



## SURULI KUMAR. S

Plant Maintenance | Project Management | Instrumentation & Control | Automation

*Result-oriented professional with proven career in conceiving & implementing effective strategies that can add value to the organization through rich experience and excellence*



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### Core Competencies

#### Project Management

Instrumentation & Control / Automation

Erection & Commissioning

Preventive / Breakdown Maintenance

RCA (Root Cause Analysis)

Spares Procurement & Management

Team Training & Development

Team Building & Leadership



### Profile Summary

- Proven excellence in offering **17 years** of experience in instrumentation & maintenance operations, Automation, managing erection, planning, commissioning, instrumentation & maintenance operations
- Presently working as **Deputy Manager – Instrumentation**, with **Sterlite Copper, Vedanta Ltd., Tuticorin, Tamil Nadu**
- Technical skills entail exposure in instrumentation with hands-on experience in **Automation through DCS, PLC and Industrial Instrumentation**
- Control and Instrumentation** in various process equipment such as **Chemical Reactor, Evaporator, Vacuum Crystalliser, Belt and Bag Filters, Centrifuges, Driers, Distillation columns, Stripper, Scrubber, Boiler, Smelting Furnace, Boiler, Turbine, ESP and related equipment in Chemical, Metal, Power and other process Industries.**
- Expert in conducting tests & inspections to ensure operational effectiveness of systems; **planning & effectuating maintenance plans**
- Experience in advance planning for **resource mobilization, manpower deployment and rendering of technical support**; ensured execution of projects within time, cost & budgetary parameters
- Exposure towards Kaizen**; taking measures for enhancing the capacity of safety and maintaining the safety limits in smooth running of the plant
- Drove process improvement by implementing **Kaizen, 5S & TPM activities**; track record in coordinating, planning and implementing changes to **machinery and process methodology** & control systems and reporting
- An effective communicator with **excellent relationship management skills** and strong problem-solving & organizational capabilities.



### Soft Skills

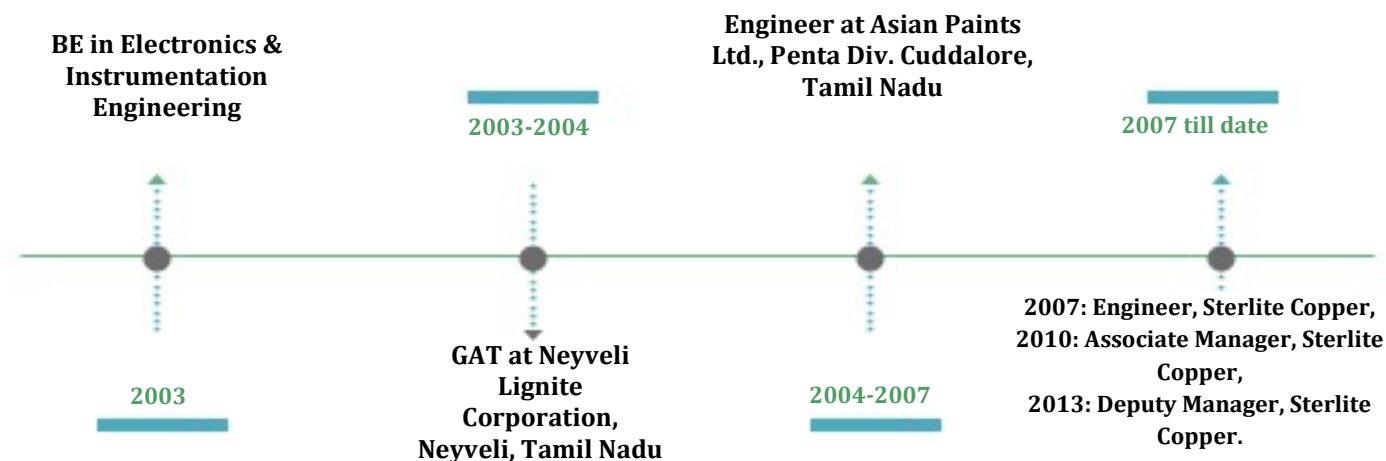


### Education

- BE in Electronics & Instrumentation Engineering** from Kamaraj College of Engineering & Technology, Virudhunagar, affiliated to Madurai Kamaraj University in 2003 with 77.52%



