ALTRAN SOLUTIONS

TECHNICAL TRAINING

Plant Training

Altran Solutions is a nationally recognized engineering and management consulting firm of highly skilled professionals. With offices in Boston, Chicago, Charlotte, Orlando, San Francisco and the New York/Philadelphia area, Altran Solutions has been providing services to the utility and commercial industries since the mid eighties.

Due to our vast experience in a variety of areas, we are able to bring the knowledge and skills to you. As your success depends on your ability to address day to day problems and issues, Altran Solutions offers a number of courses in our core areas that were developed for the plant engineer, technician, operations, or maintenance individual. These courses are designed to provide you the skills and knowledge needed to become more effective in your job. Some of the classes being offered are described below.

1. Material Selection

This course presents plant and design engineers with the fundamentals of selecting component materials of construction that are suitable for the intended service. Discussion areas include identification of service conditions, material properties, and material performance in the identified service conditions, as well as typical applications. This course addresses ferrous metals (carbon, alloy, and stainless steels), non-ferrous metals (copper and nickel base, aluminum), and polymers (plastics, elastomers, rubbers). The information presented in this course will aid the engineers in minimizing component degradation and improving component reliability through proper material selection.

2. Biofouling and Biofouling Management

This two-day course, designed for engineers, technicians, and maintenance personnel, teaches the students the causes of biofouling and biodeterioration, and reviews techniques for identifying, preventing, and treating this type of corrosion.

3. Aging Management

Designed for System, Programs, and Design Engineers, this course is a presentation of the Identification and Detection of Aging Issues training course co-developed by Altran Solutions and EPRI. It reviews the significance of materials aging to equipment reliability, the plant's role in detection and management of component aging, performance monitoring as outlined in INPO AP–913, aging failure progression, leading indicators, and performance of effective walkdowns. The course provides the students with the overall knowledge and skills necessary to understand and identify component aging, as well as minimize its affect. Course length is dependent on the number of modules presented.

4. Protective Coatings: Basics or Inspector Training

Altran Solutions offers a single-day presentation of basics as well as a comprehensive five-day classroom and practical training course. The basics course is intended for engineering, maintenance, and supervisory personnel and provides the fundamentals of protective coatings, their selection and uses, and the degradation mechanisms affecting them. The comprehensive course is intended to support certification as a Protective Coating Inspector to the requirements of ASTM D4537. This training course is an excellent tool that can be used as requisite training for engineers that are assigned technical responsibility of the plant's protective coatings and linings program.

5. Analog Instrument Fundamentals

This one-day course, designed for plant system, component, and design engineers, reviews the basic fundamentals of analog control systems and component operation. Students of this course will gain an understanding of components such as square rooters, orifices, controllers, and I/P's. This class will also review the basic operation of common flow control systems, level control systems, and pressure control systems. Finally, this class will review the use and benefits of various controller features such as gain setting and PID controls.

6. Digital Instrumentation Fundamentals

This one-day course, designed for engineers with an understanding of analog control systems provides students with an overview of the knowledge necessary to upgrade analog control systems to digital control systems. This course reviews the difference between analog and digital systems, as well as outlining the benefits and concerns associated with changing from an analog control system to a digital control system.

7. Flow Accelerated Corrosion Programs

This one-day course, designed for System, Program, and Design Engineers, offers an overview of flow accelerated corrosion. Students in this course will learn the terms, issues, and conditions required to produce FAC as well as the techniques used to avoid related component failures.

8. Corrosion in Piping / Corrosion Management

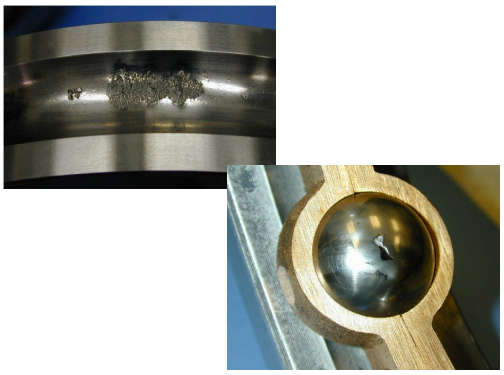
This one-day course, designed for engineering, technician, operating, and maintenance personnel, reviews material selection and the fundamentals of corrosion. This course focuses on various types of corrosion affecting plant components as well as methodologies to detect and minimize corrosion's effects.

9. Failure Modes and Effects Analysis (FMEA)

Basic FMEA is a powerful tool that can be utilized to enhance component safety and reliability and is applicable to a range of plant activities including design and commercial grade dedication. This 1-day introductory course on the methodology fundamentals addresses the use of FMEA in the commercial grade dedication process and can be immediately applied at the plant.

10. Failure Analysis

This course, geared toward System, Component, and Design Engineers, provides the basic concepts of component failure analysis, supplemented with case studies and samples of actual failures. Included is a description of how to recognize degradation mechanisms, indicators, and stressors as well as fundamentals of analytical techniques. These failure analysis concepts provide a foundation for failure prevention strategies.



For more information on this capability,
Please contact us at (617) 204-1000 or
via e-mail at sales@altransolutions.com