

# 200HP Intake Water Supply Pumps For Private Power Plant in Central India

This case study is about the private power plant, the huge benefits they got by using Darling Make Raw Water Pumps which ensured consistent intake water supply for their power generation when VT pumps installed at site were not able to perform

## Problem faced by Customer :

The intake water supply source for this plant was nearby river. Traditionally the pumping was done with the help of 2 nos of 450 HP VT pumps in their Jack well near the river.

However every year during summer i.e. from April to June these VT pumps can not be operated due to receding water levels and also due to higher NPSH requirement of pumps. Resulting in huge loss of productivity year after year.

They were looking for submersible turbine pump version which can be put directly in water source. But that too was not that easy as;

- Out side diameter of the pump had to be within particular limit as the existing VT Pump gurdar cannot be modified.
- Pump should be able to operate in single as well as in parallel operation with existing VT pumps.
- The installation of new pumps should be easy without disturbing current set-up & also ensure less breakdown cycle.
- The pump should be deigned for continuous duty.



**ENTER DARLING PUMPS, WITH THEIR KNOWLEDGE & EXPERTISE TO PROVIDE CUSTOMISED SOLTIONS...**

## Solution Offered by Darling Pumps:

- Understanding the exact needs (both expressed & implied) of this clients through various discussions & site visits.
- Propose, Design, Develop a solution for them in form of 200 HP – 2 nos Submersible Turbine Pumps considering the dimensional limitations.
- Delivering the solution before stipulated timeline, pumps were designed, developed, manufactured, tested with duration of 5 month flat (October to March)
- Offering added benefits like least minimum submergence, portable & user friendly design.
- Ensuring pumps were installed & commissioned in couple of weeks time.

## Benefits to the customer:

- Continuous water supply through out the year, No more loss of productivity.
- No worries if water level goes down in summer,
- Less energy consumed as compared to the VT pumps,
- Lesser maintenance & lesser running cost.
- No need for plant shut down for pump maintenance

## Benefits of SVT Series Pumps:

- Low installation cost as it requires lesser space and no civil construction
- Can be installed directly into the sump,
- No drop in efficiency and performance over the period of time.
- Design for continuous duty.
- No coupling between pump & motor hence practically vibration free.
- Very lean design with lesser number of components providing longer operating life, but lesser maintenance.



Darling SVT Series Pump

**End Result – Customer is quite happy with the solution & pumps provided by Darling Pumps as both these supplied pumps are running successfully without even a minor breakdown since 2016, for which our esteemed customer has also issued us a performance certificate.**