

TRAINING PROGRAM ON Industrial Lubrication Fundamentals & Machinery Lubrication



### **ABOUT ARRELIC TRAINING INSTITUTE**

Arrelic Institute is focused to equip both industry professionals and college graduates with the skills and knowledge required for bridging the desire stare of workforce which industry needs to compete globally.

Arrelic Institute provides over 75 different type of customized training programs in the field of Reliability Engineering, Asset Management, Best Practice, Operation & Maintenance, Predictive Maintenance, NDT, Predictive Analytics, Quality, Risk & Safety.

Arrelic Institute conducts public trainings and workshops in 38 locations across India and 10+ International locations. We are working for large corporate house from 15 different types of industries ranging from Airlines, Automobiles, Cement, Defence Manufacturing, FMCG, Glass, Marine, Metals, Mining, Oil & Gas, Power, Pulp & Paper, Facility Management and Fertilizer.

#### ARRELIC INSTITUTE: AT A GLANCE



www.arrelic.com/offerings/training-and-development



### **ARRELIC AWARDS & RECOGNITIONS**



# TOP5

Won the Top 5 Startups in eastern India in Thieve 30 by NASSCOM



Selected for GES – 2017, Hyderabad and showcased among top 100 Start-ups from India.



- a search for solutions to

transform India



Top 24 Start-ups selected over 1850 startups across India By CNBC.



Selected for NPC –
Bangalore and NPC –
Kolkata for Product
showcase.



Product showcased in TIECON – 2017 and selected through Govt. Of Odisha.

## #startupindia

**Startup India Recognize** 



STARTUP ODISHA recognised.



BIRAC finalist in SPARCH - 2017



Selected for Web summit -Lisbon



Selected for Hello tomorrow, Paris Summit.



Selected and presented in 1000 open startups.



# **Introduction to Industrial Lubrication Fundamentals**& Machinery Lubrication

Introduction to optimal lubrication practices, which covers the common activities of a lubrication technician. This training is considered to be a key component to support a lubrication excellence program. This interactive course uses a variety of activities and media to provide the lube technician with the technical knowledge and methodologies of lubrication excellence, which enhance their competencies to execute qualified lubrication duties.

As per Arrelic, lubricant is a substance that reduces friction between two surfaces in relative motion by making them slippery and easier to move. Arrelic's. Industrial Lubrication Fundamentals is based on optimal lubrication practices, which covers the common activities of a lubrication technician. This training is considered to be a key component to support a lubrication excellence program. This interactive course uses a variety of activities provide the lube technician with the technical knowledge and methodologies of lubrication excellence, which enhance their competencies to execute qualified lubrication duties.

Arrelic's main purpose of Machinery lubrication is how to improve the reliability of M/C with the use of lubricant. It also covers advanced lubrication topics like lubricant selection, troubleshooting, predictive maintenance and more.

If organisations are to move toward an asset management environment with a focus on maximising equipment life, then the planner must be seen more as a whole of life Asset Management Planner rather than the Maintenance Planner of old. This course is the starting point for that transition.





## LEARNING OBJECTIVES &

#### KEY BENEFITS OF ATTENDING THE WORKSHOP

By attending this technical training on "Industrial Lubrication Fundamentals & Machinery Lubrication" delegates will be able learn and deliver the following things.

- ✓ Receive and inspect new lubricants
- ✓ The primary purpose of a lubricant
- ✓ Maintain inventory of lube room
- ✓ Label lubricant containers/packages, machines, lubricant storage areas
- ✓ Remove contaminants from new oils (solid, moisture) using filter carts or installed systems
- ✓ Transport and apply lubricants and products
- ✓ Conduct field inspections on machines
- ✓ Safety, Leak and Spill Response and Disposal of Hazardous Materials
- ✓ The negative effects of friction in mechanical equipment

#### WHO SHOULD ATTEND?

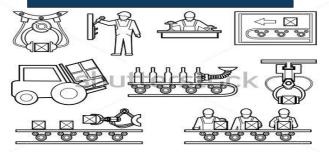
Predictive Maintenance attempts to detect the onset of a degradation mechanism with an aim of correcting the degradation prior to significant deterioration in the component or equipment. People in the following roles should participate in this training:

✓ A11 Maintenance Professionals. Engineers, Lubrication Reliability Engineers, Craftsmen and Millwrights, Equipment Operators, Maintenance Managers, Lubrication Technicians, Manufacturing Industrial Engineers, Maintenance Supervisors, Predictive Maintenance Lubricant Technicians, Industry Professionals, Laboratory Analysts, **Operations Managers.** 





#### LOW PRODUCTIVITY



Conventional use of time-based approach for maintenance does not take into consideration the way assets are being utilized, their current condition and real world operating conditions.

#### HIGH DOWNTIME



Failure to curb unplanned downtime and lack of control over value chain processes lead to high costs, inefficiencies and poor compliance. These severely impacts the profit and industrial growth.

## INADEQUATE ASSESS CONTROL



Industries lack the ability to interpret assets data and because of unavailability of proper predictive methods they are unable to predict equipment failures which leads to unplanned downtime.

#### HIGH MAINTENANCE COST



Increased competition, pressure to grow revenue & profit, tighter regulations, scarcity of raw material, fluctuation demand and obsolete technologies have impacted the way industries are being operated.



#### **COURSE OUTLINE**

#### **DAY - 1**

## The Role of Lubrication in Machine Reliability

- ✓ To make proper design to manage various types of machinery lubrication and/or inspection.
- ✓ How to improve the machine reliability using lubrication

#### **Lubrication Fundamentals**

- ✓ Manage change and/or top-off oil in mechanical equipment found in common industrial sites.
- ✓ Understand the fundamentals of lubrication and oil analysis, and get more from your lubrication strategy

## Contamination control as a way to improve machine performance

- ✓ Understand the fundamentals of lubrication and oil analysis, and get more from your lubrication strategy
- ✓ Significantly increase profits and turnover, whilst improving quality goals

#### **DAY - 2**

## Handling and application practices for both oils and greases

- ✓ Significantly increase profits and turnover, whilst improving quality goals
- ✓ Gain better understanding of oil analysis

## Design to manage various types of machinery lubrication

- ✓ Addressing the various concepts of TPM
- ✓ Enhancing overall product quality through suitable materials
- ✓ Advance the lubrication knowledge and expertise of your reliability team

# Appropriate methods to collect samples as the first step in lubricant based machine condition assessment

- ✓ Advance the lubrication knowledge and expertise of your reliability team
- ✓ Employ and interpret advanced oil analysis techniques and results to identify and troubleshoot lubricant degradation and/or abnormal conditions, and recommend costeffective corrective action(s)

#### PROGRAM SCHEDULE

 09:00 -10:30
 Morning Session 1

 10:30 -11:00
 Refreshments & Networking Break

 11:00 -12:30
 Morning Session 2

 12:30 -13:30
 Lunch

13:30 -15:00 15:00 -15:30 15:30 -17:00

17:00 -17:30

Afternoon Session 1
Refreshments & Networking Break
Afternoon Session 2