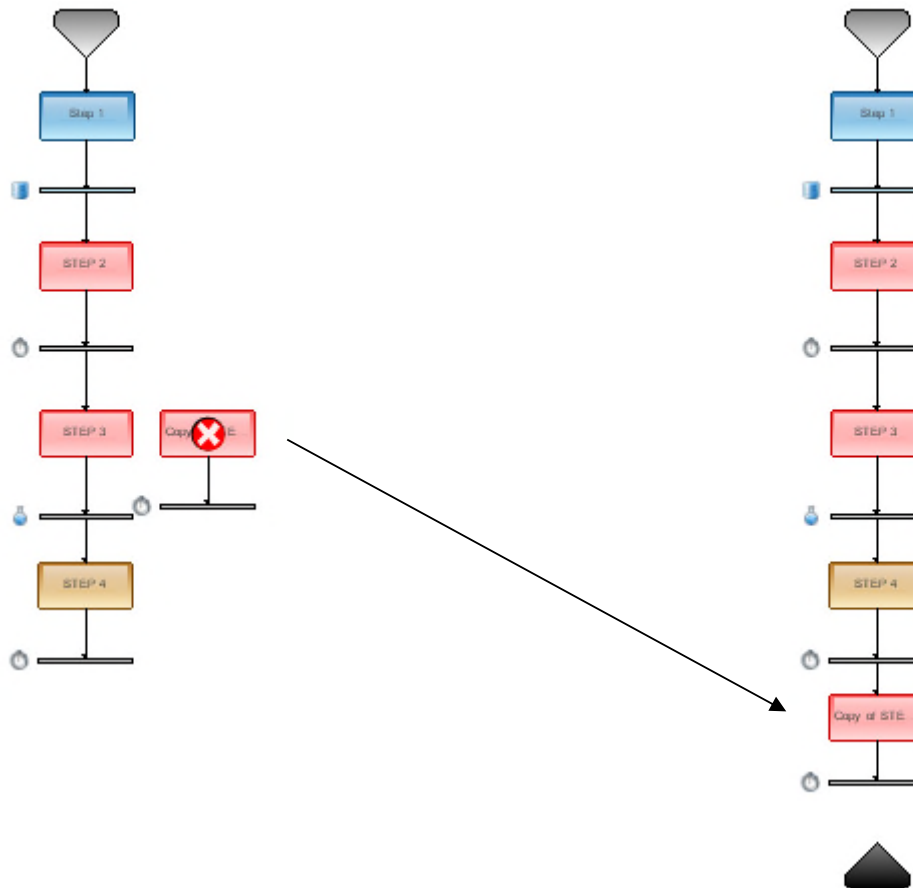
5-Describing the operating mode



Right click on the third step and select “Duplicate”.
This copy avoids to specify again most of the parameters for this new step.

5-Describing the operating mode

Connect the new step to the ending event of the fourth step

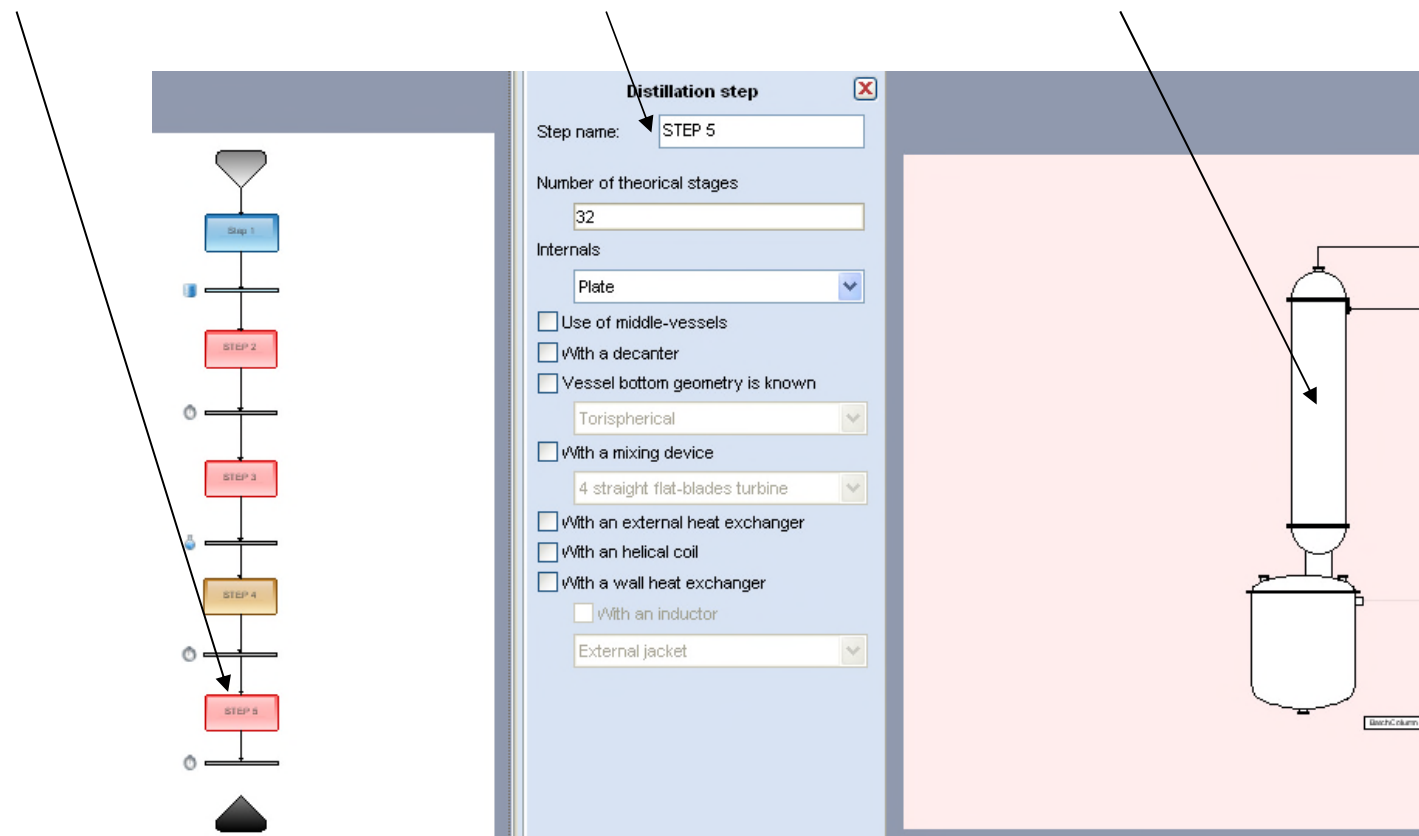


5-Describing the operating mode

1- Double click on the fifth step

2- Enter the name: STEP 5

3- Double click on the column



5-Describing the operating mode

4- Nothing to change in this window since this step has been duplicated from step 3, which is identical to step 5. The boiler duty is already defined as well as the reflux ratio.

Column

Name:

Parameters Notes Advanced parameters Validation

Distillation step

Operating mode
Constant heat duty

Reflux ratio Constant value 5
Reflux flowrate

Profile of heat losses
Profile of heat inputs
Reactive stages
Middle-vessels

Gas sidestreams Liquid sidestreams
Flowrates Molar
Liquid tank Used Flowrate

Volume
Controls

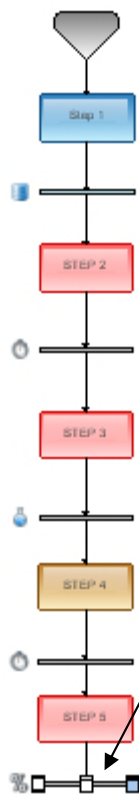
Boiler duty Constant value 500000 kcal/h

Thermodynamic calculator Default calculator

Tolerances

Restore OK Cancel

5-Describing the operating mode



- 1- Double click on the event at the end of the fifth step
- 2- Enter a name for the event
- 3- Select “fraction inside a tank”
- 4- Enter the desired mass fraction of dichloromethane. Select “<” to indicate that the event should be reached by decreasing value.

Event

Information

Name: End of step 5

Parameters

Priority

Notes

Validation

Event type

☐ Time spent since beginning of simulation
 ☐ Time spent since beginning of step
 ☐ Reflux ratio
 ☐ Production of a component inside a tank
 ☐ Total production inside a tank
 ☐ Temperature at a stage
 ☐ Fraction inside the distillate
 ☒ Fraction inside a tank
 ☐ Fraction inside the boiler
 ☐ Fraction at a stage
 ☐ Load of a component inside the boiler
 ☐ Total load inside the boiler
 ☐ Liquid distillate flowrate

Parameter(s) of the event

Compound

DICHLOROME

TL01

<

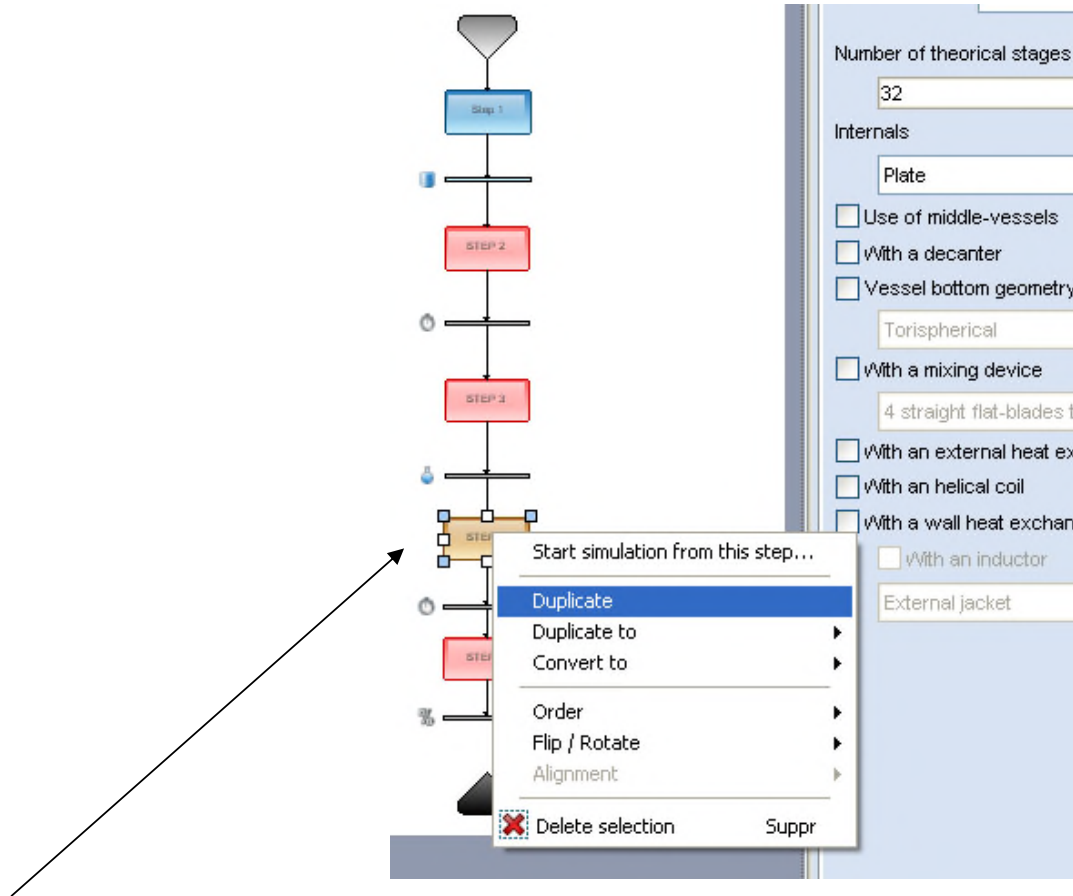
Mass

0.96

OK

Cancel

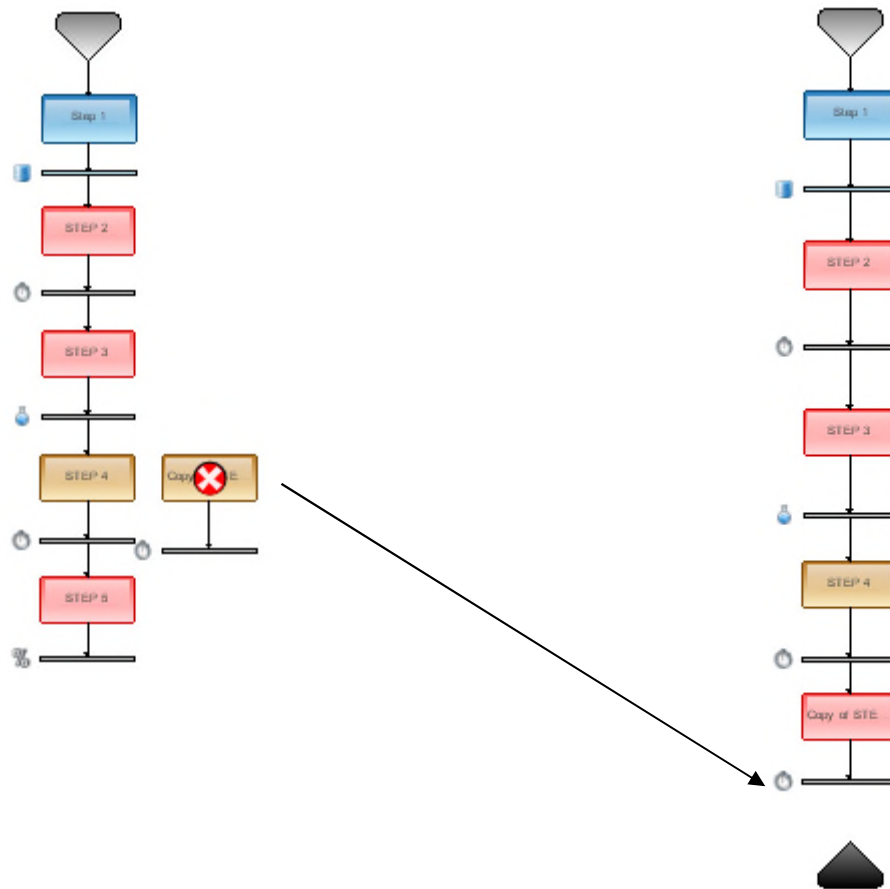
5-Describing the operating mode



Right click on the fourth step and select “Duplicate”.
This copy avoids to specify again most of the parameters for this new step.

