

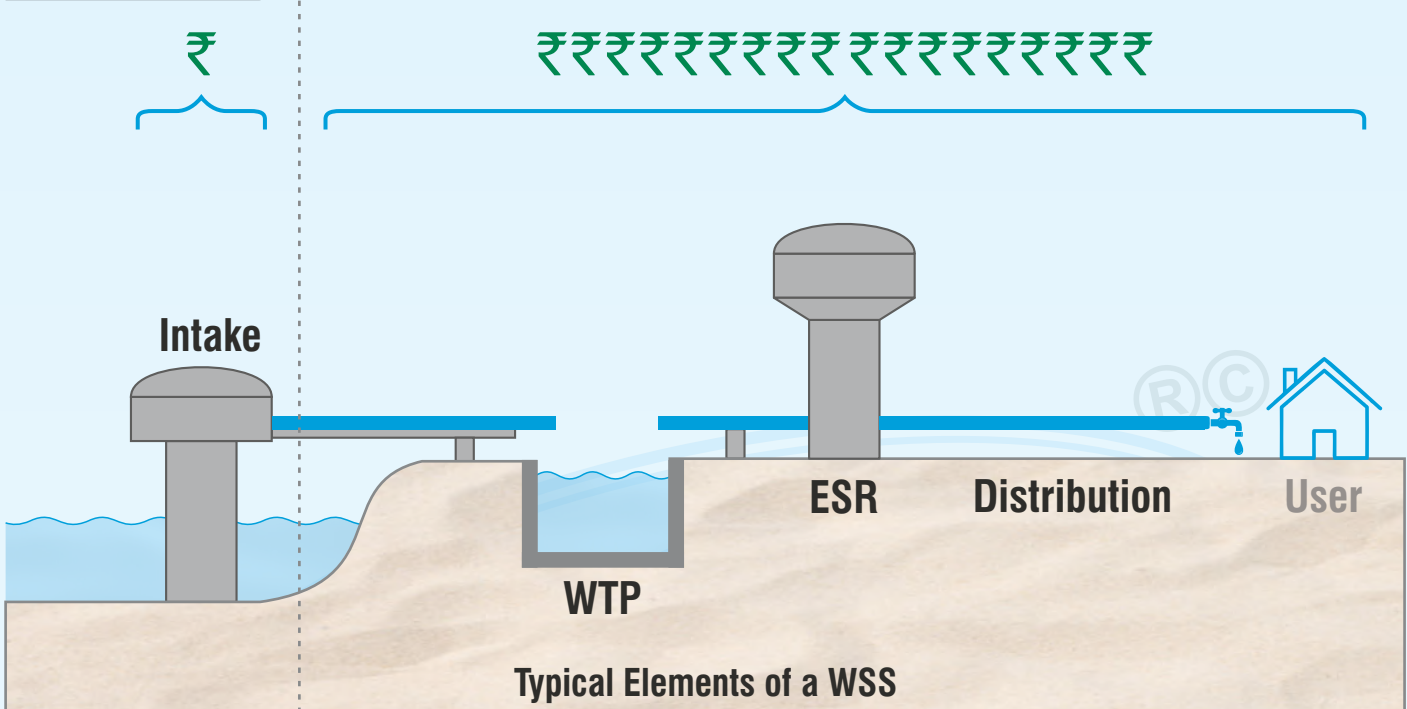
*Submerged Pumpset
based
Floating Pontoon Pumping Station*

*100% Guarantee for dot On-time Water Supply
(irrespective of delays in Construction of Intake Well,
Meandering of River Course)*

*for Permanent Raw Water Intake in Irrigation,
Water Supply, Power, Industry & Mines etc.*



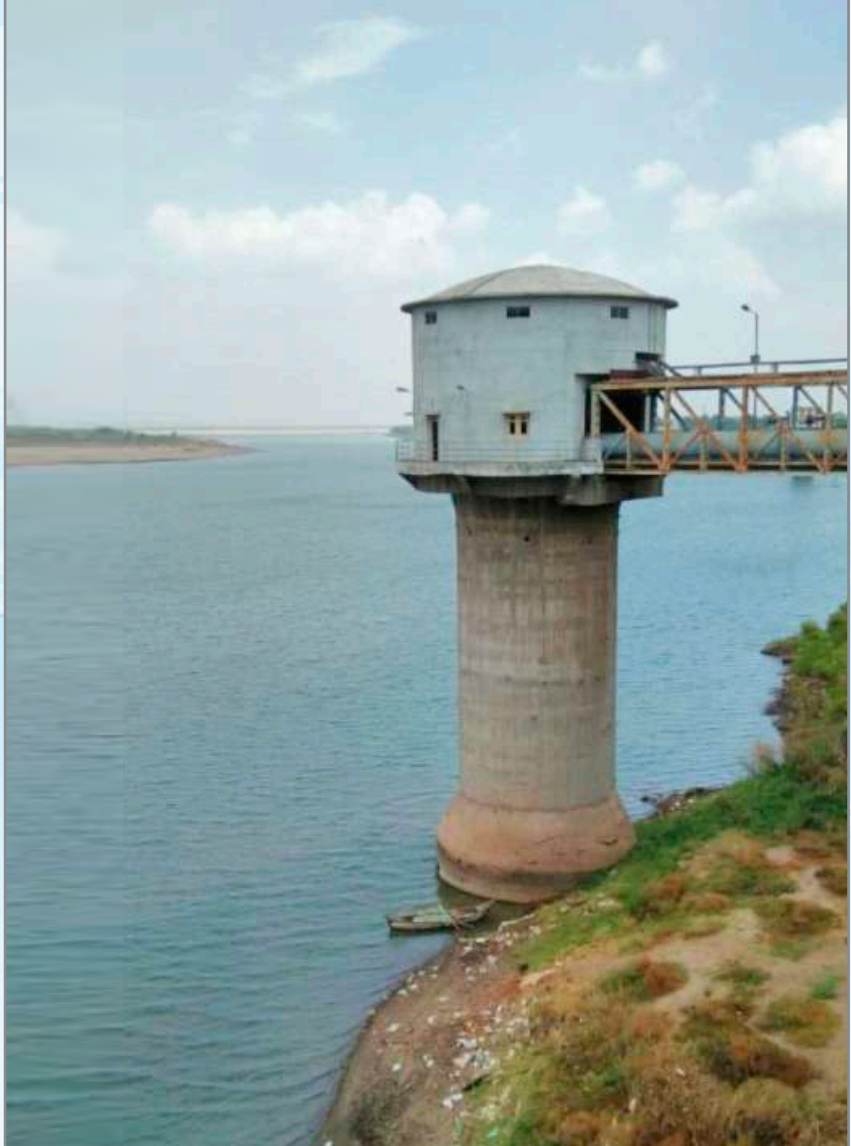
Background



In most Water Supply Schemes, the cost of Conveying & Distribution Pipelines, WTPs, Distribution Pumping Stations & ESRs / HGLRs often comprise upto 90-95% (of total cost).

