

## Thermal EA

**4-Day Short Course**  
*Focus on Engineering Practice*

## HEAT EXCHANGER PERFORMANCE ASSESSMENT & MAINTENANCE

*Sponsored by*  
**Thermal Engineering Associates**

*Featuring Sessions by*  
**Senior Engineers and  
Inspection Experts**

**Danny Alleman / Bill Closser**

**James Fisher / Allen Gallaher**

**Dana Ives / Mark Koss**

**Paul Koss / Carl Kuester**

**Dean Leimbach / Carlton Lindell**

**Chris Speas / Harry Williamson**

*Hosted by*  
**The Merrick Group  
Training Facility  
West Hazleton, PA**

**June 14 – 17, 2016**  
**Tuesday 8:00 a.m. – Friday 4:00 p.m.**

### *Who Should Participate*

Practicing engineers and technicians who are involved in plant HX maintenance should consider this course.

## Course Objective

The course objective is to provide practical information on HX construction and performance characteristics, inspection, and maintenance, and a forum for interaction with senior practicing engineers and inspection experts.

## Course Schedule

### Tuesday

- Introduction
- Condensers and Other Shell-and-Tube Exchangers
- Feedwater Heaters
- Tube and Other Failures: Damage Mechanisms
- Materials Selection

### Wednesday

- Preventive and Corrective Maintenance
- Visual Inspection
- Eddy Current Assessment
- Q & A Session
- Demonstrations

### Thursday

- Inspection: Oil & Gas Perspective
- Plant HX Inspection Program Development
- Performance Monitoring and Trending
- Q & A Session
- Demonstrations

### Friday

- Heat Exchanger Cleaning with Demonstration
- Power Plant Case Studies:  
*Inspection, Assessment, and Maintenance Process*

## Instruction

### **Danny Alleman, Senior Project Engineer** **Dominion Power**

- Thirty years of engineering experience in electric power industry, with experience as a Performance Engineer, System Engineer, and Component Engineer responsible for plant heat exchanger program.
- Extensive experience in heat exchanger maintenance.
- Responsible for managing installation of new turbines and other major equipment as a Project Engineer.
- BSME, Virginia Tech.

### **Bill Closser, President** **NuClear Services Group, Inc.**

- Provides consulting, testing and support services.
- Over twenty-five years of experience in condition monitoring, plant performance, and equipment reliability.
- Eight years of experience with EPRI. Program Manager, Nuclear Applications and Services; Director of Nuclear and International Services, EPRI Solutions.
- Chairman, ASME PTC 12.5 Committee. Member, ASME OM-21 Committee. Co-author EPRI NP-7552.
- Consultant, *Classical HX Analysis*, 2015 EPRI Report.
- BSME and BSNE, OSU; MBA, Regis University.

### **James Fisher, Director of Operations /** **Sr. Project Manager, The Merrick Group, Inc.**

- Current responsibilities include oversight of project managers and supervisors and extend to development and implementation of training programs.
- Twenty years of experience in HX cleaning, inspection, repair, and project management focused on development and execution of cleaning/maintenance contracts.
- NACE Level II.
- BA/BS Liberal Arts, Dickinson College.

### **Dana Ives, Project Manager, Mistras Group**

- Thirty years of experience in heat exchanger inspection and assessment for US/International power, chemical, and oil & gas (onshore and offshore) plants.
- Eddy Current Level III NDE Inspector.
- Initial training and experience as NDI Technician with US Air Force.

## Instruction

### Allen Gallaher, Project Manager Curtiss Wright – Anatec Division

- BOP heat exchanger inspection and assessment.
- Thirty years of experience in project management of heat exchanger inspection, eddy current testing, and assessment programs in industry.
- Extensive experience in BOP heat exchanger training.
- Eddy Current Level III NDE Inspector.
- BA/MA Math, Northeastern University.

### Mark Koss, Consultant Retired as Program Manager – Materials/Metallurgical Engineering, TVA

- Thirty-five years of experience in metallurgical/welding engineering at TVA.
- Extensive experience in materials selection, specification, and failure analysis in nuclear/fossil/hydro plants.
- BSE (Metallurgical), University of Tennessee; MSChE, University of Tennessee – Chattanooga.

