

**JOB DESCRIPTION (NON - SUPERVISORY)**

1. JOB DETAILS	
Job Title :	Technician Engineer – Instrumentation Maintenance
Job Reference No. :	<i>RDM/N003</i>
Job Holder's Name :	
Reports to :	Engineer – Instrumentation Maintenance
Department :	Reduction Maintenance
Location :	EMAL -Taweelah Smelter
Grade :	<i>09</i>
Revised on :	18 February 2010

2. JOB PURPOSE
To troubleshoot, repair, maintain, calibrate & replace instrument devices such as pressure, temperature, level switches, flow sensors, transmitters, thermocouples, limit switches, proximity switches, solenoids, valves, pneumatic devices, load cells, weighing system, field I/O devices, PLC system, control devices etc.
To lead a crew of technicians & contractors in performing instrument maintenance activities.

3. JOB DIMENSIONS		
Number of staff supervised :	Direct Reports :	NIL
	Indirect Reports :	Technicians, contractors and trainees
Key Financial Dimensions :	NIL	



4. KEY ACCOUNTABILITIES :

- To lead shift crew as directed by the supervisor.
- Attend to all equipment breakdowns and planned maintenance work with minimum direction and supervision within the time constraint given to reduce production downtime.
- Effectively troubleshoot, test, repair, fault find and diagnose failures on PLC'S, field devices & SCADA.
- Ensure that all preventive maintenance works are carried out in accordance with the safety procedures and plant operational requirements.
- Initiate response or replacement of worn out or failed components / parts in a safe manner.
- Carry out work in accordance with the Company's Operating Safety Regulations and plant operating requirements.
- Assist other disciplines in the repair and troubleshooting of equipment.
- Input data into maintenance management systems for works and manning records.
- Monitor repeated breakdowns and take proper action to resolve the problems using CMMS.
- Ensure implementation and compliance of the EMAL Safety Management Plan and Environment standards.
- Carry out maintenance work and "troubleshooting" on instrument devices & control systems in his area of responsibility or as directed by his superior.
- Carry out checks and adjustments on any instrument equipment whenever necessary or as directed by his superior in compliance with EMAL safety standards.
- Carry out day / shift duties of a team of Technicians / Craftsmen / Contractors along with on the job training for new Craftsmen as agreed by Supervisor.
- Inspect, fine adjustment, calibration of instrument devices in orderly fashion and identify & report any abnormalities. Repair and / or replace items required and re-assemble and test the equipment, leaving the working area clean.
- Perform all the PM'S, running inspections & checklists on daily basis issued to him as per maintenance planning requirements

**5. JOB CONTEXT :**

The job holder maintains an excellent level of skills when performing his task. He adheres to health and safety procedures to ensure he protects himself and colleagues from accidents and equipment damage. He also performs other functions as requested by his supervisor. The job holder is expected to abide by the safety, quality and environment system requirements as defined in EMAL'S OSR procedure.

GENERAL SAFETY SYSTEM RESPONSIBILITIES:

- Wear required PPE and follow safe work practices at all times.
- Report near misses / incidents. Participate in all activities relating to removal of hazards in your work area.
- Assist with identification of hazards arising from activities in work area, ensuring that all are communicated to relevant personnel in order to maintain a hazard free work area.
- Participate in implementation of EMAL Safety Policy & communication to subordinates.
- Provide an open means by which subordinates / sub contractors can communicate safety concerns, when possible action the items and when not ensure these are passed to personnel / sections for further actions.
- Identifying and evaluating potential / existing safety problems, suggesting solutions and recommending suitable corrective measures.
- Shall be able to use PTW system for maintenance activities.

GENERAL QUALITY SYSTEM RESPONSIBILITIES:

- Ensuring the requirements of the Company's Quality System is complied with.
- Assist with the continual improvement of the Quality System by implementing and participating in process improvement initiatives in relative areas.
- Identifying and evaluating quality problems, suggesting solutions and recommending suitable corrective measures.

GENERAL ENVIRONMENT SYSTEM RESPONSIBILITIES:

- Report all process or other incidents that may cause environmental harm to the relevant personnel, regardless of severity.
- Follow all government, company rules and management directives, regulations and policies that relate to health, safety, environment and the meeting of departmental missions and objectives.
- Follow the procedures and instructions related to Environment within the scope work area.
- Assist with the identification and evaluation of existing and potential Significant Environmental Aspects

GENERAL WORK RESPONSIBILITIES :

- Attend to all equipment breakdowns and planned maintenance work with minimum direction and supervision.
- Technically assess the requirement of allocated jobs and select the necessary tools and equipment to complete such work.
- Using the computerized maintenance system, order the spare parts from warehouse and maintain records of all maintenance works completed.
- Ensure that all maintenance work are carried out in accordance with the safety procedures and plant operational requirements.
- Monitor any repeated breakdown and take proper modification to resolve the problem.
- Provide on the job training to new craftsmen in order to equip them with the necessary skills to be able to carry out maintenance repair work as planned.
- Effectively be able to test, fault find and diagnose failures on control system and instrument devices

The job holder shall work with testing, calibration & measuring equipment, hand & portable tools, special tools and is exposed to intensive heat, noise and conditions with regard to dirt, grease, fumes and oil. The job holder should be able to receive, read and understand drawings, service manuals and job content instructions from immediate supervision.



6. COMMUNICATIONS & WORKING RELATIONSHIPS :

INTERNAL :

- Regular contact with production and maintenance peers as well as supervisory staff as and when necessary to discuss daily tasks, equipment defects and company/dept meetings

EXTERNAL : NIL

7. PROBLEM SOLVING AND DECISION MAKING :

The job holder should be able to diagnose faults on PLC, control system, field devices and rectify the problems to satisfy the plant operational requirements and minimize breakdowns.

8. QUALIFICATIONS, EXPERIENCE & SKILLS:

MINIMUM QUALIFICATIONS :	Engineering / Diploma / Technical College or equivalent in Electrical / Electronics / Instrumentation discipline.
MINIMUM EXPERIENCE :	<ul style="list-style-type: none"> ▪ 5 to 7 years experience in smelter maintenance area or equivalent experience in heavy industry. ▪ Maintenance & troubleshooting of control systems, PLC system, SCADA system, instrument calibration, etc. ▪ Hands on experience on variable speed drives would be an added advantage.
JOB SPECIFIC SKILLS :	<ul style="list-style-type: none"> ▪ Ability to lead a crew of technicians and contractors. ▪ Ability to work on various communication protocols such as Device net, Control net, Profibus, Ethernet, Modbus, CANbus, etc. ▪ Ability to read and understand drawings, service manuals and job content instructions ▪ Skilled in maintenance and troubleshooting of instruments, controllers, calibration and advance PLC systems / SCADA. ▪ Conversant with Permit To Work (PTW) system.
GENERIC SKILLS :	Good written and spoken English language skills, basic computer skills.



9. COMPETENCIES :	
CORE COMPETENCIES	PROFICIENCY LEVEL
Leadership	N/A
Team Working	2
Sharing knowledge and Fostering Open Communication	2
Problem Solving	1
Planning and Organising	2
Continual Improvement and Quality Focus	1
Accountability	2
Self Directing	1
Customer Focus	2
Behaving with Integrity	5

10. APPROVALS :	
Job Holder :	
Signature : _____	Date : _____
Line Manager (Department Manager / Function Head) :	
Signature : _____	Date : _____
Manager – Human Resources	
Signature : _____	Date : _____