

Lesson 10: Heat Exchanger Design II

Read: Pages 724-738

Problems: 14-16 (Problem Set 5)

Objectives (Cadets will be able to):

1. Calculate heat exchanger annual operating costs.
2. Use CHEMCAD to optimize a heat exchanger based on operating conditions.
3. Use CHEMCAD and Excel to optimize a heat exchanger based on operating costs.

Definitions:

Utility option, TEMA, design criteria, design variable limits, tube wall thickness, tube outer diameter, tube pitch, tube pattern, trufin tube code, turbulator, tube sheet, inlet nozzle, baffle, material specifications, sealing strip, entrainment ratio

Cadet Notes: