



DESTILATION TOWER IN THE PETROLIUM INDUSTRY

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Semester 1

Week 8

Date



Outline

- What is DESTILATION TOWER IN THE PETROLIUM INDUSTRY



Objectives

When completed this lecture, student is expected to:

- 1- Understand what is distillation column in petroleum industry
- 2-The operation and how separation taking place for different components of oil products.

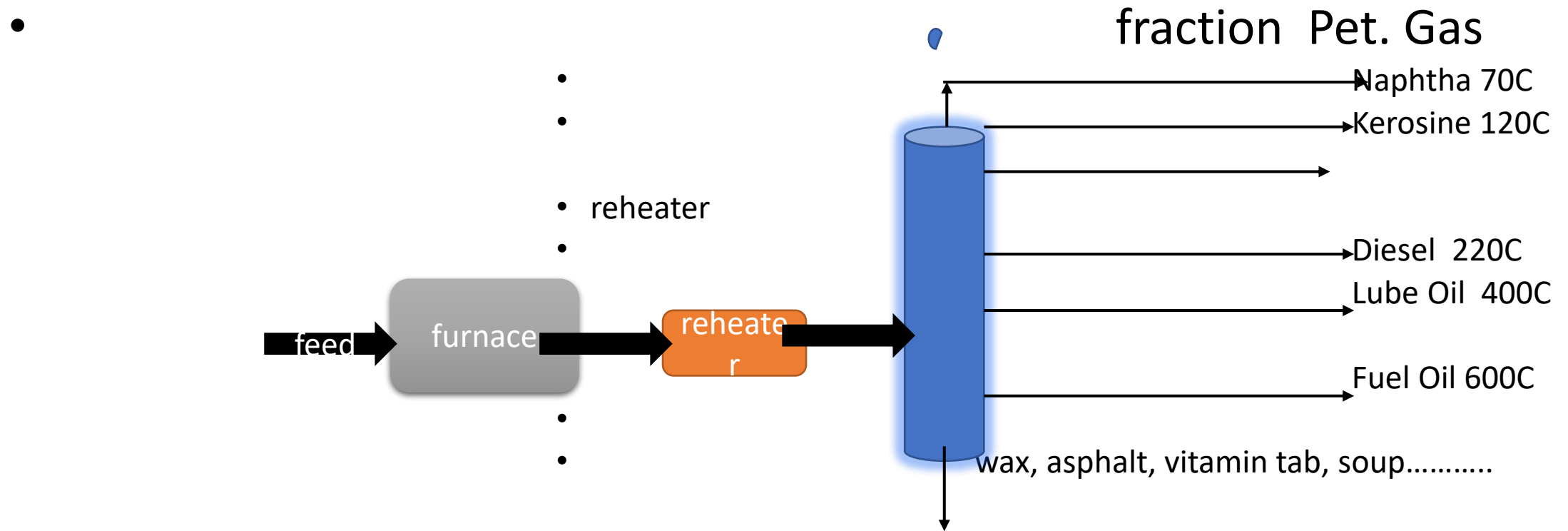


- https://www.youtube.com/watch?v=OPXudQ0_q8g



DISTILATION TOWER

- HEATED CRUDE OIL is pumped into distillation tower to reduce the raw crude oil into its products of hydrocarbons, the process of separation takes place as result of the crude oil fractions are having different boiling temperature as shown in the link bottom is of high temp. and as we go up the temperature is less as shown



