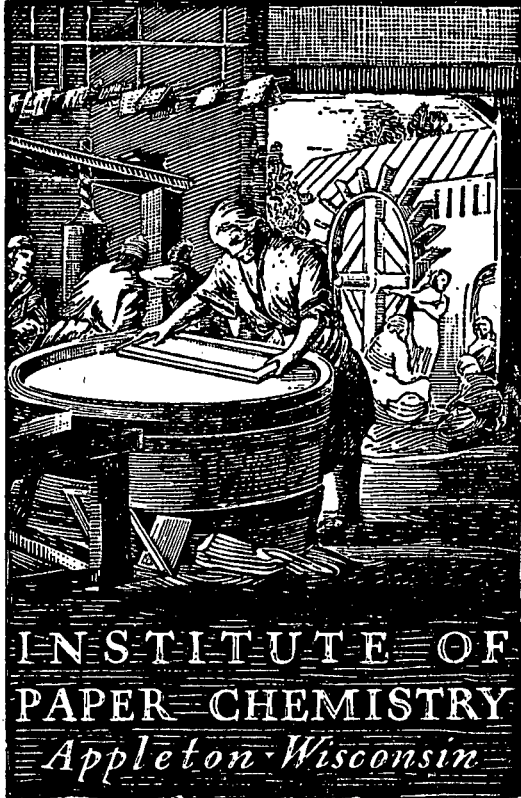


Thw. Br...

BASE-LINE

NOVEMBER-DECEMBER, 1971



INSTITUTE OF
PAPER CHEMISTRY
Appleton Wisconsin

CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL LINERBOARD DATA FOR NOVEMBER AND
DECEMBER, 1971)

Project 2694-1

Report Thirty
A Progress Report

to

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

This material is intended only for the internal use of authorized
persons within Fourdrinier Kraft Board Institute member companies

February 29, 1972.

BASE-LINE
NOVEMBER-DECEMBER, 1971

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL LINERBOARD DATA FOR NOVEMBER AND DECEMBER, 1971)

Project 2694-1

Report Thirty

A Progress Report

to

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

This material is intended only for the internal use
of authorized persons within Fourdrinier Kraft Board
Institute member companies

February 29, 1972

TABLE OF CONTENTS

	Page
SUMMARY	1
INTRODUCTION	5
PRESENTATION OF DATA	5
Presentations (Tables):	
Table I-II 26-Lb. Linerboard, Monthly Averages of Mill Data	6-7
Table III-IV 33-Lb. Linerboard, Monthly Averages of Mill Data	8-9
Table V-VI 38-Lb. Linerboard, Monthly Averages of Mill Data	10-11
Table VII-VIII 42-Lb. Linerboard, Monthly Averages of Mill Data	12-13
Table IX-X 69-Lb. Linerboard, Monthly Averages of Mill Data	14-15
Table XI-XII 90-Lb. Linerboard, Monthly Averages of Mill Data	16-17
Table XIII Data on Conditioning and Testing Environments	19
APPENDIX. NOTES A, B, C, AND D USED IN TABULATING OF MILL DATA	21

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL LINERBOARD DATA FOR NOVEMBER AND DECEMBER, 1971)

SUMMARY

PART I: SUMMARY OF MOISTURE CONTENT DATA
(SEPTEMBER-DECEMBER, 1971)

Linerboard Grade Wt.		Moisture Content			
		September	October	November	December
26 Lb.	Max. ^a	6.5	6.0	6.8	6.0
	Min. ^a	2.7	2.4	2.6	1.8
	Av. ^b	4.4(18)	4.3(15)	4.1(21)	4.0(21)
33 Lb.	Max. ^a	6.3	6.5	6.6	6.3
	Min. ^a	3.3	3.0	2.8	3.1
	Av. ^b	4.8(24)	4.8(23)	4.7(27)	4.7(25)
38 Lb.	Max. ^a	6.5	6.6	6.4	6.1
	Min. ^a	4.0	3.0	3.5	3.6
	Av. ^b	5.3(23)	5.0(26)	5.0(28)	5.0(23)
42 Lb.	Max. ^a	6.8	6.8	6.8	6.8
	Min. ^a	3.5	3.6	3.9	4.2
	Av. ^b	5.2(39)	5.2(32)	5.2(37)	5.2(34)
69 Lb.	Max. ^a	7.7	7.7	7.6	8.0
	Min. ^a	3.5	4.1	3.8	3.8
	Av. ^b	5.7(33)	5.9(29)	5.6(31)	5.8(29)
90 Lb.	Max. ^a	8.2	8.0	8.0	7.9
	Min. ^a	4.4	5.1	4.9	4.9
	Av. ^b	5.9(19)	6.2(16)	6.3(15)	6.3(15)

^aCurrent machine average.

^bCurrent F.K.I. average, number of machines is indicated in parentheses.

PART II: SUMMARY OF ADJUSTED BASIS WEIGHT DATA
(SEPTEMBER-DECEMBER, 1971)

Linerboard Grade Wt.		Adjusted Basis Weight, lb./M ft. ²			
		September	October	November	December
26 Lb.	Max. ^a	26.6	27.6	28.1	28.2
	Min. ^a	25.9	26.1	26.2	26.1
	Av. ^b	26.9(18)	26.8(15)	26.9(22)	27.0(21)
33 Lb.	Max. ^a	35.1	34.9	34.8	34.9
	Min. ^a	32.9	33.0	32.8	32.5
	Av. ^b	33.8(24)	33.7(24)	33.7(28)	33.7(25)
38 Lb.	Max. ^a	40.0	40.0	40.2	40.4
	Min. ^a	37.7	38.1	37.6	38.2
	Av. ^b	38.7(23)	38.8(26)	38.8(28)	38.9(23)
42 Lb.	Max. ^a	44.5	44.2	43.9	43.9
	Min. ^a	42.0	42.0	42.0	42.1
	Av. ^b	42.7(39)	42.8(34)	42.8(39)	42.8(36)
69 Lb.	Max. ^a	72.0	73.0	72.2	72.2
	Min. ^a	68.7	68.5	69.1	68.4
	Av. ^b	70.0(33)	70.0(31)	70.1(32)	70.0(31)
90 Lb.	Max. ^a	94.2	92.8	92.9	91.9
	Min. ^a	88.6	88.9	88.5	88.8
	Av. ^b	91.3(19)	90.9(17)	90.9(15)	90.8(16)

^aCurrent machine average.

^bCurrent F.K.I. average, number of machines is indicated in parentheses.

PART III: SUMMARY OF CALIPER DATA
 (SEPTEMBER-DECEMBER, 1971)

Linerboard Grade Wt.		Caliper, pt.			
		September	October	November	December
26 Lb.	Max. ^a	9.0	9.5	9.0	9.0
	Min. ^a	6.8	6.6	6.7	6.4
	Av. ^b	7.8(17)	8.0(15)	7.8(22)	7.8(21)
33 Lb.	Max. ^a	11.5	11.0	11.0	10.7
	Min. ^a	8.8	8.6	8.3	8.6
	Av. ^b	9.8(23)	9.8(24)	9.7(27)	9.6(24)
38 Lb.	Max. ^a	12.8	12.4	12.5	12.6
	Min. ^a	10.0	9.9	9.8	9.7
	Av. ^b	10.9(22)	11.0(26)	11.0(27)	10.8(22)
42 Lb.	Max. ^a	13.8	13.4	13.6	13.7
	Min. ^a	10.9	10.6	10.7	10.6
	Av. ^b	12.0(38)	11.9(33)	12.0(38)	11.9(35)
69 Lb.	Max. ^a	21.7	22.4	21.3	22.6
	Min. ^a	17.9	18.0	18.0	18.0
	Av. ^b	19.6(32)	19.7(30)	19.7(32)	19.7(30)
90 Lb.	Max. ^a	27.9	26.8	28.2	27.6
	Min. ^a	23.4	23.1	23.0	23.5
	Av. ^b	25.5(18)	25.4(17)	25.6(17)	25.8(15)

^aCurrent machine average.

^bCurrent F.K.I. average, number of machines is indicated in parentheses.

PART IV: SUMMARY OF BURSTING STRENGTH DATA
(SEPTEMBER-DECEMBER, 1971)

Linerboard Grade Wt.		Bursting Strength, p.s.i.g.			
		September	October	November	December
26 Lb.	Max. ^a	81	81	84	83
	Min. ^a	63	66	65	63
	Av. ^b	75(18)	72(16)	73(22)	72(22)
33 Lb.	Max. ^a	93	95	99	101
	Min. ^a	76	80	79	79
	Av. ^b	88(24)	87(25)	87(29)	87(26)
38 Lb.	Max. ^a	110	107	110	112
	Min. ^a	91	92	89	89
	Av. ^b	99(23)	98(27)	98(28)	98(24)
42 Lb.	Max. ^a	122	116	119	119
	Min. ^a	99	102	101	101
	Av. ^b	108(39)	107(34)	107(39)	107(36)
69 Lb.	Max. ^a	159	155	165	160
	Min. ^a	133	132	134	135
	Av. ^b	145(33)	144(31)	145(33)	144(31)
90 Lb.	Max. ^a	199	187	190	188
	Min. ^a	154	160	161	159
	Av. ^b	172(19)	172(18)	172(17)	172(16)

^aCurrent machine average.

^bCurrent F.K.I. average, number of machines is indicated in parentheses.

INTRODUCTION

The continuous base-line study (modified) is a compilation of monthly averages of mill test data obtained routinely on six major grade weights of linerboard manufactured in the member mills of F.K.B.I., Inc. Mill data are included for moisture content, basis weight, caliper, and bursting strength tests made on the production of individual machines which produced at least 500 tons of one or more of the following six major grade weights during a given month: 26, 33, 38, 42, 69, and 90 lb. At the Institute, the as-reported basis weight, corresponding to the as-reported moisture content, is adjusted to a moisture content of 7.8%. Both the as-reported and the adjusted basis weight averages are included in the report.

PRESENTATION OF DATA

For the six major grade weights of linerboard referred to earlier, mill test averages for moisture content, basis weight (reported and adjusted), caliper, and bursting strength are compiled in the following tables.

