



Sanitaire® AMX series turbo blowers

One blower. Two bearing technologies. A smarter approach.

The Sanitaire AMX series turbo blower combines proven airfoil bearing technology with integrated magnetic bearing support to deliver reliable, oil-free aeration performance in demanding wastewater treatment processes.

Designed for applications with frequent start-stop cycles—including sequencing batch reactors (SBRs) and intermittent aeration—the new Sanitaire AMX series turbo blower extends service life, reduces maintenance, lowers operating costs, and helps facilities meet increasingly stringent energy efficiency and nutrient removal requirements.

Performance that works harder for your treatment plant

- **Airfoil and Magnetic Bearing Technology**—Proven air foil bearing with magnetic bearing support during start-stop events, extending bearing life without full magnetic system complexity.
- **Reliable high-cycle performance**—Designed for frequent start-stop operation reducing bearing wear and improved reliability
- **Greater energy efficiency**—Improves aeration efficiency to lower energy usage, operating costs, and support sustainability goals.
- **Lower maintenance and operating costs**—Fewer moving parts, no gearbox, and reduced bearing wear minimizing maintenance, labor, parts, and downtime.
- **Supports regulatory compliance**—Helps facilities meet increasingly stringent nutrient removal requirements while improving plant efficiency.

The best of both blower technologies

Sanitaire AMX series turbo blowers deliver the simplicity and efficiency of airfoil bearing blowers with the durability and operational stability of magnetic bearing systems.

Benefits include

- Extended bearing service life
- Reduced maintenance and downtime
- Lower total cost of ownership
- Reduced operational risk
- Optimized performance for demanding treatment processes



SANITAIRE
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Technical specifications

Motor

- High-speed PMSM motor with class H insulation
- Voltage 400 VAC, 50–60 Hz, 3-phase (optional 500 VAC)
- 56–746 kW (75–1000 HP)
- Protective Earth (3P + PE)
- Titanium motor shaft



High-speed permanent magnet synchronous motor (PMSM)

Impeller

- Solid forged aluminum alloy (Al7075-T6)
- Precision 5-axis CNC machined
- Anodized protective coating



5-axis, CNC-milled aluminum alloy impeller with an anodized coating

Controls

- Danfoss Vacon® Variable Frequency Drive
- Siemens S7-1200 PLC (CPU1214C)
- 178 mm full-color touchscreen
- Communication options: Ethernet/IP, Modbus RTU, Modbus TCP, 4–20 mA along optional Profibus DP
- Optional ProfinET

Enclosure

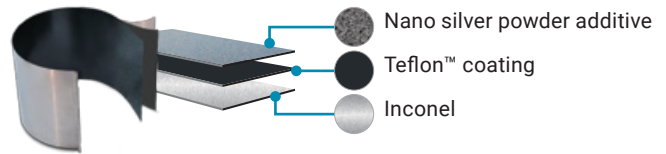
- Powder-coated steel (IP51 rating for Louvre and IP52 for flanged option)
- Optional stainless steel outdoor enclosure (IP54 rating)
- Optional hot-climate configuration up to 55°C



Easy air filter replacement

Certifications and compliance

- CE compliant
- Manufactured to ISO 9000 and ISO 14000 standards
- Performance testing standards ISO22484 or PTC13
- WIMES compliant with some exceptions



Superior bearing technology

Bi-directional airfoil bearing featuring a Nano Silver Triple Treatment Bearing (NSTB+) coating with magnetic bearing support provides unmatched durability and high cycle reliability for PMSM applications.



Bi-directional bearing

- Long life span
- Reversible rotation



Bearing showing the magnetic bearing assist (150 000 starts and stops)

Exceptional user experience, built in

- Simple installation with no special foundations or time-consuming alignment required
- Modular design with a compact footprint and convenient access points
- Quiet operation
- Vibration-free performance
- Oil-free lubrication with minimal maintenance requirements

Additional features

- Built-in air filters
- Bellmouth flow meter ($\pm 3\%$ accuracy)
- Blow-off valve
- Optional accessories: discharge silencer, suction silencer (if flanged inlet used), check valve, expansion joint