

COOLING WATER TREATMENT CALCULATIONS										IMPORTANT NOTE			
1	CIR. RATE	M3/hr.	fill	10000	FILLING COLOUR CODE						FILL INPUT	DO NOT FILL calculations	
2	ΔT	deg.C		10									
3	COC			5									
4	COC-1			4									
5	LEAK	M3/hr.		1									
6	JP CTSYSTEM	M3	M3	2000	FILL DATA								
7	Evaporation Rate	M3/hr.		185.19									
8	Make Up Rate	M3/hr.	CLICK ONCE	231.48									
9	Blow Down	M3/hr.		46.30									
10	Drift Loss	M3/hr.		10									
11	WASTAGE PER HOUR	M3/hr.		57.30									
12	Wastage/Day	M3/Day		1375.11									
13	MAKE UP / DAY -	M3/D	5556	166667	M3/MONTH								
14	Wastage/Month	m3/m		41253	M3/Month								
ANTISCALANT/ANTICORROSIVE DOSES										treatment on wastage		ANTI CORROSIVE SPECIAL	
15	ANTISCALANT/ANTICORROSIVE.	ppm	30	FILL DATA		ppm	25	icorrosive special					
16	15ppm to 50ppm			CLICK ONCE	41	LITERS/DAY		di anodic/di cathodic					
17					1237.6	LITERS/MONTH		CLICK ONCE	34	LITERS/D			
18					14851.2	LITERS/YEAR				1031	LITERS/M		
19										12376	LITERS/YR		
20	RATE	RS./USD/LIT	110	FILL RATE		RS./USD/LIT	100	FILL RATE					
21				CLICK ONCE	136136	RS/USDM		CLICK ONCE	103133	RS/USDM			
22					1633632	RS/USD/YR				1237600	RS/USD/YR		
23	DISPERSANT	ppm	10	FILL DATA	POLYMER	ppm	5	HOMO/COTER POLYMER					
24	5ppm to 20 ppm			CLICK ONCE	14	LITERS/DAY		ICAL STABILIZER					
25					413	LITERS/MONTH		CLICK ONCE	7	LITERS/D			
26					4950.4	LITERS/YEAR				206	LITERS/M		
27										2475.2	LITERS/YR		
28	RATE	RS./USD/LIT	120	FILL RATE		RS./USD/LIT	150	FILL RATE					
29				CLICK ONCE	49504	RS/USDM		CLICK ONCE	30940	RS/USDM			
30					594048	RS/USD/YR				371280	RS/USD/YR		
31	HOLD UP CTSYSTEM	M3	2000			M3	2000						
32	REDUCING BIOCID-1	ppm	30	FILL DATA	treatment on hold up	ppm	40	REDUCING BIOCID-2					
33	30ppm to 100 ppm			CLICK ONCE	60	LITERS/INSTANCE		ON HOLDUP					
34								CLICK ONCE	80	LITER/INST			
35					instances/month			instances/month					
36					2			2					
37					120	LITS/MONTH				160	LITS/M		
38					1440	LITS/YR.				1920	LITS/YR.		
39	RATE	RS./USD/LIT	200	FILL RATE		RS./USD/LIT	250	FILL RATE					
40				CLICK ONCE	24000	RS/USDM		CLICK ONCE	40000	RS/USDM			
41					288000	RS/USD/YR				480000	RS/USD/YR		
42	HOLD UP CTSYSTEM	M3	2000			M3	2000						
43	BIO DISPERSANT	ppm	10	FILL DATA	treatment on hold up	ppm	10	OXYDISING BIOCID-2					
44	5 ppm to 30 ppm			CLICK ONCE	20	LITERS/INSTANCE		ON HOLD UP					
45								CLICK ONCE	20	LITERS/INST			
46					instances/month			instances/month					
47					2			4					
48					40	LITS/YR.		80	LITS/M				
49					480	LITS/YR.			960	LITS/YR.			
50	RATE	RS./USD/LIT	300	FILL RATE		RS./USD/LIT	300	FILL RATE					
51				CLICK ONCE	12000	RS/USDM		CLICK ONCE	24000	RS/USDM			
52					144000	RS/USD/YR			288000	RS/USD/YR			
53	Make Up Rate	M3/hr.	231.48			Make Up Rate	M3/hr.	231.48					
54	OXYDISING BIOCID-2	ppm	2	FILL DATA	treatment on make up	ppm	5						
55				CLICK ONCE	0.46	LIT/HR		CLICK ONCE	1.16	LIT/HR			
56					24	HOURS			24	HOURS			
57					11.1	LIT/DAY			27.8	LIT/DAY			
58					333	LITS/MONTH			833	LITS/M			
59					4000	LITS/YR.			10000	LITS/YR.			
60	RATE	RS./USD/LIT	70	FILL RATE		RS./USD/LIT	70	FILL RATE					
61				CLICK ONCE	23333	RS/USDMONTH		CLICK ONCE	58333	RS/USDM			
62					280000	RS/USD/YR			700000	RS/USD/YR			
63	TREATMENT COSTS										ONCE THROUGH SYSTEM		
64	MONTHLY	RS/USD		YEARLY	RS/USD	TREATMENT ON CIRCULATION RATE							
65	ANTISCALANT/ANTICOR.	136136		1633632		ANTICORROSIVE	3000	M3/HR.					
66	ANTICORROSIVE SPECIAL	103133		1237600		FILMING AMINE BASED	1	PPM					
67	DISPERSANT POLYMER	49504		594048		RATE	300	RS/USD/LIT					
68	HOMO/COTER POLYMER	30940		371280		QUANTITY	72	LIT/DAY					
69	REDUCING BIOCID-1	24000		288000		PER MON.	2160	LIT/M					
70	REDUCING BIOCID-2	40000		480000		PER YEAR	25920	LIT/YR.					
71	BIODISPERSANT	12000		144000		COST	7776000	RS/USD					
72	OXYDISING BIOCID-2	24000		288000		OXYDISING BIOCID-2 CHLORINE ETC							
73	OXYDISING BIOCID-2	24000		288000		DOSE	0.5	PPM					
74	BIODISPERSANT	12000		144000		RATE	6	RS/KG					
75	OXYDISING BIOCID-2	24000		288000		QUANTITY	270	KG/M					
76	OXYDISING BIOCID-2	24000		288000		PER MON.	3240	KG/YR.					
77	OXYDISING BIOCID-2	24000		288000		PER YEAR	162000	RS/USD					
78	SPECIFIC ADDITIVE	58333		700000									
79	MONTHLY	501380		6016560									

by S.C.Bharadwaj.