

Containerboard Interlaboratory Testing Program

Participant Summary Report #667 - April 2025

[Introduction to the Containerboard Program](#)

[Explanation of Tables and Definitions of Terms](#)

Analysis	Sample	Analysis Name
<u>201</u>	<u>BO18</u>	<u>Top to Bottom Box Compression Strength, Corrugated Boxes</u>
<u>202</u>	<u>EC16</u>	<u>Edgewise Compressive Strength, by T811, Corrugated Board</u>
<u>203</u>	<u>EC16</u>	<u>Edgewise Compressive Strength by T839, Corrugated Board</u>
<u>205</u>	<u>42L3</u>	<u>Bursting Strength (Mullen), 42 lb Linerboard</u>
<u>207</u>	<u>31K1</u>	<u>Bursting Strength (Mullen), 31 lb Linerboard</u>
<u>215</u>	<u>42L3</u>	<u>Ring Crush, 42 lb Linerboard</u>
<u>217</u>	<u>31K1</u>	<u>Ring Crush, 31 lb Linerboard</u>
<u>223</u>	<u>42L3</u>	<u>STFI, 42 lb Linerboard</u>
<u>225</u>	<u>31K1</u>	<u>STFI, 31 lb Linerboard</u>
<u>228</u>	<u>42L</u>	<u>Roughness - Stylus Method, 42 lb Linerboard</u>
<u>229</u>	<u>42L3</u>	<u>Roughness - Sheffield Method, 42 lb Linerboard</u>
<u>231</u>	<u>42L</u>	<u>Internal Bond, 42 lb Linerboard</u>
<u>234</u>	<u>42L</u>	<u>COF Inclined Plane (Slide Angle), 42 lb Linerboard</u>
<u>237</u>	<u>42L</u>	<u>Air Resistance, 42 lb Linerboard</u>
<u>240</u>	<u>CM13</u>	<u>Flat Crush Strength (CMT), 26 lb Corrugating Medium</u>
<u>250</u>	<u>CM13</u>	<u>Fluted Edge Crush Strength (CFC), 26 lb Corrugating Medium</u>
<u>255</u>	<u>CM13</u>	<u>Ring Crush (RCT), 26 lb Corrugating Medium</u>
<u>261</u>	<u>CM13</u>	<u>STFI, 26 lb Corrugating Medium</u>

Collaborative Testing Services, Inc.
CONTAINERBOARD INTERLABORATORY TESTING PROGRAM

INTRODUCTION

The Interlaboratory Testing Program for Containerboard is operated and maintained by Collaborative Testing Services, Inc. (CTS), with technical guidance provided by the Containerboard Group of the American Forest & Paper Association. The tests are conducted on a monthly basis.

For these tests samples of linerboard and corrugating medium, that each have been separately randomized from narrow rolls, are distributed for testing weekly. One weight of medium (26 lb.) is used for Concora Flat Crush Strength, Corrugated Fluted Crush Strength, Ring Crush Strength, and STFI Compression. Two weights of linerboard are tested each month for Mullen Burst, Ring Crush, and STFI Compression: 42 lb. - every month; 35 lb. and 56 lb. - alternate months. The participants return their test results for analysis and receive a monthly report.

Please refer to the section, "EXPLANATION OF TABLES", for definitions of terms and guidelines to interpreting the results.

USE OF AVERAGE MEAN AS A COLLABORATIVE REFERENCE VALUE

The samples of linerboard and corrugating medium, which have been randomized and placed in sealed packages for distribution in this program, may be used as collaborative reference materials. The values most representative of each material are the Cumulative Grand Means in the latest reports, given at the bottom right of each table. Comparisons can only be made within one lot of material; therefore check your measurements against the Cumulative Grand Means with the same lot code as on the packages being tested.

