

# Stainless Steel Submersible Pumps for CIDCO

## A success story at CIDCO

### About the Project

CIDCO at Navi Mumbai decided to have STPs at the new townships being developed by CIDCO. In the first phase 3 STPs with associated pumping stations were planned at Karanjade, Ulwe and Taloja.

### The Challenge

Since all these STPs are located in area near to the creek as well as near the industrial areas having chemical plants, there was a great possibility of mixing of sea water and chemicals with the sewage to be pumped and treated.

In view of this, pumps with normal cast Iron / NiCl material would not have been suitable from corrosion point of view.

CIDCO, because of previous good experience of submersible pumps was preferring submersible pumps than conventional centrifugal horizontal pumps in view of many advantages. But supplying submersible pumps with motor in corrosion resistant material was a challenge.



*Image for representational purposes only*

### The Solution

KISHOR team had detailed discussions with CIDCO and their consultants about various options. KISHOR's earlier experience of manufacturing submersible pumps with motors in complete Stainless Steel / Duplex Steel came handy at this point of time. KISHOR suggested to go in for complete SS material including motors and mounting accessories. The electrical parameters of the submersible motor were required to be developed from scratch since non-magnetic motor housings such as stainless steel are not good conductors of magnetic flux increasing the starting current of the motor. Also, care had to be taken to ensure that galvanic corrosion is not initiated anywhere in the pump since seawater and chemical effluents are strong electrolytes promoting galvanic corrosion.

### The Benefit

KISHOR supplied more than 40 submersible pumps of sizes ranging from 2 hp to 200 hp for all the three STPs in stainless steel including all the accessories which relieved CIDCO from corrosion of pumps and ensured longer life of pumps.