IVANHOE MINES
NEW HORIZONS

PROGRESS GALLERY / December 2020

Building futures. Strengthening communities.

Construction of the Phase 1 concentrator and associated infrastructure at the Kakula Copper Mine is progressing rapidly. Watch a short fly-over video showcasing ongoing construction**:** https://vimeo.com/495561497/9e42d84cf2

Building what will be **3 of the world's best mines** and exploring for the **next copper giant** in Southern Africa's legendary mineral fields

WESTERN FORELAND

Copper exploration

Democratic Republic of Congo's Central African Copperbelt

KAMOA-KAKULA

Copper mine development and exploration

Democratic Republic of Congo's Central African Copperbelt

PLATREEF

Mine development at platinum-group elements, gold, nickel and copper discovery

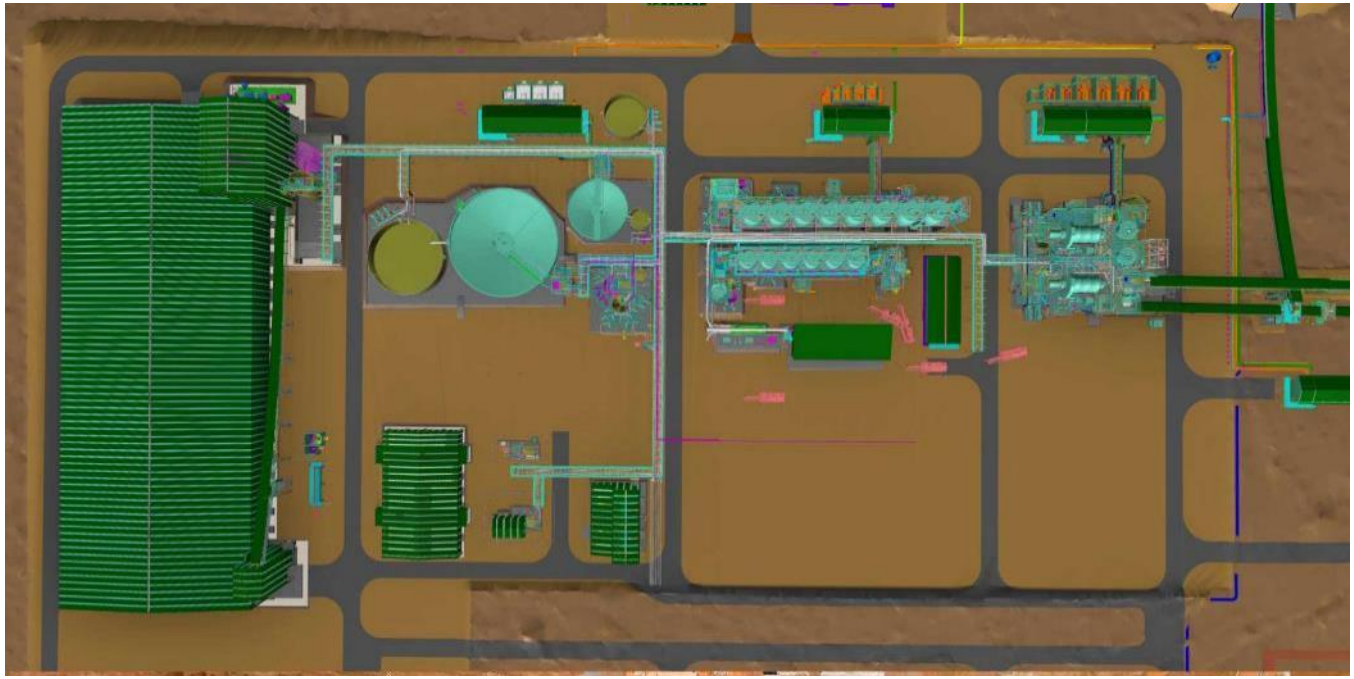
South Africa's Bushveld Complex

KIPUSHI

Zinc, copper, silver and germanium at historic, high-grade mine

