

Clive John Wray

CURRICULUM VITAE

Personal Details

11 Norman Rd
Mill Hill
Bryanston
South Africa

Home: +27 (0)11 463 3979
Cell: +27 (0)82 579 3376
Email: clive.wray@rayten.co.za

Nationality: South African / British
Birth Date: 14/08/1979
Married: Male

Executive Summary

Having graduated with a BSc (Eng) Mechanical Engineering degree, I have since gained Professional Engineering (Pr. Eng.) status through the Engineering Council of South Africa (ECSA). My work experience can be summarised as follows:

- Manager Engineering/ SHEQ – Air quality monitoring / Engineering services (Rayten Engineering Solutions)
- Manager Engineering - Mining Process Plants / Chemical Plants (Basil Read Matomo)
- Senior / Lead Mechanical Engineer – Petrochemical (ThyssenKrupp Uhde)
- Risk Analyst / Project Engineer – Consulting (Amec Ltd)
- Mechanical Engineer - Building Services (Linaker Ltd)
- Jnr. Mechanical Engineer - Oil and Petrochemical (Sasol Ltd)

I believe myself to possess the qualities you are looking for in an individual to work interdependently within a thriving team. I am creative, hard working, keen to learn and eager to promote my own ideas and apply them to the workplace.

Qualifications

- **Professional Engineer (Pr. Eng.)** Reg. No: 20090334
Engineering Council of South Africa (ECSA)
 - **BSc (Eng) Honors Mechanical Engineering (1998-2002)**
University of Natal, South Africa (Awarded a Sasol Bursary (2000))
-

Additional Qualifications

- Project Management Prof. (PMP) Davis and Dean, 2012
- PDMS Uhde Internal Training, 2010
- Pressure Vessel Design and Analysis PVElite, 2007
- Project Management OD&L Learning Centre, 2003.
- Time Management OD&L Learning Centre, 2003.
- Effective Problem Solving (EPS) OD&L Learning Centre, 2003.

Education

Senior Certificate (1993-1997)

Kingsway High School, Kwa-Zulu Natal, South Africa

Subjects: English, Afrikaans, Mathematics, Physical Science, Geography, Technical Drawing

Computer Skills

Proficient with Microsoft Office 2000 package, including:

Word, Excel, Access, Project and PowerPoint

Well informed with the following Engineering computer packages:

PVElite, Compress, Mechanical designer, MSC Nastran, FLUENT, Unigraphics, AutoCAD, Solid Edge, Caddie and OPTIVESSEL 2000 Build 59, PDMS

Employment History

Rayten Engineering Solutions, Strydompark, South Africa

July 2014 – Current

- Manage all air quality monitoring projects
- Dispersion modelling
- Emission monitoring
- Engineering designs, procurement and installation of extraction systems
- SHEQ Management

Basil Read Matomo, Melrose Arch, South Africa

October 2011 – July 2014

Managed the following tasks during the project proposal stage:

- Assisted with development of a Work Breakdown Structure (WBS) and costing structure for engineering man-hours as required by project controls.
- Developed a project organogram for engineering.
- Generated engineering management cost estimates.
- Developed a resource loading plan in conjunction with the Project Manager and Engineering Managers based on the cost execution philosophy and schedule.
- Assisted with compiling the proposal where necessary.

Managed the following tasks during project execution:

- Provided technical assistance during design and procurement of engineering packages.
- Developed a project execution strategy with regards to engineering packages, supplier packages, Project Engineers and erection contractor packages.
- Setting up the project engineering standards and engineering specifications register.
- Managed the review and acceptance of Client specifications together with the Lead Engineers.
- Participated in the project kick-off meeting.

Employees:

- Reviewed actual project resource needs with the Project/Lead Engineers on an on-going basis.
- Generated a responsibility matrix based on the deliverable list.
- Participated in interviews and selection of suitable candidates.
- Resolved conflict between engineering employees on a project.
- Ensured correct allocation of man-hours per cost code in the man-hour budget as generated by Project Controls.
- Ensured the correct adjustment of man-hours according to scope changes/design changes.
- Monitored and reported on engineering progress against man-hours spend.

Engineering:

- Managed all engineering work and resources on projects including technical acceptability of work, scheduling of works, man-hour efficiency and cost.
- Ensured that the technical integrity and work scope definition is maintained through the Procurement and Construction activities.
- Issued progress, efficiency and technical overview reports.
- Ensured project quality requirements were clearly defined and adhered to.
- Generated Technical Data Sheets and Scope of Works for various types of mechanical equipment for Enquiry and for Purchase.
- Verification and approving of vendors designs calculations and drawings.
- Preparation of project standards, engineering and technical specifications.
- Preparation of technical enquiries.
- Responsible for resolving and addressing all technical queries that rose during basic and detailed engineering on all projects.
- Promote company business.
- Promote a safety conscience environment.

