

Mumbai

Mini Pumping Stations

41,000m³/hr Storm Water Pumping Capacity added in just 2 months..!

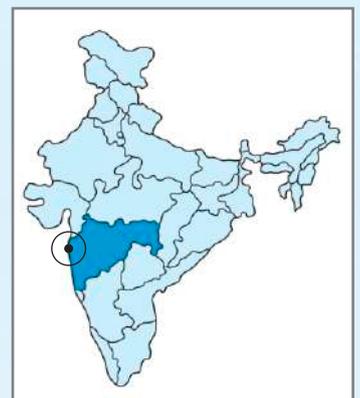


Mumbai is the Capital of Maharashtra & the de facto Financial Centre of India. According to the UN, as of 2018; it is the 2nd most populous city in India & the 8th most populous in the World with a population of roughly **2crore**.



Apart from being the financial, commercial & the entertainment capital of India; it is also one of the World's top 10 centres of commerce in terms of global financial flow (*generating 6.16% of India's GDP, accounting for 25% of its Industrial output, 70% of its Maritime Trade & 70% of its Capital transactions*).

Mumbai's business opportunities attract migrants from all over India.



History



For centuries, the seven islands of Bombay were under the control of successive indigenous rulers before being ceded to the **Portuguese** Empire & subsequently to the British East India Company in 1661.

During the mid-18th century, Bombay was reshaped by the Hornby Vellard project, which undertook reclamation of the area between the seven islands from the sea.

Situation:

Mumbai is hit by a triple whammy :

1) Firstly, **heavy torrential rains** in a very **short span** means huge strain on the drains - excess water gets logged in all low lying areas.

2) Secondly, besides rains; Mumbai gets its water from a **web of rivers** - **Mithi** (18 km), **Dahisar** (12 km), **Poisar** (7 km) & **Oshiwara** (7 km). Rising population, expanding settlements, garbage dumping, industrial effluents, sewage & wastewater have also reduced the water discharge capacity of drains into the Arabian Sea.



3) Thirdly, Mumbai drains its waste and excess water through it's **Storm Water Drainage system (SWDS)**, originally designed during the **1860's** (by the British).

Lack of Space to augment the capacity of rains is now a major bottleneck & Mumbaikars face water logging almost every monsoon.

Chunabhatti, Milan Subway (Santacruz) & Mahalaxmi are densely populated & encompass commercial establishments. All these get severely affected on account of flooding and virtually become to a standstill. Mahalaxmi is also in close proximity of Arabian Sea.

Solution :

To arrest this perennial problem & mitigate risk of prolong flooding, **Municipal Corporation of Greater Mumbai (MCGM)** has come up with engineering solution of **Mini Pumping Stations** through its Storm Water Drains Department.

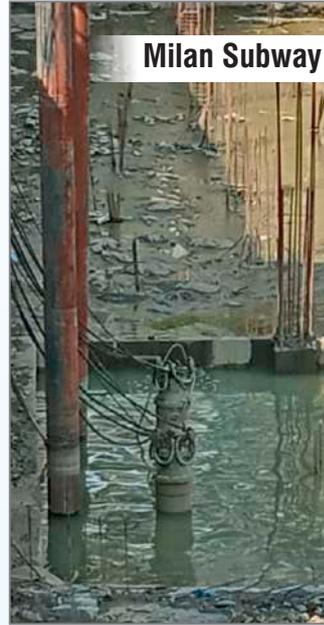
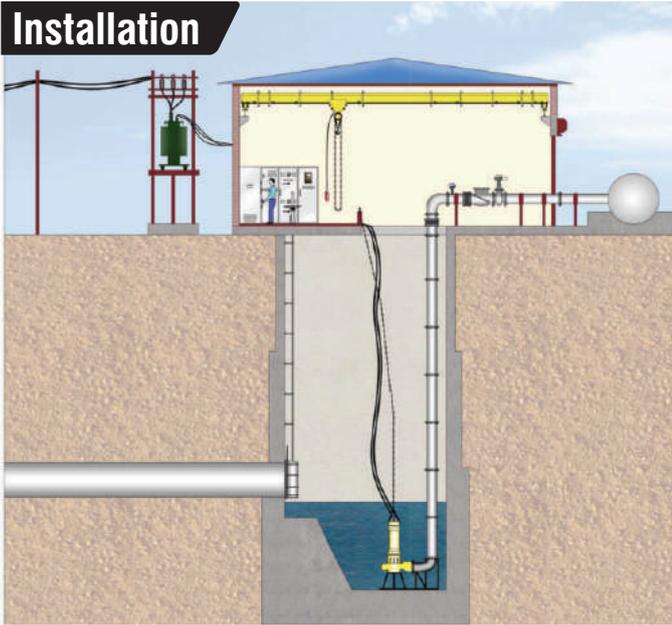
This Mini Pumping Station scheme involves disposing storm water to nearest discharge points within shortest time though **Large Capacity Submersible Non Clog Pumps** & piping network and control system.



