

Moataz Abd El Salam Mohamed

SENIOR RELIABILITY AND ROTATING EQUIPMENT CONDITION MONITORING ENGINEER

EMBA , VIB CAT 3 , ARP-A , MLS, DPA (S)



(Total 21 years' experience)

SUMMARY

Profile: Male, Married , Birth Date :19-8-1978

Nationality: Egypt

Current Location: Egypt

Current position: Reliability And Condition Monitoring section head

Company: Gasco

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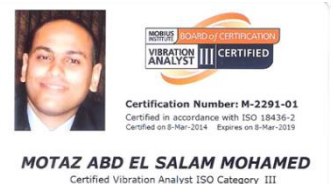
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EDUCATION

- **ALEXANDRIA UNIVERSITY ALEX, Egypt**
Mechanical Engineering, Bachelor (BSc) (graduate at 2000)
- **ALEXANDRIA UNIVERSITY ALEX, Egypt**
Power station post graduate diploma,(at 2008) GPA (B+)
- **ALEXANDRIA UNIVERSITY ALEX . EGYPT**
EMBA (2020)
- **(DBA) project management (s) Cairo University**
- **Mobius institute authorized instructor**



OTHER CERTIFICATES

- **Vibration specialist level 2 certificate (2006)**
American vibration institute, United States
- **Level 2 vibration specialist (Mobius institute)(2012)**
- **Level 3 vibration specialist (Mobius institute) (2013)**
- **Mobius institute instructor**

Experience summary

I have 20 years of on hand experience in maintenance, engineering, condition monitoring and managing projects to enhance equipment safety & reliability. Experience in pumps, compressors , gas turbines , turbo expander and other rotating equipment as maintenance and condition monitoring.

He has CATIII Level vibration specialist from **MOBIUS INSTITUTE** 2013 and from American vibration institute 2006, master degree in mechanical engineering (power station) Alexandria university, post graduate diploma in equipment maintenance and design from Alexandria university.

Commissioning and startup for rotating equipment in MAXIMIZATION project (GASCO) 2010 (commissioning more than 50 centrifugal pumps , 3 manturbo centrifugal compressors 60 air cooler ,Siemens gas turbine SGT600 commission 1 air screw compressor ,NEA 4 cylinders 1.5MW reciprocating compressor) work with GE energy in (inspection and life extension services) by GRANITE co. including borescope and vibration analysis service for gas turbine with different frame size (frame 9 FA ,7 FA ,6 FA)

Familiarized with CMMS systems like MAXIMO (generate w.o. and follow up ,modification and other related activities), Commissioning and startup for more than 20 centrifugal pumps in GABCO (horus) project including leveling & alignment and commissioning.

Conducting training courses in mechanical engineering including (vibration analysis, shaft alignment, rotor balancing, mechanical and dry gas seal, effective maintenance management, pumps opearation and maintenance, compressors



maintenance and operation, gas turbine operation and maintenance, bearing installation and proper lubrication, maintenance management)

Oil and gas Projects coordination and following up.

ADDITIONAL COURSES

Internally training Courses :

- ***Basic offshore safety induction emergency training (BOSIT)2010***
- ***Vibration Analysis Cat III (Mobius Institute) 2012***
- ***Vibration analysis level 2 (American vibration institute)***
- ***Fire fighting training***
- ***OHSAS 18001***
- ***Lock out tag out process***
- ***Work permits***
- ***Job hazard analysis & risk assessment technique***
- ***Corrosion and selection of material (ALEX. UNIV.)***
- ***Shaft to shaft alignment (NAIT "CANADA")***
- ***Vibration Analysis (NAIT "CANADA")***
- ***Vibration analysis certified from American vibration institute.***
- ***Centrifugal and reciprocating compressors training***
- ***Bearing technology at SKF training center***

Externally training courses:

- ***Gas turbine familiarization (GE Energy) (USA)***
- ***Borescope training course for gas turbines (GE Energy)(USA)***
- ***On job training in USA (GE frame 7)***
- ***On job training in turkey (GE frame 9 and 6)***
- ***On job training in Tunis (GE frame 9)***
- ***On job training in Qatar (GE frame 9)***
- ***On job training in Algeria (GE frame 9)***

TEACHING COURSES AS INSTRUCTOR :(more than 4000 training hrs.)

