

WASTEWATER

inovair[®]
Geared Centrifugal Blowers

THE MOST RELIABLE, COST EFFECTIVE AND EFFICIENT BLOWERS

LOWEST TOTAL OWNERSHIP COST

Inovair's highly efficient and durable geared centrifugal blowers deliver the industry's lowest total ownership cost. The key is a high-efficiency design that is also affordable, thanks to the use of industry standard components to avoid unnecessary complexity and cost, as well as the company's 30 years of experience designing and manufacturing compact blowers. **Inovair's** proven design approach also simplifies maintenance and produces extreme durability.

BABA-COMPLIANT, MADE IN THE USA

With documented energy savings as high as 45% relative to PD and multistage blowers, and without the electrical complexity and durability issues seen in high speed turbo blowers, **Inovair** offers a unique combination of high efficiency, reliability, and simplicity. Unlike some others, **Inovair blowers** and customers are supported by the advantages of a vertically integrated manufacturer, with **Inovair** controlling all elements of design, production, and service. All of these activities are performed 100% in the USA, at the company's headquarters in Kansas City.



**BABA-COMPLIANT BLOWER
OPTIONS FROM 25-600 HP**



IM-20

25-150 HP



IM-30

Single or Stacked
40-400 HP



IM-50

300-600 HP

**MADE
IN THE USA** 

IM SERIES MACHINE LINEUP

25-600 HP



IM-10



IM-20



IM-30



IM-30 STACKED



IM-40



IM-50

IO SERIES MACHINE LINEUP

15-100 HP



IO-10

IO-20

BEST-IN-CLASS EFFICIENCY & LOW MAINTENANCE COST

Inovair blowers deliver unmatched performance with efficiency advantages independently verified using the latest ASME PTC-13 testing standards. Designed for real-world wastewater applications, our technology responds seamlessly to fluctuating liquid levels and airflow demands, ensuring optimal performance at all times. Plus, Inovair systems integrate smoothly with other blower technologies, making it easy to upgrade, expand, or balance existing installations without disruption.

INTEGRATED CONTROL SYSTEM

IN-HOUSE UL CERTIFIED 508A PANEL SHOP

- Allen-Bradley PLC's
- Ethernet (TCP/IP Modbus) or hard wire capable
- Easy systems integration

LCP

- Mass airflow (SCFM) based control system
- Automatic temperature compensation
- Automatic pressure compensation for varying liquid levels

MCP

- Feedback-based flow control capable - D.O., ORP, etc.
- Balanced run time between multiple blowers
- Single point interface
- Lead-lag functionality
- Balancing valve control

INDUSTRY STANDARD COMPONENTS

- NEMA Standard Motor
- Allen Bradley PLC
- Off The Shelf Variable Frequency Drive

DURABLE DESIGN

- Indoor/Outdoor Installation
- Dirt/Dust Tolerant
- Start-Stop Capable
- Durable 20-year design life

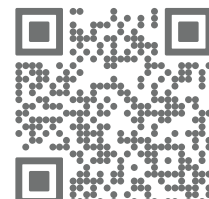
OPERATING CAPACITY

- 150 to 2,600 SCFM
- Up to 22 psi
- Capable of variable level applications



SCAN FOR MORE DATA

Learn more about the **Wastewater Product line** and how it is the most efficient and reliable forced-air blower for your application.



INOVAIR CASE STUDIES

See Inovairblowers.com for additional information.



37% ENERGY SAVINGS, IMPROVED RELIABILITY, OUTDOOR DURABILITY

Application: Aeration Basin

Flow: 3,600 SCFM **Pressure:** 9.5 PSIG

Horsepower: 200 HP

Description: Western Missouri wastewater plant documented 37% energy savings along with improvements in reliability (reductions in maintenance and unplanned downtime) by replacing its two 150 HP PD blowers (300 HP total) with Inovair's 200HP stacked IM series blowers.

"I have never run across a blower that I feel is as **bulletproof** and as **easy to maintain** as this one is,"
—B. KINKEL
 Water Reclamation Lead Operator



VARYING LIQUID LEVELS TO 15 PSI

Application: Digester Aeration

Flow: 400 - 1200 SCFM **Pressure:** 7.0-15.0 PSIG **Horsepower:** 125 HP

Description: Southern California wastewater plant sought out Inovair to provide a solution for their varying liquid level digester (at 3300ft plant elevation). Inovair's compact footprint and ability to operate over widely varying liquid levels were key reasons for choosing Inovair.



