



---

## PROCESS & QUALITY ASSURANCE MANAGER

---

### CAREER OBJECTIVE

A highly motivated and results-oriented Metallurgical Engineer with 10 years of experience in the Aluminium and Steel Industry. Proven track record in Quality Assurance, Research & Development, and process improvement. Expertise in ensuring quality standards, reducing rejections, and enhancing process efficiency. Seeking a challenging role to contribute to a reputable organization.

### CAREER HIGHLIGHTS

Adept at managing large-scale operations, streamlining processes, and implementing innovative solutions that reduce costs and improve product quality.

Expert in the Aluminium and Steel Industries, with hands-on experience in Cold Rolling Mill and Quality Assurance.

Proven track record in process improvement, quality control, and customer complaint resolution.

Certified in Lean Six Sigma methodologies with expertise in TPM and TQM.

Certified in ISO 9001:2015, ISO 14001:2015, and ISO 45001:2018. A strategic leader with a focus on innovation, safety, and sustainability, delivering high-impact results in dynamic, high-pressure environments.

### PROFESSIONAL ACCOMPLISHMENTS

- Developed and implemented process of Rolling of hard Alloy-AA5754-H111 at Hindalco Industries Limited, resulting in a reduction in recovery loss by 2.5% for Arbor fold and monthly cost savings of 12L/month.
- Reduced oil carryover/oil stain in Hard Alloy by Venturi installation at Hindalco Industries Limited, resulting in cost savings on account of NC reduction by 2% and savings of 7.5 L/month.
- Implementing composition tuning has led to a 5% reduction in customer complaints related to bursting in FSCL.
- In 2021, honored with the Pride Award at Hindalco Industries Limited for successfully eliminating edge blooming in the SRC product.
- Decrease energy consumption and Cost saving of 5 L/months in CSCL stocks for Cycle modification.
- Achieved a 2% increase in product yield by minimizing the number of passes required for the SRC-Semi rigid container.
- A new modified MRL oil lubrication was developed in collaboration with the Quaker Houghton team to address the solution patch issue in tin electroplating, resulting in a 0.8% reduction in NC and monthly savings of 16.8 L/month.

### MANAGERIAL EXPERTISE

#### • Team Leadership:

- Train and guide QA Personnel on SOPs for existing, new customers as well as new products applications; review for enabling them to take correct online decisions.
- Coordinate, guide and monitor different internal as well as cross functional process audit to align the process as per the required business dynamics

#### • Process Improvement:

- Reduce internal rejections and customer claims through root cause analysis and implementation of effective Corrective actions.
- Identify the critical parameters and work on improving Process Capability Index Cp, Cpk.
- Determine criteria and methods needed to ensure that both the operation and control of these processes are effective.
- Aligning operational excellence initiatives to improve Product and Process Quality.
- Keeping track of changing customer need and suggest improvement in product and process.
- Develop and implement process control strategies to ensure consistent product quality.
- Analyzing and optimizing cold rolling processes to improve efficiency, product quality, and reduce costs.
- Monitoring and controlling process parameters respect to CIV/COV.
- Coordinates with the Maintenance and QC department for effective operation of the mill with optimum supplies to satisfy internal as well as external customers.
- Preparing reports on process performance, quality metrics, and improvement initiatives.

- **New Product Development:**

- Led teams successfully develop the alternative grade of Steel for Can/Bowl manufacturing with Tinplate grade, reducing Complaint ppm by 10%.
- Successfully guided teams in developing the grade for aerospace applications AA2219 and managed the planning of the rolling schedule.
- Collaborate with product application teams to design and develop CBCL (Can body stock) products for diverse applications.

- **Quality Control:**

- Ensure implementation of SOP, control plans on shop floor to produce product first time right and every time right.
- Analyze findings, assess potential problems and determine countermeasure along with the operation/production team to improve process quality.
- Monitor internal and external rejections and their analysis for control improvement.
- Analyze experimental data and prepare technical reports summarizing research findings.
- Analysis of non-conformity of all products on a daily basis.
- Co-ordinate with operations and other departments to implement CAPA based on RCA.
- Discussion of NC'S with Finishing line /CM/HM with root cause every day and its disposition.
- Monitoring of the incoming quality of Ingots and other critical raw materials.
- Disposition of non-conformity ingots.
- Regular observation on profile & flatness came into our critical alloy through the IBA System.
- Preparing reports on process performance, quality metrics, and improvement initiatives.

- **Training:**

- Provide job/awareness training to all concerns based on customer feedback/internal investigations finding/process audit input/customer requirement.
- Provide regular training and feedback to physical and chemical lab personnel for enhancing their skill.
- Conducted cross-department training on Process, Quality, Products, Certifications, and Applications, and operational knowledge across the organization.