- ***Vibration analysis course***
- ***Pump technology***
- ***Hydraulic systems***
- ***Lubrication systems***
- ***Bearings maintenance and selection***
- ***Mechanical and dry gas seal operation and maintenance***
- ***Laser Shaft to shaft alignment***
- ***Compressor fundamentals***
- ***Gas turbine fundamentals***
- ***Maintenance management***
- ***Boilers and heat exchangers operation and maintenance***
- ***Maintenance best practice and optimization***
- ***Mechanical fault diagnosis***
- ***Maintenance benchmarking and improvement***

Some Training courses customers:

(DEWA(Dubai) , HAYA water(Oman) , MANSOURA For Petroleum CO. (Egypt) , khalda oil (Egypt) , abu kir fertilizers (Egypt) , ORPIC (Oman) , Qatar petroleum (Qatar), QAPCO(Qatar) , iraq oil north (Iraq) , Cairn (India), Dubal (Dubai), Bapetco (Egypt), Gasco (Egypt) , Suze oil(Egypt), GUPCO (Egypt), PDO(oman) , , dry doc (oman) , dry doc (dubai) , Nomac (Saudi arabia) , maaden (Saudi arabia)

LANGUAGES:

Arabic	Native
English	excellent (read and write)
German	Basics

COMPUTER SKILLS :

- MS OFFICE (WORD – EXCEL – POWER POINT-ACCESS)
- AUTOCAD
- INTERNET + WINDOWS
- PRIMAVERA 1 &2 levels

WORK EXPERIENCE

GASCO (Egyptian natural gas company)

Technical support assistant general manager

- Provide Management of Change/Studies related technical support to all company Assets (Operations) identifying the timely solution to ensure Asset Integrity and Reliability sustaining Safe and Continuous Plant Environment.
- Develop feasibility studies and perform engineering studies for initiated changes through Management of Change process for safe and reliable operation
- Provide engineering support and develop work packs to maintenance executed modifications. Support shutdown/inspection/QA/QC during shutdowns for resolution discovery jobs /complex plant issues.
- Provide engineering Inputs throughout Project Life Cycle (Pre-FEED/FEED) ensuring quality and flawless execution.
- Active participation in Safety Workshops, Cold Eye Reviews and Value Improvement Workshops. Steward /participate Root Cause Failure Analysis (RCFA), scenario based risk assessments (SBRAs), Formal Risk Assessment (FRA).
- Review & validate all engineering documents (Drawings/Data Sheets/Philosophies/ Project Specifications etc.) produced by vendors, contractors and consultants.
- Contribute developing and implementing department policies, procedures and controls covering all areas of Process Engineering and Optimization Business line activities.

GASCO (Egyptian natural gas company)

Engineering inspection, studies and project following up assistance general manager

- Review and following up the new projects starting from engineering to construction phase
- Determine the required project for the plant in order to keep its reliability with in accepted limit
- Doing projects like fire proofing, coating and protection, steel structure
- Improve condition monitoring reliability system projects
- Rotating equipment Reliability and availability calculation
- New projects rotating equipment preservation

- Supervision for commission installation for new rotating equipment of C2C3 Maximization project in WDC Alex.
- Review piping systems (isometric drawing , piping supports , fittings and piping alignment) making sure it's match the design specs
- Commissioning and pre-commission new rotating equipment
- Monitor rotating equipment performance (compressors, gas turbine, pumps) and work to improve it.
- Deal with vendors to overcome the technical problems comes up.
- Improve equipment reliability and cost effectiveness.
- equipment KPI's monitoring
- Root cause failure analysis activity.
- Plan for year budget and activity to meet business demands.
- Applying RCFA, RCA, MOC and RCM approach in maintenance activity.
- RBI and RCM implementation
- Thermal insulation replacement and installation
- Piping and fixed equipment inspection using different techniques.
- Train D project coordinator (making sur that design and application of project is comply with company technical requirement)