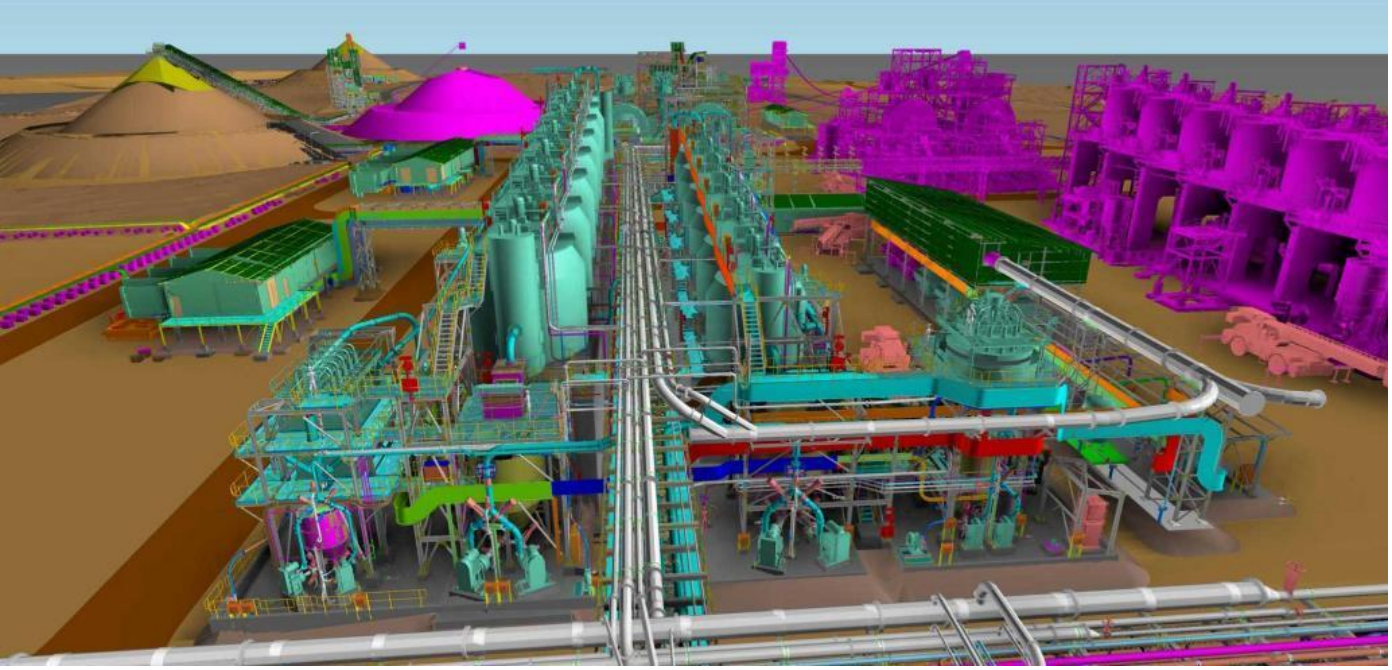
Democratic Republic of Congo's Central African Copperbelt

In December, Kamoa Copper's surface construction crews successfully achieved 5 million hours worked without a lost-time accident. Torra Engelbrecht, Kamoa Copper's Head of Construction (third from right), congratulates the construction team.



3D overhead illustration of the completed Phase 1, 3.8-Mtpa concentrator plant.

The picture immediately below shows the current construction progress.



3D illustration of Kakula's initial 3.8-Mtpa concentrator plant, with the recently-initiated second 3.8-Mtpa processing plant shown in magenta.

The picture immediately below shows the current construction progress.

T3 Projects employees installing copper electrical cables at the Phase 1 concentrator. 48 kilometres of copper electrical cable has been installed out of a total of 207 kilometres.

