

Robert Paul Smith

Middelburg, South Africa | +27 79 767 5053 | robertps2.0@gmail.com

Dual Citizenship (UK & South Africa)

Looking to Relocate

Preventive Maintenance Engineering | Oil Sample Analysis | Condition Monitoring | Mechanical Engineer

PROFESSIONAL SUMMARY

Reliability driven Mechanical Engineer with 5 years of experience in Condition Monitoring within in the mining industry. Skilled in Preventive Maintenance Engineering and improving reliability/performance through best engineering practices. With a strong track record of improving machine availability and outperforming targets using RCA Analysis, Data/History Analysis, Tribology and Life Cycle Analysis. Committed to continuous improvement and lifelong learning of new engineering skills.

KEY SKILLS

- | | | |
|----------------------------|--------------------------|-------------------------------|
| ✓ Preventative Maintenance | ✓ RCA Analysis | ✓ Mechanical System Analysis |
| ✓ Power BI | ✓ Mechanical Engineering | ✓ Data Analysis |
| ✓ Maintenance Management | ✓ Tribology/Oil Analysis | ✓ Planning and Forecasting |
| ✓ Resource Allocation | ✓ Backlog Management | ✓ Data Modeling |
| ✓ CAD Modeling | ✓ KPI Modeling/Analysis | ✓ Life Cycle/History Analysis |

PROFESSIONAL EXPERIENCE

❖ **Condition Monitor**

June 2021 – Present

Precision Opencast Mining Services | Middelburg, MP, South Africa

While completing my engineering diploma, I was asked to establish and run a new condition monitoring section for the company as well as to work with the management team to improve to maintenance strategy and develop new systems to help track and improve outdated manual tasks.

Responsibilities

- Perform Condition monitoring (Oil Sample Analysis, Machine Health System Analysis & Filter/Magnetic Plug Analysis) on a machine fleet of 200+ pieces of equipment while actioning and tracking findings.
- Improve the preventive maintenance standard though constantly adding, updating and improving upon the current system using best Engineering Practices, RCA and Life Cycle Analysis.
- Using Power BI, and SQL data, develop systems to bring the maintenance strategy into the future, and move away from Excel manual systems.

Successes

- Successfully implemented a Condition Monitoring system with the help of the management team, leading to increases in detection of early critical warns such as engine dust entry and fuel dilution, due to this we saw a dramatic decrease in critical component failures.
- Reduced breakdowns of multiple components to near zero through using RCA and Life Cycle Analysis by determining the cause of failure and implement planned change outs based on determined life hours and RCM.
- Developed a system to track and plan machine services, hours and location leading to a 33% increase in service accuracy as well as decreasing the man hours required to plan services.

❖ Engineering Apprentice

June 2019 – June 2021

Precision Opencast Mining Service | Middelburg, MP, South Africa

Hired as an engineering apprentice to gain experience for my diploma, I worked with the Group Engineer, Mechanical Managers and Mechanics. Learning and assisting, I got to work on large diesel machines all while being taught the fundamentals of on-site diesel mechanics and maintenance.

Responsibilities

- Assist with mechanical rebuilds and projects on large diesel mining equipment such as undercarriage replacements, engine removes, and hydraulic system cleans while learning how to utilize machine information systems such as SIS and Prosis.
- Planning, ordering and organizing parts while ensuring that stock levels on critical parts were correct and that parts needed for planned work arrived on time and was available also including part costing and budget management.

Successes

- Learnt the in's and out's of multiple heavy machines(Cat D10s,D9s,D6s, Volvo A40Gs, etc.) while writing multiply well received reports and presentations for both university and work on the different projects and rebuilds while also getting to experience and participate in the on-site work first hand.
- Creating and implemented a new sorting system for stored parts that is still used to this day to help with stock level evaluation and stock take, while also having become extremely proficient with all available parts systems(SIS, Komtrax's, John Deere Online).

ADDITIONAL EXPERIENCE

❖ Repair Trainee

June 2017 – June 2019

AJS Technologies | Middelburg, MP, South Africa

- Working with an Electrical Engineer, I was taught how to troubleshoot and repair electronics while earning money to help pay for my studies.
- Through this I learnt basic electronic fundamentals and technical skills, circuit design and circuit diagram reading.
- I was also taught some of the basics of business management, invoicing and engineering communication.

EDUCATION

Advanced Diploma (NQF7/RQF6), Mechanical Engineering

- 2025
- University of South Africa

National Diploma (NQF6/RQF5), Mechanical Engineering

- 2022
- University of South Africa

Relevant Certifications and Training

Principles and Technology of Lubrication Engineering

- 2022 – With Distinction
- South African Institute of Tribology

Lean Six Sigma – Yellow Belt

- 2025
- Prof. Dr. Marcelo Machado Fernandes

SolidWorks CAD Design Associate

- 2025
- Dassault Systemes

Asset Maintenance and Condition Monitoring

- 2025
- NAFCO - Dr. AF Nnachi

Lean Six Sigma – White Belt

- 2024
- Prof. Dr. Marcelo Machado Fernandes

Older Certifications and Training

Lift and move materials and equipment by means of a forklift.

