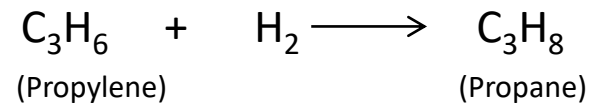
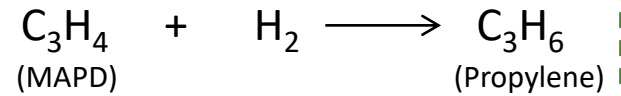
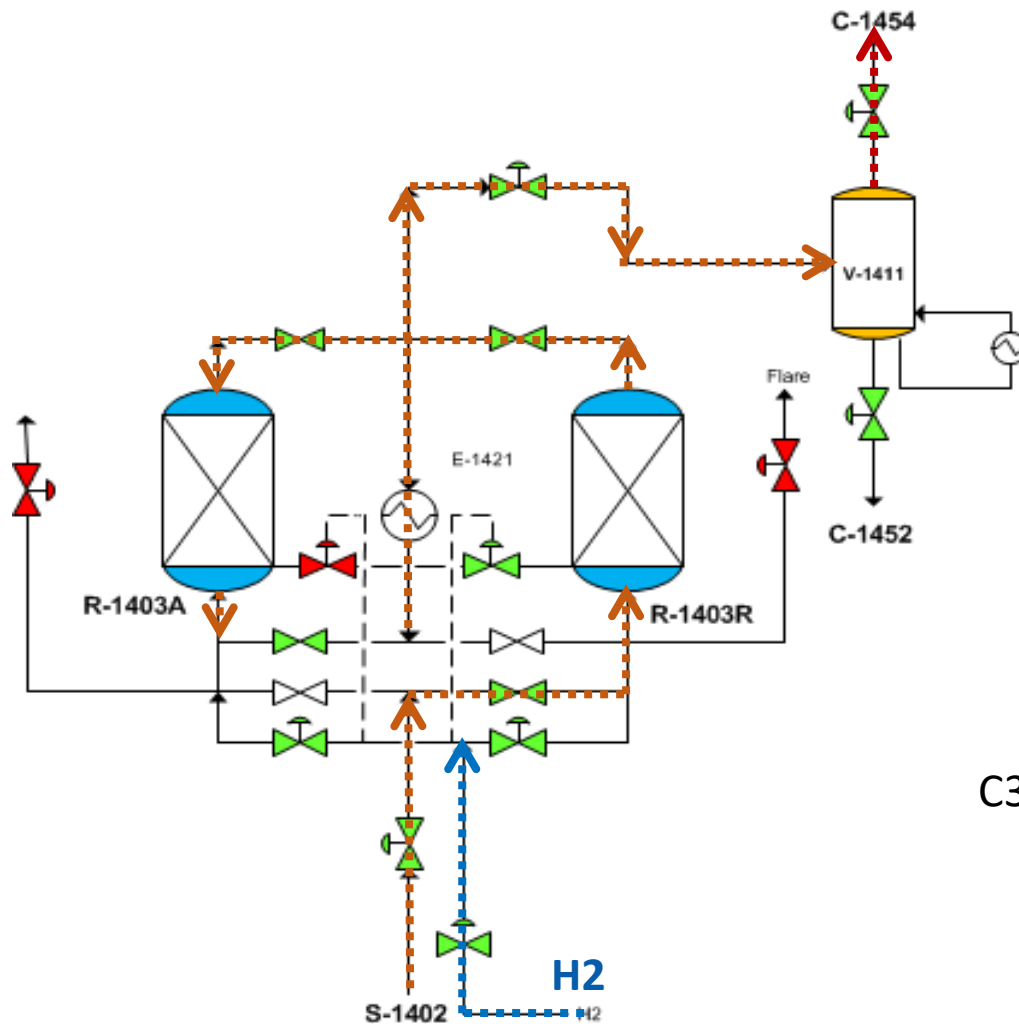




**Optimize selectivity of
MAPD convertor No.2 (R-1403)
#27977**

Kankamol B.

