



Training Services

TRAINING SYLLABUS

FOR

**MACHINE LUBRICANT ANALYST LEVEL I
MLA I**

CERTIFICATION COURSES

March 2023

Machine Lubricant Analyst Level I MLA I

Certification Training
Duration: 24 Hours

Syllabus:

- Introduction
 - Welcome
 - Simple Ground Rules
 - Introductions
 - Review Agenda
- Maintenance Strategies
 - Why machines fail
 - The impact of poor maintenance on company profits
 - The role of effective lubrication in failure avoidance.
- Lubrication Theory
 - Fundamentals of Tribology
 - Functions of a Lubricant
 - Lubrication Films
- Lubricants
 - Base Oils
 - Additives and their Functions
 - Lubricating Oil Properties
 - Grease Lubrication
- Lubricant Selection
 - Viscosity selection
 - Base-oil type selection
 - Machine specific lubricant requirements
 - Application and environment related adjustments
- Lubricant Application
 - Basic calculations for determining required lubricant volume
 - Basic calculations to determine re-lube and change frequencies
 - When to select oil; when to select grease
 - Effective use of manual delivery techniques
 - Automatic delivery systems
- Preventive and Predictive Maintenance
 - Lube routes and scheduling
 - Condition monitoring techniques
 - Equipment tagging and identification
- Lube Condition Control
 - Filtration and separation technologies
 - Filter rating
 - Filtration system design and filter selection
- Lubricant Storage and Management
 - Lubricant receiving procedures
 - Proper storage and inventory management
 - Lube storage containers
 - Proper storage of grease guns and other lube application devices
 - Maintenance of automatic grease systems
 - Health and safety assurance
- Oil Sampling
 - Objectives for lube oil sampling
 - Sampling methods
 - Managing interference
- Lubricant Health Monitoring
 - Lubricant failure mechanisms
 - Testing for wrong or mixed lubricants
 - Fluid properties test methods – applications and limitation
- Wear Debris Monitoring Analysis
 - Common wear mechanisms
 - Wear debris testing