### Carl Kuester, Owner Engineering Consultant & Exchanger Repairs

- Twenty-five years with an electric utility; experience in engineering, construction, start up, training, operation, maintenance, and plant superintendent functions.
- Past President, Turbine, Exchanger, Condenser Co., Dynamic Energies Inc., Condenser Technologies, Inc.
- Over fifty years of engineering experience. Consulting in all phases of power plant engineering, with emphasis on heat exchanger equipment, including repairs, removal of sample tubing for analysis, and retubing.
- BSE, Brown University.

### Dean R. Leimbach Retired as ISI Specialist – Susquehanna Nuclear Power Station

- Thirty-five years of experience in heat exchanger inspection, testing, condition assessment, and NDE issues, as well as program management and personnel training.
- Previously maintained accreditations: Eddy Current Level III NDE Inspector, Ultrasonic Testing Level III NDE Inspector, ANSI Weld Inspector, NACE Coatings Systems Inspector, Nuclear Power Utility Supervisor Certification, NDE Personnel Training & Certification.
- 1975 USAF NDE Technical School graduate.

## Instruction

### Paul Koss, Project Manager Curtiss Wright – Anatec Division

- Over twenty-five years of experience in heat exchanger inspection and assessment primarily in fossil/nuclear applications.
- Eddy Current Level III NDE Inspector.
- BS Geology, Western Kentucky University.

### Carlton Lindell Consulting Engineer

- Past Vice President, Cramer & Lindell Engineers, Inc.; General Manager, Rust-Cramer & Lindell Engineers.
- Over fifty years of engineering experience.
- Extensive experience in eddy current testing in fossil/nuclear power, chemical, and petrochemical industries, development of inspection standards, and tube failure analysis.
- BSME, MSME, University of Connecticut.

### Chris J. Speas, Senior Director The Merrick Group, Inc.

- Twenty-nine years of experience in power plant component inspection and maintenance.
- Experience in inspection project oversight, independent oversight and review of programs and project management.
- Actively participates in EPRI NDE industry working groups.
- Member of ASNT, ASME, and ANS.
- ET Level III.

### Harry Williamson, Senior Engineer Duke Energy

- Sixteen years of experience as heat exchanger and pressure vessel consultant on predictive and preventive maintenance for fleet fossil, hydro, and combined cycle power plants.
- Twelve years of experience as design engineer for fleet fossil plants and Oconee Nuclear Station.
- Extensive experience with heat exchanger cleaning, inspection, repair, retubing, manufacturing procedures, trouble shooting, and root cause analysis.
- Registered Professional Engineer.
- BSME, North Carolina State University.

## Instruction

### Lindon Thomas, President Thermal Engineering Associates

- Forty years in engineering teaching and research.
- Over twenty years of experience in providing industry engineers with heat exchanger analysis training.
- Principle Investigator, 2015 EPRI Report, *Classical Heat Exchanger Analysis*.
- Author of *Heat Transfer*, Professional Version, 2000 Choice (ALA) Outstanding Academic Title.
- BSME, Tulsa University; PhD ME, Kansas State University.

## Registration

### Heat Exchanger Performance Assessment & Maintenance

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
Email/Phone \_\_\_\_\_

**Course Fee: \$1750**

Register on-line at [www.thermalea.com](http://www.thermalea.com)  
or forward registration form and payment to

### Thermal Engineering Associates

1424 Farrington Dr.  
Knoxville, TN 37923

Phone: (844) 507-8267

[lthomas@thermalea.com](mailto:lthomas@thermalea.com)

### Event Hotel

**Fairfield Inn & Suits by Marriott Hazleton**

**Phone: 1-570-501-0759**

[www.marriott.com/HZLFI](http://www.marriott.com/HZLFI)

**Special Room Rate – \$85 (plus 11% tax)**

**Hazleton, PA is part of a family resort area  
in the foothills of the Pocono Mountains.**