

Introduction 500 TPD Kiln With High Pressure, High Temperature WHRBs

Introduction:

4X500 TPD Kiln was introduced in JSPL unit # 2 with increased efficiency and reliability of machines. 4X57 TPH WHRBs and 2X25 MW TG was also installed to utilize its heat more efficiently.

Comparison between Unit # 1 WHRB based Power Plant and Unit # 2 WHRB based Power Plant.

	Unit # 1	Unit # 2	Remarks.
1.	36 MW	50 MW	Unit # 2 WHRB is capable to supply another 50 TPH steam for 12 MW Power generation
2.	Turbine of Unit # 1 Press. 32 Kg/cm ² Temp. 410-5 °C FW Temp. 105 °C	Turbine of Unit # 2 Press. 63 Kg/cm ² Temp. 490-5 °C FW Temp. 135 °C	Higher Cycle efficiency by 5%.
3.	Outage of 300 TPD Kiln linked WHRBs is much higher in comparison to 500 TPD Kiln linked WHRBs	<u>Forced outage nil</u>	

List of Forced Outages is enclosed herewith.

Muttu
(Rajesh Muttu)

SHUT DOWN DETAIL OF WEIR BOILERS

BOILER # 1

WEEK: APRIL 03

S.NO.	DATE	FROM	TO	S/D HOURS	REASON	REMARK
1	07.01.03	10.45PM	10.45AM 8.10.03	12	ECONOMISER LEAKAGE	
2	12.01.03	12.15PM	9.45AM 15.01.02	69	ECONOMISER TUBES REPLACED	
3	5.02.03			21.4	ECONOMISER LEAKAGE	
4	15.2.03	4.40PM	6AM	13.2	ECONOMISER LEAKAGE	
5	21.3.03			10	ECONOMISER LEAKAGE	
6	14.4.03	8.05PM	6.45AM	10.4	ECONOMISER LEAKAGE	
7	29.4.03	8.30PM	7.40AM	11.2	ECONOMISER LEAKAGE	
8	30.4.03	10.00AM	5.45PM 03.4.03	213.15	KILN SHUT DOWN	
9	22.5.03	6.40PM	6.55AM	12.15	ECONOMISER LEAKAGE	
10	28.6.03	11.40AM	2.05AM	40.15	KILN SHUT DOWN	
11	31.7.03	8.35PM	7.05AM	11.3	ECONOMISER LEAKAGE	
12	01.10.03	6AM	7.40PM 28.10.03	561.4	KILN 2 BOILER SHUT DOWN	
13	11.01.04	7.00PM	6.00AM 12.01.04	31	ECONOMISER LEAKAGE	
14	02.2.04	4.15PM	8.35AM 12.02.04	232.3	ECONOMISER LEAKAGE / KILN S/D	
15	13.04.04	6.30PM	4.15AM 12.04.04	9.45	L.S.P. CHECKING	
16	01.05.04	6.00AM	4.30AM 15.05.04	358.5	KILN SHUT DOWN	
17	15.07.04	1.45AM	11.20AM 24.07.04	9.55	ECONOMISER LEAKAGE	
18	5.09.04	10.00PM	1.45AM 6.09.04	13.45	E.S.P. CHECKING	
19	9.09.04	9.50AM	5.45AM 9.09.03	7.55(2.50-5.05)	KILN(ABC) E.S.P. CHECKING	
20	16.10.04	12.00AM	5.55AM 31.10.04	365.55	BOILER ANNOUNCED	
21	9.11.04	7.00PM	9.15PM	2.15	DUCT JOINING OF WEIR#2	
22	16.02.05	8PM	5AM 23.02.05	297	KILN SHUT DOWN	
23	1.03.05	8PM	11.15 PM 01.03.05	3.15	LD FAN BALANCING	
24	9.03.05	9PM	1.30AM 9.03.05	4.3	DUCT JOINING	
26	18.05.05		31.05.05	70.05	RADIATION ZONE LEAK..	
26	30.06.05		10.07.05	272.55	KILN 2 BOILER ANNOUNCED	
27	9.08.05			9.2	ECONOMISER LEAKAGE	
28	18.10.05		23.10.05	81.55	LD FAN COMMISSIONING	

