PRASATH M

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SUMMARY

- Extensive work experience and proficiency in the area of SIEMENS based PCS7, H-Stations, PLC Systems, HMI and Industrial Communication networking for different industries such as Automotive, Manufacturing, Power Plants, Steel Plants, Solid Waste Treatment and Oil & Gas

CAPABILITIES

- PLC, HMI programming & software development
- PLC & HMI system configuration & design
- PLC Panel Electrical wiring and Relay Logic
- Responding to customer queries & interactions.
- R&D and new functionality testing of latest software and hardware system
- Conducting Factory Acceptance Test (FAT), Site Acceptance Test (SAT),
- Commissioning & troubleshooting for new & existing systems.
- Project Co-ordination and Documentation
- After sales and technical support.

TECHNICAL EXPERTISE

- Siemens S7-200, S71200, S71500, S7-300 and S7-400's CPU and signal modules
- Siemens S7-400H Hot Redundant and High availability systems
- PID controls, Simatic Microbox IPC, Sinamics Drives
- ET200M and ET200S, ET200SP
- Siemens WinCC, WinCC Flexible, ProTool, IFIX V5.1
- MPI, Profibus, Modbus and Ethernet communication
- ET200M-Stand alone and Redundant for Remote IO's
- RS Logix 5000
- Operator and Touch panels
- Auto CAD (electrical)
- Kalkitech with IEC61850
- Software Redundancy (S7 300)
- GAMP
- Six Sigma (3.4)
- SQL server 2008 R2
- MES Siemens
- P&F Barrier programming
- Pilz Relay

EDUCATION

Bachelor of Engineering in Electronics and Instrumentation   May 2010 - May 2014
Valliammai Engineering College, Chennai

PROFESSIONAL EXPERIENCE

Organization: United Oil and Gas Engineering (P) Ltd, Chennai
Designation: Project Engineer   May 2014 – Oct 2016

Organization: Evio (P) Ltd, Mumbai
Designation: Project Engineer   Nov 2016 – May 2017

Organization: Glatt System (P) Ltd, Pune
Designation: Automation Engineer   May 2017 – Till Date

GLATT SYSTEM MACHINES COMMISSIONING AND IMPLEMENTATION

1. Fluid Bed Dryer GFB Pro 300
2. High Sheer Granulation HSG pro 800
3. Glatt Coater GCSi 700
4. GFB + Wurster Coater
5. GFB + Top spray
6. PCS System

GENERAL FUNTION AND RESPONSIBILITIES

The control system consists of a PLC for the machine control functions, a Personal Computer (PC) with the SCADA software "Glattview" and a touch-screen panel PC working as thin client to operate the machine. The PLC and the personal computer are in permanent contact exchanging information. The SCADA downloads nominal values to the PLC and receives all actual parameters and values from the process. Features of Glattview system are batch reports, recipe handling, access right level handling and graphical user interfaces (GUI).

The PC System has a graphical user interface based on Microsoft Windows©.
It is possible to operate most of the functions by touch operation. The color of the symbols on the operator screen will indicate the actual status of the machine functions.

A function can only be activated, if the machine status allows the required action and the user has the required security permissions. If one of these functions is not fulfilled, the function will be interlocked and the user gets notified by a user guide.

The user guide (pop-up) describes in plain text, why the selected function cannot be executed or what actions are to be done before. If the security permission is not given, it will be displayed on the screen.

There are pictures for each PID-controller loop, where the controller parameters are indicated. Within this picture it is possible to adjust the PID-controller by modifying the P, I- or D-value.

KEY RESPONSIBILITIES

1.PLC Programming and HMI/SCADA Development

2.Customer Requirements Implementation and Commissioning

3.CAPA and CCN Document Preparation.

4.Instrument Calibration and Complete process management

5.TOC, QPP, HDSP, HATP, ATPIO, FS and OQ

STARCH COOKING SYSTEM FOR SATIA PAPERS

The project involves the complete control of starch cooking system at the Satya papers, Punjab. The system controls a single starch comprising of 6 storage tanks, 22 valve chambers, 8 PID valves, 18 booster pumps, Communication to Emergency shutdown systems.

The control system consists of 1 numbers of Siemens S7 1500 – ET 200S Controller, 1 HMI. The communication network comprises of Ethernet.

Overall Scope of Work:

Application Engineering, Functional and Detailed Hardware and Software Design and Testing and Factory Acceptance Test and Site Acceptance Test.

