

*Cost Effective, Simple to Operate & Low Maintenance*  
*Lift Irrigation cum Water Supply Scheme*



Cauvery Neeravari  
Nigama Limited

**Thattekere**  
*(Karnataka)*



Rural Drinking Water and  
Sanitation Department



Thattekere Lake



Source: GoogleMap

Karnataka State is the eighth largest State in the country and is located on very undulating terrain between the Western Ghats & the Deccan plateau.

**Thattekere** is a village in Kanakapura taluka in Ramanagara district, located in the Elephant Corridor of Bannerghatta National Park & 40km away from Bangalore – it derives its

name from a lake : "**Thatte**" means **Plate** & "**Kere**" means **Lake**.

## Situation :

Agriculture being the main occupation of the state of Karnataka, Irrigation plays utmost significant part in obtaining increased yields from the land.

Despite that fact that it has reasonably good rainfall, due to undulating terrain, most patches of land are not adequately irrigated.



There were more than 25,000 tanks scattered over erstwhile Mysore state, but in Bombay Karnataka and Hyderabad Karnataka areas, the number of such minor irrigation works were meager leading to lack of sustained irrigation & erratic water supply & need cost effective, simple means of Lift Irrigation/ Water Supply.

## Solution :

The scheme is taken up to for **Holenarasipura** taluk to feed suffering ayacut of SRD (South) Canal as well as Drinking Water Supply from **Hemavathy river** vide the Thattekere village.



The compact intake well

Head	Discharge	Qty.	HP
<b>16m</b>	<b>2040 m<sup>3</sup>/hr</b>	<b>4</b>	<b>170hp</b>
<b>Customer :-</b>  Executive Engineer, <b>CNNL,</b> HRBC Division, Holenarasipura.		<b>End Customer :-</b>  Executive Engineer, <b>Rural Drinking Water                      and Sanitation Department</b> Belgaum.	



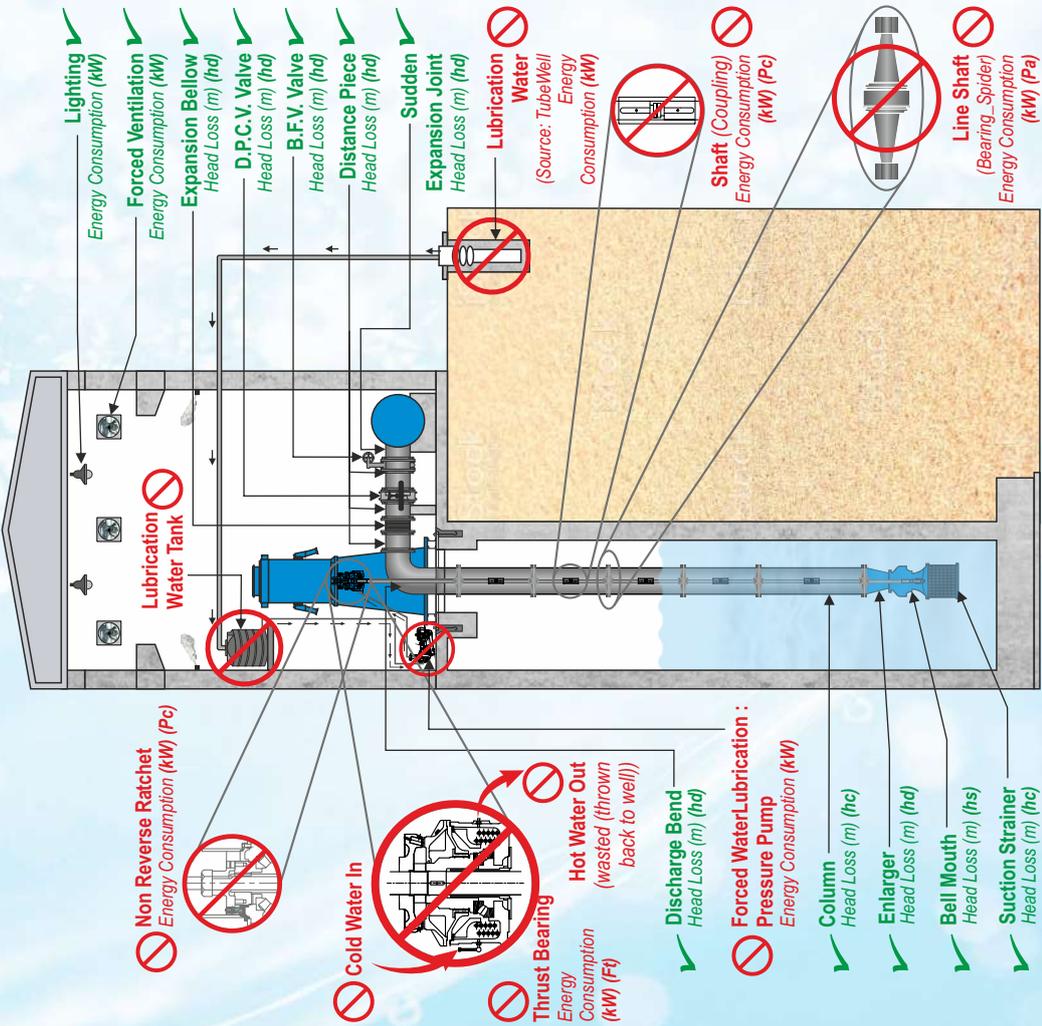
Aqua's Submerged Centrifugal pumps are installed on Auto coupling system for quick assembly / removal.