## Career Timeline



## Significant Highlights

- Orchestrated automation of all 4 Converter Punching Machines
- Steered improvements, modification and projects in Twin Caster; installed feedback for proportional valves in Hydraulic Oil Circuit and attained reduction of breakdowns in Twin Caster
- Increased casting rate from 90 TPH to 105TPH (increasing from 98TPH to 105TPH, was awarded 3rd best CIP 2015-2016, Gold Award in CCQC 2016 & Excellence in NCQC 2016)
- Reduced rejection of anode (Weigh Ladle Pouring Profile Optimisation and Wheel Speed Optimisation)
- Increased availability of ladle weighing system by upsizing load cell with 4.7T capacity
- Coordinated during Green Tribunal Visit in 2013, for the Stack SO<sub>2</sub> analyser calibration procedure to the panel
- Increasing Sulphuric Acid Loading Rate from 89 to 100 MT/Hr
- Led several Kaizen implementations in Cathode Stripping Machine, Anode Preparation Machine and Anode Scrap Washing Machine for process improvement and reduction in cycle time
- Installation of non-contact optical analysers for SGS#1 and SGS#2 stack SO<sub>2</sub> measurement
- Commissioned Secondary Scrubber Bag House in DCS - Yokogawa CS3000 & Converter ESP in DCS- Yokogawa CS3000
- Planned on-time safe execution and shutdown maintenance of DCS-Yokogawa CS3000 in the Tuticorin Complex during major shutdown in 2008 and 2010 and shutdown maintenance of Secondary Smelter in 2014
- Conducted the following maintenance activities:
  - Yokogawa CS3000 DCS version upgradation from V3.05 to V3.08, and then to Centum - VP
  - Interlinking of Ambient Air Quality Monitoring System with DCS-Yokogawa CS3000 and to Air Care (TNPCB)
  - Automation of Baryte Spray System in Twin Caster in AB Micrologix 1200 PLC
  - Installation and commissioning of Converter Position Monitoring System in AB Micrologix 1500 PLC
  - Interlinking of Secondary Smelter DCS Yokogawa CS300 with Proface HMI
  - Installation of RSview32 SCADA System for Converter PLCs
  - Interlinking of 4 no's Converter PLC Micrologix 1500 with DH485 Protocol Communication
  - Upgradation of Anode Furnace Rotation PLC from SLC series to Micrologix 1500 series and installation of RSVIEW SCADA for data acquisition
  - Installation of ISA Roof Temperature Profile Monitoring

**Casting Rate increased from 90 TPH to 105TPH**

**Automated all 4 Converter Punching Machines**

**Star of Business for 2009-2010**

**Automation of Reaction, Formaldehyde and Stripper**



## Work Experience

**Since Nov 2007: Sterlite Copper, Vedanta Ltd., Tuticorin, Tamil Nadu**

### Growth Path:

2007: Engineer, Sterlite Copper,  
2010: Associate Manager, Sterlite Copper,  
2013: Deputy Manager, Sterlite Copper.

### Key Result Areas:

- Spearheading maintenance of instruments in the area of operations for improvement of availability and reliability
- Preparing and reviewing of ECA (Equipment Criticality Analysis) and FMEA (Failure Mode and Effects Analysis)
- Scheduling and reviewing Preventive Maintenance (PM), Calibration & Refurbishment
- Updating of ISO9001, 14001 and 18001 documents, ensuring compliance and representing the department in audits
- Performing breakdown analysis and taking corrective actions for breakdowns using RCA (Root Cause Analysis)
- Planning execution of improvement, upgradation and automation projects
- Steering Spares Management through VED Analysis (Vital Essential Desired)
- Ensuring zero incidents and enhancing safe work practices through HIRA (Hazard Identification and Risk Assessment)
- Implementing and reviewing 5S practices
- Compiling various business excellence standards and certifications
- Establishing project review, monitoring and status reporting procedures to accurately report progress of the project to the stakeholders and end user clients

### Previous Experience

#### **Jul 2004 to Nov 2007: Asian Paints Ltd., Penta Division, Cuddalore, Tamil Nadu as Engineer - Instrumentation**

##### **Projects Undertaken:**

- Automation of Reaction, Conversion of Allen Bradley Mini PLC 2 to Siemens Siematic S7 PLC
- Automation for modification of Formaldehyde Plant (mesh to granule catalyst) with Siemens Siematic S7-300 PLC
- Erection & commissioning of Instrumentation in Formaldehyde Stripper and Distillation Column with Siemens Siematic S7-300 PLC
- Implementing Control Logics for off Gas Firing in Boiler using relay logics
- Erection & commissioning of instruments for Tri Penta removal project using ABB Single Loop Controller

#### **Nov 2003 to Jun 2004: Neyveli Lignite Corporation, Neyveli, Tamil Nadu as Graduate Apprentice Trainee**

- Unit 6, Thermal Power Station 2 - (7 x 210 MW Lignite Fired Power Plant)
- Control and Instrumentation Department

### Knowledge Purview

- Yokogawa DCS Platform – Centum VP and CS3000 Platform
- Yokogawa CS3000 and Centum VP DCS and Exaquantum
- Siemens PLC – Siematic S7 Platform and Win CC
- Siemens S7-300/400 PLC, Step 7, WINCC, WINCC Flexible and Protocol Scada
- Allen Bradley PLC – Micrologix 1500, 1400, 1200 Platforms, Control Logix Platform
- Flex Logix and LOGIX5555 PLC, LOGIX500, LOGIC5000 Programing
- RSVIEW32 Software
- Emerson, ABB SO2 Analyzers and OPSIS DOAS Non-contact SO2 Analyzers

### Personal Details

**Date of Birth:** 27<sup>th</sup> May 1982

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