Table Number	Description
I - II	Mill Test Averages on 26-lb. Linerboard
III - IV	Mill Test Averages on 33-lb. Linerboard
V - VI	Mill Test Averages on 38-lb. Linerboard
VII - VIII	Mill Test Averages on 42-lb. Linerboard
IX - X	Mill Test Averages on 69-lb. Linerboard
XI - XII	Mill Test Averages on 90-lb. Linerboard

TABLE I
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 26 LB. FOURDRINIER KRAFT LINERBOARD
NOVEMBER, 1971

CODE	MOISTURE CONTENT, PERCENT				BASIS WT., LB./ M SQ. FT.				ADJ. BASIS WT.,*A LB./ M SQ. FT.				CALIPER, PT.				BURSTING STRENGTH, P.S.I.G.				
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				
	CUR.	CUM.	FACT.	IND.	CUR.	CUM.	FACT.	IND.	CUR.	CUM.	FACT.	IND.	CUR.	CUM.	FACT.	IND.	CUR.	CUM.	FACT.	IND.	
AV.	AV.	*B	*C	AV.	AV.	*B	*C	AV.	AV.	*B	*C	AV.	AV.	*B	*C	AV.	AV.	*B	*C		
A1	4.0	4.4	90.9	88.9	26.6	26.2	101.5	101.9	27.7	27.2	101.8	103.4	8.1	8.2	98.8	103.8	79	78	101.3	108.2	
C1	4.8	4.5	106.7	106.7	26.0	25.9	100.4	99.6	26.9	26.9	100.0	100.4	7.6	7.5	101.3	97.4	69	70	98.6	94.5	
D1		2.4				25.8				26.9				7.0				69			
F1		4.7				25.7				26.5				8.3				77			
H1	4.2	5.0	84.0	93.3	25.9	26.0	99.6	99.2	26.3	26.4	99.6	98.1	8.1	7.6	106.6	103.8	84	80	105.0	115.1	
I1	3.2	4.1	78.0	71.1	25.3	25.4	99.6	96.9	26.6	26.4	100.8	99.2	8.0	7.6	105.3	102.6	77	78	98.7	105.5	
J1	3.7	3.4	108.8	82.2	26.5	26.4	100.4	101.5	26.7	26.6	100.4	99.6	7.9	7.6	103.9	101.3	75	81	92.6	102.7	
K1	4.7		104.4		25.7			98.5	26.6			99.2	8.4		107.7		69			94.5	
M1		3.7				25.6				26.7				7.9				79			
N1	5.6	5.8	96.6	124.4	26.0	26.0	100.0	99.6	26.6	26.6	100.0	99.2	8.1	8.4	96.4	103.8	80	77	103.9	109.6	
Q1	3.6	3.8	94.7	80.0	26.0	25.8	100.8	99.6	27.2	27.0	100.7	101.5	7.7	7.5	102.7	98.7	70	72	97.2	95.9	
R1	4.2	4.1	102.4	93.3	25.7	25.8	99.6	98.5	26.7	26.8	99.6	99.6	7.3	7.2	101.4	93.6	69	70	98.6	94.5	
S1		5.1				26.6				27.3				8.3				68			
T1	3.4	3.5	97.1	75.6	25.5	25.6	99.6	97.7	26.7	26.8	99.6	99.6	7.5	7.3	102.7	96.2	65	67	97.0	89.0	
U1	5.6	5.5	101.8	124.4	26.0	26.0	100.0	99.6	26.6	26.7	99.6	99.2	8.8	8.8	100.0	112.8	74	77	96.1	101.4	
V1		5.0				26.4				26.8				7.4				68			
Z1	6.0	5.9	101.7	133.3	25.7	25.8	99.6	98.5	26.2	26.3	99.6	97.8	7.5	8.1	92.6	96.2	67	70	95.7	91.8	
B2		5.6				26.5				26.7				8.5				67			
D2	4.7	5.0	94.0	104.4	26.4	26.4	100.0	101.1	27.3	27.2	100.4	101.9	7.9	7.8	101.3	101.3	73	74	98.6	100.0	
F2		4.5				26.0				26.9				8.3				73			
G2	2.9	5.4	53.7	64.4	26.1	26.1	100.0	100.0	27.5	26.8	102.6	102.6	7.8	8.2	95.1	100.0	78	80	97.5	106.8	
H2	2.6	2.2	118.2	57.8	25.1	25.1	100.0	96.2	26.5	26.6	99.6	98.9	6.8	7.3	93.2	87.2	77	76	101.3	105.5	
L2		5.8				26.5				26.6								69			
M2	6.8	6.7	101.5	151.1	25.9	26.2	98.8	99.2	26.2	26.5	98.9	97.8	8.0	8.0	100.0	102.6	65	66	98.5	89.0	
N2		4.6				25.6				26.5				8.6				73			
O2		3.1				25.7				27.0				8.0				74			
P2		2.8				26.8				28.2				8.9				70			
S2		4.4				25.6				26.5				7.2				73			
T2	3.6	4.7	76.6	80.0	25.5	25.2	101.2	97.7	26.7	26.0	102.7	99.6	6.7	6.6	101.5	85.9	70	70	100.0	95.9	
U2	3.3	3.3	100.0	73.3	26.7	26.5	100.8	102.3	28.0	27.8	100.7	104.5	9.0	9.0	100.0	115.4	70	68	102.9	95.9	
V2	3.7	4.4	84.1	82.2	26.8	26.8	100.0	102.7	26.9	27.0	99.6	100.4	7.5	7.8	96.2	96.2	79	80	98.8	108.2	
X2	2.9	3.0	96.7	64.4	26.7	27.0	98.9	102.3	28.1	28.4	98.9	104.8	8.0	8.4	95.2	102.6	72	73	98.6	98.6	
Z2	3.5	3.6	97.2	77.8	25.3	25.8	98.1	96.9	26.5	26.9	98.5	98.9	7.1	7.5	94.7	91.0	70	67	104.5	95.9	
B3		4.1			27.0	26.4	102.3	103.4	27.0	27.1	99.6	100.7	6.7	7.0	95.7	85.9	76	74	102.7	104.1	
FKI DATA																					
CUR.																					
AV.	4.1				26.0				26.9				7.8				73				
CUM.																					
AV.	4.5				26.1				26.8				7.8				73				
IND.																					
*D	91.1				99.6				100.4				100.0				100.0				

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE II
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 26 LB. FOURDRINIER KRAFT LINERBOARD
DECEMBER, 1971

CODE	HOISTURE CONTENT, PERCENT				BASIS WT., LB./ M SQ. FT.				ADJ. BASIS WT.,*A LB./ M SQ. FT.				CALIPER, PT.				BURSTING STRENGTH, P.S.I.G.				
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				
	CUR. AV.	CUH. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUH. AV.	FACT. *B	IND. *C	CUR. AV.	CUH. AV.	FACT. *B	IND. *C	
A1	3.8	4.2	90.5	84.4	26.3	26.2	100.4	101.2	27.4	27.2	100.7	102.2	8.1	8.2	98.8	103.8	83	78	106.4	113.7	
C1	4.4	4.6	95.6	97.8	26.1	26.0	100.4	100.4	27.1	26.9	100.7	101.1	7.6	7.5	101.3	97.4	68	70	97.1	93.2	
D1		2.6				26.0				26.9				7.0			70				
F1		4.8				25.6				26.4				8.4			77				
H1		4.9				26.0				26.4				7.7			80				
I1	3.6	4.0	90.0	80.0	25.3	25.4	99.6	97.3	26.5	26.4	100.4	98.9	7.4	7.7	96.1	94.9	81	78	103.8	111.0	
J1		3.6				26.4				26.6				7.7			80				
K1	4.8	4.7	102.1	106.7	25.6	25.7	99.6	98.5	26.4	26.6	99.2	98.5	8.4	8.4	100.0	107.7	69	69	100.0	94.5	
H1	3.3	3.7	89.2	73.3	26.6	25.6	103.9	102.3	27.9	26.7	104.5	104.1	7.9	7.9	100.0	101.3	77	79	97.5	105.5	
H1	5.6	5.8	96.6	124.4	26.0	26.0	100.0	100.0	26.6	26.6	100.0	99.2	8.3	8.4	98.8	106.4	78	77	101.3	106.8	
Q1	3.7	3.8	97.4	82.2	26.0	25.8	100.8	100.0	27.1	27.0	100.4	101.1	7.6	7.5	101.3	97.4	71	72	98.6	97.3	
R1	4.5	4.1	109.8	100.0	25.8	25.8	100.0	99.2	26.7	26.8	99.6	99.6	7.4	7.2	102.8	94.9	70	71	98.6	95.9	
S1		5.2				26.6				27.4				8.3			68				
T1	3.3	3.5	94.3	73.3	26.4	25.6	103.1	101.5	27.7	26.8	103.4	103.4	7.4	7.3	101.4	94.9	66	67	98.5	90.4	
U1	5.9	5.4	109.2	131.1	26.2	26.0	100.8	100.8	26.8	26.7	100.4	100.0	9.0	8.8	102.3	115.4	74	76	97.4	101.4	
V1	4.8	5.0	96.0	106.7	26.4	26.4	100.0	101.5	26.8	26.8	100.0	100.0	7.7	7.4	104.0	98.7	67	68	98.5	91.8	
Z1	6.0	5.9	101.7	133.3	25.6	25.8	99.2	98.5	26.1	26.3	99.2	97.4	7.5	8.1	92.6	96.2	72	70	102.8	98.6	
B2		5.5				26.6				26.8				8.4			67				
D2	4.9	5.0	98.0	108.9	26.5	26.4	100.4	101.9	27.3	27.2	100.4	101.9	8.2	7.8	105.1	105.1	66	74	89.2	90.4	
F2		4.4				26.0				26.9				8.3			73				
G2		4.8				26.1				27.0				8.1			80				
H2	2.5	2.4	104.2	55.6	25.1	25.1	100.0	96.5	26.5	26.6	99.6	98.9	7.4	7.3	101.4	94.9	80	76	105.3	109.6	
L2	4.8	5.8	82.8	106.7	26.6	26.4	100.8	102.3	26.7	26.5	100.8	99.6					65	69	94.2	89.0	
H2		6.7				26.1				26.4				8.0			66				
H2		4.6				25.6				26.5				8.6			73				
O2		3.1				25.7				27.0				8.0			74				
P2	1.8	2.8	64.3	40.0	26.0	26.8	97.0	100.0	27.7	28.2	98.2	103.4	8.0	8.9	89.9	102.6	63	70	90.0	86.3	
S2		4.4				25.6				26.5				7.2			73				
T2	3.2	4.3	74.4	71.1	25.7	25.3	101.6	98.8	27.0	26.3	102.7	100.7	6.9	6.6	104.5	88.5	75	70	107.1	102.7	
U2	3.5	3.3	106.1	77.8	26.4	26.6	99.2	101.5	27.6	27.8	99.3	103.0	8.8	9.0	97.8	112.8	68	68	100.0	93.2	
V2	3.2	4.4	72.7	71.1	26.7	26.7	100.0	102.7	26.8	26.9	99.6	100.0	8.4	7.8	107.7	107.7	78	80	97.5	106.8	
X2	2.9	3.0	96.7	64.4	26.8	26.8	100.0	103.1	28.2	28.2	100.0	105.2	8.1	8.2	98.8	103.8	70	72	97.2	95.9	
Z2	3.4	3.6	94.4	75.6	25.2	25.7	98.0	96.9	26.4	26.9	98.1	98.5	6.4	7.4	86.5	82.0	70	67	104.5	95.9	
B3		4.6				26.7				27.2				6.9	6.9	100.0	88.5	75	74	101.4	102.7
PRI DATA																					
CUR. AV.	4.0				26.1				27.0				7.8				72				
CUH. AV.	4.5				26.0				26.8				7.8				73				
IND. *D	88.9				100.4				100.7				100.0				98.6				

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE III

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 33 LB. FOURDRINIER KRAFT LINERBOARD

