

Chlorine Removal Using AM-88

Dosing Calculations and Metering Pump Adjustment

Caution: Handle chemical and solution with care. Wear rubber gloves, facemask or goggles, and protective clothing.

To remove chlorine from feedwater, inject at the rate that is 3 times the chlorine present in water. For example, if chlorine in feed water = 1 ppm, then AM-88 should be injected at the rate which produces 3 ppm AM-88. Amount of chemical for various feed flows at 1 ppm chlorine is as given below.

Feed Gal/day	AM-88 (Gals/day) – Per 1 ppm Chlorine		
	30% solution	20% solution	10% solution
1,000	0.01	0.025	0.03
5,000	0.05	0.075	0.15
10,000	0.10	0.150	0.30
20,000	0.20	0.300	0.60
50,000	0.50	0.750	1.50
100,000	1.00	1.500	3.00

- Do not use solution of less than 10% concentration.
- The recommended injection point is into the feedwater downstream of any filtration equipment or cartridges.
- RO permeate is recommended for use in solution.

Note: AM-88 is sodium metabisulfite based and will lose its effectiveness when exposed to air. Keep the solution tank covered and make fresh solution frequently. Use the table below as a guideline.

AM-88 SOLUTION WEIGHT %	MAXIMUM SOLUTION LIFE
2	3 Days
10	1 Week
20	1 Month
30	6 Months

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Setting the Metering Pump:

- Set the frequency as high as possible, say (80%).
- Adjust the stroke so that desired amount of flow is obtained.

For example:

If the amount of chemical to be injected = 2 Gal/day

stroke * Frequency * max pump flow rating = 2 Gal/day

Say stroke length = L, Max pump flow rating = 10 Gals/day

$$L * .8 * 10 = 2 \text{ Gal/ day}$$

$$\text{or } L = 2 / 8 = 25\%$$

Thus when the frequency of pump is set at 80% and stroke length set at 25%, the injection rate will be 2 Gals/day.

- The actual tank level should be monitored to confirm the injection rate of chemicals. If not, adjust the stroke length to get desired amount.