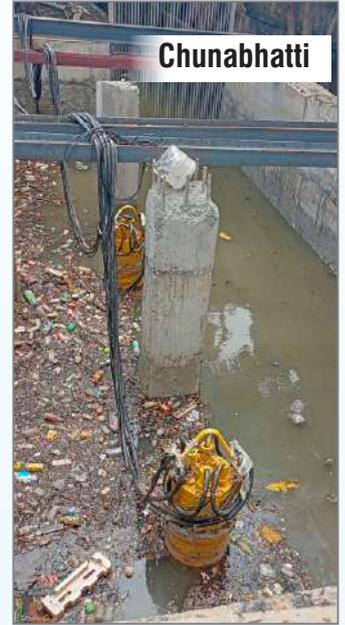
Aqua's Support

Aqua did the Site Survey, assessed the demand & engineered pumping solution within a very short span. Aqua also delivered all the **16 pumps cumulating 41,000 m³/hr within just 1 month** (well before monsoon) well in the time which helped m/s MCGM & m/s ARW to start operations & prove the effectiveness of Mini Pumping Stations.

Installation



Milan Subway



Chunabhatti

m/s Aqua had already supplied, various Pumpsets (details mention in following table) to MCGM.

Mini DPS	Pump Model	Capacity (m ³ /hr)	Total Head (m)	Quantity (nos.)
Mahalaxmi	ANS.._V_PS._1st_VoG_ES_4052_TQ_6P_.170N_ER__415_NJ.	3000	10	8
Chunabhatti	ANS.._V_PS._1st_VoG_ES_4052_TQ_6P_.170N_ER__415_NJ.	3000	10	3
Chunabhatti	ANS.._V_PS._1st_VoG_ES_3033_D_.4P_.60N_ER__415_NJ.	1000	10	1
Chunabhatti	ANS.._V_PS._1st_VoG_ES_2027_D_.4P_.30N_ER__415_NJ.	500	10	2
Milan Subway	ANS.._V_PS._1st_VoG_ES_4052_TQ_6P_.170N_ER__415_NJ.	3000	10	2



Robust
ANS
Submersible
NC
pumps



Chunabhatti



Mahalaxmi

Crucial & most vital aspect of this pumping solution is reliability, as need arises, during incessant rain and likely flooding situations, pump should run uninterrupted.

Aqua pumps have been running successfully without any slightest trouble during monsoon.

Aqua's Benefits

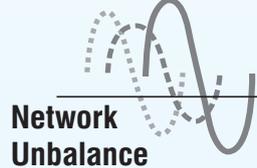
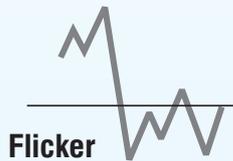
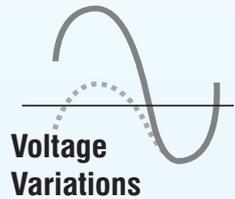
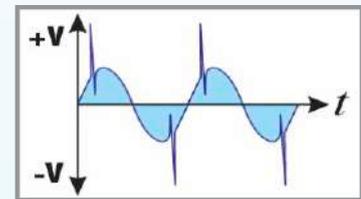
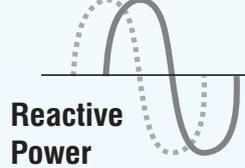
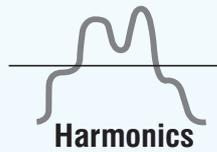
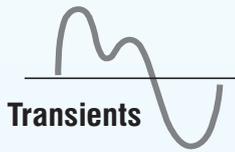
India's 1st ; 2nd Generation of Submersible Non Clog pumpset



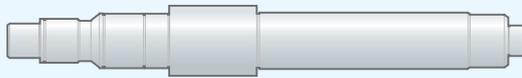
World's Best, Premium Motor Insulation



Insulation is based on "Power House" type treatment (*Mica based; Dual Vacuum Pressure Resin Impregnation (VPI)*) technology for Superb **Di-Electric Strength** due to use of costlier **Resin** (*v/s cheaper Varnish used by most Competitors*). Hence, Aqua's Motor easily tolerates :



Tolerates
Power Spikes & Surges



Oversized Robust Shaft:

Pump Clogging can even cause catastrophic Shaft Shearing - thanks to Costly Oversizing, Aqua's Shafts are Fail Safe & Guaranteed for Life.



Saves (upto 75%)
Spare Parts & Consumables*



Robust
&
Reliable



No need for
Frequent
Periodic....



Oil &/or Grease

"We are happy with the Courteous Pre Order Engineering Support, the Delivery of pumpsets within Promised time inspite of short time & Robust performance of Aqua Submersible Non Clog pumpsets which has played a vital role in satisfactory results of this crucial yet time bound Mini Pumping Station projects"

Mr. Omkar Wagh

Director, ARW Engineers India Pvt. Ltd.

Aqua Machineries Private Limited

www.aquapumps.com

Registered Office & Manufacturing Plant

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