

aerating trays is of paramount importance, as is also the method of insuring uniform delivery of water to the tray structure. The water piping, tray structure, and baffling system must be carefully designed to insure proper coordination of the functions of each at all loads within the maximum rating.

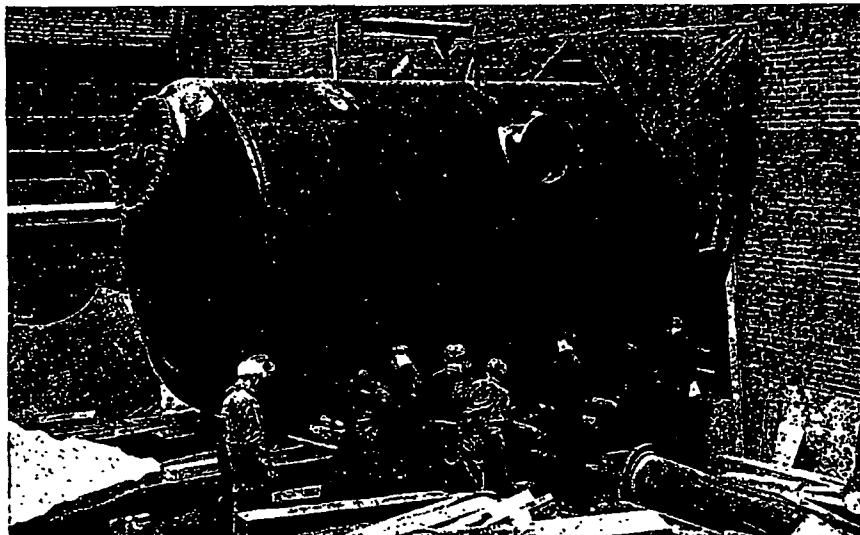
Storage capacity equivalent to two minutes of rated flow is generally provided in the deaerator, although occasionally plant conditions require a storage capacity in the deaerator many times this standard capacity. Excess storage capacity can be provided in a separate storage tank from which the feed pump takes its suction, with the deaerator mounted directly

above. Experience indicates, however, that storage capacity is largely a matter of personal preference, with the exception of the rare cases where rapidly and widely fluctuating load conditions are encountered.

If metering equipment is desired as an integral part of a deaerator, it can be provided with any of the various types of deaerators available. The V-notch weir type of meter is generally provided as an integral part of metering deaerators and such deaerators can be provided with surge capacity between the deaerating compartment and the metering compartment as well as with storage capacity on the outboard side of the meter.

A wide variety of special accessory attachments, such as recording instruments, special overflow equipment, and outside float chambers for the operation of water regulating valves, are frequently furnished with deaerator apparatus of all types. The selection of such apparatus for use with the deaerator depends entirely upon the intention of operators towards keeping permanent records of performance, as well as for insuring, as far as possible, the elimination of operating difficulties. Generally, the only difficulties encountered in the operation of a properly selected deaerator are in connection with the accessories wherein all moving parts are incorporated.

★ A
"GIANT"
IN
AKRON



THIS PHOTOGRAPH, which was published in the December 1933 issue of *POWER*, shows an Elliott deaerating heater being taken into the new Goodyear million-dollar power plant. *POWER* called the heater a "giant", but it is not as big as several deaerating

heaters built by Elliott. The unit pictured has a capacity of 700,000 lbs. per hour, with 1000 cu. ft. of storage. It weighs 35 tons, is 25 ft. long, 13½ ft. high. The unit is built of copper-bearing steel plate, welded throughout. The flat car on which it was brought to Akron

had to be routed by a roundabout way because not all railroad bridges could provide the necessary clearance for car and load to pass. But the heater seems to be going through the hole in the wall of the building which was left for that purpose.