



# STAINLESS STEEL PUMPS FOR PUMPING LOW pH LIQUID IN HYDEL PLANT IN NORTH-EAST OF INDIA

Pumping corrosive or aggressive liquids with low pH is a very demanding application. There are very few companies offering submersible pumps for this applications. This case study is about how Darling Pumps can provide simple, effective & reliable submersible pumping solution for such a demanding applications.

## Problem faced by Customer:

Generally one would wonder where in Hydel Power Plant do they need to pump corrosive or aggressive liquids with low pH. However for this particular Hydel plant, it was a continuous process. For some reason the river from which it draws it intake water for power generation has very low pH (3 to 5) water flowing through it across the year.

Here, the VT pumps which are generally used for pumping intake water have had a very poor life.



Add to this, operating a VT pumps during rainy season & summer season had its own different set of challenges.

End Client was fed-up due to inconsistent intake water supply, constant breakdown of pumps, high spares consumption & maintenance cost, loss in productivity & revenue.

Many desperate attempts were made to find out a solution which can help them to overcome not only their present challenges, but which can also take care of their anticipated future challenges. There past experiences had made them very skeptical about going in for any solution.

IT WAS UP TO DARLING PUMPS TO LIVE UP TO CUSTOMERS EXPECTATION & OFFER THEM A SOLUTION WHICH WAS NOT ONLY RELIABLE BUT WAS ALSO RELATABLE ENOUGH FOR THEM TO MAKE A DECISION...





# Solution Offered by Darling Pumps:

- Using our past experiences of providing solution for similar applications, an objective study of actual requirement & challenges faced by the clients was made.
- A specific solution for each requirement / location was proposed with proper reasoning & specific deliverables were set.
- Solution through specially designed in form of submersible Stainless Steel Pumps of 50HP-5nos, 30HP-12nos and 15HP-3nos were worked out.
- Supply & Performance credentials for past supplies were shared with client.
- Proposed pump design was such that it took care of their anticipated challenges like able to handle solids, work even when river level goes down in summer.
- Higher interchangeability & portability quotient was offered to end client for effective work around.

#### Benefits to the customer:

- Freedom to use pumps for continuous duty without any worries of erosion or corrosion.
- Flexibility to use pumps for fixed or portable application.
- No worries about frequently changing water level, pump fit to work in all situations.
- Great Savings on running cost, spares consumptions & maintenance cost in comparison with traditional methods & solutions.
- Higher revenue generation & increased profitability.

## Benefits of Stainless Steel Series Pumps:

- Compact, easy to handle & light weight design ensures better reach to maximum depth
- Built-in protection against overheating, mechanical jamming and dry running
- Built-in efficiency restoration system
- Fully covered shaft, not exposed to pumped liquid hence lesser chances of corrosion or erosion
- Highly durable rubber parts ensuring better Mechanical seals life & effective overall sealing for the pump set.



Darling Stainless
Steel Series Pump

END RESULT – JOY OF OFFERING A SOLUTION FOR SUCH DEMANDING APPLICATIONS IS UNPARALLELED. ADD TO THIS THE CUSTOMER SATISFACTION OVER LAST COUPLE OF YEARS HAS ONCE AGAIN PROVEN OUR FORTE AS ONE OF THE MOST TRUSTED SOLUTION PROVIDER IN ARENA OF SUBMERSIBLE PUMPING IN THE COUNTRY...

Note: For more details about this case study, you can contact: +91-9981992833