## **TECHNICAL EXPERTISE**

- **Process Engineer: Cold rolling Mill & Annealing furnace**

- Hands-on experience with Cold Rolling Mill and Annealing Furnace operations.
- Experience in development of high Ra roll through short blasting roll grinding.
- Conducted benchmarking and process variation analysis to identify and resolve critical process and product issues, addressing root causes within the manufacturing process.
- Ensuring that the rolled products meet quality standards and customer specifications.
- Compiled technical data and utilized Process Control Monitoring (PCM) and Statistical Process Control (SPC) tools to analyze equipment performance, resolve customer complaints, and implement corrective and preventive actions.
- Managed process documentation (A3/Infinity Loop Notes) and collaborated with production, maintenance, and quality departments to execute process changes. Coordinated with group technology and development teams to deploy improvement projects aligned with World Class Manufacturing (WCM) standards.
- Led strategic planning to integrate R&D processes into business operations, applying scientific theories to enhance technical development. Managed performance metrics, set measurable goals, and identified process improvement opportunities focusing on waste elimination, safety, cost reduction, product quality, and productivity enhancement.
- Provided leadership to engineers and technicians, focusing on long-term strategic development for process enhancements.
- Institutionalizing 5S, Abnormality elimination, Basic conditions, Kaizen, Quality circle etc so that usage of 7-Problem solving tools (7QC tools) are practiced by all levels.
- Spearheaded production planning and organizational activities, participating actively in Health, Safety, and Environment (HSE) initiatives, accident investigations, and PPE briefings to maintain a safe working environment.

- **Quality Assurance: Cold Rolling mill & Finishing Line**

- Looking after the process and Quality of 6HI reversing rolling mill.
- Handling shifts related NC and mill abnormality.
- Looking after the diversion related activity for 6HI, BAF and temper mill.
- Involve in Annealing Cycle trails, cycle stabilization activity.
- Skills in IBA analysing for monitoring mill parameters as well as handling surface inspection systems.
- Establish and maintain operation practices, control plans, quality standards and FPY monitoring.
- Supports Process in rolling activities and development of new processes and products.

## • Research & Development:

- R&D Lab-Metallographic, Tensile testing, Anodizing Testing, Lab facility up gradation and kaizen activities etc.
- Assigned to create process routes for various alloys based on the designated temper specifications.
- Develop and test new materials to meet specific customer requirements and industry standards.
- Analyze material properties using various analytical techniques (e.g., SEM, microscopy, spectroscopy, mechanical testing).
- Involve in various coating (Chrome and Tin) grade material development along with lacquering and printing application for various edible and paint cans.
- Evaluate and optimize existing manufacturing processes (rolling, heat treatment) to improve efficiency, reduce costs, and enhance product quality through benchmarking of competitive samples.
- Collaborate with product development teams to design and develop new steel or aluminum products for diverse applications.

## CAREER PROGRESSION

- **TATA STEEL LIMITED, Jamshedpur, India**  
**Process Manager Temper Rolling and Coating Line – From March 2023-24**  
**R&D and mechanical Lab-From April 2024**

**Company Profile:** A dominant player in tinplate industry, Tata Steel's Tinplate Division serves packaging needs of wide spectrum of customers for packaging of food products like fresh and processed edibles & beverages and in non-food applications such as paints, aerosol, battery jackets and closures.

**Products:** Electrolytic Tinplate (ETP) & Tin free steel (TFS) in sheets & coils. Branded oil cans -PAXEL (15kg/litre oil cans) from Service & Solution Partner centers. Lacquered and printed sheets from state-of-the-art solution center.

- **HINDALCO INDUSTRIES LIMITED, Sambalpur, Odisha (India)**  
**Quality Assurance Engineer (Finishing Line-Slitting line (Daniel Slitter, Fini CTL), Tension leveler), Nov 2017 – Nov 2019**  
**Process Engineer (Cold rolling Mill), December 2019 –March 2023**

**Company Profile:** Hindalco Industries Limited is the metals flagship company of the Aditya Birla Group. A US\$28 billion metals powerhouse, Hindalco is an industry leader in aluminum and copper. In India, the company's aluminum units across the country encompass the gamut of operations from bauxite mining, alumina refining, coal mining, captive power plants and aluminum smelting to downstream rolling, extrusions and foils. Today, Hindalco ranks among the global aluminum majors as an integrated producer and a footprint in 9 countries outside India.

- **TATA STEEL BSL, Odisha, India**  
**Assistant Manager (Process Engineer for Cold mill and temper mill), July 2014 - Nov2017**

**Company Profile:** Tata Steel BSL Limited is India's fifth largest flat steel producing company with an existing steel production capacity of 5.6 million tons per annum (MTPA) as on March 31, 2018. It has India's largest Cold Rolled Steel Plant and is one of the largest suppliers of automotive grade and high carbon special steel in the country.

## PROFESSIONAL QUALIFICATIONS

- **Bachelor of Technology (Metallurgical Engineering), 2014**
  - BIT Sindri Dhanbad
  - Percentage: 79.3%

## SOFTWARE APPLICATIONS

- SAP
- Oracle
- Minitab/Statistica
- MS Office

## RECOGNITION

- Received Pride Award for the Elimination of Edge Blooming in SRC Product at Hindalco Industries Limited.
- Received Aspiring Engineer Award for Addressing the issue of Quench and Solution Patch in Tinplate and Chrome coated Product at Tata Steel-Tinplate division

## HOBBIES AND INTERESTS

- Cooking
- Watching Movies
- Reading Poetry and Sayri

## PERSONAL INFORMATION

- Languages Known: English, Hindi, Bengali
- Marital status: Single
- Nationality: Indian
- Date of Birth: 15 January 1992
- Passport Status: C1576052