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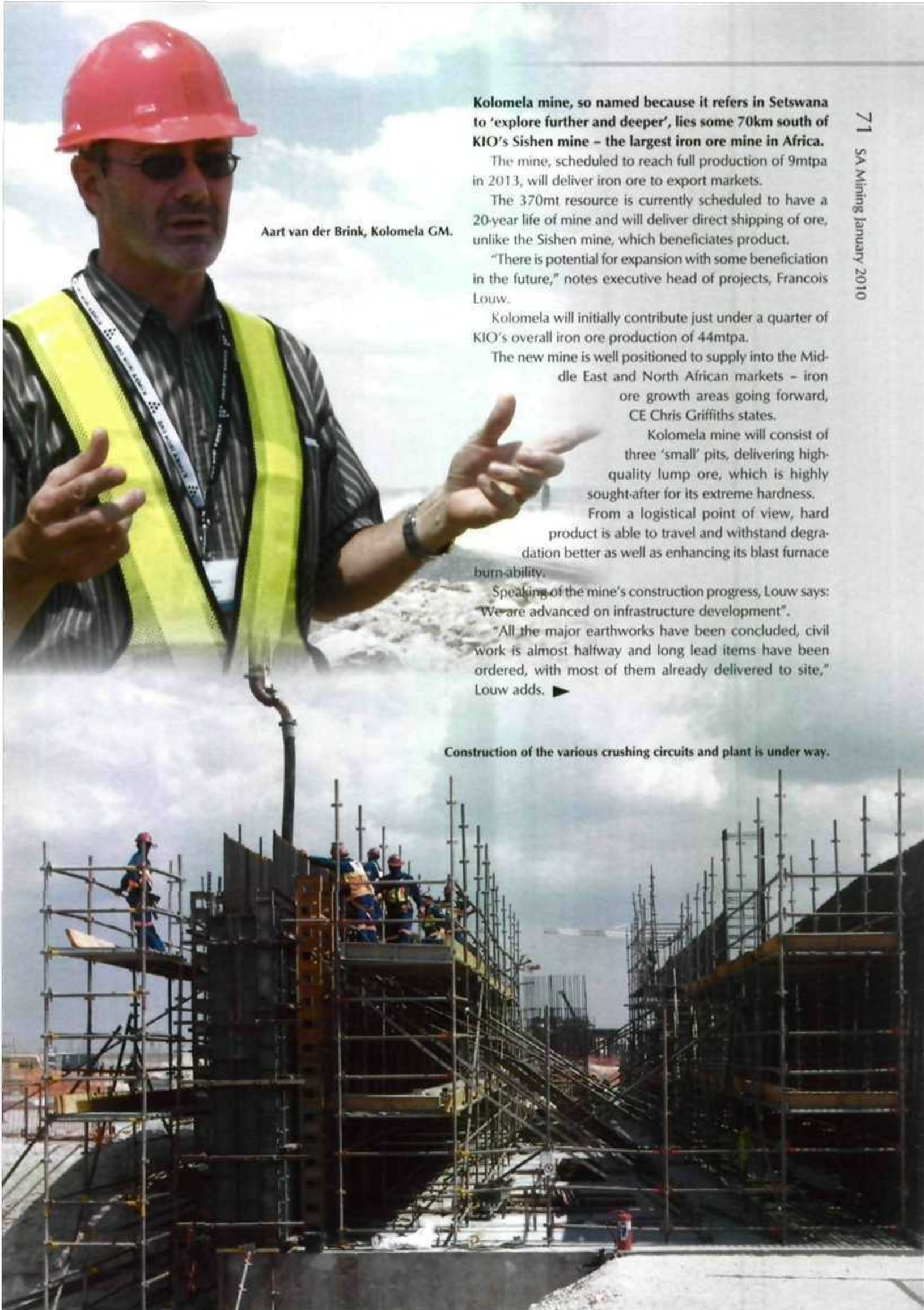
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Iron man in the making

Construction on Kumba Iron Ore's (KIO) R8.5bn Kolomela mine, formerly known as Sishen South mine and located near Postmasburg in the Northern Cape, has surpassed the 30% mark. A recent site visit to the Kolomela mine revealed a hive of activity bent on bringing the operation into production in the first half of 2012, in time for iron ore market tightness in 2013, which would be driven primarily by Chinese growth. Nelendhre Moodley reports.



Early stage drilling and mining at Leeuwfontein.



Aart van der Brink, Kolomela GM.

Kolomela mine, so named because it refers in Setswana to 'explore further and deeper', lies some 70km south of KIO's Sishen mine – the largest iron ore mine in Africa.

The mine, scheduled to reach full production of 9mtpa in 2013, will deliver iron ore to export markets.

The 370mt resource is currently scheduled to have a 20-year life of mine and will deliver direct shipping of ore, unlike the Sishen mine, which beneficiates product.

"There is potential for expansion with some beneficiation in the future," notes executive head of projects, Francois Louw.

Kolomela will initially contribute just under a quarter of KIO's overall iron ore production of 44mtpa.

The new mine is well positioned to supply into the Middle East and North African markets – iron ore growth areas going forward, CE Chris Griffiths states.

Kolomela mine will consist of three 'small' pits, delivering high-quality lump ore, which is highly sought-after for its extreme hardness.

From a logistical point of view, hard product is able to travel and withstand degradation better as well as enhancing its blast furnace burn-ability.

Speaking of the mine's construction progress, Louw says: "We are advanced on infrastructure development".

"All the major earthworks have been concluded, civil work is almost halfway and long lead items have been ordered, with most of them already delivered to site," Louw adds. ►

Construction of the various crushing circuits and plant is under way.

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This includes the stackers and reclaimers. Construction of the primary, secondary and tertiary crushers is also well under way.

At this point in time, some 1500 people are working on-site, with expectations of this number rising to 2500 at construction peak.

Construction of 718 housing developments, costing some R550m, is scheduled to take place in two phases, and is expected to start early this year.

Rail construction by state-owned enterprise Transnet began towards the end of last year 'with the parastatal on time for delivery in line with the overall mine plan'.

The Kolomela rail construction includes a Beeshoek bridge spanning 51m in length and two lines with provision for a third line. The two lines, in balloon formation, will have sufficient clearance for 342 wagons with locos.

Kolomela will be mined from 450m on the 14km long and 3km wide ore-body across three pits - Kapstevet, Klipbankfontein and Leeuwfontein - with the majority of ore coming from Leeuwfontein.

All mining done in-house will use the standard truck and shovel method.

20mt of waste pre-stripping will take place between 2009/10, building up to 30mt and 9mt of ore in 2012/13.

The Kolomela operation, situated on 16 000ha, lies on a shallow water table which requires dewatering. Once de-watered, the water will be fed into the local system and to municipalities for public use.

With energy efficiency at the forefront of all mining operations looking to keep costs low, the Kolomela mine has invested some R25m on using energy-efficient products, such as high efficiency motors, lighting systems and solar geysers on its housing development.

All in all, Louw reports that the operation has saved about a quarter of the original power requirement. It has already secured 14MVA of power. ○

MAIN CONTRACTORS:

- Hatch - Plant & rail
- BVi - Infrastructure
- Jeffares and Green - Roads
- Aurecon (Ninham Shand) - Export pipeline

EQUIPMENT SUPPLIERS:

- Komatsu
- Caterpillar
- Metso
- Takraf

CONSTRUCTION:

- Concor - Earthworks & roads
- GLTA - Civils
- Group 5 - Buildings
- TTC - SMPP

Construction of the plant is under way.

