

THE WORLD-CLASS KAMOA-KAKULA COPPER COMPLEX PARTNERS WITH ELESSENT CLEAN TECHNOLOGIES FOR MECS® SULFURIC ACID PLANT

ST. LOUIS, USA, January 9, 2024 – The Kamo-a-Kakula Copper Complex (Kamo-a-Kakula), a joint venture between Ivanhoe Mines, Zijin Mining Group and the government of the Democratic Republic of Congo (DRC), has partnered with Elessent Clean Technologies (Elessent) to install a new 2,500 metric tonne per day (MTPD) smelter off-gas MECS® sulfuric acid plant. In conjunction with global EPC partner, China Nerin Engineering Co. Ltd. (NERIN), the new acid plant will be part of a new 500,000-tonnes-per-annum direct-to-blister flash copper smelter that is under construction at Kamo-a-Kakula, as part of its Phase 3 expansion. Upon completion of the Phase 3 expansion, Kamo-a-Kakula is projected to be the fourth largest copper operation globally.

“At Kamo-a-Kakula we aim to set a new industry standard by being the greenest major copper mine in the world. It helps that DRC not only has an incredible mineral endowment, but also has an abundance of clean hydroelectricity to power its mining industry. However, we also need the right technology to extract the copper in a sustainable way. By using the MECS® acid plant design and its incorporated technologies, our new plant helps achieve our path to net zero.” said David Mitchell, Kamo-a-Kakula’s Senior Project Manager for the smelter project.

The MECS® sulfuric acid process incorporates state-of-the-art technologies, such as the MECS® pre-conversion technology and the MECS® DynaWave® gas cleaning technology. DynaWave® scrubbers, the gold standard in gas cleaning applications, clean and condition the upstream off gas of the smelting furnace at the sulfuric acid plant. The MECS® pre-conversion technology is a novel approach for processing off-gas streams with elevated sulfur-dioxide concentrations while consuming significantly less power.

“Kamo-a-Kakula is one of the world’s fastest-growing major copper operations. Partnering with NERIN on the mine’s greenfield smelter complex is very exciting. It is a great honor to work with the owners of what is anticipated to be one of the greenest major copper operations on the planet.” Eli Ben-Shoshan, CEO, Elessent Clean Technologies.

For decades, copper has been essential in industries like civil and building construction, machinery, and power transmission. Recently, however, copper demand has seen a steady increase due to its position as a critical metal in the energy transition, which includes electric vehicle (EV) technology. In fact, copper is one of the most vital metals in the energy transition and the shift to EVs. Copper is essential throughout the entire EV value chain, including use in everything from EV manufacturing to charging stations and supporting infrastructure. Because of the metal’s high durability, high conductivity, and efficiency, it has become indispensable to the industry.



The Kamoā-Kakula Copper Complex has been in commercial operations since July 2021. The operation is currently undergoing its Phase 3 expansion, which will increase copper production to over 600,000 tons of copper per year from Q3 2024.

The MECS[®] sulfuric acid technology has been in use for nearly a century in the phosphate fertilizer, non-ferrous metals (leaching & smelting), oil refining and general chemical industries. MECS[®] technologies feature breakthrough solutions, many of which have revolutionized the performance, quality and cost-effectiveness of customer operations. They include MECS[®] heat recovery systems (HRS[™]), MECS[®] SolvR[®] regenerative SO₂ scrubbing and MECS[®] MAX3[™] sulfuric acid production technology. Integrated into these MECS[®] technologies are proven specialty products such as catalysts, Brink[®] mist eliminators, DynaWave[®] scrubbers, ZeCor[®] corrosion resistant alloy products, and acid coolers all of which are specifically designed for the most demanding operating environments. Marketed by Elessent Clean Technologies, the MECS[®] technology is the world-leading sulfuric acid production technology with more than 1,000 sulfuric acid plant licenses and projects. Elessent Clean Technologies is committed to long-term customer satisfaction and support for the life of customer assets. Learn more at ElessentCT.com



About Elessent Clean Technologies

Elessent Clean Technologies is a global leader in process technologies to drive sustainability and carbon neutrality in the metal, fertilizer, chemical and oil refining industries with an unwavering commitment to customer support. We provide extensive global expertise across our portfolio of offerings in key applications – MECS[®] sulfuric acid production, STRATCO[®] alkylation, BELCO[®] wet scrubbing and IsoTherming[®] hydroprocessing. Offering critical process equipment, products, technology and services, we enable an array of industrial markets, including phosphate fertilizer, non-ferrous metals, oil refining, petrochemicals and chemicals, to minimize their environmental impact and optimize productivity. We are dedicated to helping our customers produce high-quality products used in everyday life in the safest, most environmentally-sound way possible, with a vision to make the world a better place by creating clean alternatives to traditional industrial processes. Learn more at www.ElessentCT.com.

Contacts

Elessent Clean Technologies

Mary Reiss

Tel: +1-314-464-4375

Mary.Reiss@ElessentCT.com

MECS[®] Sulfuric Acid Technology

Sarah Douglas

Tel: +1-314-464-3764

Sarah.Douglas@ElessentCT.com