



THE NEW YORK  
BLOWER COMPANY

**THE NEW YORK BLOWER COMPANY** designs and builds the widest array of fans and blowers in the industrial process market. nyb's industry-leading fan selection/design software allows us to deliver the highest efficiency products, maximize fan availability and optimize life-cycle costs.

Our representatives work with plant engineers, maintenance and design teams to develop application-specific custom fan solutions that meet the exact requirements of the individual process. Our commitment to each customer is demonstrated by unrivaled site-support and continuing development of improved design, welding and fabrication techniques- all backed by our warranty. Our experienced field engineers and technicians are ready to assist, around-the-clock, for emergency repair, fan troubleshooting, fan assessment and preventative maintenance.

Further, we have the teams to service/repair/install replacement components or complete fans, regardless of the original manufacturer. Industries, processes and technologies continue to evolve. For over 130 years, The New York Blower Company will continue to evolve right along with them.

## PRODUCTS & SERVICES

- ▶ Axial/Inline Fans
- ▶ Centrifugal Fans
- ▶ Custom Designed Fans
- ▶ Plenums Fan Arrays
- ▶ Pressure Blowers
- ▶ Fiberglass Reinforced Plastic
- ▶ Double Width Fans
- ▶ Packaged Fan Systems
- ▶ Steam Coil Products
- ▶ Ventilator Products
- ▶ Replacement Parts
- ▶ Emergency Repair
- ▶ Fan Troubleshooting
- ▶ Finite Element Analysis (FEA)
- ▶ Computational Fluid Dynamics

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800-208-7918

# FANS FOR BOILER/ HRSG AMMONIA INJECTION SYSTEMS



Photo Credit:  
Aether DBS



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SB-330  
10.19.R0

# APPLICATIONS

## FOR SCR HOT GAS OR AMBIENT AIR FANS

Nitrogen oxides (NOx) abatement systems are necessary in applications that result in having higher levels of NOx to help reduce the pollutant, therefore diminishing the amount of SMOG and decreasing the harmful effects on the environment.

Selective catalytic reduction, or SCR, is a process where a catalyst is added to nitrogen oxide (NO) gas via ammonia injection to convert it into diatomic nitrogen (N<sub>2</sub>) and water (H<sub>2</sub>O). Fans are used in this processes to supply air flow through the ammonia injection skid.

New York Blower fans can be integrated into a system to produce a customized emissions management solution that adheres to stringent energy and environmental standards. By customizing fans to the application, common problems such as bearing failure, unreliable performance, and high maintenance costs are avoided.

## TEMPERING AIR FANS

These fans provide ambient air into the process for cooling. Fans tend to be on the larger size. For example of a recently constructed fan was for an application requiring 400,000 CFM (679,600 m<sup>3</sup>/hr), 18" WG (4,479 Pa), and around a 1500 BHP range. Custom engineered-to-order fans are available for this application, as well as many others. Contact your local sales representative for more information.

## TYPICAL APPLICATIONS INCLUDE

- ▶ Gas Fired Power Plants
- ▶ Ammonia Injection Skids
- ▶ Coal-fired Power Plants
- ▶ Refineries
- ▶ Natural Gas
- ▶ Biomass/Biological Fuels
- ▶ Petrochemical Processing
- ▶ Oil and Gas Fired Boilers
- ▶ Lime Kilns
- ▶ Incineration
- ▶ Utility Boilers
- ▶ Internal Combustion Engines
- ▶ Gas Turbines

## DESIGN FEATURES

- ▶ Peak Reliability
- ▶ Custom-Designed Tunnel Bearing Unit to Avoid Excessive Vibration Issues
- ▶ Temperatures Ranging from Ambient to Over 900°F. (482°C.)
- ▶ Minimal Leakage Shaft Seal
- ▶ Retrofits- Fans Redesigned to Improve Mechanical Reliability of SCR Systems



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