SOLAR TURBINES :

(Reliability Engineer) (2010 to july 2011) Angola- chevron Malongo Base:

- Equipment's Reliability and availability calculation
- Root cause failure analysis
- Machinery troubles analysis and solution recommendation.
- Spare parts consumption optimizing.
- Maintenance activity performance monitoring

GE (GENERAL ELECTRIC)

BOREScope INSPECTOR: (2008 to 2010)

Company	GELES- MATERIALS
Customer	Baymina energy (suiz energy) , Turkey
Site	Adapazari Elektrik, Turkey
Duties	borescope inspection for gas turbine components (all compressor stages including stator and rotating vanes and casing , combustion system including fuel nozzle ,liners , TP and flame detectors and all turbine stages include nozzles , buckets ,shroud and platform)
Equipment	2 units MS9001 FA +e using Video scope OLYMBUS – IPLEX
Company	GELES- MATERIALS
Customer	Redbud Oklahoma
Site	Redbud Oklahoma city ,USA
Duties	borescope inspection for gas turbine components (all compressor stages including stator and rotating vanes and casing , combustion system including fuel nozzle ,liners , TP and flame detectors and all turbine stages include nozzles , buckets ,shroud and platform)
Equipment	MS 7001 FA using EVEREST XLG3 VIDEOSCOPE
Company	GELES- MATERIALS
Customer	CPC Rades

Site	CPC Rades2 Tunis
Duties	borescope inspection for gas turbine components (all compressor stages including stator and rotating vanes and casing , combustion system including fuel nozzle ,liners , TP and flame detectors and all turbine stages include nozzles , buckets ,shroud and platform)
Equipment	MS 9001 E using EVEREST XLG3 VIDEOSCOPE
Company	GELES- MATERIALS
Customer	Harrison Power
Site	Harrison County Power Texas
Duties	borescope inspection for gas turbine components (all compressor stages including stator and rotating vanes and casing , combustion system including fuel nozzle ,liners , TP and flame detectors and all turbine stages include nozzles , buckets ,shroud and platform)
Equipment	MS 7001 FA using EVEREST XLG3 VIDEOSCOPE
Company	GELES- MATERIALS
Customer	Qatar Electricity And Water Company
Site	Ras Abu Fontas
Duties	borescope inspection for gas turbine components (all compressor stages including stator and rotating vanes and casing , combustion system including fuel nozzle ,liners , TP and flame detectors and all turbine stages include nozzles , buckets ,shroud and platform)
Equipment	MS 9001 FA using EVEREST XLG3 VIDEOSCOPE
Company	GELES- MATERIALS
Customer	TURKEY BOO
Site	Gebze , izmir (turkey)
Duties	borescope inspection for gas turbine components (all compressor stages including stator and rotating vanes and casing , combustion system including fuel nozzle ,liners , TP and flame detectors and all turbine stages include nozzles , buckets ,shroud and platform
Equipment	2 X MS 9001 FA using EVEREST XLG3 VIDEOSCOPE
Company	GELES- MATERIALS
Customer	Baymina Enerji AS
Site	Ankara Dogal Gaz Santrali (turkey)
Duties	borescope inspection for gas turbine components (all compressor stages including stator and rotating vanes and casing , combustion system including fuel nozzle ,liners , TP and flame detectors and all turbine stages include nozzles , buckets ,shroud and platform
Equipment	2 X MS9001FA using EVEREST XLG3 VIDEOSCOPE
Company	GELES- MATERIALS
Customer	Shariket Kahraba Skikda (Algeria)
Site	Skikda Power Unit #GT2
Duties	all compressor stages including stator and rotating vanes and casing
Equipment	MS9001FA, using EVEREST XLG3 VIDEOSCOPE
Company	GELES- MATERIALS
Customer	Saudi Electricity Company