Medium-voltage and low-voltage copper electrical cables installed in the flotation and milling areas of Kakula’s Phase 1 concentrator.

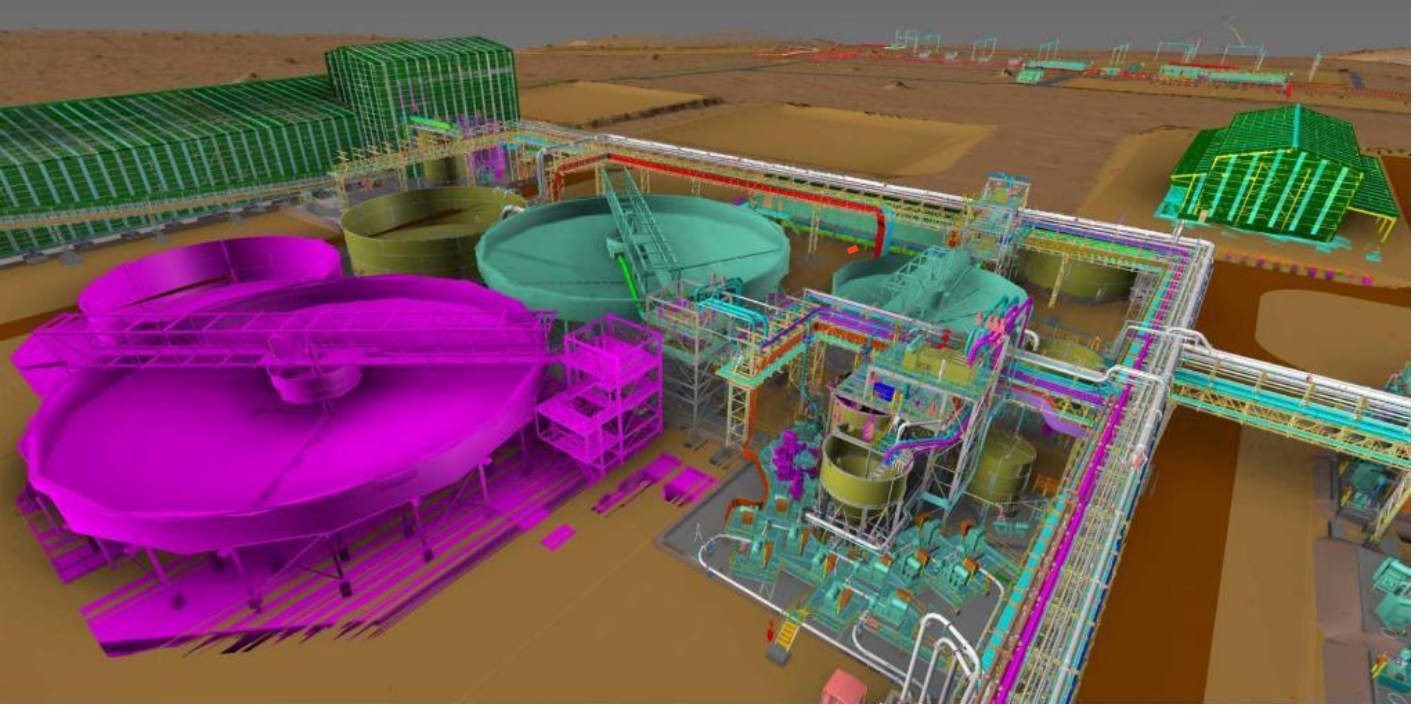
Dario Ngwenya, Manuel Machai and Sylvain Majaliwa Katundu (left to right) of T3 Projects, a leading South African electrical installation company.

Installation of copper electrical cables at the Phase 1 concentrator.

Ariel Ilunga, scaffolding erector with DRC contracting company Majengo, working on Kakula's Phase 1 concentrator.

