

# RESUME

## **SUMMARY**

- Instrument Engineer with 4+ years experience in Instrumentation and Control field.
- Excellent knowledge in instrumentation specification and standard, P&ID, and instrument/electrical design and drafting.
- Experienced in developing PLC and ControlLogix software and HMI using RSLogix5/RSLogix5000 and RSVIEW32/Factory Talk view for client-server as well as other Rockwell Software support program (RSLinx, RSEmulate, RSTrend).
- Have experience in project management and contract preparation.

## **PERSONAL DETAILS**

<b>Name</b>	:	<b>YUNITA RACHMUDDIN</b>
Date of Birth	:	10 <sup>th</sup> August 1980
Gender	:	Female
Nationality	:	Indonesia
Marital Status	:	Married
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Passport Expiry Date	:	16 September 2010
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## **EDUCATION**

Educational Qualification	:	S1 (Electrical Engineering Faculty, sub study Computer, Control, & Electronic Engineering)
University	:	Hasanuddin University, Makassar
Period of study	:	August 1999 – December 2004

## **TRAININGS / SEMINAR ATTENDED:**

- English for TOEFL test, Hasanuddin University - 2003
- Basic PLC Programming & Hardware, Hasanuddin University - 2004
- RSLogix5000 for ControlLogix software programming, Rockwell Automation, Jakarta – 2007
- Factory Talk View SE project development, Rockwell Automation, Jakarta – 2007
- Basic Safety Training (JSA, LOTO, Risk Assessment, Confine Space, Working on Heights, Safe Drive Training), Inco Sorowako
- CARDAX training for operator and administrator, Sorowako – 2008
- Report Writing Class, Inco Sorowako – 2007
- Business English 2 course, Inco Sorowako – 2007
- RFID Asia 1<sup>st</sup> annual meeting, Jakarta - 2008

## **TECHNICAL SKILLS**

- Design and drafting control systems using AutoCAD
- Computer Literate:
  - Windows, MS Office, Visio, AutoCAD, MS Access, MS Project
- PLC/ControlLogix based programming using RS/FT software

## **LANGUAGE & DEGREE OF PROFICIENCY**

	<u>SPEAK</u>	<u>READ</u>	<u>WRITTEN</u>
INDONESIA	EXCELLENT	EXCELLENT	EXCELLENT
ENGLISH	GOOD	GOOD	GOOD

## **EXPERIENCE SUMMARY**

Employer Name : PT INCO, tbk  
Period of working : January 2005 - Now  
Designation : Instrument Engineer  
Engineering Experiences :

- Familiar with Standard and Code (ISA).
- Piping and Instrument Diagram (P&ID) Review and Evaluation.
- Instrument data sheet preparation.
- Instrument Index and PLC I/O List preparation.
- Bill of Material for Instrument/Electrical Bulk Material preparation.
- Instrument/Electrical Design and Drafting.
- Engineering Work Package (EWP).
- QA/QC.
- Electrical load calculation.
- PLC and ControlLogix software and HMI development.

## **PROJECT DETAILS**

### **1. Calcine Transfer Fugitive Emission Capture**

Position: Instrument & System Design Engineer

Responsibilities:

- Engineering Work Package preparation
- Bill of material and specification review
- Cable Schedule
- Instrument drawings (Block Diagram, General Arrangement, Elementary Diagram, Interconnection Diagram, Instrument Loop Diagram) design
- Instrument drawing index preparation
- RSLogix5 software development

Project Description:

The purpose of this project is to provide instrumentation and control system installation for CTS #4 Ventilation system. The main ventilation system installation includes hood, dampers, ducting and accessories will be covered in the mechanical and civil work package. The scope of instrument and control work generally includes:

1. Installation of 7 (ea) three-way solenoid valves.
2. Installation of 6 (ea) lever-type limit switches.
3. Installation of junction box complete with terminal block.
4. Run and terminate signal cables.
5. PLC software programming.

## **2. Batch Plant Computer Review**

Position: Project Engineer

Responsibilities:

- Engineering Report preparation
- Budget estimation
- Bill of material and specification review

Project Description:

Review the computer system at PT INCO's Batching Plant for possibility to install new one and how it will impact the operation. Generate report and offer solution to sponsor to improve existing system operation.

## **3. Security project phase I - IV (Cardax system and Microwave Network)**

Position: Project Engineer

Responsibilities:

- QA/QC
- Testing and commissioning
- Bill of material and specification review
- Contract preparation and review
- Project management

Project Description:

This is an on going and long term project established by PT Inco to improve Security services at almost every area in PT Inco operation, utilizing CARDAX (Card Access) and CCTV's. This project also includes installing network infrastructure, i.e. microwave and fiber optic, and building sophisticated Monitoring Room according to Australian Security Monitoring Standard.

