



Curriculum Vitae

Alan Forsyth



Profession: Bulk Materials Handling, Mechanical Engineer

Education: BSc Eng (Witwatersrand)
Executive Development Programme (IMD)

**Registrations/
Affiliations:** Professional Engineer (860109)
SA Institute of Mining and Metallurgy
Institute of Quarrying of Southern Africa

Expertise

After receiving a degree in Mechanical Engineering from the University of the Witwatersrand in 1975, Alan joined Samuel Osborn (South Africa) Limited, who manufacture and supply materials handling and beneficiation plant, conveyors and equipment to the mining, quarrying and construction industries. Initially he was a project engineer on a wide variety of materials, including aggregates, limestone, silica, granite, dimension stone, coal, iron ore, diamonds, platinum, gold, chrome, manganese, nickel, copper, aluminium and scrap, from feasibility studies to turnkey contracts.

In October 1985, he was appointed manager, projects and contracting; in 1987, divisional director, then in 1989, projects director. Typically these were turnkey contracts over a broad range of minerals with a number of specialist sectors such as scrap crushing and processing. Projects included tips, crushing and screening plants, conveyors systems, dense-medium beneficiation plants, sampling plants, storage and rapid-loading terminals, with capacities ranging up to 5,000tph and conveyors up to 2400mm wide and 6 km in length.

In July 1999 he was appointed managing director, the position he held until he left the company in September 2004.

In 2001 he completed an 11 week Programme for Executive Development at IMD (Institute for Management Development) in Lausanne, Switzerland.

In 2005, he was nominated by ASPASA to the MQA (Mining Qualifications Authority) to assist in developing the needs of the CLAS (Cement, Lime, Aggregate and Sand) sector, facilitating and participating in the development of occupational qualifications and training development and has



been nominated to a number of task teams associated with training and development. He is a registered Qualification Development Facilitator with SAQA/ QCTO.

Employment History

2014 - Present	Principal Engineer	Bara Consulting
2005 - Present	Independent Contractor	MQA/ Aspasa/ CLAS
2005 - 2014	Principal Engineer	RHDHV Mining, formerly Turgis Consulting
1974 - 2004		Osborn Engineered Products

Recent Key Experience:

- Johannesburg Water, Northern Works, 2007-2010: Mechanical Engineer for mechanical contract supervision for 150Ml/day waste water treatment plant.
- Ferrexpo plc, Poltava Iron Ore Mine, 2006/09: Principal Mechanical Engineer for 40 Mt/a feasibility studies for overburden handling systems at up to 7,000 t/h and primary crushing and conveying systems up to 7,000 t/h, with conveyor lengths up to 8 km.
- Optimum Colliery, 2009 and 2012: Project Manager for complete surface materials handling and plant simulations. Conveyors up to 6 km in length
- Ferrexpo plc, Belanova Iron Ore Mine, 2012: Mechanical Engineer for 40 Mt/a Pre-feasibility study for in-pit and ex-pit overburden handling conveyor and stockpiling systems up to 7,000 t/h, with conveyor lengths up to 2 km
- Sasol Secunda 2012: Mechanical Engineer for Fresh Coarse Ash Truck Loading Facility feasibility study
- ABG Bulyanhulu Gold Mine, Tanzania, 2010, 2012 and 2013: Mechanical Engineer for Concept and Pre-feasibility studies for underground truck / conveyor systems.
- The Mineral Corporation 2013: Engineering Report for the Engineering Services for the Mine Surface Engineering Infrastructure and Bulk Services for a chrome mine
- MQA 2012 - 2014: Facilitator for the development of various qualifications in the Mining Sector
- CSA Copper Mine, Australia 2015: Lead Mechanical Design Engineer on the detailed design of a large conveyor system.

Experience

Design, Engineering and Project Management: Crushing, screening, handling, dense medium beneficiation plants and conveying systems for companies including: Anglo Coal, BHP Billiton, Sasol, Heckett Multiserv, A Lowenthal Metals, Richards Bay Dry Bulk Terminal, Afrisam and Afrimat.

Mechanical Engineering: Experience includes: Plant, Underground and Overland Conveyor Systems; Apron feeders; Rotary breakers; Rolling ring crushers; Mineral sizers, single and double roll crushers; Track-mounted primary jaw crusher stations; Scrap shredders; Jaw and cone crushers; Vibrating feeders; Screens; Scrubbers; Screw classifiers; Mills; Dense-medium beneficiation plant; Rapid load-out stations: Sampling plant.



Management: He has project management, manufacturing, marketing, sales and general management experience and managed the sale of Osborn from Anglo Operations to Astec Inc in 2000.

Occupational Development and Training: Since 2005 he has participated in occupational training and development at the Mining Qualifications Authority.