But **Intake Well** & it's **Pumping Machinery** contribute to a mere **5-10%** (of total cost) - hence, Project Managers tend to give less Importance to Intake Well & it's Pumping Machinery.

But... is it really wise to give just 5% of total attention to Intakewell & Pumping Machinery...?



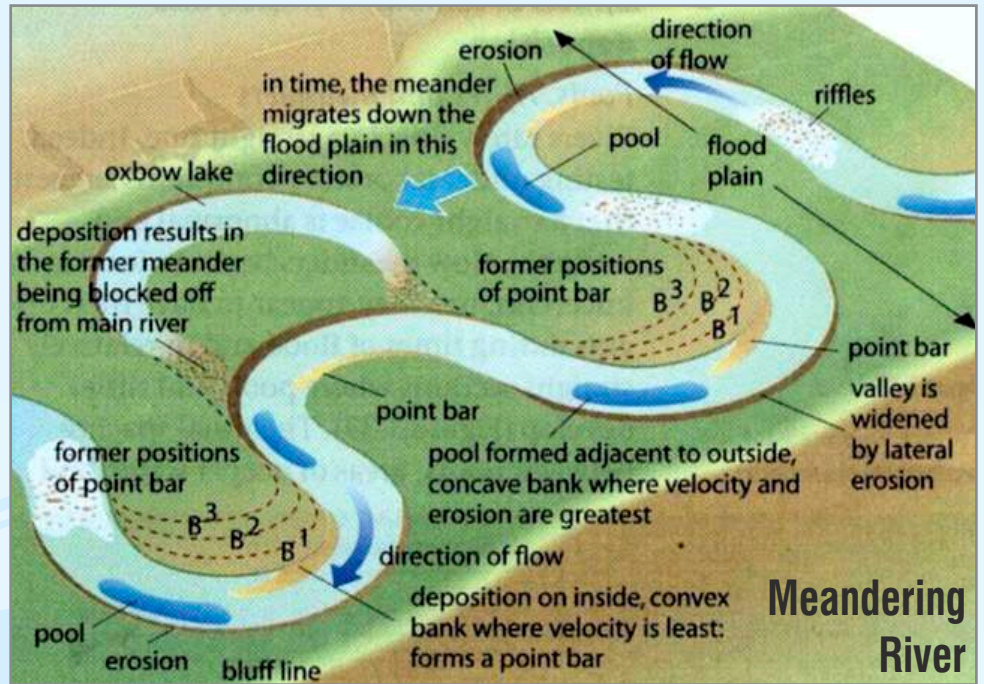
Site Situation :



The Water Source **Changes** its **Course** every season - **Meandering Water Course..!**

Quandry :

Where to Construct the Fixed Intake Well (to ensure that Water always comes in to the Well)...?



Solution :

Instead of a Fixed Well, go for a **Submerged Pump based Floating Pontoon Station**



Construction of Intake Well is a Complex & Tedious job...!

Constraints:

- **Perennially Standing water**; creating difficulties in construction.
- **Location** of Intake Well being **near Dam Spillway Face** thereby raising Dam Safety issues during Construction phase.
- **Soil Bearing Capacity** Issues...



Costly & Risky Coffers Dams are often required for construction of Intake Wells

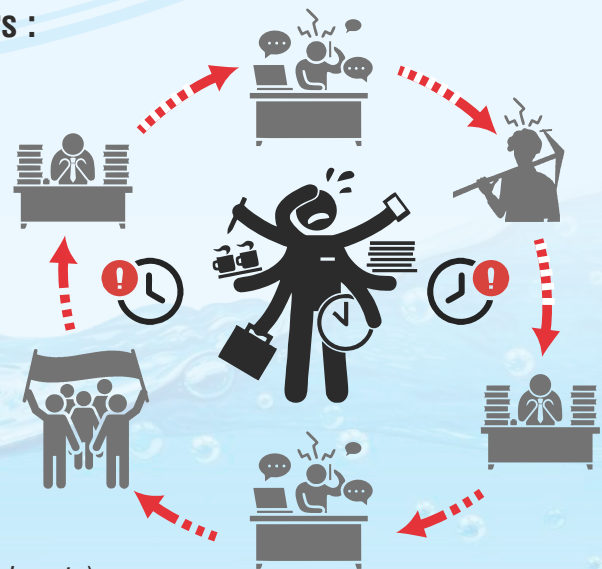
Design & Approval issues from Multiple Stake Holders :

- Resistance of Local Farmers,
- Land Acquisition Collectorate,
- Water Body Owner WRD,
- Beneficiary Local Body / PHE,
- Forest dept.,
- a plethora of DPR & Proof Consultants.

Financial Discouragement:

- Minimal Profitability & Miniscular Share (of Intake Well) in Total Project Value yet Maximum Effort leading to it's neglect.
- Cost disparities & overruns (between Actual v/s Estimated costs);

lead to **cascading delays** even before the Construction (of Intake) can begin.



*These (often inevitable) huge delays (in Intake Well construction) derail the Entire Project's Commissioning (water supply) - leading to a paradoxical situation wherein **DESPITE** an Expenditure (& Execution) of upto 95% Project (mostly within estimated time duration) - Water Supply is inordinately **DELAYED** for years thereafter...!*

Solution:



