

109 YEAR OLD ICONIC TALLAH TANK REFURBISHMENT - IVC'S CONTRIBUTION

Tallah Tank – Kolkata



SOME STATISTICS:

World's largest overhead steel tank for water storage

Size: 98 m (321 ft) X 98 m (321 ft) X 5.5 m (18 ft) deep

Height from ground: 33.5 m (110 ft)

Capacity: 9 million gallon

Dead weight: 44,000 m. tons (more than that of Titanic: 41,370 m. tons)
(Water & Steel structure)

Owner: Kolkata Municipal Corporation

PURPOSE:

When Palta pumping station nearby is incapable of supplying sufficient water for North Kolkata during peak hours, water from the Tallah tank automatically flows into the two trunk mains to make up for the shortfall. During the night, the tank is again filled up.

THE JOB:

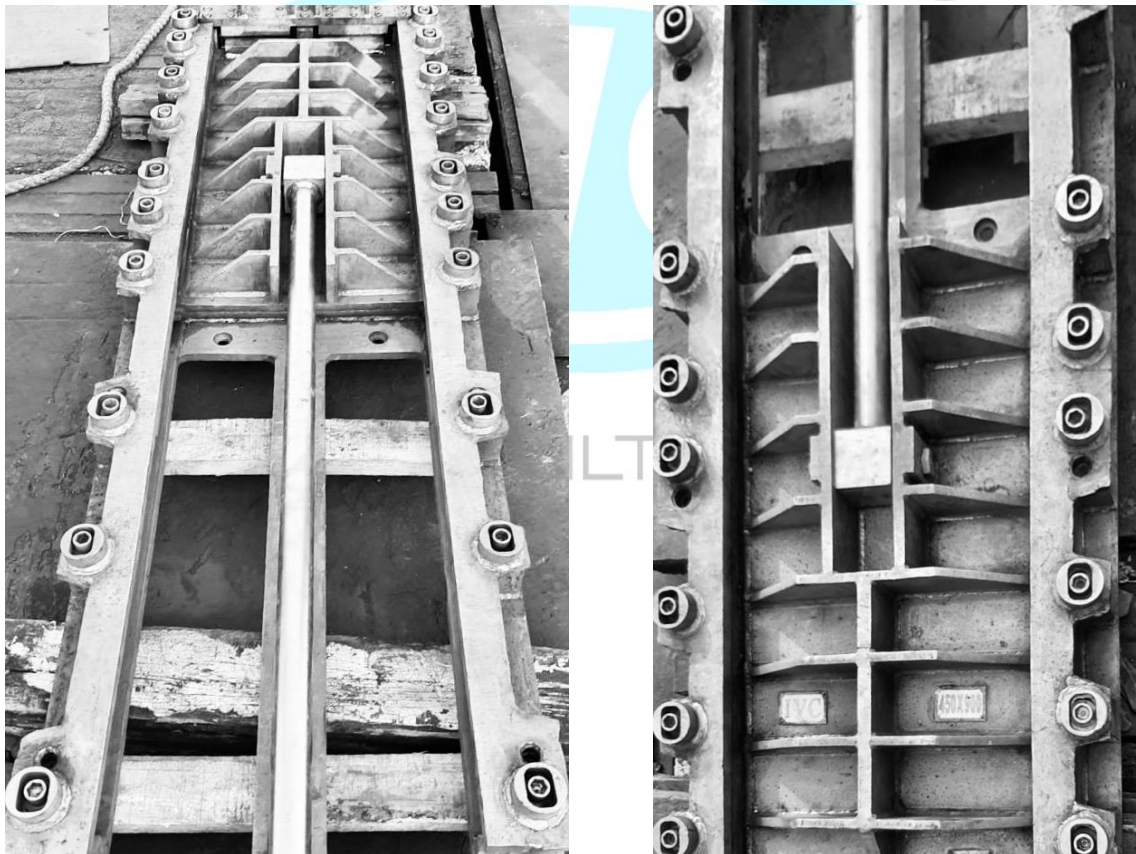
The Municipal Corporation decided to refurbish this ancient but very useful tank as there were leaks beginning to surface. Inside the tank there are 4 compartments, each with 2Nos. odd sized Penstock gates to isolate each tank for maintenance purpose, one chamber (compartment) at a time.

The ones present within were badly pitted and had lived past their lives. New ones that could last 30 years or more were needed. The only way a Penstock could reach inside the tank is from top downwards. No Gate manufacturer was willing to take the risk. IVC decided to venture forth, a laborious climb to the top using the meandering steel staircase got our engineers into the tank to survey the location and propose a technically feasible and lasting solution.

All **stainless steel 316 L** construction to make the equipment near corrosion proof, suitable for seating as well as unseating head, self contained gates with the operating arrangement on top of the yoke, were finally proposed and agreed upon.

EXECUTION:

While the lining part, involving removal of old coat, shot blasting and Airless spray painting using food grade epoxy coat, was undertaken by a local firm of repute; **design, manufacture and testing of these Penstocks was done by IVC at their Benares Road works.** Two of these 8 Penstocks have since been commissioned, the rest will be done in phases without disrupting water supply to the city and in so doing the efficacy of these Gates will be ably demonstrated.



NB: IVC's Benares Road works in Bengal has undertaken many a challenging assignments involving many Penstocks of sizes upto 2500 mm (square/round) in numerous locations - Vizag steel plant, Titagarh Thermal power station, Water and Sewage pumping stations in Municipal Corporations of Delhi, Kolkata, Mumbai, Bangalore, Chennai to name some.