SHUT DOWN DETAIL OF WUR BOILERS

WEP. APRIL 03

BOILER # 2

S.NO	DATE	FROM	TO	S/D HOURS	REASON	REMARK
1	19.01.03	2.15PM	1.10AM	4	ECONOMISER LEAKAGE	
2	26.01.03	8.40AM	9PM	12.2	ECONOMISER LEAKAGE	
3	19.2.03	6.20AM	8PM	13.4	ECONOMISER LEAKAGE	
4	26.2.03	7AM	5.40AM	10.4	ECONOMISER LEAKAGE	
5	14.3.03		15.03.03	13.4	ECONOMISER LEAKAGE	
6	23.3.03	3.10AM	3.35PM	7.45	ECONOMISER LEAKAGE	
7	31.3.03	9PM	9.30AM	12.3	ECONOMISER LEAKAGE	
8	11.4.03	10.40PM	8.45AM	10.05	ECONOMISER LEAKAGE	
9	15.4.03	11.25AM	1.00PM 25.4.03	251.35	PLANT STOPPED FOR MAINT	
10	01.9.03	6.00AM	11.9.03	240	KILN SHUT DOWN	
11	21.12.03	12.05PM	11.50AM	11.45	ECONOMISER LEAKAGE	
12	12.01.04	7.20 AM	6.00 PM 20.01.04	202.4	KILN STOPPED FOR MAINT	
13	29.01.04	2.15 AM	9.00AM 28.01.04	7.45	ECONOMISER LEAKAGE	
14	20.02.04	7.45PM	12.20PM 21.02.04	16.35	ECONOMISER LEAKAGE	
15	9.03.04	11.20AM	6.50am 0.03.04	19.1	ECONOMISER LEAKAGE	
16	27.05.04	8.30PM	9.00AM 29.06.04	300.3	CONVECT LEAKAGE KILN SD	
17	25.09.04	7.10PM	3.30AM	5.2	ECONOMISER LEAKAGE	
18	02.11.04	3.10PM	4.50AM 11.11.04	271.4	KILN STOPPED FOR MAINT	
19	9.03.05	4.30AM	7.15AM 10.03.05	2.45	DUCT JOINTING	
20	29.03.05	7.30PM	7.10AM 30.03.05	11.2	ECONOMISER LEAKAGE	
21	7.04.05		02.05.05	327.15	KILN SHUT DOWN	
22	18.05.05		21.05.05	75.55	CONVECTION LEAKAGE	
23	13.10.05		28.10.05	350.15	CONVECT LEAKAGE KILN SHUT	
24	25.12.05		24.12.05	13.3	ECONOMISER LEAKAGE	
25	20.01.06	4.15PM	01PM 21.01.06	15.45	ECONOMISER LEAKAGE	
26	28.01.06	2.00AM	11.10PM 31.01.06	38.1	RAW MATERIAL SHORTAGE	
27	22.09.06	8.50AM	6.40AM 10.10.06	530	KILN SHUT DOWN	
28	07.11.06	3.30AM	1150PM 11.11.06	97	RADIATION LEAK	
29	18.12.06	6.15PM	5.40AM 18.12.06	41.3	ECONOMISER LEAKAGE	
30	30.12.06	9.25PM	7.00AM 31.01.07	81.35	CONVECTION LEAKAGE	

