VIVEKANANDAN D

Engineering and Maintenance Manager

Mobile: +966-510949750 **Email ID:** vivekanan34@gmail.com **Address:** Dammam, Saudi Arabia
DOB: 01-09-1986

A highly motivated and results-oriented Mechanical Engineering professional with 14+ years of experience seeks to leverage expertise in hydraulic systems, project management, and maintenance to excel as an Engineering and Maintenance Manager within a reputable organization in the Mechanical or Industrial Engineering industry. Possesses a proven ability to optimize operational efficiency, reduce downtime, and drive continuous improvement initiatives. Seeking to contribute to a company's success by ensuring the reliability, efficiency, and safety of its mechanical and hydraulic systems.

Professional Summary

- Successfully executed multiple industrial projects within budget and timeframe while ensuring adherence to stringent safety and quality standards.
- Possess extensive experience in hydraulic system design, troubleshooting, maintenance, and commissioning across diverse industries such as oil & gas and manufacturing.
- Managed and optimized the maintenance operations of complex machinery, including pumps, cylinders, and tire processing equipment, leading to increased uptime and productivity.
- Adept at implementing preventive and condition-based maintenance programs, reducing downtime, and extending the lifespan of critical equipment.
- Experienced in leading, training, and mentoring technical teams, fostering a culture of safety, collaboration, and continuous improvement.
- Proficient in using SAP/ERP systems for project management, inventory control, and procurement processes.
- Skilled in utilizing engineering software such as CREO and AutoCAD for 3D modeling, 2D drawing, and technical documentation.

Technical Skills

Hydraulic Systems	●●●●●
Project Management	●●●●●
Maintenance Management	●●●●●
Troubleshooting	●●●●●
Preventive Maintenance	●●●●●
CREO	●●●●○
AutoCAD	●●●●●
SAP/ERP	●●●●○
Commissioning	●●●●○
3D Modeling	●●●●○

Soft Skills

Communication
Teamwork
Leadership
Problem-Solving
Critical Thinking
Time Management
Adaptability
Decision-Making
Conflict Resolution
Stress Management

Core Competencies

Hydraulic Systems Expertise
Project & Maintenance Management
Troubleshooting & Problem-Solving
Team Leadership & Development
Engineering Design & Software Proficiency

Work Experience

Project Engineer Nov 2022 - Present

AFI (Alaa for Industry)(Dammam - SaudiArabia)

Responsible for all aspects of project lifecycle, including planning, execution, monitoring, and closeout. Collaborated effectively with cross-functional teams, including engineering, procurement, construction, and client representatives, to deliver projects on time, within budget, and to the required specifications. Provided technical expertise and guidance to team members, ensuring adherence to best practices and company procedures.

- Managed and executed multiple shutdown, turnaround, and maintenance projects for key clients in the oil and gas industry, including SABIC and Aramco affiliates, ensuring timely completion, adherence to stringent quality standards, and strict safety regulations.
- Preparing techno-commercial proposals for Aramco, SABIC & other oil and gas industries shutdown and overhauling works.
- Successfully planned and executed the reconditioning and commissioning of marine loading arms, demonstrating expertise in hydraulic system maintenance and project management.
- Performed critical troubleshooting and resolution of complex hydraulic system issues in operational settings, minimising downtime, and maximising equipment reliability and performance.
- Developed and implemented comprehensive flushing procedures for hydraulic systems utilised in oil well head equipment, contributing to improved equipment performance and longevity.
- Prepared detailed cost estimations, project proposals, and technical documentation, ensuring accurate project budgeting and efficient communication with clients.

Achievements:

- Successfully executed a critical shutdown activity at Hadeed, completing the project within a challenging timeframe while maintaining the highest safety and quality standards.
- Successfully completed the refurbishment of a 16" Marine Loading Arm at Aramco - Rastunara, Yanbu, ensuring its safe and efficient operation.

Service Manager Mar 2022 - Nov 2022

Pump Service Center (A subsidiary of Abdullah Ahmad Al-Dossary Holding Co.)(Al Khobar - Saudi Arabia)

Responsible for overall service department performance, including customer satisfaction, on-time delivery, and budget adherence. Successfully collaborated with clients to understand their specific needs, providing tailored solutions and exceeding customer expectations.