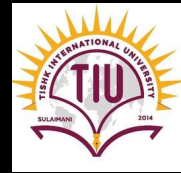
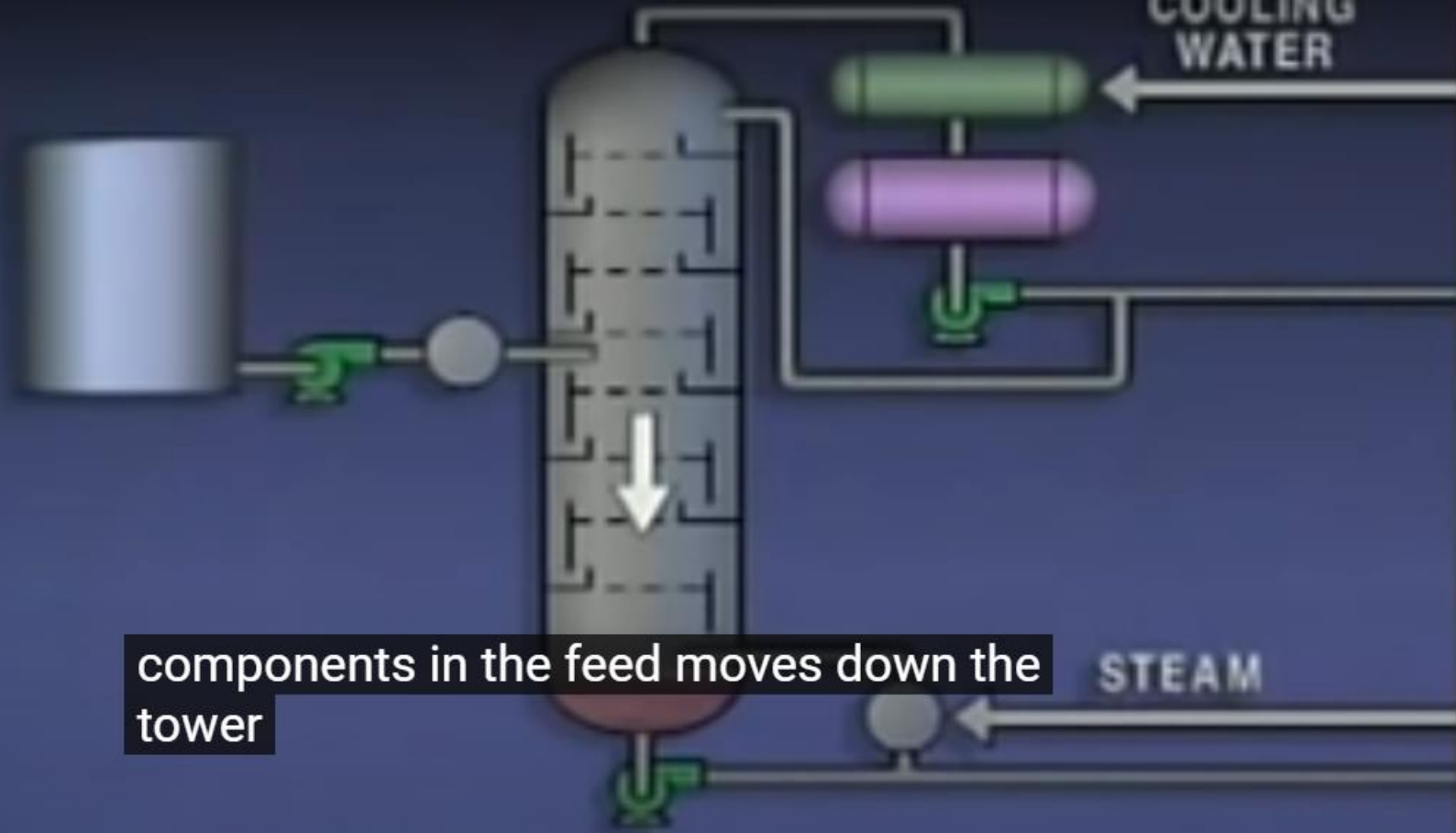