Responsibilities:

- Worked directly with end-users for Requirement Gathering
- Application Engineering and design of System Architecture and Networking
- Development of High Level Functional Design Specification
- Development of Detailed Design Specification Documents
- Development of Program in Ladder
- Development of Control Logic
- Development of HMI
- Testing and Modification of Software Logic
- FAT & SAT

Environment

- SIMATIC STEP 7 TIA V13.0
- SIMATIC KTP 1000 Wincc Flexible 2008

Duration
- 1 months

PRETRETEMENT+UF+RO+DM WATER TRETEMENT PLANT-TNPL, MANAPARAI

Ministry of Water, TNPL is implementing the Privatization of Water Treatment Plant Management Facilities. The project involves one common control panel plc housing system provided to perform automatic control, Data Acquisition, the protection and sequential logic control for entire WTP.

The control system consists of 2 numbers of Siemens S7 412 – 5H hot redundant Controller and visualized using WinCC, 2 Operating Stations, Servers and 6 Client terminals with 3 Emergency shutdown systems incorporating Siemens PCS7 for control. The communication network comprises of redundant Ethernet and Profibus.

Overall Scope of Work:

Application Engineering, Functional and Detailed Hardware and Software Design and Testing and Factory Acceptance Test and Site Acceptance Test.

Responsibilities:
- Development of Control logic and SCADA Visualization
- Report generation
- Networking and connection establishment between third party devices and other PLCs
- Testing and Client acceptance
- Documentation and training
- Third Party communication with HONEYWELL DCS

Environment
- SIMATIC MANAGER V5.5 SP2.
- SIEMENS WinCC V7.3

Duration
- 4 months

ETP & STP-TVS SRICHAKRA-MADURAI

TVS SRICHAKRA ETP and STP plant is fully process automated with siemens automation systems. There are more than 78 Pumps and 33 Valves 7 PID VFD.S7 1200 plc and visualized using WinCC.

GSM Module includes integrating the PLC monitoring and archiving critical real time data in order to identify problems thereby increasing the plant productivity.

Overall Scope of Work:

Application Engineering, Functional and Detailed Hardware and Software Design and Testing and Factory Acceptance Test and Site Acceptance Test

Responsibilities:
- Connecting of communication processors and testing of its communication with GSM module
- Customized programming for sending critical data to the Client.
- Testing and validation of PLC and PID Tuning
- Commissioning and hand over
- Documentation and training

Environment
- SIMATIC STEP7 TIA V13.0
- SIMATIC WINCC V7.3
- SIEMENS GSM Module with Antenna

Duration
- 2 months

WTP RO-DHARWAR

Nectar beverages (p) ltd is one of the oldest Pepsi and cool drinks company in India. There are more than 58 Pumps and 19 Valves 4 PID VFD.S7 1200 plc and visualized using WinCC flexible 2008.

The control system consists of 1 numbers of Siemens S7 1200 Controller, 1 HMI. The communication network comprises of Ethernet

Overall Scope of Work:
Application Engineering, Functional and Detailed Hardware and Software Design and Testing and Factory Acceptance Test and Site Acceptance Test.

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Responsibilities:
- Design and development of Logic diagrams and Logic blocks.
- Programming of process control.
- Testing, commissioning, training & Hand-Over.
- Post Commissioning Support

Environment
- SIMATIC STEP7 TIA V13.0
- SIMATIC WINCC FLEXIBLE 2008

Duration
- 1 month

CONVEYOR BOTTLE FILLING SYSTEM-CHENNAI

The Chennai based SNJ group, a leading manufacturer of Indian made foreign liquor, is diversifying in to beer manufacturing. The plant is automated using non-redundant S7 300 PLC and visualized using WinCC and WinCC flexible software.

In a conveyor system, stepper motor is used. Our system includes 25 number of sensor. In the filling system the plc get the sensor feedback and control the solenoid valve timing as well as control the conveyor belt.

Overall Scope of Work:
Application Engineering, Functional and Detailed Hardware and Software Design and Testing and Factory Acceptance Test and Site Acceptance Test.