NOVEMBER, 1971

CODE	MOISTURE CONTENT, PERCENT				BASIS WT., LB./ M SQ. FT.				ADJ. BASIS WT.,*A LB./ M SQ. FT.				CALIPER, PT.				BURSTING STRENGTH, P.S.I.G.				
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				
	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	
A1		4.8				33.1				34.2				9.8			90				
C1	5.2	4.9	106.1	108.3	32.5	32.6	99.7	98.8	33.4	33.6	99.4	98.8	9.7	9.7	100.0	100.0	85	85	100.0	97.7	
D1		3.7			34.1	33.0	103.3	103.6	33.9	33.8	100.3	100.3	9.4	9.1	103.3	96.9	93	86	108.1	106.9	
E1	5.8	5.6	103.6	120.8	33.3	33.2	100.3	101.2	33.4	33.4	100.0	98.8					84	90	93.3	96.6	
F1		6.1				32.5				33.1				9.7			96				
H1		5.5				33.0				33.4				9.7			95				
I1	3.7	4.4	84.1	77.1	32.0	32.0	100.0	97.3	33.4	33.2	100.6	98.8	9.1	8.9	102.2	93.8	95	96	99.0	109.2	
J1	4.0	3.9	102.6	83.3	33.4	33.3	100.3	101.5	33.7	33.6	100.3	99.7	9.4	9.4	100.0	96.9	92	93	98.9	105.7	
K1	4.9	5.2	94.2	102.1	32.4	32.5	99.7	98.5	33.4	33.4	100.0	98.8	9.8	9.8	100.0	101.0	84	86	97.7	96.6	
M1	5.4	4.6	117.4	112.5	33.4	32.8	101.8	101.5	34.3	34.0	100.9	101.5	10.3	9.6	107.3	106.2	86	87	98.8	98.8	
N1	6.4	6.5	98.5	133.3	33.0	33.0	100.0	100.3	33.5	33.5	100.0	99.1	10.3	10.7	96.3	106.2	94	90	104.4	108.0	
O1		5.0				33.0				34.0				9.0			90				
P1	4.3	4.1	104.9	89.6	32.2	32.1	100.3	97.9	33.4	33.4	100.0	98.8	10.4	9.2	113.0	107.2	82	90	91.1	94.2	
Q1	4.9	4.6	106.5	102.1	32.9	32.7	100.6	100.0	33.9	33.9	100.0	100.3	9.6	9.2	104.3	99.0	86	87	98.8	98.8	
R1	4.3	4.1	104.9	89.6	32.5	32.6	99.7	98.8	33.7	33.9	99.4	99.7	9.5	9.3	102.2	97.9	82	83	98.8	94.2	
S1		5.5				33.5				34.3				10.2			81				
T1	3.6	3.5	102.8	75.0	32.6	32.5	100.3	99.1	34.1	34.0	100.3	100.9	10.2	9.6	106.2	105.2	80	84	95.2	92.0	
W1	4.6	4.3	107.0	95.8	33.6	33.0	101.8	102.1	33.9	33.3	101.8	100.3	9.6	9.3	103.2	99.0	86	83	103.6	98.8	
Y1		5.1				32.5				33.4				10.0			88				
Z1	6.3	6.0	105.0	131.2	32.3	32.2	100.3	98.2	32.8	32.8	100.0	97.0	9.8	9.9	99.0	101.0	82	83	98.8	94.2	
A2		4.7				33.8				34.9				9.1			87				
B2	5.4	5.4	100.0	112.5	33.6	33.6	100.0	102.1	33.7	33.8	99.7	99.7	9.8	9.8	100.0	101.0	83	85	97.6	95.4	
C2		4.7				33.2				34.3				9.2			91				
D2	6.0	6.0	100.0	125.0	33.2	33.2	100.0	100.9	33.9	33.8	100.3	100.3	10.4	9.8	106.1	107.2	84	89	94.4	96.6	
F2	4.6	4.7	97.9	95.8	32.7	32.6	100.3	99.4	33.8	33.6	100.6	100.0	9.6	10.6	90.6	99.0	87	86	101.2	100.0	
G2	3.5	5.6	62.5	72.9	33.1	32.9	100.6	100.6	34.7	33.7	103.0	102.7	9.4	10.1	93.1	96.9	96	96	100.0	110.3	
H2	2.8	2.7	103.7	58.3	31.4	31.5	99.7	95.4	33.1	33.3	99.4	97.9	9.3	9.0	103.3	95.9	87	88	98.9	100.0	
L2	5.3			110.4	33.0			100.3	33.1			97.9					80			92.0	
M2	6.6	6.5	101.5	137.5	32.7	32.9	99.4	99.4	33.1	33.4	99.1	97.9	10.0	10.1	99.0	103.1	99	83	119.3	113.8	
N2	4.6	4.8	95.8	95.8	33.2	33.2	100.0	100.9	34.4	34.2	100.6	101.8	10.4	10.3	101.0	107.2	84	80	105.0	96.6	
O2		3.9				32.5				33.9				10.3			87				
P2	4.8	5.2	92.3	100.0	33.0	33.5	98.5	100.3	34.1	34.4	99.1	100.9	9.5	10.0	95.0	97.9	79	82	96.3	90.8	
Q2	5.7	5.6	101.8	118.8	33.4	33.2	100.6	101.5	34.2	33.9	100.9	101.2	8.7	8.8	98.9	89.7	90	90	100.0	103.4	
T2		5.2				32.0				32.9				8.2			82				
U2	4.5	4.6	97.8	93.8	32.3	32.6	99.1	98.2	33.5	33.8	99.1	99.1	11.0	11.0	100.0	113.4	79	77	102.6	90.8	
V2	3.7	4.2	88.1	77.1	33.5	33.6	99.7	101.8	33.7	33.9	99.4	99.7	9.9	9.9	100.0	102.1	91	94	96.8	104.6	
X2	3.7	4.1	90.2	77.1	33.3	33.8	98.5	101.2	34.8	35.2	98.9	103.0	10.3	10.6	97.2	106.2	85	89	95.5	97.7	
Z2	3.5	3.5	100.0	72.9	32.0	32.3	99.1	97.3	33.5	33.8	99.1	99.1	8.8	8.9	98.9	90.7	88	85	103.5	101.1	
B3		3.9				33.2				34.1				8.3	9.2	90.2	85.6	94	88	106.8	108.0
FKI DATA																					
CUR.																					
AV.	4.7				32.9				33.7				9.7				87				
CUM.																					
AV.	4.8				32.9				33.8				9.7				87				
IND.																					
*D	97.9				100.0				99.7				100.0				100.0				

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE IV

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 33 LB. FOURDRINIER KRAFT LINESBOARD

DECEMBER, 1971

CODE	MOISTURE CONTENT, PERCENT				BASIS WT., LB./ M SQ. FT.				ADJ. BASIS WT.,*A LB./ M SQ. FT.				CALIPER, PT.				BURSTING STRENGTH, P.S.I.G.				
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				
	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	
A1	5.1	4.6	110.9	106.2	32.6	33.1	98.5	99.1	33.5	34.2	98.0	99.4	10.0	9.7	103.1	103.1	91	90	101.1	104.6	
C1	5.5	4.9	112.2	114.6	32.9	32.6	100.9	100.0	33.7	33.6	100.3	100.0	9.5	9.6	99.0	97.9	84	85	98.8	96.6	
D1		4.2				33.4				33.8				9.2				88			
E1	5.5	5.7	96.5	114.6	33.4	33.2	100.6	101.5	33.5	33.4	100.3	99.4					89	89	100.0	102.3	
F1	5.3	6.1	86.9	110.4	32.5	32.5	100.0	98.8	33.4	33.1	100.9	99.1	9.2	9.6	95.8	94.8	94	98	95.9	108.0	
H1		5.5				32.9				33.3				9.7				95			
I1	3.3	4.3	76.7	68.8	32.4	32.0	101.2	98.5	34.0	33.2	102.4	100.9	8.9	8.8	101.1	91.8	91	97	93.8	104.6	
J1	4.2	4.0	105.0	87.5	33.4	33.4	100.0	101.5	33.7	33.6	100.3	100.0	9.8	9.4	104.2	101.0	90	93	96.8	103.4	
K1	5.8	5.0	116.0	120.8	32.7	32.4	100.9	99.4	33.4	33.4	100.0	99.1	9.9	9.8	101.0	102.1	85	85	100.0	97.7	
M1	4.7	4.6	102.2	97.9	33.3	32.9	101.2	101.2	34.4	34.1	100.9	102.1	9.9	9.6	103.1	102.1	85	87	97.7	97.7	
N1		6.5				33.0				33.5				10.6				90			
O1		5.0				33.2				34.2				8.9				94			
P1		4.2				32.2				33.4				9.8				86			
Q1	4.8	4.6	104.3	100.0	32.9	32.7	100.6	100.0	34.0	33.9	100.3	100.9	9.2	9.2	100.0	94.8	87	87	100.0	100.0	
R1		4.1				32.6				33.9				9.3				83			
S1		5.5				33.5				34.3				10.2				82			
T1	3.7	3.5	105.7	77.1	32.8	32.5	100.9	99.7	34.2	34.0	100.6	101.5	9.8	9.6	102.1	101.0	79	84	94.0	90.8	
V1	4.7			97.9	33.2			100.9	33.7			100.0	9.7			100.0	81			93.1	
W1	4.6	4.4	104.5	95.8	33.6	33.0	101.8	102.1	33.9	33.3	101.8	100.6	9.6	9.3	103.2	99.0	86	84	102.4	98.8	
Y1		5.1				32.5				33.4				10.0				88			
Z1	6.2	6.0	103.3	129.2	32.0	32.2	99.4	97.3	32.5	32.8	99.1	96.4	9.5	9.9	96.0	97.9	83	83	100.0	95.4	
A2		4.7				33.8				34.9				9.1				87			
B2	5.2	5.4	96.3	108.3	33.3	33.6	99.1	101.2	33.4	33.8	98.8	99.1	9.2	9.7	94.8	94.8	90	85	105.9	103.4	
C2		4.7				33.2				34.3				9.2				91			
D2	5.9	6.0	98.3	122.9	33.2	33.1	100.3	100.9	33.9	33.8	100.3	100.6	10.3	9.8	105.1	106.2	83	88	94.3	95.4	
F2		4.6				32.6				33.7				10.5				86			
G2	3.1	5.3	58.5	64.6	32.9	32.9	100.0	100.0	34.6	33.8	102.4	102.7	9.4	10.0	94.0	96.9	101	96	105.2	116.1	
H2	3.1	2.7	114.8	64.6	31.8	31.5	101.0	96.6	33.4	33.2	100.6	99.1	9.2	9.1	101.1	94.8	89	87	102.3	102.3	
L2	5.3	5.3	100.0	110.4	32.8	33.0	99.4	99.7	32.9	33.1	99.4	97.6					79	80	98.8	90.8	
M2	5.5	6.6	83.3	114.6	32.2	32.9	97.9	97.9	33.0	33.3	99.1	97.9	10.0	10.0	100.0	103.1	85	84	101.2	97.7	
N2		4.8				33.0				34.1				10.1				82			
O2		3.9				32.5				33.9				10.3				87			
P2	5.0	5.2	96.2	104.2	33.1	33.3	99.4	100.6	34.1	34.3	99.4	101.2	9.6	10.0	96.0	99.0	85	81	104.9	97.7	
Q2	6.3	5.6	112.5	131.2	33.3	33.2	100.3	101.2	33.8	34.0	99.4	100.3	8.7	8.8	98.9	89.7	89	90	98.9	102.3	
T2		5.2				32.0				32.9				8.2				82			
U2	4.3	4.6	93.5	89.6	32.3	32.6	99.1	98.2	33.5	33.8	99.1	99.4	10.7	11.0	97.3	110.3	81	77	105.2	93.1	
V2	3.6	4.2	85.7	75.0	33.4	33.6	99.4	101.5	33.6	33.9	99.1	99.7	10.2	9.9	103.0	105.2	93	94	98.9	106.9	
X2	3.7	4.0	92.5	77.1	33.4	33.7	99.1	101.5	34.9	35.1	99.4	103.6	10.3	10.6	97.2	106.2	89	88	101.1	102.3	
Z2	3.4	3.5	97.1	70.8	32.1	32.3	99.4	97.6	33.6	33.8	99.4	99.7	8.6	8.9	96.6	88.6	91	85	107.0	104.6	
B3		4.2				33.5				34.2				9.3	9.0	103.3	95.9	88	89	98.9	101.1
PKI DATA																					
CUR.																					
AV.	4.7				32.9				33.7				9.6				87				
CUM.																					
AV.	4.8				32.9				33.7				9.7				87				
IND.																					
*D	97.9				100.0				100.0				99.0				100.0				

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE V

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 38 LB. FOURDRINIER KRAFT LINERBOARD