Site	Jeddah PP3
Duties	all compressor stages including stator and rotating vanes and casing
Equipment	Borescope inspection for two 7EA+e gas turbines, using EVEREST XLG3 VIDEOSCOPE
Company	GELES- MATERIALS
Customer	Al kamil power Company
Site	Oman – Al Kamil
Duties	all compressor stages including stator and rotating vanes and casing, all compustion cans and all turbine stages.
Equipment	Borescope inspection for two 9E gas turbines, using EVEREST XLG3 VIDEOSCOPE

GASCO (Egyptian natural gas company) Alexandria, Egypt (June 2003 to 2008)

RELIABILITY ENGINEER:

Condition Monitoring Activities:

- Borescope inspection (Olympus) and performing technical reporting for turbo-machinery.
- Laser alignment: machinery alignment using laser alignment kit (CSI ultra spec 8117)
- Experience in vibration analysis, phase analysis using CSI vibration analyzer 2120-A2 & CSI 2130. The ability to carry out advanced analysis using dual channel analyzers.
- experience in trouble-shooting, root cause failure analysis and performance testing
- Experience in motor current signature analysis and other motor conditioning like (flux coil, shaft current and current analysis).
- Preparing vibration reports (daily, half monthly, monthly and annual reports).
- Planning for equipment preventive maintenance.
- Establishing condition monitoring system and data acquisition by using SKF CMXA 50.
- Dealing with Bentley Nevada systems in turbo machinery

Maintenance activities:

- 1- Generate and plane the maintenance plan (preventive maintenance) for all the following equipments:
 - Two Thermodyn turbo compressors driven by General electric gas turbines type MS 5382C (USA)
 - One Thermodyn turbo compressor driven by General electric gas turbines type MS 3152J (USA)
 - Four turbo-expanders Mafi-trench Type EC4 (USA)
 - Two reciprocating gas compressors Neuman & Esser (Germany) 1.25 Mw
 - One reciprocating gas compressors Dresser Rand (U.S.A) 1.3 Mw
 - Three reciprocating utility air compressors Neuman & Esser (Italy)75 Kw
 - 33 centrifugal pumps
 - 48 air coolers GEA (USA)
 - Four fire diesel pumps- Peerless (USA)
 - Gas /gas shell & tube heat exchangers.
 - Five direct fire heater natural draft.
 - Valves
- 2- Carry out and supervise all preventive & predictive maintenance program .
- 3- Carry out all corrective maintenance.
- 4- Create the operating budget & operating schedule.
- 5- Prepare the suitable training courses for maintenance crew to improve their performance & skills (junior engineers, technicians & mechanics).
- 6- Report daily activities, the major jobs and problems
- 7- Handle the correspondences (faxes, internal memos, E mails, material requests and Work orders)
- 8- Prepare all the reports (technical, monthly, annual, reports.)
- 9-Generate and coordinate all the material requests which is necessary for the planned maintenance
- 10- Control the warehouse stock levels for the equipments to avoid any surplus spares

TEMSAH FOR SHIP BUILDING ISMAIELIA, Egypt (Nov 2000 - Sep 2001)

PROJECT ENGINEER

- TEMSAH FOR SHIPBUILDING (offshore projects)

Responsible for project shift, applying project procedure and police to keep the job at high Efficiency and safe

- Repair for project requirement equipment
- Handel job activity according to safety police
- Supervision for project progress according to time schedule
- Supervision for diving process
- Make required
- test related to project requirement (hydro test , tension test , leak test)

BEHERA CONTRIBUTION PORT SAIED, Egypt (Sep 2001 - June 2003)

MAINTENANCE ENG.:

- BEHERA CONTRIBUTION (heavy equipment maintenance eng.)

Responsible for heavy equipment maintenance, keeping it at high efficiency and in good condition

- Repair spare parts requirement budget
- Make required test for hydraulic and mechanical component to insure it's performance
- Lead screw of technicians to achieve maintenance missions
- Deal with different types of heavy equipment brand names
- Hydraulic equipment and circuits maintenance and troubleshooting.