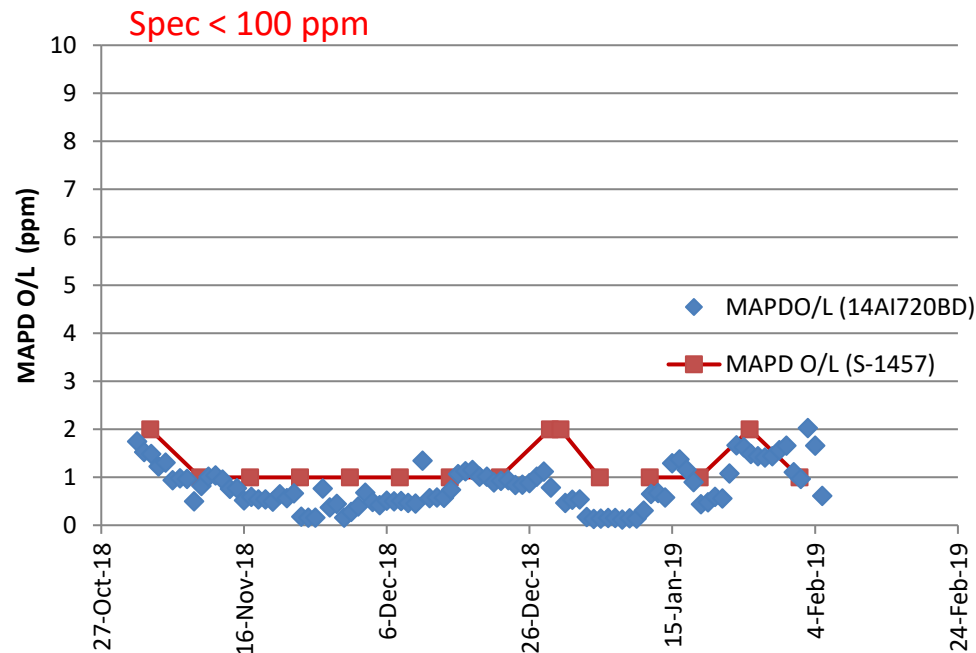
Simplify diagram MAPD Convertor NO.2



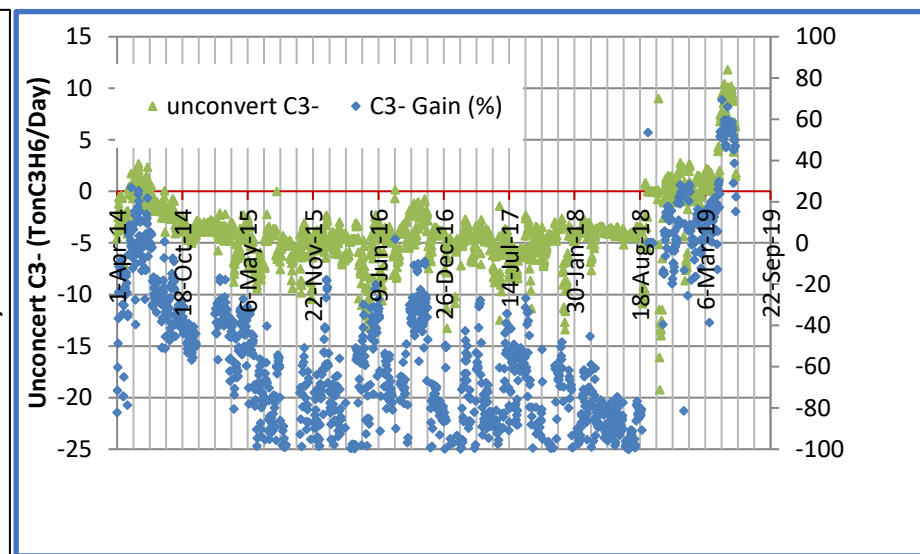
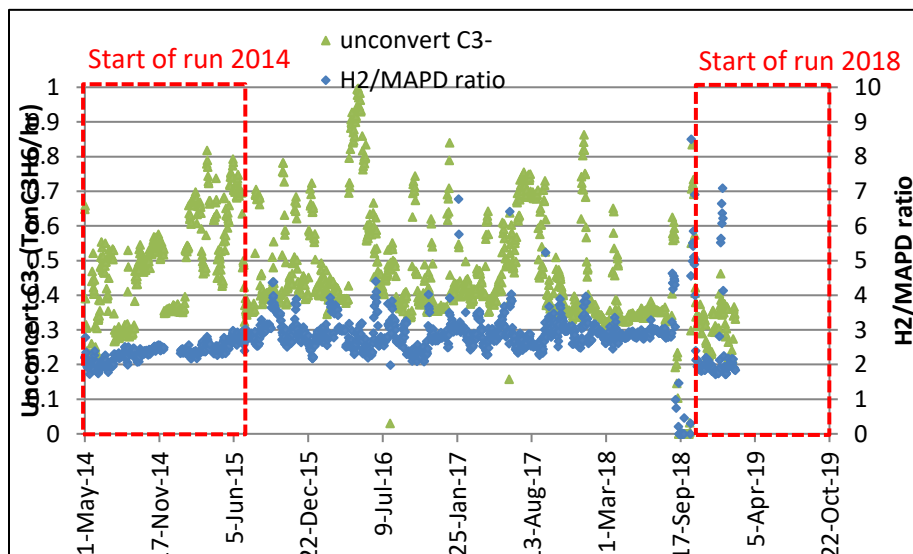
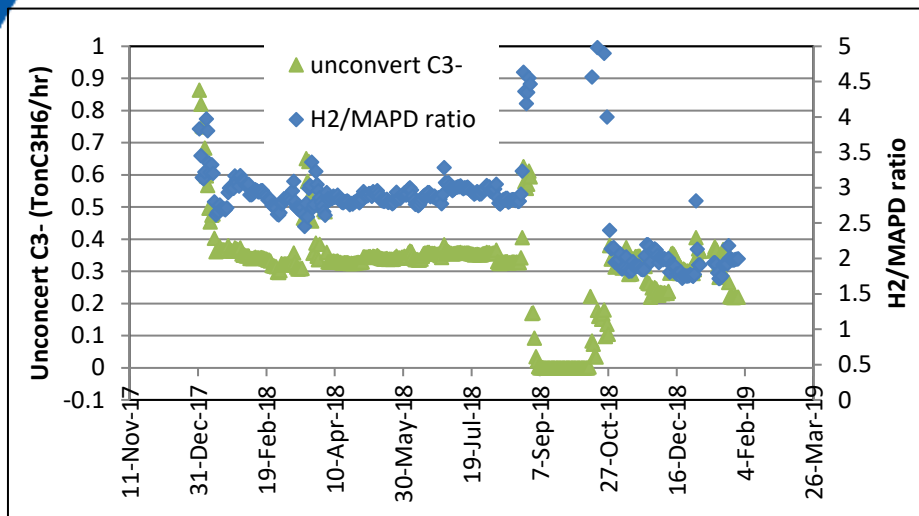
$$\text{C3- GAIN} = 2 - (\text{H2/MAPD ratio}) \times 100\%$$

Summary Detail

- To increase average selectivity by carefully reducing hydrogen partial pressure.
- As a result of MAPD O/L is very low, AXENS recommend to increase MAPD O/L from 1 ppm to 30 ppm (Spec < 100 ppm) and closely monitor MAPD in C3- product.



Baseline collection



Benefit calculation

C3- price	938\$/Ton	From price set Max infinity
C3/LPG price	500\$/Ton	From price set Max infinity
Exchange rate	31.5THB/\$	From price set Max infinity

Base Line (1 March 14 - 31 Aug 2018)

Base line H2/MAPD ratio	2.94
Baseline C3- loss (unconvert C3-)	-4.31T/D
Base lin3 C3- gain	-94.19%
Propylene product	7+1
	6+2
	5+3
	4+3
	4.45T/H
	6.95T/H
	8.3T/H
	8.47T/H

Target

Target H2/MAPD ratio	2.00
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Actual Monthly

Mode 5+3

11days

H2/MAPD ratio	1.46	
C3 Gain	53.68%	
C3 loss (unconvert C3-)	9.37T/D	(+ = Gain/ - = Loss)
C3- gain increase by reduce unconvert C3-	13.68T/D	
Actual C3- product	8.44T/H	
	47,084.15	THB/D
benefit	517,925.70	THB/month

Mode 4+3

18days

H2/MAPD ratio	1.89	
C3 Gain	57.31%	
C3 loss (unconvert C3-)	9.78T/D	(+ = Gain/ - = Loss)
C3- gain increase by reduce unconvert C3-	14.09T/D	
Actual C3- product	8.84T/H	
	124,122.83	THB/D
benefit	2,234,210.93	THB
Total benefit	2,281,298.02	MTHB/Month



Thank You