ThyssenKrupp (Uhde Division), South Africa
February 2006 – October 2011

Projects:

- **New Multiple Products Pipeline (NMPP / Transnet) - Lead Mechanical Engineer**
- **Temane Expansion (Sasol Petroleum) - Lead Mechanical Engineer**
- **MIBK2 (Sasol) - Senior Mechanical Engineer**

Head office based works:

- Managed project budgets, schedules, man-hour, and staff.
- Generated Technical Data Sheets and Scope of Works for various types of mechanical equipment for Enquiry and for Purchase.
- Responsible for the design of Pressure Vessels, Tanks, Heat Exchangers, Turbines, Pumps and Bulk Handling Equipment in accordance with relevant codes and client requirements.
- Verification and approving of vendors designs calculations and drawings.
- Preparation of project standards, engineering and technical specifications.
- Preparation of technical enquiries.
- Responsible for resolving and addressing all technical queries that rose during basic and detailed engineering on all projects.

- Monitored the execution and progress of all phases during basic and detailed engineering and procurement associated with all mechanical equipment.
- Selection of Vendors/ Contractors on a technical basis.
- Compiled technical bid evaluations.
- Reviewed Vendor Documentation to ensure design integrity and compliance with specifications.
- Liaised with other departments to ensure the integrity of the equipment and machinery. Coordinated with home office, Site and Client during detailed engineering, construction, pre-commissioning and commissioning when required.
- Worked with the construction and commissioning teams to progress up to the final acceptance of the work within the project milestones.
- Controlled and reported the engineering Project Budget man-hours, costs and schedule.
- Liaison with Clients to ensure alignment of design with Client requirements. Closely coordinated with Client and tried to identify the engineering issues which were critical for cost, schedule, quality, operability, safety etc. from the mechanical engineering point of view, and recommended technical solution for Client.
- Project Planning and budgeting.
- Assisted the Project Manager (Site) related to mechanical engineering (rotating machines, pressure vessel, piping etc.).
- Report writing.

Field based work:

- Handled all mechanical engineering matters, drawings, specifications, field requisitions, as built drawings, etc.
- Provided engineering expertise to field construction for permanent and temporary works, ensuring that the works were completed safely.
- Verified the scope of work were completed and handed over to the Client/Operator in a defined, timely and systematic process.
- Studied and assessed all drawings, specifications etc and obtain rulings on all construction matters that require engineering interpretation.
- Ensured that all drawings, specifications, procedures, work practices, method statements, quality plans etc were indexed, available and retrievable and that the latest issues are being worked to.
- Checked and arranged approval of design when applicable and alerted the Resident Construction/Site Manager of any special aspects of engineering design or changes.
- Carried out general liaison with the Client Site Engineers in conjunction with the Resident Construction/Site Manager, attending all necessary meetings when required.

Amec Limited, Eli Lilly Site, Surrey, UK
Risk Analyst/ Project Engineer (6 Month Contract)
June 2005 – Dec 2005

- 6 Month Contract to manage and conduct Risk Assessments during the commissioning phase of a new R&D / Chemistry block.
- Managed Engineering Systems within the Eli Lilly pharmaceuticals R&D Building Site.
- Responsible for conducting all System Risk Assessments for the old/new Chemistry R&D Block.

Linaker Limited, Redhill, Surrey, UK
Mechanical Project Engineer (6 Month Contract)
November 2004 – May 2005

- Project Management in the Building Services sector.
- Completed all projects to client's specifications and budget requirements.
- Conducted Risk Assessments and Method Statements.
- Planning and Co-ordination.
- Supervised all site activities that were outsourced to contractors, responsible for safety of contractors.
- Project costing and valuation.
- Responsible for preparing quotations/tenders/proposals
- Dedicated to building strong, enduring working partnerships.
- Responsible for design and sizing of all mechanical systems in each project.
- Responsible for the production of design fees, conceptual design, design innovation, design calculation and final detailed designs in accordance with the subcontract agreement with the end user/client.
- Report writing.

Sasol Limited, Sasolburg, South Africa
Project/Mechanical Engineer (Permanent)
January, 2003 – October, 2004

- Implemented/managed all new projects from the Front-end-loading phases to completion by applying Project Management principles and the Sasol Business Development and Implementation (BD&I) Model.
 - Supervised all site activities that was outsourced to contractors, responsible for safety of contractors and controlled the commissioning of projects.
 - Cost Control and Project Budgeting.
 - Coordinated other disciplines.
 - Conducted Risk assessments.
 - Conducted Risk Based Inspections (RBI) in preparation for the Sasol Wax GTL 2004 Shutdown.
 - Planning and Co-ordination.
 - Ensured maintenance of all assets according to company standards.
 - Organized Root Cause Analysis (RCA) for recurring problems and attended problem break-through strategies used for defect elimination.
 - Responsible for planning a range of potential solutions to problems.
 - Attended meetings and communicated the information promptly. (Verbal and Written).
 - Worked independently with minimum supervision.
-