Kakula's crusher plant. Oversize ore (+50mm) from the screening plant will be conveyed to the green crusher feed bins (top left), through two orange vibrating feeders (middle left), through the two green chutes (middle left) and into the two red Sandvik CS 660 cone crushers (bottom left).

Concrete base poured for Kakula’s Phase 2 ball mill foundations.



KAMOA-KAKULA

3D illustration of the tailings thickener and concentrate thickener with the filter building and concentrate storage building shown in the background and the Phase 2 thickeners shown in magenta.

The picture immediately below shows the current construction progress.

Joseph Kasungu, a B40D articulated dump truck operator for DRC contracting company Kongo River.

Ongoing construction of Kakula's first phase, backfill paste plant. Approximately one half of the mine's tailings will be sent back underground, significantly reducing the surface tailings storage.

KAMOA-KAKULA

Kamoa-Kakula’s new fire engine has arrived at the mine.

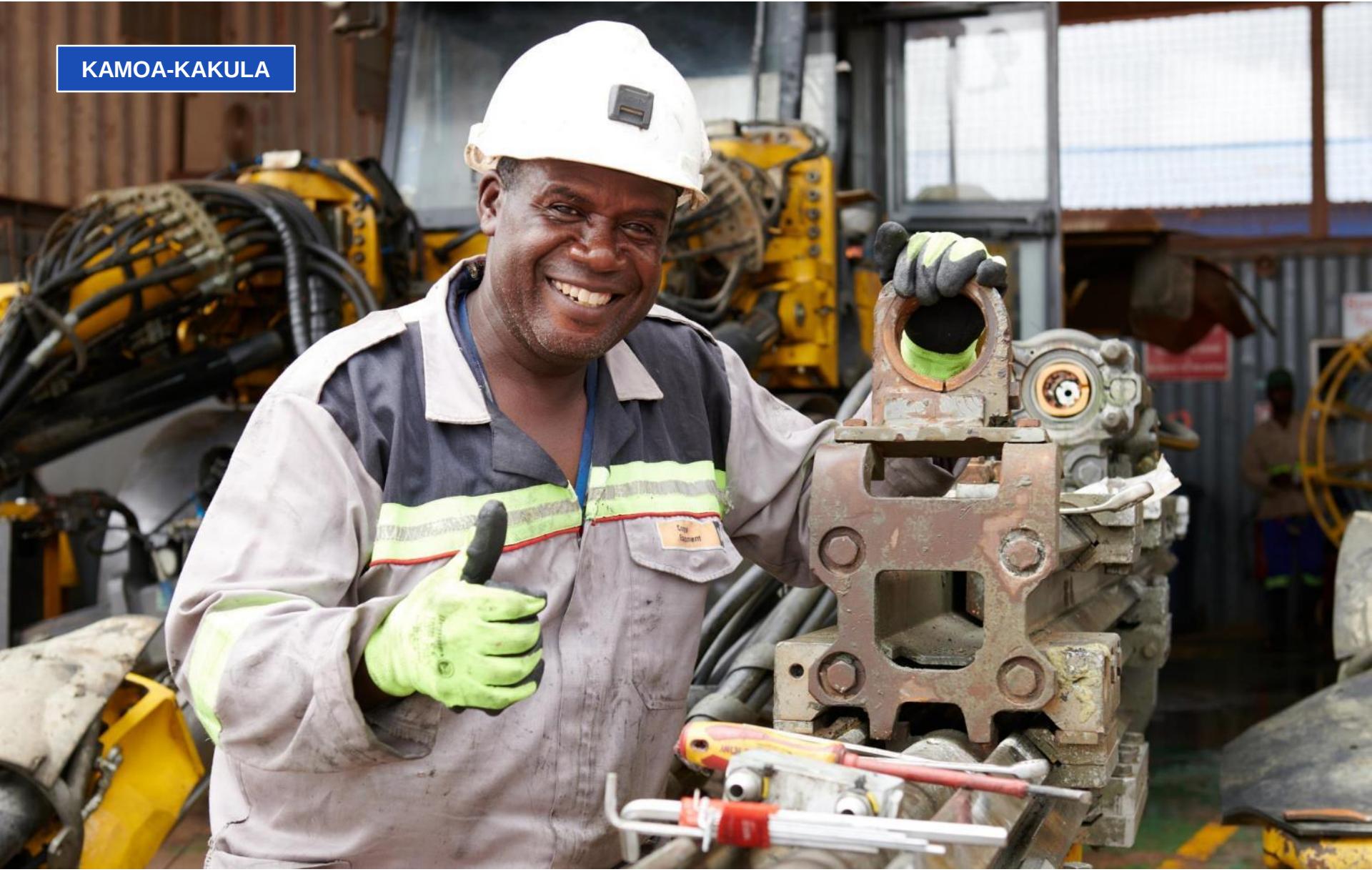
Lunda Ngandu, belt attendant, starting up the Kakula North underground 2,000-tonne-per-hour ore conveyor.

