



3 Days Intensive Learning with Ricky Smith, CMRP

# MASTERCLASS IN MAINTENANCE & RELIABILITY BEST PRACTICES with SMRP BOK FOR CMRP PREPARATION

Learn the world's best practices in M&R along with mastering SMRP's 5 BOK for Maintenance & Reliability Excellence.



**Instructor:**

**Ricky Smith CMRP**

**DATES**

**LOCATIONS**

7-9 June, 2022

Live Online



# ABOUT METRIUS AND WORLD CLASS MAINTENANCE

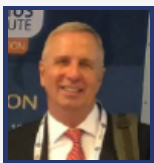
We at Metrius Academy are one of the premier training and development organization working with world top minds helping with workforce upskilling. Having partnered with WORLD CLASS MAINTENANCE, our training is developed with a guided approach through a complex number of formal and informal learning options keeping business perspective in. We are passionate about building a community of individuals who strive to learn each day, we strongly believe in the power of developing others and empowering individuals.

With the experience of executing 150+ training & events, we have been trusted by companies like-

## Some of the clients Ricky has helped with

- ArcelorMittal Steel
- Gallatin Steel
- Georgia-Pacific Corp
- Fontana
- US Department of State
- US Army
- Saudi Aramco
- Oman Petroleum
- Gold Corp (Canada)
- Reliance (India)
- Irving Oil
- New-Indy Paper

## LEARN FROM WORLD'S TOP INDUSTRY PRACTITIONER & COACH



*By Expert Practitioner & Coach*

### Ricky Smith, CMRP

Ricky Smith is a well-known Maintenance and Reliability book author, consultant, and best practices educator worldwide. Ricky has over 30 years' experience working as a Maintenance and Reliability Professional for companies/organizations such as US Army, Exxon Company USA, Alcoa Mt Holly, Kendall Company, and Life Cycle Engineering. In addition, Ricky worked as a Maintenance consultant/ Educator with hundreds of companies in over 30 countries worldwide.



### The "Facilitator"

Ricky with 30 years' of experience as an educator has facilitated the learning of others.

He has been an educator, an innovator and an enabler for his learner's.



### Focused on "YOU"

Ricky as a great trainer is focused on "YOU"

As is the case with a educator, his primary goals has always been to be focused on "YOU" and "YOUR SUCCESS".



### The "AHA" Moment

Ricky is in the business of making the learning happen.

Ricky with his focus on the outcome keeps imploring himself with a simple question-"What is the outcome from this learning session from my trainees?"

# WHY ATTEND THIS WORKSHOP?

Key Takeaways from this training

## What “you” should expect to take away from this training:

- Better understanding of Maintenance and Reliability Best Practices and how to apply in any organization.
- Recognition of the gaps in your Maintenance Organization and how to close those gaps.
- A simple plan one can implement when they return.
- Feel pride in your Maintenance Work through the knowledge one has gained.
- Less stress through new knowledge and skills gained.

## What should “your leadership” expect to see when you return?

- A more confident professional based on knowledge gained in the training.
- A simple plan with “quick wins” and long-term sustainment
- A simple but effective Maintenance Dashboard which can be implemented.
- Procedure Templates and other items which can be used upon return.

# WHO SHOULD ATTEND THE TRAINING?

- The course is designed specifically for individuals participating in or aspiring to the following
- Production and Reliability Managers and Engineers & leaders
- Mechanical, Electrical, Production or Project Engineers
- Construction/Contractor Managers and Supervisors
- Maintenance Managers, Supervisors, Planners and Schedulers
- Materials Management Managers/Supervisors
- CMMS Administrator or Key Users
- Maintenance Engineers (Functional and Reliability)

# WORKSHOP OBJECTIVES

- Learn what are Known Maintenance and Reliability Best Practices and how to apply in any organization.
- Review what is “World Class Maintenance”, workflow, attributes, and benchmarks.
- Develop Maintenance Leading and Lagging KPIs for any Organization and learn how to create Maintenance KPI Dashboards
- Identify where Proactive Work comes from and why it is critical to success in any Maintenance Organization.
- Define what is Preventive and Predictive Maintenance and how they impact proactive maintenance.
- Learn how to perform a PM Optimization Process at your site.
- Learn why a Maintenance Planning and Scheduling Process Map is so critical to optimization of wrench-time.
- Define Failures Modes for Specific Components and Assets
- How to transition Technicians and Production Leadership to Proactive Maintenance believes and attributes.

