

Clever chemistry, big results: how a flocculant change boosted a concentrator



Imagine a South African concentrator, its thickeners struggling to cope. The supernatant was cloudy, the underflow shaky, and the whole system felt stretched. The fix didn't call for a major overhaul or fancy new equipment just a better flocculant. That's where MetSop came in with a simple, effective solution.

We tested two MetSop flocculants, MetFloc-235 and MetFloc-245, against the plant's current one using standard lab methods. We looked at three things: how clear the supernatant was, how fast the solids settled, and how stable the underflow looked. Tests ran at 15 g/t and 50 g/t dosages to compare performance. At 15 g/t, both MetFloc-235 and 245 stood out. They scored 4 out of 5 for clarity, while the existing flocculant managed only 2.5. Settling rates were faster with the MetSop pair, getting solids to drop quicker and cleaner. At 50 g/t, all three hit their limit, but MetFloc-235 and 245 still settled faster.



For the metallurgy boffins, this points to stronger flocs, better particle binding, and a smoother solid-liquid separation exactly the kind of detail that gets a process engineer excited. For the plant, the impact was clear: thickeners ran better, water came out clearer, and the underflow was more reliable. No extra costs, no new machines, no big changes to the setup just a smarter choice in chemistry that delivered.

This wasn't about turning everything upside down. It was about making a small, precise adjustment that paid off big time. The concentrator team saw the difference in every litre of clear supernatant. For the metallurgy crowd, it's the kind of targeted, data-backed tweak that makes you nod in appreciation.



MetSop's flocculants showed that a little clever chemistry goes a long way; keeping things simple, practical, and seriously effective.

