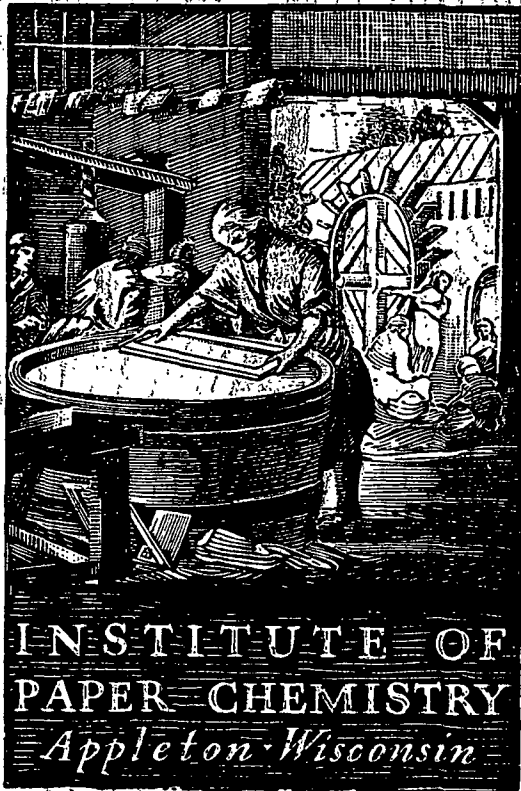


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FORTY-FIRST PRODUCTION DATA REPORT

✓ Project 1108-31

Report Seven

A Progress Report

to

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

May 30, 1969

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ADDENDUM

(After the Production Data Report had been prepared, additional production data were received. Rather than delay issuance of Report Seven, the additional production data have been included in an Addendum. The tonnages given herewith represent, therefore, the latest reported production data.)

1. Total production for 1968 was 9,461,866 tons.

TABLE I

LINERBOARD PRODUCTION FOR 1968

Domestic linerboard	6,813,466
Decorative linerboard	606,074
Wet-strength linerboard	265,149
Functional linerboard	78,501
Other end uses	488,675
Export linerboard	1,210,000

2. Average tons per company for year 1968: 498,000

TABLE II
DOMESTIC LINERBOARD

Regular Grades	Tons	% of Total
26 ^a		
27 - 32	617,362	9.06
33	6,175	.09
34 - 37	646,113	9.48
38	9,808	.14
39 - 41	582,174	8.54
42	1,987	.03
	3,102,026	45.53
43 - 46		
47	68,802	1.01
48 - 68	73,268	1.08
69	77,273	1.13
70 - 89	1,226,789	18.01
90	3,317	.05
91 & up	391,901	5.75
	6,471	.09
Total	6,813,466	

^aIncludes 2,798 tons of 17-lb.; 26 tons of 24-lb.; and 3,098 tons of 25-lb. linerboard.

TABLE III
SPECIAL LINERBOARD

	Tons
Decorative linerboard	606,074
Wet-strength linerboard	265,149
Functional linerboard	78,501
Other end uses	488,675
Total	1,438,399

TABLE IV
EXPORT LINERBOARD

Grade, lb.	Tons	Grade, lb.	Tons
22 ^a	624	57	580
23	4,272	58	256
24	1,011	59	--
25	57,601	60	2
26	187,475	61	4,365
27	281	62	6,392
28	762	63	21,545
29	--	64	30,521
30	17,049	65	--
31	43,879	66	667
32	2,997	67	1,147
33	95,117	68	19,010
34	--	69	214,628
35	11,776	70	1,588
36	14,736	71	--
37	9,604	72	9
38	57,043	73	--
39	1,283	74	--
40	14,946	75	--
41	89,914	76	2,947
42	141,984	77	--
43	--	78	120
44	16	79	--
45	318	80	151
46	14,594	81	--
47	81,146	82	58
48	--	83	--
49	--	84	--
50	--	85	77
51	99	86	--
52	800	87	131
53	--	88	--
54	--	89	--
55	--	90	55,840
56	--	91 & up	640
Total			1,210,001

^aIncludes 43 tons of 17-lb. linerboard.

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

FORTY-FIRST PRODUCTION DATA REPORT

SUMMARY

Production of fourdrinier kraft linerboard by the nineteen member companies of the Fourdrinier Kraft Board Institute, Inc. during 1968 is summarized in this report. The following data may be of interest:

1. Total production for 1968 was 9,439,382 tons.

TABLE I

LINERBOARD PRODUCTION FOR 1968

Domestic linerboard	6,802,897 tons
Decorative linerboard	574,476 tons
Wet-strength linerboard	269,107 tons
Functional linerboard	78,501 tons
Other end uses	492,524 tons
Export linerboard	1,221,877 tons

2. Comparison of total production for the years 1960 through 1968 using average tons per company per year:

1960	334,000
1961	301,000
1962	318,000
1963	331,000
1964	347,000
1965	362,000
1966	410,000
1967	402,000
1968	497,000

DISCUSSION OF RESULTS

The following companies submitted production data for inclusion in this report:

Alton Box Board Company
The Chesapeake Corporation of Virginia
Container Corporation of America
Continental Can Company, Inc.
Crown Zellerbach Corporation
Georgia Kraft Company
Georgia-Pacific Corporation
Great Northern Paper Company (Great Southern Division)
Hoerner Waldorf Corporation
International Paper Company
Olinkraft, Inc.
Owens-Illinois, Inc.
St. Joe Paper Company
St. Regis Paper Company
Tennessee River Pulp & Paper Company
Union Camp Corporation
Western Kraft Corporation
Westvaco Corporation
Weyerhaeuser Company

Tables II through IV show the total tonnages by grade compiled from the reports of the nineteen companies.

