



TWISTER® Aerators Rehabilitate Wastewater Treatment Plant in Iraq

TWISTER aerators provide intense air-to-water mixing and unmatched oxygen transfer rates.
Hillah, Iraq

THE FACTS

LOCATION: Iraq

APPLICATION: Activated Sludge Basins

DATE OF INSTALLATION: FALL 2004

TOTAL PROJECT COST: Not disclosed

PROBLEM: Needed to treat raw water sewage flowing into the Tigris River

SOLUTION: Purchased 24 Low Speed TWISTER Aerators

EQUIPMENT: 50HP and 60HP TWISTER Aerators

BUYER: Bechtel Corporation

ABOUT THE TWISTER

- Intense air-to-water mixing and unmatched oxygen transfer rates
- Available from 2 to 150HP (1.5 to 110 kW) at 50 or 60 hertz
- Ideal for high rate aeration, leachate treatment, supplemental aeration, and sequencing batch reactors

ABOUT AEROMIX

AEROMIX is a world leader in water and wastewater treatment equipment. AEROMIX offers full lines of treatment systems, aeration, equipment, and solar-powered equipment. Please visit us online at www.aeromix.com to learn more.

PROJECT BACKGROUND

Wastewater treatment plants in Iraq protect the Tigris River from sewage produced by nearly 17 million residents. The mechanical and electrical equipment at these plants have suffered from looting, lack of spare parts, and no preventative maintenance over the past two decades.

Capacity of the sewage plants have been reduced by several factors, resulting in untreated raw water sewage flowing directly into the Tigris River, endangering the health of Baghdad residents and downstream populations.

AEROMIX SOLUTIONS

AEROMIX recommended 12 - 50HP and 12 - 60HP Fix Mounted TWISTER Low Speed Aerators be installed at two of the rebuilt wastewater treatment plants. The rebuilding of these two wastewater treatment plants is a part of a larger reconstruction effort at several Iraqi sites, including:

- Baghdad
- Najaf
- Karbala
- Kerkh
- Diwaniyah
- Basrah
- Hillah



Location: Hillah, Iraq



Location: Diwaniyah, Iraq

This restoration program will restore and increase the capacities of several water treatment and sanitation systems throughout Iraq.

HOW IT WORKS

The TWISTER low speed aerator simultaneously mixes and aerates wastewater basins. Whether float or fixed mounted, the TWISTER aerators partially submerged rotating turbine is turned at a slow speed (40 to 100 RPM) by an integral motor and gearbox. AS the turbine rotates, veins create a strong pumping force. A column of water rises and is propelled nearly horizontal, in a fine spray of small water droplets. A large surface area is created, making an ideal air-to-water interface which creates very high oxygen transfer.



Location: Diwaniyah, Iraq

Thorough factory testing for each MONSOON Paddlewheel Aerator ensures the equipment meets the stringent AEROMIX quality standards.