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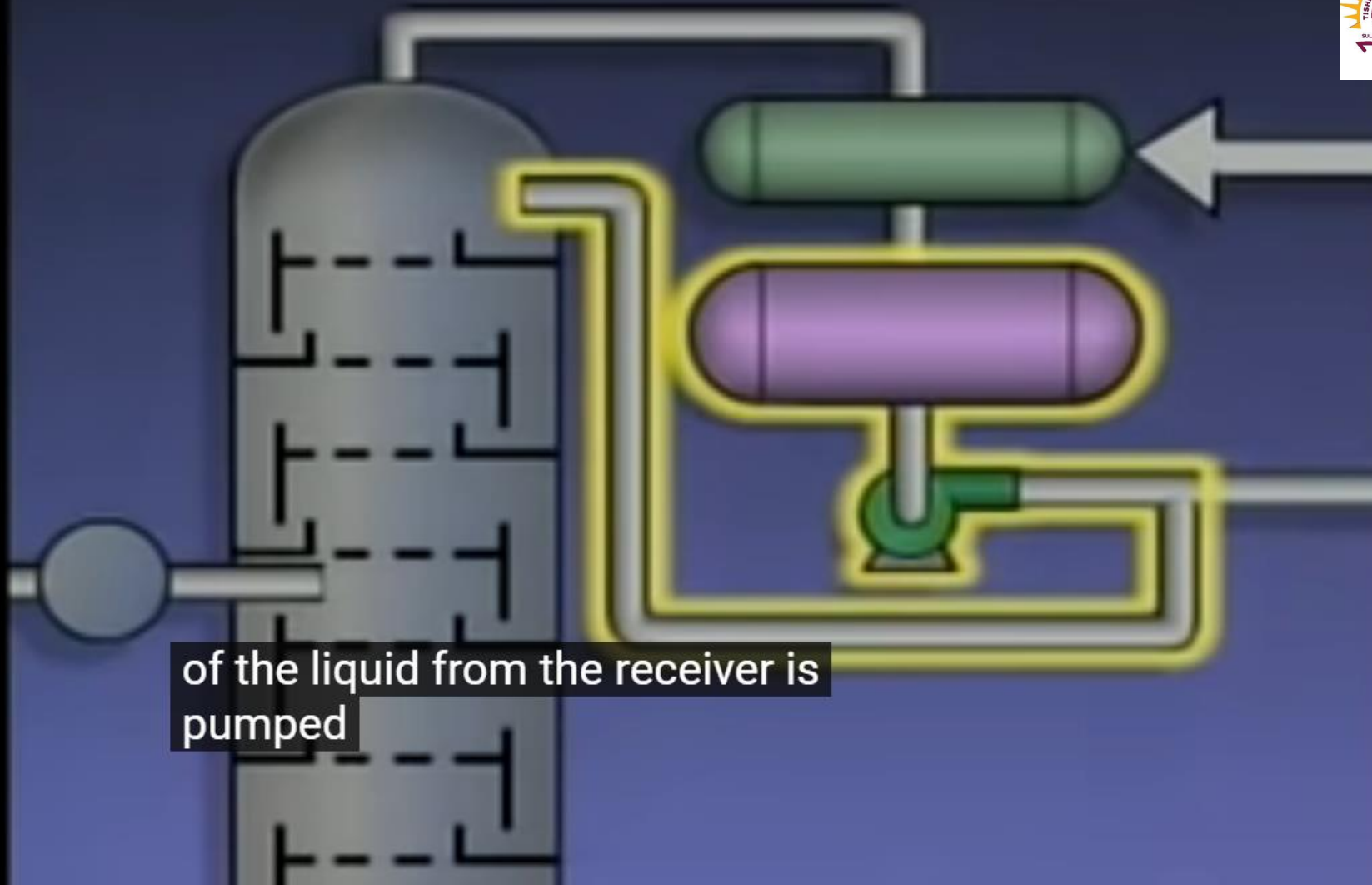


- Input crude oil called feed
- Output called fraction
- Fractionators
- Fractions
- Overlaps
- External reflux is referred to the returned fraction to the tower
- Increase purity
- reboiling

Refinery Crude Oil Distillation Process Complete Full HD



components in the feed moves down the tower



of the liquid from the receiver is pumped



Refinery Crude Oil Distillation Process Complete Full HD

rising vapors through the liquid on the tray each

8:12 / 17:03

A video player interface showing a refinery distillation process. The video title is 'Refinery Crude Oil Distillation Process Complete Full HD'. The video content shows a close-up of a distillation tray with rising vapors. A subtitle reads 'rising vapors through the liquid on the tray each'. The video progress bar shows 8:12 / 17:03. The player controls include play, pause, volume, and full screen buttons.

