

## **NUWAN LANKESHWARA**

### **Sr Materials Engineer , Sr Quality Control Engineer**

BSc Eng SCE-KSA, MMUP-QATAR, IESL/AM-SRI LANKA, ISO9001 QMS -LA, ISO 17025 LM, SAP MM

**Email: lankagg@gmail.com | Phone: 0542852072 KSA**

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**Dear Hiring Manager,**

I am writing to express my interest in opportunities within your esteemed organization, where I can leverage my 16 years of extensive experience in the construction industry, particularly in materials engineering, quality control, and procurement.

My background includes significant contributions to large scale infrastructure development, highway projects, including roads, bridges, drainage systems, and utility networks projects across Saudi Arabia, Qatar, and Sri Lanka, where I have successfully implemented quality assurance strategies that led to a remarkable 50% reduction in non-conformance reports.

Throughout my career, I have developed a comprehensive skill set in quality management systems and standards, including QCS 2014 , KSA-MOT,ISO 9001:2015 and ISO 17025.

Key highlights of my qualifications include:

- Proficiency in materials submittals, approvals, industrial audits, and procurement, ensuring compliance with project specifications.
- Expertise in asphalt mix design (Superpave and Marshall methods), bitumen testing, and sustainable asphalt production, incorporating up to 40% RAP, plant auditing, emulsion and cutback asphalt production and testing.
- Extensive experience with concrete mix design and testing, precast concrete, polymer reinforced concrete, HDPE, GRP, structural steel, soil stabilization and CBM crusher plant managing, and aggregate testing.
- Leadership in resolving NCRs and implementing root cause analysis to maintain the highest quality standards.
- SOP and Technical report writing, failure analysis of materials, and Statical analysis of the test results.

In addition to technical expertise, I bring a strategic mindset to cost control and materials optimization, often suggesting innovative, cost-effective solutions that improve project outcomes. My experience with SAP Materials Management and knowledge of BOQ monitoring ensures accurate forecasting and procurement processes

I am particularly excited about the prospect of contributing to a reputable organization that values innovation and quality in construction. I am confident that my expertise in materials testing, mix design, and project management will be an asset to your team.

Thank you for considering my application. I look forward to the opportunity to discuss how my skills and experiences align with your needs.

**Sincerely,**

**Nuwan Lankeshwara**



# NUWAN LANKESHWARA

## Sr. Materials Engineer & QC

**Manager** [BSc Eng.(Hons), SCE-KSA, MMUP-Qatar, AMIE-Sri Lanka, ISO 17025, ISO 9001 LA, SAP MM]

**Riyadh -KSA**

### CONTACT DETAILS

✉ lankagg@gmail.com

☎ 0542852072

in [LinkedIn](#)

### EDUCATION

🔑 **Bachelor of Science in Engineering Hons. specialized in Materials Engineering**, University of Moratuwa, Sri Lanka, 2008

### CORE COMPETENCIES

- ➔ Quality Assurance Strategies
- ➔ Infrastructure Development Standards
- ➔ Highway Materials Testing
- ➔ Asphalt Mix Design and Plant
- ➔ Compliance and Regulatory Framework
- ➔ ISO 17025-IAS
- ➔ SAP Materials Management
- ➔ ISO 9001 Lead Auditor
- ➔ Sustainable Construction Practices
- ➔ Risk Assessment and Mitigation
- ➔ Performance Evaluation Techniques
- ➔ Team Leadership and Development
- ➔ Client Relationship Management
- ➔ Cross-Functional Collaboration

### KEY MEMBERSHIPS



Associate member – Institute of Engineers Sri Lanka. [AMIE-13674]



Participating member –ASTM International [MEM-2038056]



Approved Materials Engineer – MOT Saudi Arabia



Engineering Membership - MMUP/UPDA Qatar [ 23612]



IESL -Qatar Chapter Member



SCE- Member of Saudi Engineer Council

### JOB OBJECTIVE

Dynamic and results-driven professional with **16 years** of extensive experience in the construction industry, specializing in materials engineering, quality control, and procurement. Targeting to leverage expertise in infrastructure development, highway, industrial audit, materials testing, mix design, asphalt and crusher plant operation, and project management within a challenging role in a reputable organization.

### PROFILE SUMMARY

- ➔ Offered extensive experience in the construction sector, with a significant focus on quality management and materials engineering, encompassing diverse geographical exposure across Saudi Arabia, Qatar, and Sri Lanka.
- ➔ Developed a comprehensive skill set through various roles, including QA/QC management and materials engineering, with a strong emphasis on construction materials testing, industrial auditing, and project execution, leading to a well-rounded professional profile.
- ➔ Achieved notable success in the current role by implementing innovative quality assurance strategies that resulted in a 50% reduction in non-conformance reports, significantly enhancing materials production and testing frequencies.
- ➔ Showcased exceptional leadership capabilities, fostering a collaborative team environment while mentoring junior engineers and technicians, thereby enhancing overall team performance and project outcomes.
- ➔ Possess in-depth knowledge of quality management systems and standards, including ISO 9001:2015, ISO 17025 -IAS that have been instrumental in driving compliance and continuous improvement initiatives across multiple projects.
- ➔ Skilled in advanced materials engineering principles, including the evaluation of asphalt, bitumen, aggregate, concrete, structural steel, HDPE, GRP and soil performance, ensuring that all materials meet or exceed project specifications and industry standards.