## **4. Larona Generator #1 & #2 Replacement and Generator #3 Excitation System**

Position: Project Engineer

Responsibilities:

- Software development
- Testing and commissioning
- Bill of material and specification review
- Contract preparation
- Project management
- Customer/factory acceptance test

Project Description:

This project mainly consist of 3 parts, i.e. Larona generator #1 and #2 refurbishment, and Larona generator #3 excitation system (AVR) replacement. Main objectives are:

- Replace each generator unit automation with a PTI standard ControlLogix controller.
- Replace electro-mechanical governor with modern digital governor.
- Incorporate the Unit Automation into the HMI control and Utilities Automation network.
- Design and Install ControlLogix (CLX) unit automation cabinet similar to LGS#3 unit.
- Design above system to handle heat flow to avoid overheating
- Incorporate Governor IO into above ControlLogix system.
- Develop Atlas GE software and hardware into above ControlLogix system.
- Test and Commission

## **5. Kiln #5 Grizzly Cooling System**

Position: Instrument Design Engineer

Responsibilities:

- Engineering Work Package preparation
- Bill of material and specification review
- Cable Schedule
- Instrument drawings (Block Diagram, General Arrangement, Elementary Diagram, Interconnection Diagram, Instrument Loop Diagram) design

- Instrument drawing index preparation
- RSLogix5 software development

**Project Description:**

The discharge grizzly on Kiln #5 was cooled by high-pressure air from the plant-air system. This method of cooling provides inefficient heat transfer, using a commodity that is expensive to produce. The propose solution with this project is to provide a stand-alone low pressure, high volume air blower connected to an intake header. The exhaust from the cooling system will vent to atmosphere, as waste,

Instrument works covered in this project generally include:

- Installation of temperature sensors and transmitters,
- Installation of flow sensor and transmitter,
- Installation of junction box,
- Installation of PLC analog I/O module,
- Run and terminate signal and power cable,
- RSLogix5 software development,
- Test and commissioning,
- Mark-up drawings as built.

## **6. Fire Protection System at Project Refocus Building**

Position: Project Engineer

Responsibilities:

- Engineering Work Package preparation
- Bill of material and specification review
- Drawings (Block Diagram, General Arrangement, Elementary Diagram, Interconnection Diagram) design
- QA/QC
- Test and commissioning

Project Description:

The scope of work generally includes:

- Installation of electronic fire protection system consists of smoke detectors, manual pull stations, alarm bell, and indicating light.
- Installation of emergency lights.
- Installation of exit sign lamp.
- Installation of fire extinguishers

## **7. Fiber Optic and Telephone Cable Installation to Enggano Camp**

Position: Design Engineer

Responsibilities:

- Cost estimation
- Engineering Work Package preparation
- Bill of material and specification review
- Layout drawing
- HAZOP review
- Contract preparation
- QA/QC

Project Description:

Generally, work scopes covered by this project are:

- To run 12/C Single-mode Fiber Optic cable approx. 4 km, overhead through existing and new (3 ea) poles from FO junction box (FOIC-1) to EMD office at Enggano camp.
- To run 12/C Single-mode Fiber Optic cable approx. 100 mtrs, overhead through existing poles from EMD office to PPI office at Enggano camp.
- To run 25-pr telephone cable approx. 150 mtrs, overhead through existing poles from EMD to PPI office at Enggano camp.

## **8. Balambano Powerhouse AC Upgrade**

Position: Instrument & System Design Engineer

Responsibilities:

- Cost estimation
- Material specification review
- Instrument drawings (Block Diagram, General Arrangement, Interconnection Diagram, Instrument Loop Diagram) design
- HMI software development using RSVIEW32

Project Description:

Balambano Hydro Power Generation Plant was built in 4 (four) stories building of main services, up to down, that is generator floor, turbine or fan floor, spiral case or pump floor and tube case floor. These all floors are consisting of some of the critical equipments and control panels such as: excitation control panels, governor control panel, etc. which are, very sensitive to the change of temperature. The normal temperature for panel control shall be around 22 °C to 25 °C. It is reported there were several occurrences that equipment trip due to high temperature.

The current air temperature on entire floors were measured and observed between 29°C to 30 °C. The temperature in the turbine feed even higher more than 38 °C. The performance of the fan is recently decreased and optimally can only cover half of the area.

This condition raised the following problems:

- The fan can not cover the demand of cooling rate and flow for entire floors.
- The existing supply fan can only cover half of the area, which are subjected not for critical equipments or panel controls.
- The people who work in these areas could not endure optimally when they are working within period of 2 up to 3 hours due to high temperature. This condition is experienced not comfortable to work.

Based on above conditions and problems generated thereby, additional air conditioning services is significantly needed to supply adequate flow of cooling, especially for control panels and equipments.

So the main objectives of this project are:

- To provide the proper flow rate of cooling in the area of generator floor, turbine or fan floor, spiral case or pump floor and tube case floor, so that, the equipments and panel controls can operate for their optimum service time.
- The workers who are working everyday in particular/certain area need the additional air conditioner to get comfortable temperature.
- The air conditioning equipment shall be low operating cost, easily maintained and shall be similar to the Larona air conditioning system.
- Modify the existing fresh air supply fan system to the area.

I herewith certify that all statements above are correct and true.

Sincerely Yours,

**Yunita R., ST**