# Pumping System : Energy Comparison

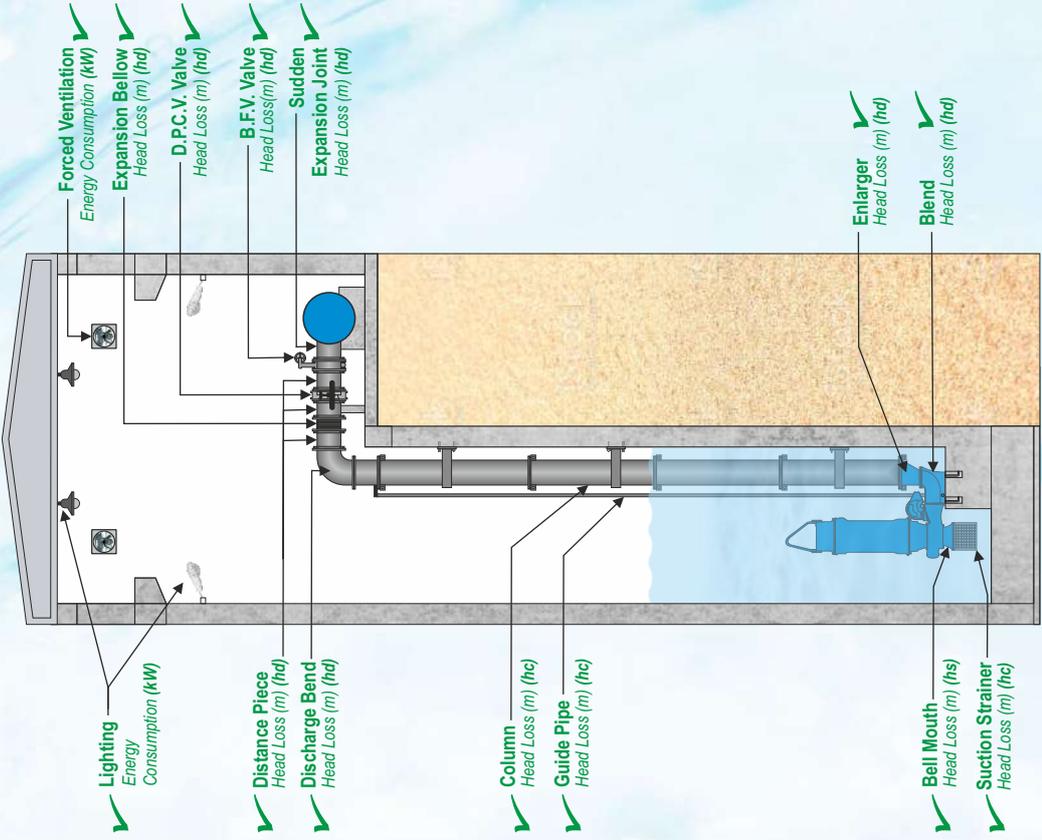
**Legend :**  
Ancillaries/ Auxiliaries/ Components marked **RED** indicate that they are Not Required in SubCF based pumping (& hence their Losses are also automatically eliminated).