# BONUS

{Get yourself CMRP certified}

## Why Get Certificate?

The Value Of CMRP Certification

# 1

CMRP is the only Maintenance, Reliability and Physical asset management Certification accredited by ANSI

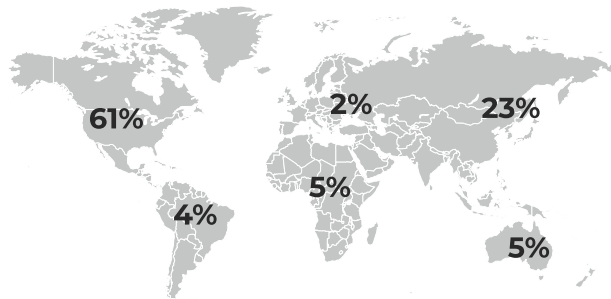


# 9

Number of years CMRP Certification has held ANSI accreditation

# 84%

Number of respondents who say having a third party accredited certification is important



Total CMRP certified Professionals worldwide

# 7200+

active CMRP's as of March 15<sup>th</sup> 2020.

## Top 5 Industries that benefit from the certification



Consulting Services



Food & Beverage



Chemical



Oil & Gas



Pharma & Biotech

# 81%

Number of respondents said they would recommend CMRP Certification Results based on 2015 SMRPCO Certification Survey.

Recertification rated for the CMRP (people that see value on paying it to renew) 83% as of March 15

## WHY ATTEND WITH US?

### 6 months

unlimited access to recorded training through our learning platform for maximizing learning outcomes.

### 3 days (20 hours)

of Immersive & Interactive Live masterclass

### Course materials

in the electronic format

### 1-year

complimentary SMRP Membership

### CMRP Exam fee

included

### Certificate of participation

Participants will receive a certificate of attendance for the course.

### Unparalleled

support [We mean it!]

# DAY 1: MAINTENANCE AND RELIABILITY

## Maintenance and Reliability

### Overview

- Definition of Maintenance
- Definition of Reliability
- What does “World Class Maintenance” look like and where was it created?
- World Class Maintenance Benchmarks
- Maintenance Leading and Lagging KPIs
- Work Identification
- Definition and expectations from PM and PdM
- The PF Curve and How does it Work.
- Repeatable Procedures(Sub point)Repeatable Procedure Exercise
- The RACI Model to define Roles and Responsibilities.(Sub point) RACI Exercise

### Preventive Maintenance

- Failure Modes and how to manage and mitigate them
- Developing and Managing a PM Program/Process
- Steps required to develop an Effective PM Program
- Writing a Repeatable/Effective PM Procedure

- Preventive Maintenance Roles and Responsibilities (RACI)
- Managing a PM Program
- Preventive Maintenance Leading and Lagging KPIs
- 14 Steps of a PM Optimization Process
- How to Manage a PdM Program(Sub point) Preventive Maintenance Exercise
- CMRP Practice Test

### Predictive Maintenance (PdM) / Condition Monitoring (CBM)

- Definition of PdM and CBM)
- The Objective of PdM / CBM
- Vibration analysis
- Ultrasonic analysis
- Infrared analysis
- Oil analysis
- Laser-shaft alignment
- Motor circuit analysis
- Non-Destructive
- Testing Day 1
- Review 2 things you learned today.