Material	Lot Code	Dates in Use
26# Corrugating Medium	CM13	September 2023 - Current
	CM12	June 2022 - August 2023
31# Linerboard	31K1	August 2024 - Current
	35E3	June 2022 - June 2024
42# Linerboard	42L3	March 2025 - Current
	42L2	Nov 2024 - Feb 2025
52# Linerboard	52J2	September 2024 - Current
	52J1	November 2023 - July 2024

ABOUT CTS

Founded in 1971, Collaborative Testing Services, Inc. (CTS) is a privately-owned company that specializes in interlaboratory tests for a wide variety of industries including rubber, plastics, fasteners and metals, containerboard, paper, color, agriculture, hemp, and wine, as well as proficiency tests for forensic laboratories. All of the tests are designed to assist organizations in achieving and maintaining quality control objectives. Labs from the U.S., as well as more than 100 countries, currently participate in the CTS programs.

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EXPLANATION OF TABLES

Each analysis is divided into three time spans. On the left side of the table are the individual laboratory results for each week of the month; in the center are each lab's statistical data for the month; and on the right are each lab's cumulative data for up to 16 weeks. At the bottom of the table are the consensus statistics for all the participants for each of the three time spans.

Definitions of Terms Used

Weekly Results

Laboratory Data

- WebCode - A six character laboratory identifier used to maintain information on a confidential basis. The WebCode is unique for each cycle and will change for each report. Your WebCode can be found in your Individual Report (Current Month Performance Report) and your datasheet.
- Weekly Means - The average of the test results obtained by the participant for each week that data were reported.

Consensus Data

- Wk Mean - For each week, the average of the Means for all the participants, excluding those laboratories flagged with an 'X'.
- Avg SD - For each week, the average of the within-laboratory standard deviations (SD's) for all the participants, excluding those laboratories flagged with an 'X'. The Avg SD is an indication of the variation of measurements within an average laboratory.
- SD btwn Labs - For each week, the standard deviation of the laboratory Means about the Wk Mean, excluding those laboratories flagged with an 'X'. The SD LABS is an indication of the precision of measurement between the laboratories.
- Labs Incl - The number of laboratory Means included in the Wk Mean for that week.
- Labs Excl - The number of laboratory Means reported but excluded from the Wk Mean for that week because of outlying results ('X' following Mean).
- Labs not rcvd - The number of laboratories failing to report for that week.

Monthly Results

Laboratory Data

- Mean - For each laboratory, the average of all the weekly Means reported for this month.
- CPV - **Comparative Performance Value**, an indication of how well a laboratory's Mean agrees with the other participants. The CPV is a ratio indicating the number of standard deviations from the consensus mean (Monthly Mean). The closer a laboratory's CPV is to zero, the more consistent its results are with the other participants' data.
- SD - For each laboratory, the average of the weekly within-lab standard deviations (SD's) for all reported Weekly Means this month.
- SD Wk - The standard deviation among the laboratory's weekly Means, including those Means flagged with an 'X'. The SD Wks is an indication of that laboratory's ability to obtain constant results from week to week.

Consensus Data

- Month Mean - The average of the Means for all the participants, excluding those laboratories flagged with an 'X,' reporting data for this month.
- Avg SD - For the current month, the average of the within-laboratory standard deviations (SD's) for all the participants, excluding those laboratories flagged with an 'X'.
- SD btwn Labs - For the current month, the standard deviation of the laboratory Means about the Month Mean, excluding those laboratories flagged with an 'X'.
- SD btwn Group - For the current month, the standard deviation of the laboratory Means within the group about the Month Mean, excluding those laboratories flagged with an 'X'.
- SD btwn Wks - For the current month, the average of the laboratory between week standard deviations (SD Wks) for all the participants, excluding those laboratories flagged with an 'X'.

Cumulative Results

Laboratory Data

Mean	-	For each lab, the average of all the monthly Means reported for the weeks shown.
CPV	-	Comparative Performance Value , an indication of how well a laboratory's cumulative mean agrees with the other participants. The CPV is a ratio indicating the number of standard deviations from the consensus mean (Monthly Mean).
SDr	-	For each laboratory, the average of the weekly within-lab standard deviations (SD's) for the weeks shown.
SD Wk	-	The standard deviation among the laboratory's weekly Means for the weeks shown, including those Means flagged with an 'X'. The SD Wks is an indication of that laboratory's ability to obtain constant results from week to week.
Wks	-	The number of weeks included in the cumulative period.
Inst	-	The two letter instrument code. Codes are summarized at the bottom of the last analysis page.

