NIGIL KARUNANITHI MECHANICAL ENGINEER COATING/PAINTING INSPECTOR

Mobile : 0591476953

E Mail : Karunanigil93@gmail.com

Profile

Intend to work with a leading corporate hi-tech environment with committed and dedicated people, which will help me to explore myself fully and realize my potential.

My strength

- Hard working and able to work one initiative
- Commitment and dedication at work
- Continuous learning and development

It skill

Well versed with MS office and internet application

Organizational

Possess Good experience of 05 years of experience as QA/QC Coating/painting inspector Pipeline project

Awareness and understanding of Saudi Aramco Schedule "Q" & ISO 9001,2000,2018 Version. Closed Awareness & Understanding of Saudi Aramco Standards (SAES,SAEP ,SAMSS, SAIP,ASTM & SA General Instructions).

Professionals experience

Employer : ARABIAN PIPE COATING COMPANY

Department: QA/QC

Location : Al-Jubail (Saudi Arabia)

Designation: COATING/PAINTING INSPECTOR

Duration: January 2016 to 2021

Responsible for processing line pipes with 3(LPE) layer Polyethylene coating, and Flange Spool, Drill pipes internal and external FBE coating inspection .

Concrete weight coating and Sacrificial Anode installation, Internal and external FBE coating, Girth coating, Double joint welding inspection, Liquid coating mixing and thinning.

Employer: Expertise Contract Company.

Department: QA/QC

Location: jubail (Saudi Arabia)

Designation: COATING/PAINTING INSPECTOR

Duration: 2021 Present

Responsible for processing Vessels, Flare Drums, pipelines, Sump, Pipe spools, coating inspection (internal and External)

Plant Maintenance and pipeline replacement.

Roles and responsibilities

- Inspection and quality procedures
- Working as in-charge of external & internal coating plant and verifying all the stage wise painting inspection
- Performed inspection of painting works which improved product quality by 100%
- Advising the project painting Supervisors on the coating system And application of the coating, advising the Client about different types of coating system for the project and monitoring the mixing and application of the paint in accordance to the quality standard
- Experienced in various coating system such as liquid epoxy, FBE powder coating for pipes as well as field joints application using FBE powder, Heat shrink sleeve application for buried pipeline field and extruded polyethylene coatings

