Engineered Waste Heat Steaming Equipment for Sulfuric Acid Plants, Thermal Oxidizers, Incinerators and Petrochemical Plants

Through expert engineering and the Babcock & Wilcox (B&W) Chanute, Kansas, manufacturing facility we provide custom designed waste heat recovery and heat transfer equipment for a wide range of applications and process industries worldwide.

Firetube waste heat boilers

Firetube waste heat boilers recover valuable energy from hot process gases for a variety of applications including sulfuric acid plants, thermal oxidation systems, process gas coolers and sulfur recovery. With our ability to handle large and heavy vessels, we can design, manufacture and ship extraordinarily large units. Our proven design and operational standards for such things as circulation ratio, retention times, corrosion allowance, and blow-off configuration improve the life and reliability of the boiler. For high-capacity sulfuric acid plants we offer a system with two boilers operating in parallel with a common steam drum to accommodate very high-heat duty and steam production requirements.

Watertube waste heat boilers

Watertube waste heat boilers recover valuable energy from hot process gases for a variety of applications including thermal oxidation systems, furnaces / incineration and process gas coolers. We optimize the users' return on investment by custom designing each boiler based on specific gas conditions and site requirements. The boilers are designed and constructed to either ASME Section I or Section VIII.

B&W offers these boilers with a variety of materials and casing constructions including internally insulated and lined, refractory lined and membrane wall construction. Membrane wall construction allows for a gas tight, water-cooled, inner casing useful for high temperature applications and corrosive gas (high SO_2) applications.

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Economizers

Economizers are used to recover the useful heat in exhaust or flue gas before it is released into the atmosphere and transfer it to the steam production cycle.

We offer a wide range of packaged economizers for industrial boilers. Each economizer is custom designed for the application. Whether the gas is clean burning or subject to fouling, B&W will select the proper tube configuration, metallurgy and heat transfer extended surface for the application.

We can also manufacture economizer pendant sections for utility or power boilers, including support systems and inlet/outlet headers and associated piping.

Economizers manufactured in our Chanute facility receive the benefit of onsite tube finning, innovative bending technology and superior pressure part welding quality.

Sulfuric acid plant boilers

Boilers for waste heat recovery systems are a critical component to the cost-efficient operation of sulfuric acid plants. We have extensive experience integrating waste heat boilers with a plant's sulfur burner and recovery system. This includes designing and fabricating for unique operating conditions such as high gas-side pressures, caustic environments and high operating temperatures.

For more information, contact us at:

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