Responsibilities:
- Commissioning of the system
- Logic and scada screen modification as per client's request at site
- Testing the system functionality and stability
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Environment
- SIMATIC WinCC V7.0
- SIMATIC MANAGER V5.4 SP2
- WinCC Flexible 2008 SP2

Duration
- 1 month

CAR BODIES PRODUCTION WITH CONVEYOR SYSTEM THROUGH ROBOT-CHENNAI

Grupo antolin is car bodies built a new two level production building to hundi, Chevrolet etc. The production line uses up to 15 robots. The complete body production line is divided into 20 cells. Profinet used to transfer the data, enabling flexible configuration of network topologies. Conveyor system also transport material between cells in different production units.

This plant uses two independent controllers one is the non-redundant CPU S7 300 system. The second is SIL3-rated safety control system. Here safety function such as emergency stop, protective door contacts, and loading/infeed area equipped with safety guards, as well as safety robots and safe drives, must be taken in to consideration.

Overall Scope of Work:
Application Engineering, Functional Hardware and Software Design, Software Development, Testing

Responsibilities:
- Scada screen development for the system
- Alarm generation and trending
- Profinet TCP/IP communication
- Testing, commissioning and hand over of the system

Environment
- SIMATIC WinCC V7.0
- SIMATIC MANAGER V5.5

Duration
- 3 months

DEINKING CELL PLANT – UTHRAKANT STATE KATYAYINI PAPER MILL LTD

Involves, deinking cell is used to remove the ink from paper pulp. The flotation cell is composed of 5 super imposed elementary cells, each operating an aeration phase, a collecting phase and a separation phase.
In feed pump with ink particles are sent to deinking cell and processed pulp will be from ink particles and the pulp is taken into paper production.

Overall Scope of Work:

Application Engineering, Functional and Detailed Hardware and Software Design and Testing and Factory Acceptance Test and Site Acceptance Test.

Responsibilities:
- Logic Development for both PLC and SCADA
- Alarm generation and trending
- Profinet TCP/IP communication
- Commissioning at site
- Training and documentation

Environment
- SIMATIC WINCC FLEXIBLE 2008
- SIMATIC STEP7 TIA V13.0

Duration
- 1 months

SEA WATER TO TREATED WATER, GUJARAT

Ministry of Water, Gujarat GHCL is implementing the Privatization of sea water to treated water Services Management Facilities. The project involves one Sea Water Management Centre (SWMC), including a Waste-To-Energy Plant (WTE) for twenty years operation. The SWRO Plant includes four section like PT, DM, RO and chemical storage.

The design, hardware and software for the system conforms to specifications, codes, standards and rules of good practice and according to the ministry law and regulation, American Standards, ISO Standards, European Standards, DIN Standards and specifications. The distributed control system shall operate (24h/ 7 days) without shutdown.

Overall Scope of Work:

Application Engineering, Functional and Detailed Hardware and Software Design and Functional Testing

Responsibilities:
- Logic Development for both PLC and SCADA
- Profinet TCP/IP communication
- Report generation
- Testing and Client acceptance
- Documentation and training

Environment
- SIMATIC MANAGER V5.5 SP4.
- SIEMENS WinCC V7.4

Duration
- 2 months

30MLD WASTE WATER TREATMENT FACILITY PLANT, GUJARAT(ANJAR)

Waste water treatment systems consist of collection, transport and treatment of domestic waste water along with its safe disposal. It thus became necessary to establish centralized as well as decentralized domestic sewage treatment plants. These plants are a vital component of infrastructure planning and development of any community. Much emphasis is now being provided on constructing adequate capacity of high performance sewage treatment plants.

The control system consists of 1 numbers of Siemens S7 412 Controller, 1 scada. The communication network comprises of Profinet. This project consists of 4 Rio panel.

Overall Scope of Work:
Application Engineering, Functional Hardware and Software Design, Software Development, Testing

Responsibilities:
- Programming and scada screen development.
- Software redundancy testing.
- Pre FAT testing
- Commissioning at site
- Training and documentation
- Profinet Drives commissioning (Siemens)
- Modbus RTU Drives commissioning(Danfoss)

Environment
- SIMATIC MANAGER V5.5 SP4.
- SIEMENS WinCC V7.3

Duration
- 1 month

PERSONAL DETAILS

Name   : Prasath M
DOB   : 10th Jun 1993
Marital Status : Bachelor
Languages Known : To Speak – English, Tamil
                   To Read and Write – English, Tamil, Telugu(Read)
Mother Tongue   : Tamil
Passport   : L 2261387
Current Location : Chennai, Tamil Nadu
Total Experience : 4 years

Experience in Industrial Automation/Control Systems Domain: 4 years.