### WORK EXPERIENCE

#### Consultant Materials Engineer | Dorsch Gruppe, Doha, Qatar | Dec 2020 – Feb 2024 [ 3 Years]

- Worked on the South of Al Meshaf - Road and Infrastructure Project P04 & P07.

#### Senior Materials Engineer / QC Manager / QA/QC Engineer | AJM [JH Construction WLL], Doha, Qatar | May 2016 – Dec 2020 [5 Years]

- Involved in multiple highway and infrastructure projects, including:
  - B Ring Road Project (including Steel Pedestrian Bridge)
  - Al Furusia Highway and Infrastructure Project
  - Lusail and Mesaieed Asphalt Plant & Lab

#### Construction and Materials Engineer | Bin Ajinah Group, Saudi Arabia | July 2010 – June 2013 [3 Years]

- Contributed to highway, laboratory, and plant projects, including:
  - Ras Al Khair Highway Project
  - Nairiyah–Safania Highway Project
  - Qariya-Oliya, Umaqla; Group 12 Road Project
  - Safania asphalt plant and laboratory.


#### Quality Assurance Manager | V.V Karunaratnen & Company, Sri Lanka | July 2013 – Jan 2016 [ 2.5 Years]


- Managed quality assurance for road and bridge construction projects, including road, bridge, retaining walls rehabilitation and improvements.

#### QA/QC Engineer | Sierra Construction LTD, Sri Lanka | Jan 2016 – May 2016 [5 months]

- Contributed to the Anuradhapura Substation Project, including steel structures.

## EQUIPMENT USED

AUTOCAD 

MS Office 

## PROFESSIONAL TRAINING

### Asphalt Production and Materials Optimization:

- **Use of RAP in Asphalt Production:** Evaluated the feasibility of incorporating up to 40% Reclaimed Asphalt Pavement (RAP) with rejuvenators in asphalt mixes (Qatar).
- **Emulsion Optimization:** Enhanced emulsion production procedures to meet tack coat requirements (Qatar).
- **Density Optimization:** Minimized density variation between laboratory mix and plant-produced asphalt for consistent quality (Qatar).
- **Sulfur-Extended Binder:** Implemented sulfur-extended binder in asphalt production (Saudi Arabia).
- **Asphalt Core Correlation:** Developed a reliable relationship between asphalt core results and PQI NDT measurements for improved R-value (Qatar).
- **Asphalt Mix Design:** Designed asphalt mixes using Marshall Method, MS2, and Bailey Method (Qatar).

### Soil and Backfilling Investigations:

- **Gabbro Compaction Properties:** Studied single-sized gabbro for trench backfilling, analyzing density and voids characteristics (Qatar).
- **Soil Properties Analysis:** Explored the relationship between PI/LL, CBR, and sieve analysis for soil suitability in filling applications (Qatar).
- **Trench Backfilling Materials:** Investigated limestone feasibility for sewer trench backfilling in low water table areas (Qatar).
- **Soil Stabilization:** Evaluated cement and admixture usage for soil stabilization to achieve early strength (Sri Lanka).

### Pavement and Infrastructure Development:

- **Soil Profile and Pavement Design:** Conducted quality tests (DCP, CBR) for informed pavement design (Sri Lanka).
- **Shoulder Area Assessment:** Assessed natural ground suitability for road widening through CBR and related tests (Sri Lanka).

### Trainee Materials Engineer | Consulting Engineers & Contractors Pvt. Ltd., Sri Lanka | March 2009 – March 2010 [1 year]

- Worked on the Tissa-Kirinda Road project [SBST, DBST, Bridges].

### Production Manager, Quality Assurance Executive | Korean SPA Accessories (Pvt.) Ltd., Sri Lanka | Jan 2008 – Jan 2009 [1 year]

- Managed production and quality assurance for polymer injection molding plants.

### Trainee Materials Engineer | Ashok Steel Industries (Pvt.) Ltd., Sri Lanka | Feb 2006 -July 2006 [6 months]

- Worked in the steel manufacturing plant from steel scraps to HYSD bar production.