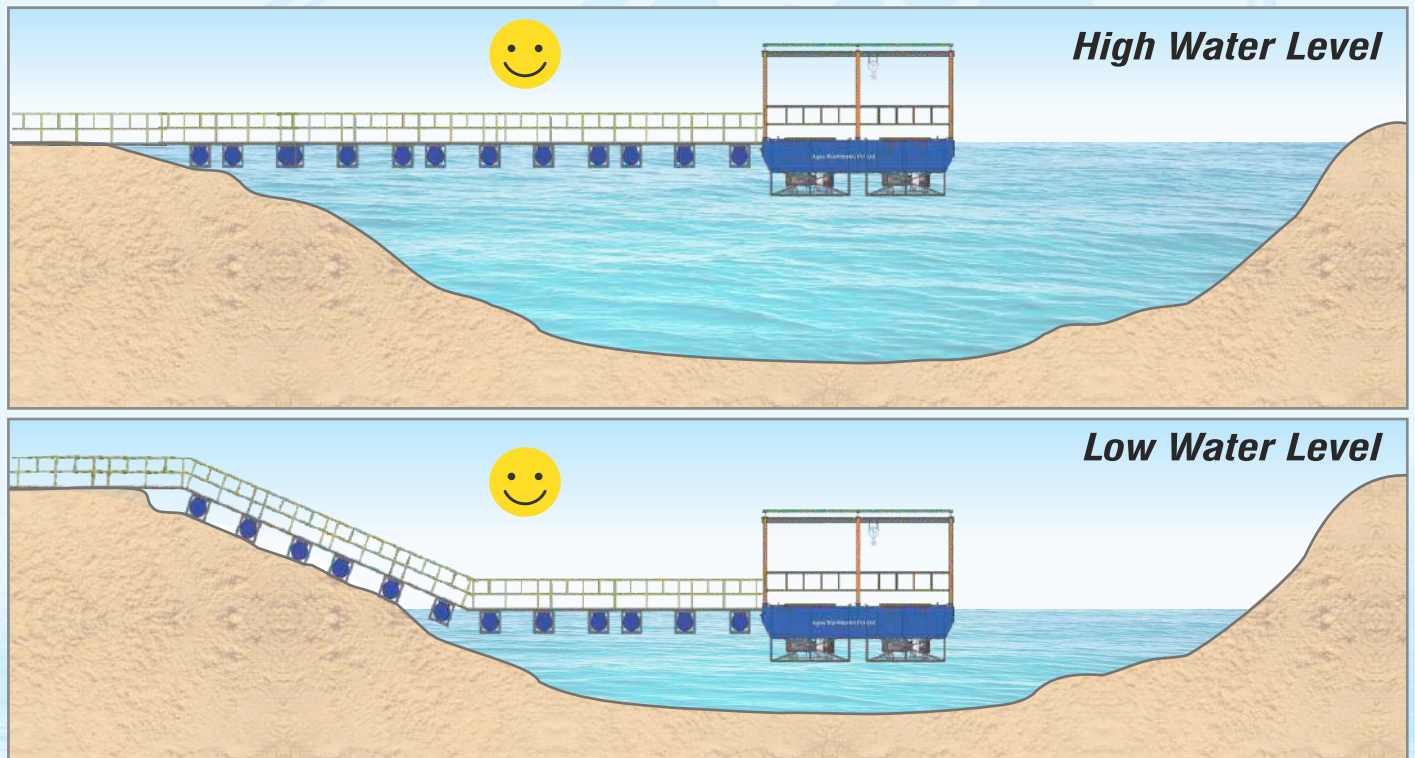
Now with Submerged pumpset (& back-up Pontoon Technology), you have a 100% Guarantee of being able to start water supply irrespective of delays in Construction of Intake Well, Meandering Water courses, etc

Instead of a **Intake Well dependent VT pump**, in the **Tender itself**; opt for Versatile **Submerged pumpsets** which can be used :

- 1) Either, in a **Regular Civil Intake Well** (if required (& as & when constructed))
- 2) **or on Floating Pontoons** also (if the Intake Well is done away with (or delayed in construction)) to be ordered **only if required**.



Either ways, Client is assured of Timebound Commissioning of Water Supply (as soon as Pipelines are laid & Electrification is done) at **No Additional Cost** - i. e. *an Insurance Policy without any Premium.*



24 x 7 x 365 Water Supply is ASSURED Irrespective of Rise & Fall of Water Level; Meandering of Water Course & Delays in Construction of Intake Well.



Avoids the need for Time Consuming & Risky (Incase of Meandering River) RCC Intake well



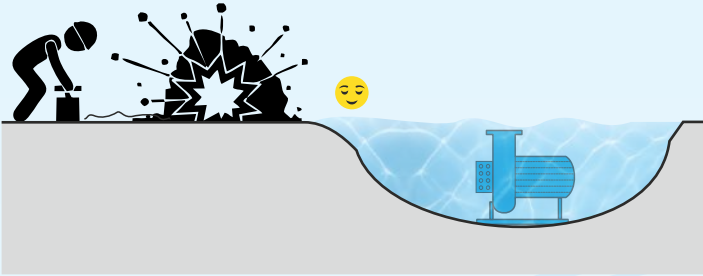
Avoids issues of **Land Acquisition** (for Pumping Station)





Eliminates Inundation & Flooding issues faced with Land-based Traditional Pumping Stations

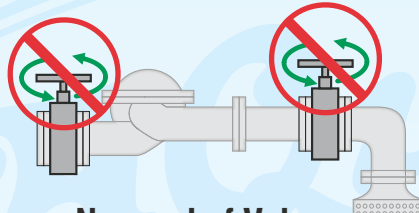
Why Submerged Pumps for Floating Pontoon Pumping Stations...?



Mines : during **Blasting**, sharp high speed debris often impact (& damage) Pumps & Motors exposed to Air (like in Conventional Coupled pumps) - however, in case of Submerged pumps; Water absorbs much of the momentum (of such debris) & hence hugely lessens the damage....



Eliminates Suction Lift Problems like **Priming, NPSH & Cavitation**



No need of Valve Opening / Closing during pump Start/Stop



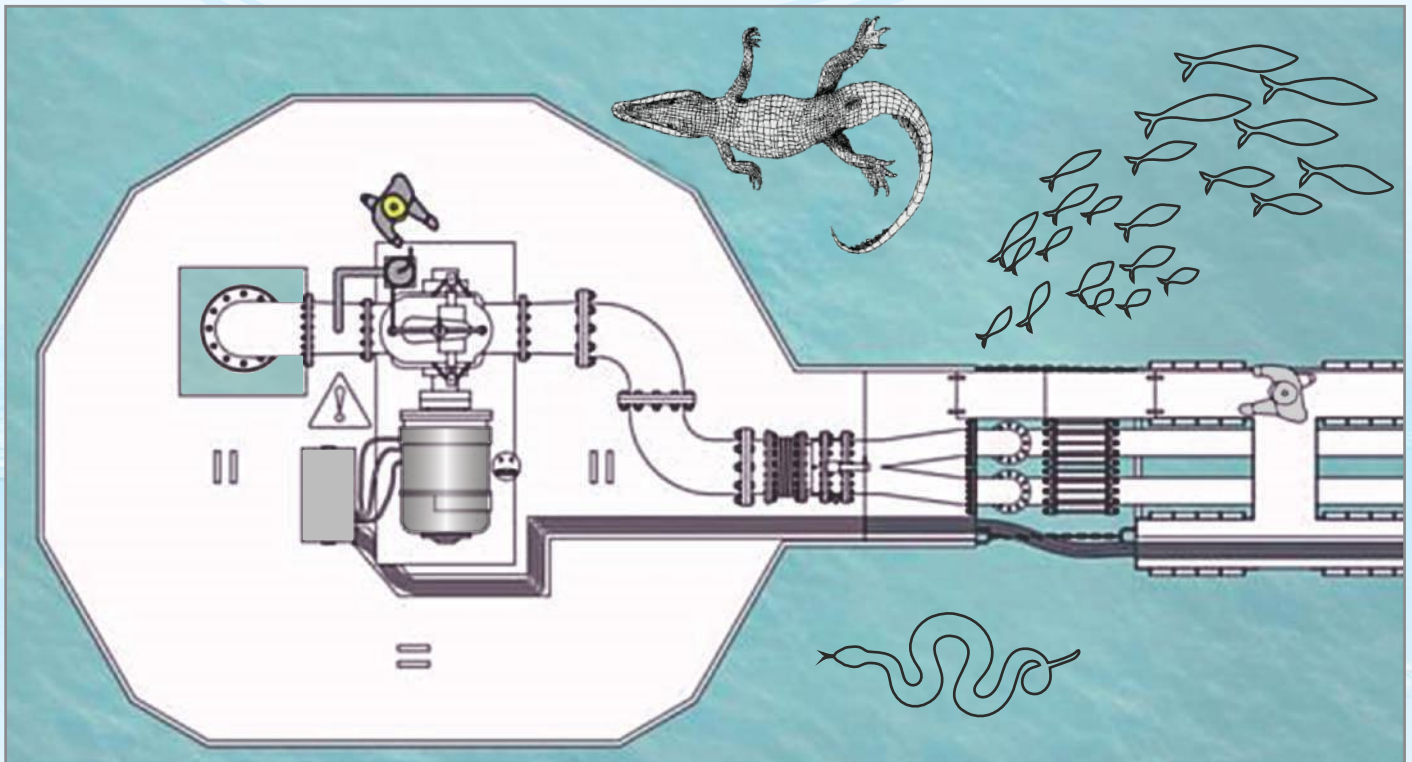
No need for Frequent Periodic....



