

Course Fee: US\$650

This short course is dedicated to the discussion of thermosiphon reboilers. Model thermosiphons in *Xist* using detailed guidelines for piping and fluid property specification. Investigate thermosiphon operational issues and learn how to screen for these using *Xist*. This course provides a checklist for future design review.

Key Topics

- Common types of distillation column reboiler
- Once-through vs. recirculating thermosiphon reboilers
- Vertical vs. horizontal configurations
- Modeling thermosiphons in *Xist*
- Piping and fluid property specification
- Operational issues
- Modeling turndown operation

Suggested Participants

Engineers who design, rate or troubleshoot thermosiphon reboilers

HTRI Software

This course will make use of the following HTRI software: *Xchanger Suite*[®] components *Xist*[®] and *Xvib*[®]. All training materials are based on the current software version.

Course Credits: 6 hours (PDH/CEU)

Outline

- I. Reboiler Equipment
 - Types of reboilers
 - Advantages and disadvantages of each

- II. Modeling Thermosiphons
 - Activating the thermosiphon logic in *Xist*
 - Piping specification
 - Guidelines for fluid properties and heat release specification
 - Overview of pressure drop calculations

- III. Operational Issues
 - Overview of wet-wall and dry-wall boiling methods
 - Typical thermosiphon reboiler operational problems
 - HTRI thermosiphon reboilers checklist
 - Modeling turndown operation