- Managed all aspects of service operations for pump and cylinder overhauls, including order intake, scheduling, resource allocation, and quality control.
- Conducted on-site troubleshooting and repair of pumps and cylinders at onshore and offshore facilities, minimizing equipment downtime and ensuring client satisfaction.

- Developed and implemented service delivery plans and schedules, optimizing technician utilization and ensuring on-time project completion.
- Conducted regular site visits to client locations to assess equipment performance, gather feedback, and maintain strong customer relationships.
- Developed and delivered technical training programs for workshop technicians, enhancing their technical skills in pump and cylinder maintenance and repair practices.

Achievements:

- Implemented a new training program for technicians, resulting in a noticeable improvement in the efficiency and quality of pump and cylinder overhauls.
- Successfully resolved several complex technical issues with pumps and cylinders at offshore drilling platforms, minimizing costly downtime for clients and receiving commendations for problem-solving skills.

Manager - Mechanical Maintenance Mar 2016 - Feb 2022

Ceat Ltd, India (Chennai, India)

Responsible for the overall safety and efficiency of the mechanical maintenance department, ensuring compliance with all applicable safety regulations and industry best practices. Successfully mentored and developed a team of technicians, fostering a culture of safety, teamwork, and continuous improvement.

- Managed all aspects of mechanical maintenance for a large-scale tire manufacturing facility, ensuring maximum equipment uptime, productivity, and adherence to safety regulations.
- Led a team of 16 technicians in the execution of preventive, predictive, and corrective maintenance activities for a wide range of tire processing equipment, including Banbury mixers, extruders, calendaring machines, and hydraulic tire curing presses.
- Developed and implemented comprehensive maintenance plans and schedules, optimizing resource allocation, reducing equipment downtime, and minimizing maintenance costs.
- Successfully troubleshooted and resolved complex mechanical and hydraulic system issues, minimizing production disruptions and ensuring timely completion of maintenance activities.
- Collaborated effectively with cross-functional teams, including production, engineering, and procurement, to improve equipment reliability, optimize processes, and implement continuous improvement initiatives.
- Managed the procurement process for spare parts and maintenance materials, ensuring cost-effectiveness, timely availability, and inventory optimization.

Achievements:

- Successfully implemented a new condition-based maintenance program for critical tire processing equipment, resulting in a significant reduction in unplanned downtime and maintenance costs.
- Played a key role in the successful installation and commissioning of new tire manufacturing equipment as part of a plant expansion project, ensuring its smooth integration into existing operations.

Sr. Product Design & Commissioning Engineer Mar 2009 - Feb 2016

Maha Hydraulics Private Limited (Chennai, India)

Managed project budgets, timelines, and resources effectively, ensuring alignment with client requirements and company objectives. Collaborated closely with multidisciplinary teams, including engineers, technicians, and clients, throughout the project lifecycle, from initial design concepts to final commissioning and handover.

- Led the design, development, and commissioning of a wide range of custom hydraulic systems and components for diverse industrial applications, including freight conveyors, reclaimer bucket wheel drives, and man-riding chairlifts, adhering to international standards such as ASME, ASTM, SAE, and DIN.
- Successfully managed all phases of engineering projects from conceptualization and design to manufacturing, installation, testing, and commissioning, ensuring on-time delivery, within budget constraints, and to the highest quality standards.
- Utilized advanced engineering software, including CREO and AutoCAD, to create 3D models, 2D drawings, technical documentation, and perform simulations for optimized designs and improved product functionality.
- Conducted comprehensive design reviews, performance testing, and validation procedures to ensure the reliability, durability, and efficiency of hydraulic systems and components, adhering to strict safety and performance requirements.
- Collaborated with vendors and manufacturers to ensure timely procurement of materials and components, while maintaining quality standards and cost-effectiveness during the manufacturing process.

