A Shovel a Day
On-Site Relocation of Two Hydraulic Shovels: 800 Ton and 600 Ton Respectively

Vanguard was recently called on to assist in the on-site relocation of two massive hydraulic mine shovels at South32’s Wolfekrans Colliery near Middelburg. The call came through no more than one week before a Komatsu PC 8000 and a CAT 6060 FS shovel needed to be relocated on-site between different mine pits. A quick but calculated solution was needed to ensure we could assist South32 in their time of need.

The sight of the Komatsu PC 8000 shovel, the world’s largest hydraulic shovel, was intimidating! We knew we had a mammoth task on our hands to move it 11 km along mine haul roads on such short notice. However nothing is ever too big for the Vanguard team and we grabbed the opportunity with both hands.

*Cargo Details:*
- **Shovel 1 – Komatsu PC 8000**
  - Weight: 800 tons
  - Dimensions: 18.2 x 10.1 x 11.7 m
  - Transport Distance: 11 km
- **Shovel 2 – CAT 6060 FS**
  - Weight: 600 tons
  - Dimensions: 16.4 x 8.4 x 10.3 m
  - Transport Distance: 5 km

Our team of engineers quickly put together a transport solution utilising a 6-file, 14-axle Goldhofer PST combination to accommodate the girth of the shovel and increase stability of the load. A team of six was tasked with assembling the PST combination and did so in record time, ensuring that we met the clients target for loading the PC 8000 on a Thursday afternoon.

The tracks of both shovels dwarfed the cross beams on which they had to be loaded, but some skilful operating and well-coordinated communication between Vanguard and South32’s team ensured both shovels moved on and off the trailer with relative ease.

The 11 km journey along mine haul roads involved scaling gradients of near 10%, crossing over national roads, some tight bends and clearing under power lines.

Once the PC 8000 reached its destination and was offloaded safely, it was time to move the CAT shovel. The same process for loading, transporting and unloading was followed and the shovel too reached its destination safely and on time.

In a mine environment where time is money, Vanguard’s quick reaction and carefully-planned solution ensured that each shovel reached its destination and was ready to work in less than one day!