Mining crew at the Kansoko Mine: (L-R, back row) Markaveli Mihigo, shift supervisor; Simon Kanyimbu, miner; Fabrice Kadianga, LHD operator; Richard Mbaya, drill rig operator; Alexander Kapalu, general worker; (L-R, front row) Arthur, general worker; Alex Kashina, general worker; Jean Marie, miner; and John Saidi, drill rig operator.

Tresor Matoka, mechanic, performing maintenance on a double boom drilling rig at the Kansoko Mine workshop.

Aerial view of staff accommodation at Kakula Village. Transmission towers for the 220-kilovolt power line connecting Kamoa-Kakula to the national power grid are in the background.

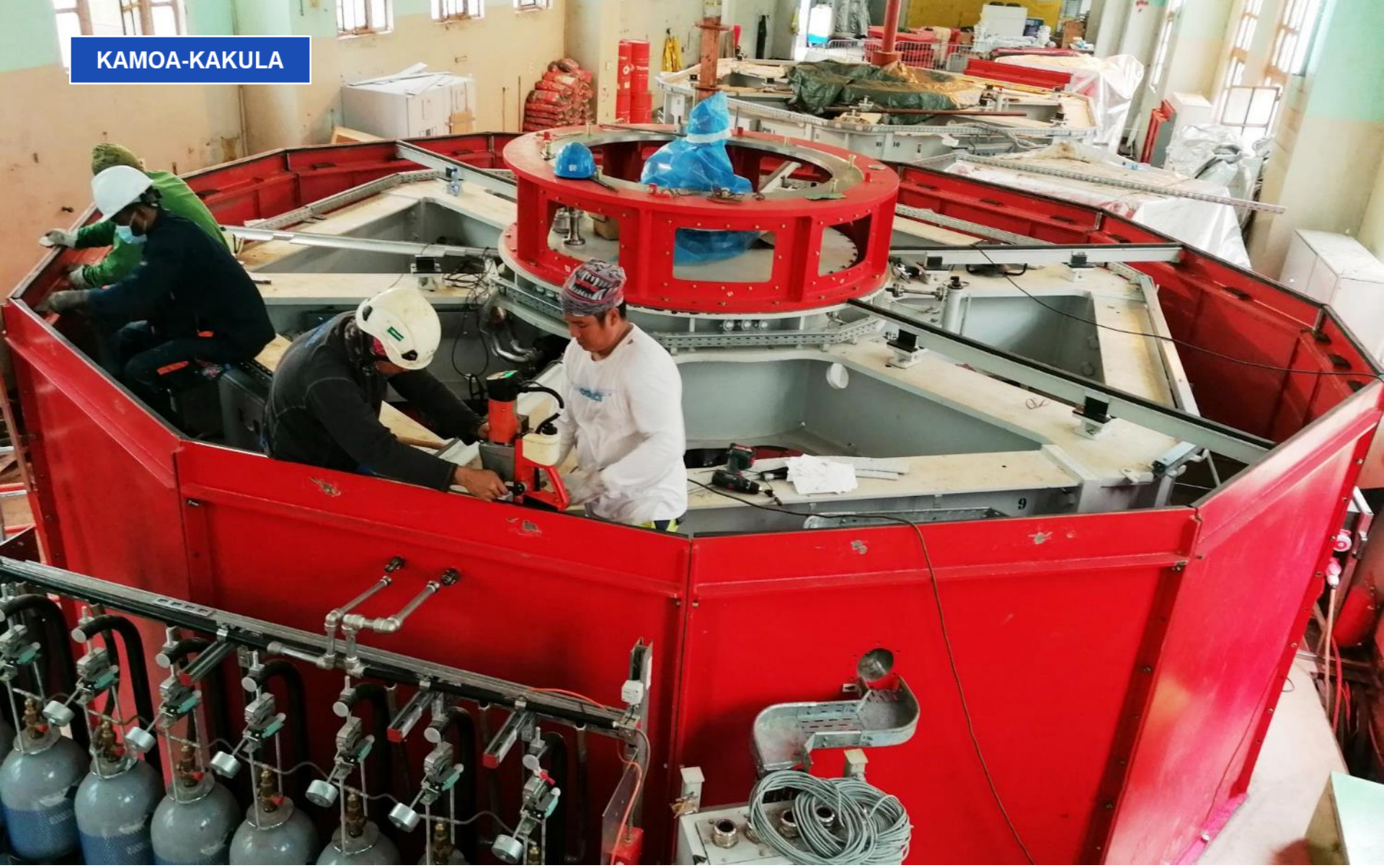
Kamoa-Kakula contractor accommodation and recreation facilities.



