



## KUMARESAN

SENIOR MANAGEMENT PROFESSIONAL

QUALITY / PROCESS – Steel Foundry

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### Core Competencies

**Quality & Process - Product Assurance & Alpha set Moulding & All special process control.**

**Quality Audits & Compliance & Certifications and approvals.**

**QMS/EMS/OH&S Management system implementation.**

**Welding Process / Heat Treatment. & Supplier Quality**

**Moulding & Melting Production**

**Corrective actions (CAPA) & Investigation. Handling customer/Internal NCR.**

**Lean Quality Tools & Calibration**

**Costing / Feasibility study (Quality & Manufacturing)**

**NDT – RT,VT,PT,UT,MT / Inspection**

**Destructive Testing / Sand Testing/ Spectro Analysis /Image analysis**

### Profile Summary

- **Quality Assurance & Manufacturing Process professional** with **26 years** of rich experience in Quality Management, Melting ,Molding and fettling. Destructive and Non-destructive Testing, Cost Optimization, Inspection & Auditing across steel foundry; establishing Quality Management System and ensuring **Supplier, In-process and Product Quality.**
- **Heat Treatment Process Expert .**
- **Extensive knowledge of Non Destructive Testing (NDT) - RT, MT, PT, VT and UT (SNT-TC-1A Level -II )** Interpretation of castings quality as per ASTM /ASME / ISO /EN standard )
- Comprehensive knowledge of **Lean Quality Tools** like FMEA, Pareto Chart, Fish Bone Diagram and 8D Methodology and implemented **Kaizen and 5 S**
- **Implemented the QMS, EMS and OH & S Management systems; worked for obtaining certification for the same** and ensured continuous improvement by identifying the gaps in the IMS systems and driving quality production.
- **Lead Auditor –QMS (ISO 9001: 2015) and Internal auditor in EMS (ISO 14001 -2015 ) , OH &S( ISO 45001-2018) , ISO/IEC 17025:2017 ;** Excellence in conducting **process audits and inspection** to ensure stringent quality control; adapting & implementing stage-by-stage quality system to ensure adherence to technical specifications and standards to achieve customer satisfaction .
- **Coordinated to meet the production target . Monitoring the alpha set sand molding process and execution of Melt in Induction Furnace.**
- **Certified Welding Inspector;** Expertise in welding inspections, and qualification of welders , ensuring compliance with code s, standards, customer specifications
- Exhibited leadership in **identifying & verifying quality issues** or trends in the assigned product based on data , **Implementing corrective actions.**
- Responsible for **calibration of all measuring and monitoring instruments.**
- Worked independently for **PED 2014/68/EU , NORSOK , Marine , BS EN 15085 -2 and API 20A certification** for the foundry.
- Strived to maintain customer rejection at zero and internal rejection <0.50%.

### Total Experience : 26 Years - HISTORY

Aug ' 21 - Till Now self-employed - Consultant and Technical advisor to steel foundries

Apr' 18 - Mar' 21 Karmen International Pvt Ltd , Cast metals Division - D G M -Process & System

Dec'09 - Apr' 18 Karmen International Pvt Ltd , Castmetals Division - Manager -QA

Aug'08-Apr'09 Peekay Steel Casting, Coimbatore as Assistant Manager -QA

May'01-Aug'08 Ultimate Alloys Pvt. Ltd., Coimbatore as QA-Incharge

Dec'98-May'01 M/s Lakshmi Electro Smelter – Aluva, Kerala as In charge-Quality

Jul'95-Apr'98 M/s Sivananda steels Ltd., Chennai as Chemist-QA-lab

May'94-Jul'95 Samco Metals & Alloys (P) Ltd., Vellore (T.N) as Trainee Melting supervisor/Junior Chemist

## Notable Accomplishments across the Career

- Qualified foundries to ISO 9001, ISO 14001, ISO 45001, PED and Merkblat W0, NORSOK, API 20A, EN 15085-2, Marine and IBR approvals
- Developed process for critical grades like C12A, 4A, 5A, 6A, Monel, Inconel, NAB and SG
- Achieved the maximum production and dispatch tonnage.
- Managed heat treatment furnace operations and fixed Heat treatment cycles, grade wise to meet required critical casting hardness, Micro structure and Mechanical Property
- Achieved 100% customer satisfaction by managing the quality of product by process audit and system audit
- Used lean quality tools to analyze, take effective corrective action and eliminate the problems and wastes
- Credited for qualifying 20 welders in more than 25 steel grades and few Non ferrous grades (SMAW)
- Achieved Zero Customer rejections by strengthening the molding and melting practices
- Performed Quality Costing for the organization and saved expenditure by 25%
- Estimated price for new material grades and performed Feasibility study for new enquiries.
- Implemented new techniques and process methods to reduce wastage by controlling, recycling and reusing