- Before painting application surface preparation, cleanliness surface roughness, blasting grade, Salt contamination measurement surface defects, blasting abrasive cleaning
- To carry out general inspection duties for surface preparation (ASTM D4417) and to perform final inspection prior to handover to clients. Witnessing of surface preparation DFT checks, adhesion tests, holiday tests etc.
- Preparation of inspection test plan (ITP), inspection reports, quality control procedures, method statement etc.
- Preparation of NCR for coating not conforming to the specifications.
- Reviewing safety requirements for the abrasive blasting, painting and work permit system at process areas in the plant
- Witness of blotter test to ensure contamination free compressed air (ASTM D4285)
- Reviewing blotter test records profile of surface preparation, wet and dry film thickness and holiday check for the immersion /buried service
- Assessed potential paint problems, i.e.(sag, holiday, skin, adhesion problems, bits, grinding etc)
- Coordination with client QC inspector for the required inspection activities documentation, etc.
- Maintaining code standard and technical Data Sheet as per contractor specifications.
- Review of coating procedures, inspection test plan and scope of work,material data sheet.
- Coating evaluation & Failure analysis.
- Conduct non destructive & destructive testing of coatings.
- Handle surveillance inspection of surface preparation, paint mixing, WFT ,DFT ,adhesion and curing of paint.
- Conduct inspection of consumables like paint, powder and insulating material & steel grit and garnet.
- Conduct visual inspection for products and prepare status reports .
- Inspect painting and coating equipment before the production.
- Check dew point RH % and substrate temperature for suitable blasting and coating.
- Grade the surface profile by using standard comparator (ISO surface profile comparators, Replica rest .(ASTM 4417 Method C)
- Conduct final coating inspection and testing of DFT ,(SSPC PA2) Holiday Detection (Low voltage DC wet sponge test & High voltage DC test NACE SP 0188 & NACE SP0490).
- Visual inspection of abrasive material (ISO 11124-3) blasted areas are free from oil, grease and other contamination and coating materials.
- Ensuring environment conditions (Dew point ,relative humidity,steel temperature) as per client's specifications.
- Conduct stage wise surface preparation and coating in process and final inspection of liquid coating system (APCS -1,2,3...to28 for external,immersion and underground 113,AB&C and 102,104,106)
- Stage wise inspection of coating process in the spool base production of pipeline coating in all stations like surface preparation, coating application (Heating and FBE, PP powder spray and polypropylene tape wrapping by machine and Quenching station.
- Witnessing fusion bonded epoxy (FBE), 3Layer injection moulded polypropylene,3LPE and concrete cement coating, polypropylene flame spray.
- Checking the blasting surface free from salts by taking chloride test, Bresle test etc. (ISO 8502,SSPC Guide 15)
- Blister assessment ISO 4628-2 and ASTM D714
- Checking the gel time & cure time as per powder manufacturer recommendation.
- Surface cleanliness grade & profile is measured by using testex tape ,press -o- film & profile is free from slivers ,laminations, Sharp edges , dust , dirt etc .
- Verify the paint and powder storage conditions and shelf life as per manufacturer data sheet.
- Elapsed time between blasting & Coating is maintained
- Check the coating is free of irregularities like sag,runs, blisters, fish eyes, bubbles, contamination, Holidays, orange peel etc.
- Check adhesion test X cut. ASTM 2409.
- Check Peel off test ISO 21809.
- Conducting the PQT and ITP for the entire painting/coating with client approved procedure.
- Surface preparation paint formulation, curing and drying paint/paint film, testing and health and safety requirements.
- Conversant with painting procedure, plant and powder manufacturer data sheets like KCC KARUMEL, 3M SCOTCHKOTE, TUBOSCOPE
 "JOTUN,HEMPEL,INTERNATIONAL INTERLINE,ITERGARD,BOREALIS, VAISPAR etc.
- Coating of internal pipe surfaces & subsea structures
- Critical inspection procedures, asset integrity and corrosion
- Abrasive blast cleaning of internal and external areas of pipe work
- Writing coating inspection project specifications and procedures
- Working in large scale hazardous environments
- Offshore visits/inspection trips as and when required
- Wet blasting with specialized systems
- Coating final inspection DFT, adhesion, Doc, visual inspection
- Submarine pipe weight coating inspections density, out diameter, continuity, overlap and visual inspection
- Standard specification for Portland cement (ASTM C150)
- Submarine pipe weight coating standard test method for compressive strength of cylinder concrete (ASTMC39)
- Standard test method for density, Absorption and voids in hardened concrete (ASTM C 642)
- Quality of water to be used in concrete (AASHTO T26)
- Impact resistance test
- Shear resistance test
- Concrete laboratory testing

Expertise Contract Company.

Position - Coating Inspector

Responsible for quality assurance of client specific protective coatings and corrosion projects and applying related technical skills in support of protective coatings and corrosion control operations. Duties and Responsibilities Include

- Onsite inspections of specific quality assurance requirements and ensure compliance with specifications.
- Inspection of raw materials used for production meets project quality requirements.
- Reporting of day to day inspection and production activity.

Coating System Worked On

- Fusion Bonded Epoxy Internal and external application to line pipe, spools, fittings, induction bends and associated items.
- Liquid Coatings Internal and external application of various liquid coatings (Polyamide Cured Zinc Rich Epoxy, Ultra High Build Epoxy, Glass Flake Reinforced Polyester, Inorganic Zinc Coatings, Interseal 738).
- Submarine pipe Weight Coatings.
- 3 & 2 Layer Polyethylene & Polypropylene Coating.
- Sacrificial anode installation .
- Fusion Bonded Epoxy Internal Girth weld coating

Major Projects Worked On

• National Petroleum Const. Co. LTD. Dubai oil and Gas field pro.

