KOENIG SOLUTIONS · COURSE OUTLINE

Vibration Analysis Short Course

6 Hours	4	13	SC206
DURATION	MODULES	TOPICS	COURSE CODE

COURSE OVERVIEW

A must for anyone who evaluates the vibration potential of shell-and-tube heat exchangers! In this course, you learn about vibration mechanisms in shell-and-tube heat exchangers and Xist methods to analyze vibration severity. Most importantly, you discover corrective measures to mitigate damage.

WHO THIS COURSE IS FOR

- Design and plant engineers responsible for the mechanical condition of shell-and-tube heat exchangers

LEARNING OBJECTIVES

What You Will Learn

- Introduction to vibration phenomena
- Flow-induced vibration (fluidelastic instability, vortex shedding, turbulent buffeting, acoustic vibration)
- Design options to mitigate vibration
- Field fixes
- Xist Vibration Report
- Example application and case studies

COURSE SYLLABUS

4 Modules, 13 Topics

01

Tube Vibration

TOPICS

- Introduction to vibration
- Fluidelastic instability
- Vortex shedding
- Exchanger designs free of vibration problems

02

Xist Vibration Report

TOPICS

- Analyze tube spans
- Interpret results
- Xist criteria for "flags"

03

Acoustic Vibration

TOPICS

- Fundamentals of acoustic vibration
- HTRI methods
- Corrective action

04

Introduction to Xvib

TOPICS

- Reasons to use Xvib
- Calculation methods
- Creation of an Xvib case from Xist

DELIVERY NOTE

How It Is Delivered

- 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)

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.

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