



which covers a chemical or chemical combination used to treat a given water. Columns provided for station analysis

Assume we are using caustic soda to react with the phosphate. The straight edge crosses this scale at 0.009, and $200 \times 0.009 = 1.8$ lb per day. Now select the colloid or coagulant in either pounds or pints. Going to the pound colloid scale, we find we need 0.016 lb

Summary. The treatment-control charts have been designed with the utmost simplicity. Feedwater is sampled before treatment, as it goes to the boiler, and the calculation of chemical feed is

Calculation of additional alkali is for determination of the amount required to neutralize the treating chemical. If there is appreciable alkalinity in the boiler feedwater, the refinement can be introduced by determining the amount of caustic represented by this alkalinity, and subtracting the resulting figure from the total caustic feed. Large installations will find both these refinements advisable, but for the average small plant, calculations based on these charts are simple and adequate.



Most important thing to decide about flood protection is what and how much to install in a plant permanently.

Openings at low elevations are naturally the most vulnerable to rising water. Best thing to do here is to fabricate barriers that can be stored near the openings they are to close. Small ventilating ducts use plates that can be bolted be-

Heavy reinforced bulkheads made of steel plate and angle iron serve to seal door openings on the outside. Holding studs can be welded to metal door frames or imbedded in the concrete or brick wall. A rubber gasket cemented to the plate rim and a supply of nuts stored on the studs completes the job.