KOENIG SOLUTIONS · COURSE OUTLINE

Heat Exchanger Troubleshooting Short Course

6 Hours	4	SC302
DURATION	MODULES	COURSE CODE

COURSE OVERVIEW

Design decisions can have a costly impact on heat exchanger operation. In this course, you learn by reviewing several real cases in which unit designs had critical commercial consequences for operators/ owners. Among other topics, this course may address: assessment of acoustic vibration in rectangular ducted bundles (Xace); vibration analysis of a shell-and-tube heat exchanger (Xist and Xvib), including a review of the velocity scaling applied to tubes near impingement plate edges; sizing of annular distributor (vapor belt) and associated tube vibration analysis (Xist and Xvib); root cause analysis of tube failures in a steam generator (a reboiler/steam drum configuration modeled as a thermosiphon reboiler in Xist); design review of an air-cooler/condenser (Xace) with excessive tubeside pressure drop during winter operation. In some cases, the units did not work in service; in others, the designs were revamped before the units began operation. Each case study is introduced as a problem; participants work individually or in groups to determine the cause and develop solutions. Prior to each case, the instructor reviews related HTRI methods.

WHO THIS COURSE IS FOR

- Engineers—from novice to expert—who want to ensure that design problems are identified before operation

COURSE SYLLABUS

4 Modules

01

Case 1: Steam generator with tube failure

02

Case 2: Air-cooler with excessive pressure drop during winter operation

03

Case 3: Shell erosion in an ethylene dichloride condenser

04

Case 4: Waste heat recovery unit with acoustic resonance

DELIVERY NOTE

How It Is Delivered

- This course will make use of the following HTRI software: Xchanger Suite components Xist, Xace, and Xvib. All training materials are based on the current software version.
- Course credits: 6 hours (PDH/CEU)

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training | Live Online Classes (ILO) | Fly-Me-A-Trainer (FMAT) | Flexi (Self-Paced) | 1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

Visit koenig-solutions.com | **info@koenig-solutions.com**