

Plants using high pressure steam for heating or processing report fuel savings up to 50% production increases up to 389%

Here is a report by plants that have installed the Stickie Differential Drainage and Boiler Return System.

This system returns steam condensation from heating and processing units to boilers at only 15 to 20 degrees less than the temperature of steam at operating pressure.

The system is used in plants which process food, rubber, chemicals and paper . . . plants in the laundry and dry cleaning field—where steam at 75 to 200 pounds pressure is employed. After installation of the Stickie system, these plants report:

1. Fuel consumption down 15 to 50%, and boiler capacity up proportionately.
2. Production increased up to 389% because the system permits higher and more uniform boiler pressure, drier steam at higher temperatures.
3. Maintenance costs reduced—on boilers, steam lines, steam traps, etc.—by eliminating high velocities and reducing scale.
4. Less waste, spoilage and rejects—because the Stickie system automatically maintains maximum steam temperature within processing unit.
5. Use of raw make-up water and scale-forming particles reduced as much as 90%.
6. Flash steam waste reduced—up to 95%.
7. Feed pump load and pumping costs lowered as much as 75%.

To increase production and lower production costs, investigate the Stickie Differential Drainage and Boiler Return System. Write for free Bulletin No. 250, and for simple data sheet which will enable us to prepare an estimate of the results you can expect. Every Stickie installation is guaranteed.

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ing. Because of the many questions received concerning the results of the test work, the following have been included.

The isothermal diagrams shown in various graphs reveal of heat absorption for the develop. The accuracy of the temperature determinations is subject to question due to local deposits, irregularities in the application and other less factors. The system is, however, entirely accurate to produce reliable on the factors affecting relative absorption of the various furnace. These factors are: rating, excess combustion, and slag-ash. Overfire air, and flame shape secondary importance.

The rating is the most factor in overall heat-absorption elevations of the various surfaces of the grate has the greatest influence relative heat absorption of the grate. The rating has less effect on absorption near the grate than that of the furnace.

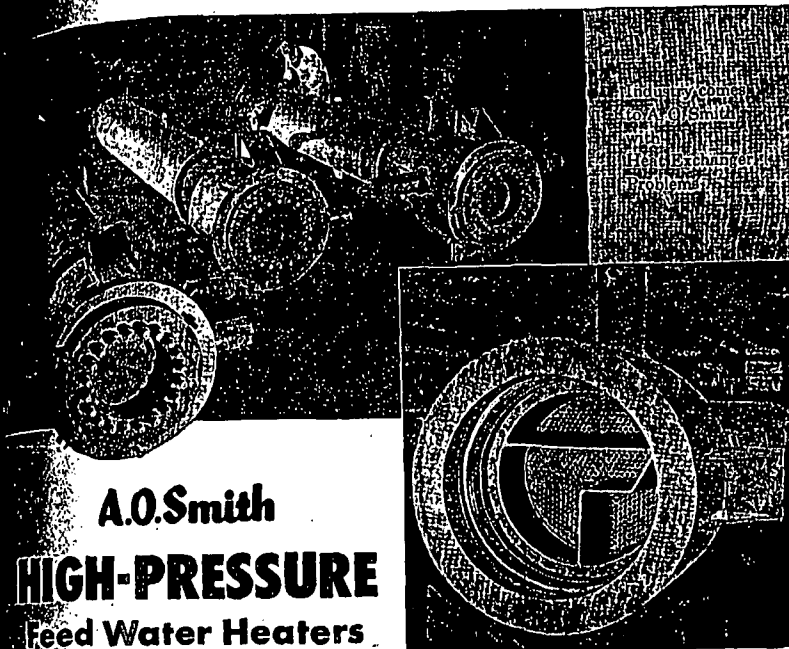
At all loads heat-absorption walls decreases rapidly as the from the grate increases. Excess combustion affects average heat-absorption at all loads but has little effect heat-absorption near the grate. slag-ash pattern is more stable than in the pulverized coal grate units. Overfire air, when used, the limits of these tests has negligible effect on furnace heat-absorption. Paper No. 52-A-142.

Industrial Experience in Fly Ash Collection. By B. S. Norling, E. I. de Nemours & Co., Inc.

Until recent years, the almost was considered a natural means of disposal. Almost without exception, furnace gases from homes, schools and large industries alike, discharge their furnace gases with all the products of combustion into the atmosphere. With the increase in population and concentration of industry, this practice cannot be continued without deleterious effects. This paper discusses the problems involved, citing as an example the installation of fly-ash collectors in a large industrial plant in an area where the nuisance was said to exist.

A survey was made to determine the plant's contribution to the nuisance causing the nuisance. Tests were

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plus a variety of other techniques in utilizing materials of all types, are implemented by complete fabrication facilities for producing equipment, fixtures and fittings. As a result, A. O. Smith engineers are able to develop the best solution of any heat-exchanger problem.

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Problems are resolved by research groups whose combined experience and accumulated data are without parallel.

Three high-pressure feed water heaters are shown in the upper illustration. They are designed for 2400 psi on the tube side and have modified Bridgman closures for channel covers.

The lower illustration is a view of one of the above feed water heaters prior to completion, showing detail of channel construction. Tube sheet was drilled by A. O. Smith high-precision method to a degree of perfection for above accepted standards, to insure against leakage.

allel. Closely associated are the experts in tool and fixture design who have their own unexcelled facilities.

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