



OX[™] disc aerators can add nutrient removal performance without additional tanks

REPLACE AGING BRUSH ROTORS WITH OX™ DISC AERATORS

REDUCE LIFECYCLE COSTS BY MORE THAN 50 PERCENT

Easy & Flexible Installation

- Replaces all brush rotors on a 14" shaft
- Fits all single & multichannel oxidation ditches
- Offers installation by Evoqua service technicians

Benefits:

- Lasts longer than steel brushes because nonmetallic discs do not rust
- Delivers additional aeration capacity to handle increased influent loading
- Eliminates dead zones
- Eliminates splashing that clogs mechanical components
- Keeps equipment cleaner to lengthen service life
- Eliminates basin dredging
- Provides biological nutrient removal with existing tanks in series operation
- Reduces energy costs by up to 40 percent in series operation
- Reduces misting

Contact:

oxdisc@evoqua.com Tel: (855) 505-5080

Schedule an on-site equipment evaluation



Aging brush rotors can be easily upgraded to low-maintenance disc aerators

The OX disc aerator is made of durable, high-density

polystyrene incorporating molded nodules and recesses to transfer oxygen and provide superior mixing



OX™ DISC AERATORS

A More Affordable, Durable, Low-Maintenance Brush Rotor Alternative

We recommend OX[™] disc aerators to replace brush rotors. Because non-metallic OX disc aerators do not deteriorate or corrode like carbon steel brush rotors, the expected life of the system is at least 20 years. In contrast, brush rotors typically last an average of only five to 10 years.

Operators prefer OX disc aerators because they slice through the water, rather than striking it, which results in substantially less operational noise and eliminates messy excess splashing that clogs mechanical components and requires constant cleanup. And OX disc aerators may require fewer drives, which reduces noise, capital expenditures and maintenance.

Operators also prefer OX disc aerators because they generate excellent oxygenation within the basins. Dead zones are eliminated because the OX disc aerators provide more uniform mixing throughout the entire basin.

With better mixing capabilities, the OX disc aerator can operate at lower speeds that require less power. In fact, OX disc aerators can use up to 40 percent less power than conventional brush rotors if operated in series.

Unlike other companies that sell brush rotors, Evoqua also can install brush rotors or OX disc aerators with its own dedicated field service support teams.

Series Operation Enables Biological Nutrient Removal & Stormflow Management

Facilities using OX disc aerators can upgrade to biological nutrient removal if they operate their oxidation ditches in series. Series operation requires less space, enhances energy efficiency and does not require additional tankage. During series operation, any oxidation ditch using the OX disc aerator can achieve biological phosphorus removal or up to 90 percent total nitrogen removal. Series operation also enables stormflow management capability. These series operation capabilities can also be automated by adding a SmartBNR[™] process control system, which empowers operators, reduces energy costs and enhances system reliability.

Evoqua: Offering Brush Rotors & Disc Aerators

At Evoqua, we have more than 40 years of expertise in both brush rotors and disc aerators. Evoqua is the OEM for Passavant Mammoth brush rotors. We also pioneered the disc aerator in the 1970s. So, we can replace your existing brush rotors or upgrade your ditches with OX disc aerators.

Comparing Conventional Brush Rotors to OX Disc Aerators

These charts allows you compare the features and benefits of conventional brush rotors to OX disc aerators.

	Brush Aerator	OX Disc Aerator
Mixing Horsepower	40 HP/MG	10 HP/MG
Pounds of oxygen transferred per ft. of shaft	4-6	8-12
Average life expectancy	5-10 years	20+ years
Requires baffles/mixers	Yes	No
Eliminates dead zones	No	Yes
Allows full automation with SmartBNR controls	Yes	Yes
Resists corrosion	No	Yes
Reduces noise levels	No	Yes
Reduces aerosols/misting	No	Yes
Eliminates splashing that clogs mechanical components	No	Yes

Series Operation Benefits

	Brush Aerator	OX Disc Aerator
Offers total nitrogen (TN) removal	No	Yes
Offers biological phosphorus removal	No	Yes
Handles excess stormflows without clarifier overflow	Yes	Yes
Energy consumption		Up to 40% less



2607 N Grandview Blvd #130, Waukesha, WI 53189

(855) 505-5080

www.evoqua.com/oxdisc

OX and SmartBNR are trademarks of Evoqua, it's subsidiaries or affiliates in some countries

All information presented herein is believed reliable and in accordance with accepted engineering practices. Evoqua makes no warranties as to the completeness of this information. Users are responsible for evaluating individual product suitability for specific applications. Evoqua assumes no liability whatsoever for any special, indirect or consequential damages arising from the sale, resale misuse of its products.

© 2017 Evoqua Water Technologies LLC Subject to change without notice BC-BRUSHTODISC-BR-0417