SHUT DOWN DETAIL OF WIER BOILERS

WED, APRIL 03

BOILER # 3

S.NO.	DATE	FROM	TO	SHD HOURS	REASON	REMARK
1	19.4.03	8.00AM	11.10PM 16.4.03	159.1	KILN SHUT DOWN	
2	19.6.03	6.40PM	7.55AM	12.25	ECONOMISER LEAKAGE	
3	08.7.03	8.10PM	7.00AM	10.5	E.S.P. CHECKING	
4	09.7.03	8.10AM	10.30PM	12.5	E.S.P. CHECKING	
5	25.7.03	12.10PM	12.00N	11.5	ECONOMISER LEAKAGE	
6	31.7.03	6.10PM	4.00PM 24.8.03	579.5	KILN SHUT DOWN	
7	31.12.03	7.50AM	2.30PM 14.01.04	342.2	KILN SHUT DOWN	
8	26.01.04	10.40PM	12.15PM 27.01.04	13.25	E.S.P. CHECKING	
9	26.04.04	7.00PM	7.45AM 27.04.04	11.45	E.S.P. CHECKING	
10	11.06.04	7.50PM	5.15AM 11.06.04	9.25	ECONOMISER LEAKAGE	
11	2.08.04	6.00AM	12.52AM 12.08.04	14.85	KILN SHUT DOWN	
12	9.09.04	5.15PM	8.30AM 10.09.04	15.15	ECONOMISER LEAKAGE	
13	29.11.04	6.35PM	7.30AM 30.11.04	12.35	ECONOMISER LEAKAGE	
14	14.01.05	6.15PM	1.30AM 27.01.05	344.15	KILN SHUT DOWN	
15	30.01.05	6.45PM	8.15AM 30.01.05	6.0	E.S.P.M. CHECKING	
16	31.01.05	8PM	2PM 01.02.05	7	E.S.P.M. CHECKING	
17	3.03.05	8.10PM	4.40AM	6.0	E.S.P.M. CHECKING	
18	5.03.05	8.05PM	5.15AM 5.03.05	6	E.S.P.M. CHECKING	
19	8.07.05		18.07.05	240.15	CONVECTION LEAKAGE	
20	20.12.05		30.12.05	198.25	CONVECTION LEAKAGE	
21	8.06.06	6.30AM	8.45PM 02.06	15.15	ECONOMISER LEAKAGE	
22	17.06.06	9.30PM	9.15AM 21.06.06	84.1	KILN BREAKDOWN	
23	8.09.06	9.20PM	7.15PM 21.09.06	312.15	KILN SHUT DOWN	

SHUT DOWN DETAIL OF WHR BOILERS

WED. APRIL 03

BOILER # 4

S.NO.	DATE	FROM	TO	S/D HOURS	REASON	REMARK
1	26.3.03	10.40PM	07.42AM27.3.03	9.45	ECONOMISER LEAKAGE	
2	15.05.03	9.50AM	10.56AM25.5.3	241	KILN SHUT DOWN	
3	17.7.03	12.32AM	8.30AM22.7.4	116	KILN SHUT DOWN	
4	28.9.03	9.70AM	9.25PM29.09.03	11.25	ECONOMISER LEAKAGE	
5	06.11.03	11PM	9.05AM07.11.03	10.05	ECONOMISER LEAKAGE	
6	29.12.03	11.00A.M.	10.15P.M10.01.0	299.45	KILN SHUT DOWN LEAKAGE	
7	13.02.04	12.10PM	8.15PM	8.05	ECONOMISER LEAKAGE	
8	02.04.04	3.50PM	10.00PM	6.1	ECONOMISER LEAKAGE	
9	11.04.04	1.20AM	10.05AM12.04.04	8.45	ECONOMISER LEAKAGE	
10	18.04.04	6.00AM	8.45AM23.04.04	242.45	KILN SHUT DOWN	
11	19.09.04	6.00AM	11.25AM07.10.04	437.25	KILN SHUT DOWN V. B.K.F.	
12	8.12.04	7.00PM	3.15AM	9.35	ECONOMISER LEAKAGE	
13	31.01.05	5.05AM	6.30AM11.22.05	241.25	KILN SHUT DOWN	
14	17.06.05		24.06.05	189	KILN SHUT DOWN LEAKAGE	
15	6.12.05		14.12.05	195.2	KILN SHUT DOWN	
16	20.05.06	7.30AM	9.15PM31.05.06	277.4	SHUT DOWN BOILER AND STOP	
17	26.08.06	6.00AM	10.25AM7.09.06	299.25	KILN BREAKDOWN	
18	7.12.06	6.05AM	8.10AM22.12.06	362.05	KILN SHUT DOWN	
19	27.12.06	6.30PM	8.25AM28.12.06	13.55	ECONOMISER LEAKAGE	

