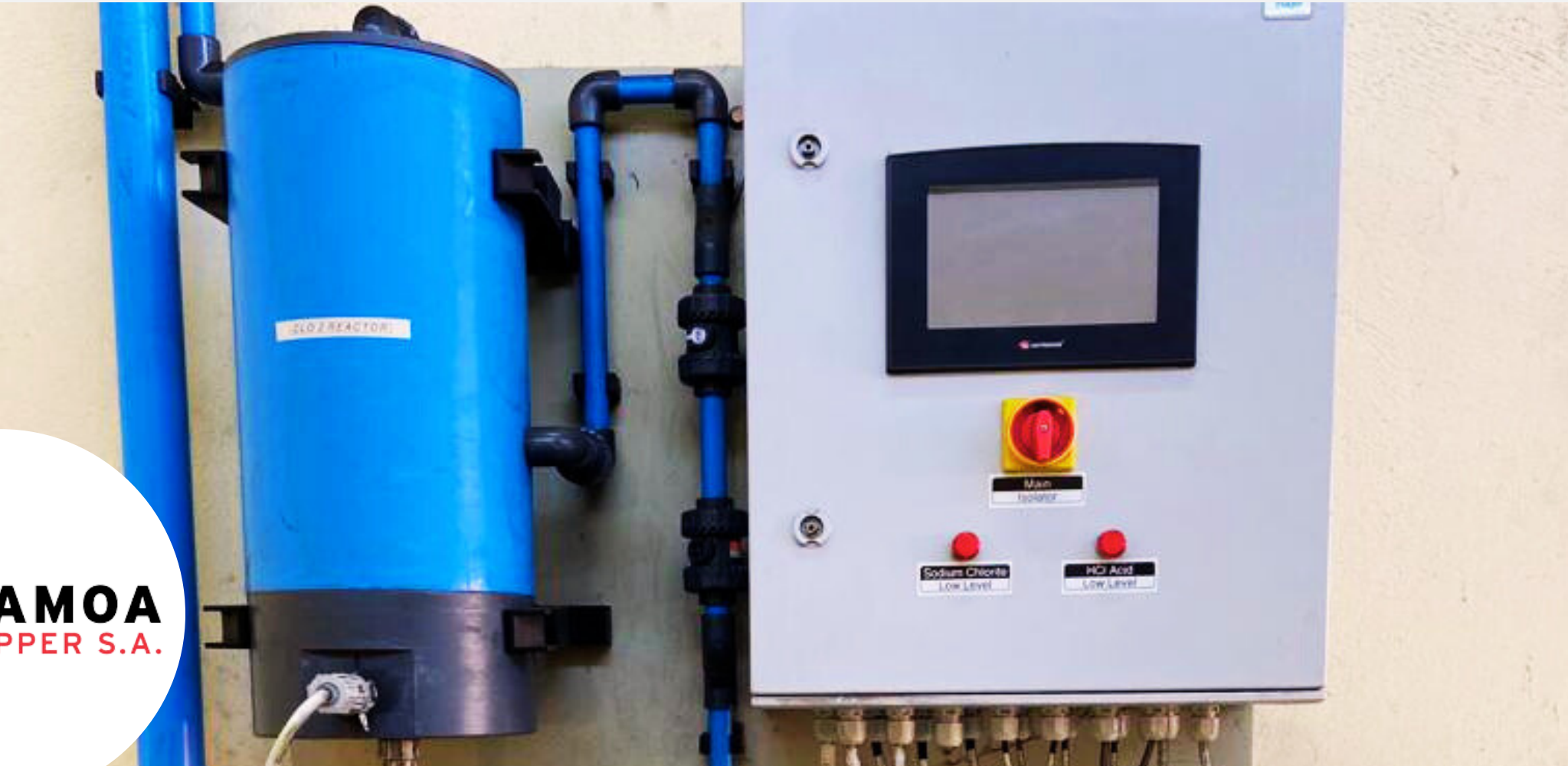




Case Study

Mining Industry

Chlorine generator disinfection plant



Their Problem

Based on the existing water treatment system, the mine is struggling with chlorine dosing due to constant increase in flow/consumption and manual handling of the process. Watericon received an invitation to conduct a survey in order to submit a proposal to address the challenge.

Our Solution

Our -IconOx-B-2C-500- is a chlorine dioxide generator designed for the manufacture of chlorine dioxide solutions from precursor chemicals. The system has been set up to deliver chlorine dioxide solutions between 1.5g/L ($\pm 10\%$) concentration, on a batch basis.



Typical Plant Feed

- Borehole water with flow of 250m³/h



Performance Target

- Disinfected potable water, with <1.5ppm free chlorine



Process

- Chlorine dioxide generator
- IconOx-B-2C-500-A
- Chlorine dioxide capacity (as per factory settings) is 500g/hr ($\pm 10\%$)



Innovation

Generates chlorine dioxide from two precursor chemicals, namely:

- Sodium Chlorite Solution – 25% wt/wt
- Hydrochloric Acid – 30% wt/wt

The chlorine dioxide is generated via the following reaction: $5\text{NaClO}_2 + 4\text{HCl} \rightarrow 4\text{ClO}_2 + 5\text{NaCl} + 2\text{H}_2\text{O}$