

Rotating Equipment Maintenance And Troubleshooting

Oil & Gas Engineering Kigali (Rwanda) 13 - 17 Jan 2025

UK Traininig **PARTNER**

www.blackbird-training.com



Rotating Equipment Maintenance And Troubleshooting

Ref: 321624_142268 Date: 13 - 17 Jan 2025 Location: Kigali (Rwanda) Fees: 3300 Euro

Introduction:

Pumps and compressors are the tow pieces of equipment which are used in almost all manufacturing and processing plants. The effectiveness of their selection, specifications, operations, maintenance and troubleshooting has tremendous impact on plant productivity. An understanding of the basic principles involved, how they work, what can go wrong, troubleshooting and preventive maintenance can go a long way to increase productivity. In addition, pumps and compressors are generally critical machines in any production process, and hence it is vital that maintenance is most effective for these units.

Course Objectives of Rotating Equipment Maintenance And Troubleshooting

- The program assumes familiarity with troubleshooting and maintenance of rotating equipment.
- the program investigates the root causes of failure, and relates these to operating conditions and process parameters.
- mechanisms are identified and a detailed understanding of the troubleshooting and diagnostic methods needed to detect and identify these is developed.
- The program provides participants with the knowledge needed to be effective in the inspection, monitoring and diagnostics of pumps and compressors, with emphasis placed upon the importance of a combined condition monitoring and strip-down inspection approach to maintenance.
- This program aims to provide delegates with a comprehensive understanding of how to use a combined predictive and preventive maintenance approach to achieve maximum reliability and greatest understanding of any deterioration that may occur.
- This course focuses on the essentials to add to the skills of those who are responsible for plant equipment to reduce breakdowns and get more operation hour.
- The program provides participants with the knowledge needed to be effective in the inspection, monitoring and diagnostics of pumps and compressors, with emphasis placed upon the importance of a combined condition monitoring and strip-down inspection approach to maintenance.

Rotating Equipment Maintenance And Troubleshooting Course Outlines





DAY 1

- Rotating equipment overview
- Fluid mechanics and systems, an overview
- Pump fundamentals
- Pump selection and sizing
- Pump installation and operation

DAY 2

- Compressor installation and operation
- Alignment and mechanical consideration
- Antifriction and hydrodynamic bearings
- Flexible coupling installation and operation

DAY 3

- The effect of a gas density change
- Compressor selection and sizing
- Compressor design and maintenance
- Shaft sealing

DAY 4

- Steam turbine function and types
- Steam turbine operation and maintenance
- Gas turbine types, applications and operation
- Gas turbine performance and maintenance

DAY 5

- Functions and failures, predictive and preventive maintenance
- Failure consequences and analysis
- Steam turbine troubleshooting
- Pumps and compressors system troubleshooting





Blackbird training cities

Accra1 (Ghana)	Amman (Jordan)	Amsterdam (Netherlands)	Annecy (France)
Baku (Azerbaijan)	Bali (Indonesia)	Bangkok (Thailand)	Bangkok (Thailand)
Barcelona (Spain)	Batumi (Georgia)	Beijing (China)	Beirut (Lebanon)
Berlin (Germany)	Birmingham (UK)	Bordeax (France)	Boston,Massachusetts (USA)
Brussels (Belgium)	Cairo (Egypt)	Cape Town (South Africa)	Casablanca (Morocco)
Cascais (Portugal)	Copenhagen (Denmark)	Doha (Qatar)	Dubai (UAE)

Düsseldorf (Germany)

Head Office: +44 7480 775 526 | 0 7401 177 335 Email: training@blackbird-training.com Website: www.blackbird-training.com





Blackbird Training Category



Human Resources



Secretary & Admin



Supply Chain & Logistics



Health & Safety



Aviation



Audit & Quality Assurance



Law and Contract Management



Management & Leadership



Telecom Engineering



C-Suite Training



Finance, Accounting, Budgeting



Project Management



Professional Skills



Hospital Management



Agile and Refinement



Marketing, Sales, Customer Service



IT & IT Engineering



Oil & Gas Engineering



Customs & Safety





Blackbird training Clients

Β.

Booking.com

Netherlands



MANNAI Trading Company WLL, **Qatar**



Nigeria

QN

Qatar No (C

Ce

GAC

UNE FILIALE D'EGA

Alumina Corporation

Guinea



Qata ank Oatar



Oatar Foundation, Oatar



Oxfam GB International Organization, **Yemen**



Capital Markets Authority, Kuwait



KFAS Kuwait



Reserve Bank of Malawi, **Malawi**



ral Bank of Nigeria Nigeria



Ministry of Interior, KSA

eni

ENI CORPORATE UNIVERSITY, Italy



AFRICAN UNION ADVISORY BOARD ON CORRUPTION, Tanzania

Mabruk Oil Company Libya



Ś

General Organization for Social Insurance KSA

General Or

الشركة السعودية للكهريا. Saudi Electricity Company

BPKH Badan Pengelola Keuangan Haji

BADAN PENGELOLA KEUANGAN Haji, Indonesia



Defence Space Administration



NATO

Italy

الصناعات الوطنية (القابدية) National Industries Group (Holding), Kuwait



North Qil company,



EKO Electricity



Hamad Medical Corporation, **Oatar**



Oman Broadband



USAID Pakistan

بنك الخليج GULF BANK

Gulf Bank Kuwait



UN.



STC Solutions, KSA





Head Office: +44 7480 775 526 | 0 7401 177 335 Email: training@blackbird-training.com Website: www.blackbird-training.com

ES BLACKBIRD FORTRAINING

LONDON TRAINING PROVIDER