

Industrial Water Treatment

Hyperboloid Mixer PABIO Mix

PABIO Mix enables efficient mixing and oxygen supply in a tank by using the mixing impeller with the optimal shape for mixing. This equipment is based upon the technology from a German company, INVENT.



Features

- High mixing ability

High bottom flow rate is available with small mixing force by slowly rotating large hyperboloid mixing impeller near the bottom of a tank.

Mixing force density: 2 to 5W/m³

- High oxygen movement power efficiency (for aerator type)

During aeration, bubbles supplied from the ring sparger (diffusing tube at the bottom of the mixing impeller) are miniaturized by the projection at the bottom of the mixing impeller to efficiently diffuse oxygen.

Aeration efficiency. 2.2kgO₂/kWh

- Simple structure and lightweight

Very simple structure consists of driving section, shaft, and mixing impeller only.

The mixing impeller is made of FRP with the maximum weight of approximately 200kg for the mixing impeller diameter of 2500mm (1.5kw).

- Easy installation and maintenance and low cost of maintenance

Install and remove without draining a tank because the mixer type does not require the lower anchor.

No maintenance is required for the submerged sections, because of no underwater sliding part nor twining of foreign substances.

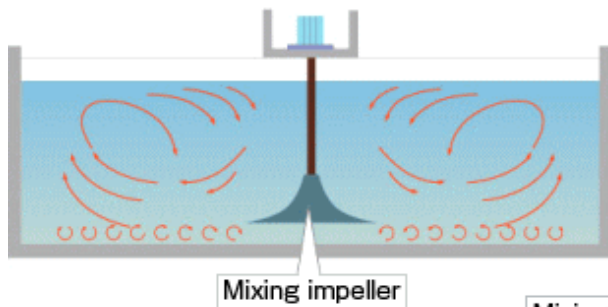
Low maintenance cost only for overhaul of the drive member.

- No splash and less smell

Mixing is performed near the bottom of the tank and there is no splash and less smell.

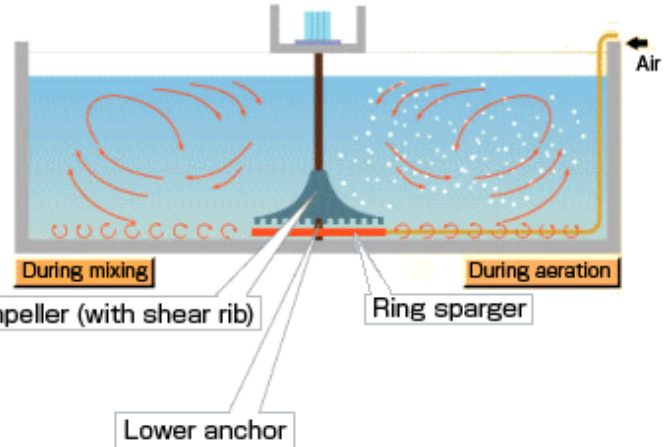
Mixing and aeration image

● Mixer type



Mixing impeller

● Aerator type



Mixing impeller (with shear rib)

Ring sparger

Lower anchor



During denitrification operation (mixing)



During nitrification operation (aeration)

Water Infrastructure Marketing and Sales Department for Private Sector, Marketing and Sales Division, Environmental Engineering Business Unit, Kobelco Eco-Solutions Co., Ltd.

For inquiries about this equipment, please complete and send in an inquiry form.

[!\[\]\(83bbbd261710c59db0214aa27b2edc0d_img.jpg\) Click here for inquiries](#)

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