HIGH EFFICIENCY SBR SYSTEM, RELIABLE START/STOP OPERATION

Application: Lagoon Aeration

Flow: 2000 SCFM **Pressure:** 11.38 PSIG **Horsepower:** 125 HP

Description: A plant in Oregon switched from another technology and installed an Inovair IM-30 stacked unit for their BR process. The Inovair blowers have worked flawlessly starting/stopping every 10 minutes since installation. The plant is truly happy with their decision to utilize Inovair and is experiencing improved reliability and lower operating costs.



BETTER FLOW CONTROL AND EFFICIENCY WITH 25% LESS ENERGY

Application: Aeration Basin

Flow: 1,230 SCFM **Pressure:** 8.5 PSIG **Horsepower:** 75 HP

Description: An Ohio plant was looking to replace their (3) 100 HP multi-stage blowers with more efficient blowers, with better flow control. Inovair provided (3) 75 HP IM series blowers with a master control panel. The higher efficiency blowers, along with the improved flow control provided a 25%+ energy savings.

Blower	Type	Capacity	Pressure	HP
Blower 1	A	100	10	100
Blower 2	A	100	10	100
Blower 3	A	100	10	100
Inovair IM-30	B	100	10	75
Inovair IM-30	B	100	10	75

20,000 START-STOP CYCLES

Application: Aeration and Digester Processes

Flow: 600-1150 SCFM **Pressure:** 6.0 PSIG **Horsepower:** 50 HP

Description: This project resulted in not only substantially energy savings and improved process control, but also substantially improved reliability. A unique aspect of the digester process was a high number of start/stop cycles. Now with over 15,000 start-stop cycles, this case study of blower improvements is even more powerful now than it was when we presented it at the Wisconsin Wastewater Operator's Association conference in 2016.

"With **45% energy savings** over our previous multi-stage blowers, this project **pays for itself very quickly**"
—SCOTT MILLHOLLAND
 Supervisor, Kill Creek Water Resource Recovery Facility



COMPETITIVE CAPITAL COST, HIGH EFFICIENCY, AND EASY INSTALLATION

Application: Aeration Basin

Flow: 2000 SCFM **Pressure:** 7.0 PSIG **Horsepower:** 125 HP

Description: The Inovair IM-30's competitive capital cost, high efficiency, and easy installation provided a wastewater treatment plant in Western Kentucky with the lowest cost of ownership. Inovair's proven stack configuration provided a seamless and efficient flow range (1150 -5250 SCFM) in a single footprint. This nearly 80% turndown coupled with Inovair's designed and built control system ensures smooth and efficient operation during all flow conditions.

ABOUT INOVAIR

Inovair designs and manufactures high-efficiency blowers and compressors in the USA, drawing on engineering expertise from F-35 fighter jet programs and record-setting drag racing. With operations based in Kansas, Inovair is vertically integrated—designing, machining, assembling, and supporting all products in-house. This structure ensures industry-leading availability, the fastest parts turnaround, and unmatched U.S.-based service and support. Customers also benefit from the highest quality and reliability, along with eligibility for American incentives and funding programs. By leveraging proven aerospace and motorsports learnings, Inovair delivers compact, efficient, and quiet solutions with integrated controls—providing superior performance and the lowest cost of ownership.



HIGHEST EFFICIENCIES

Inovair excels at aerodynamic design, achieving over 80% isentropic efficiency for the life of the blower. This delivers 10–45% energy savings compared to multi-stage or PD blowers, confirmed by real-world case studies and ASME PTC 13 testing.

LOW MAINTENANCE

Inovair products are designed for quick, in-field maintenance by operators, with tasks supported by online videos. Engineered for minimal effort and cost, they deliver the lowest total cost of ownership over their service life.

MINIMAL DOWNTIME

Inovair offers proven durability backed by industry-leading support from its Kansas City headquarters. Vertical integration and close team collaboration ensure fast responses and effective solutions when issues arise.

LOWEST COST OF OWNERSHIP