## Work Experience

**May 21 - Till now self employed -As a consultant for steel foundries.**

**Apr'18-Mar'21 Karmen International Pvt. Ltd., Cast Metal Division, Chennai**

**Growth Path:** Dec'09-Apr'18 Manager - Quality /Apr'18-Mar'21 Deputy General Manager- Systems and Process.

### Key Result Areas:

- Spearheaded QA team and managing 12 engineers for the entire quality assurance functions involving New Products, Customer Quality, Supplier & In-Process Quality. Managed production team in molding and melting to meet customer requirement.
- Prepared/Implemented SOP for inspection and testing of all incoming raw materials, in process and finished products
- Identified, developed & selected new suppliers and implementing Quality Management System at supplier's end.
- Conducted inspections & audits and monitoring activities; preparing observation and non-conformance reports, if required; steered internal audits to ensure system, product & process effectiveness
- Facilitated quality excellence through quality management tools like Lean, Quality, 7 QC Tools, 8 D Methodology Zero Defect and Kaizen.
- Handled internal & external customer complaint investigation, corrective and preventive actions and CAPA are initiated for continual improvement
- Formulated and managed the development and implementation of QA/QC goals, objectives, policies, procedures and systems as defined by management to meet and ISO requirements, internal benchmark with business context and company profitability, including budgetary control
- Ensured all supplier are evaluated. PPAP and APQP records are documented
- Updated quality manual time-to-time with respect to the changes or modification in the process
- Supervised job according to quality control procedure and applied international standards & codes
- Segregated & managed defective products for next process till satisfactory remedial actions are taken
- Performed root cause analysis for the customer complaints and internal non-conformances
- Managing entire gamut of QA work encompassing:
  - Conducted Feasibility study and Order Review customer wise
  - Prepared Quality plan, CCP, PFD, FMEA item wise and QTP order wise.
  - Approved all the inspection documents from receiving, in process to final product
  - Prepared all testing procedures, SOP, PSRM, Inspection plan, Process requirements
  - Fixed targets to reduce rejection, Reduce welding rod consumption, Reduce rework
  - Performed welding qualification as per ASME, EN, AWS D1.1
  - Statistical process control in Molding, Melting, Welding, Heat treatment
  - Implemented the QMS, EMS and OH & S Management systems; worked for certification.
  - Conducted risk Assessment in all activities in foundry
  - Conducted R & D for new material grades to fix Heat treatment cycle and Polymer quenching.
  - Expertise in manufacturing of SG, Nickel Alloys and Nickel Aluminum Bronze Castings.
  - Approval of NDT inspections RT, MT, PT, UT, VT
  - Approval of sample castings for bulk.
  - Headed the Heat treatment Department.

## Education

- ⦿ B.Sc. (Chemistry) from the University of Madras in 1993

## Other Certifications

- ⦿ Certified Welding Inspector - Welding Research institute, BHEL- Trichy and welding coordinator as per EN ISO 14731.
- ⦿ Lead Auditor –QMS (ISO 9001: 2015) From Negeil Bohr- TUV (IRCA)
- ⦿ ASNT - SNT TC 1A Level II in RT,UT,MT,PT,VT
- ⦿ Certified Internal auditor in EMS (ISO 14001 -2015 ) and OH &S( ISO 45001-2018)
- ⦿ Certified internal auditor as per ISO /IEC 17025:2017 from TUV .

## Knowledge Purview

- ⦿ Production Knowledge(Steel Casting )
- ⦿ Steel Specification , standards and codes.
- ⦿ Feasibility study
- ⦿ Costings (Quality and Manufacturing )
- ⦿ Material Management
- ⦿ No bake continues mixer Molding Production Line Management ( Process and Quality)
- ⦿ Purchase specification for raw materials fixing
- ⦿ Incoming inspection for all raw materials
- ⦿ Preparation of all procedures for all destructive and nondestructive testing .
- ⦿ Preparation of inspection plan (Receiving /In process/Final )
- ⦿ Preparation of Quality plan (item wise ) / Quality Test plan (Order wise)
- ⦿ Lean quality Tools (FMEA, Pareto chart, Fish Bone Diagram, 8D Methodology)
- ⦿ Statistical Process Control
- ⦿ Implementation of Kaizen and 5S
- ⦿ Castings Rework / Scrap Reduction and NCR management .
- ⦿ Customer Handling and PPAP
- ⦿ Metallurgy (Steel)
- ⦿ Heat Treatment (Steel)
- ⦿ Mechanical ,Impact ,Spectro ,Corrosion ,Micro and Sand Testing Expertise
- ⦿ Process control in Molding -Alpha Set – Calibration of continues Mixer / Operations
- ⦿ Induction Melting Operations
- ⦿ Melt Charge preparation (Grade wise)
- ⦿ Welding and welding qualifications .Weld Maps and Major Weld Reports as per ASME /ISO/AWS.
- ⦿ NDT – RT, MT, PT, VT, UT
- ⦿ Identification /Evaluation of Aspects and Impacts, Hazards and Risk
- ⦿ Preparation of SOP/WORK INSTRUCTIONS.
- ⦿ Risk and opportunity Assessment department wise
- ⦿ Calibration of all instruments and measuring equipment .
- ⦿ Acid pickling and passivation
- ⦿ Documentation -ISO QMS,EMS,OH &S ,W0 & PED, NORSTOK M650 , MARINE APPROVAL , EN 15085 -2 CL-1 , API 20A , IBR and Nuclear approval as per ASME Sec III
- ⦿ Trained by reputed customers like caterpillar, komatsu, Sulzer pumps , Wabtec , Dellner .

## Residence

**Area :** Muthapudupet / **Town :** Avadi / **City :** Chennai / **State :** Tamil Nadu .