



Biox Plant

THE BEST EXPORT PROJECT WINNER

The Steel Award for the best export project went to the new **Biox Plant in Zimbabwe**. Biological oxidation ('Biox') is a technology that ensures the optimal processing of high-sulphur gold ore, thereby increasing the achievable gold recovery.

Mining and industrial project type

This technically challenging structural framing project entailed detailing, fabricating and constructing a gold-processing Biox plant. The primary objective thereof was to provide access to the various areas of the Biox plant and its piping support system.

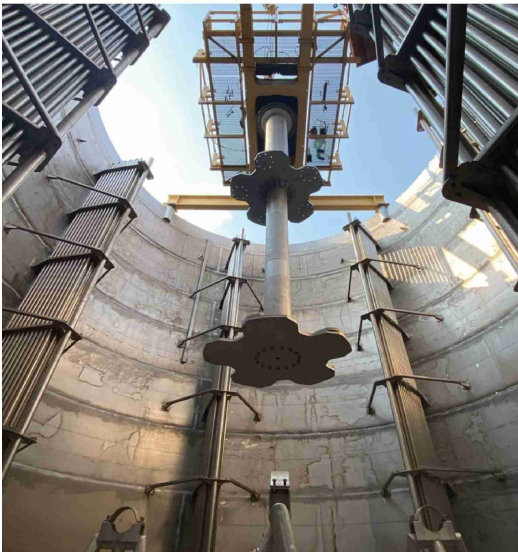
Project brief

The brief was to succeed in completing the project amidst the Covid-19 pandemic, which impacted all the project facets. The highly driven team faced the challenges head-on whilst under severe pressure.

The primary objective was to provide access to the various areas of the Biox



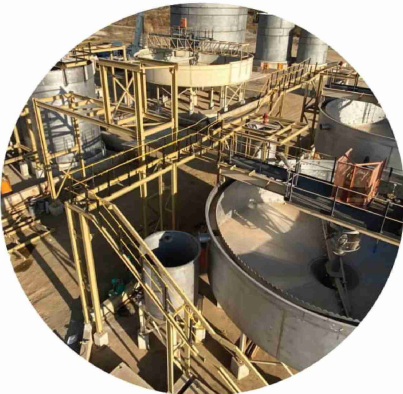
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WR PROJECTS TO BE PROUD OF

INTERESTING FACTS:

- **Brief:** To succeed in completing the project during Covid-19 pandemic.
- **Primary objective:** To provide access to all areas of the Biox plant.
- A total of 85% of the piping was HDPE (high-density polyethylene)



plant and the piping support system. A total of 85% of the piping was HDPE (high-density polyethylene), which needed several structural supports incorporated whilst keeping weights to a minimum and ensuring an aesthetically-pleasing final plant layout.

A technically challenging project

This was a technically challenging project due to the stringent requirements; and the quality level of the fabrication by Betterect was extremely high. The project entailed detailing, fabricating and constructing a gold-processing Biox plant in partnership with Metso, Outotec, ADP Marine & Modular, Lycopodium Group and Betterect – the main SMPP contractor responsible for detailing, fabrication and site installation of structural steel, platework piping and mechanical equipment.

Benefits of steel in this application

Steel was chosen due to the industrial nature of the project. Constructing a building using steel requires fewer materials for its foundation. Benefits include:

- Steel is a flexible material that can withstand high loads.
- It is economical.
- It enables a rapid work completion rate and requires fewer working hours.
- Facilities can be commissioned faster.
- Savings in materials.
- Load on the foundation is lower.

Project team

- Betterect
- Allied Steelrode
- Macsteel Service Centres SA (Pty) Ltd

Full acknowledgement and thanks go to <https://www.saisc.co.za> for the information in this editorial. WR