Shafts &/or Coupling



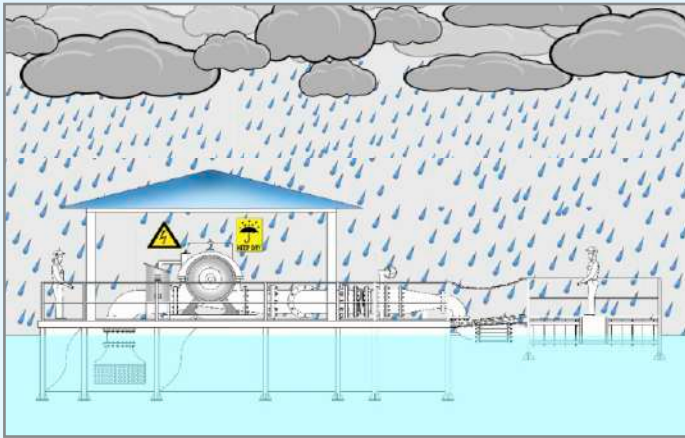
Gland Packing



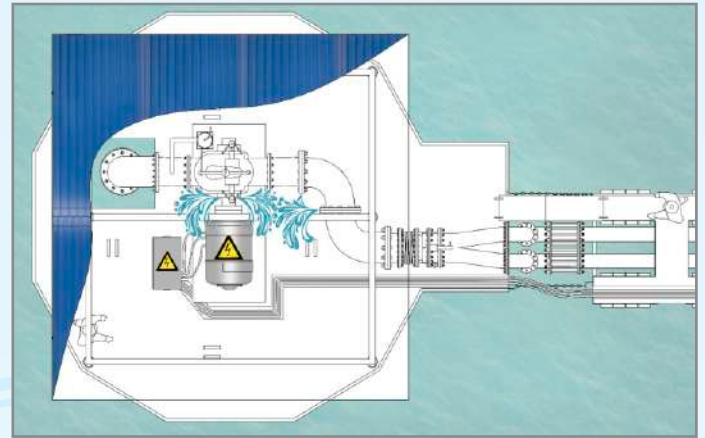
Conventional VT & Horizontal Pumps require the Operator to go upto the Pump frequently (during each Start/Stop & Frequently for Valve Start/Stop; Priming, Forced Water Lubrication Operation & Various Routine Maintenance like Oiling, Greasing, Alignment; Gland Tightening / Replacement etc.) Exposing them to **Increased Risk of Exposure to Aquatic Creatures.**



Motors of VT & Horizontal Pumps need to be Protected from...

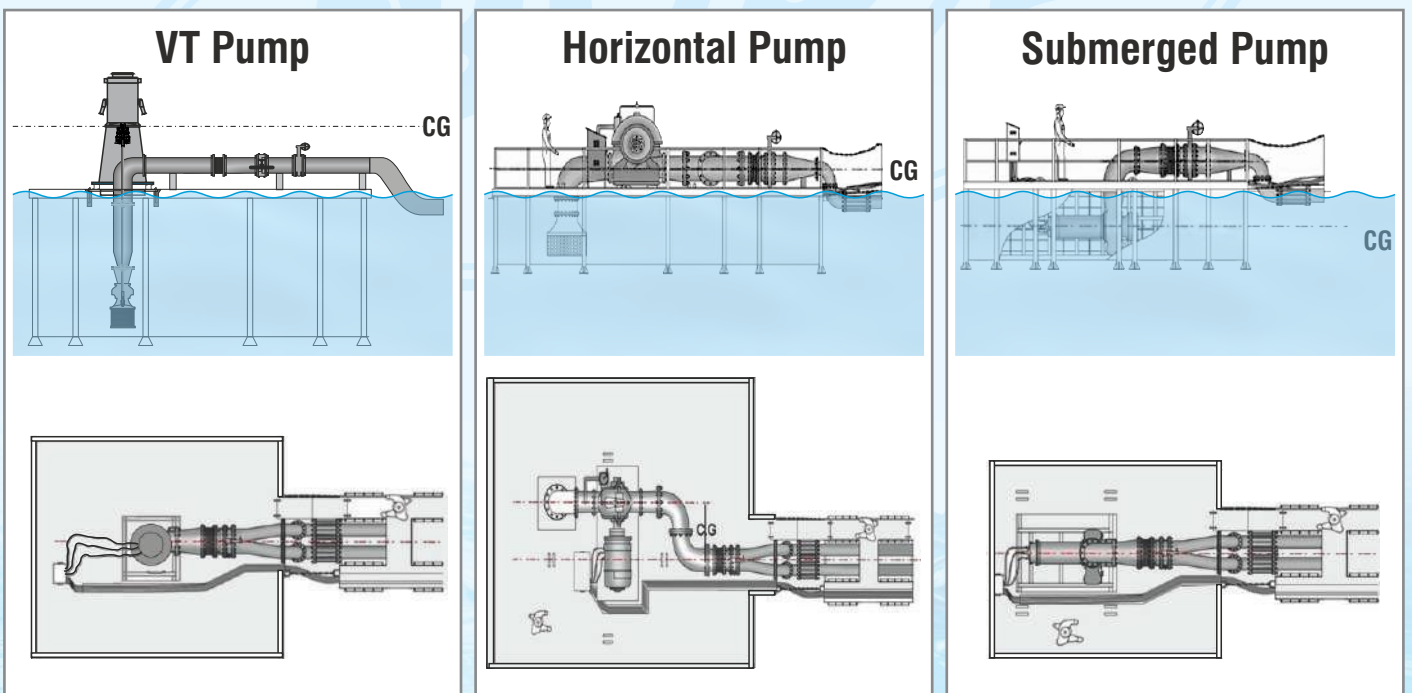


...Rains, Storms & Splashing Waves !



