# Henk van Aarde

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## PERSONAL STATEMENT

I am an adaptable and innovative qualified Mechanical Engineer with 6 years' experience in:

- Design
- R&D
- Site management
- Commissioning
- Project management

I am looking to develop and apply my expertise in new concept development, simulation and validation within a forward thinking company.

## **KEY SKILLS**

# **Technical Skills**

- o SolidWorks
- o MS Office
- o Autocad
- o Pro E wildfire

# **EDUCATION**

- University of JohannesburgB-Eng Mechanical Engineering
- Uplands college
   IEB subjects including Math's (C), Science (B), Computer science (C)

#### **EMPLOYMENT**

## **Mechanical Engineer**

Rula bulk materials handling | Johannesburg | www.rula.co.za 01-2010 - Present

## Achievements

- Optimized and furthered the design of a pressure actuated dispensing device to apply parasiticide to livestock and game
- Site engineer/site manager for the refurbishment of the dust handling plant of 3 units of the Kriel power station
- o Performed pressure tests on pneumatic conveying pressure vessels.
- Investigated the failure of a high pressure release valve by simulating operation. Failure
  modes were identified and rectified through use of alternate materials. Wear was also
  identified as a problem and the design optimized successfully.
- o Investigated and determined the cause of submerged scraper conveyor stub shafts seizure.
- o Part of the team developing submerged scraper conveyor stub shafts.
- o Investigate the reason for poor efficiency from an inclined screw feeder.
- o Testing centrifugal fans to determine P-V characteristics.
- o Investigation as to the cause of impeller shaft bearings overheating.
- o Design of a rotary feeder.
- o Design, modeling and generating drawings of a conveyor belt scale.
- o Design, modeling and generating drawings of a conveyor belt feeder including chutes.
- o Design, modeling, generating drawings and testing of a mechanical lubrication system.
- o Design of a 400 000:1 reduction "gearbox".
- o Consulting on the optimization of a pneumatic ash conveying system at Majuba power station.
- Site engineer/manager for plant erection and interface modification at PPC Buluwayo,
   Zimbabwe.
- o Design of an enclosed, horizontal cement mixer for underground mining use.
- O Site engineer for the construction of a coal bypass system at the Majuba power station.
- o Design of a collapsible tripper on a 3000tph conveyor.
- Design of a scraper conveyor

## PERSONAL INTERESTS

Hunting | Fishing | Archery | Mountain biking | Motor biking | Photography | Rock climbing | Target shooting

## **REFERENCES**

References are available on request.