Achievements:

- Successfully designed and commissioned a 250kW hydraulic power unit and HM 25 hydraulic motor for a freight conveyor handling iron ore at TATA GROWTH SHOP, Jamshedpur, India, improving material handling efficiency and reducing downtime.
- Designed and commissioned a 200kW hydraulic power unit for a reclaimer bucket wheel drive system and a 1600kW hydraulic conveyor drive system handling lignite coal at Neyveli Lignite Corporation(NLC), India, enhancing operational capacity and reliability.
- Developed and implemented a new design for radial piston hydraulic motors, resulting in improved performance, reduced maintenance requirements, and increased lifespan compared to previous models.

Education

Bachelor of Mechanical Engineering (2007 - 2009)
Anna University, Chennai, India

Projects

Maha Hydraulics Private Limited

- Designed and commissioned a robust 250kW Hydraulic Power Unit and HM 25 hydraulic motor, optimizing the performance of a Freight Conveyor responsible for handling iron ore at TATA GROWTH SHOP, Jamshedpur, India.
- Engineered and commissioned a 200kW Hydraulic Power Unit for a Reclaimer Bucket Wheel Drive System and a high-capacity 1600kW Hydraulic Conveyor Drive System utilized for handling lignite coal at Neyveli Lignite Corporation(NLC), India, enhancing operational efficiency and reliability in demanding industrial environments.

- Successfully designed and commissioned a range of Hydraulic Power Units with varying capacities for ELECON ENGINEERING CO LTD, India. These Hydraulic Drives are integral to the operation of critical equipment such as Wagon Tipplers, Side Arm Chargers, Reclaimer Bucket Wheels, Apron Feeders, and slew Drives, showcasing adaptability in meeting diverse client requirements while ensuring optimal performance and reliability.
- Developed, engineered, and commissioned a specialized Hydraulic System and integrated a Viking motor for APHMELS, creating a Man-Riding Chairlift system crucial for safe and efficient personnel transportation in challenging underground coal mining environments.

CEAT Limited

- Stabilized production output by identifying and mitigating recurring short stops occurring in the hydraulic tire curing press, demonstrating problem-solving skills and a proactive approach to process improvement.
- Successfully reduced tire scrap rates by implementing various quality control and process optimization measures, contributing to cost savings and enhanced product quality.
- Led the design, development, and commissioning of 36"/28" Hydraulic Motorcycle/Scooter and 48" PCR Tire Curing Presses, showcasing expertise in hydraulic systems and tire manufacturing equipment.
- Performed comprehensive Machinery Failure Mode & Effects Analysis (FMEA) and Design Failure Mode and Effect Analysis (DFMEA) to identify potential failure points and implement preventive measures, improving equipment reliability and minimizing downtime.
- Played a key role in the development of new vendors and sourcing strategies for Greenfield and expansion projects, ensuring access to high-quality materials and services while optimizing costs.
- Successfully managed the erection and commissioning of critical tire manufacturing equipment, including tire curing presses, uniformity machines, tire building machines, and extruders, ensuring seamless integration into existing production lines and timely project completion.
- Actively participated in Quality Based Management (QBM) and Deming process improvement initiatives, demonstrating a commitment to continuous improvement and operational excellence.
- Developed an in-house service and testing facility for hydraulic cylinders, reducing reliance on external vendors, improving response times for repairs, and enhancing overall maintenance efficiency.

AFI

- Developed and executed a comprehensive flushing procedure for hydraulic systems utilized in M/s. Baker Hughes' pipe spools ensure optimal performance and longevity of critical equipment used in oil well head applications.
- Successfully managed and executed a critical shutdown activity at M/s. Hadeed, completing the project within a challenging timeframe while maintaining stringent safety and quality standards.
- Completed the full refurbishment of a 16" Marine Loading Arm at Aramco - Rastunara, Yanbu, restoring the equipment to its original specifications and ensuring its safe and efficient operation.
- Completed the full refurbishment of a Truck Loading Arm at Aramco - Rastunara, Hawaiya Gas plant, restoring the equipment to its original specifications and ensuring its safe and efficient operation.
- Successfully managed and executed a shutdown activity at M/s. IBN Zhar, completing the project within a challenging timeframe while maintaining stringent safety and quality standards.

Hobbies

3D Printing, Mechanical Design, DIY Projects, Technology Trends, Problem Solving

Languages

Tamil, English, Telugu, Hindi