...Water Sprays !
(Frequently Emanating from Pipeline Leakages)

Pros & Cons of Various Pontoon mounted Pumps



	VT Pump	Horizontal Pump	Submerged Pump
Pumping CutOff Depth ...ability to Lift Dead Water 	Very High ☹️☹️ ...due to Long Underhanging depth & Vertically Bottom Suction - huge wastage of dead water 	High ☹️ ...due to NPSHr Cavitations Problems & Vertical Bottom Facing Suction - Substantial wastage of dead water 	Minimal 😊 ...due to Horizontal Side Suction & Minimalistic Underhanging Depth

	VT Pump	Horizontal Pump	Submerged Pump
Risk of Toppling & Lateral Stability due to Lower Center of Gravity (CG) & Low Roll Center (LRC)	Much Above the Deck <i>...leads to pendulum like high amplitude oscillations</i> Highly Unstable	Above the Deck <i>...leads to mild oscillations</i> Unstable	Below Deck <i>...so no oscillations</i> Stable
Stability against Waves, Storms etc.	Highly Unstable <i>...leading to Chances of Toppling & Oscillating</i>	Mildly Unstable <i>...having Some Chances of Toppling</i>	Very Stable... <i>...no Chances of Toppling</i>
Direction of Pump's Inlet Suction Flow	Vertical Bottom Facing <i>...leads to Undesirable Suction of Silt</i>	Vertical Bottom Facing <i>...leads to Undesirable Suction of Silt</i>	Horizontal Side Facing <i>...leads to Suction of Fairly Clear Water from Upper Strata.</i>
Pontoon's Head Room requirement (for Lifting Hoist)	Very High 	High 	Medium
Size of Pontoon	Bulky 	Very Bulky 	Compact
Lubrication of Pumpsets	Forced Water Lubrication is Continuously required. <i>...is Very Costly & Very Complex to Operate & Maintain</i>	Periodic Oiling &/or Greasing is required. <i>...is Costly & Tedious to Operate & Maintain</i>	Not required.
Installation & Operating Manpower: Skill level required & Quantity	Ultra Highly Skilled 	Highly Skilled 	Medium Skilled
Conducive to Remote Operation	No 	No 	Yes
Need for Operator to go to Pontoon Frequently <i>...for Priming, Alignment of Shaft/Coupling; Gland Packing Replacement / Tightening; Valve Opening / Closing; Forced Water Lubrication; Re-Oiling, Re-Greasing; Sleeve Replacement; etc.</i>	Yes 	Yes 	Not Required.

Benefits of Aqua's Submerged Pumpsets

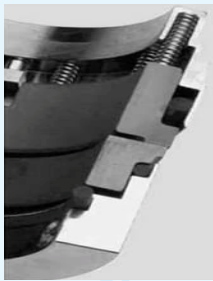


Combines the Efficiency of VT, Reliability of Induction Motors & Familiarity of Centrifugal Pumps; all in a Maintenance Free, Submerged Monoblock Enclosure

Single, Robust & oversized Shaft is **Common** between the motor & pump - made from **Stainless Steel** & designed without Any Sleeves (*below the Mechanical Seals*) it **eliminates the need of spare parts.**

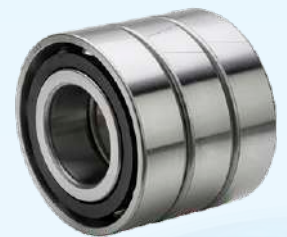


A Strong, Single Shaft for Fail Safe Operation



Shaft Sealing is by means of **Two**, Independent, high quality Bi-Directional; **Mechanical Seals** for **L_{10H}** life in excess of **50,000** hours &/or **5** years. The Primary seal is always of **Silicon Carbide** faces to withstand Erosion incase of increased silt content in water.

Grease (*L_{10H} life of Grease in excess of 45,000h for HT & 75,000h for LT*) **Lubricated Anti Friction Bearings** (*L_{10H} life of Bearings in excess of 1,00,000h*) are located deep inside the motor & inherently **isolated from the pumped media** - make them **fail proof** even in case of increased silt levels in Water.



Saves (*upto 75%*) **Spare Parts & Consumables***



Saves (*upto 66%*) **O&M Staff***



Low Life Cycle Costs (*LCC*)*



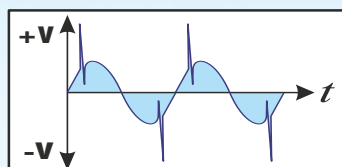
Low Energy Cost : Due to Elimination of Suction Losses, Ancillary & Auxiliaries; **Wire to Water Power Consumption** of Submerged Pump based Pumping Station is **slightly Lower** (*compared to Conventional Bare Shaft Pump - Motor Set based Pumping Stations*).*

* (refer marketing@aquapumps.com for additional white papers)

Tolerates...



...Wide Voltage Variation



...Power Spikes & Surges

No need for Frequent Periodic....



Oil &/or Grease



Ready for Remote Operation:

Intelligent InBuilt Monitoring



Easy Monitoring (& Remote Control[#]) of your Pumpset's Health.

- **PSLD** detects Pressurized Water Leakage from Mechanical Seals.
- **CCWLD** detects Accidental Water Leakage from Cable Sheath's Cuts &/or Nicks into the Motor.

- **BTDs** in the form of Bi-metallic Switches (for All Pumpsets) & RTD's (PT100 - 3 Wire Simplex type - from Size > 150kW) to Monitor Bearing Temperature (without any Additional Cost)[#].
- **WTDs** in the form of Bi-metallic Switches (for All Pumpsets) & RTD's (PT100 - 3 Wire Simplex type - 1 per each Phase - from Size > 150kW) to Monitor Winding Temperature (without any Additional Cost)[#].

[#]requires additional communication hardware

Why Aqua's pontoons...?



Enhanced Safety...

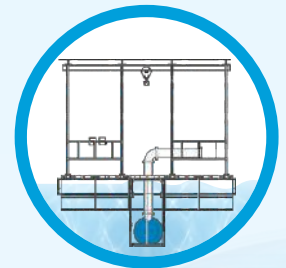
Robust, Safe & Stable Design meets **AS3962 - 2001** standards – **Australian Standards** Guidelines for Design of **Marinas**.



Australian STANDARD

The centre of the structural steel frame of the pump pontoons have a **Low-Slung chassis** hence the **Pump sits below the deck** of the pontoon :

- 1) this lowers the **Centre of Gravity (CG)** & **Low Roll Centre (LRC)** for Increased Stability & also
- 2) Prevents the pump sliding under the pontoon which otherwise may cause load imbalance, tipping or roll over.