### Key Result Areas:

#### Sr. Materials Engineer, QC Manager, ME, QA/QC:

- Analyzed quality data trends to identify improvement opportunities, ensuring targeted actions for enhancing overall project quality.
- Delivered comprehensive quality updates and performance metrics during bi-weekly and monthly progress meetings, ensuring clear communication of key insights.
- Conducted regular audits at project sites, laboratories, and industrial locations in line with ISO 9001:2015, ISO 17025 standards and client specifications, addressing noncompliance with corrective actions such as internal SORs and NCRs.
- Managed the resolution of quality defects and non-conformance reports (NCRs), ensuring that all issues were addressed and closed promptly.
- Organized and tracked KPIs, ensuring that evidence was collected and presented to demonstrate quality performance and compliance.
- Fostered collaboration with project teams, including PM, PD, SE, QA/QC, and ME, to address quality control concerns and ensure smooth project execution.
- Oversaw the final stages of project delivery, ensuring that all client handover activities were completed according to snag lists and quality specifications.
- Suggested and gained client approval for cost-effective and efficient material alternatives that improved project performance and reduced expenses.
- Led the development and implementation of comprehensive quality assurance strategies, policies, and quality plans to maintain high standards throughout the project lifecycle.
- Guided and managed a team of QA/QC professionals, providing mentorship and support, while staying informed on the latest industry trends and quality management practices.

#### Materials Engineer, QA Manager / Engineer:

- Reviewed and authorized material submittals, Material Inspection Requests (MIRs), and test results, ensuring strict compliance with project specifications while providing critical insights to stakeholders for informed decision-making.
- Analyzed material performance and failure data, conducting in-depth evaluations of Asphalt, Concrete, Soil, Aggregate, Bitumen, HPDE, Steel, GRP, and HDPE, pinpointing underlying causes of material issues and formulating targeted corrective strategies.
- Designed and supervised rigorous testing protocols across Asphalt Plants, Crushers, and PMB Plants, integrating technical specifications and cost-efficiency considerations in Asphalt and SubBase designs, following Superpave and Marshall mix design principles.
- Coordinated closely with site/plant personnel, laboratory teams, and QA/QC managers, driving continuous improvements in material quality through detailed analysis of testing outcomes and implementation of corrective actions.
- Developed and enforced comprehensive Quality Assurance, Environmental Management, and Safety Systems, ensuring robust adherence to industry standards and regulatory requirements.
- Directed operations at the asphalt plant, optimizing production processes through the strategic use of both virgin aggregates and Recycled Asphalt Pavement (RAP) to enhance sustainability and cost-effectiveness.

### Laboratory and Quality Assurance:

- **Proficiency Testing:** Led proficiency test programs and intra-laboratory comparisons (Qatar).
- **Measurement and Calibration:** Conducted uncertainty and repeatability analysis; reviewed calibration certificates for equipment verification (Qatar).
- **ISO Auditing:** Performed internal audits per BS EN ISO 17025 standards (Qatar).

### Specialized Trainings:

- **Superpave Certification:** Certified in Superpave mix design as per AASHTO standards (Saudi Arabia).
- **Wet and Dry Utilities Testing:** Mastered testing procedures and inspections for wet and dry utilities (Qatar).
- **ISO Compliance:** Training on ISO 9001-2015 and ISO/IEC 17025-2017 standards (Qatar).
- **SAP Materials Management:** Proficient in SAP for materials management.

### Workshops and Industry Innovations:

- **Trench Backfilling and Materials Management:** Participated in workshops focusing on trench backfilling, pavement equipment, and materials management (Qatar).
- **Sustainable Construction:** Engaged in discussions on achieving net-zero carbon emissions in construction (Qatar).
- **Crumb Rubber Binder:** Training in crumb rubber modified binder application for road construction (Qatar).

### Compliance and Management:

- **Compliance Policies:** Acquired knowledge of compliance confirmation policies, preventing corruption, and promoting equal opportunities (Online).
- **Performance Evaluation:** Conducted performance analysis for laboratory supervisors and technicians (Qatar).

- Conducted detailed investigations of soil profiles, contributing to the development of pavement designs based on advanced quality testing and strength analysis to ensure long-term performance and durability.
- Maintained meticulous QA/QC records, including testing, equipment calibration, and maintenance logs, while establishing Standard Operating Procedures (SOPs) and control charts in compliance with international standards (BSI, AASHTO, ASTM, KSA-MOT, ISO 9001:2008, ISO 17025).
- Led Quality Control initiatives, including quality assurance meetings, internal audits, site quality assessments, and factory/plant/laboratory inspections, ensuring alignment with ISO 9001:2015 and ISO 17025 standards.
- Collaborated with Senior Quantity Surveyors to aggregate and analyze monthly material data, ensuring accurate reporting and alignment with the Bill of Materials (BOM) for effective cost management.
- Worked proactively with site and laboratory teams to mitigate non-conformities during construction, issuing NCRs, investigating discrepancies, and implementing corrective actions to maintain quality standards and project integrity.

### PERSONAL DETAILS

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- Driving License.** : KSA , Qatar , Sri Lanka
- Address** : Riyadh Saudi Arabia – Transferable Iqama [2591406810]
- Date of Birth** : 18<sup>th</sup> December 1982
- Languages Known** : English [IELTS -7], Sinhala [ Native]