

Axis House, a metallurgical processing company, is expanding globally and sustainably. The company has garnered a reputation for timely delivery through its efficient and cost-effective logistics capabilities and advances in reagent technologies, earning the trust of the Copperbelt region and expanding its influence globally.

In an interview with Hlengiwe Motaung, MD, Qunton Giles, sheds light on how the company's principles will continue having a global influence as a cutting-edge metallurgical processor.

Axis House has established itself as a prominent figure in the mineral processing sector for over 20 years. Giles was appointed MD in October 2022, and comes from an extensive background in the supply chain industry with one of the largest warehousing and logistics providers in sub-Saharan Africa.

Giles reveals that he was always attracted to the Axis House principle of providing unparalleled value to its clients.

"Axis House is a company built on entrepreneurship. Its constant search for radical alternative solutions and the eagerness to try out new and uncharted waters fired up something in me, and so when I joined the company, it was a natural transition for me moving from one culture to a very similar company culture, which the former MD (current CEO) Justine Stubbs has established."

Giles commends Stubbs for imparting the importance of value add and constantly evolving the business.

"While other metallurgical processing companies deem service providers purely a means to an end, Justine has reinforced to me that suppliers are a vital component to the success of a business," adds Giles.

As countries around the world work towards reducing their carbon emissions and transitioning to clear sources of energy, the demand for **EVs** and renewable energy technologies are expected to increase significantly. This will drive up the demand for battery metals and metallurgical processing.

"The increase in demand for battery metals presents opportunities. On the one hand, it provides opportunity for countries with significant reserves of these metals to benefit economically. On the other hand, it also raises concerns about the environmental and social impacts of mining and processing these metals".

This increase in demand for battery metals highlights the importance of developing sustainable and responsible supply chains for these materials, as well as investing in metallurgical processing research and development to find alternative technologies to reduce our reliance on hazardous chemicals.



"Axis House will maintain a strong presence in the Democratic Republic of Congo as our primary business. We will continue to partner with all our clients throughout the Copperbelt. To do otherwise would be at our peril," urges Giles.

Sustainable practices in metallurgical processing

The mineral processing industry has been facing challenges in terms of the types of chemical agents used for mineral separation. The dominant gold extraction technology since the 1970s has been the cyanidation process, which uses sodium cyanide in a dilute solution to selectively dissolve gold from ore.

However, the concerns regarding the use of this reagent due to its high toxicity and potential environmental impacts remain.

Cyanide spills have led to major fish kills, contaminated drinking water supplies, and harmed agricultural lands. While cyanide remains essential to modern gold mining, Axis House is exploring new and improved reagents to address these issues and ensure safer and more environmentally friendly operations.

Giles emphasises that Axis House is well underway with this. "We have, through our metallurgical processing research and development programme, developed a cyanide replacement. The world is going greener and the key to our solution-driven technical capabilities is to find more sustainable, greener, less hazardous materials."

Competitive Advantage

Axis House takes a customised approach when working with clients, carefully selecting solutions for each unique situation. Giles explains that the Axis House team meet with key personnel at each mine site to gain a better understanding of current problems experienced on site.

Ore samples are obtained, and the metallurgical processing team creates a tailor-made solution in their Cape Town laboratory. The nature of the ore body changes constantly, which means that the reagent suite required by the client is also ever-changing. Therefore, Axis House creates an optimised solution for each ore, focusing on maximum economic efficiency for the customer and establishes a continuous closed loop as new solutions are implemented.

This ensures that the partnerships with clients remain strong. "It's all down to a solution-based offering," maintains Giles.

The company is now working on research and development for a lithium flotation solution that will be rolled out in the coming months. "We have also made a commitment to our clients to provide field testing equipment on-site, which includes flocculant testing, optimisation of ratios and dosage through our magnesium oxide pilot plant to enhance



cobalt recovery, a filtration unit and a portable electrowinning unit testing acid mist suppressants.

As sustainability is a key focus for us, we have developed a solution for controlling and reducing evaporation within the chemical bath, that not only safeguards the structure around the unit but also benefits the environment."

Besides the technical offerings Axis House offers, it also stands out with its unique competitive advantage of holding strategic stocks for its clients.

"We are very mindful of the fact that to generate value, you need to have a value-added service," states Giles. "We have an appetite to provide our clients with off-balance sheet stocks, where stocks are held across the globe closer to the mine site.

'We tailor-make our stock offering to add value and hold our competitive advantage through our strategic partnerships with our suppliers and our manufacturers."

Giles is enthusiastic about collaborating with Stubbs to expand the company's product range beyond Axis House's current regions of operation. The Axis House Group aims to establish strategic offices worldwide, capitalising on existing structures and product lines.

"Our aim remains to offer our clients a comprehensive metallurgical processing solution and commit to explore new and improved reagents to ensure safer and more environmentally friendly operations," Giles concludes.

Source: Mining Review Africa