5-Describing the operating mode

Connect the new step to the ending event of the fifth step

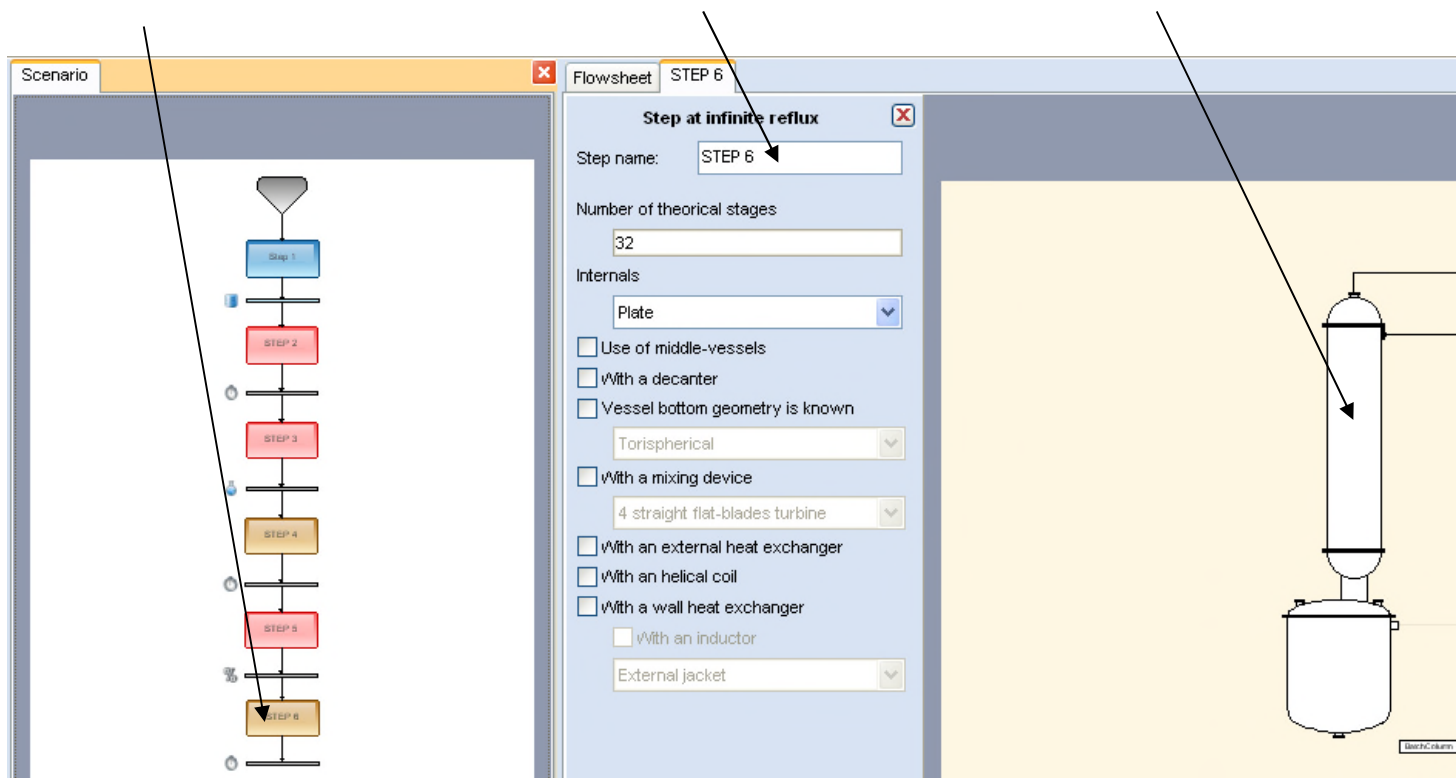


5-Describing the operating mode

1- Double click on the last step

2- Enter the name: STEP 6

3- Double click on the column

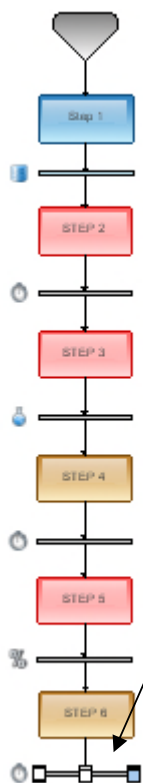


5-Describing the operating mode

3- Nothing to change in this window since this step has been duplicated from step 4, which is identical to step 6. The boiler duty is already defined.

The screenshot shows the 'Column' window with the 'Validation' tab selected. The window contains a schematic of a distillation column. The 'Operating mode' is set to 'Constant heat duty'. The 'Boiler duty' is set to 'Constant value' at '-500000 kcal/h'. The 'Reflux flowrate' is also visible. The window includes buttons for 'Profile of heat losses', 'Profile of heat inputs', 'Reactive stages', 'Middle-vessels', 'Volume', 'Controls', 'Tolerances', 'Restore', 'OK', and 'Cancel'. The 'Thermodynamic calculator' and 'Default calculator' are also present.

5-Describing the operating mode



1- Double click on the event at the end of the sixth step

2- Enter a name for the event

3- Select “time spent since beginning of step”

4- Enter the desired time of step

5- Click on “OK”

Event

Information

Name:

Parameters Priority Notes ☒ Validation

Event type

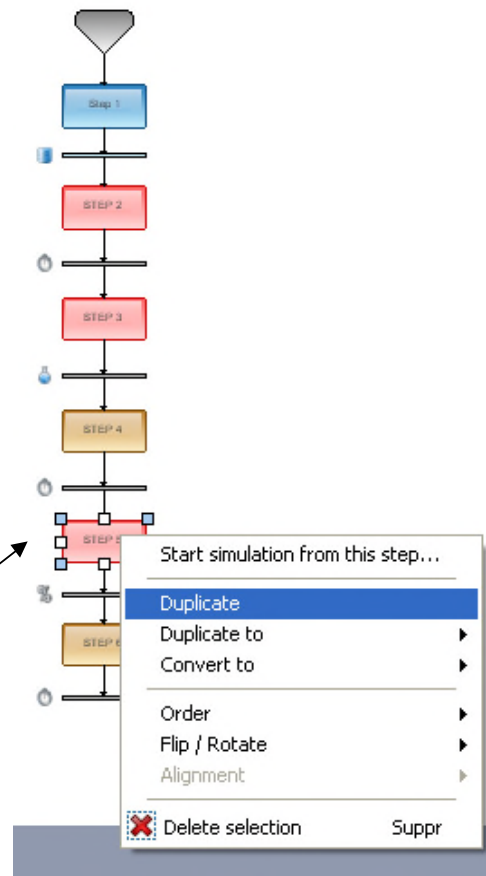
- ☐ Time spent since beginning of simulation
- ☒ Time spent since beginning of step
- ☐ Reflux ratio
- ☐ Production of a component inside a tank
- ☐ Total production inside a tank
- ☐ Temperature at a stage
- ☐ Fraction inside the distillate
- ☐ Fraction inside a tank
- ☐ Fraction inside the boiler
- ☐ Fraction at a stage
- ☐ Load of a component inside the boiler
- ☐ Total load inside the boiler
- ☐ Liquid distillate flowrate

Parameter(s) of the event

Time of step

OK Cancel

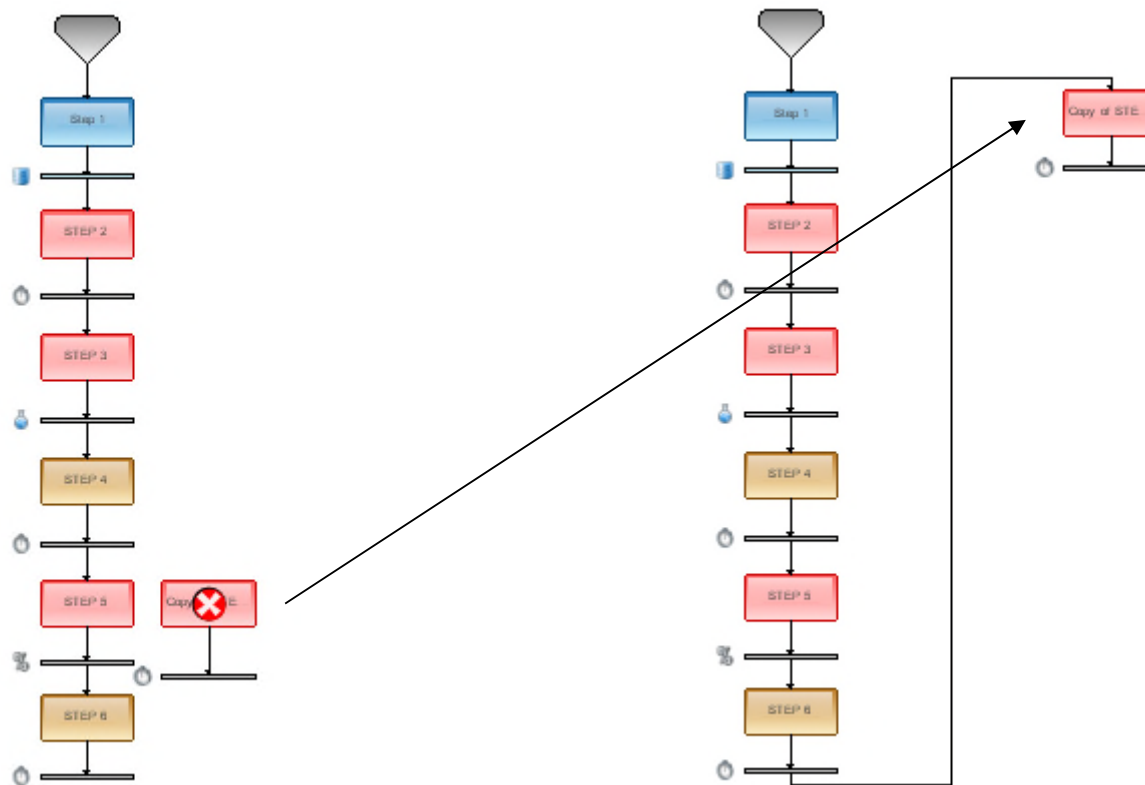
5-Describing the operating mode



Right click on the fifth step and select “Duplicate”.
This copy avoids to specify again most of the parameters for this new step.

5-Describing the operating mode

Connect the new step to the ending event of the sixth step



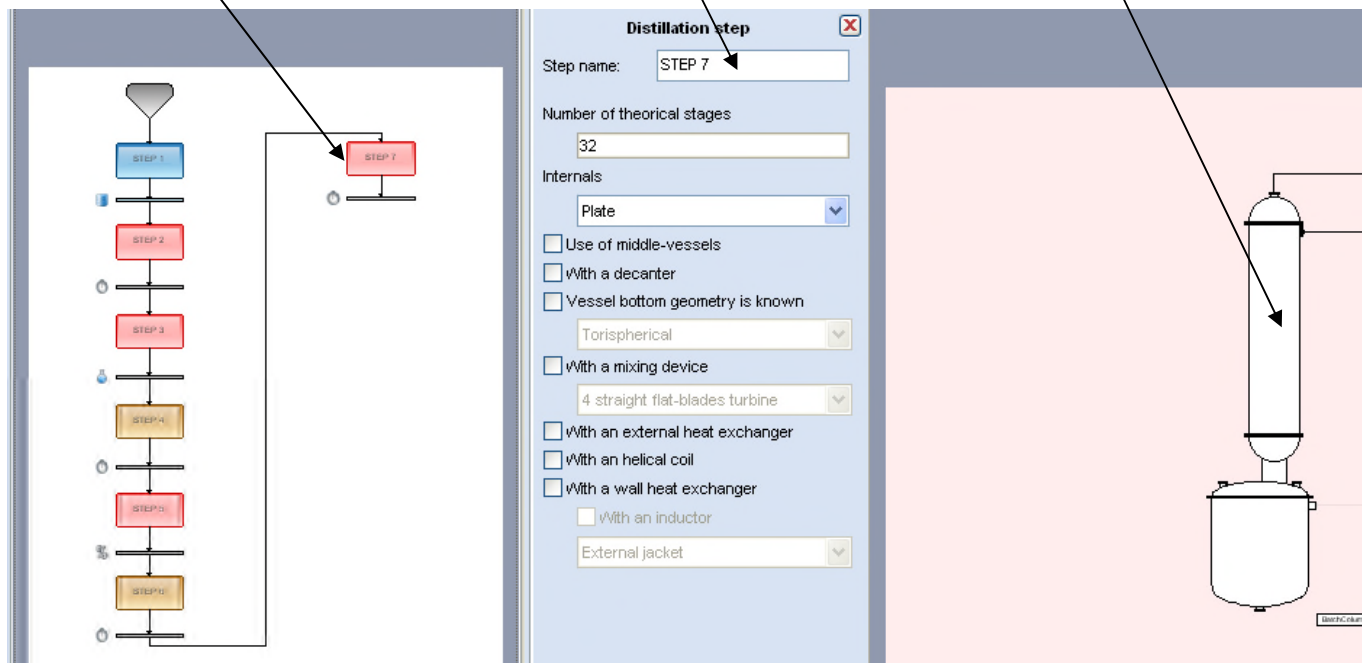
You may want to align the icons on the left side of the window in order to have the new step at the top right side.

5-Describing the operating mode

1- Double click on the last step

2- Enter the name: STEP 7

3- Double click on the column



5-Describing the operating mode

4- Nothing to change in this window since the step has been duplicated from step 5, which is identical to step 7. The boiler duty and the reflux ratio are already defined.

The screenshot shows the 'Column' software window with the 'Parameters' tab selected. The window contains a central diagram of a distillation column with several control panels around it. Two arrows from the text on the left point to the 'Reflux ratio' and 'Boiler duty' settings.

Parameters | Notes | Advanced parameters | Validation

Distillation step

Operating mode: Constant heat duty

Reflux ratio: Constant value | 5 | Reflux flowrate

Profile of heat losses

Profile of heat inputs

Reactive stages

Middle-vessels

Gas sidestreams | Liquid sidestreams

Flowrates: Molar

Liquid tank: Used | Flowrate

Volume

Controls

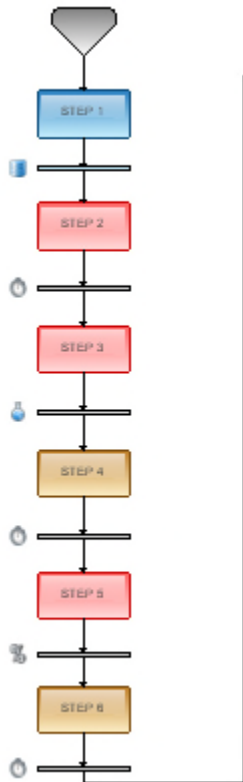
Boiler duty: Constant value | 500000 kcal/h

Tolerances

Thermodynamic calculator: Default calculator

Restore | OK | Cancel

5-Describing the operating mode



1- Double click on the event at the end of the step 7

2- Enter a name for the event

3- Select “fraction inside a tank”

4- Enter the desired mass fraction of dichloromethane. Select “<” to indicate that the event should be reached by decreasing value.