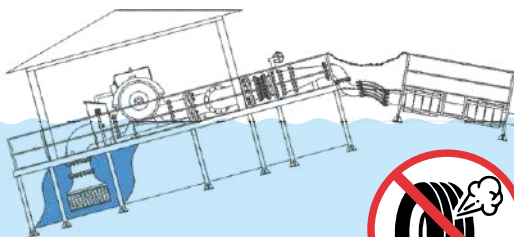
Manned Areas are fitted with Safety Hand Rails & Toe Guards.

The float systems are designed & sized with minimum **1.25 x FoS** (Factor of Safety)



No Issues of Toppling over during High Tide, Waves &/or Winds

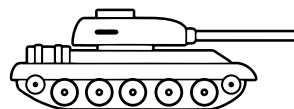
Plastic/Polymer Pontoon



Can get Punctured / Leakage due to Sharp Stones / Debris.



Robust Tank like Build



Aqua's Metallic Pontoon

Ease of...



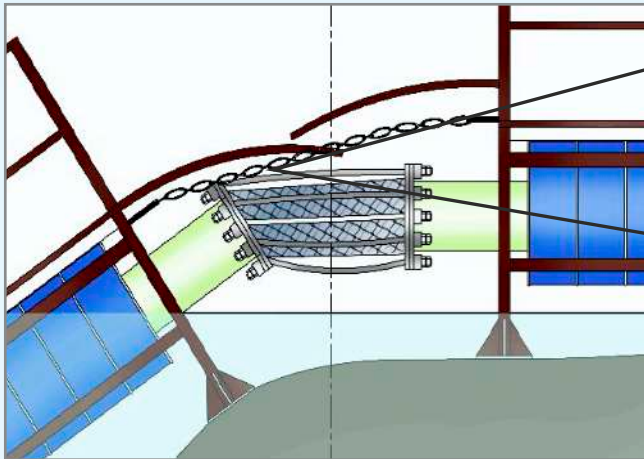
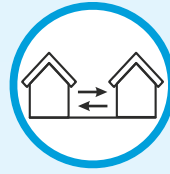
...Assembly & Re-Location at Site in Water



...Transport, Loading & Docking



...Skidding Around at & usage at Multiple Sites



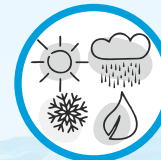
Fully Metallic, Sunlight & Ozone Aging Resistant, Puncture Proof; Flexible Discharge Piping (capable of With-Standing upto 25 bar)

Advanced Design



The flotation modules for pontoons and walkways are fabricated with **Top Entry Inspection Ports** facilitating easy & safe inspections against long term leakage (if any).

Sufficient **Clear Working Space** for easy O & M of pumpsets &/or resting of pumpsets on pontoon deck.



Safe & Operative in **All Seasons**



Modular Design

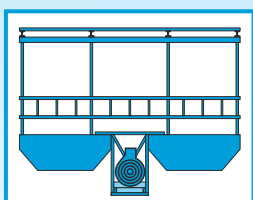
(to Suit Single or Multiple Pumpsets)



Anchoring, Mooring & Towing Provisions



Walkway allows easy to access pontoon from Bank / Land.

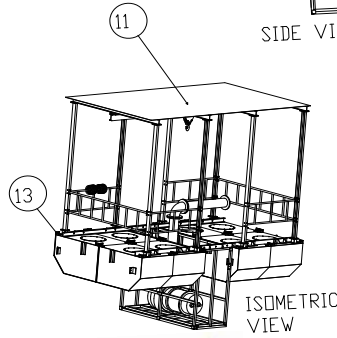
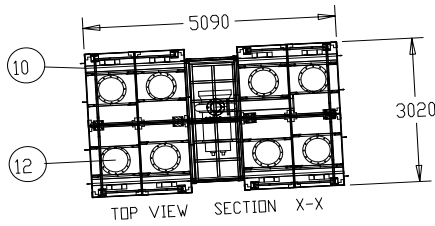
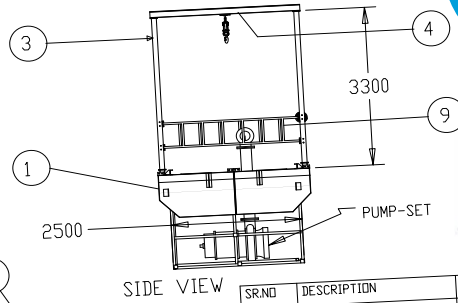
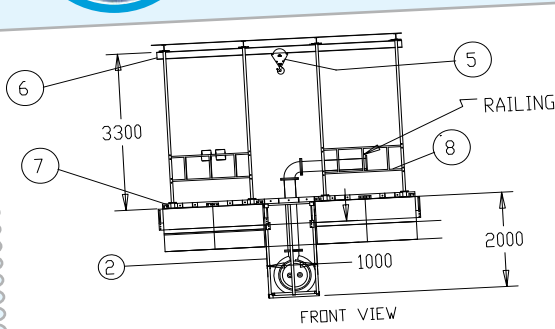


Designed with Costlier (to manufacture) **Swim Ends** & Minimum **Two Hulls** for Lower **CG** & to withstand high wind & waves.

- Well equipped with provisions for **Increasing / Decreasing the Buoyancy** in running live load conditions.
- Specially designed **Pivot Joints** to connect pontoon & walkways to rest on uneven dry bed surface as well as waves created due to Storm / Winds.
- Walkways / Gangways can be specially customized & designed for pipes and cable trays on request/demand by customer.



Compliant with Stringent **NAVAL & MARINE** specifications & certified by IIT.



SRNO	DESCRIPTION	SIZE	MATERIAL	QTY
1	FLOAT	1.5X1X1	MS IS2062 B E250	8
2	PUMP-CAGE	2.5X2X1	MS IS2062 B E250	1
3	ISMC-COLUMN	3.3	MS IS2062 B E250	8
4	ISMB HORIZONTAL-BEAM	3	MS IS2062 B E250	4
5	CHAIN PULLEY & B.LOCK	5	INDEF	1
6	ISMB-150CHAIN BLOCK&P	5	MS IS2062 B E250	1
7	ISMC-100-SUPPORTING	5.05	MS IS2062 B E250	2
8	SHORT RAILING	1.624	MS IS2062 B E250	4
9	LONG-RAILING	3.220	MS IS2062 B E250	2
10	ISA-65X65X5	3	MS IS2062 B E250	5
11	CORRUGATED-SHEETS	14 t x2.5ft	GI SHEETS0.5 MM	4
12	PROVISION FOR CHANGING BUOYANCY	500 MM	MS IS2062 G-B E250	8
13	HDEK FOR MORING/ SHIPPING LIFE -JACKET	STD	MS IS2062 G-B E250	2
	HARDWARE/NUT SET	--	SS 304	LDT

Vikash Prakash
Naval Architect
AMRINA-00319835
Royal Institution of Naval Architects, London

A Chattopadhyay
B. Tech & PG (Naval Architecture)
Chartered Engineer, IET
License No. B1552416



