Case Study in PRO/II

Start with Separator from Problem 2



Click on the Input Tab and click on Case Study



Click on Define Case Study.

Click on PARAM1 and change to something representative of your parameter, such as FEEDFLOW.

Click on Parameter.

Choose Stream

Choose S1

Parameter		
UOM Range Help	Overview	
Stream/Unit:		Stream Name:
Stream	~	S1 ~
Parameter		
OK to PFD	ок	Cancel Cancel to PFD
Select the unit/stream name	for this parameter	

Click on Parameter... and choose Flowrate.

	Parameter Selection			
m	UOM Range Help			
	Parameter:			
	a Temperature Pressure Flowrate			
	Flowrate			

Click OK, OK

Click on the second Cycle 1 and change to 10.

Click on step size.

Parameter Step Value						
UOM Range Help						
Basis: Actual ~	Value of Change: 10					
OK Enter the value of the change	Cancel					

Leave as Actual and make Value of Change 10. Click OK.

If desired, click on RESULT1 and change name to something more mnemonic.

Click on Parameter. Leave as Stream. Choose Stream Name S3. Click on Parameter. Choose Flowrate. Choose Selected Components. Choose Starting Component PROPENE and Ending Component PROPENE.

UOM Range Help Parameter: Flowrate: Starting Component: Entropy Parameter: All Components PROPENE Cv Selected Components Ending Component: Molecular Weight PH Total Ionic Strength PROPENE Enowrate Ending Component:	
Parameter: Flowrate: Starting Component: Entropy Cp Cv Molecular Weight pH Total Ionic Strength Flowrate	
Entropy Cp Cv Molecular Weight pH Total Ionic Strength Flowrate	_
Cv Molecular Weight pH Total Ionic Strength Flowrate	\sim
Flowrate	~
Phase: Volume Percent Dishilate:	
Actual Flowing Volume Adjusted Standard Flowrate Composition Concentration Phase Volume Percent Distillate. Weight Weigh	

Click OK, OK

PRO/II - Case Study Parameters and Results	
Range Help	Overview
Define Case Study Parameters: Cut 1 Parameter <u>FEEDFLOW</u> change:	Set up Case Study Cycles Include in Cycles Stream S1 Flowrate in kg-mol/sec_from cycle 1 through
Insert	ase case value and step size = 10,000
Results:	Total Cycles:
Cut 1 Result RESULT1 = Stream S3 Insert Insert Reset	Flowrate of component PROPENE on a Wet basis in

Click OK.

Click the RUN button 🕨 . Click on Run Simulation.

Click on the Output tab and click on Case Study Plots..



Give the plot a name (all caps, no spaces) and a title.

Click on DATA.

Click on FEEDFLOW and then ADD.

Click on the just added line and then twice on the Up button.

Click on the X-Axis line. Change Label/Legend to Feed Rate and Click Update.

Click on RESULT1 (or whatever you called it) and then click ADD.

Click on the just added line and click Up once.

Click on the Y-Axis #1 line. Change Label/Legend to Propene Flow and Click Update

	Case Study - Plot Definition							
			Help					
er l	Plot Name: F	LOW						
	Plot Title: P	ropene as	a Function	of Feed				
	Plot Definition Available Variable(s)		Axis	Selected Variable(s)	Label/Legend	Format		
	Cycles		X-Axis	FEEDFLOW	Feed Rate FEEDFLOW	Line	Up	
2			Y-Axis #1 Y-Axis #2	RESULT1	Propene Flow RESULT1 Y-Axis #2	Line	Down Remove Remove All	
E	Add ->	nition	Label/Lo	egend: Propene Flow		Format: Line V	Update	
D				ОК	Cancel			

Update selected Axis/Variable data

Click OK.

Click View All Plots.



The rather boring plot will be displayed.



There are lots of options for Case Studies. Explore a few.