THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

SUMMARY OF DATA OBTAINED IN BASE-LINE STUDY ON LINERBOARD DURING DECEMBER, 1966, AND JANUARY, 1967

Project 1108-13

Report

to

TECHNICAL DIVISION

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

February 7, 1967

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PART I. GENERAL

	Current Report	Previous Report
Period	December, 1966 – January, 1967	October – November, 1966
No. of mills	20	21
No. of samples	140	144
Nonparticipants:	1. Container Corp. (Fernandina Beach) 2. Olin Mathieson 3. Owens-Illinois (Valdosta) 4. St. Regis (Pensacola) 5. Western Kraft	1. Container Corp. (Fernandina Beach) 2. Olin Mathieson 3. St. Regis (Pensacola) 4. Western Kraft
New participants:	None	None

PART II. QUALITY DATA

A. Summary of Data

Test	Report	Current Mill Data Max.	Min.	Av.	12-Month Cum. FKI Av.
Basis Weight, lb./1000 ft.^{2}	Cur.	43.9	42.0	42.8	42.6
	Prev.	43.6	41.6	42.8	42.6
Caliper, pt.	Cur.	13.6	11.3	12.5	12.6
	Prev.	13.4	11.1	12.4	12.6
Bursting Strength, p.s.i.g.	Cur.	125	102	110	110
	Prev.	123	102	111	110
M.D. Elmendorf Tear, g./sheet	Cur.	369	266	313	323
	Prev.	366	255	320	325
C.D. Elmendorf Tear, g./sheet	Cur.	425	330	372	373
	Prev.	412	326	372	373

B. Trends in Quality Data in Current Report
(Reference being data from previous report)

Basis Weight:	Same as previous report	No significant changes
Caliper:	Increased from 12.4 to 12.5	
Bursting Strength:	Decreased from 111 to 110	
M.D. Elmendorf Tear:	Decreased from 320 to 313	
C.D. Elmendorf Tear:	Same as previous report	

PART III. CALIBRATION DATA

A. Summary of Data

B. Significance of Calibration Data (References being data for previous report and average data for previous six months.)

Range, %	Current Report No. of Mills	Current Report %	Previous Report No. of Mills	Previous Report %	6-Month Average[a], %	B.
			Basis Weight			
± 0.5	10	50.0	13	61.9	45.8	Good agreement.
± 1	17	85.0	18	85.7	85.0	
± 2	20	100.0	21	100.0	98.5	
± 3					98.5	
± 4					100.0	
			Caliper			
± 0.5	0	0.0	2	9.5	12.0	Agreement good but slightly poorer than that shown for previous data.
± 1	4	20.0	5	23.8	30.1	
± 2	10	50.0	12	57.1	66.4	
± 3	14	70.0	17	81.0	81.9	
± 4	16	80.0	19	90.5	92.4	
± 5	20	100.0	21	100.0	100.0	
			Bursting Strength			
± 0.5	1	5.0	1	4.8	9.0	Good agreement.
± 1	5	25.0	7	33.3	36.2	
± 2	10	50.0	12	57.1	56.1	
± 3	12	60.0	15	71.4	71.3	
± 4	18	90.0	18	85.7	80.5	
± 5	19	95.0	18	85.7	81.9	
± 7.5	20	100.0	20	95.2	96.9	
±10			21	100.0	98.5	
±13					100.0	

[a] Average of data for previous six months excluding data for the current report.

PART III. CALIBRATION DATA (Continued)

A. Summary of Data

B. Significance of Calibration Data

Range, %	Current Report No. of Mills	Current Report %	Previous Report No. of Mills	Previous Report %	6-Month Average[a], %
M.D. Elmendorf Tear					
± 0.5	1	5.3	1	5.0	8.1
± 1	3	15.8	2	10.0	17.9
± 2	7	36.8	5	25.0	31.0
± 3	7	36.8	8	40.0	42.5
± 4	9	47.4	11	55.0	52.5
± 5	10	52.6	12	60.0	62.3
± 7.5	13	68.4	18	90.0	83.7
±10	16	84.2	20	100.0	95.2
±12.5	16	84.2			98.3
±15	17	89.5			100.0
±23	19	100.0			
C.D. Elmendorf Tear					
± 0.5	1	5.3	2	10.0	8.2
± 1	6	31.6	4	20.0	23.0
± 2	8	42.1	8	40.0	37.7
± 3	8	42.1	8	40.0	42.5
± 4	11	57.9	11	55.0	60.6
± 5	11	57.9	14	70.0	70.4
± 7.5	13	68.4	16	80.0	83.6
±10	16	84.2	17	85.0	88.5
±12.5	17	89.5	20	100.0	95.1
±15	17	89.5			96.7
±22	19	100.0			100.0

B. Agreement good at lower ranges but somewhat poorer at higher ranges.

B. Agreement good at lower ranges but generally somewhat poorer at higher ranges.

[a] Average of data for previous six months excluding data for the current report.