PRINTS OF PREVIOUS REVISION NO. SHOULD BE SCRAPPED

No.	REVISION	ZONE	COPIED BY	REF.NO.	DATE

NOTES		Rev. - 02	
1	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN mm. SURFACE ROUGHNESS AS PER CO-STD.	DATE :-	15/04/2019
2	TOLERANCES FOR DIMENSIONS SHALL BE AS PER MANUFACTURING PRACTICE.	DATE :-	15/04/2019
3	UNMENTIONED TOLERANCES AS PER CO-STD.	DATE :-	15/04/2019
4	REMOVE ALL SHARP BURRS AND CHAMFER SIDES.	DATE :-	15/04/2019
5	DRAWING NOT TO BE SCALED.	DATE :-	15/04/2019

ASSEMBLY OF PONTOONS
GENERAL ARRANGEMENT DRAWING
PONTOON-TYPE-1
Aqua Machineries Pvt. Ltd.
Survey No. 442/2, 504/1 & 504/2, Near Postgraduate Estate,
Roor Express Highway, Somali, Ahmednagar District, Gujarat, India
Email: enquiry@aquamachines.com Web: www.aquamachines.com
GSTIN: 0291282184MFC09975



“Most of our designs are Heavy duty Marine Naval Certified for highest safety & assured peace of mind.”

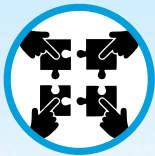
U. M. Shah,
Project Manager, AMPL

Spacious & State of the Art Plant...

Synchronization of

Hydraulic Engg + Pump + Pontoon + Walkway + Electricals + Piping

system design under a **SINGLE ROOF** for
Turnkey Responsibility
& Harmonious System Performance



Well Synchronized Pump, Pontoon & Walkway Design for Optimal System Performance



Well Equipped Manufacturing...



Unique Realistic Test Bed...



No Assumption, No Simulation - Only Realistic, 100%; Full Scale Testing..!

Unlike most Pontoon & Walkway Manufacturers, Aqua has a **Unique Test Bed facility** to **Actually Float Pontoons & Walkways** enabling **100% Compliance** between **Designed Assumptions** v/s **Actual Performance** like **Buoyancy, Stability** (& also *Check Welding Integrity*)



NDT Test as per **ASME** (SEC V Article 6)

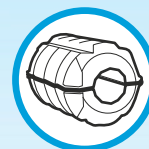
Accessories



Life Jacket



Life Buoy



Pipe & Cable Floats



Ladder



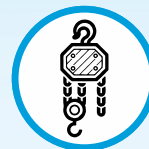
Marine Chain

Used for Anchoring Pontoons



Mechanical / Electrical Winches

Pulling / Holding the Pontoon to Shore



Chain Pulley

Used to Lift & Lower Pump & Pipes



Anchor

Prevent the Pontoons from Drifting due to Wind or Water Currents

Some Submerged Pumpset based Floating Pumping Stations @ 2021

No.	Pump Details	Location
1	600 HP (2W+1S)	NTPC Thermal Power Plant, Kudgi at Almatti Dam
2	600 HP (2W+1S)	NTPC Thermal Power Plant, NTPC Solapur, Darlipalli, Khargone
3	475 HP (2W+0S)	Tata Sukinda mines, Odisha
4	335 HP (2W+1S)	Machchhu 1 Dam, Gujarat
5	350 HP (3W+1S)	NPGC Barge Mounted Pumping station at Nabinagar
6	300 HP (2W+1S)	Nand RWSS
7	300 HP (1W+1S)	Gadag water supply project
8	270 HP (1W+1S)	Gadegaon LIS at Waghur Dam
9	250 HP (1W+1S)	Kothiya WSS
10	250 HP (2W+1S)	Peechi Dam
11	235 HP (1W+0S)	Lalbagh, Bangalore
12	215 HP (2W+1S)	Ozat Dam
13	200 HP (1W+1S)	Gohai Dam
14	180 HP (4W+2S)	Sarneji WSS
15	180 HP (1W+1S)	Nargramonholi
16	180 HP (1W+1S)	Kappukadu
17	180 HP (1W+1S)	Gataprabha River water supply project
18	150 HP (1W+1S)	Nagathan, Bijapur
19	150 HP (1W+1S)	Bhadar Dam
20	150 HP (1W+1S)	Machchhu Dam
21	140 HP (4W+2S)	Ukai Dam
22	130 HP (2W+1S)	Jivapar WSS
23	130 HP (1W+1S)	Bawra WSS
24	120 HP (1W+1S)	Dholidhaja Dam
25	120 HP (3W+1S)	Aji Dam
26	120 HP (2W+1S)	Ajwa Dam, Gujarat
27	115 HP (2W+1S)	Bhadar Dam
28	110 HP (1W+1S)	Bhadar Dam
29	100 HP (1W+1S)	Kuboor MVS Scheme
30	90 HP (1W+1S)	Ukai Dam
31	90 HP (1W+1S)	Gohai Dam
32	80 HP (1W+0S)	MIDC Ranjangaon
33	75 HP (5W+2S)	MJP Aurangabad
34	75 HP (3W+1S)	PHED, Nagaur
35	75 HP (2W+1S)	Bramhagavan Dam
36	75 HP (2W+1S)	Mithi Dam
37	70 HP (1W+1S)	Vadod
38	70 HP (1W+0S)	Belgaum WSS





Date: 12/Feb/2021

TATA

TO WHOM IT MAY CONCERN

This is to certify that we are using Aqua Make Submerged Turbine Pumpset

LT Pump set (2 nos)
Model: ASS_H_PS_2st_bo_2552_M_M_0475_3300_NJ_HPKW:475/335
Vol:3.3 kv, Head: 145 m, Discharge: 600 m³/hr, commissioning year: 2017.

LT Pump set (2 nos)
ASS_H_PS_3st_bo_1543_M_M175_415_NJ_HPKW: 175/132, Head: 145 m, Discharge: 175 m³/hr, commissioning year: 2018.

These pumpsets are installed on pontoons and running smoothly. As compared to our earlier split casing centrifugal pump these submerged pumpsets are simple to operate and zero maintenance.

We also satisfied with the technical support and services provided by Aqua as on when required.