- 2022
- Copper Coal Training

Basic Rigging

- 2021
- Safety and Training Solutions

Hydraulic Torque Tool Training

- 2021
- Wanawake Industrial Supplies



We certify that

ROBERT PAUL SMITH

*having complied with the requirements of the Higher Education Act
and the Institutional Statute, was issued with the*

ADVANCED DIPLOMA
in Mechanical Engineering

*at a congregation of the University
on 19 June 2025*

Vice Chancellor

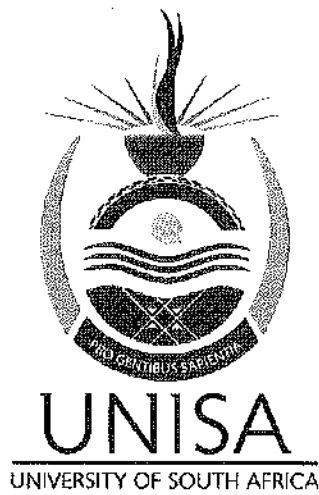
University Registrar



Executive Dean

29013358002138D04642





We certify that

ROBERT PAUL SMITH

*having complied with the requirements of the Higher Education Act
and the Institutional Statute, was issued with the*

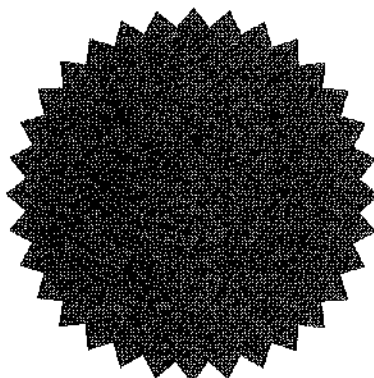
NATIONAL DIPLOMA

in Engineering: Mechanical

*at a congregation of the University
on 11 April 2022*

Vice Chancellor

University Registrar



Executive Dean

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Southern African Institute of Tribology

This is to certify that

Robert Paul Smith

attended the Course

“Principles and Technology of Lubrication Engineering”

and passed the appropriate Examination to the satisfaction of the

Southern African Institute of Tribology

With Distinction

SECRETARY

2022

PRESIDENT



YELLOW BELT CERTIFICATION

I hereby certify that:

Robert Smith

*has successfully completed a 20-hour Lean Six Sigma training
at the Yellow Belt level and demonstrated competence
in the methodology by being approved in the final test.*

A handwritten signature in black ink, appearing to read "M. Machado", is positioned above the name of the certifier.

Prof. Dr. Marcelo Machado Fernandes

Lean Six Sigma Master Black Belt

ASQ Certified MBB – 65316044

Minitab Certified Trainer

106438554

May 18, 2025

CERTIFICATE OF ATTENDANCE

This certificate is awarded to

Robert Smith



For Successful Completion of a Course on

ASSET MAINTENANCE AND CONDITION MONITORING

Date: 04th – 05 August 2025

This event has been Validated with **2CPD** as per ECSA policy.

Service provider CPD-SP-047

Accreditation number: ICMEESA357-25

Facilitator
Dr AF Nnachi



CERTIFICATE

Dassault Systèmes confers upon

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the certificate for

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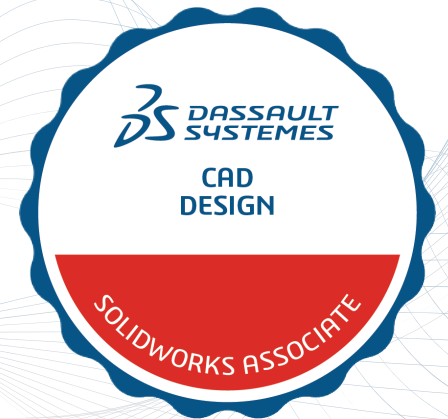
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A handwritten signature in black ink.

Manish KUMAR
SOLIDWORKS CEO
R&D Vice President





WHITE BELT CERTIFICATION

I hereby certify that:

Robert Smith

has completed a 4-hour training on Lean Six Sigma at a White Belt level and has demonstrated capability in this body of knowledge being approved in the final test.

Prof. Dr. Marcelo Machado Fernandes

Lean Six Sigma Master Black Belt

ASQ Certified MBB – 65316044

Minitab Certified Trainer

CERTIFICATE AUTHENTICITY CODE:

CLBQQPSSF-ZJTVLTKHJ-XTPXCCCCXT

18th Jun 2024



SAFETY AND TRAINING SOLUTIONS

CERTIFICATE OF COMPETENCE

AWARDED TO

R.P. SMITH

ID 9606295016088

FOR

SUCCESSFULLY COMPLETING THE

BASIC RIGGING

TRAINING COURSE

SAQA ID	UNIT STANDARD TITLE	LEVEL	CREDITS
253638	Sling and Communicate During Crane Operations	2	4

COURSE DATE: 21 SEPTEMBER 2021

EXPIRY DATE: 21 SEPTEMBER 2023 /

OR AS PER MINE COP

CERT NO: SATS 67412



[Signature]

DIRECTOR



ISO 9001:2015 Certified



16/MQA/0905/AC4/261119



ACC/18/08/00025



TETA: 19-1125

To verify the authenticity of this certificate contact info@satsolutions.co.za

COPPER COAL TRAINING

Certificate of Competency

This serves to certify that

R.P. SMITH
9606295016088

has been assessed and found competent against the following
unit standard:

Unit standard title: Lift and move material and equipment by means of a
forklift

Unit Standard: 244365

ASSESSOR:

Dewald Nieuwoudt (ASS/00323)



TRAINING MANAGER:

C. Nieuwoudt

Verification: 079 191 5547

COPPER  COAL
TRAINING

CETA
Construction Education and Training Authority
ACC/18/08/00014

CERTIFICATE NO.: CCT22-373

SITE SPECIFIC / MACHINE SPECIFIC

ISSUE DATE: 16/06/2022

EXPIRE DATE: 16/06/2024



WANAWAKE
INDUSTRIAL SUPPLIES
NURTURING INDUSTRY

Certificate of Attendance

This is to certify that

ROBERT SMITH

ID NO: 960629 5016 088


Has attended the

HYDRAULIC TORQUE TOOL TRAINING

At

POMS – MIDDELBURG

Heino Seraphim


Signature

Date: 6 May 2021