NOVEMBER, 1971

CODE	MOISTURE CONTENT, PERCENT				BASIS WT., LB./ M SQ. FT.				ADJ. BASIS WT.,*A LB./ M SQ. FT.				CALIPER, FT.				BURSTING STRENGTH, P.S.I.G.				
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				
	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	
A1	4.7	5.0	94.0	90.4	38.9	39.1	99.5	102.6	40.2	40.2	100.0	103.6	11.6	11.2	103.6	107.4	97	100	97.0	99.0	
C1	4.9	4.8	102.1	94.2	37.6	37.6	100.0	99.2	38.8	38.8	100.0	100.0	11.3	11.2	100.9	104.6	94	94	100.0	95.9	
D1		4.2				38.2				39.0				10.6				99			
E1	5.6	5.5	101.8	107.7	38.2	38.0	100.5	100.8	38.3	38.2	100.3	98.7					97	98	99.0	99.0	
F1		5.4				37.3				38.3				10.5				108			
G1	4.3	4.6	93.5	82.7	37.8	37.9	99.7	99.7	39.2	39.2	100.0	101.0	10.3	10.6	97.2	95.4	109	103	105.8	111.2	
H1	6.1	5.9	103.4	117.3	37.3	37.8	98.7	98.4	37.6	38.1	98.7	96.9	11.1	10.9	101.8	102.8	106	105	101.0	108.2	
I1	3.8	4.4	86.4	73.1	37.0	37.1	99.7	97.6	38.6	38.5	100.2	99.5	10.3	10.3	100.0	95.4	104	105	99.0	106.1	
J1	4.5	4.5	100.0	86.5	38.5	38.4	100.3	101.6	38.8	38.7	100.2	100.0	11.5	11.2	102.7	106.5	95	102	93.1	96.9	
K1	4.9	5.0	98.0	94.2	37.3	37.4	99.7	98.4	38.5	38.5	100.0	99.2	11.4	11.4	100.0	105.6	93	97	95.9	94.9	
M1	3.9	4.4	88.6	75.0	38.3	37.6	101.9	101.0	39.9	39.0	102.3	102.8	10.9	10.8	100.9	100.9	99	103	96.1	101.0	
N1		7.1				38.0				38.4				11.4				96			
O1	5.2	5.5	94.5	100.0	37.6	37.7	99.7	99.2	38.7	38.7	100.0	99.7	11.3	10.6	106.6	104.6	99	100	99.0	101.0	
P1	4.7	4.8	97.9	90.4	37.2	37.2	100.0	98.2	38.5	38.4	100.3	99.2	11.9	10.7	111.2	110.2	96	98	98.0	98.0	
Q1	5.4	5.5	98.2	103.8	38.0	37.7	100.8	100.3	39.0	38.6	101.0	100.5	10.6	10.5	101.0	98.1	98	97	101.0	100.0	
R1	4.5	4.3	104.6	86.5	37.4	37.6	99.5	98.7	38.7	39.0	99.2	99.7	11.3	10.9	103.7	104.6	91	95	95.8	92.8	
S1		5.5				38.8				39.8				11.4				93			
T1	5.1	5.0	102.0	98.1	37.8	37.8	100.0	99.7	38.9	39.0	99.7	100.2	11.1	10.8	102.8	102.8	89	93	95.7	90.8	
W1		4.7				37.6				37.9				11.1				95			
Y1		4.4				37.5				38.9				11.8				95			
A2		5.6				38.8				39.7				11.2				101			
B2	5.2	5.5	94.5	100.0	38.7	38.8	99.7	102.1	38.8	38.9	99.7	100.0	11.1	11.1	100.0	102.8	96	97	99.0	98.0	
C2	5.5	5.6	98.2	105.8	38.2	38.0	100.5	100.8	39.2	38.9	100.8	101.0	11.5	11.0	104.5	106.5	99	98	101.0	101.0	
D2	6.4	6.3	101.6	123.1	38.1	38.3	99.5	100.5	38.7	39.0	99.2	99.7	11.6	11.2	103.6	107.4	94	97	96.9	95.9	
E2		5.1				37.4				38.5				11.1				106			
F2	5.2	4.8	108.3	100.0	37.8	37.5	100.8	99.7	38.9	38.7	100.5	100.2	11.5	10.7	107.5	106.5	97	97	100.0	99.0	
G2	4.5	5.8	77.6	86.5	38.1	38.3	99.5	100.5	39.5	39.1	101.0	101.8	9.8	10.2	96.1	90.7	108	109	99.1	110.2	
H2	3.5	3.1	112.9	67.3	36.5	36.6	99.7	96.3	38.2	38.4	99.5	98.4	10.7	10.5	101.9	99.1	95	96	99.0	96.9	
J2		5.9				38.2				39.0				10.9				101			
K2		4.6				38.2				39.5				10.4				100			
M2	6.3	6.4	98.4	121.2	38.6	37.8	102.1	101.8	39.2	38.4	102.1	101.0	11.0	10.8	101.8	101.8	100	100	100.0	102.0	
O2	5.9	4.4	134.1	113.5	37.6	37.6	100.0	99.2	38.4	39.0	98.5	99.0	11.4	11.7	97.4	105.6	93	96	96.9	94.9	
Q2	5.7	5.8	98.3	109.6	37.9	38.2	99.2	100.0	38.8	39.1	99.2	100.0	9.8	10.0	98.0	90.7	98	97	101.0	100.0	
R2	5.5	5.7	96.5	105.8	37.3	37.5	99.5	98.4	38.2	38.4	99.5	98.4	10.2	10.7	95.3	94.4	110	102	107.8	112.2	
T2	5.0	5.1	98.0	96.2	37.3	37.1	100.5	98.4	38.4	38.2	100.5	99.0	10.0	9.9	101.0	92.6	96	96	100.0	98.0	
U2	5.1	5.5	92.7	98.1	37.7	37.8	99.7	99.5	38.8	38.8	100.0	100.0	12.5	12.3	101.6	115.7	95	93	102.2	96.9	
V2	4.0	4.3	93.0	76.9	38.2	38.4	99.5	100.8	38.4	38.7	99.2	99.0	11.3	11.2	100.9	104.6	102	102	100.0	104.1	
W2	4.9	4.7	104.2	94.2	38.5	38.4	100.3	101.6	39.7	39.8	99.7	102.3	10.4	10.3	101.0	96.3	94	94	100.0	95.9	
Z2		4.4				37.4				38.8				10.4				98			
B3		3.5				36.9				38.6				10.2				99			

FKI DATA

CUR.																					
AV.	5.0				37.8				38.8				11.0				98				
CUM.																					
AV.	5.2				37.9				38.8				10.8				98				
IND.																					
*D	96.2				99.7				100.0				101.8				100.0				

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE VI
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 38 LB. FOURDRINIER KRAFT LINERBOARD.

DECEMBER, 1971

CODE	MOISTURE CONTENT, PERCENT				BASIS WT., LB./ M SQ. FT.				ADJ. BASIS WT.,*A LB./ M SQ. FT.				CALIPER, PT.				BURSTING STRENGTH, P.S.I.G.			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	5.5	5.0	110.0	107.8	38.5	38.9	99.0	101.8	39.5	40.1	98.5	101.8	10.7	11.3	94.7	98.2	100	99	101.0	102.0
C1	4.8	4.8	100.0	94.1	37.7	37.6	100.3	99.7	38.9	38.8	100.2	100.2	11.1	11.3	98.2	101.8	94	94	100.0	95.9
D1		4.7				38.7				39.0				10.6			100			
E1	5.6	5.5	101.8	109.8	38.3	38.0	100.8	101.3	38.4	38.2	100.5	99.0					99	98	101.0	101.0
F1		5.4				37.4				38.3				10.5			108			
G1		4.3				37.8				39.2				10.3			109			
H1		5.9				37.8				38.0				10.9			105			
I1	4.0	4.4	90.9	78.4	36.7	37.1	98.9	97.1	38.2	38.5	99.2	98.4	10.0	10.3	97.1	91.7	96	105	91.4	98.0
J1	4.8	4.6	104.3	94.1	38.4	38.4	100.0	101.6	38.7	38.7	100.0	99.7	11.5	11.2	102.7	105.5	98	101	97.0	100.0
K1		5.0				37.4				38.5				11.4			95			
M1	4.0	4.3	93.0	78.4	38.6	37.7	102.4	102.1	40.2	39.7	102.8	103.6	10.2	10.8	94.4	93.6	101	102	99.0	103.1
N1		7.1				38.0				38.3				11.4			96			
O1		5.2				37.6				38.7				10.9			101			
P1	5.3	4.8	110.4	103.9	37.4	37.2	100.5	98.9	38.4	38.4	100.0	99.0	11.3	10.9	103.7	103.7	98	98	100.0	100.0
Q1	5.4	5.5	98.2	105.9	37.9	37.7	100.5	100.3	38.9	38.6	100.8	100.2	10.4	10.5	99.0	95.4	101	97	104.1	103.1
R1	4.5	4.3	104.6	88.2	37.5	37.5	100.0	99.2	38.8	39.0	99.5	100.0	11.2	10.9	102.8	102.8	93	95	97.9	94.9
S1		5.5				38.8				39.8				11.4			93			
T1	5.6	5.0	112.0	109.8	38.1	37.8	100.8	100.8	39.0	39.0	100.0	100.5	10.7	10.9	98.2	98.2	89	92	96.7	90.8
W1		4.7				37.6				37.9				11.1			95			
Y1		4.3				37.5				38.9				11.8			95			
A2		5.6				38.8				39.7				11.2			101			
B2	5.3	5.4	98.1	103.9	38.5	38.7	99.5	101.8	38.6	38.8	99.5	99.5	10.8	11.1	97.3	99.1	95	97	97.9	96.9
C2	5.3	5.6	94.6	103.9	38.0	38.0	100.0	100.5	39.0	38.9	100.2	100.5	11.4	11.0	103.6	104.6	103	98	105.1	105.1
D2	6.1	6.3	96.8	119.6	38.2	38.3	99.7	101.0	38.9	38.9	100.0	100.2	11.4	11.2	101.8	104.6	93	97	95.9	94.9
E2		5.1				37.4				38.5				11.1			106			
F2	4.7	4.8	97.9	92.2	37.7	37.5	100.5	99.7	39.0	38.8	100.5	100.5	10.3	10.9	94.5	94.5	98	97	101.0	100.0
G2	3.7	5.6	66.1	72.5	38.7	38.2	101.3	102.4	40.4	39.2	103.1	104.1	10.0	10.2	98.0	91.7	112	108	103.7	114.3
H2		3.2				36.6				38.4				10.6			96			
J2		6.0				38.2				38.9				10.9			102			
K2		4.6				38.2				39.5				10.4			100			
M2	5.6	6.4	87.5	109.8	38.2	37.9	100.8	101.0	39.1	38.5	101.6	100.8		10.8			94	100	94.0	95.9
O2	5.8	4.4	131.8	113.7	38.2	37.6	101.6	101.0	39.0	39.0	100.0	100.5	11.6	11.7	99.1	106.4	94	96	97.9	95.9
Q2	6.1	5.8	105.2	119.6	38.3	38.2	100.3	101.3	39.0	39.1	99.7	100.5	9.7	10.1	96.0	89.0	99	97	102.1	101.0
R2	5.5	5.7	96.5	107.8	37.5	37.5	100.0	99.2	38.4	38.4	100.0	99.0	10.0	10.6	94.3	91.7	109	103	105.8	111.2
T2		4.9				37.2				38.3				9.7			94			
U2	5.1	5.4	94.4	100.0	37.5	37.8	99.2	99.2	38.6	38.8	99.5	99.5	12.6	12.4	101.6	115.6	92	93	98.9	93.9
V2	3.6	4.3	83.7	70.6	38.1	38.4	99.2	100.8	38.3	38.7	99.0	98.7	11.4	11.2	101.8	104.6	98	102	96.1	100.0
W2	4.9	4.7	104.2	96.1	38.4	38.5	99.7	101.6	39.6	39.8	99.5	102.1	10.2	10.3	99.0	93.6	97	94	103.2	99.0
Z2	4.4	4.4	100.0	86.3	37.3	37.4	99.7	98.7	38.7	38.8	99.7	99.7	10.2	10.4	98.1	93.6	100	98	102.0	102.0
B3													9.8	10.3	95.1	89.9	111	95	116.8	113.3
FKI DATA																				
CUR.																				
AV.	5.0				38.0				38.9				10.8				98			
CUM.																				
AV.	5.1				37.8				38.8				10.9				98			
IND.																				
*D	98.0				100.5				100.2				99.1				100.0			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE VII
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 42 LB. FOURDRINIER KRAFT LINERBOARD