For TATA STEEL MINING LIMITED
Sr Manager Electrical
Sukinda Chrome Mines

TATA STEEL MINING LIMITED
Sukinda Chrome Mines

FORM NO. 3(A)
(Referred to in Rule No. 5 B (ii))

WORK WISE DETAILS OF WORK COMPLETED OR PROGRESS BY THE CONTRACTOR

1	Name of Contractor	: Aqua Machineries Pvt. Ltd. Plot No. 3821, Phase-IV, G.I.D.C. Vatva, Ahmadabad
2	LoI / Work Order No. & Date	: PO reference/OutwardNo:11175 Dtd 06/03/2019.
3	Name of Work	: The work of Hydrological Survey, SITC of SCF Pump Sets on floating Pontoons, Panel Room and all Electro Mechanical Accessories Including 3 months of Comprehensive O & M at VMC AJWA SAROVAR
4	Estimated Cost of Work put to Tender	: Rs. 50324000.00
5	Tender Amount	: Rs. 57800000.00 (SITC + O&M)
6	Date of Starting the Work	: 07.03.2019
7	Stipulated Date of Completion of Work	: 04.06.2019
8	Actual Date of Completion of Work	: 18.06.2019
9	Amount of Work done up to Date 18.06.2019	: Rs. 57798839.00

10 State whether the details as above given by the contractor are correct, if not state as to what is correct information : Yes

11 State whether the contractor has executed the work in progress satisfactorily as per specifications. If not give the correct position : SITC works of the project were completed on 18.06.2019. Operation & Maintenance work was removed from scope of work

12 Above works consisting one of the followings:
 1. 750m³/hr, 30m head cuses, 90 kW X 3 Nos SCF pumpsets installed on 3 nos floating pontoons with necessary 120 mtr floating walkway.
 2. 11KV /415V, 315 KVA transformer - 1 Nos.
 3. Panel room having area 100 sqm - 1 nos.
 4. D.G. set with panel - 400 KVA - 1 nos.
 5. MS Pipes dia 300 mm, 400 mm and 700 mm with BFV, DPCV, EB - 1 lot
 6. S.S. Double braided Flexible piping system 300 mm dia - 1 lot (6 m long - 72 nos)
 7. Pipe Floaters - 1 lot
 8. HT & LT Cable - 1 lot
 9. 700 mm dia Electro magnetic Flow meter - 1 nos

GUJARAT WATER INFRASTRUCTURE LIMITED
(A Govt. of Gujarat Undertaking)

Office of the Senior Manager (MC-35,54)
Jambhwal, Near new circuit house,
Surandemgar-Rajkot Highway Road,
Surandemgar

Date: 20/02/2021

To Whom So Ever It May Concern

This is to certify that we are using Aqua make Submerged Turbine Pumpset

For Model: ASS_H_PS_3st_bo_1543_M_M175_415_NJ_HPKW: 175/132, Head: 145 m, Discharge: 175 m³/hr, commissioning year: 2018.

These pumpsets are installed on pontoons and running smoothly. As compared to our earlier split casing centrifugal pump these submerged pumpsets are simple to operate and zero maintenance.

We also satisfied with the technical support and services provided by Aqua as on when required.

For TATA STEEL MINING LIMITED
Sr Manager Electrical
Sukinda Chrome Mines

Place: Vadodra
Ref:
Date:

Executive Engineer
Water Supply Dept.
Vadodra

Gujarat Water Supply & Sewerage Board

Supply Executive Engineer,
Public Health Mech. Sub. Division,
Gujarat Water Supply & Sewerage Board,
Mumbai. Phone no- 09 97180079

To Whom it may concern

This is to certify that we are using "AQUA" make 300HP Submerged VT (Boil Type) pump sets with following capacities:

1) 1134m³/hr X 51m X 300HP X 4 Nos. Installed in Intake Well
2) 1134m³/hr X 51m X 300HP X 2 Nos. Installed in Floating Pontoons (Bargaft)

Submerged VT pumps are suspended type no bottom rest, installed in same intake well for Head RWSS Intake Well and 2 Nos. pump installed in Floating Pontoons (Bargaft, Dist. Bharuch

We are using above both type installed pump sets in Intake /over raw water pumping. We found above both type pump sets working satisfactorily, simple to operate, robust in operation and almost no routine maintenance. We are satisfied with aqua's technical and after sales service support.

The performance of the pump sets is satisfactory since January 2016 till today.

Executive Engineer
P.H. Mech. Division
Bharuch

PERENNIAL TECHNOLOGIES PVT. LTD.
Building Confidence

Date - 1/4/2019

Performance Certificate.

This is to certify that Since August 2017 we are using 3 nos x 600 HP Sub CF Pump sets of Aqua make at NTPC Vadodra 2.660 MW STPP project for its make up water requirement. Originally, Jackwell construction work was awarded since 2-3 years but could not complete due to site constraints. Continuous water availability was the main constraint for full work. On this scenario we have proposed NTPC to install Aqua make 3 nos x 600 HP SCF Submerged centrifugal Pump sets of capacity 1200 m³/hr, at 200 mtr of each Pump set, directly into the dam. These Pump sets were installed on Pontoons as there is not any civil structure to mount any type of Pump sets. These Pump sets are operating 24 to 26 hours a day on daily basis from last 2 years, with almost zero maintenance. Based on satisfactory operation of these pumps, NTPC decided to install 2 additional pump sets. These are installed by Perennial. We have installed & satisfactorily commissioned similar pump sets for NTPC Vadodra. Also we are executing similar job for NTPC Vadodra, for which order is already received by Perennial. We appreciate technical & service support rendered by Aqua along with prompt response to any of our requirement.

Yours faithfully,
Prashant Pare
For: Perennial Technologies Pvt. Ltd.

MIDC

S.E. (Electrical & Instrumentation) Office of the Superintending Engineer, (G&M) MIDC, Nare Circle, Jig Cess, Pune - Mumbai Road, Wamburda, Pune-411 001
Date: 28/07/2014

To: Aqua Machineries Pvt. Ltd. Plot No. 3821, G.I.D.C. Phase-IV, Vatva, Ahmadabad - 382445.

Sub: M&E to water supply scheme (G.R.I.).

Dear Sir,

Maharashtra Industrial Development Corporation (MIDC) has developed Rajasthan Industrial Area adjoining S&S to S&S to P&S (Jig Cess) i.e. 80 kva away from Pune city along Pune Ahmadabad Highway. MIDC has provided 27.8 MLD water supply scheme in Rajasthan Industrial Area.

In January of 2013, it was found that the water level of Ghod Dam, (Source of water) was drastically going down. MIDC was lifting raw water from the dead stock of the dam from March 2013. In May 2013 MIDC was under level was available above the source of Rajghod and only one level of all VT pump sets were submerged. Hence, MIDC had to make provision of alternate arrangement to lift the water from dead stock operate 2 Nos. x 250 HP VT pump sets discharging 2500 m³/hr for all 24 hours.

As an emergency measure, it was proposed to lift the water into the Jackwell from the dam by providing a existing suitable capacity Submerged Centrifugal pumps to fulfill the daily requirement of water to the Rajasthan Industrial Area as well as nearby villages.

Aqua Machineries Pvt. Ltd. Ahmadabad, promptly made available the 1200HP submerged Centrifugal Pump having discharge of 1200m³/hr. 1300 liter within the week's time. Mr. Manoj Exaker & Engineering Services, Badliwadi commissioned the pump. The pump worked satisfactorily at site.

Yours faithfully,
S. K. Bhatnagar
Superintending Engineer (E&M)
(Pune-41)



Machhu 1 Dam



Nabi Nagar



UKAI DAM



Some Clients....

