

# MERCURY EMISSIONS CONTROL



**Babcock Power**  
ENVIRONMENTAL

a Babcock Power Inc. company

Babcock Power Environmental Inc., a Babcock Power Inc.® company, provides fully integrated environmental solutions for utility power plants, waste-to-energy facilities, and large industrial applications. Babcock Power Environmental is a market leader in the field of environmental air pollution control technology, including innovative systems to reduce mercury emissions in coal-fired power plants.

During the past decade mercury has become another significant air emission that coal-fired power plant operators have had to address. Although the Clean Air Mercury Rule issued by the EPA in 2005 has been vacated, many states have moved ahead and established more stringent mercury requirements. This growing focus on reducing mercury emissions has encouraged the development of new technologies.

To assist plant operators in achieving their emission control objectives, Babcock Power Environmental offers a portfolio of mercury removal solutions for various applications. Including the establishment of an exclusive agreement with RWE Power's Rheinbraun Brennstoff GmbH (RBB) of Cologne, Germany to apply their Activated Lignite HOK® carbon product and associated technology.

HOK® has been demonstrated to remove more than 90% of mercury. **Contact Babcock Power Environmental to use HOK® and reduce your mercury emissions today.**

## BENEFITS

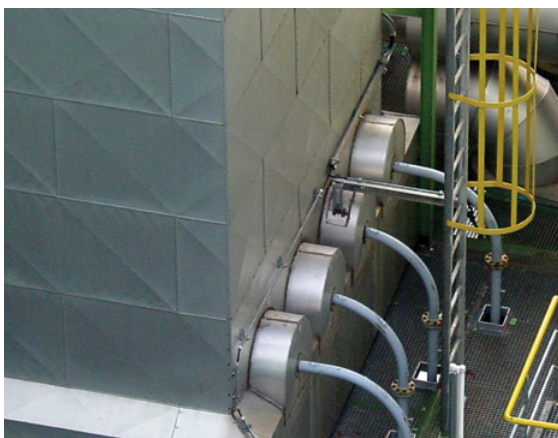
### Mercury Removal Experience

- Coal-fired power plants, waste-to-energy plants, sewage sludge disposal plants, steel mills and co-burning facilities
- Integrated system approach for optimum performance and efficiency

### Access to various proven technologies

- Ability to meet market-based and command-and-control mercury regulations
- Activated Lignite HOK® - exclusive distribution in North America with RWE Power AG
- Use of Delta Wing®\* (static fixed mixing devices) to enhance mass transfer and reduce the number of injection points
- Low-cost, modular polysulfide process captures elemental and ionic mercury while producing a stable and benign end product

\*Delta Wings furnished utilize technology under an exclusive license with Balcke-Dürr GmbH and from other Babcock Power Inc. proprietary sources.





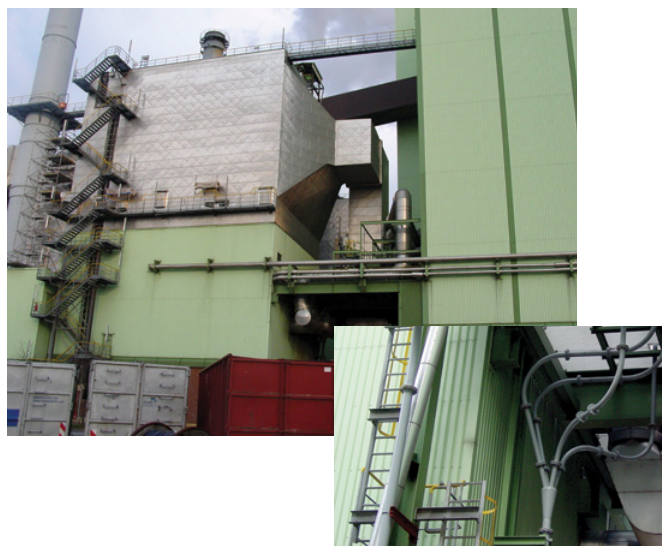
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## PROVEN RESULTS

HOK has been used worldwide in more than 400 waste management facilities to control mercury and dioxin emissions, as well as in RWE Power's coal-fired power plants for mercury control. HOK has been demonstrated to remove more than 90% of mercury.

Activated Lignite HOK® is being used at U.S. and German utility power plants, proving to be an excellent mercury control adsorbent comparable with benchmark sorbent activated carbon. Depending upon the specific requirements of each specific site, Babcock Power Environmental has access to and can apply a variety of sorbent technologies.



## SUFFICIENT HOK® ADSORBENT SUPPLY

- 220,000 US tons annual production capacity
- Approximately 400 systems now operating with Activated Lignite HOK® for flue gas cleaning
- RWE Power AG is the world's largest producer of Activated Lignite for adsorptive gas cleaning and market leader for these applications
- Bromine & sulfur impregnated products are available which permit the use of these sorbents in many different applications of adsorption
- Product is used in many different applications of environmental protection
- Activated Lignite is a low-cost sorbent with an unvarying high quality

## COMPLETE IN-HOUSE CAPABILITIES

- Capable of furnishing complete AQCS system (NOx, SO<sub>2</sub>, Dioxins, Hg, PM), including carbon sorbent injection systems
- In-house Computational Fluid Dynamics (CFD) modeling capability
- Ensure proper placement of sorbent injection points
- Ensure proper placement of Delta Wing® mixing devices, when required
- Minimize required sorbent by ensuring optimum mixing
- Single source of responsibility
- Installation, start-up and commissioning services available

### SAFETY<sup>3</sup> PEOPLE. POWER. PROJECTS.

We're giving safety the third degree.

Babcock Power Inc. and its subsidiaries place the safety, health and security of our people at the core of our company values. Our team is our most valuable resource, generating solutions everyday to deliver safe, clean, reliable energy globally. With a keen focus on safety, Babcock Power Inc. conducts business in a manner that protects our people, our customers and the environment. From innovation to generation, we are proud of our award-winning safety record and are committed to operating with integrity and excellence.

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