5- Click on “OK”

Event

Information

Name:

Parameters Priority Notes ☒ Validation

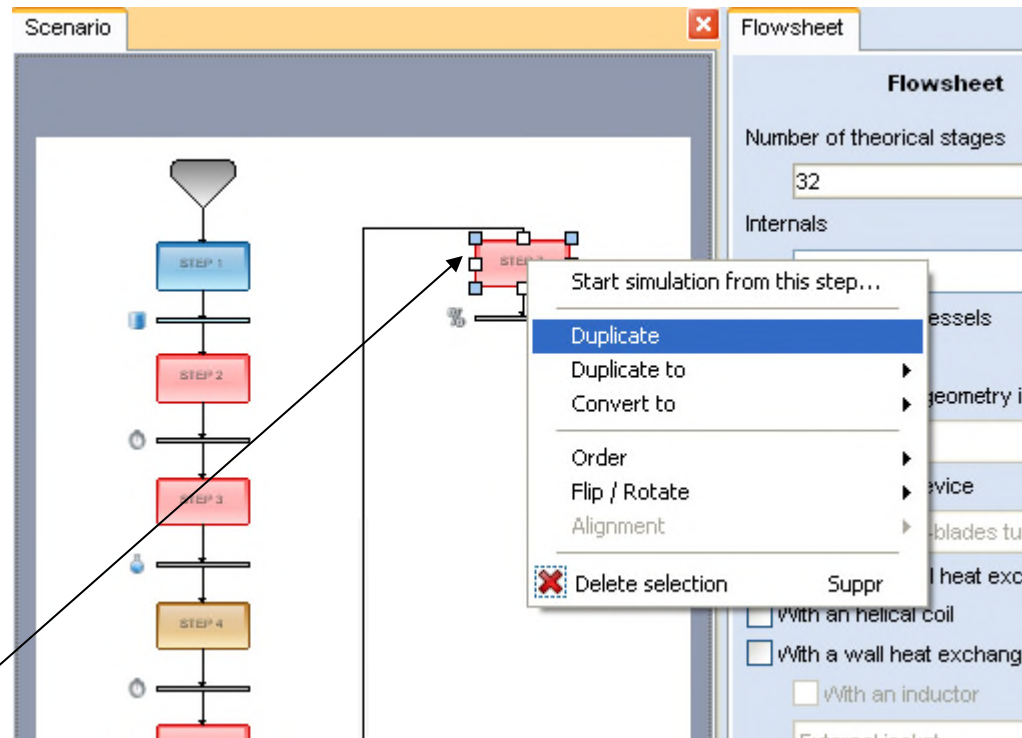
Event type

- ☐ Time spent since beginning of simulation
- ☐ Time spent since beginning of step
- ☐ Reflux ratio
- ☐ Production of a component inside a tank
- ☐ Total production inside a tank
- ☐ Temperature at a stage
- ☐ Fraction inside the distillate
- ☒ Fraction inside a tank
- ☐ Fraction inside the boiler
- ☐ Fraction at a stage
- ☐ Load of a component inside the boiler
- ☐ Total load inside the boiler
- ☐ Liquid distillate flowrate

Parameter(s) of the event

Compound

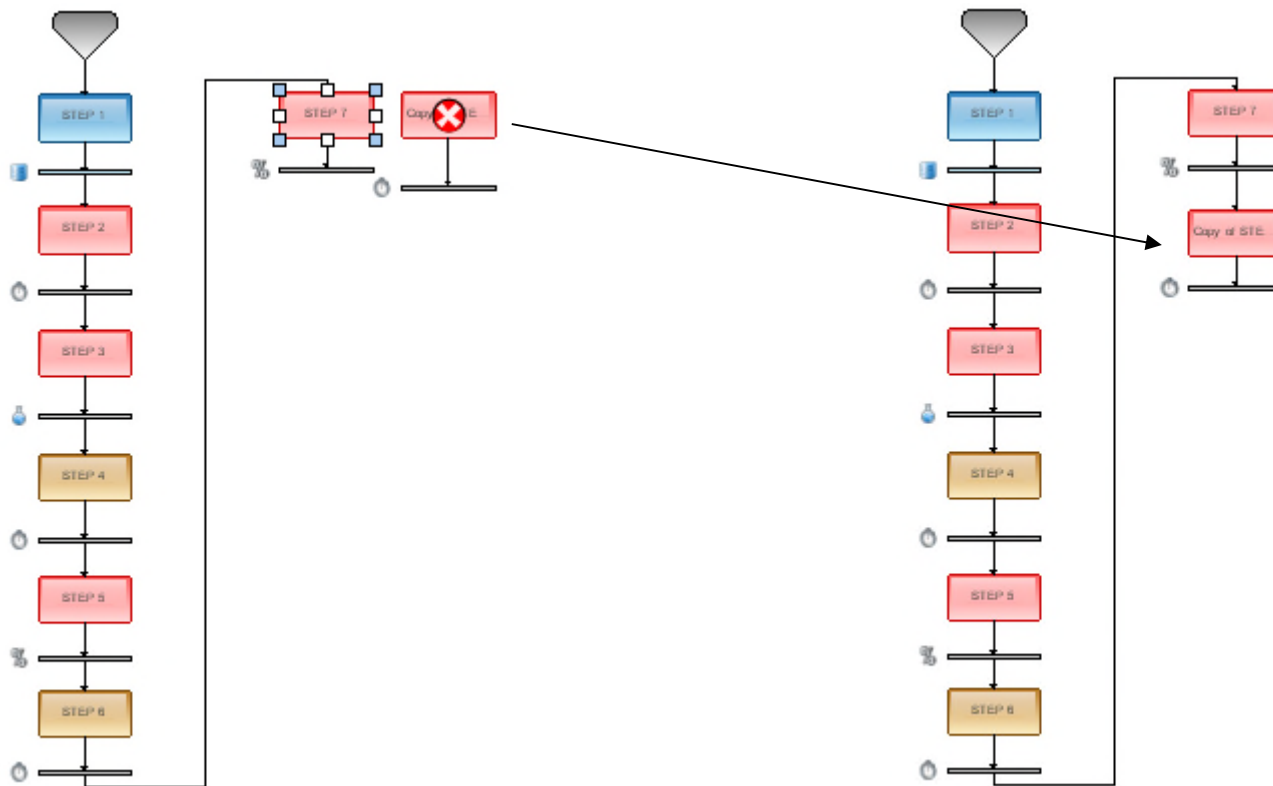
5-Describing the operating mode



Right click on the step 7 and select “Duplicate ”.
This copy avoids to specify again most of the parameters for this new step.

5-Describing the operating mode

Connect the new step to the ending event of the step 7

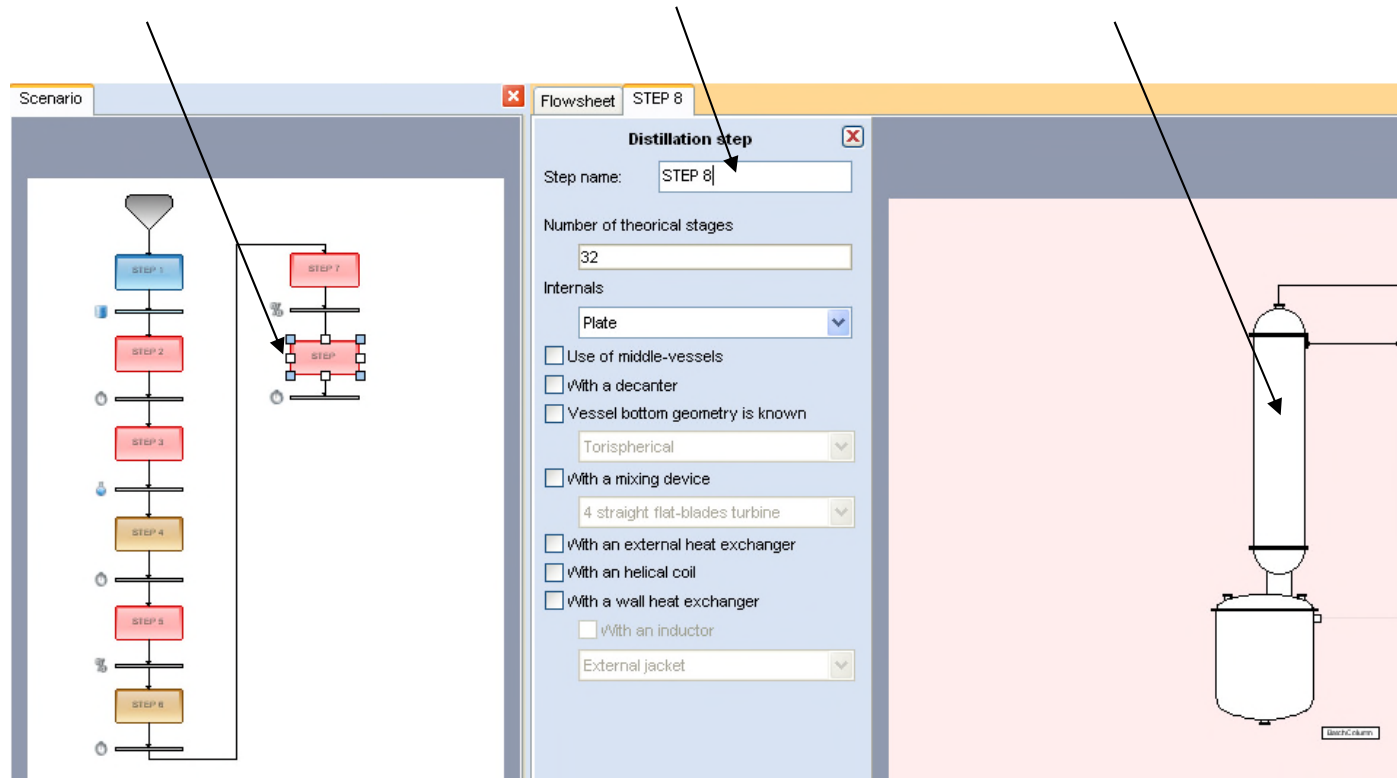


5-Describing the operating mode

1- Double click on the last step

2- Enter the name: STEP 8

3- Double click on the column



5-Describing the operating mode

4- Nothing to change in this window since this step has been duplicated from step 7, which is identical to step 8. The boiler duty and the reflux ratio are already defined.

Column

Name:

Parameters Notes Advanced parameters Validation

Distillation step

Operating mode
Constant heat duty

Reflux ratio Constant value 5
Reflux flowrate

Profile of heat losses
Profile of heat inputs
Reactive stages
Middle-vessels

Gas sidestreams Liquid sidestreams
Flowrates Molar
Liquid tank Used Flowrate

Volume
Controls

Boiler duty Constant value 500000 kcal/h

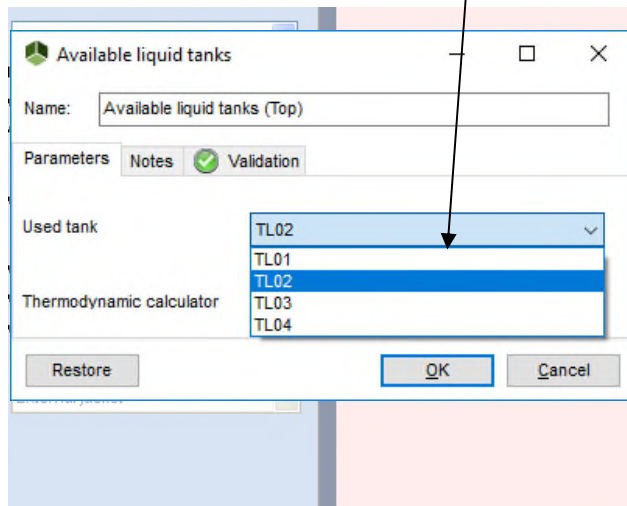
Tolerances

Thermodynamic calculator Default calculator

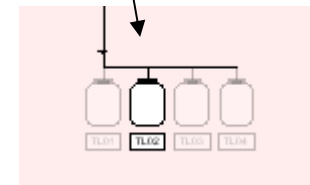
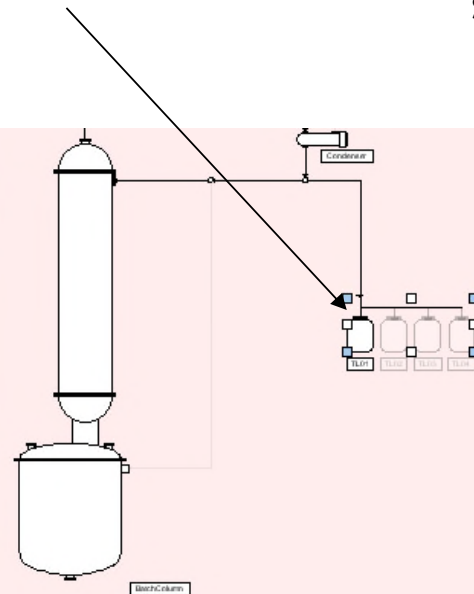
Restore OK Cancel

5-Describing the operating mode

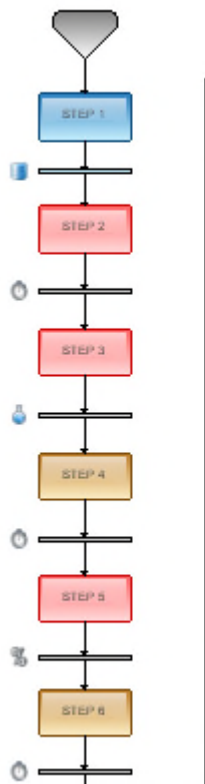
5- Double click on the liquid tanks and select the tank 2 then click on “OK”



6- The tank 2 has been selected



5-Describing the operating mode



- 1- Double click on the event at the end of the step 8
- 2- Enter a name for the event
- 3- Select “fraction inside the distillate”
- 4- Enter the desired mass fraction of acetone.
Select “>” to indicate that the event should be reached by ascending value.