Saudi Aramco Pipeline.
 Petrochemical,Oil and Gas maintains pro.

SAIPEM Const. Co. LTD.

Dubai Manifa Pipeline pro.(underwater)

HANWHA Const. Co. LTD.

Underwater Pipeline.

EMAS Const. Co. LTD. OilMaintenance potential pro.

MAPA const.and co.trade.inc Saudi water pipeline pro.
Saudi Aramco Casing project .(Drill pipes)

Engineering for the Petroleum & Process. Oil Maintenance potential pro.

Al Rushaid Const.Co. LTD

Oil and gas field Pro.

BR.CAT Const.Co.LTD.

Oil and Gas maintain potential pro.

Nasser Al Hajri Const.Co.LTD.
 Petrochemical,Oil and Gas pro.
 Onshore maintain potential program zone pro.

Nasser S.al hajri (NSH) Corp.LTD. Engineering &Construction. Aramco pro.

Marubeni Const.Co.LTD. PTTEP Algeria -HBR DevelopmentPhase 1 pro.

Tecnicas Reunidas Const.Co.LTD.
 M/S MCDermott Arabia Co.LTD.
 Engineering & Construction.
 Hasbah pro.

Arkan Overseas Co.LTD. Diesel tank with pipeline and fire water pro.

M/S Technip Saudi Arabia LTD. KGOC Gas and Condensate Export pro .

NESMA. onshore Merjan pro.

Wasit Gas Plant Saudi Aramco Plant maintenance and installing Pro.
ISBL & RCPC Petrokemya South. Caustic line replacement shutdown pro.

Key skills and competencies

- Quality control procedures
- Adequate knowledge in ASTM,SSPC,NACE,ISO,SAUDI ARAMCO Standard
- Saudi aramco coating procedures such as SAMSS -089 ,SAMSS -091,SAMSS 012 and SAES 316
- Survey of the material powder, paint, abrasive & repair material
- Failure determination and analysis
- Coating damage estimation and requirement analysis
- Area determination
- Abrasive quality control
- surface preparation inspection, rectification and support
- Suggesting power tools for usage
- Preparing the surface for specified standards
- Humidity control

- DFT controlling for subsequent coating
- Inspection of coating damage
- verify proper documentation compliance
- Marking reports as regulations
- Execute blasting and painting operations as per quality standards
- Working in electrostatic spray systems
- Working with low-pressure spray systems
- Industrial protective coatings
- Monitoring of the mixing and the application of the coatings
- Training operational users & client service staff.

Academia

 Bachelor of Mechanical Engineering under the. Board of Technical Education AnnamalaiUniversity –Chidambaram, Tamilnadu, India.

Certification

Protective coating inspector program(PCI) Has fulfilled the level 2 requirements Of SSPC
 ID:127198 Valid up-to 31/03/2025

Achievements

- Diploma Computer Application (DCA) distinction
- PACKAGES: MS OFFICE, MS EXCEL, PowerPoint

Safety

- Thorough knowledge in safety measures of hazardous/flammable chemicals like thinner, MEK.Zn-18.
- Complete safety training in LOTTO procedure.
- Adequate training in safety while using inspection and industrial tools.
- Extensive knowledge about PPE.
- First Aid training
- Participate and conduct risk assessments in job sites to eliminate risk and unsafe working conditions.
- Trained in safe disposal of hazardous chemicals and reducing environmental impact.

Personal dossier

Father's Name : KARUNANITHI.RDate of birth : 19-09-1993

• Mailing Address :<u>Karunanigil93@gmail.com</u>

• Permanent Address : South street, Chinnoor, Parangipettai (PO) Buvanagiri

(TK)Cuddalore (District) Tamilnadu, India.

• Language knowns : English, Tamil, Malayalam, Hindi

Nationality : Indian
Religion : Hindu
Marital status : Single
Passport Number : N6443632
Passport Expiry :04-02-2026
Sex : Male

• Igama No :2416319677

Declaration

 I hereby declare that all the information furnished above is true to the best of my knowledge and belief.

NIGIL KARUNANITHI