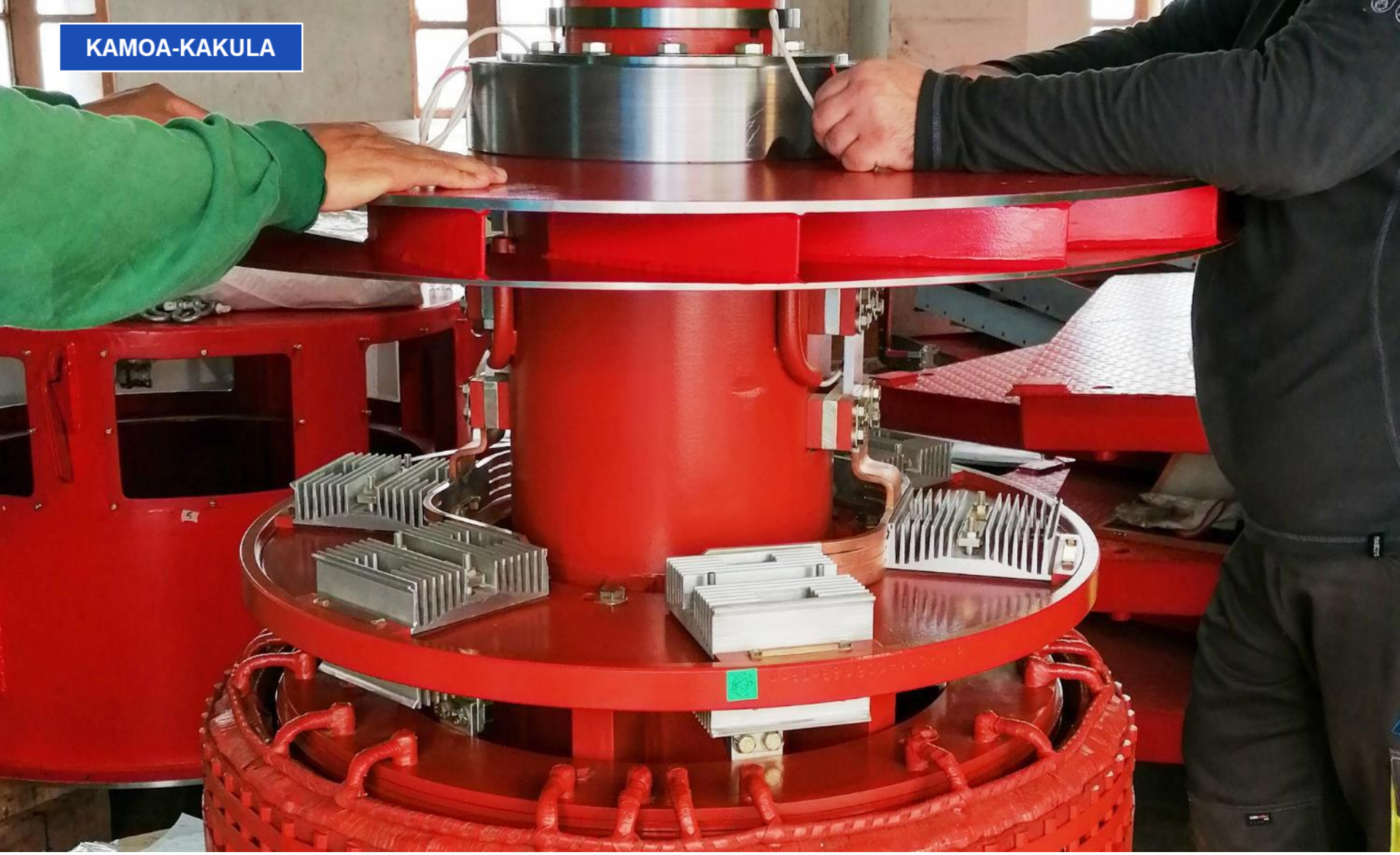
Mechanic Faustin Ngombe Itshimbu at the Kansoko Mine workshop.