**Legend :**  
Ancillaries/ Auxiliaries/ Components marked **GREEN** indicate that they are common in both pumping types (& hence their Losses are unavoidable)

**VT**



**SubCF**



**“ Despite having nearly Similar Bowl Efficiency (to VTs), due to Elimination of various Ancillary & Auxiliary Losses; SubCF pumping system Consumes T.N.R. (slightly) Lower Energy (than VT pumping system)....! ”**

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ಕಾವೇರಿ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ  
(ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಒಂದು ಉದ್ಯಮ)

ದೂ. : 08175-273238  
ಪ್ಯಾಕ್ಸ್ : 08175-273403  
email : echrchnp@gmail.com



CIN-U45205KA20035GC032044

ಕಾರ್ಯಪಾಲಕ ಇಂಜಿನಿಯರ್‌ರವರ ಕಛೇರಿ,  
ಹೇಮಾವತಿ ಬಲದಂಡೆ ನಾಲಾ ವಿಭಾಗ,  
ಹೊಳೆನರಸೀಪುರ  
ಹಾಸನ ಜಿಲ್ಲೆ- 573211

ಸಂಖ್ಯೆ : ಕಾ.ಇಂ/ ಹೇಬದಾನಾವಿ/ಯೋ.ಶಾ./ಸ.ಇಂ.1/2021-22 47 ದಿನಾಂಕ: 23-04-2021

**TO WHOM SO EVER IT MAY CONCERN**

The Submerged Centrifugal pumpset supplied by M/s Aqua Machineries Pvt Ltd, Ahmedabad make are erected and commissioned by M/s H.C.Umesh, Class I Electrical Contractor for THATTEKERE LIS.

Pumpset type	: - Submerged Centrifugal pumpset with Integral motor
Pumpset Make	: - Aqua Machineries Pvt Ltd, Ahmedabad
Application	: - Raw water handling.
Pump Model	: - ARS_V_AC_1 <sup>ST</sup> _VoG_3547_M_L_0170N_00415_NJ
Head	: - 16Mwc.
Discharge	: - 2040 M3/hr.
No of Stages	: - 1 No.
DN Size	: - 350 MM.
Motor Rating	: - 170 HP / 125 Kw.
Voltage	: - 415 V
Motor Type	: - LT Submerged squirrel cage induction – Dry Air filled Totally Enclosed ( IP 68 ) self frame surface water cooled ( TESWC ) ( Complying to IC4A1W0 of IS 6362 )
Qty	: - 4 Nos.( 3W + 1S )
Installation	: - Auto coupling installation

These pumps were commissioned in the month of Nov 2019 and are working satisfactorily till date.  
This letter is issued as per the request received from M/s Aqua Machineries vide reference no. Aqua/2021-22/Perf. Letter Req. Dated: 22.04.2021.

Executive Engineer,  
CNNL, HRBC Division,  
Holenarasipura.



**Competitive Energy Costs**

Wire to Water efficiency is Slightly better than VT pumps based PS



**Robust & Reliable**

Over-safe Design & Smart Protection Systems result in high Reliability.



**Low Life Cycle Costs (LCC)**

Minimal Maintenance & Low Energy Costs



**User Friendly**

Compact, Fully Portable - can be Coupled/ DeCoupled from Automatic Coupling system in matter of minutes.

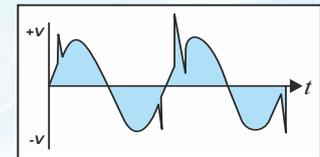


**Maintenance Free**

Requires No Consumables or Routine maintenance

- no Oiling,
- no Greasing,
- no Gland Rope Tightening or Replacement,
- no Shaft Alignment hassles,
- no Forced Water Lubrication system to operate & maintain.

**Tolerates Poor Power Quality**



Discharge in the SRD Canal.

**Aqua Machineries Private Limited**

[www.aquapumps.com](http://www.aquapumps.com)

Registered Office & Manufacturing Plant

Survey No. 504/1-2, 442/2, Near Haridarshan Estate, Near Express Highway, Ramol, Ahmedabad-382 445. Gujarat, India.

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