



ULTRAMARINESM CONTROL & DOSING CHART

60-84 kg/cm²
850 - 1200 psig

Sample	Limits	Test Frequency	Means of Adjustment
Boiler Water Phosphate	15-25 ppm	daily	ADJUNCT B (I)
pH	9.8-10.2	daily	GC (II)
Chlorides	16 ppm max.	daily	Blowdown
Conductivity	120 mmho. max.	daily	Blowdown
Hydrazine	0.03-0.10 ppm	daily	AMERZINE (III)
Silica	6 ppm max.	weekly	Blowdown
P. Alkalinity	Ref. (1)	weekly	
T. Alkalinity	Ref. (1)	weekly	
Condensate pH	1-2 drops	daily	SLCC-A (IV)
Ammonia	0.5 ppm max.	weekly	
Feedwater Conductivity	Ref. (1)	daily	
Hardness	Nil	weekly	

REMARKS

1. Reference tests are for the purpose of supplying information for use in periodic technical reviews. Although control limits are not supplied for the several reference tests required, the data obtained from these sources are of prime importance.

2. INITIAL DOSAGE

<u>GC</u>	<u>ADJUNCT B</u>	<u>AMERZINE</u>	<u>SLCC-A</u>
14 ml/ton	30gr/ton	0.10 ltr/ton	0.10 ltr/ton

3. The dosages shown are guidelines. The exact dosage requirements necessary to achieve the desired chemical levels may vary slightly from plant to plant.

DOSING SECTION

I-ADJUNCT B DOSING GUIDE

Phosphate Test Result	ADJUNCT B grams/ton
0	35
3	30
5	27
7	25
9	22
11	19
13	16
15	14
17	11
19	8
21	5
23	3
25	
25+	Blowdown

II-GC DOSING GUIDE

pH Test Result	GC ml/ton
8.6 or less	14
9.0	13
9.1	12
9.2	12
9.3	12
9.4	11
9.5	11
9.6	10
9.7	9
9.8	8
9.9	7
10.0	5
10.1	2
10.2	
10.3 or above	Blowdown

4. When test results are in the satisfactory range, chemical dosage is not required. If, however, chemical loss before the next test is expected to exceed 15-20% (via blowdown or contamination), it is advised that chemical levels be raised above the lower ends of the control ranges.

5. AMERZINE (hydrazine) must be fed on a continuous basis to maintain control. Dosage variations will result from different plant layouts and operating condition.

III-AMERZINE DOSING GUIDE (see Note 5)

AMERZINE Test Result	AMERZINE Adjustment
less than 0.03 ppm	Increase dosage by 25%
0.03-0.10 ppm	Maintain
greater than 0.10 ppm	Decrease dosage by 25%

IV-SLCC-A DOSING GUIDE

Drops of N/50 Sulfuric Acid	SLCC-A Adjustment
less than 1	Increase by 25%
1 - 2	Maintain
greater than 2	Decrease by 25%