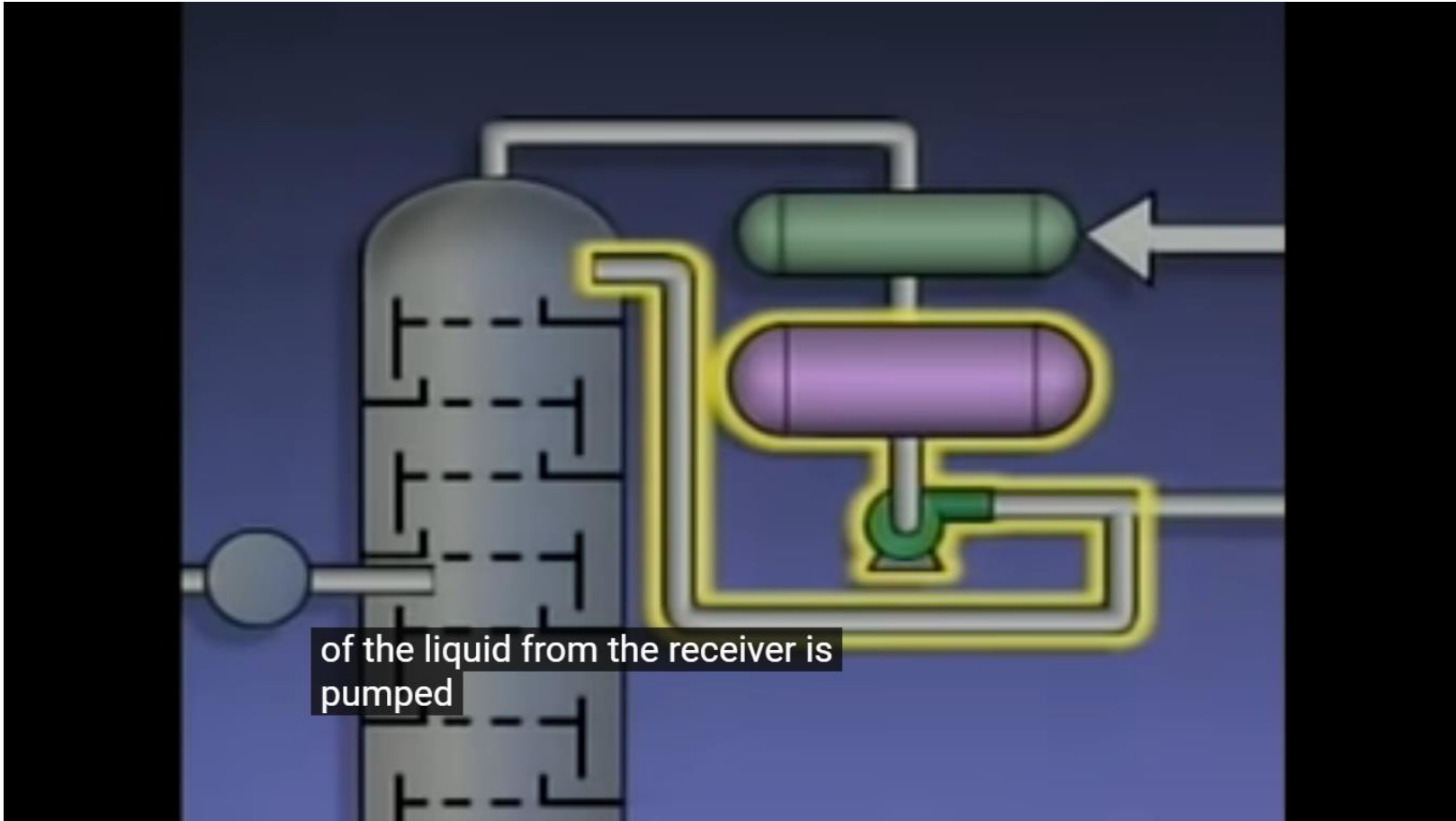


Refinery Crude Oil Distillation Process Complete Full HD

