

Tailings Transfer Pumps Rio Tinto

Application market	Industry
Market segment	Mining
Pumped medium	Water with Bauxite tailings
Pump product	Bearing frame
Country	Canada



Challenge

Rio Tinto is a leading global mining group specializing in the exploration, extraction, and processing of raw materials. The challenge in this slurry application was to extract bauxite tailings from the mine and feed them into the aluminum production process. Reliable and wear-resistant pump solutions are required to convey the highly viscous and abrasive pumped medium from the quarry to the processing plant.

Solution

During an evaluation process, it was found out that, since the late 1980s, two **Hidrostat D04K Screw Centrifugal Pumps** had already been in successful operation for the pumping task at hand. The pumps had worked reliably for thirty years with minimal maintenance. The customer will now replace other, older units from various competitors with Hidrostat pumps too.

Benefits

The very long and extremely positive experience with the **Hidrostat Screw Centrifugal Pump** made the selection process very easy for the customer. Existing pumps from competitors were replaced by new Hidrostat units and a maintenance plan was drawn up for the next 15 years. Rio Tinto officials have confirmed that pumps from other manufacturers will no longer be used for this application. Hidrostat is the reliable and proven solution for bauxite tailings transfer pumps.

Quantity of units sold	2 pcs.
Pump type	D04K-LT4R + D2M10
Motor data	Not available
Material combination	Pump body of cast iron with Hidrohard impeller and wear parts
Duty point	Flow : 47.8 liters per second / Head : 43 meters
In operation since	1990