Consensus Data

Grand Mean	-	The average of the Means for all the participants, excluding those laboratories flagged with an 'X,' reporting data for the number of weeks included in the cumulative period.
Avg SD	-	For the cumulative period, the average of the within-laboratory standard deviations (SD's) for all the participants, excluding those laboratories flagged with an 'X'.
SD btwn Labs	-	For the cumulative period, the standard deviation of the laboratory Means about the Month Mean, excluding those laboratories flagged with an 'X'.
SD btwn Wks	-	For the cumulative period, the average of the laboratory between week standard deviations for all the participants, excluding those laboratories flagged with an 'X'.
Labs Incl	-	The number of laboratory Means included in the Grand Mean.

Any laboratory that receives a 'flag' following a mean or standard deviation should refer to the chart below for an explanation of the data flag symbol:

<u>Flag</u>	<u>Explanation</u>
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Data Flags "X" and "*" indicate a laboratory's performance on an average value differed from the consensus.

Data Flags "H" and "L" indicate a laboratory's performance on a standard deviation differed from the consensus.

Flags assigned to Weekly Means, Monthly Mean and Cumulative Mean:

- | | |
|---|--|
| X | Excluded from the weekly means, monthly means and/or the cumulative mean. Immediate review of data and/or testing procedure is recommended. |
| * | Included in the weekly means, monthly means and/or the cumulative mean; however, lab should review testing procedure and monitor future results. |

Flags assigned to Weekly Means:

- | | |
|---|--|
| H | Indicates high within-laboratory standard deviation. The laboratory SD for each week is not shown, but laboratory average SD and consensus average SD values are shown. |
| L | Indicates low within-laboratory standard deviation. The laboratory SD for each week is not shown, but laboratory monthly average SD and consensus average SD values are shown. |

Flags assigned to Monthly SD Wks and Cumulative SD Wks:

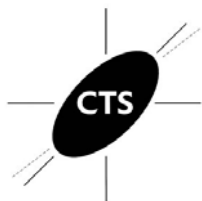
- | | |
|---|--|
| H | Indicates high variability between weekly means (high week-to-week variation). |
| L | Indicates low variability between weekly means (low week-to-week variation). |



Containerboard Interlaboratory Testing Program
 Analysis 201
Top to Bottom Box Compression Strength, Corrugated Boxes - BO18
 TAPPI Official Test Method T804

Report #667
April 2025

Monthly Results				Cumulative Results				
WebCode	Mean	CPV	SD	Mean	CPV	SD Months	Months	Inst
4CN3B6	553.0	-0.18	24.65	564.2	-0.10	8.86	4	EX
4JXQN4	561.3	0.01	32.70	585.1	0.73	18.25	4	LM
4TMCWM	608.2	1.06	24.98	609.8	1.71	2.47 L	4	LG
66FXZX	535.6	-0.57	42.66	532.0	-1.38	9.05	4	EX
8PGTLK	616.4	1.24	20.15	582.0	0.61	35.96	4	LS
9VE6T2	529.0	-0.72	63.61	566.7	0.00	26.30	4	EX
CB3D7G	566.2	0.12	25.72	557.8	-0.35	12.81	4	LG
DALGCW	535.5	-0.57	93.05 H	558.9	-0.31	29.57	4	EX
DKGRMP	559.7	-0.03	26.20	578.5	0.47	13.85	4	LO
DVN8VH	578.2	0.39	24.59	559.4	-0.29	25.79	4	EX
EULY2P	489.4	-1.61	60.57	533.7	-1.31	30.07	4	ER
FGF9XV	611.8	1.14	37.27	606.6	1.59	18.42	4	EX
G3RL6A	611.7	1.14	15.68	647.8	3.23 X	24.78	4	LG
LND7P7	605.7	1.00	21.70	601.0	1.37	8.59	4	ET
LYDHHM	550.2	-0.24	51.23	534.4	-1.28	13.89	4	ER
M7DG93	548.0	-0.29	13.17	554.8	-0.47	8.46	4	LG
QWTDDC	508.9	-1.17	50.85	542.1	-0.98	31.40	4	ER
U39YB9	594.0	0.74	23.13	576.0	0.37	15.09	4	LM
WGFYXA	567.7	0.15	36.09	597.1	1.21	23.19	4	EX
WU7QHD	548.5	-0.28	53.37	568.3	0.07	17.01	4	EX
XF4GD4	572.0	0.25	43.89	555.6	-0.44	18.56	4	LG
XH6K47	530.6	-0.68	26.41	534.4	-1.28	55.21 H	4	ES
XUGUPA	600.3	0.88	28.21	588.1	0.85	13.92	4	LG
Y92UYA	484.9	-1.71	25.26	519.3	-1.88	32.68	4	ER
YDVLAR	583.7	0.51	4.99 L	585.0	0.73	3.47 L	4	EX
YRCJER	446.7	-2.57 *	22.44	476.7	-3.57 X	38.75	4	TB
Z8YGTT	566.7	0.13	50.06	549.0	-0.70	17.42	4	LS
ZXUAET	644.4	1.87	33.86	592.7	1.04	49.90 H	3	ER
Consensus (All Labs) Results								
Month Mean			561.02	Grand Mean		566.62		
Avg SD			39.31	Avg SD Months		24.39		
SD btwn Labs			44.52	SD btwn Labs		25.17		
Labs Incl			28	Labs Incl		26		