- 5- Click on “OK”

Event

Information

Name:

Parameters **Priority** **Notes** ☒ **Validation**

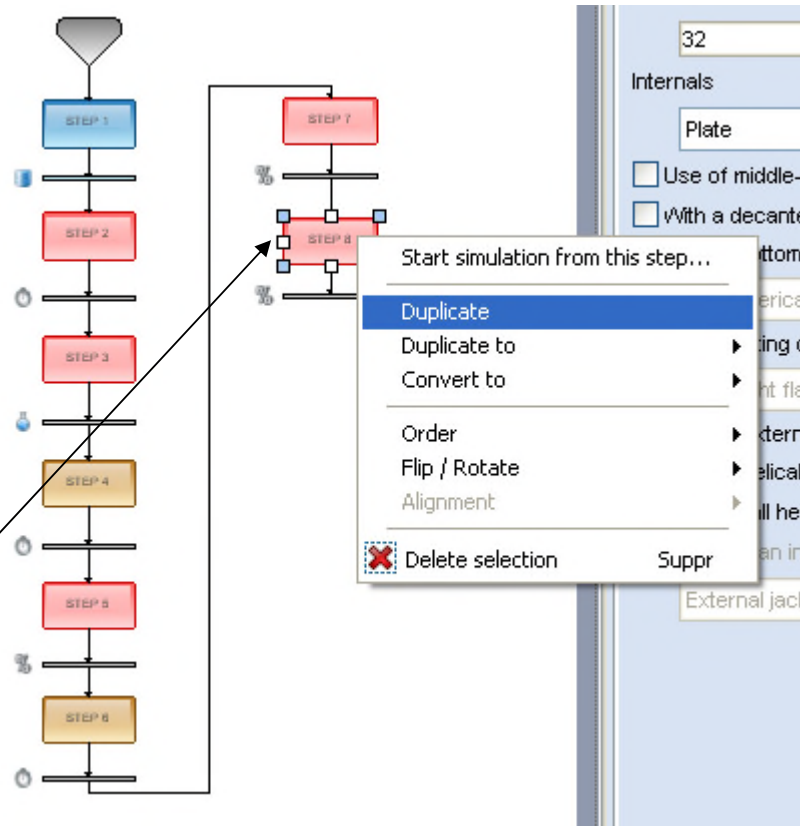
Event type

- ☐ Time spent since beginning of simulation
- ☐ Time spent since beginning of step
- ☐ Reflux ratio
- ☐ Production of a component inside a tank
- ☐ Total production inside a tank
- ☐ Temperature at a stage
- ☒ Fraction inside the distillate
- ☐ Fraction inside a tank
- ☐ Fraction inside the boiler
- ☐ Fraction at a stage
- ☐ Load of a component inside the boiler
- ☐ Total load inside the boiler
- ☐ Liquid distillate flowrate

Parameter(s) of the event

Compound

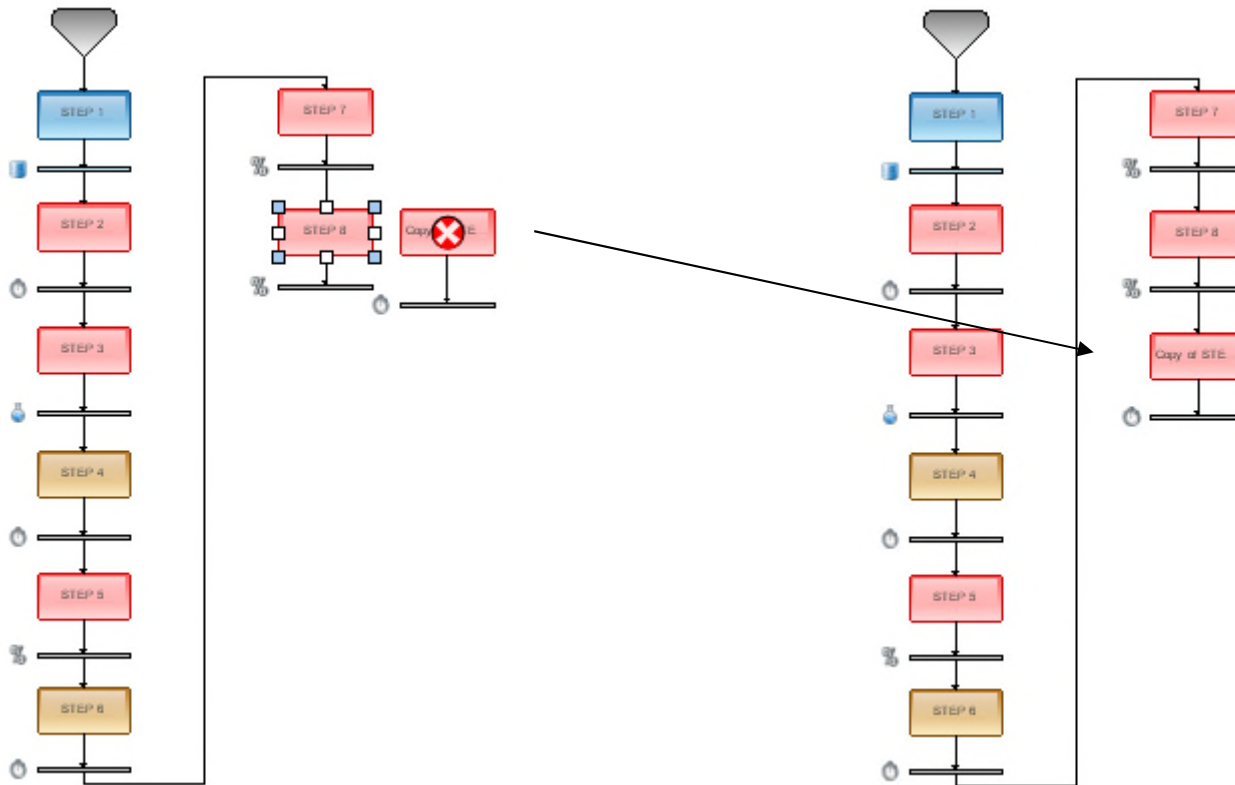
5-Describing the operating mode



Right click on the step 8 and select “Duplicate ”.
This copy avoids to specify again most of the parameters for this new step.

5-Describing the operating mode

Connect the new step to the ending event of the step 8

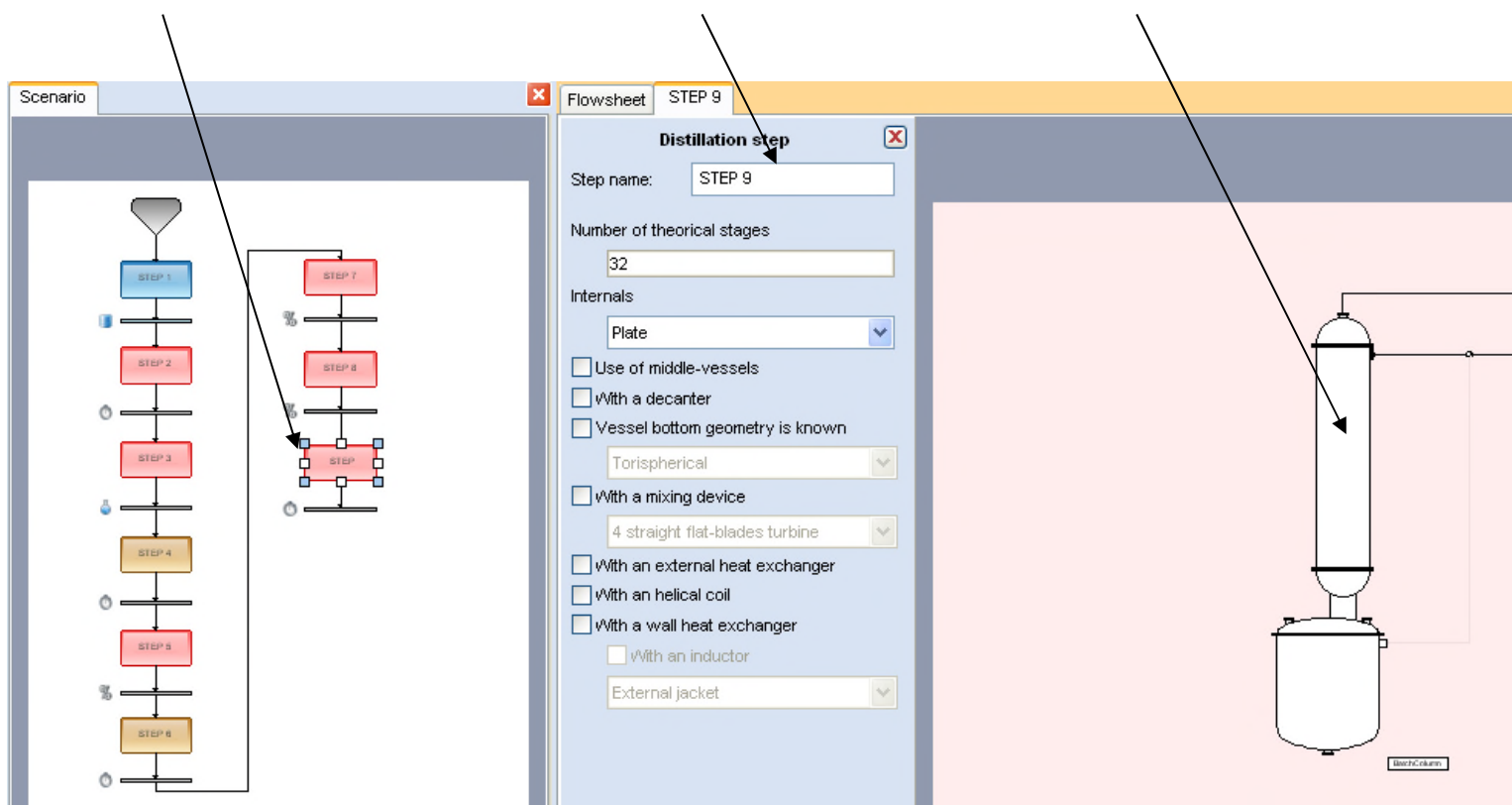


5-Describing the operating mode

1- Double click on the last step

2- Enter the name: STEP 9

3- Double click on the column



5-Describing the operating mode

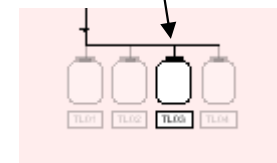
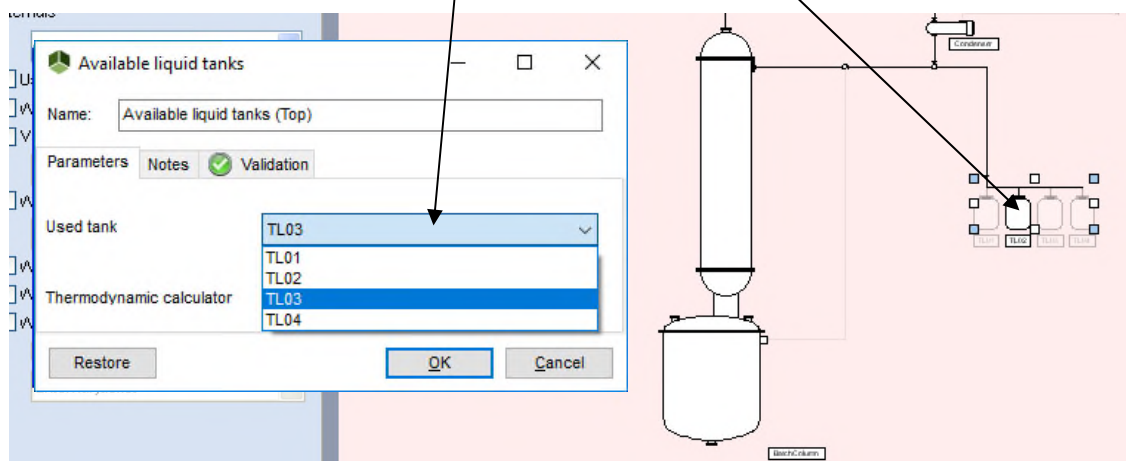
4- Nothing to change in this window since this step has been duplicated from step 8, which is identical to step 9. The boiler duty and the reflux ratio are already defined.

The screenshot shows the 'Column' software window with the 'Parameters' tab selected. The window title is 'Column'. Below the title bar, there is a 'Name:' field containing 'Column'. The 'Parameters' tab is active, with sub-tabs for 'Notes', 'Advanced parameters', and 'Validation' (which has a green checkmark). The 'Distillation step' section contains an 'Operating mode' dropdown set to 'Constant heat duty'. To the right of the column diagram, the 'Reflux ratio' is set to 'Constant value' with a value of '5' and a 'Reflux flowrate' button. Below the column, the 'Boiler duty' is set to 'Constant value' with a value of '500000 kcal/h'. The 'Thermodynamic calculator' section at the bottom shows 'Default calculator' selected. The 'Liquid tank' section is also visible, showing 'Used' and 'Flowrate' options. The 'Controls' section at the bottom of the column diagram includes buttons for 'Volume' and 'Controls'. The 'Tolerances' button is located at the bottom right of the window.

