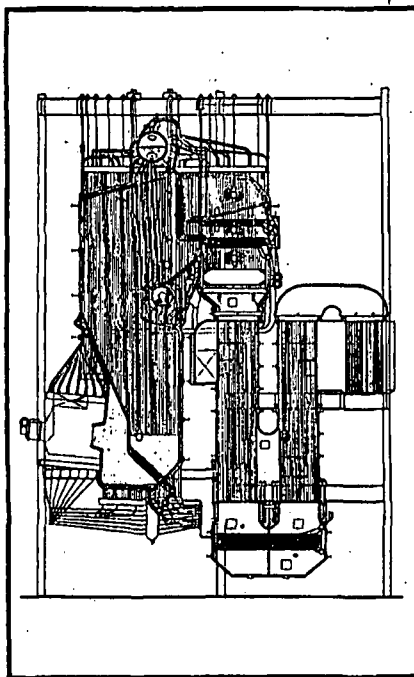


More B&W Pressurized Cyclone Furnace Boilers on the Line



B&W Cyclone-Fired Radiant Boiler for a leading chemical manufacturer. Four units of this design are installed in one power plant. A similar unit is in operation at another of the company's plants. Each boiler normally generates 400,000 pounds of steam per hour with superheater outlet conditions of 1250 psi, 830 F. The design pressure is 1400 psi.

Cyclone Furnace Boilers on the Line

LARGE CHEMICAL PLANT INSTALLS 4TH and 5TH CYCLONE UNITS

Having pioneered Cyclone Furnace firing for industrial steam plants, a large chemical manufacturer has recently placed its fourth and fifth Cyclone-fired boilers into operation. The first pressurized Cyclone-fired boiler ever built has been in successful continuous operation at one of this company's plants since February 1949.

ELIMINATION OF FLY ASH PROBLEM

Low fly-ash discharge to the stack, without the use of precipitators, was a prime consideration in the original selection of Cyclone Furnaces for the first three units back in 1946. Most of the coal-ash is converted to liquid slag which is removed through the slag tank, and can be disposed of readily. Thus, some of the most difficult problems in power plant operation — preventing heavy stack discharge and eliminating the handling of large amounts of useless fly ash—are overcome. But, in addition to solving these problems, a whole host of other benefits have also been realized.

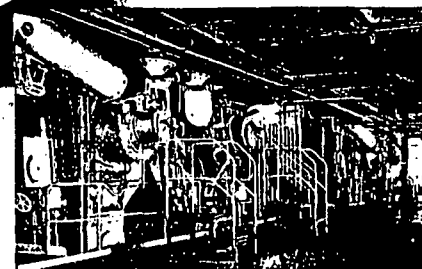
and Cyclone Furnaces were thus the logical choice for the firm's two new units.

SIMPLIFICATION OF COAL BURNING EQUIPMENT

Simplification of the entire process of supplying and burning the coal is an important asset of Cyclone Furnace firing. It reduces maintenance costs, makes operation easier, and improves availability. This is because pulverizers, with their drives, fans, ducts, and burners are not needed, since the Cyclone Furnace uses coal which is merely crushed, instead of pulverized. This also increases safety and lends itself readily to "push-button" operation.

GREATER FUEL EFFICIENCY — WIDE COAL RANGE

Greater firing efficiency results from the great turbulence and high temperatures in the Cyclone Furnace. Carbon loss is practically eliminated. In addition, excess combustion is reduced, bringing a corresponding reduction in heat lost to the stack.



Firing side showing Cyclone Furnaces.

A wide range of coals is burned in the Cyclones. Piney Fork coal is the designed fuel for this plant, but coals of many different varieties have been burned successfully.

PRESSURE-FIRING — NO INDUCED DRAFT FAN

Pressure-firing without induced draft fans is another pioneering achievement of this chemical company in its five Cyclone-fired units. Since the first boiler was placed on the line nearly five years ago, pressure-firing has contributed to smoother operation with reduction in fuel consumption. Having only forced draft fans on the unit eases the operator's tasks, simplifies controls, and saves considerable auxiliary power.

B&W's experience with Cyclone Furnaces, Pressure Firing, and so many other cost-saving engineering advances, is at your disposal when your next plant is being designed.

The Babcock & Wilcox Co., 161 East 42nd St., New York 17, N. Y.



BOILER DIVISION