# DAY 2: WORKFLOW PROCESSES

World Class Maintenance (Alumax Mt Holly – John Day PE, one of the founding members of SMRP)

## Maintenance Planning

- Maintenance Planning Definition
- Maintenance Planning Workflow
- Maintenance Planning Leading and Lagging KPIs
- Maintenance Planning Roles and Responsibilities

- Maintenance Scheduling Roles and Responsibilities (RACI)
- Maintenance Planning and Scheduling Exercise

## Maintenance Scheduling

- Maintenance Scheduling Definition
- Maintenance Scheduling Workflow

## Work Execution

- Work Execution Definition
- Work Execution Leading and Lagging KPIs
- Work Execution Roles and Responsibilities (RACI)

## Work Order Closeout

- Work Order Close Out Definition
- Work Order Close Out Leading and Lagging KPIs
- Work Order Close Out Roles and Responsibilities (RACI)

## Maintenance Dashboards

- Objective of Maintenance Dashboards
- Maintenance Dashboard Fundamentals
- Steps to Creating a Maintenance Dashboard

# DAY 3: TRANSITIONING TO PROACTIVE MAINTENANCE

Review of Day 2

## Business & Management

- Create a strategic direction and plan for Maintenance and Reliability Operations
- Vision, Mission, and Strategic Plan to achieve business goals.
- Maintenance and Reliability Leaders utilize knowledge of industry benchmarks to establish goals.
- The Value of Effective Metrics
- Managing with Leading and Lagging KPIs which measure the direction and success of Maintenance and Operations.
- Safety and Environmental issues are Critical to Success.

## Manufacturing Process

### Reliability

- Maintenance is critical to ensuring success of Manufacturing Processes.
- Manufacturing Process Reliability Principles
- Process Flows are defined.
- Continuous Improvement through Lean Six Sigma
- KPIs - Operation Driven Reliability (ODR), OEE and TEEP
- Management of Change and Change Management Protocols

## Equipment Reliability

- Activities that apply to equipment and processes for which maintenance is accountable.

- Access current capabilities of equipment and processes in terms of reliability, maintainability, availability, and criticality
- Activities selected to apply the most appropriate maintenance practices, so they deliver capabilities in the safest and most cost-effective manner.
- Equipment performance expectations analyzed through methods such as Root Cause Analysis, Weibull Analysis, etc.
- Nominal design parameters and best demonstrated performance are evaluated and compared to inherent design.
- Defining Predictive and Condition Based Maintenance
- Understanding the application of Predictive (PdM) and Condition Bases Maintenance Technologies to include
  - Vibration Analysis
  - Infrared Thermography
  - Ultrasonic Testing
  - Lubrication and Wear Particle Analysis
  - Electrical Condition Monitoring
  - Non-Destructive Testing
- What is Design for Reliability, Availability, and Maintainability?
  - Key Terms and Definition
  - Reliability Block Diagram
  - The Failure Curves
  - Reliability Distribution
  - Asset Life Cycle Cost

## Organization and Leadership

- Organizational structure and alignment to the strategic plan
- Skills, Competency and Performance analysis
- Job Task Analysis, Skills Assessments Training

## Work Management

- Maintenance Workflow
- Work Requests and Work Request Flow
- Identifying work

- Equipment numbering
- Maintenance Backlog
- Priority Systems
- Approval Systems

## Maintenance Technician

- Maintenance Skills
- How to Change Maintenance Technicians way of thinking
- Engaging Technicians
- Roles and Responsibilities

## Final Exercise

Creating a Master Plan to transition your organization to a higher level of reliability and maintainability along with a Maintenance Dashboard

If you would like to attend, see the next page for the registration form or if you have questions or need more information send an email to [rsmith@worldclassmaintenance.org](mailto:rsmith@worldclassmaintenance.org)

## HOW TO REGISTER?

### Course Fee

Workshop Only	USD <b>\$1450.00</b>
Workshop plus SMRP Membership and CMRP Exam	USD <b>\$2050.00</b>

### 3 Ways to Register

E: [register@metriusglobal.com](mailto:register@metriusglobal.com)

T: +1 (920) 389-1975

W: <https://learn.metrius.academy/enrollments>

### In-House

If interested to run this course in-house please contact us at:

T: +1 (920) 389-1975

E: [register@metriusglobal.com](mailto:register@metriusglobal.com)

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