

<u>BOILER</u>	<u>SYSTEM</u>	<u>CHEMICAL</u>	<u>TREATMENTS</u>		
<u>1 BOILER</u>		<u>LPB/Recovery</u>	<u>MPB</u>	<u>HPB</u>	
1 <u>PRESS.</u> Kg/cm2		<20	20 - 60	>60	
2 <u>Steam Temp.Deg.C.</u>				540	
3 <u>Steaming Capacity</u> M3/hr	M3/hr				
4 <u>MAKE UP WATER QUALITY</u>		DM/SOFT/ R.O.	DM/SOFT	DMW.	
5 <u>Boiler Hold up</u>	M3				
6 <u>Cycles of Operation</u>		2 to 3	3 to 4	5	
7 <u>%Blow Down of steaming rate</u>		<10%	<5%	<3%	
8 <u>Steam Silica</u>	As SiO2	<0.020	<0.020	<0.020	
A.	<u>TREATMENT</u>	<u>BASEED ON BOILER</u>	<u>BLOW</u>	<u>DOWNS</u>	<u>& LEAKS.</u>
	<u>QUANTITY</u>	<u>SYSTEM HOLD UPS</u>			
1 <u>pH (boiler)</u>		10.5-11.5	10 TO11	9.2- 9.5-10	
2 <u>pH booster</u>	Caustic soda ppm	01/10/15		10	5
<u>pH (feed)</u>	Cu based/Iron based	8.5 to 9.2/9.5	8.5 to 9.2/9.5	8.5 to 9.2	
3 <u>ANTISCALANT ANTI CORROSIVE</u>	As PO4 ppm	01/10/30	<20	<10	
	PHOSPHATE + PHOSPHONATE based	20-40	15-30	05/01/20	
4 <u>DISPERSANT</u>	ppm	10 to20	2 to 5	.	
5 <u>OXYGEN SCAV-GER</u>	DO2 ppm residual left		0.1	0.02	0.01
	SULPHITE BASED	Na2SO3 PPM	30-50	20-30	CATALISED
6 <u>SILICA IN BOILER</u>	As SiO2 PPM		5	2	0.5
7 <u>NaNO3/M alkalinity</u>	as Ratio	>2.4	>2.4		
B.	<u>TREATMENT</u>	<u>BASEED ON BOILER</u>	<u>BLOW</u>	<u>DOWNS</u>	<u>& LEAKS.</u>
	<u>QUANTITY</u>	<u>and NON RETURN</u>			
	<u>TOTAL MAKE UP</u>	<u>of CONDENSATE</u>			
1 <u>ANTI CORROSIVE</u>					
	AMMONIA	ppm as NH4OH	10 to15	5-10	
	DEHA	ppm as DEHA	3 to5	2 to5	3 to 5
	MORPHOLINE	ppm			1 to 3
2 <u>OXYGEN SCAV-GER after Deaeration</u>					3 to 5
	HYDRAZINE Residual	ppm as N2H4	0.1 -1.0	0.1 -0.5	0.05 -0.3
	DEHA	ppm as DEHA			<1.0
C.	<u>FILMING AMINE</u>	<u>ppm as ODA.</u>			<u>5</u>
	+ DISPERSANT				<u>5</u>

