KAMAL CISCO

VACANCY AVAILABLE

Job Title: Instrumentation Technician

Reporting to: Maintenance Electrical Supervisor / Instrumentation Supervisor / Maintenance Electrical Superintendent

The Maintenance Instrumentation Technician is responsible for the installation, calibration, inspection, maintenance, troubleshooting, and repair of process instrumentation, analytical equipment, and control systems throughout the steel manufacturing plant. The incumbent ensures that instrumentation and control equipment operate accurately and reliably to support safe, efficient, and continuous production.

The role includes preventative, predictive, corrective, and breakdown maintenance of field instruments, transmitters, control valves, weighing systems, gas analysers, PLC interfaces, and process monitoring equipment while ensuring compliance with statutory, engineering, quality, and SHERQ requirements.

KEY RESPONSIBILITIES

Instrumentation Maintenance

Install, inspect, maintain and repair:

- Pressure transmitters
- Temperature transmitters and thermocouples
- RTDs (Resistance Temperature Detectors)
- Flow meters
- Level transmitters
- Load cells
- Weighing systems
- Control valves
- Solenoid valves
- Pneumatic actuators
- Positioners
- Pressure switches
- Level switches
- Flow switches
- Proximity sensors
- Photoelectric sensors
- Encoders
- Vibration monitoring devices
- Industrial gas analysers
- Oxygen probes
- Moisture analysers
- Industrial monitoring equipment

Steel Manufacturing Equipment

Provide instrumentation support for:

- Electric Arc Furnace (EAF)
- Ladle Furnace (LF)
- Continuous Casting Machine (CCM)
- Water Treatment Plant (WTP)
- Scrap Shredder Plant
- Cooling water systems
- Dust extraction systems
- Compressors
- Pumps
- Hydraulic systems
- Pneumatic systems
- Billet handling systems
- Conveyor systems
- Overhead cranes
- Utilities and auxiliary plant

Calibration

- Calibrate process instruments in accordance with approved procedures.
- Verify instrument accuracy and repeatability.
- Maintain calibration schedules.
- Record calibration results.
- Ensure calibration equipment remains certified and traceable.
- Investigate calibration deviations and implement corrective actions.

Preventative Maintenance

- Perform scheduled inspections of instrumentation equipment.
- Replace worn or defective components.
- Conduct functional testing of instruments and control loops.
- Monitor equipment condition.
- Complete preventative maintenance work orders.
- Update maintenance records in SAP PM or the CMMS.

Breakdown Maintenance

- Respond to instrumentation failures and production breakdowns.
- Diagnose faults using appropriate test equipment.
- Repair or replace defective instrumentation.
- Restore equipment safely and efficiently.
- Investigate recurring failures and recommend improvements.

Process Control Support

- Assist with maintaining process stability through accurate instrumentation.

- Support PLC and SCADA interfaces with field devices.
- Verify instrument signals and communication.
- Perform loop checks during maintenance and commissioning.
- Assist with optimisation of process control systems.

Engineering Support

- Read and interpret P&IDs, loop diagrams, wiring diagrams, and instrument datasheets.
- Assist with commissioning of new equipment.
- Support plant upgrades and automation projects.
- Participate in Factory Acceptance Tests (FAT) and Site Acceptance Tests (SAT).
- Recommend instrumentation improvements.

Maintenance Planning

- Execute scheduled maintenance work.
- Provide accurate feedback on completed work orders.
- Assist the Maintenance Planner with identifying spare parts and maintenance requirements.
- Report recurring equipment defects.
- Recommend improvements to preventative maintenance schedules.

Documentation

- Maintain calibration certificates and records.
- Complete maintenance reports.
- Update instrument registers.
- Record modifications to instrumentation systems.
- Ensure engineering documentation is current and accurate.

Health, Safety, Environmental and Quality (SHERQ)

- Comply with the Occupational Health and Safety Act (OHSA).
- Follow Lockout/Tagout (LOTO) procedures.
- Conduct pre-task risk assessments.
- Wear prescribed PPE.
- Report hazards, incidents, and near misses.
- Maintain excellent housekeeping standards.
- Support ISO 9001, ISO 14001, and ISO 45001 management systems.

Continuous Improvement

- Identify opportunities to improve instrument reliability.
- Participate in Root Cause Failure Analysis (RCFA).
- Recommend equipment upgrades.
- Improve calibration and maintenance practices.
- Support Lean Manufacturing and reliability initiatives.

Any other duties which may be reasonable required, due to the operational requirements of the business.

QUALIFICATIONS

Minimum Requirements

- Grade 12 (Matric).
- National Diploma, N6, or equivalent qualification in Instrumentation, Process Control, Electrical Engineering (Light Current), Electronic Engineering, or Industrial Instrumentation.

Preferred Qualifications

- Trade Test as an Instrument Mechanician.

Advantageous Qualifications

- Siemens, Endress+Hauser, Emerson, ABB, Yokogawa, or Honeywell instrumentation training.
- PLC and SCADA awareness training.
- SAP PM user training.
- Valid Code B Driver's Licence.
- First Aid Certificate.
- Basic Firefighting Certificate.
- Working at Heights certification.
- Confined Space Entry certification.

EXPERIENCE

Minimum Requirements

- Minimum 5 years' experience in industrial instrumentation maintenance.

Preferred Experience

- Steel manufacturing or heavy industrial environment.
- Electric Arc Furnace (EAF), Ladle Furnace (LF), and Continuous Casting Machine (CCM) operations.
- Instrument calibration and testing.
- Process control systems.
- SAP PM or equivalent CMMS.

Kamal CISCO is an equal opportunity employer. In line with our Employment Equity Plan, preference will be given to suitable candidates from designated groups to support our commitment to workforce diversity.

If you are interested in applying for this position, please send your CV, including three contactable references, to recruitment@kamalcisco.co.za before **22 September 2026**.

Only shortlisted candidates will be contacted for an interview.