# **Circulating Dry Scrubber (CDS) Technology**

Babcock & Wilcox (B&W) recognizes the importance of maintaining coal's status as a competitive fuel choice for our utility customers. We continue to develop new technologies and advancing our well-proven base of emissions control systems to meet the challenges posed by tighter emission regulations. In addition, we have used acquisitions and licenses of environmental control products to expand our breadth of technology offerings and experience base. B&W has a long history of working with our technology partners to further develop the licensed technology.

B&W is the exclusive North American licensee for Enviroserv's circulating fluidized bed–flue gas desulfurization (CFB-FGD) technology (more commonly referred to as a circulating dry scrubber, or CDS). Along with our wet, spray dry and dry sorbent injection solutions, we have expanded our existing portfolio of flue gas desulfurization products to provide the optimum solution for each application.

# Technology

CDS technology is ideal for smaller units that are firing medium to high sulfur coals. Compared to wet FGD systems, capital costs are lower for CDS systems with the potential for higher SO<sub>3</sub> reduction and lower particulate matter (PM) emissions due to the integral B&W pulse jet fabric filter. In addition, the CDS may fill other site specific needs and is ideal for plant locations with limited space because of its smaller footprint. Like the spray dryer absorber (SDA), the CDS creates a dry solid byproduct and does not require a wastewater treatment facility.



#### Benefits

- High SO<sub>2</sub> removal efficiency
- Integral SO $_3$ , HCl, HF, mercury, heavy metals, dioxins and furans, and PM $_{2.5}$  emissions reduction
- Fuel flexibility to handle higher sulfur coals
- Low capital cost
- Low auxiliary power use
- Low operational and maintenance costs
- Dry reagent preparation and recycle system operation
- Low fresh water consumption
- Integral consumption of plant waste water streams for zero liquid discharge operation
- Absorbent feed independent of water injection (compared to an SDA)

Recirculation Flue



technology has the potential for higher emissions reduction and lower capital costs compared to other FGD technologies.

continued **>** 



ID Fan

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### Unique capabilities and experience

B&W has more than 40 years of experience executing FGD and other environmental projects for the power industry. Working with B&W can provide our customers with benefits not available from other suppliers. Our capabilities include:

- Integration of boiler, combustion and emissions control systems
- Experience with a wide range of emissions reduction technologies
- Experienced project management and execution teams
- Demonstrated equipment startup and commissioning expertise
- Dedicated environmental aftermarket services and replacement parts

These unique capabilities allow B&W to objectively evaluate each application and then engineer and supply the best overall solution. In addition, our project management expertise means that your project will be executed on time and on budget.



## CDS is ideal technology for plant locations with limited space because of its smaller footprint.



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Established in 1867, Babcock & Wilcox is a global leader in renewable, environmental and thermal technologies and services for power and industrial applications.

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