Containerboard Interlaboratory Testing Program
Analysis 201

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April 2025

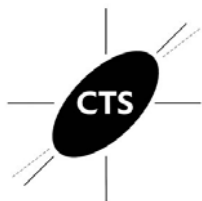
Top to Bottom Box Compression Strength, Corrugated Boxes - BO18
TAPPI Official Test Method T804

Consensus By Method

Test Method	Group Mean	SD btwn Group	Difference from Grand Mean	Labs Included
Hot melt adhesive sealing	542.55	52.11	18.46	8
Clip sealing	564.40	36.97	3.38	19
Staple sealing	644.44	0.00	83.42	1

Key to Instrument Codes Reported by Participants

ER	Emerson 6200 Series	ES	Emerson 8510
ET	Emerson 7200	EX	Emerson Apparatus (Model not specified)
LG	TLS / L.A.B. Validator Series	LM	Lansmont 122-15k
LO	Lansmont 152-30k	LS	Lansmont Squeezer
TB	TMI Monitor/Compression Tester, Model 17-70		



Containerboard Interlaboratory Testing Program
 Analysis 202
Edgewise Compressive Strength, by T811, Corrugated Board - EC16
 TAPPI Official Test Method T811

Report #667
April 2025

WebCode	Monthly Results				Cumulative Results				Inst
	Mean	CPV	SD		Mean	CPV	SD Months	Months	
2K2CJ9	41.0	-1.44	2.03		42.7	-1.58	2.84	4	TS
3CPH47	51.7	1.08	0.91	L	51.7	1.13	0.00	1	XX
C2TPQX	49.2	0.50	2.19		47.9	-0.03	1.31	3	LC
DALGCW	47.2	0.03	2.04		47.5	-0.14	1.76	4	LC
DVN8VH	46.8	-0.06	2.55		49.0	0.32	1.99	4	LC
FFLF3C	52.3	1.22	4.86	H	52.5	1.36	0.74	4	XX
QWTDDC	40.8	-1.49	3.79		43.4	-1.38	3.24	4	EN
XF4GD4	50.4	0.78	3.23		50.6	0.79	2.16	4	EX
YDVLAR	48.8	0.40	0.78	L	49.0	0.32	0.45	4	TL
Z8YGTT	42.8	-1.01	3.61		45.4	-0.79	2.69	4	LD

Consensus (All Labs) Results			
Month Mean	47.11	Grand Mean	47.97
Avg SD	2.87	Avg SD Months	2.11
SD btwn Labs	4.25	SD btwn Labs	3.31
Labs Incl	10	Labs Incl	10

Key to Instrument Codes Reported by Participants

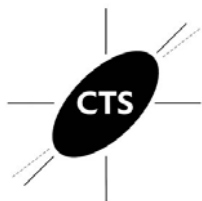
EN	Emerson 2200	EX	Emerson (model not specified)
LC	L&W Crush Tester 48	LD	L&W Crush Tester 248
TL	Tech-Lab Systems Compression	TS	TMI Digital Crush Tester, Model 17-56
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program
 Analysis 203
Edgewise Compressive Strength by T839, Corrugated Board - EC16
 TAPPI Official Test Method T839