NOVEMBER, 1971

CODE	MOISTURE CONTENT, PERCENT				BASIS WT., LB./ M SQ. FT.				ADJ. BASIS WT.,*A LB./ M SQ. FT.				CALIPER, PT.				BURSTING STRENGTH, P.S.I.G.				
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				
	CUR. AV.	CUM. AV.	FACT. #A	IND. #C	CUR. AV.	CUM. AV.	FACT. #A	IND. #C	CUR. AV.	CUM. AV.	FACT. #A	IND. #C	CUR. AV.	CUM. AV.	FACT. #B	IND. #C	CUR. AV.	CUM. AV.	FACT. #B	IND. #C	
A1	5.1	5.7	89.5	96.2	42.3	42.0	100.7	101.2	43.5	43.0	101.2	101.6	12.3	12.2	100.8	102.5	105	107	98.1	98.1	
B1	4.9	5.0	98.0	92.4	41.1	41.4	99.3	98.3	42.4	42.7	99.3	99.1	12.6	12.7	99.2	105.0	119	117	101.7	111.2	
D1		4.7			42.6	42.2	100.9	101.9	42.8	42.9	99.8	100.0	12.2	11.9	102.5	101.7	110	106	103.8	102.8	
E1	5.4	5.5	98.2	101.9	42.3	42.0	100.7	101.2	42.4	42.2	100.5	99.1					106	104	101.9	99.1	
F1	5.3	5.2	101.9	100.0	41.1	41.0	100.2	98.3	42.2	42.2	100.0	98.6	11.9	11.6	102.6	99.2	111	112	99.1	103.7	
G1	4.5	4.5	100.0	84.9	41.7	41.6	100.2	99.8	43.2	43.1	100.2	100.9	11.4	11.4	100.0	95.0	114	110	103.6	106.5	
H1	5.8	6.0	96.7	109.4	41.6	41.9	99.3	99.5	42.0	42.3	99.3	98.1	12.0	11.9	100.8	100.0	117	110	106.4	109.3	
I1	3.9	4.6	84.8	73.6	41.0	40.8	100.5	98.1	42.7	42.3	100.9	99.8	11.3	11.5	98.3	94.2	110	112	98.2	102.8	
J1	5.0	4.8	104.2	94.3	42.4	42.4	100.0	101.4	42.8	42.8	100.0	100.0	12.2	12.3	99.2	101.7	106	106	100.0	99.1	
L1	6.0	6.1	98.4	113.2	41.6	41.8	99.5	99.5	42.4	42.6	99.5	99.1	11.6	11.5	100.9	96.7	109	112	97.3	101.9	
M1	4.9	4.5	108.9	92.4	42.1	41.4	101.7	100.7	43.4	42.9	101.2	101.4	12.1	12.0	100.8	100.8	113	110	102.7	105.6	
N1		6.8				42.0				42.5				12.1				108			
O1	5.4	5.5	98.2	101.9	41.7	41.5	100.5	99.8	42.8	42.6	100.5	100.0	12.0	12.0	100.0	100.0	102	103	99.0	95.3	
P1	5.2	5.0	104.0	98.1	41.3	41.2	100.2	98.8	42.5	42.4	100.2	99.3	12.3	12.0	102.5	102.5	108	108	100.0	100.9	
Q1	5.5	5.8	94.8	103.8	42.0	41.5	101.2	100.5	43.0	42.4	101.4	100.5	11.4	11.6	98.3	95.0	105	105	100.0	98.1	
R1	4.4	4.3	102.3	83.0	41.4	41.4	100.0	99.0	42.9	43.0	99.8	100.2	12.4	12.1	102.5	103.3	103	104	99.0	96.3	
S1		6.1				42.6				43.4				12.5				105			
T1	5.3	4.9	108.2	100.0	41.7	41.5	100.5	99.8	42.8	42.8	100.0	100.0	12.1	11.9	101.7	100.8	103	106	97.2	96.3	
W1	4.2	4.9	85.7	79.2	42.9	42.3	101.4	102.6	43.3	42.7	101.4	101.2	11.4	11.7	97.4	95.0	101	102	99.0	94.4	
X1		6.5				42.8				43.2				12.7				98			
Y1		4.5				41.8				43.3				12.7				107			
A2		6.0				42.8				43.6				12.4				106			
B2	5.7	5.9	96.6	107.5	42.3	42.3	100.0	101.2	42.4	42.5	99.8	99.1	12.3	12.3	100.0	102.5	103	103	100.0	96.3	
C2	5.5	5.7	96.5	103.8	42.0	42.0	100.0	100.5	43.0	43.0	100.0	100.5	12.6	12.2	103.3	105.0	107	106	100.9	100.0	
D2	6.8	6.9	98.6	128.3	42.3	42.3	100.0	101.2	42.8	42.7	100.2	100.0	12.7	12.3	103.2	105.8	104	104	100.0	97.2	
E2	5.4	5.3	101.9	101.9	41.3	41.3	100.0	98.8	42.4	42.4	100.0	99.1	12.3	11.7	105.1	102.5	109	110	99.1	101.9	
F2	5.3	5.0	106.0	100.0	41.6	41.4	100.5	99.5	42.7	42.7	100.0	99.8	11.5	11.6	99.1	95.8	104	106	98.1	97.2	
G2	4.9	5.8	84.5	92.4	42.3	42.3	100.0	101.2	43.6	43.2	100.9	101.9	10.7	11.2	95.5	89.2	115	119	96.6	107.5	
H2	3.9	3.6	108.3	73.6	40.5	40.6	99.8	96.9	42.2	42.5	99.3	98.6	12.0	11.8	101.7	100.0	106	105	101.0	99.1	
I2		4.8				41.4				42.8				12.8				117			
J2	6.4	5.9	108.5	120.8	41.9	41.8	100.2	100.2	42.5	42.7	99.5	99.3	12.2	11.6	105.2	101.7	106	107	99.1	99.1	
K2	4.6	5.0	92.0	86.8	41.5	41.4	100.2	99.3	43.0	42.7	100.7	100.5	11.5	11.3	101.8	95.8	108	109	99.1	100.9	
M2	6.6	6.5	101.5	124.5	41.7	41.7	100.0	99.8	42.0	42.3	99.8	98.6	12.0	12.0	100.0	100.0	105	108	97.2	98.1	
N2	4.1	4.7	87.2	77.4	42.2	41.8	101.0	101.0	43.9	43.2	101.6	102.6	13.6	12.9	105.4	113.3	108	109	99.1	100.9	
O2	5.4	5.0	108.0	101.9	40.9	41.7	98.1	97.8	42.0	43.0	97.7	98.1	12.4	12.8	96.9	103.3	104	104	100.0	97.2	
P2	5.3	5.6	94.6	100.0	42.0	42.2	99.5	100.5	43.1	43.3	99.5	100.7	12.7	12.9	98.4	105.8	107	109	98.2	100.0	
Q2	5.9	5.7	103.5	111.3	42.1	41.9	100.5	100.7	43.0	42.9	100.2	100.5	11.2	11.3	99.1	93.3	103	104	99.0	96.3	
R2	6.1	5.9	103.4	115.1	41.3	41.4	99.8	98.8	42.0	42.3	99.3	98.1	11.6	11.8	98.3	96.7	109	106	102.8	101.9	
T2	4.6	5.2	88.5	86.8	41.4	41.0	101.0	99.0	42.8	42.2	101.4	100.0	10.9	11.0	99.1	90.8	108	108	100.0	100.9	
U2	5.3	5.3	100.0	100.0	41.4	41.8	99.0	99.0	42.5	42.9	99.1	99.3	13.5	13.5	100.0	112.5	101	99	102.0	94.4	
V2	4.2	4.5	93.3	79.2	42.2	42.2	100.0	101.0	42.4	42.6	99.5	99.1	12.5	12.2	102.4	104.2	108	109	99.1	100.9	
W2	6.2	5.4	114.8	117.0	42.2	42.1	100.2	101.0	42.9	43.2	99.3	100.2	11.2	11.2	100.0	93.3	105	105	100.0	98.1	
X2	5.5	5.4	101.8	103.8	42.1	42.4	99.3	100.7	43.2	43.5	99.3	100.9	12.6	13.0	96.9	105.0	107	108	99.1	100.0	
Y2	4.5	4.9	91.8	84.9	41.6	42.0	99.0	99.5	43.1	43.3	99.5	100.7	11.3	11.8	95.8	94.2	108	106	101.9	100.9	
Z2		4.5				41.4				42.9				11.5				107			
A3		5.1				41.3				42.5				13.1				108			
B3		4.0			43.1	42.5	101.4	103.1	43.1	43.2	99.8	100.7	11.1	11.3	98.2	92.5	115	108	106.5	107.5	
C3		4.9				41.3				42.7				12.0				106			
FKI DATA																					
CUR.																					
AV.	5.2				41.8				42.8				12.0				107				
CUM.																					
AV.	5.3				41.8				42.8				12.0				107				
IND.																					
*D	98.1				100.0				100.0				100.0				100.0				

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE VIII
 AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 42 LB. FOURDRINIER KRAFT LINERBOARD

