# Booysendal mine – Stacker Reclaimer New Rom Pad

Lydenburg, Mpumalanga, South Africa

## Project Facts

**Product**
Franki Pile

**Market**
Mining

**Client**
Northam Booysendal Mine

**Main Contractor**
Grinaker-LTA (Pty) Ltd

**Engineers**
SRK Consulting

**Key Achievements**
Installed 629 No. Franki Piles

- **About the project**

  The Northam Platinum Booysendal Mine required the construction of a new stacker and reclaimer facility for the handling of raw mined platinum ore at its North Plant. Grinaker LTA was appointed as the main contractor and subsequently engaged Franki Africa to undertake the specialist foundation works.

  The scope of works included the installation of 629 driven cast in-situ piles (Franki Piles) to support the stacker and reclaimer structures. Pile depths ranged from 5 m to 16 m, depending on the structural loading requirements and prevailing ground conditions.

- **Challenges**

  The foundation design for the stacker and reclaimer will be subject to substantial static and dynamic loads generated during operation, necessitating precise pile installation and strict compliance with specified positional and verticality tolerance.

  The significant distance between the concrete batching facility relative to the site created challenges in maintaining concrete supply continuity, concrete quality, and adherence to delivery schedules throughout the piling operations.

- **The Solution**

  Franki Piles (driven cast in-situ piles) were selected because they provide high end-bearing capacity, excellent performance under dynamic loading, and good resistance to settlement.

  The piling foundation system was verified through 12 no. dynamic load tests at 150% working load, confirming adequate pile capacity.

  Concrete supply challenges were mitigated through detailed delivery planning and close coordination with suppliers, ensuring a continuous concrete supply and the successful completion of the piling works within budget and programme.