Definitions employed on the report forms submitted by each company are given in Appendix A.

TABLE II
DOMESTIC LINERBOARD

Regular Grades	Tons	% of Total
26 ^a	617,597	9.08
27 - 32	6,377	0.09
33	645,491	9.49
34 - 37	10,098	0.15
38	581,406	8.55
39 - 41	1,987	0.03
42	3,104,742	45.64
43 - 46	68,802	1.01
47	73,619	1.08
48 - 68	77,500	1.14
69	1,215,592	17.87
70 - 89	3,354	0.05
90	389,861	5.73
91 & up	6,471	0.10
Total	6,802,897	

^aIncludes 2,798 tons of 17 lb.; 26 tons of 24 lb.; and 3,098 tons of 25-lb. linerboard.

TABLE III
SPECIAL LINERBOARD

	Tons
Decorative linerboard	574,476
Wet-strength linerboard	269,107
Functional linerboard	78,501
Other end uses	492,524
Total	<u>1,414,608</u>

TABLE IV
EXPORT LINERBOARD

Grade, lb.	Tons	Grade, lb.	Tons
22 ²	624	57	580
23	4,272	58	256
24	1,011	59	--
25	57,601	60	2
26	188,691	61	4,398
27	281	62	6,392
28	762	63	21,545
29	--	64	30,080
30	17,338	65	--
31	43,879	66	667
32	2,997	67	1,146
33	93,850	68	19,010
34	--	69	221,559
35	13,091	70	1,588
36	14,736	71	--
37	9,604	72	9
38	59,744	73	--
39	1,283	74	--
40	14,946	75	--
41	89,914	76	2,947
42	143,090	77	--
43	--	78	120
44	16	79	--
45	318	80	151
46	14,942	81	--
47	80,528	82	58
48	--	83	--
49	--	84	--
50	--	85	77
51	99	86	--
52	800	87	131
53	--	88	--
54	--	89	--
55	--	90	56,104
56	--	91 & up	640
Total			1,221,877

^aIncludes 43 tons of 17-lb. linerboard.

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A handwritten signature in dark ink, appearing to read "RCM = Ku", is positioned above a horizontal line.

R. C. McKee, Chairman
Container Section

APPENDIX

DEFINITIONS

GENERAL

1. Fourdrinier Kraft Board

This report covers all production of fourdrinier kraft board made on Containerboard machines of Containerboard type quality.

2. Basis Weight

Pounds per MSF to be reported as the nominal or billed basis weight, rounded off to nearest pound. If a laminated sheet is sold, as for example, 90-lb. linerboard - this is to be reported as Regular 90-lb.

3. Tonnage

Round off to nearest whole ton.

4. Reporting

Report one figure per Company. Do not report by individual Mills, Machines, Divisions, etc.

EXPORT FOURDRINIER KRAFT LINERBOARD

Export is all shipments outside of the United States of Fourdrinier Kraft Linerboard classified as Containerboard. If sold on a metric basis this should be expressed as lb./MSF rounded off to nearest whole lb./MSF. Grades are not broken down into end uses, special qualities (e.g., Wet Strength), etc., but are to be reported in the basis weight category that is applicable.

DOMESTIC FOURDRINIER KRAFT LINERBOARD

1. Regular Grades

- A. Fourdrinier kraft linerboard made in conventional container board quality for the domestic corrugated container industry. Liner with minimal treatments which do not significantly change their end-use applications, such as antiskid, should also be placed in this category.

Heavyweight linerboards made by lamination should be reported as final billed basis weight and are also put in this category.

- B. Decorative Linerboard - Linerboards made for decorative or visual enhancement.
1. Mottled White. Linerboard made with unbleached base and mottled or variegated bleached surface.
 2. Solid White. Full bleached linerboard including nonmottled or solid bleached surface.
 3. Miscellaneous. All colored bleached and unbleached grades including calender applied colors.
- C. Wet-Strength Linerboard. Water-resistant grades for use in both corrugated and solid fiber V & W board grades. Also included is linerboard for lettuce boxes and other uses which use wet-strength treatments in the component boards.
- D. Functional linerboards, surface treated on the machine with specific properties designed to give a functional use, such as antiabrasion, water repellency, grease resistance, etc.
- E. Other End Uses. Fourdrinier kraft linerboards apparently not intended for corrugated containers. While there may be little or no differences in the boards, they should be put into the proper category whenever the end use is known.
1. Solid Fiber Box Stock - Fourdrinier kraft linerboard made for solid fiber containers other than V & W grades.
 2. Fiber Drums - Linerboard sold to converters for the purpose of making fiber drums.
 3. Fiber Can - Linerboard sold for the fabrication of fiber composite cans.

DOMESTIC FOURDRINIER KRAFT LINERBOARD (Cont'd)

4. Overwraps - Linerboard sold for nonbox uses, such as sleeves, bundling machines, preformed container overwraps and roll wrappers.
5. Laminating Grades - Fourdrinier kraft linerboard, containerboard quality, used for any laminating end-use other than boxes. Again this may be of a different quality than normal containerboard or with properties, specific for laminating. This would include products such as panels, solid fiber structures, fiber drum top and bottoms, etc.
6. Fiber Core and Tube Stock - Kraft linerboard used in the fabrication of fiber cores and tubes.
7. Folding Carton Stock - Fourdrinier kraft board made for folding carton use. This would also include coated unbleached boards for cartons, bottle carrier stock, beer carrier stock, etc.