Report #667
April 2025

WebCode	Monthly Results				Cumulative Results				Inst
	Mean	CPV	SD		Mean	CPV	SD Months	Months	
2K2CJ9	45.4	-1.19	2.17		47.6	-0.81	2.24	4	TS
3CPH47	51.2	0.39	1.19		51.2	0.26	0.00	1	XX
4CN3B6	47.4	-0.64	1.41		46.0	-1.26	2.33	4	LD
4JXQN4	54.1	1.22	1.59		52.7	0.71	1.37	4	TG
4TMCWM	49.8	0.03	1.27		51.3	0.31	2.42	4	BU
8PGTLK	49.6	-0.04	0.75	L	50.6	0.10	1.48	4	EM
9EABL2	56.6	1.89	1.31		70.5	5.98 X	26.93 H	4	TG
CB3D7G	49.9	0.06	2.47		52.2	0.57	2.80	4	MK
DALGCW	54.0	1.18	2.12		54.5	1.24	0.68	4	LC
DKGRMP	43.1	-1.83	2.41		44.5	-1.70	3.11	4	LD
DVN8VH	51.5	0.50	2.52		49.9	-0.11	2.02	4	LC
EULY2P	55.4	1.56	1.39		53.3	0.90	2.04	4	LD
F2MJXT	48.3	-0.38	3.53	H	49.9	-0.10	2.27	2	EM
FGF9XV	49.5	-0.06	1.19		48.3	-0.57	1.30	4	CT
G3RL6A	47.7	-0.57	1.05		50.6	0.09	2.66	4	EM
GDPLFR	44.1	-1.56	1.30		43.9	-1.90	1.59	3	TD
JU9Y9B	48.3	-0.39	1.41		50.3	0.00	1.40	4	EM
LND7P7	50.2	0.14	1.64		52.9	0.78	1.84	4	TD
LYDHMM	51.3	0.44	2.04		50.9	0.18	0.41	4	EM
M7DG93	54.6	1.34	2.24		53.7	1.00	2.40	4	EM
M9CURL	43.3	-1.76	2.64		43.8	-1.91	1.81	3	IX
PQTKZK	44.3	-1.49	1.36		45.5	-1.42	1.65	4	BU
Q4PB3Z	50.7	0.27	2.41		54.8	1.33	2.94	4	EM
Q6KU42	51.3	0.44	2.09		55.6	1.56	2.90	4	TE
QWTDDC	46.4	-0.91	3.09		48.3	-0.60	1.34	4	EN
TFYFKF	50.2	0.13	2.16		51.5	0.35	1.77	4	TU
TXZDPW	56.3	1.81	1.85		54.8	1.35	1.07	4	LC
U39YB9	46.9	-0.79	1.56		47.0	-0.97	0.11	L 4	EM
WK2J3D	44.8	-1.36	4.26	H	39.2	-3.28 X	4.00 H	4	XX
XF4GD4	50.4	0.18	1.63		49.0	-0.38	1.48	4	LY
XH6K47	53.2	0.97	1.71		53.1	0.84	1.42	4	LD
Y92UYA	48.0	-0.48	2.30		46.4	-1.14	1.47	4	LD
YDVLAR	48.8	-0.26	0.87	L	48.8	-0.44	0.00	1	TL
YRCJER	54.2	1.23	2.02		55.1	1.44	1.18	4	LD
Z8YGTT	47.7	-0.56	0.84	L	48.0	-0.69	1.35	4	LD
ZXUAET	51.5	0.49	3.49	H	53.5	0.97	2.39	3	LD



Containerboard Interlaboratory Testing Program
Analysis 203
Edgewise Compressive Strength by T839, Corrugated Board - EC16
TAPPI Official Test Method T839

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April 2025

Consensus (All Labs) Results			
Month Mean	49.72	Grand Mean	50.28
Avg SD	2.08	Avg SD Months	1.93
SD btwn Labs	3.63	SD btwn Labs	3.38
Labs Incl'd	36	Labs Incl'd	34