DECEMBER, 1971

CODE	MOISTURE CONTENT, PERCENT				BASIS WT., LB./ M SQ. FT.				ADJ. BASIS WT.,*A LB./ M SQ. FT.				CALIPER, PT.				BURSTING STRENGTH, P.S.I.G.			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	5.9	5.6	105.4	113.5	41.7	42.0	99.3	99.8	42.6	43.0	99.1	99.5	11.9	12.2	97.5	99.2	106	107	99.1	99.1
B1		4.9				41.3				42.6				12.7				118		
D1		4.8			42.1	42.4	99.3	100.7	42.6	42.9	99.3	99.5	11.9	12.0	99.2	99.2	107	107	100.0	100.0
B1	5.4	5.5	98.2	103.8	42.2	42.0	100.5	101.0	42.3	42.2	100.2	98.8					105	104	101.0	98.1
F1	5.2	5.2	100.0	100.0	41.1	41.0	100.2	98.3	42.3	42.2	100.2	98.8	11.8	11.6	101.7	98.3	111	112	99.1	103.7
G1	4.4	4.5	97.8	84.6	41.7	41.6	100.2	99.8	43.2	43.1	100.2	100.9	11.4	11.3	100.9	95.0	115	110	104.5	107.5
H1		6.0				41.9				42.3				12.0				111		
I1	4.3	4.5	95.6	82.7	40.9	40.8	100.2	97.8	42.5	42.3	100.5	99.3	11.3	11.4	99.1	94.2	109	112	97.3	101.9
J1	4.8	4.9	98.0	92.3	42.6	42.4	100.5	101.9	43.0	42.8	100.5	100.5	12.4	12.3	100.8	103.3	104	106	98.1	97.2
L1	6.0	6.1	98.4	115.4	41.6	41.7	99.8	99.5	42.4	42.5	99.8	99.1	11.1	11.5	96.5	92.5	113	111	101.8	105.6
M1	4.4	4.5	97.8	84.6	42.3	41.5	101.9	101.2	43.9	42.9	102.3	102.6	11.8	12.0	98.3	98.3	111	110	100.9	103.7
N1		6.7				42.1				42.6				11.8				108		
O1	5.5	5.5	100.0	105.8	41.7	41.5	100.5	99.8	42.7	42.6	100.2	99.8	12.2	12.0	101.7	101.7	104	103	101.0	97.2
P1	5.1	5.1	100.0	98.1	41.6	41.2	101.0	99.5	42.8	42.4	100.9	100.0	12.0	12.0	100.0	100.0	107	108	99.1	100.0
Q1	5.6	5.8	96.6	107.7	41.7	41.5	100.5	99.8	42.7	42.4	100.7	99.8	11.5	11.5	100.0	95.8	107	105	101.9	100.0
R1	4.5	4.3	104.6	86.5	41.4	41.4	100.0	99.0	42.9	43.0	99.8	100.2	12.2	12.1	100.8	101.7	101	104	97.1	94.4
S1		6.1				42.6				43.4				12.5				105		
T1	5.3	5.0	106.0	101.9	41.9	41.5	101.0	100.2	43.0	42.8	100.5	100.5	11.9	11.9	100.0	99.2	103	106	97.2	96.3
W1	4.2	4.8	87.5	80.8	42.9	42.4	101.2	102.6	43.3	42.8	101.2	101.2	11.4	11.6	98.3	95.0	101	102	99.0	94.4
X1		6.5				42.8				43.2				12.7				98		
Y1		4.4				41.9				43.4				12.6				107		
A2		6.0				42.8				43.6				12.4				106		
B2	5.5	5.9	93.2	105.8	42.4	42.4	100.0	101.4	42.5	42.4	100.2	99.3	12.2	12.3	99.2	101.7	103	103	100.0	96.3
C2	5.2	5.7	91.2	100.0	41.8	42.0	99.5	100.0	43.0	42.9	100.2	100.5	12.6	12.2	103.3	105.0	108	106	101.9	100.9
D2	6.8	6.9	98.6	130.8	42.3	42.2	100.2	101.2	42.8	42.7	100.2	100.0	12.6	12.3	102.4	105.0	102	104	98.1	95.3
E2	5.1	5.4	94.4	98.1	41.5	41.3	100.5	99.3	42.7	42.4	100.7	99.8	12.1	11.8	102.5	100.8	110	110	100.0	102.8
F2	5.3	5.0	106.0	101.9	41.6	41.4	100.5	99.5	42.7	42.7	100.0	99.8	11.8	11.6	101.7	98.3	106	106	100.0	99.1
G2	5.0	5.7	87.7	96.2	42.1	42.3	99.5	100.7	43.4	43.3	100.2	101.4	10.9	11.1	98.2	90.8	119	118	100.8	111.2
H2	4.2	3.6	116.7	80.8	40.6	40.6	100.0	97.1	42.2	42.5	99.3	98.6	12.3	11.8	104.2	102.5	105	106	99.0	98.1
I2		4.8				41.4				42.8				12.8				117		
J2	6.4	6.0	106.7	123.1	41.7	41.8	99.8	99.8	42.3	42.6	99.3	98.8	12.5	11.7	106.8	104.2	104	107	97.2	97.2
K2	4.6	5.0	92.0	88.5	41.2	41.4	99.5	98.6	42.6	42.7	99.8	99.5	11.8	11.3	104.4	98.3	109	108	100.9	101.9
M2	6.2	6.5	95.4	119.2	41.8	41.7	100.2	100.0	42.5	42.3	100.5	99.3	12.0	12.0	100.0	100.0	105	108	97.2	98.1
N2	4.7	4.7	100.0	90.4	41.8	41.8	100.0	100.0	43.2	43.2	100.0	100.9	13.7	13.0	105.4	114.2	108	109	99.1	100.9
O2	5.4	4.9	110.2	103.8	41.9	41.6	100.7	100.2	43.0	42.9	100.2	100.5	12.8	12.7	100.8	106.7	105	104	101.0	98.1
P2	5.4	5.5	98.2	103.8	42.0	42.2	99.5	100.5	43.1	43.2	99.8	100.7	12.9	12.9	100.0	107.5	107	109	98.2	100.0
Q2	5.8	5.8	100.0	111.5	42.0	42.0	100.0	100.5	42.9	42.9	100.0	100.2	11.4	11.3	100.9	95.0	103	104	99.0	96.3
R2	6.2	5.9	105.1	119.2	41.4	41.4	100.0	99.0	42.1	42.3	99.5	98.4	11.8	11.8	100.0	98.3	110	107	102.8	102.8
T2	4.4	5.2	84.6	84.6	41.2	41.1	100.2	98.6	42.7	42.3	100.9	99.8	10.6	11.0	96.4	88.3	107	108	99.1	100.0
U2		5.3				41.7				42.9				13.5				100		
V2	4.4	4.4	100.0	84.6	42.3	42.2	100.2	101.2	42.5	42.6	99.8	99.3	12.7	12.2	104.1	105.8	106	109	97.2	99.1
W2	5.9	5.5	107.3	113.5	42.2	42.1	100.2	101.0	43.1	43.2	99.8	100.7	11.1	11.2	99.1	92.5	106	105	101.0	99.1
X2	5.3	5.4	98.1	101.9	42.1	42.4	99.3	100.7	43.2	43.5	99.3	100.9	12.8	13.0	98.5	106.7	107	108	99.1	100.0
Y2	4.8	4.8	100.0	92.3	41.6	42.0	99.0	99.5	43.0	43.3	99.3	100.5	11.2	11.8	98.9	93.3	112	107	104.7	104.7
Z2		4.5				41.4				42.9				11.5				107		
A3		5.1				41.3				42.5				13.1				108		
B3		4.3			42.7	42.8	99.8	102.2	43.5	43.3	100.5	101.6	10.7	11.3	94.7	89.2	115	109	105.5	107.5
C3		4.9				41.3				42.7				12.0				106		
PKI DATA																				
CUR.																				
AV.	5.2				41.8				42.8				11.9				107			
CUM.																				
AV.	5.2				41.8				42.8				12.0				107			
IND.																				
*D	100.0				100.0				100.0				99.2				100.0			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE IX

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 69 LB. FOURDRINIER KRAFT LINERBOARD

NOVEMBER, 1971

CODE	MOISTURE CONTENT, PERCENT				BASIS WT., LB./ M SQ. FT.				ADJ. BASIS WT.,*A LB./ M SQ. FT.				CALIPER, PT.				BURSTING STRENGTH, P.S.I.G.				
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				
	CUR. AV.	CUM. AV.	FACT. #B	IND. #C	CUR. AV.	CUM. AV.	FACT. #B	IND. #C	CUR. AV.	CUM. AV.	FACT. #B	IND. #C	CUR. AV.	CUM. AV.	FACT. #B	IND. #C	CUR. AV.	CUM. AV.	FACT. #B	IND. #C	
A1	5.7	6.2	91.9	98.3	69.7	69.0	101.0	101.4	71.3	70.2	101.6	101.8	20.0	19.4	103.1	102.0	146	148	98.6	101.4	
B1	6.0	6.1	98.4	103.4	69.1	68.1	101.5	100.6	70.5	69.4	101.6	100.7	19.3	18.6	103.8	98.5	152	154	98.7	105.6	
D1		5.0			70.7	69.4	101.9	102.9	70.3	70.3	100.0	100.4	20.1	19.8	101.5	102.6	146	148	98.6	101.4	
E1	6.0	6.2	96.8	103.4	69.0	68.5	100.7	100.4	69.2	68.7	100.7	98.8					146	148	98.6	101.4	
G1	4.6	4.6	100.0	79.3	67.9	67.9	100.0	98.8	70.3	70.3	100.0	100.4	20.0	19.5	102.6	102.0	149	142	104.9	103.5	
H1	5.7	6.6	86.4	98.3	68.6	68.9	99.6	99.8	69.1	69.4	99.6	98.7	19.0	19.0	100.0	96.9	165	154	107.1	114.6	
I1	3.8	4.3	88.4	65.5	67.1	67.2	99.8	97.7	70.0	69.8	100.3	100.0	18.6	18.4	101.1	94.9	148	149	99.3	102.8	
J1	5.1	5.3	96.2	87.9	69.7	69.5	100.3	101.4	70.3	70.1	100.3	100.4	19.6	19.7	99.5	100.0	141	142	99.3	97.9	
L1	6.2	6.3	98.4	106.9	68.6	68.7	99.8	99.8	69.8	69.8	100.0	99.7	19.9	19.5	102.0	101.5	140	142	98.6	97.2	
M1	5.1	4.2	121.4	87.9	70.2	68.0	103.2	102.2	72.2	70.7	102.1	103.1	19.1	19.7	97.0	97.4	145	153	94.8	100.7	
N1		7.2				69.6				70.0				19.6				147			
O1	6.1	6.3	96.8	105.2	68.2	67.8	100.6	99.3	69.4	68.9	100.7	99.1	20.4	20.2	101.0	104.1	136	133	102.2	94.4	
P1		6.2				68.5				69.7				19.6				146			
T1	4.9	4.9	100.0	84.5	69.1	67.9	101.8	100.6	71.2	70.0	101.7	101.7	21.3	20.2	105.4	108.7	143	147	97.3	99.3	
W1	5.8	5.9	98.3	100.0	69.7	69.3	100.6	101.4	70.3	69.9	100.6	100.4	18.9	19.1	99.0	96.4	140	141	99.3	97.2	
A2		6.7				70.2				71.0				20.6				140			
B2	5.5	6.2	88.7	94.8	69.2	69.5	99.6	100.7	69.4	69.8	99.4	99.1	20.8	20.8	100.0	106.1	134	142	94.4	93.0	
C2	6.5	6.0	108.3	112.1	69.0	69.0	100.0	100.4	70.0	70.4	99.4	100.0	21.0	19.9	105.5	107.1	141	139	101.4	97.9	
D2	7.6	7.7	98.7	131.0	69.7	69.6	100.1	101.4	69.8	69.7	100.1	99.7	21.0	20.4	102.9	107.1	146	142	102.8	101.4	
E2	5.9	5.8	101.7	101.7	68.3	68.4	99.8	99.4	69.7	69.9	99.7	99.6	19.5	18.7	104.3	99.5	147	147	100.0	102.1	
F2	5.0	5.8	86.2	86.2	67.6	68.1	99.3	98.4	69.6	69.6	100.0	99.4	19.3	19.3	100.0	98.5	134	136	98.5	93.0	
G2	6.3	6.4	98.4	108.6	69.8	69.1	101.0	101.6	70.9	70.1	101.1	101.3	18.7	19.3	96.9	95.4	151	150	100.7	104.9	
H2	4.8	4.4	109.1	82.8	67.0	67.2	99.7	97.5	69.2	69.6	99.4	98.8	20.3	19.5	104.1	103.6	143	145	98.6	99.3	
I2	4.1	4.5	91.1	70.7	67.8	68.7	98.7	98.7	70.5	71.2	99.0	100.7	20.2	20.6	98.0	103.1	147	143	102.8	102.1	
J2	7.1	6.8	104.4	122.4	68.7	68.7	100.0	100.0	69.2	69.4	99.7	98.8	20.1	19.6	102.6	102.6	147	146	100.7	102.1	
K2	5.1	5.2	98.1	87.9	68.3	68.5	99.7	99.4	70.3	70.4	99.8	100.4	18.3	18.2	100.5	93.4	148	148	100.0	102.8	
M2	6.9	6.8	101.5	119.0	69.1	68.6	100.7	100.6	69.8	69.3	100.7	99.7	20.0	19.3	103.6	102.0	145	150	96.7	100.7	
N2		5.4				68.9				70.7				22.5				146			
O2	5.0	5.5	90.9	86.2	67.8	68.6	98.8	98.7	69.8	70.4	99.1	99.7	20.6	21.1	97.6	105.1	141	139	101.4	97.9	
P2	5.3	5.2	101.9	91.4	68.6	69.2	99.1	99.8	70.5	71.1	99.2	100.7	20.4	20.8	98.1	104.1	137	140	97.8	95.1	
Q2	7.0	6.8	102.9	120.7	68.5	68.4	100.1	99.7	69.1	69.2	99.8	98.7	18.9	19.5	96.9	96.4	139	138	100.7	96.5	
T2	4.4	4.8	91.7	75.9	68.1	67.6	100.7	99.1	70.6	69.8	101.1	100.8	18.0	18.2	98.9	91.8	140	148	94.6	97.2	
V2	4.1	4.0	102.5	70.7	68.8	69.3	99.3	100.1	69.1	70.0	98.7	98.7	21.2	21.0	101.0	108.2	152	147	103.4	105.6	
W2	6.9	6.5	106.2	119.0	69.7	69.4	100.4	101.4	70.4	70.3	100.1	100.6	18.6	18.7	99.5	94.9	144	144	100.0	100.0	
X2		5.6				69.0				70.7				22.1				147			
Y2	5.5	5.4	101.8	94.8	68.8	68.8	100.0	100.1	70.5	70.6	99.8	100.7	19.1	19.8	96.5	97.4	143	140	102.1	99.3	
A3		5.4				68.1				69.9				21.3				145			
B3		4.3				69.4				70.6			18.7	18.8	99.5	95.4	156	147	106.1	108.3	
C3	5.9	7.1	83.1	101.7	69.3	69.5	99.7	100.9	70.8	70.0	101.1	101.1	19.2	19.3	99.5	98.0	147	142	103.5	102.1	
FKI DATA																					
CUR.																					
AV.	5.6					68.8				70.1				19.7				145			
CUM.																					
AV.	5.8					68.7				70.0				19.6				144			
IND.																					
*D	96.6					100.1				100.1				100.5				100.7			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE I
 AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 69 LB. FOURDRINIER KRAFT LINERBOARD
 DECEMBER, 1971

