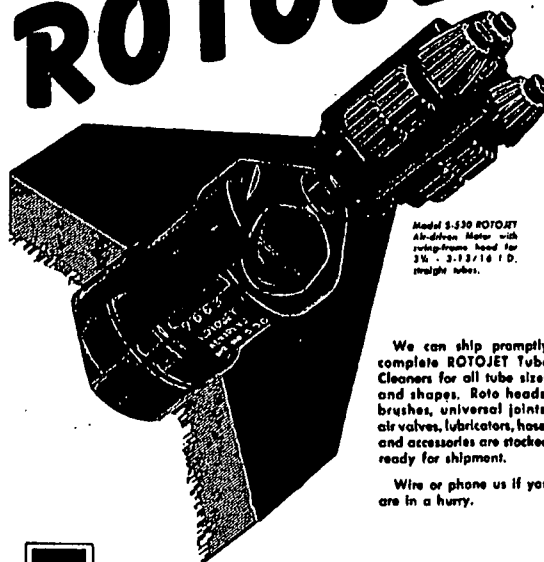


Obsolete Tube Cleaners waste time, labor, and money

Even if you rarely use tube cleaners, you can't afford to be without a powerful new ROTOJET. A ROTOJET should save you enough in time, labor, and air in one cleanout to pay for itself. You won't believe a tube cleaner can pack such tremendous power until you try the new ROTOJET.

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Model S-530 ROTOJET
Air-driven Motor with
rotary pump head for
3½ - 3-1/2" I.D.
straight tubes.

We can ship promptly complete ROTOJET Tube Cleaners for all tube sizes and shapes. Roto heads, brushes, universal joints, air valves, lubricators, hose, and accessories are stocked ready for shipment.

Write or phone us if you are in a hurry.

ELLIOTT COMPANY-ROTO DIVISION
153 Sussex Avenue Newark 1, N. J.

More TECHNICAL BRIEFS

Begin on page 154

tion, since Kodak Park extends over considerable area. We have two power houses about a mile apart, but the Bldg 101 plant, located in what is called Kodak Park West, is inadequate to supply the full requirements of the western sections of Kodak Park and the deficiencies are made up from the Bldg 31 plant, located in Kodak Park East, which is the larger of the two and has the newest equipment. There is a 12 in. pipe line transmitting at 260 psi. to Bldg 101 with an extension to the area still further west, a mile and a half from Bldg. 31. We are now in the process of supplementing the 12-in. main with a 5,000-ft., 20-in. pipe line to supply steam for the new turbine previously mentioned and also, expected increases in load in the western areas of the plant.

The distribution mains radiate from each of the two power plants to take care of process and heating loads. The nominal steam pressure of these mains is principally 70 psi or 5 psi. A 4,000-ft., 36-in. main is being planned, also in conjunction with the new generating unit, to convert the sizable load of a gelatine plant to low-pressure steam service as a means of improving heat balance. Because of the distance involved, the transmission pressure in this case will be somewhat higher than 5 psi.

Although the primary aim of our power plants is to supply steam for process and heating, electrical generation is of almost equal importance. The power produced, however, is a by-product of the steam plant. Boiler capacity is not installed simply for the making of power, although the incremental capital expenditure for higher pressure and temperature rating and the incidental equipment caused by power generation are made to stand on their own merit.

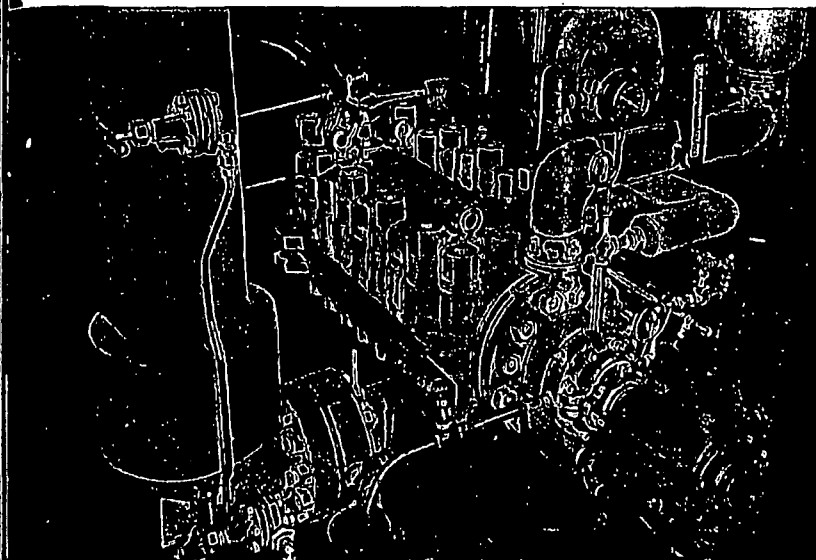
The steam required in the plant integrates to a reasonably steady demand from the boilers. During non-factory hours and weekends, the demand drops off to 75%. The summer steam load is approximately 75% of the maximum winter loads. On this type of steam demand the electrical requirements are obtained as far as possible from the theoretical heat equivalent. Practically considering boiler and turbine efficiencies, this is about 4200 Btu measured from the coal pile.

Two important factors prevent obtaining this ideal condition at all times. One of these is the difference in the rate of increase of the steam and electrical demands. The other is that our steam and electric peaks do not occur at the same time of year.

The electric demand varies about the

100,000 HOURS

and not opened yet!



This Ingersoll-Rand High Pressure Boiler Feed Pump installed 15 years ago has never been opened for inspection . . . and it still meets capacity and pressure requirements.

The Ingersoll-Rand Class HT pump shown above was installed in 1938 at the Windsor Station, owned jointly by The Ohio Power Company (part of the American Gas & Electric Company) and the West Penn Power Company (in the West Penn Electric Company system). Since that time, it has operated for over 100,000 hours—pumping 1025 gpm of 380° F boiler feed water at

415 psi intake and 1900 psi discharge. Throughout this entire 15 year period, the casing and high pressure breakdown have never been opened for inspection.

There are five other I-R Class HT pumps at this station. Four of these have chalked up unopened service records of from 50,000 to 80,000 hours each.

These outstanding operating records are the result of competent pump operation and feedwater control on the part of the station's personnel—and the careful material selection and high standards of construction inherent in every I-R boiler feed pump.

For proved dependability in high pressure service, it pays to specify Ingersoll-Rand pumps.



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