SHUT DOWN DETAIL OF WIR BOILERS

WEF -APRIL 03

BOILER # 5

S.NO.	DATE	FROM	TO	S/D	REASON	REMARK
1	10.5.03	1.15PM	2.00PM 20.5.03	240.45	BOILER ANNUAL SHUTDOWN	
2	25.6.03	12.30PM	10.30AM 28.6.3	70	RADIATION ZONE TUBE	
3	03.8.03	1.05PM	9.30PM	8.25	ECONOMISER LEAKAGE	
4	10.8.03	8.50PM	11.30AM 11.08	14.4	ECONOMISER LEAKAGE	
5	22.8.03	7.25PM	9.25AM 23.8.03	14	ECONOMISER LEAKAGE	
6	01.9.03	6.00PM	5.50PM 2.9.03	23.5	ECONOMISER LEAKAGE	
7	16.9.03	11.50PM	7AM 28.9.03	303.1	KILN SHUTDOWN	
8	16.11.03	12PM	5.40PM 05.12.03	245.4	KILN SHUTDOWN	
2	06.12.03	6.55PM	5.40AM 07.12.03	10.43	RADIATION TUBE LEAKAGE	
10	28.12.03	7.35PM	9.25AM 27.12.03	13.5	ECONOMISER TUBE LEAKAGE	
11	30.01.04	10.05PM	8.35AM 31.01.04	10.3	ECONOMISER LEAKAGE	
12	28.02.04	6.00AM	10.50AM 02.03.04	52.5	CONVECTION LEAKAGE	
13	25.04.04	7.00PM	5.45AM 25.04.04	10.45	E.S.P. CHECKING	
14	17.05.04	6.00AM	9.00AM 28.05.04	267	ANNUAL SHUTDOWN	
15	17.06.04	7.25PM	6.15 AM 18.5.4	11.1	E.S.P. CHECKING	
15	1.08.04	6.00PM	6.30AM 02.08.04	12.3	ECONOMISER LEAKAGE	
16	4.08.04	6.40PM	5.35AM 04.08.04	10.25	ECONOMISER LEAKAGE	
17	17.08.04	7.30PM	5.00AM	9.3	ECONOMISER LEAKAGE	
18	7.09.04	1.35AM	10.15AM	8.4	ECONOMISER LEAKAGE	
19	27.09.04	7.35PM	3.05AM	7.3	ECONOMISER LEAKAGE	
20	8.11.04	6.40PM	8.00AM 09.11.04	14.2	ECONOMISER LEAKAGE	
21	13.11.04	8.05PM	6.25AM 14.11.04	10.2	ECONOMISER LEAKAGE	
22	29.11.04	6.50AM	9.45AM 11.12.04	243.45	KILN SHUTDOWN	
23	2.05.05	6AM	5.30PM 16.05.05	323.3	KILN SHUTDOWN ANNUAL S/D	
24	06.09.05			5.55	E.S.P. CHECKING	
25	13.10.05		15.10.05	61	KILN BREAKDOWN	
26	31.12.05	6.00PM	9.50PM 07.01.06	171.5	KILN SHUTDOWN	
27	3.05.06	12MN	12.50PM 21.05.06	420.5	KILN SHUTDOWN ANNUAL S/D	

SHUT DOWN DETAIL OF WHIR BOILERS

W.E.F. APRIL 03

BOILER # 6

S.NO.	DATE	FROM	TO	S/D	REASON	REMARK
1	30.3.02	3.10PM	9.10PM	07.4.03	198.3	KILN SHUT DOWN
2	08.7.03	9.00AM	5.00PM	15.7.03	176	KILN SHUT DOWN
3	16.12.03	11.50PM	6.20P.M.	27.12.03	246.1	BOILER ANNUAL INSPECTION
4	02.07.04	6.00AM	4.15AM	14.07.04	266.15	KILN SHUT DOWN
5	20.08.04	7.00PM	8.50AM	21.08.04	13.5	ECONOMISER LEAKAGE
6	02.01.05	1.30PM	9.50AM	13.1.05	308.2	BOILER ANNUAL INSPECTION
7	13.07.05		14.07.05	31.15	KILN BREAKDOWN	
8	22.09.05		1.10.05	226.4	KILN SHUT DOWN	
9	31.12.05		7.1.06	165.1	KILN SHUT DOWN	
10	6.04.06	9.30AM	5.55PM	13.04.06	176.25	KILN SHUT DOWN
11	21.09.06	1.00PM	8.15AM	29.09.06	187.5	KILN SHUT DOWN