Fresh eggs delivered to the Kamoa-Kakula kitchens from the Mundjendje community poultry farm – a Kamoa-Kakula initiative to enhance food security in local communities.

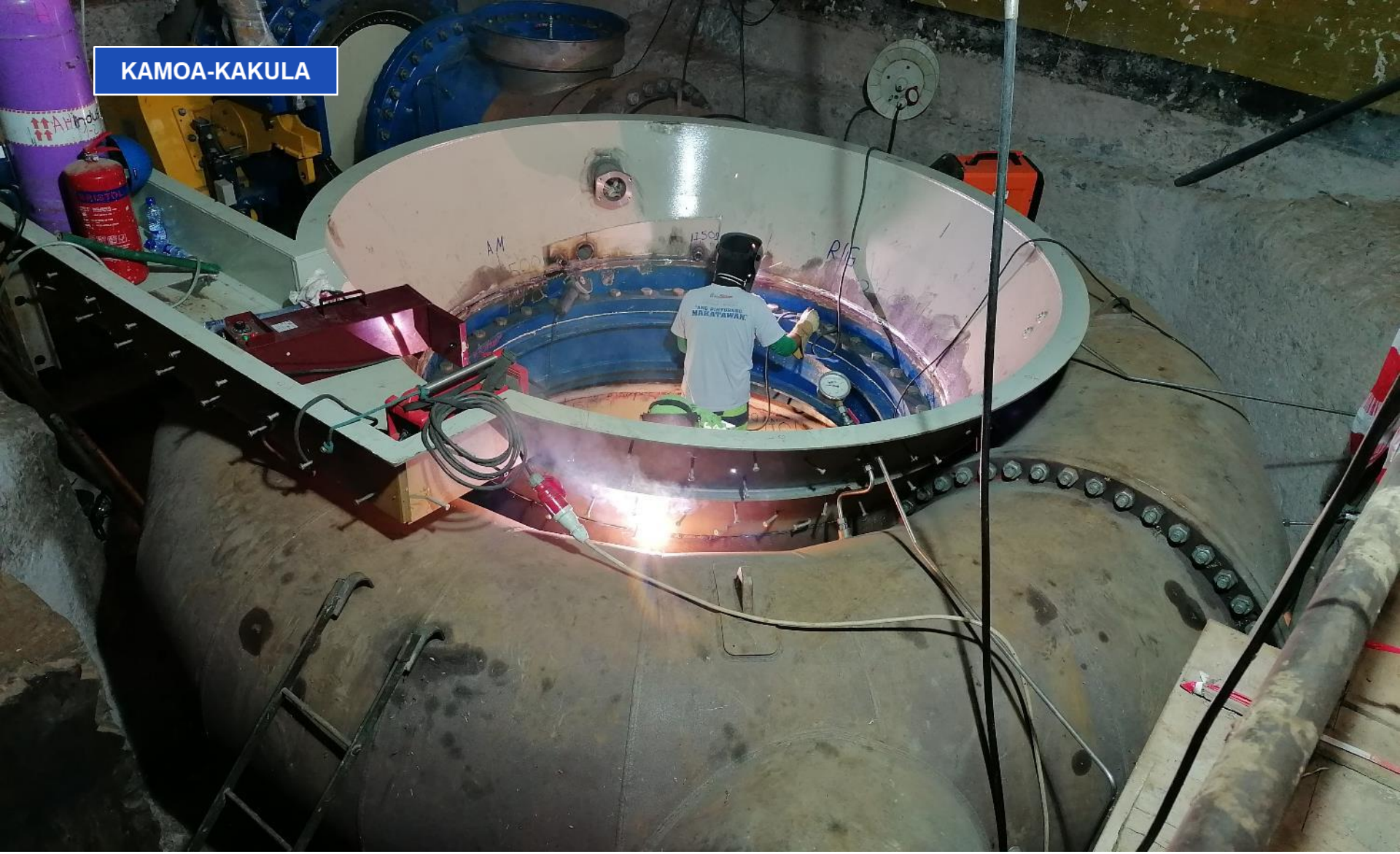
Piping installed for the rougher and cleaner flotation cells at Kakula's Phase 1 concentrator.



Electricians from Andritz Hydro, of Vevey, Switzerland, installing the alternator for the second of six new turbines at the Mwadingusha hydropower plant.



Assembling the excitation component for Mwadingusha's second turbine. A key milestone toward Ivanhoe's goal of producing the world's greenest copper was attained in December with the synchronization of the first turbine to the DRC national grid.



Preparing the casting to cover the spiral water case that will drive the fifth turbine at the Mwadingusha plant.

PLATREEF, SOUTH AFRICA

Members of the Platreef team bringing Shaft 1 safely back into operation: (Left to right) Pierre Kruger, banksman; Evelyn Mafafo, Mobilift operator; Bridget Tiwane, administration clerk; Frans Kutumela, intermediate life support; and Lucia Hlongwane, induction facilitator.

Compacting the excavation for the base of the new Shaft 1 winder.

Hendrietta Sarila, Platreef's Environmental Officer, collecting dust samples as part of Platreef's environmental monitoring program.

Members of the Platreef team attending the project's Khumbul'ekhaya event. Khumbul'ekhaya, which is the Nguni word for "remember home", is a South African Mineral Council CEO-led strategy on health and safety developed by the CEO Zero Harm Forum to drive and sustain the mining industry's pursuit of zero harm.

Electrician Prince performing maintenance on the electric panels for the variable-speed-drive motors on Kipushi’s 1,200-metre level.

Mechanical maintenance manager Kasangula conducting monthly testing of Kipushi’s Shaft 5 winder cable.

In December, the Platreef team took up the Jerusalema dance challenge. Click here to watch the short video: https://vimeo.com/490090139/3fcff27fda