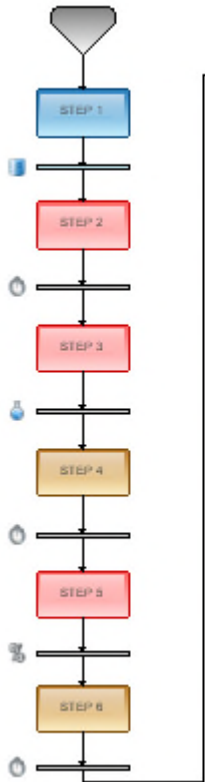
5-Describing the operating mode

5- Double click on the liquid tanks, select the tank 3 then click on “OK”

6- The tank 3 has been selected



5-Describing the operating mode



- 1- Double click on the event at the end of the step 9
- 2- Enter a name for the event
- 3- Select “total production inside a tank”
- 4- Enter the desired total production inside tank 3
- 5- Click on “OK”

Event

Information

Name: End of step 9

Parameters

Priority

Notes

Validation

Event type

☐ Time spent since beginning of simulation
 ☐ Time spent since beginning of step
 ☐ Reflux ratio
 ☐ Production of a component inside a tank
 ☒ Total production inside a tank
 ☐ Temperature at a stage
 ☐ Fraction inside the distillate
 ☐ Fraction inside a tank
 ☐ Fraction inside the boiler
 ☐ Fraction at a stage
 ☐ Load of a component inside the boiler
 ☐ Total load inside the boiler
 ☐ Liquid distillate flowrate

Parameter(s) of the event

Total production inside a tank

TL03

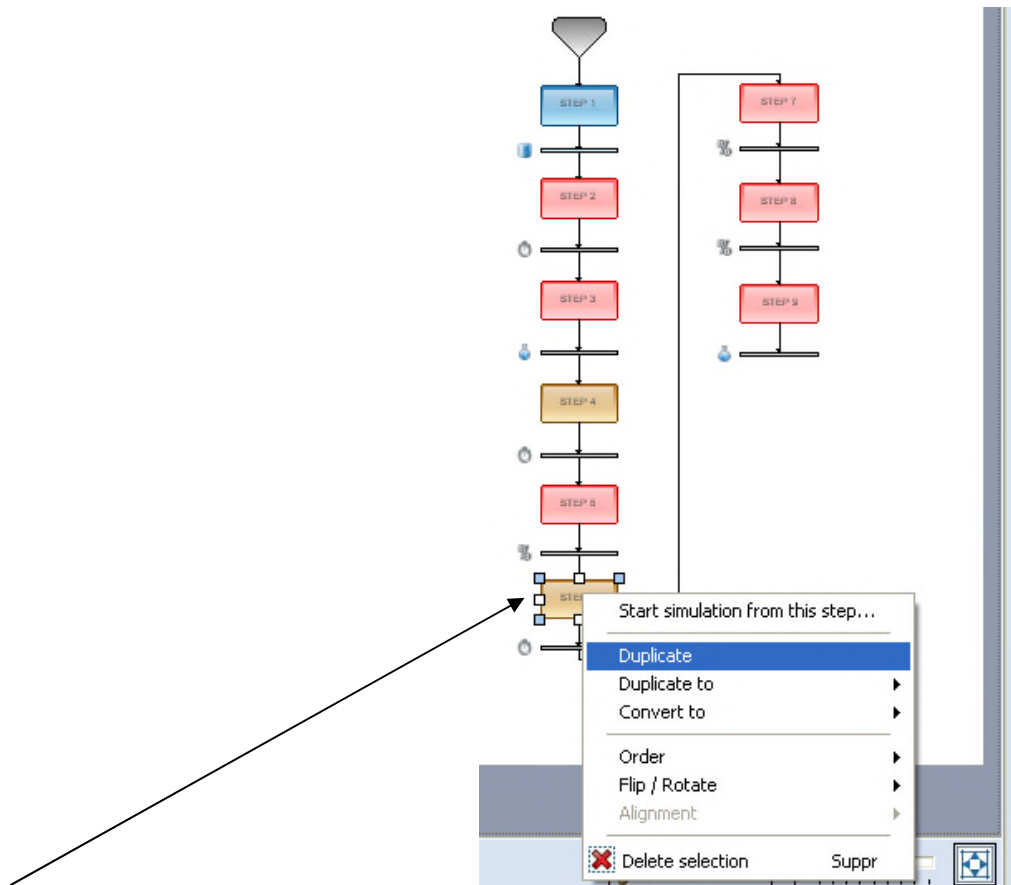
Mass

800 kg

OK

Cancel

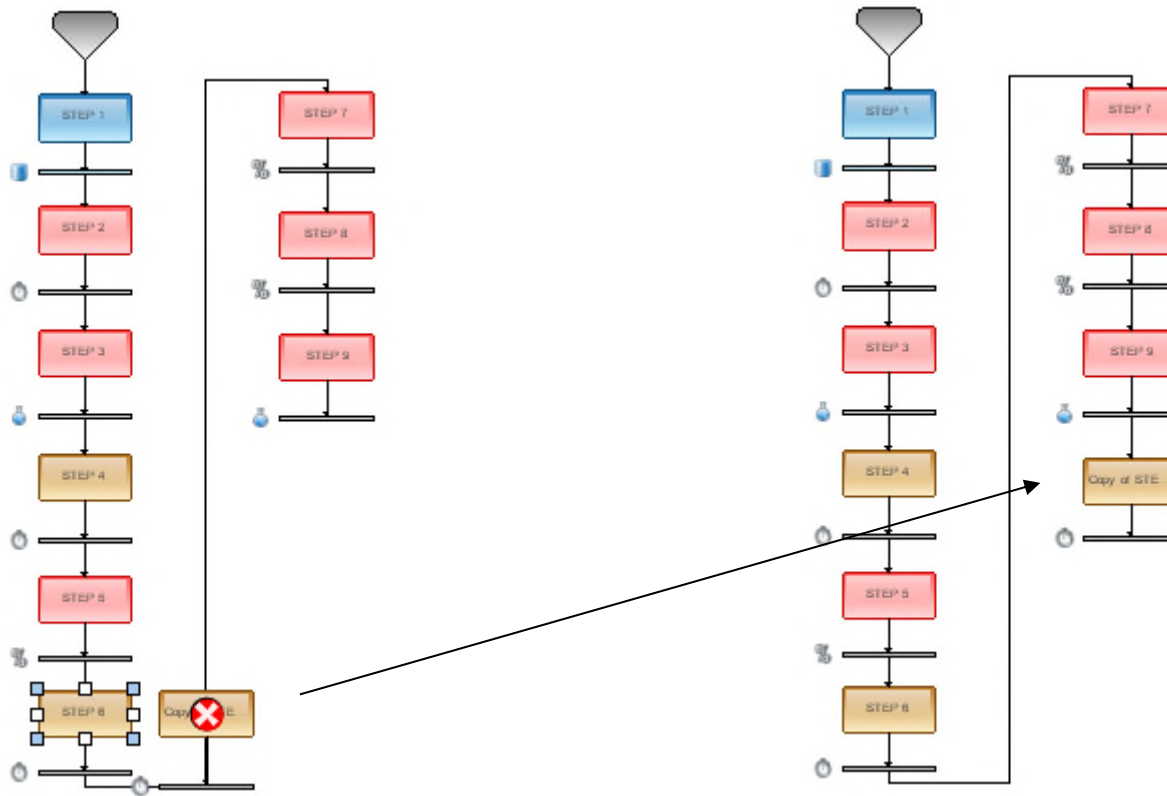
5-Describing the operating mode



Right click on the step 6 and select “Duplicate”.
This copy avoids to specify again most of the parameters for this new step.

5-Describing the operating mode

Connect the new step to the ending event of the step 9.

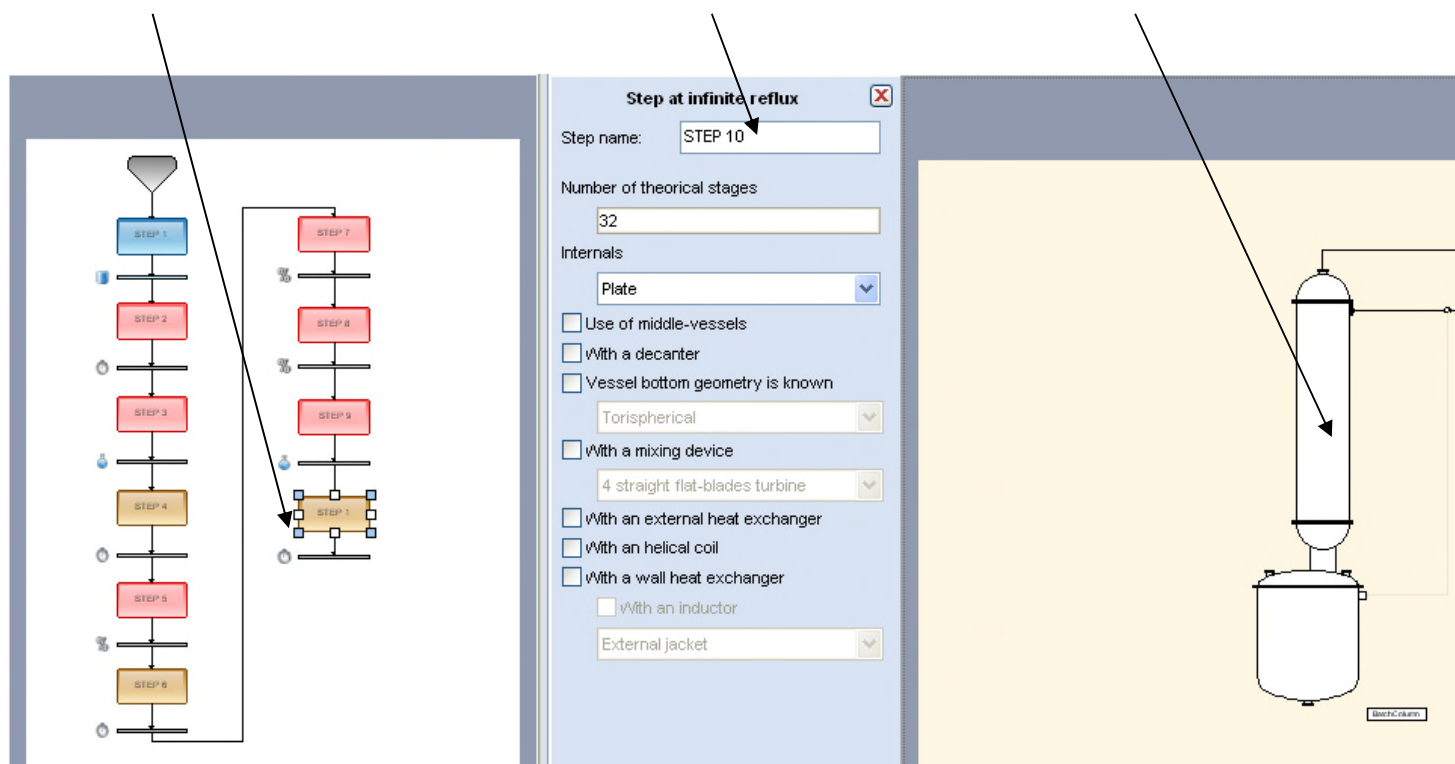


5-Describing the operating mode

1- Double click on the last step

2- Enter the name: STEP 10

3- Double click on the column



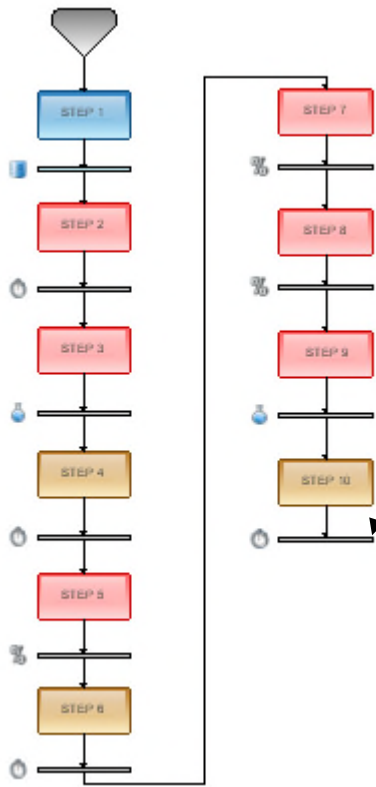
5-Describing the operating mode

4- Nothing to change in this window since this step has been duplicated from step 6, which is identical to step 10. The boiler duty is already defined.

The screenshot shows the 'Column' software window with the following configuration:

- Name:** Column
- Parameters:** Notes, Advanced parameters, ☒ Validation
- Step at infinite reflux:**
 - Operating mode:** Constant heat duty
 - Reflux flowrate:** [Defined]
 - Profile of heat losses:** [Defined]
 - Profile of heat inputs:** [Defined]
 - Reactive stages:** [Defined]
 - Middle-vessels:** [Defined]
 - Volume:** [Defined]
 - Controls:** [Defined]
 - Boiler duty:** Constant value, 500000 kcal/h
 - Thermodynamic calculator:** Default calculator
 - Liquid tank:** Used
 - Flowrates:** Molar
 - Tolerances:** [Defined]

5-Describing the operating mode



1- Double click on the event at the end of the step 10

2- Enter a name for the event

3- Select “time spent since beginning of step”

4- Enter the desired time of step

5- Click on “OK”

Event

Information

Name: End of step 10

Parameters Priority Notes Validation

Event type

- ☐ Time spent since beginning of simulation
- ☒ Time spent since beginning of step
- ☐ Reflux ratio
- ☐ Production of a component inside a tank
- ☐ Total production inside a tank
- ☐ Temperature at a stage
- ☐ Fraction inside the distillate
- ☐ Fraction inside a tank
- ☐ Fraction inside the boiler
- ☐ Fraction at a stage
- ☐ Load of a component inside the boiler
- ☐ Total load inside the boiler
- ☐ Liquid distillate flowrate