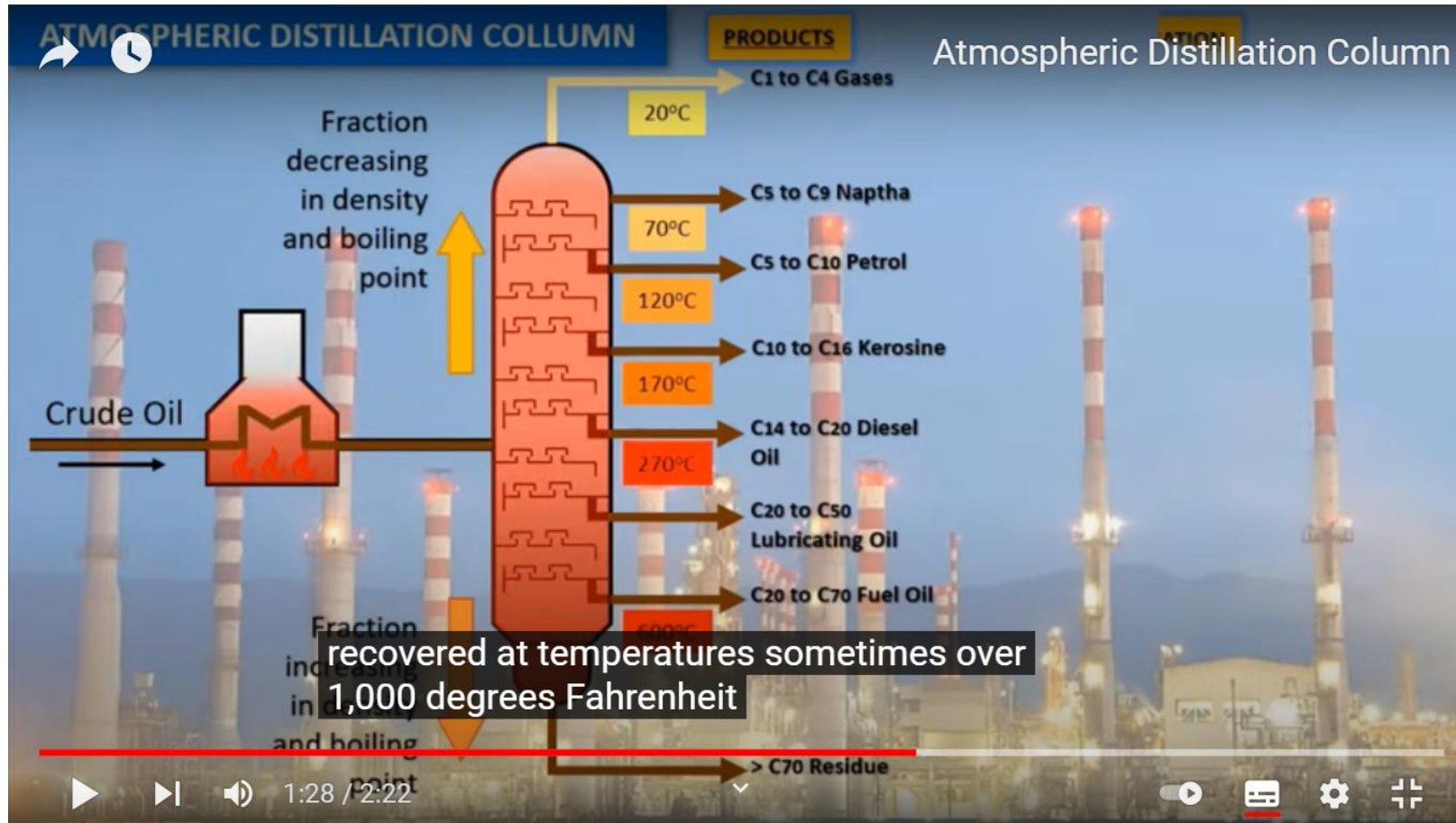
where contact between the vapors and the liquid can take place so heat transfer

