

## ARP [L] – Reliability Leader Asset Reliability Practitioner Training & Certification

The Asset Reliability Practitioner [L] "Reliability Leader" course is intended for those who have taken the lead role in a reliability and performance improvement program.

You may be responsible for the outcomes of a team of reliability personnel, maintenance personnel or contractors at one or multiple locations.

This course will provide in in-depth knowledge of how to manage your team for success.

#### **Key Topics:**

- Overview of the implementation strategy
- Establishing the economic value that can be achieved
- Developing the strategy
- Understanding motivation, error and human psychology
- Assessing workplace culture and change management
- Leadership, buy-in and employee engagement
- Discipline, control and standards in maintenance and operations
- Caring for equipment and spares
- Acquiring for lowest life cycle costs and reliability
- Asset Health (CBM) monitoring and inspections
- Using analytics for decision making, review and improvement
- Optimizing the program and improving the strategy





### **Detailed Topic List**

#### INTRODUCTION

- A successful implementation
- Why do some reliability programs fail to deliver?
- A summary of asset reliability transformation
- A summary of each stage in the implementation process & asset life-cycle
- How asset reliability relates to asset management and ISO 55000
- Understanding the key implementation phases

#### THE ECONOMICS OF RELIABILITY

- Introduction to financial fundamentals
- Financial measurements return on investment, opportunity cost, net present value, the time value of money, discounted cash flow, internal rate of return, hurdle rate, discounted payback period and cost of capital
- Financial performance
- Economic value added

#### THE VALUE OF RELIABILITY

- What is the value of our "reliability improvement" initiative?
- Business Process Review
- Assessing the current state
- Constraints, Risks, Performance and opportunities
- Cost and Waste reduction
- Pilot projects to prove the benefits
- Setting targets & the business case
- Getting management support and approval

#### **STRATEGY**

- Introduction to the organisation chart
- Steering commvsion
- HR Support
- Implementation strategy & tactics
- The roll out
- Understanding failure
- What is an asset strategy?
- Typical outcomes
- RCM, FMEA & PMO
- Using data to drive decisions

#### THE PSYCHOLOGY OF RELIABILITY

- Why this is important
- How observant are we really?
- Do we make logical decisions?
- Cognitive biases
- How money affects us
- Influence and peer pressure
- Free and Cognitive dissonance
- Motivational factors

#### HUMAN ERROR AND PERFORMANCE MANAGEMENT

- How much of a problem is human error?
- Human performance
- Types of errors
- Error management
- Assessing the likelihood of human error

#### **CULTURE CHANGE**

- Why is it necessary to change the culture?
- Culture and people's personalities
- How does culture change?
- How to plan to change the culture

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#### **PEOPLE MANAGEMENT**

- Leadership
- Awareness & buy-in
- Rolls & Responsibilities (RACI)
- Skills and knowledge audit
- Training, certification & Skills
- Employee engagement in problem solving
- Co-operation between departments
- Communicating achievements

#### CONTROL

- Co-operation between operations & maintenance
- Prioritizing Pareto & bad actors
- Basic CMMS
- Basic documentation & master asset list
- Preventive maintenance optimisation
- Planning & scheduling
- Spares management
- Basic Care lubrication and cleanliness
- Installing with precision
- Starting with basic condition monitoring
- 5S in the workshop

#### ACQUIRE

- Lowest lifecycle costs
- Project management
- Design, procure and transport for reliability
- Acceptance testing

#### DISCIPLINE

- Effective CMMS or EAM
- Documentation & standardisation
- Work management
- Spares and storeroom management

#### CARE

- Lubrication management
- Maintaining equipment clean, cool, smooth and fastened correctly
- Caring for spares
- Operating with standard operating procedures and within integrity operating windows
- Operator asset care

#### **ANALYTICS**

- Review financial performance & targets
- Program performance
- Measure & review KPI's
- Reliability & consequences
- Asset Health (CBM) monitoring and inspections
- Production performance monitoring
- Risk based inspections, NDT and hidden failure finding tasks
- AI, IIoT, machine learning and Industry 4.0

#### **END OF LIFE**

- Root Cause Analysis techniques 5Ys, FTA, Cause Tree, etc.
- Human considerations and RCA
- FRACAS and other RCA action management systems
- Dispose of assets

#### **OPTIMIZE**

- Review the business process
- Improve the asset reliability strategy
- Improve the implementation strategy
- Further reliability & production improvements

# **ARP [L] - Course Details**

#### **Duratuion:**

The course is delivered in a classroom over 5 days with the exam on the last day.

#### **Certification Exam:**

The 100 question multiple-choice exam is 3 hours and pass grade is 70% for certification.

#### **Certification Prerequisite:**

Prior experience is not required, however 48 months of relevant industrial experience and passing the exam is required for certification.

#### **Pre-study:**

On-line videos of the course are available to students to allow for study prior to attending classroom course and exam.

#### What our reliability students have said:

" The topics speak for themselves. The complete session literally covers almost every aspect of Reliability right from the beginning till the end of successfully launching Reliability Program."

"Really privileged to attend your session. Highly informative and very well structured program and an excellent presentation. Thank you very much for a high quality teaching. Looking forward to effectively utilizing the same in my organisation."

## **Highly credentialed certification**

The Asset Reliability Practitioner (ARP) certification scheme follows the independent format of the time-tested ISO certification programs, such as ISO 18436, and it follows the guidelines defined under ISO/IEC 17024 – the same process followed by the independently accredited Mobius Institute Board of Certification [MIBoC] certification scheme that has already certified tens of thousands of men and women from over 170 countries.

Two independent international committees developed the certification program. The Scheme Committee defined the topics and the requirements (such as training, experience, and examination). The Technical Committee approved the topics and is responsible for approving training courses and the examination database.

Both committees are made up of experienced practitioners, consultants and educators from around the world to ensure that the scheme meets the requirements of the majority of industries in all countries.

### **Category III Certification**



All MIBoC certified reliability practitioners receive personalized logos with their certification number and name for their own professional use. Mobius Institute also maintains a listing of all certified analysts on their website and provides each person with a certification confirmation webpage.

For more information about Mobius Institute's accreditation, please visit www.mobiusinstitute.com/certification.

Learn more about other Classroom or On-Line training options.

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