Diamond Power[®] IK-600 Sootblower

The original open-beam sootblower for recovery boiler applications



Diamond Power® IK-600 Sootblower

The Diamond Power[®] IK-600 sootblower from Babcock & Wilcox (B&W) is designed specifically for the severe duty application of Pulp & Paper recovery boilers. It features an open-beam design to allow easier access for inspection, maintenance and replacement of all major components, from the top or bottom. This flexible design allows installation in tight locations.

The IK-600 sootblower uses rugged bolt-in tie bars and a frame assembly that can be easily and quickly removed and installed. It can be retrofitted onto existing IK sootblowers.

Welding quality assurance

Nondestructive evaluation (NDE) via radiographic testing (RT) is standard for all forged flange, front-torear, splice, and lance-to-nozzle welds. Each Diamond Power recovery boiler lance tube is assigned a unique X-ray serial number that is stamped into the forged flange outside diameter. Digital x-ray images of each weld are stored for a minimum of five years for easy customer reference.

Advantages/Benefits of the IK-600 include:

- Robust design for severe-duty applications
- Specifically designed with stiffer sides to accommodate open top while maintaining rigidity
- Top cover assembly provides easy access for reduced maintenance costs
- Improved reliability
- Interchangeable parts
- Designed for lowest life cycle cost
- Compact design fits in tight spaces
- Retrofits any IK sootblower
- Lance and feed tube weld testing beyond ASME requirements





The open-beam design provides easy top access for inspection, maintenance and component replacement.







Open-beam design, shown with and without top cover assembly.

Optional Features are available to enhance performance:

- Live loaded gland for feed tube packing greatly reduces maintenance on a traditionally high-maintenance component
- Progressive helix mechanism (PHM) improves cleaning coverage by incrementally changing the nozzle path
- Gemini® nozzle designed specifically for recovery boilers and engineered to reduce steam consumption, increase cleaning energy (by up to 29% in some installations when compared to alternative designs), and reduce tube erosion when used with PHM
- Maximum peak impact pressure (PIP) cast nozzle

 maximizes energy for significantly improved boiler cleaning
- Insulated feed tubes recommended for over 850F (454C) steam source to extend life of the feed tube packing and carriage oil lubricant
- Plus pressure-purged wallbox provides a cleaner boiler house, including the sootblower, by keeping ash and fumes inside the boiler
- Severe-duty paint application for corrosive environments

Standard Specifications	
Beam	5/16 in. thick carbon steel side plates
Power	External floating Expanda cable
Control	External proximity switch
Carriage	Series one full circulating oil bath or maintenance-free PowerTrain® carriage
Pinions	16-tooth full involute, 4-3/8 in. OD rollers for 5 in. helix 12-tooth full involute, 3-11/16 in. OD rollers for 4 in. helix
Indexing	Each end of travel
Covers	Rear, side and top safety covers
Coverage	Up to 22 ft
Speeds	75, 110, 145 in./min., 5-in. helix 70, 100, 140 in./min., 4-in. helix
Motor	2HP, 1725 RPM, TENV, 1.15 service factor
Lance Tube Material	1-1/4 in. chrome-molybdenum alloy with butt-weld forged flange
Nozzle	Selected to fit cleaning application
Feed Tube Material	304 stainless steel (Diamonized® feed tubes are optional)
Valve	Flexible seat and disc, Stellite® trim, pressure control independent of valve opening
Mounting	Swivel mount, negative wallbox with purge, integral rear support

The Babcock & Wilcox Company 1200 E Market Street, Suite 650 Akron, Ohio, U.S.A. 44305 Phone: +1 330.753.4511

www.babcock.com 💓 🖪 in YouTube

The information contained herein is provided for general information purposes only and is not intended nor to be construed as a warranty, an offer, or any representation of contractual or other legal responsibility.

Diamond Power, Gemini, PowerTrain and Diamonized are trademarks of The Babcock & Wilcox Company.

Stellite is trademark of Kennametal Inc.



ENERGY | ENVIRONMENTAL

Established in 1867, Babcock & Wilcox is a global leader in advanced energy and environmental technologies and services for the power, industrial and renewable markets.

For more information or to contact us, visit our website at www.babcock.com.