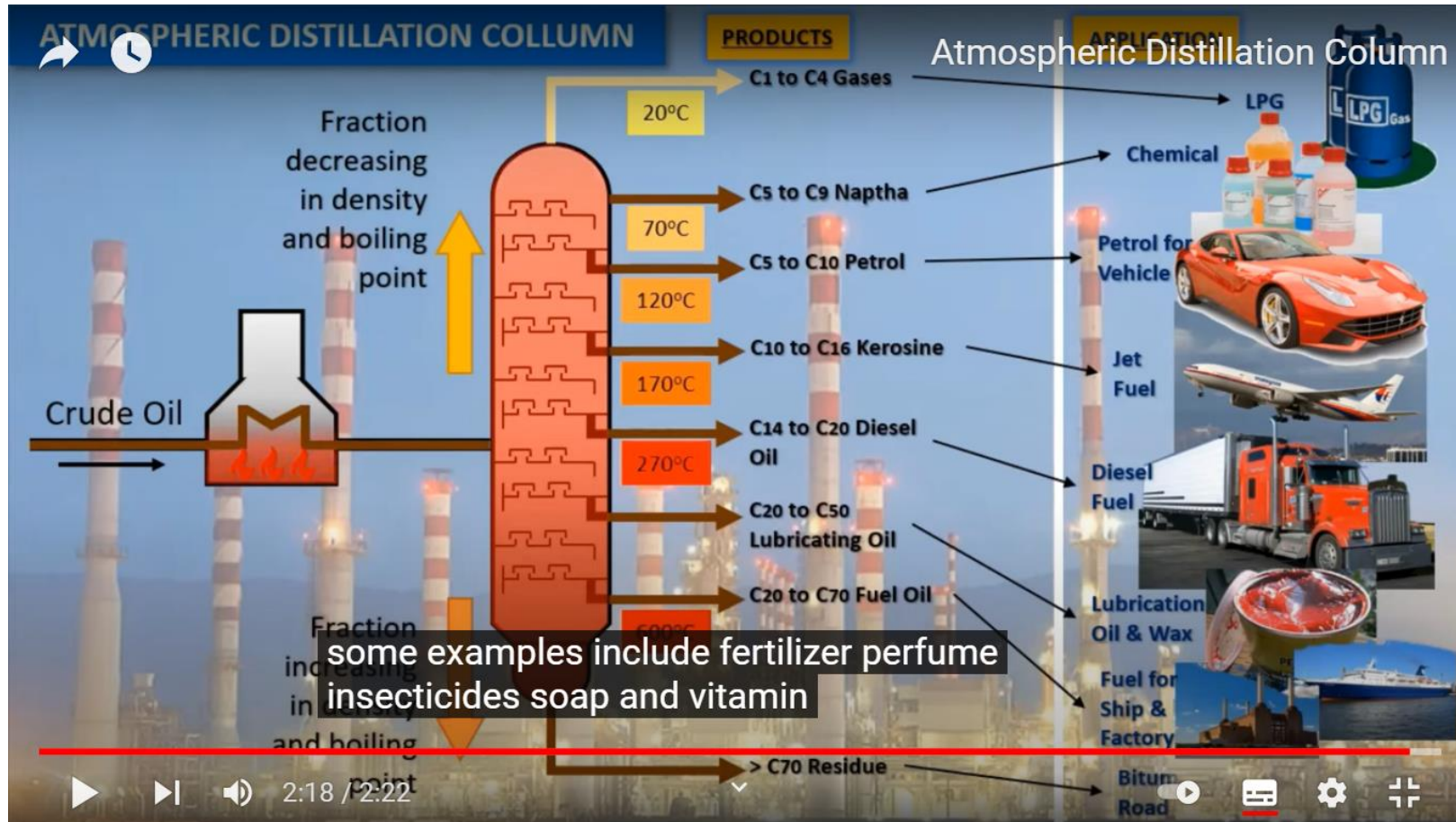
9:38 / 17:03

A video player interface showing a close-up of a distillation tray. The tray has a complex, wavy, diamond-shaped pattern. The video title is 'Refinery Crude Oil Distillation Process Complete Full HD'. A text overlay reads 'where contact between the vapors and the liquid can take place so heat transfer'. The video progress bar shows 9:38 / 17:03. The bottom control bar includes play, next, volume, and full screen icons.



of the liquid from the receiver is pumped







- <https://www.youtube.com/watch?v=cRI-nMzZjr4>
- <https://www.youtube.com/watch?v=ZnLyD7sbhRk>
- <https://www.youtube.com/watch?v=ZnLyD7sbhRk>
- <https://www.youtube.com/watch?v=GqzMkNPioXM>