Key to Instrument Codes Reported by Participants

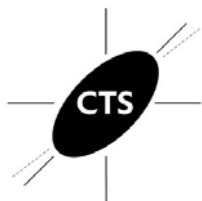
BU	Buchel Digital Crush Tester	CT	Con-Ten
EM	Emerson 1200 Series	EN	Emerson 2200
IX	Instron (model not specified)	LC	L&W Crush Tester 48
LD	L&W Crush Tester 248	LY	L&W 830
MK	Mark-10 ESM303	TD	TMI Digital Crush Tester, Model 17-09
TE	TMI Monitor/Compression Tester, Model 17-60	TG	TMI Digital Crush Tester, 17-76
TL	Tech-Lab Systems Compression	TS	TMI Digital Crush Tester, Model 17-56
TU	TMI Universal Crush Tester (TMI K440)	XX	Instrument make/model not specified by lab



Containerboard Interlaboratory Testing Program
Analysis 205
Bursting Strength (Mullen), 42 lb Linerboard - 42L3
 TAPPI Official Test Method T807

Report #667
April 2025

WebCode	Weekly Means				Monthly Results				Cumulative Results						Inst
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks		
3AHX2_AL	116.9	118.0	115.1 L	117.7 L	116.9	0.49	4.8	1.3	114.8	0.29	5.3	2.5	8	XX	
3ZRUR3	111.4	107.8	105.2	No DATA	108.1	-1.43	7.6	3.1	107.4	-1.49	7.3	2.5	5	AX	
3ZRUR3_AL	110.0	113.0	110.2	No DATA	111.1	-0.79	6.6	1.7	109.3	-1.04	6.5	2.7	5	AL	
4CN3B6	115.2	108.8	108.8	108.0	110.2	-0.98	7.1	3.4	109.1	-1.08	7.3	3.0	8	AH	
7VQRFY_AL	115.7	112.6 H	110.5	117.4	114.1	-0.14	10.7	3.1	113.7	0.01	9.6	2.8	8	AL	
86VYVY	109.5	107.3	No DATA	No DATA	108.4	-1.37	8.4	1.6	107.0	-1.61	8.0	2.0	6	LJ	
86VYVY_AL	124.6	119.0	No DATA	No DATA	121.8	1.55	9.8	4.0	116.7	0.75	9.2	5.3	6	AL	
8KL4XZ	106.7	110.4	111.8	108.7	109.4	-1.15	8.2	2.2	108.4	-1.27	8.4	2.1	8	XX	
9HP3DU	110.0	106.1	112.1	110.2	109.6	-1.11	6.4	2.5	109.9	-0.90	6.0	2.8	7	LC	
A623FZ	109.3	110.2	111.4	109.1	110.0	-1.02	5.3	1.0	110.0	-0.87	5.3	1.0	4	XX	
ATRKNW_AL	121.7	118.4	No DATA	No DATA	120.1	1.17	9.2	2.3	120.0	1.55	7.5	2.6	6	AL	
AZTYBJ	107.5	104.7 *	106.3	109.0 L	106.9	-1.71	8.5	1.8	106.3	-1.77	8.1	1.7	8	LA	
B9VJ6Y_AL	114.8	116.0	108.6	107.3 H	111.7	-0.66	19.0	4.3	110.4	-0.78	14.5	3.7	8	AL	
BJGH3W_AL	113.8	111.0	112.5	111.6	112.2	-0.54	5.6	1.2	109.6	-0.97	5.1	3.1	8	AL	
BQHUXT_AL	108.7	117.0	117.8	112.4	114.0	-0.15	8.8	4.3	113.7	0.02	8.1	3.3	8	AL	
CXCLJR	112.4	111.5	114.5	115.1	113.4	-0.29	9.3	1.7	113.2	-0.09	7.9	1.5	8	LA	
DALGCW	114.0	112.9	115.2	116.5	114.6	-0.01	6.6	1.6	113.5	-0.02	7.7	2.6	8	AH	
DDL8W_AL	121.1	115.0	118.7	120.1	118.7	0.88	7.5	2.7	116.0	0.58	8.4	3.9	8	AL	
DV229X_AL	107.5	116.5	118.1	No DATA	114.0	-0.15	9.5	5.7	113.0	-0.14	8.5	3.9	7	AL	
EULY2P	121.5	115.5	112.7	116.2	116.5	0.39	7.9	3.7	116.4	0.67	8.2	3.0	8	AH	
F92KYM	117.8	118.4	118.0	No DATA	118.1	0.74	7.3	0.3 L	120.7	1.73	8.1	3.1	6	AH	
FGF9XV	114.5	118.0	114.0	121.5	117.0	0.50	8.9	3.5	118.3	1.14	9.1	3.5	8	XX	
FKT9UM	123.0	135.6 X	132.3 X	139.9 X	132.7	3.93 X	7.1	7.2 H	129.3	3.81 X	7.4	8.1 H	8	ME	
G9FBJR_AL	111.8	106.9	107.8	106.7	108.3	-1.40	8.1	2.4	110.6	-0.73	8.1	3.3	8	AL	
GKRFUU_AL	122.7	117.5	118.0	118.6	119.2	0.98	7.7	2.3	117.7	1.00	7.7	3.6	8	AL	
GWNGDP_AI	107.9	107.2	109.4	108.8	108.3	-1.39	5.2	1.0	107.5	-1.47	5.4	1.5	8	XX	
HGRKQK	128.3 *	126.1 *H	126.0 *	127.1 *	126.9	2.65 *	12.6	1.1	126.9	3.22 X	12.6	1.1	4	LB	
JAPWCQ	118.9 L	119.1 L	119.1 L	118.6 L	118.9	0.92	1.1	0.2 L	115.9	0.56	1.1	3.3	8	LA	
KZTED8	132.8 X	130.0 X	142.0 X	133.4 X	134.6	4.33 X	10.6	5.2	135.3	5.26 X	10.2	5.7	8	AX	
L8QQJN	118.0	124.4 *	122.1	122.5	121.8	1.54	8.2	2.7	121.6	1.93 *	8.2	2.1	8	XX	
NMB2LG_AL	118.0	133.7 X	119.8	121.3	123.2	1.86	9.3	7.1 H	121.5	1.91	10.2	6.6 H	8	AL	
QFPK7C_AL	115.4	120.8	122.1	120.8	119.8	1.10	9.0	3.0	118.2	1.12	8.1	3.8	8	AL	
TJD7PB	106.1	110.2	112.6	109.5	109.6	-1.11	8.2	2.7	109.6	-0.97	7.2	1.9	8	LC	
TYT7KF	112.7	114.5	113.9	123.5	116.2	0.32	9.5	5.0	115.8	0.54	9.3	3.8	8	LC	
UG83EZ_AL	119.6	111.6	113.4	120.5	116.2	0.34	7.7	4.5	111.6	-0.48	8.0	6.0	8	AL	



