



MAESTRO
CONSULTANTS

**EXCELLENCE IN
MAINTENANCE &
RELIABILITY
MANAGEMENT
ADVANCED
TECHNIQUES
IN MAINTENANCE
MANAGEMENT**

COURSE OUTLINE 2020

Contact Us On :

Tel : +971 7 2042072 |

Email: training@maestrouae.net

Website: www.maestrouae.net

TRAINING TITLE

Excellence in Maintenance & Reliability Management: Advanced Techniques in Maintenance Management

VENUE

Dubai, UAE

DURATION

5 Days

DATES

PRICE

US\$4,000 per attendee including training material/handouts, morning/afternoon coffee breaks and Lunch buffet daily.

TRAINING INTRODUCTION

Achieving excellence in maintenance and reliability is the aim of every organization that depends on its physical assets to achieve business objectives. Lower profit margins have made reducing maintenance costs imperative to the survival of many organizations. The overall cost of asset ownership is closely tied to the outcomes of reliability, durability and longevity of physical assets. This training course is about developing and implementing the strategy and tactics that deliver the outcomes we need.

TRAINING OBJECTIVES

- This course will guide participants to develop key concepts and techniques of high pressure AMMONIA & CARBAMATE pumps.
- Know the HP AMMONIA & CARBAMATE pump types centrifugal and reciprocating, pump design data sheet and HP pumps in fertilizer plants main outline.
- Know the HP AMMONIA & CARBAMATE pump mechanical details, the types of pumps, the operating condition, maintain the operating condition for pump availability and reliability, lubricating system, bearing types journal and thrust, vibration monitoring, bearing condition temperature, vibration and axial thrust.

- Understand the HP AMMONIA & CARBAMATE pump sealing system, the maintenance activity preventive and shut down activities.
- Understand the preparation the AMMONIA AND CARBAMATE pump for complete overall disassembling, spare parts, rotor checking, impeller checking, bearing checking, repair and assembling.
- Understand the preparation he HP pumps AMMONIA & CARBAMATE for startup and condition monitoring before start up and after , trouble shooting, bearing radial vibration and axial, sealing water condition, sealing water pumps for mechanical seal injection and bearing temperature as well as drive motor condition winding temperature ampere rating and bearing temperature and vibration and axial.
- Get the fundamentals bases for process logic and safety interlock system ESD as well as the guide line of alarm setting and trip setting.
- Discuss and understand the normal operation and trouble shooting and common HP AMMONIA & CARBAMATE pumps problems centrifugal and reciprocating.
- Understand the process hazard and get the facts about process safety in fertilizer plant and the material safety data sheet for both ammonia & CARBAMATE.

TRAINING AUDIENCE

The course is designed for rotary engineers, field maintenance engineers and process engineers, urea plant supervisors and urea plant operators who are working in the urea plant synthesis section, to increase their technical knowledge HP AMONIA & CARBAMATE pumps to increase their capability for safe operation and maintain the pumps availability and reliability. The course will help to improve the participants' skills and broaden their vision and understanding of the entire industry, including technology, safety, health and environmental

TRAINING OUTLINE

DAY WISE COURSE OUT LINE:

DAY-1

- *HP pumps type and uses.
- *The HP pumps design data and performance curve.
- *HP ammonia pumps overview.

DAY-2

- *HP ammonia pump details
- *HP ammonia pump rotor, impellers, bearing and mechanical seal
- *Lube oil system and sealing water system
- *Maintenance program and preparing pumps for maintenance
- *HP ammonia pumps overall disassembly and assembly

Day-3

- *HP CARBAMATE pump details
- *HP CARBAMATE pump rotor, impellers, bearing and mechanical seal
- *Lube oil system and sealing water system
- *Maintenance program and preparing pumps for maintenance
- *HP CARBAMATE pumps overall disassembly and assembly

Day-4

- *HP AMMONIA & CARBAMATE pumps process logic
- *HP AMMONIA & CARBAMATE pumps preparation for operation, pump start and maintain online
- * HP AMMONIA & CARBAMATE pumps parameter monitoring, suction pressure, suction temperature, bearing temperature, bearing radial and axial vibration and drive motor condition.

Day-5

- *Process logic and safety interlock system ESD
- *Normal operation, up-normal condition, troubleshooting and emergency response
- *Radial and axial bearing vibration diagnosis

*Pump performance

*Process safety management and hazard analysis

Final Course Evaluation

TRAINING CERTIFICATE

MAESTRO CONSULTANTS Certificate of Completion for delegates who attend and complete the training course

METHODOLOGY

Our courses are highly interactive, typically taking a case study approach that we have found to be an effective method of fostering discussions and transferring knowledge. Participants will learn by active participation during the program through the use of individual exercises, questionnaires, team exercises, training videos and discussions of “real life” issues in their organizations. The material has been designed to enable delegates to apply all of the material with immediate effect back in the workplace.