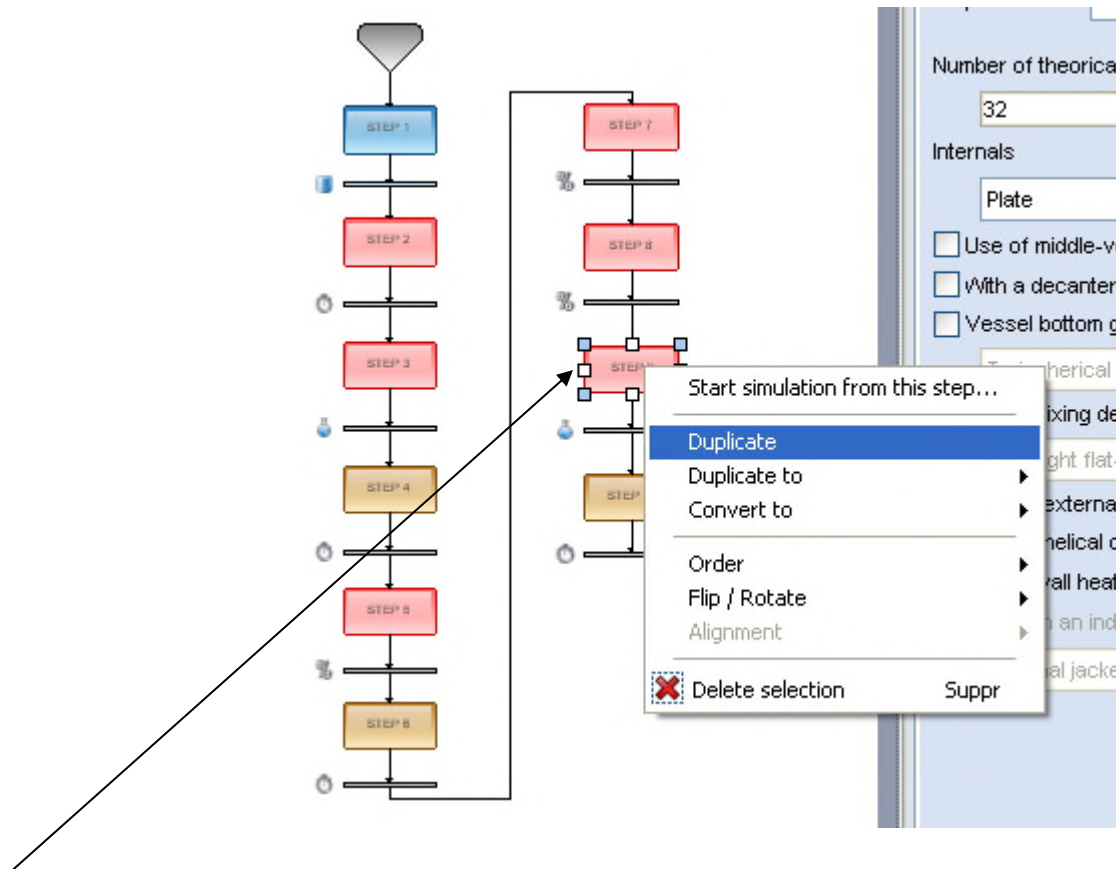
Parameter(s) of the event

Time of step

30 min

OK Cancel

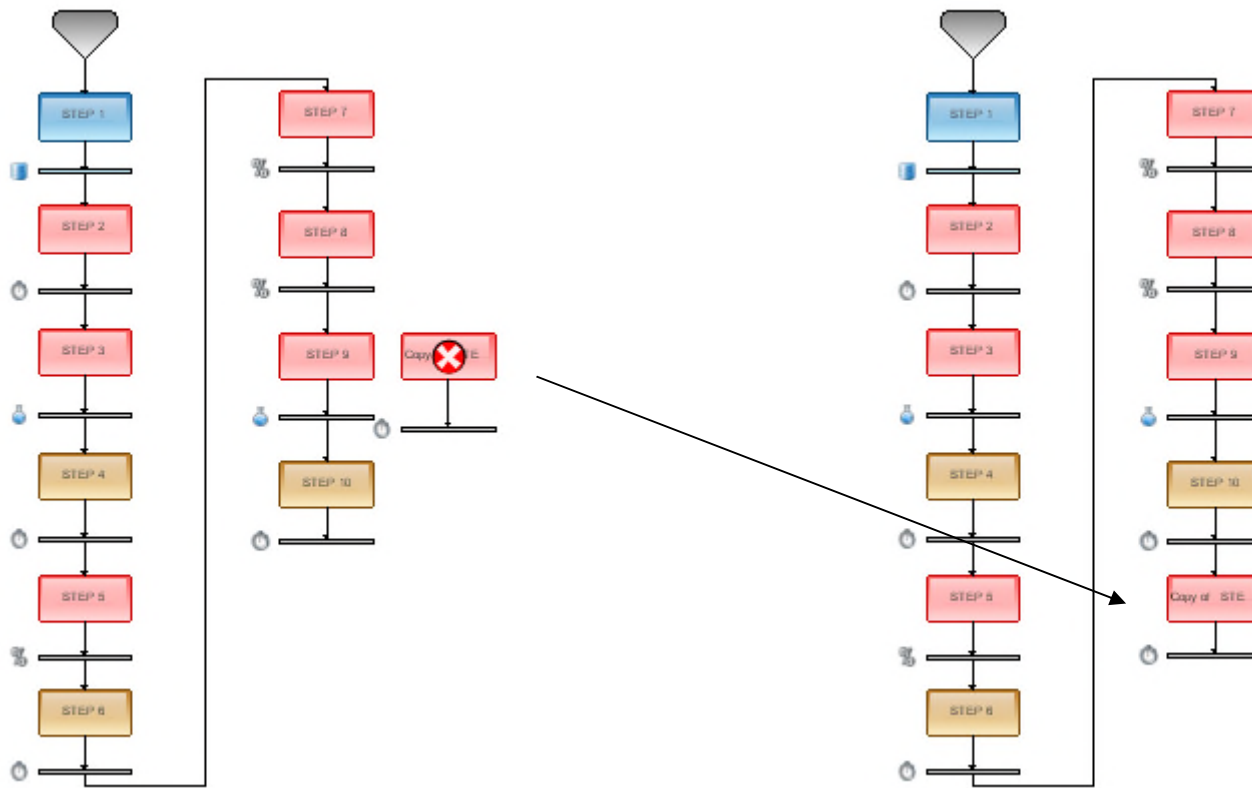
5-Describing the operating mode



Right click on the step 9 and select “Duplicate”.
This copy avoids to specify again most of the parameters for this new step.

5-Describing the operating mode

Connect the new step to the ending event of the step 10



5-Describing the operating mode

1- Double click on the last step

2- Enter the name: STEP 11

3- Double click on the column

The screenshot displays the ProSim S.A. software interface for configuring a distillation process. It is divided into three main sections:

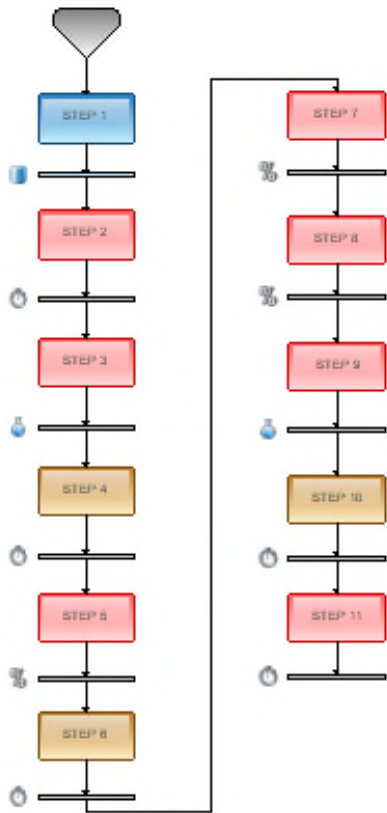
- Process Flow Diagram (Left):** A vertical sequence of steps from STEP 1 to STEP 8. STEP 11 is highlighted in red, indicating it is the selected step for configuration. An arrow points from the instruction '1- Double click on the last step' to STEP 11.
- Distillation step configuration window (Center):** A dialog box titled 'Distillation step' with a close button (X). It contains the following fields and options:
 - Step name:** A text field containing 'STEP 11'. An arrow points from the instruction '2- Enter the name: STEP 11' to this field.
 - Number of theoretical stages:** A text field containing '32'.
 - Internals:** A dropdown menu set to 'Plate'.
 - Options:** A series of checkboxes:
 - ☐ Use of middle-vessels
 - ☐ With a decanter
 - ☐ Vessel bottom geometry is known
 - ☐ With a mixing device
 - ☐ With an external heat exchanger
 - ☐ With an helical coil
 - ☐ With a wall heat exchanger
 - ☐ With an inductor
 - External jacket:** A dropdown menu set to 'External jacket'.
- Distillation Column Diagram (Right):** A schematic of a distillation column with a reboiler at the bottom. An arrow points from the instruction '3- Double click on the column' to the column body.

5-Describing the operating mode

4- Nothing to change in this window since this step has been duplicated from step 9, which is identical to step 11. The boiler duty is already defined as well as the reflux ratio.

The screenshot shows the 'Column' software window with the 'Parameters' tab selected. The window contains a schematic of a distillation column with several control buttons: 'Profile of heat losses', 'Profile of heat inputs', 'Reactive stages', 'Middle-vessels', 'Volume', and 'Controls'. The 'Distillation step' section shows 'Operating mode' set to 'Constant heat duty'. The 'Reflux ratio' is set to 'Constant value' with a value of 5. The 'Boiler duty' is set to 'Constant value' with a value of 500000 kcal/h. The 'Thermodynamic calculator' is set to 'Default calculator'. The 'Gas sidestreams' and 'Liquid sidestreams' sections are also visible, with 'Flowrates' set to 'Molar' and 'Liquid tank' set to 'Used'.

5-Describing the operating mode



- 1- Double click on the event at the end of the step 11
- 2- Enter a name for the event
- 3- Select “fraction inside a tank”
- 4- Enter the desired mass fraction of acetone.
Select “<” to indicate that the event should be reached by decreasing value.

- 5- Click on “OK”

Event

Information

Name:

Parameters

Priority

Notes

☒ Validation

Event type

☐ Time spent since beginning of simulation
☐ Time spent since beginning of step
☐ Reflux ratio
☐ Production of a component inside a tank
☐ Total production inside a tank
☐ Temperature at a stage
☐ Fraction inside the distillate
☒ Fraction inside a tank
☐ Fraction inside the boiler
☐ Fraction at a stage
☐ Load of a component inside the boiler
☐ Total load inside the boiler
☐ Liquid distillate flowrate

Parameter(s) of the event

Compound

ACETONE

▼

TL03

▼

<

▼

Mass

▼

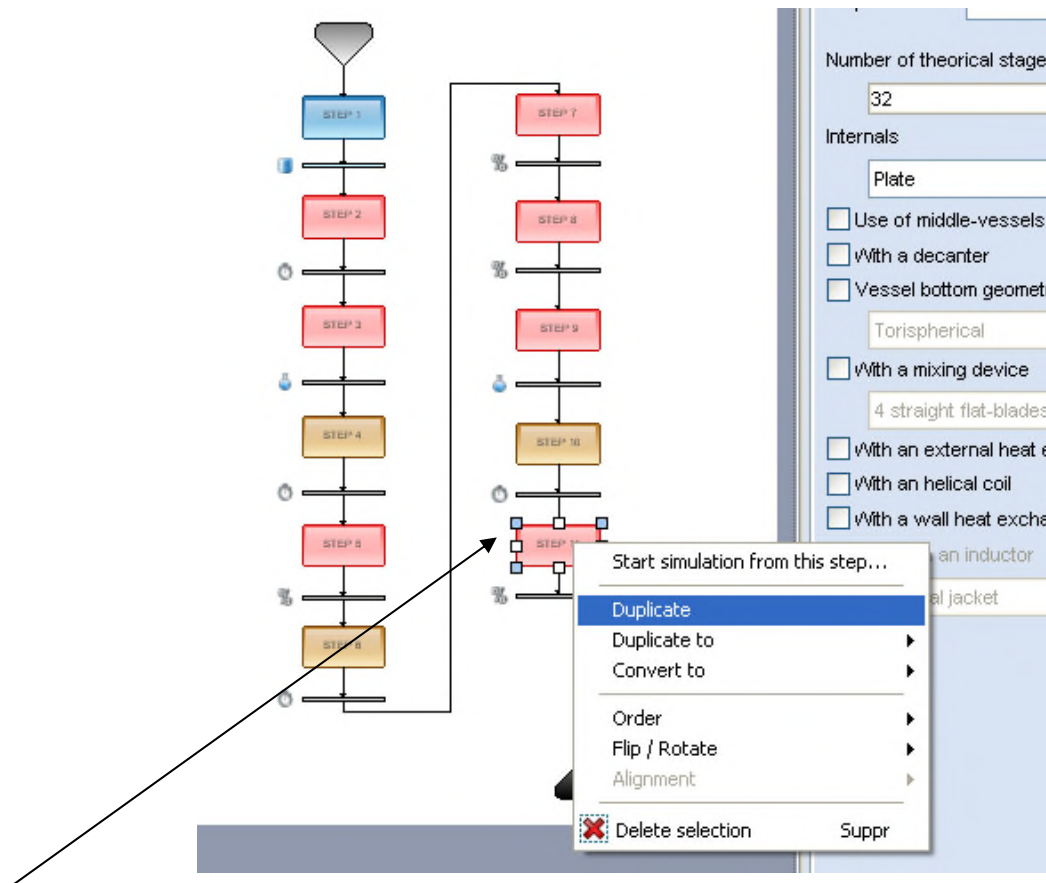
0.9

▼

OK

Cancel

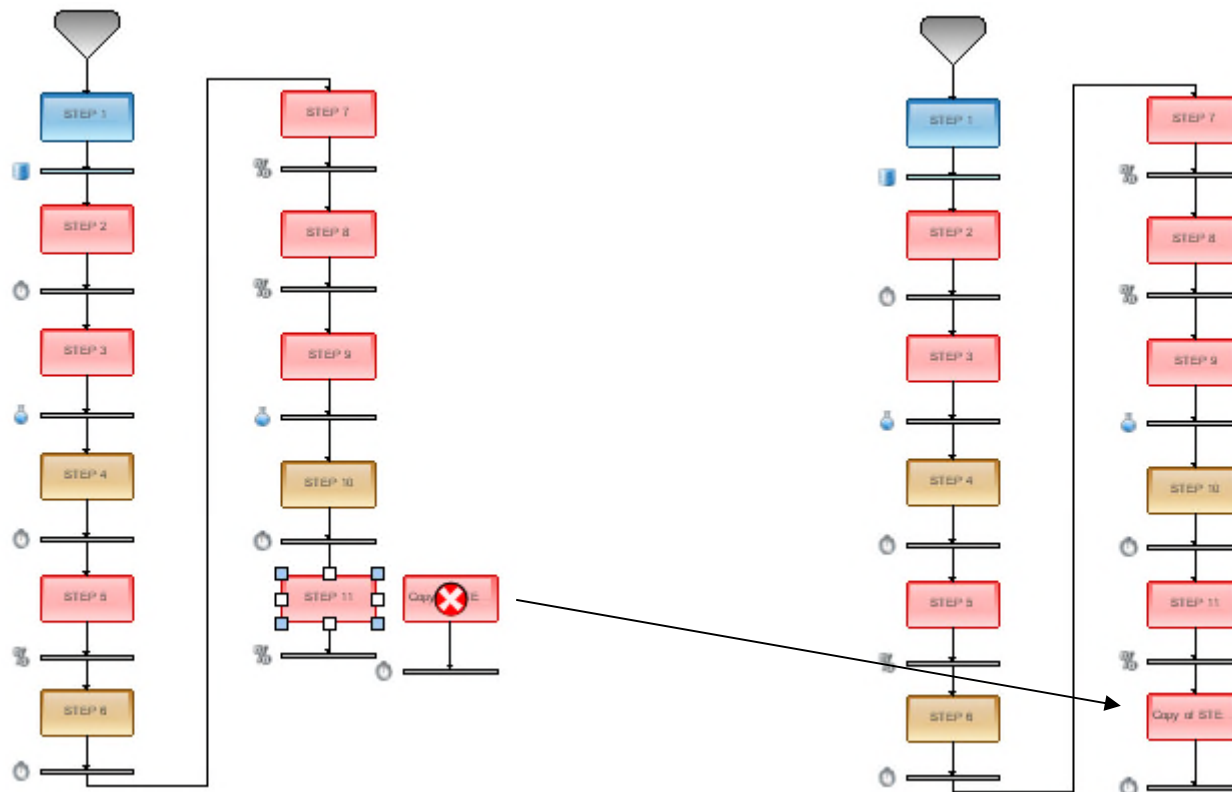
5-Describing the operating mode



Right click on the step 11 and select “Duplicate”.
This copy avoids to specify again most of the parameters for this new step.

