SA’s commodity of the year goes to manganese

Shining a spotlight on manganese, its rising global demand and SA’s readiness to handle it for the next 100 years.

South Africa contains more than 70% of the world’s manganese reserves, but only accounts for approximately 33.5% of the global manganese production. Picture: Bloomberg

South Africa is home to more than 70% of the world’s highest grade manganese – a commodity not as well-known as gold, but one that has contributed immensely to the creation of jobs; unlocked capacity at the ports and supply chain; as well as assumed a noteworthy role in stabilising the economy over the last five years.

For all its sins, the migrant labour system as well as the country’s education efforts raised awareness of a South Africa that was well endowed. For most, the awareness came at a tender age. What we didn’t know is that apart from gold – SA has coal, platinum group of metals, diamonds, ferrochrome,
iron ore, vanadium, chromium, titanium, uranium, copper – among many other minerals and base metals, including manganese.

Manganese particularly is a key additive in the manufacturing of steel products, offering superior quality. It is not found as a free element in nature, but often in combination with iron. Mined in the country’s largest province of the Northern Cape, manganese is without a substitute and rather economical. Its demand came about as China toughened its ecological requirements in 2014 with an emphasis on clean energy, increasing steel quality standards and instituting the shutdown of local mines that had exhausted their reserves which were producing low grade manganese.

Also, the world’s increased need to find sustainable means to produce lithium, zinc carbon and alkaline batteries used in necessary items like cellular phones, electric cars and domestic geysers has also played a significant role in the uptake. Traditionally, manganese has always been a source for products in the energy, chemical, electronics and agricultural sectors – being used in products like fertilisers, animal feedstuffs, surface treatments for metals and pigments.

It is estimated that 95% of manganese produced globally is consumed in the manufacturing of steel, with China accounting for over 50% of global consumption followed by India, Japan, Ukraine and South Korea respectively – five of the world’s top ten importers.

Australia has the second largest reserves of high grade manganese after South Africa; mining the commodity at significantly reduced costs because of its mines’ close proximity to the ports – which drastically reduces logistical costs. Gabon, Ghana, Brazil, India, Ukraine, Malaysia and Kazakstan are also manganese ore producing countries although, apart from Gabon and Brazil – the quality of their mineral is mid-grade.

The Transnet Port Terminals, operate 16 cargo terminals situated at the ports of Saldanha, Cape Town, Port Elizabeth, Ngqura, East London, Richards Bay and Durban. Volumes of manganese have increased 45-fold in the past five years with an average throughput of 2.7 million tons per annum at the Saldanha facility alone. Investments aimed at keeping up with the demand have been made to sustain the skip handing process at the terminal as manganese is railed from the Northern Cape to Saldanha Bay in the Western Cape. Upon arrival at the port, the manganese is loaded onto calling vessels destined for importing countries via skip operation – an efficient method that averages 201 tons per hour. The Saldanha Terminal has increased its headcount by 300% over the same five-year period.

Port Elizabeth Multi-Purpose Terminal’s handling of manganese, averages a throughput of 13.6 million tons per annum with 334 employees dedicated to the service. About 30km north of PE, the Ngqura Terminal established just under a decade ago to complement the Transnet Port Terminals (TPT) system of 16 terminals as a transhipment terminal for containers – now handles manganese as well. In the last five months, the introduction of the manganese operation has contributed about half a million tonnes to export volumes. And the Richards Bay Terminal which specialises in bulk exports – handled its first manganese vessel successfully in October after five decades. This was the first of three trials that will establish continuity of handling the commodity in the region going forward.
In order to create capacity and ensure that TPT meets the high demand of SA manganese, Transnet Port Terminals (TPT) have also recently begun operating an inland manganese terminal in the Northern Cape called Lohatlha which is focused on servicing emerging miners situated 100kms from the manganese belt in the Hotazel area. The Lohatlha Terminal will handle an estimated 1.8 million tons per annum and up to 2 million tons at full capacity. As we journey on achieving top five global status in the next five years, diversifying our operations and revenue streams using existing skills becomes pivotal.

Even though South Africa contains more than 70% of the world's manganese reserves, it only accounts for approximately 33.5% of the global manganese production. It’s still the largest producer in the world.

However, there remains huge developmental potential despite the distance between the pits and the ports which poses cost challenges for moving the commodity. The passing of the Mineral and Petroleum Resources Development Act into law in 2004 by government encouraged the establishment of new manganese mining projects in the Kalahari Desert that are playing on the world stage. Their biggest challenge is infrastructure and once overcome South Africa's position shifts as we know it. For its role in the country's economy, unlocking port capacity and creating jobs both at Transnet and in the supply chain – I’d like to declare manganese as commodity of the year.

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