Containerboard Interlaboratory Testing Program
Analysis 205
Bursting Strength (Mullen), 42 lb Linerboard - 42L3
 TAPPI Official Test Method T807

Report #667
April 2025

WebCode	Weekly Means				Monthly Results				Cumulative Results					
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst
X2LT67	108.6 H	112.6	116.5	113.5	112.8	-0.42	11.3	3.2	114.0	0.11	9.5	3.7	7	TB
XH6K47	115.1	113.3	117.9	115.5	115.5	0.16	10.7	1.9	113.1	-0.12	9.2	2.9	8	LA
XZPB36	115.0	117.4	115.6	114.0	115.5	0.17	6.5	1.5	115.1	0.36	7.1	1.4	8	LA
XZPB36_AL	118.4	113.0	115.9	117.0	116.1	0.30	5.4	2.3	114.7	0.26	5.5	3.0	8	AL
Y92UYA	115.0	114.6	113.0	111.0	113.4	-0.29	7.9	1.8	111.9	-0.41	8.4	2.6	8	LZ
YMW9Y4	120.8	118.5	118.8	125.2	120.8	1.34	6.2	3.1	120.3	1.63	5.9	2.8	8	LA
YRCJER	112.4	112.6	104.1 *	112.1 L	110.3	-0.96	6.6	4.2	108.5	-1.24	7.5	3.6	8	XX
Z8YGTT	118.7	118.1	114.7	115.9	116.9	0.47	9.3	1.9	115.9	0.55	9.0	1.7	8	LA
ZXUAET	116.6	110.0	110.0	114.9 L	112.9	-0.40	7.5	3.4	115.5	0.47	7.1	3.9	8	LA
ZXUAET_AL	108.9	113.0	112.1	111.5	111.4	-0.72	6.7	1.8	111.3	-0.56	6.8	1.7	8	AK
ZY6BZR	115.0	116.8	114.8	115.9 L	115.6	0.20	4.3	0.9	115.6	0.50	4.3	0.8 L	8	AH
ZZFDLQ	114.5	116.8	115.0	114.7	115.3	0.12	5.0	1.1	115.0	0.35	4.8	0.8 L	8	TP