5-Describing the operating mode

Connect the new step to the ending event of the step 11



5-Describing the operating mode

1- Double click on the last step

2- Enter the name: STEP 12

3- Double click on the column

The image displays three panels from the ProSim S.A. software interface:

- Left Panel:** A process flow diagram showing a sequence of steps. The last step, STEP 6, is highlighted with a red border. An arrow points from the instruction '1- Double click on the last step' to this step.
- Middle Panel:** A configuration window titled 'Distillation step'. The 'Step name' field is set to 'STEP 12'. The 'Number of theoretical stages' is set to 32. The 'Internals' dropdown is set to 'Plate'. Other options include 'Use of middle-vessels', 'With a decanter', 'Vessel bottom geometry is known' (set to 'Torispherical'), 'With a mixing device' (set to '4 straight flat-blades turbine'), 'With an external heat exchanger', 'With an helical coil', 'With a wall heat exchanger', 'With an inductor', and 'External jacket'. An arrow points from the instruction '2- Enter the name: STEP 12' to the 'Step name' field.
- Right Panel:** A schematic diagram of a distillation column. An arrow points from the instruction '3- Double click on the column' to the column structure.

5-Describing the operating mode

4- Enter the reflux ratio equal to 2

Column

Name:

Parameters Notes Advanced parameters **Validation**

Distillation step

Operating mode
Constant heat duty

Reflux ratio Constant value 2
Reflux flowrate

Profile of heat losses
Profile of heat inputs
Reactive stages
Middle-vessels

Gas sidestreams Liquid sidestreams

Flowrates Molar

Liquid tank	Used	Flowrate

Volume
Controls

Boiler duty Constant value 500000 kcal/h

Tolerances

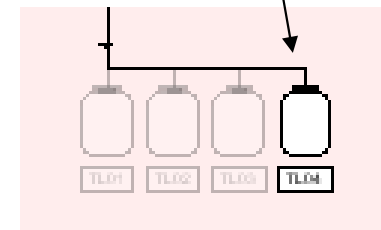
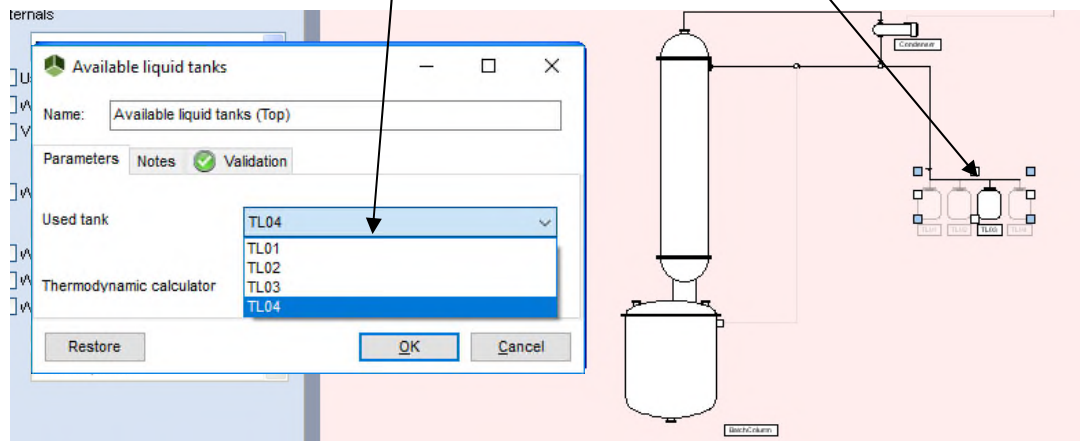
Thermodynamic calculator Default calculator

Restore OK Cancel

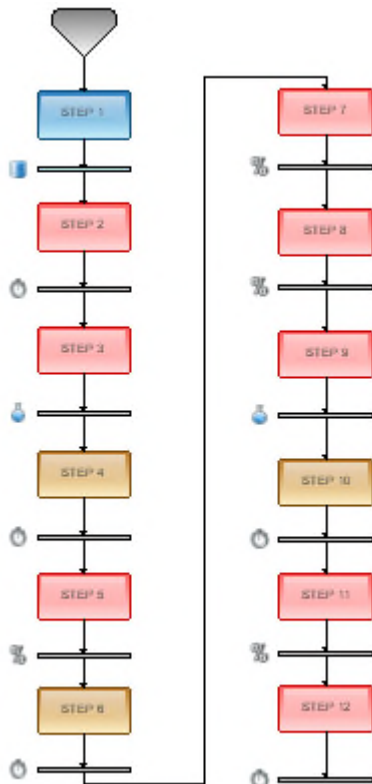
5-Describing the operating mode

5- Double click on the liquid tanks, select the tank 4 then click on “OK”

6- The tank 4 has been selected



5-Describing the operating mode



1- Double click on the event at the end of the step 12

2- Enter a name for the event

3- Select “total load inside the boiler”

4- Enter the desired mass load inside the boiler.
Select “<” to indicate that the event should be reached by decreasing value.

5- Click on “OK”

Event

Information

Name: End of step 12

Parameters Priority Notes Validation

Event type

- ☐ Time spent since beginning of simulation
- ☐ Time spent since beginning of step
- ☐ Reflux ratio
- ☐ Production of a component inside a tank
- ☐ Total production inside a tank
- ☐ Temperature at a stage
- ☐ Fraction inside the distillate
- ☐ Fraction inside a tank
- ☐ Fraction inside the boiler
- ☐ Fraction at a stage
- ☐ Load of a component inside the boiler
- ☒ Total load inside the boiler
- ☐ Liquid distillate flowrate

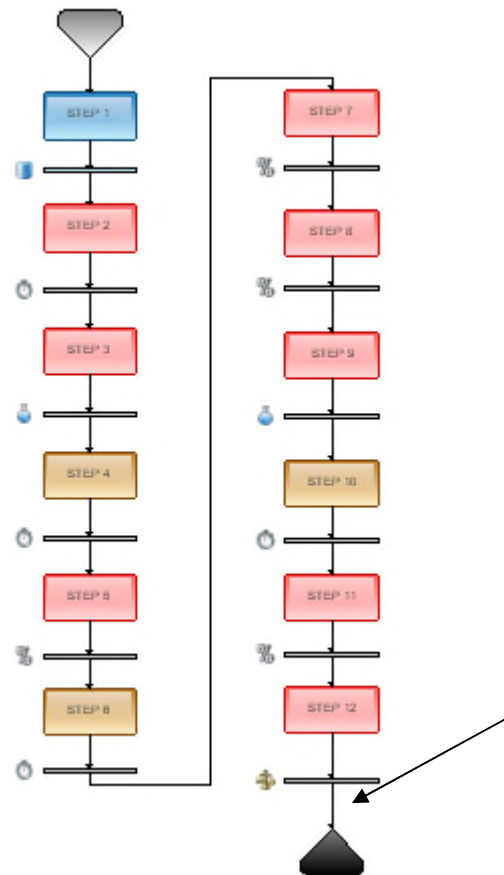
Parameter(s) of the event

Total load

< Mass 150 kg

OK Cancel

5-Describing the operating mode



Finally, connect the last event to the end of the simulation

6-Running the simulation

Click on “Report parameters” →



Select the desired options for the presentation of the report

It is possible to automatically calculate the transport properties for each stage

It is possible to perform scale-up calculation

Save the file →



Click on “Start the simulation” →



Report parameters

Report type: Reduced

Composition printing: Mass

Flowrate printing: Mass

Time between each output: 0 s

Number of integration steps between 2 tracing points: 10

Traced variables

- ☒ Fractions in the distillate: Mass
- ☒ Fractions in the boiler: Mass
- ☒ Liquid flowrate: Mass
- ☒ Duties and reflux ratio
- ☒ P at the top, T in the boiler and condenser
- ☒ Heat parameters
- ☒ Condenser parameters
- ☐ Transport properties calculation
- ☐ Scale-up calculation
 - Type of the scale-up factor: Volume
 - Scale-up factor: 2
- ☒ Generation of the report (.docx)
- ☒ Generation of the compounds and reactions files

Traced compounds

Compound	Value
METHANOL	<input checked="" type="checkbox"/>
ACETONE	<input checked="" type="checkbox"/>
DICHLOROMETHANE	<input checked="" type="checkbox"/>
DIACETONE ALCOHOL	<input checked="" type="checkbox"/>

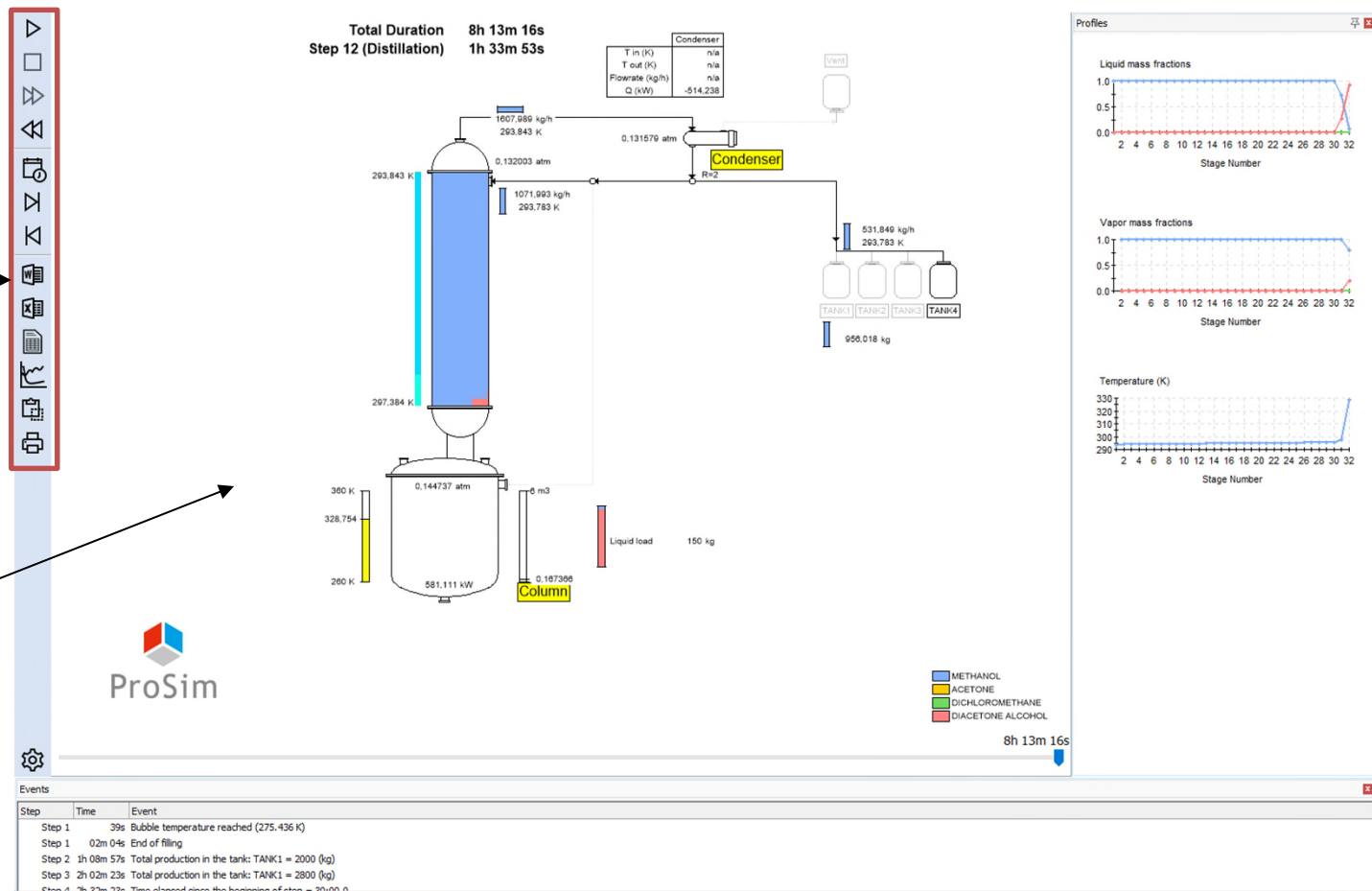
Restore OK Cancel

6-Running the simulation

The following window displays in real time the process operating parameters:

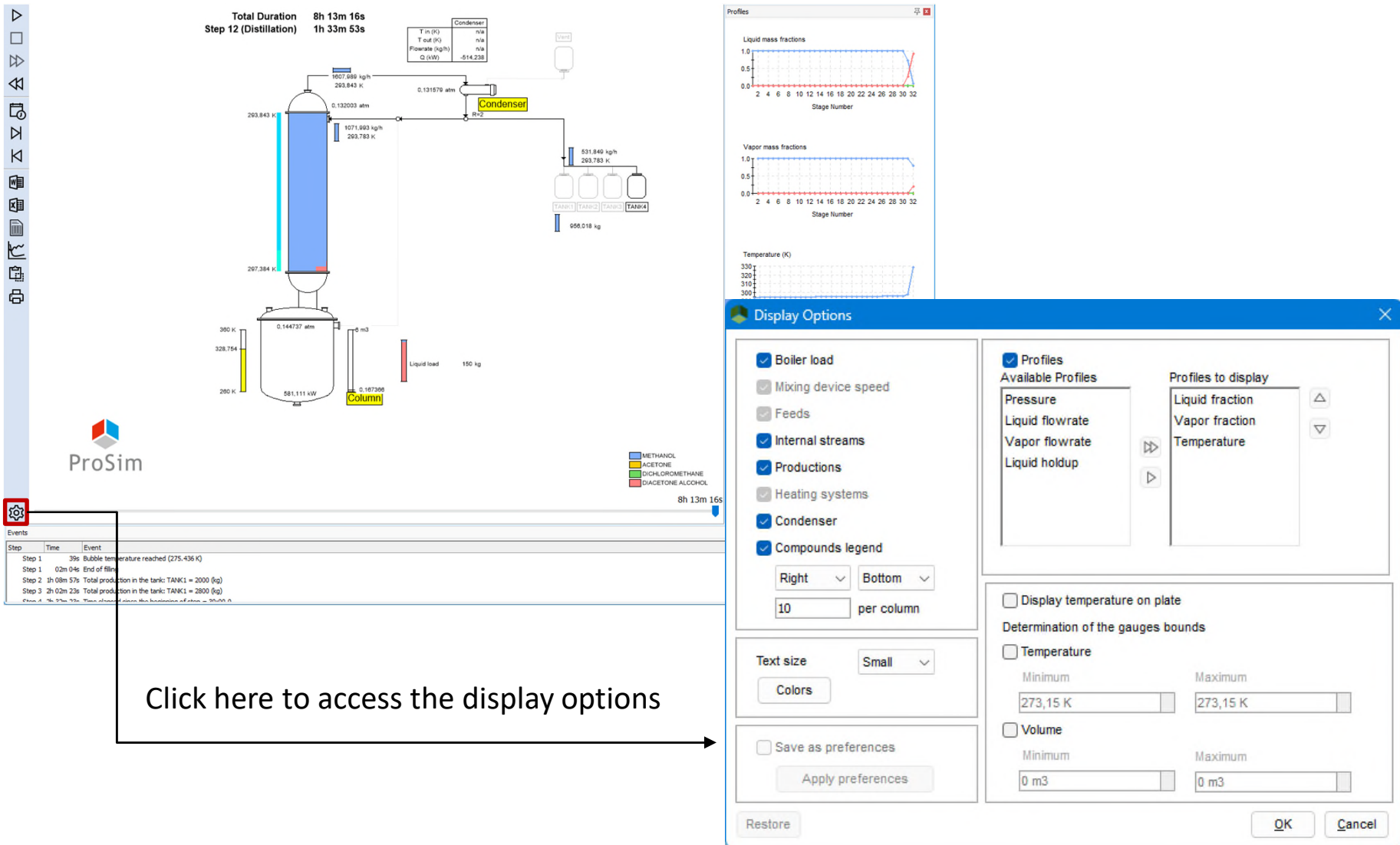
Toolbar that is used to pause, go to the next step, access the graphical settings, etc...

