

Balasore Alloys Ltd.

*Dewatering of Captive Mines
(Slurry having upto 25% solids by Volume)
at Sukhinda, Odhisha*



Balasore Alloys Limited

Balasore Alloy's Ltd. (BAL) is part of the renowned Ispat group of Companies, a major business house in the country.

The company has Chromite mines in different locations in Sukinda Valley at Jajpur Road (Odisha) making it one of the **very few** Ferro Alloys manufacturing companies in the country having **captive chromite mines**.



Situation & Problem :



Earlier BAL was using Conventional Horizontal Centrifugal Pumpsets (*non submersible type*) by putting suction pipe (*by negative suction method*) for it's pumping needs.

BAL was facing major problems of limitations of Priming (suction lift), Motor Burning due to Overnight rains & the huge maintenance of couplings, greasing, alignment meant that they had to depute huge maintenance staff.

Centrifugal pump motor's misalignment caused heavy vibrations & required frequent Bearings & Rotor replacement.

BAL were also facing suction chocking due to high Iron Ore Slurry.

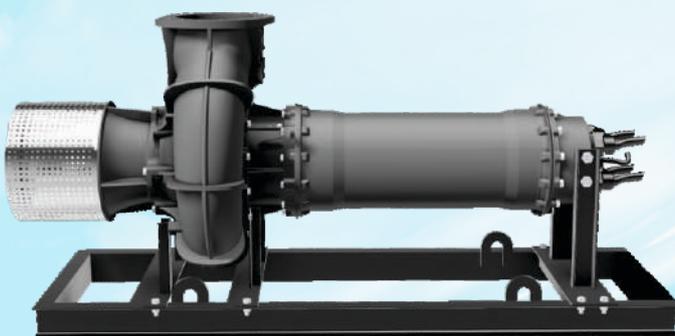


Solution :

In 2014, for the second stage of pumping (*in first stage, the submersible slurry pumps pumping slurry to the nearby sump*) BAL had purchased 2 Nos. of Aqua's Mine Dewatering Pumpsets for their Thick Slurry (*25% by Volume*) Water pumping.



Solution :



Aqua's pumps were specially designed with variable head.

In this second stage Aqua's pumps are pumping thick slurry water to 100 m head.



Low Life Cycle Costs (LCC)

Highly Efficient, Minimal Maintenance, extremely Low Consumables and spare part requirements; Low down time



Plug & Pump

No base Plate or Coupling to align;
No priming to startup

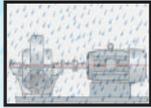


Being safely tucked away **under water**, Submerged pumpsets are exposed to **Lower Risks of damage by Flying Debris loosened during blasting & excavation.**



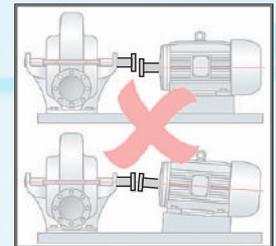
Maintenance Free

- No Oiling, • No Greasing,
- No Gland Tightening



Weather Proof

No Damage due to rain



- No Shaft Alignment
- No Coupling or Base Plate Maintenance

BALASORE ALLOYS LIMITED 

Date :21-10-2017

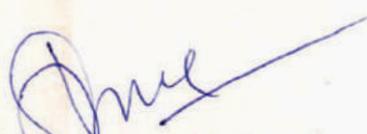
TO WHOM IT MAY CONCERN

THIS IS TO CERTIFY THAT WE HAVE PROCURED TWO NOS 250 HP MONOBLOCK SUBMERSIBLE SLURRY PUMPS FROM M/S TECHNO SERVICES ENGINEERING SYSTEMS PVT LTD, KOLKATA. IN OUR OPEN CAST MINE AT SUKHINDA

DETAILS OF PUMPS ARE AS UNDER

MANUFACTURER: AQUA MACHINERIES PVT LTD, AHMEDABAD
 PUMPING MEDIA: HEAVILY CONCENTRATED SLUDGE MIXED WITH FINE SOLIDS
 SLURRY CONCENTRATION: 25% BY VOLUME MAX
 RATED CAPACITY: 250 M3/HR
 RATED HEAD: 100M
 MOTOR RATING: 250 HP

PUMPS WERE COMMISSIONED IN 2015 AND GIVING SATISFACTORY PERFORMAMNCE SINCE THEN


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 SR. MANAGER
 FOR BALASORE ALLOYS LTD
 Kaliapani Chromite Mines
 M/s. Balasore Allovs Limited

Aqua Machineries Private Limited

www.aquapumps.com

Registered Office & Manufacturing Plant

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