CODE	MOISTURE CONTENT, PERCENT				BASIS WT., LB./ M SQ. FT.				ADJ. BASIS WT.,*A LB./ M SQ. FT.				CALIPER, PT.				BURSTING STRENGTH, P.S.I.G.			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	6.0	6.2	96.8	103.4	69.0	69.1	99.8	100.4	70.4	70.3	100.1	100.6	19.7	19.5	101.0	100.5	144	148	97.3	100.0
B1	6.1	6.1	100.0	105.2	69.2	68.2	101.5	100.7	70.4	69.4	101.4	100.6	18.7	18.6	100.5	95.4	153	154	99.4	106.2
D1		5.2			68.8	69.9	98.4	100.1	70.0	70.3	99.6	100.0	19.7	19.4	101.5	100.5	146	148	98.6	101.4
E1	6.1	6.2	98.4	105.2	68.7	68.5	100.3	100.0	68.9	68.8	100.1	98.4					146	148	98.6	101.4
G1	4.6	4.6	100.0	79.3	68.1	67.9	100.3	99.1	70.5	70.3	100.3	100.7	20.0	19.6	102.0	102.0	147	143	102.8	102.1
H1		6.4				68.9				69.4				19.0				154		
I1	3.8	4.2	90.5	65.5	66.6	67.2	99.1	96.9	69.5	69.8	99.6	99.3	18.0	18.4	97.8	91.8	147	149	98.6	102.1
J1	5.2	5.4	96.3	89.6	69.9	69.6	100.4	101.7	70.5	70.2	100.4	100.7	19.5	19.7	99.0	99.5	140	142	98.6	97.2
L1		6.3				68.7				69.8				19.5				142		
M1	4.3	4.3	100.0	74.1	69.6	68.3	101.9	101.3	72.2	70.9	101.8	103.1	19.8	19.7	100.5	101.0	150	152	98.7	104.2
N1		7.2				69.6				70.0				19.6				147		
O1	6.7	6.3	106.3	115.5	67.6	67.8	99.7	98.4	68.4	68.9	99.3	97.7	20.7	20.2	102.5	105.6	135	133	101.5	93.8
P1		6.2				68.5				69.7				19.6				146		
T1	4.7	4.9	95.9	81.0	67.9	68.0	99.8	98.8	70.2	70.1	100.1	100.3	22.6	20.3	111.3	115.3	140	146	95.9	97.2
W1	5.8	5.9	98.3	100.0	69.8	69.3	100.7	101.6	70.4	69.9	100.7	100.6	18.9	19.0	99.5	96.4	139	141	98.6	96.5
A2		6.6				70.2				71.1				20.6				140		
B2	6.3	6.1	103.3	108.6	69.0	69.5	99.3	100.4	69.2	69.7	99.3	98.8	20.5	20.8	98.6	104.6	137	142	96.5	95.1
C2	6.3	6.1	103.3	108.6	69.1	69.0	100.1	100.6	70.2	70.3	99.8	100.3	20.7	20.0	103.5	105.6	139	139	100.0	96.5
D2	8.0	7.7	103.9	137.9	69.6	69.6	100.0	101.3	69.5	69.7	99.7	99.3	20.9	20.5	102.0	106.6	141	142	99.3	97.9
E2	5.3	5.9	89.8	91.4	68.0	68.4	99.4	99.0	69.8	69.9	99.8	99.7	19.1	18.7	102.1	97.4	146	147	99.3	101.4
F2	5.8	5.6	103.6	100.0	67.8	68.0	99.7	98.7	69.3	69.6	99.6	99.0	19.3	19.3	100.0	98.5	137	136	100.7	95.1
G2	5.8	6.4	90.6	100.0	69.2	69.2	100.0	100.7	70.7	70.3	100.6	101.0	18.4	19.2	95.8	93.9	160	150	106.7	111.1
H2	4.5	4.5	100.0	77.6	66.8	67.2	99.4	97.2	69.2	69.6	99.4	98.8	20.2	19.6	103.1	103.1	144	145	99.3	100.0
I2	5.5	4.3	127.9	94.8	68.6	68.2	100.6	99.8	70.3	70.8	99.3	100.4	20.4	20.4	100.0	104.1	141	145	97.2	97.9
J2	7.3	6.8	107.4	125.9	68.8	68.6	100.3	100.1	69.1	69.4	99.6	98.7	20.5	19.6	104.6	104.6	143	147	97.3	99.3
K2	5.2	5.2	100.0	89.6	68.3	68.5	99.7	99.4	70.2	70.4	99.7	100.3	18.2	18.2	100.0	92.8	148	148	100.0	102.8
H2	7.0	6.8	102.9	120.7	68.5	68.6	99.8	99.7	69.1	69.4	99.6	98.7	20.0	19.4	103.1	102.0	145	151	96.0	100.7
N2		5.4				68.9				70.7				22.5				146		
O2	4.6	5.4	85.2	79.3	67.7	68.4	99.0	98.5	70.1	70.2	99.8	100.1	20.7	21.0	98.6	105.6	141	139	101.4	97.9
P2	6.1	5.2	117.3	105.2	68.8	69.2	99.4	100.1	70.0	71.1	98.4	100.0	20.6	20.8	99.0	105.1	136	140	97.1	94.4
Q2	7.2	6.8	105.9	124.1	68.5	68.5	100.0	99.7	69.0	69.2	99.7	98.6	19.0	19.4	97.9	96.9	138	139	99.3	95.8
F2	4.3	4.8	89.6	74.1	68.2	67.7	100.7	99.3	70.8	70.0	101.1	101.1	18.2	18.1	100.6	92.8	152	147	103.4	105.6
V2	4.9	4.0	122.5	84.5	69.1	69.2	99.8	100.6	69.4	69.9	99.3	99.1	21.8	21.1	103.3	111.2	146	148	98.6	101.4
H2	7.2	6.6	109.1	124.1	69.9	69.4	100.7	101.7	70.4	70.4	100.0	100.6	18.4	18.7	98.4	93.9	146	144	101.4	101.4
X2		5.6				69.0				70.7				22.1				147		
Y2	5.3	5.4	98.1	91.4	68.4	68.8	99.4	99.6	70.2	70.6	99.4	100.3	19.5	19.7	99.0	99.5	139	140	99.3	96.5
A3		5.4				68.1				69.9				21.2				144		
B3		4.4			70.4	69.6	101.1	102.5	71.0	70.6	100.6	101.4	18.7	18.9	98.9	95.4	145	149	97.3	100.7
C3	7.0	7.0	100.0	120.7	69.6	69.4	100.3	101.3	70.2	70.1	100.1	100.3	19.3	19.3	100.0	98.5	150	142	105.6	104.2
PKI DATA																				
CUR. AV.	5.8				68.7				70.0				19.7				144			
CUM. AV.	5.8				68.7				70.0				19.6				144			
IND. *D	100.0				100.0				100.0				100.5				100.0			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE XI
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 90 LB. FOURDRINIER KRAFT LINERBOARD
NOVEMBER, 1971

CODE	MOISTURE CONTENT, PERCENT				BASIS WT., LB./ M SQ. FT.				ADJ. BASIS WT.,*A LB./ M SQ. FT.				CALIPER, PT.				BURSTING STRENGTH, P.S.I.G.			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	6.2	6.7	92.5	101.6	90.6	89.5	101.2	101.2	92.1	90.6	101.6	101.2	25.2	24.6	102.4	99.6	175	179	97.8	102.3
B1	6.0	6.3	95.2	98.4	89.9	88.8	101.2	100.4	91.7	90.2	101.7	100.8	24.8	24.6	100.8	98.0	185	184	100.5	108.2
D1		5.4				90.0				91.5			25.5	25.0	102.0	100.8	185	180	102.8	108.2
E1		5.9				89.0				89.4								173		
I1		4.0				86.4				90.0				24.0				190		
J1		5.6				90.6				91.4				26.0				167		
L1		6.3				89.4				90.9				24.8				162		
M1		4.4				90.1				93.4				24.4				190		
O1	6.4	6.2	103.2	104.9	87.2	87.5	99.6	97.4	88.5	89.0	99.4	97.2	26.7	25.9	103.1	105.5	164	163	100.6	95.9
P1		6.2				89.3				90.8				26.1				171		
S1		7.1				91.4				92.0				25.8				169		
T1	5.6	5.2	107.7	91.8	87.9	89.0	98.8	98.2	90.0	91.5	98.4	98.9	28.2	26.7	105.6	111.5	169	178	94.9	98.8
C2	6.6	6.3	104.8	108.2	90.0	90.0	100.0	100.6	91.2	91.4	99.8	100.2	27.3	26.2	104.2	107.9	173	174	99.4	101.2
E2	6.2	5.9	105.1	101.6	89.3	89.1	100.2	99.8	90.8	91.0	99.8	99.8	26.3	25.0	105.2	104.0	169	172	98.2	98.8
F2	6.0	5.9	101.7	98.4	88.9	88.8	100.1	99.3	90.7	90.7	100.0	99.7	24.6	25.0	98.4	97.2	161	163	98.8	94.2
H2		4.4				87.3				90.5				25.5				166		
I2	4.9	5.5	89.1	80.3	88.8	88.8	100.0	99.2	91.6	91.0	100.6	100.6	26.5	25.9	102.3	104.7	169	174	97.1	98.8
J2	7.5	7.1	105.6	123.0	89.9	89.7	100.2	100.4	90.2	90.4	99.8	99.1	26.4	25.8	102.3	104.3	171	174	98.3	100.0
M2	7.2	6.6	109.1	118.0	89.2	90.1	99.0	99.7	89.8	91.3	98.4	98.7	25.0	25.0	100.0	98.8	190	194	97.9	111.1
Q2	5.4	5.5	98.2	88.5	87.7	89.2	98.3	98.0	90.0	91.4	98.5	98.9	26.5	26.7	99.2	104.7	166	165	100.6	97.1
P2	5.6	5.3	105.7	91.8	89.3	90.2	99.0	99.8	91.4	92.6	98.7	100.4	26.1	27.1	96.3	103.2	168	159	105.7	98.2
T2		5.2				87.6				90.1				23.9				178		
V2		5.3				90.2				92.6				27.0				174		
W2	7.7	7.1	108.4	126.2	91.6	90.0	101.8	102.3	91.7	90.7	101.1	100.8	24.5	24.2	101.2	96.8	177	171	103.5	103.5
Y2	5.3	5.6	94.6	86.9	90.5	91.1	99.3	101.1	92.9	93.3	99.6	102.1	24.9	24.4	102.0	98.4	162	163	99.4	94.7
B3		4.8				90.8				92.3			23.8	24.9	95.6	94.1	176	179	98.3	102.9
C3	8.0	8.1	98.8	131.1	90.6	90.6	100.0	101.2	90.4	90.3	100.1	99.3	23.0	23.4	98.3	90.9	167	165	101.2	97.7
FKI DATA																				
CUR.																				
AV. 6.3																				
CUM.																				
AV. 6.1																				
IND.																				
#D 103.3																				