Operating parameters are displayed here (temperatures, pressures, flowrates, compositions, etc...)



6-Running the simulation

The following window displays in real time the process operating parameters:

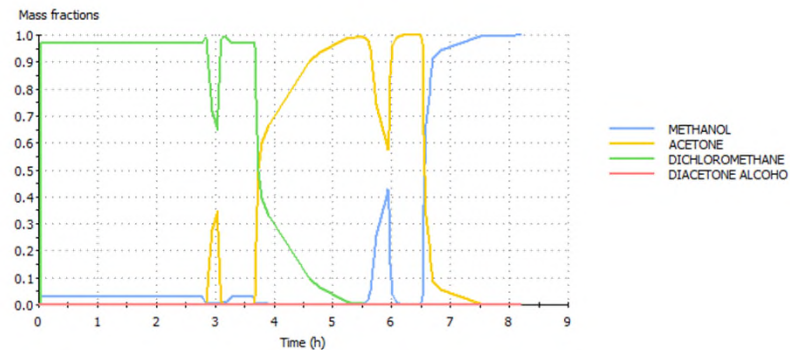


7-Reviewing the simulation results

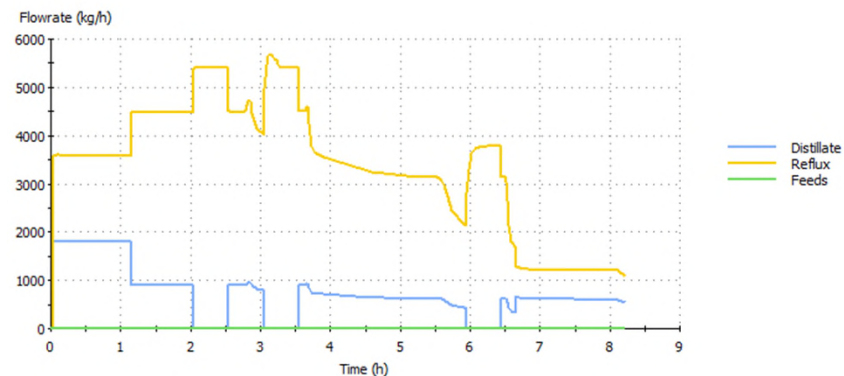
Once the simulation is complete, click on "Open the graph report" to analyze the evolution as a function of time of the variable parameters (pressure, temperature, flowrates, compositions, heat duties, physical properties, etc...)



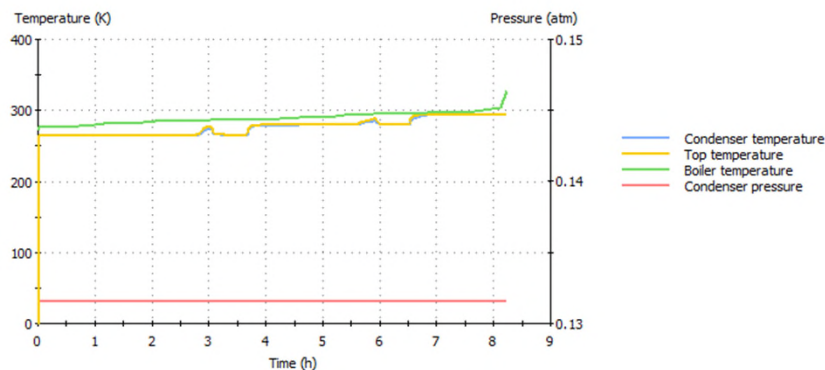
Mass fractions in the distillate



Flowrates profiles

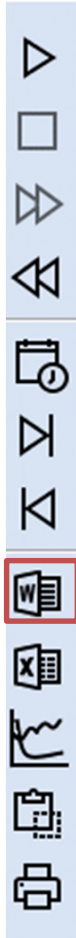


Temperatures - Pressure



7-Reviewing the simulation results

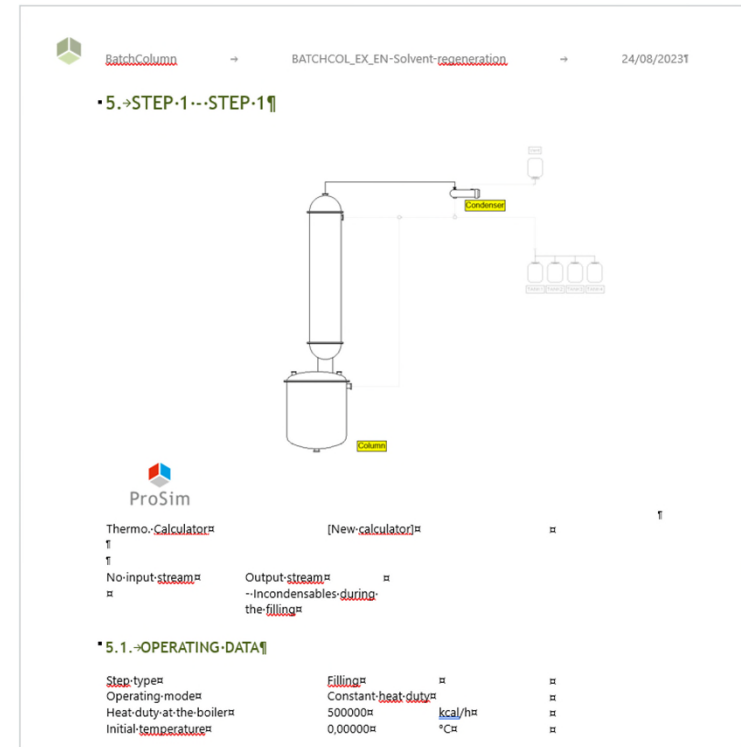
Click on "Open the report" to open the full simulation report in MS-Word format. It includes the input data (equipment and operating scenario) as well as the numerical and graphical results



BatchColumn → BATCHCOL_EX_EN-Solvent-regeneration → 24/08/2023†

Table-of-content†

- 1 → Process.....†
- 2 → Scenario.....†
- 3 → Thermodynamic-calculator.....†
- 3.1 → Model.....†
- 3.1.1 → Binary-Interaction-Parameters.....†
- 3.1.1.1 → Global-model.....†
- 3.1.1.2 → Activity-coefficient-model.....†
- 3.2 → Compounds.....†
- 3.3 → Reactions.....†
- 4 → Summary.....†
- 5 → Step-1...Step-1.....†**
- 5.1 → Operating-data.....†
- 5.2 → Condenser.....†
- 5.2.1 → Characteristics.....†



The detailed table of content provides a convenient access to the results

7-Reviewing the simulation results

Click here to access the simulation report in MS-Excel format. It includes the evolution of the process variables as a function of time















	Time (h)	Liquid volume (m3)	Feed flowrate (kg/h)	Liquid sidestream (kg/h)	Vapor sidestream (kg/h)	Vapor distillate (kg/h)	liquid distillate (kg/h)	Reflux (kg/h)
2413								
2414	1.67E-04	2.2278891	1	0	0	1.0052927	0	2.00E-02
2415	1.67E-02	2.2286754	1	0	0	1.3371409	0	2.73E-02
2416	3.33E-02	2.230627	1	0	0	1.5397891	0	3.36E-02
2417	5.00E-02	2.2332999	1	0	0	1.6559845	0	3.94E-02
2418	6.67E-02	2.2364167	1	0	0	1.7185781	0	4.53E-02
2419	8.33E-02	2.239802	1	0	0	1.7493801	0	5.13E-02
2420	0.1	2.243351	1	0	0	1.7614792	0	5.76E-02
2421	0.116667	2.2470044	1	0	0	1.7625298	0	6.43E-02
2422	0.133333	2.2507285	1	0	0	1.757826	0	7.16E-02
2423	0.15	2.2544892	1	0	0	1.7492106	0	7.94E-02
2424	0.166667	2.2582715	1	0	0	1.7412496	0	8.80E-02
2425	0.183333	2.2620693	1	0	0	1.7278169	0	9.70E-02
2426	0.2	2.2658796	1	0	0	1.7193188	0	0.10702215
2427	0.216667	2.2697004	1	0	0	1.7098734	0	0.11781666
2428	0.233333	2.2735296	1	0	0	1.7007094	0	0.12949264
2429	0.25	2.2773661	1	0	0	1.6923622	0	0.14214939
2430	0.266667	2.2812092	1	0	0	1.6844712	0	0.15582606
2431	0.283333	2.2850585	1	0	0	1.6773023	0	0.17061809
2432	0.3	2.2889139	1	0	0	1.6706803	0	0.18658742
2433	0.316667	2.2927754	1	0	0	1.6645653	0	0.20381152

7-Reviewing the simulation results

Several files are automatically generated in the folder containing the simulation file. It includes:

- The simulation file (*.pbpc)
- The results file in MS-Excel format (*.csv)
- The evolution as a function of time of the liquid flowrate in the column (*_DL.csv)
- The evolution as a function of time of the vapor flowrate in the column (*_DV.csv)

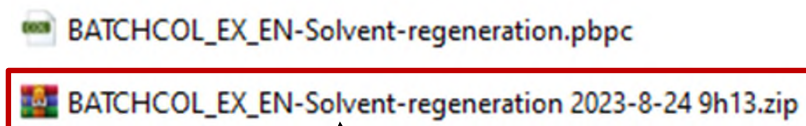
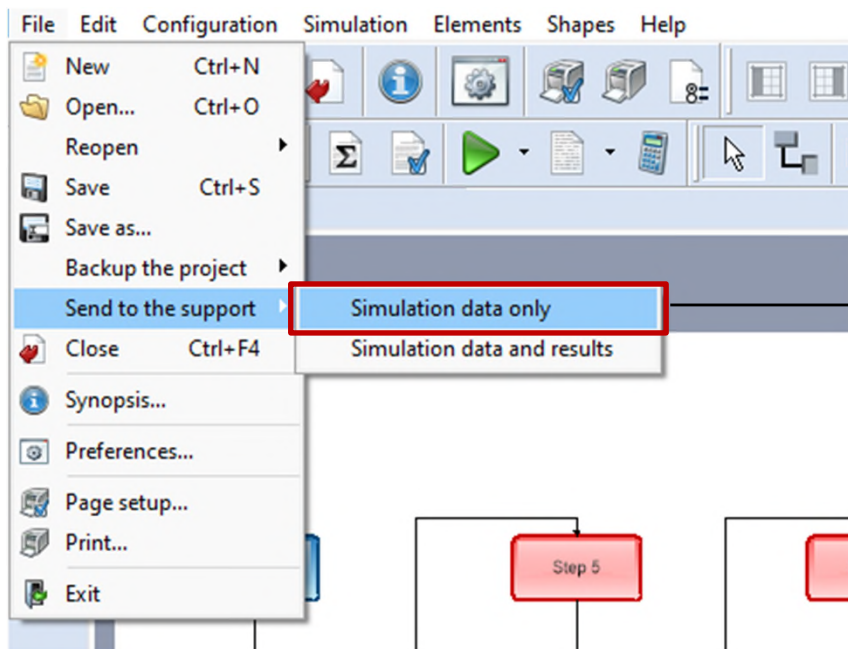
	BATCHCOL_EX_EN-Solvent-regeneration_files	24/08/2023 08:55	Dossier de fichiers	
	BATCHCOL_EX_EN-Solvent-regeneration.cat	24/08/2023 08:55	Catalogue de sécurité	13 Ko
	BATCHCOL_EX_EN-Solvent-regeneration.csv	24/08/2023 08:55	Fichier CSV Microsoft E...	330 Ko
	BATCHCOL_EX_EN-Solvent-regeneration.docx	24/08/2023 08:55	Document Microsoft W...	1 806 Ko
	BATCHCOL_EX_EN-Solvent-regeneration.don	24/08/2023 08:53	Fichier DON	4 Ko
	BATCHCOL_EX_EN-Solvent-regeneration.his	24/08/2023 08:55	txtfile	5 Ko
	BATCHCOL_EX_EN-Solvent-regeneration.log	24/08/2023 08:55	Document texte	1 Ko
	BATCHCOL_EX_EN-Solvent-regeneration.pbpc	10/09/2020 11:43	Document BatchColumn	9 631 Ko
	BATCHCOL_EX_EN-Solvent-regeneration.res	24/08/2023 08:55	Compiled Resource Script	620 Ko
	BATCHCOL_EX_EN-Solvent-regeneration.xyg	24/08/2023 08:55	Fichier XYG	420 Ko
	BATCHCOL_EX_EN-Solvent-regeneration_DL.csv	24/08/2023 08:55	Fichier CSV Microsoft E...	60 Ko
	BATCHCOL_EX_EN-Solvent-regeneration_DV.csv	24/08/2023 08:55	Fichier CSV Microsoft E...	60 Ko

7-Reviewing the simulation results

For any questions, please contact ProSim technical support by sending an email to support@prosim.net, with:

- The objectives of your simulation
- Your simulation file

To facilitate the sending of the simulation file by email, a zip file can be automatically generated by clicking on “send to support”



A zip file is created in the folder where the simulation file is stored

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