

CHEMISTRY THAT MATTERS™



PROPANE FURNACES DYNAMIC CONVERSION CONTROL

Dhafer Alwadie
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AGENDA

- Background
- Driver
- function
- Benefits

BACKGROUND

- The plant is designed to consume two type of feed to furnaces, ethane and propane .
- Ethane and propane headers are interconnected upstream of furnaces by jump-over. At allocated ethane and propane feed, the jump-over between headers help to satisfy ethane furnaces feed by mixing propane to ethane header.

DRIVER

- In the event of any shortage of feed (ethane or propane) ethane furnaces will remain at full feed. only propane furnaces feed will be reduced by APC to maintain the curtailed feed allocation.
- Propane furnaces were operated at fixed conversion of 90% irrespective of feed flow-rate in the furnace.

FUNCTION

- A dynamic conversion control program was developed in APC to increase propane furnaces conversion during reduction in propane furnaces feed rate.

BENEFITS

- This approach had helped to increase ethylene production by 1 %. Accordingly, the net income has improved.



THANK YOU