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE XII
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 90 LB. FOURDRINIER KRAFT LINERBOARD
DECEMBER, 1971

CODE	MOISTURE CONTENT, PERCENT				BASIS WT., LB./ M SQ. FT.				ADJ. BASIS WT.,*A LB./ M SQ. FT.				CALIPER, PT.				BURSTING STRENGTH, P.S.I.G.			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	6.3	6.6	95.4	103.3	89.5	89.6	99.9	100.0	90.9	90.8	100.1	99.9	25.7	24.7	104.0	101.2	180	178	101.1	105.3
B1	6.0	6.2	96.8	98.4	89.8	88.8	101.1	100.3	91.6	90.3	101.4	100.6	24.6	24.6	100.0	96.8	188	185	101.6	109.9
D1		5.4			91.0	90.2	100.9	101.7	91.9	91.4	100.5	101.0	25.0	25.0	100.0	98.4	186	181	102.8	108.8
E1	5.4	5.9	91.5	88.5	90.1	89.0	101.2	100.7	90.4	89.4	101.1	99.3					176	173	101.7	102.9
I1		4.0				86.4				90.0				24.0				190		
J1		5.6				90.6				91.4				26.0				167		
L1		6.3				89.4				90.9				24.8				162		
M1		4.4				90.1				93.4				24.4				190		
O1	6.2	6.2	100.0	101.6	87.3	87.4	99.9	97.5	88.8	88.9	99.9	97.6	26.4	26.0	101.5	103.9	161	163	98.8	94.2
P1		6.2				89.3				90.8				26.1				171		
S1		7.1				91.3				92.0				25.8				169		
T1	5.5	5.3	103.8	90.2	88.9	88.9	100.0	99.3	91.1	91.3	99.8	100.1	27.4	26.8	102.2	107.9	168	177	94.9	98.2
C2	6.6	6.4	103.1	108.2	90.4	90.0	100.4	101.0	91.6	91.4	100.2	100.6	27.2	26.2	103.8	107.1	176	174	101.1	102.9
E2	6.1	6.0	101.7	100.0	89.1	89.1	100.0	99.6	90.7	90.9	99.8	99.7	25.3	25.1	100.8	99.6	169	171	98.8	98.8
F2	6.0	5.9	101.7	98.4	89.1	88.8	100.3	99.6	90.9	90.7	100.2	99.9	25.4	25.1	101.2	100.0	159	162	98.1	93.0
H2	4.9	4.4	111.4	80.3	87.1	87.3	99.8	97.3	89.8	90.5	99.2	98.7	25.7	25.5	100.8	101.2	171	166	103.0	100.0
I2	6.0	5.2	115.4	98.4	89.2	88.8	100.4	99.7	91.0	91.3	99.7	100.0	25.9	26.2	98.8	102.0	172	172	100.0	100.6
J2	7.7	7.1	108.4	126.2	90.0	89.7	100.3	100.6	90.1	90.4	99.7	99.0	27.6	26.0	106.2	108.7	166	173	96.0	97.1
H2		7.2				89.2				89.8				25.0				190		
O2	5.7	5.5	103.6	93.4	88.5	89.0	99.4	98.9	90.5	91.2	99.2	99.4	26.0	26.8	97.0	102.4	165	165	100.0	96.5
P2	6.4	5.3	120.8	104.9	89.8	90.1	99.7	100.3	91.1	92.6	98.4	100.1	27.0	27.0	100.0	106.3	161	160	100.6	94.2
T2		5.2				87.5				90.0				23.6				179		
V2		5.3				90.2				92.6				27.0				174		
H2	7.9	7.1	111.3	129.5	91.6	90.1	101.7	102.3	91.5	90.8	100.8	100.5	24.3	24.3	100.0	95.7	178	172	103.5	104.1
Y2		5.5				91.0				93.3				24.5				163		
B3		5.1				91.5				92.4				24.8				177		
C3	7.7	8.1	95.1	126.2	90.7	90.5	100.2	101.3	90.8	90.2	100.7	99.8	23.5	23.4	100.4	92.5	169	166	101.8	98.8
FKI DATA																				
CUR.																				
AV.	6.3				89.5				90.8				25.8				172			
CUM.																				
AV.	6.1				89.5				91.0				25.4				171			
IND.																				
*D	103.3				100.0				99.8				101.6				100.6			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

Data submitted by the participating mills relative to conditioning and testing environments are summarized in Table XIII. The procedures used in calculating adjusted basis weight, cumulative machine averages, machine factors, machine indexes, and FKI indexes are described in the Appendix.

It should be explained that the number of machines for which data are compiled in each table for a specified month varies for these reasons: a machine must have (a) produced at least 500 tons of the pertinent grade weight during the specified month, or (b) produced 500 tons of the pertinent grade weight during any one or more of the 12 months prior to the specified month (so that a cumulative average is available), to be included in a given table.

TABLE XIII
 DATA ON CONDITIONING AND TESTING ENVIRONMENTS
 NOVEMBER AND DECEMBER, 1971

Code	Conditioning Environment			Testing Environment	
	Are Quality Samples Conditioned Before Testing?	Procedure Time	R.H., %	Temp., °F.	
A1	No	--	--	--	Yes: 72 ± 2°F.; 50 ± 1% R.H.
B1	No	--	--	--	No
C1	No	--	--	--	No
D1	Yes	Note ^a	--	--	Yes: 72 ± 2°F.; 50 ± 2% R.H.
E1	No	--	--	--	No
F1	No	--	--	--	No
G1	No	--	--	--	Yes: 73 ± 3.5°F.; 50 ± 2% R.H.
H1	Yes	15 min.	--	--	Yes: 73 ± 2°F.; 50 ± 1% R.H.
I1	No	--	--	--	No
J1	No	--	--	--	Yes: 73 ± 3°F.; 50 ± 2% R.H.
K1	No	--	--	--	No
L1	No	--	--	--	No
M1	Yes	15 min.	--	--	Yes: 73 ± 3.5°F.; 50 ± 2% R.H.
N1	No	--	--	--	Yes: 72 ± 2°F.; 55 ± 5% R.H.
O1	No	--	--	--	Yes: 73 ± 2°F.; 50 ± 2% R.H.
P1	No	--	--	--	Yes: 73 ± 2°F.; 50 ± 3% R.H.
Q1	No	--	--	--	No
R1	No	--	--	--	Yes: 73 ± 3°F.; 50 ± 1% R.H.
S1	No data submitted for November and December				
T1	Yes	--	--	--	Yes: 72 ± 2°F.; 50 ± 2% R.H.
U1	No	--	--	--	Yes: 73 ± 2°F.; 50 ± 2% R.H.
V1	Yes	7 min.	--	--	Yes: 73 ± 3°F.; 50 ± 2% R.H.
W1	Yes	Note ^b	--	--	Yes: 73 ± 2°F.; 50 ± 2% R.H.
X1	No data submitted for November and December				
Y1	No data submitted for November and December				
Z1	No	--	--	--	Yes: 73 ± 2°F.; 50 ± 2% R.H.
A2	No data submitted for November and December				
B2	No	--	--	--	No
C2	No	--	--	--	Yes: 73 ± 2°F.; 50 ± 2% R.H.
D2	No	--	--	--	No
E2	No	--	--	--	Yes: 73 ± 2°F.; 50 ± 3% R.H.
F2	No	--	--	--	Yes: 73 ± 3°F.; 50 ± 5% R.H.
G2	No	--	--	--	Yes: 73 ± 2°F.; 50 ± 2% R.H.
H2	No	--	--	--	No
I2	No	--	--	--	No
J2	No	--	--	--	No
K2	No	--	--	--	No
L2	No	--	--	--	No
M2	No	--	--	--	No
N2	No	--	--	--	Yes: 72 ± 3.5°F.; 50 ± 2% R.H.
O2	No	--	--	--	No
P2	No	--	--	--	Yes: 70 ± 2°F.; 50 ± 2% R.H.
Q2	No	--	--	--	No
R2	No	--	--	--	No
S2	No data submitted for November and December				
T2	No	--	--	--	No
U2	No	--	--	--	Yes: 73 ± 3°F.; 50 ± 2% R.H.
V2	Yes	5-20 min.	--	--	Yes: 72 ± 1°F.; 50 ± 5% R.H.
W2	No	--	--	--	No
X2	No	--	--	--	Yes: 70 ± 2°F.; 50 ± 2% R.H.
Y2	No	--	--	--	Yes: 73 ± 3°F.; 50 ± 2% R.H.
Z2	No	--	--	--	Yes: 73 ± 3.5°F.; 50 ± 2% R.H.
A3	No data submitted for November and December				
B3	Yes	Note ^a	--	--	Yes: 72 ± 2°F.; 50 ± 2% R.H.
C3	No	--	--	--	No

^aSamples were brought to equilibrium at standard temperature and humidity.

^bSamples are rapidly conditioned to 73°F. and 50% R.H. by air blast.

THE INSTITUTE OF PAPER CHEMISTRY



R. C. McKee, Chairman
Container Section

APPENDIX

NOTES A, B, C, AND D, USED IN TABULATIONS OF MILL DATA

Notes A, B, C, and D, used in the tables of mill data are given below; these notes define the procedure used in calculating adjusted basis weight, machine factor, machine index, and F.K.I. index. It should be stressed that each formula is applicable only to a specific physical property of a specific grade weight of linerboard.

Note A: Adjusted basis weight (ABW) = reported weight (RBW) adjusted to moisture content of 7.8%:

$$ABW = RBW \left[\frac{(100 - \text{reported moisture content, \%})}{(100 - 7.8)} \right]$$

Note B: Machine factor (%) = $\left[\frac{\text{Current machine average}}{\text{Cumulative machine average}} \right] \cdot 100$ where

$$\text{Cumulative machine average} = \leq \frac{\text{CMA's}^a \text{ for previous 12 months excluding CMA for current month}}{12}$$

Note C: Machine index (%) = $\left[\frac{\text{Current machine average}}{\text{Cumulative F.K.I. average}} \right] \cdot 100$ where

$$\text{Cumulative F.K.I. average} = \leq \frac{\text{CFKIA's}^b \text{ for previous 12 months excluding CFKIA for current month}}{12}$$

Note D: F.K.I. index (%) = $\left[\frac{\text{Current F.K.I. average}}{\text{Cumulative F.K.I. average}} \right] \cdot 100$ where

$$\text{Current F.K.I. average} = \leq \frac{\text{CMA's}^a \text{ for current month for all machines}}{\text{Number of machines}}$$

^aCMA = current machine average for a specific physical property of a specific linerboard grade weight obtained during a given month on a specific machine.

^bCFKIA = current FKI average for a specific physical property of a specific linerboard grade weight obtained during a given month.

IPST HASELTON LIBRARY



5 0602 01053462 8