Consensus (All Labs) Results														
Wk Mean	114.91	114.16	114.14	115.26	Month Mean	114.70		Grand Mean	113.59					
Avg SDr	8.07	8.19	8.02	9.15	Avg SD	8.36		Avg SD	7.81					
SD btwn Labs	5.23	4.74	4.67	5.29	SD btwn Labs	4.58		SD btwn Labs	4.12					
Labs Incl	46	44	42	38	SD btwn Wks	2.93		SD btwn Wks	3.13					
Labs Excl	1	3	2	2	Labs Incl	45		Labs Incl	44					
Labs not Rcvd	0	0	3	7										

Key to Instrument Codes Reported by Participants

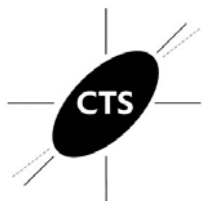
AH	Perkins Model AH	AK	L & W Autoline 300
AL	L & W Autoline 400	AX	Perkins Mullen Tester (model not specified)
LA	L&W Bursting Strength Tester	LB	L&W Burst-O-Matic
LC	L&W Autoline (205 Enrollment)	LJ	L&W Bursting Strength Tester J-Type
LZ	L&W (model not specified)	ME	Messmer Automatic Burst Tester ME-06
TB	TMI Monitor/Burst 1000	TP	Technidyne PROFILE/Plus
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program
Analysis 207
Bursting Strength (Mullen), 31 lb Linerboard - 31K1
 TAPPI Official Test Method T807

Report #667
April 2025

WebCode	Weekly Means				Monthly Results				Cumulative Results					
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst
3AHX2_AL	73.3	74.2	77.9	76.1	75.4	0.01	4.0	2.1	75.4	0.16	4.8	1.8	12	XX
3ZRUR3	69.0	70.0	66.4	* No DATA	68.5	-2.38	* 4.1	1.9	69.3	-2.12	* 5.6	1.8	7	AX
3ZRUR3_AL	73.4 L	69.5	72.7	No DATA	71.9	-1.20	3.6	2.1	72.6	-0.89	3.9	1.8	7	AL
4CN3B6	70.0	74.8	71.0	71.2	71.8	-1.24	6.8	2.1	72.7	-0.82	6.0	2.0	12	AH
7VQRFY_AL	74.6	72.0	72.5	74.7	73.5	-0.65	6.6	1.4	74.0	-0.34	5.7	1.4	12	AL
86VYVY	72.7	70.4	No DATA	No DATA	71.6	-1.31	5.6	1.6	71.7	-1.22	5.7	2.1	5	LJ
86VYVY_AL	78.6	74.7	No DATA	No DATA	76.7	0.45	5.3	2.8	73.8	-0.41	6.0	3.4	5	AL
8KL4XZ	73.9	68.6	73.8	71.2	71.9	-1.19	5.4	2.5	71.6	-1.27	5.2	1.6	12	XX
9HP3DU	74.7	79.4	72.8	72.3	74.8	-0.19	6.1	3.2	75.3	0.13	5.0	2.3	12	LC
A623FZ	75.4	75.7	76.1	76.5 L	75.9	0.21	4.3	0.4	76.5	0.57	4.0	1.1	8	XX
ATRKNW_AL	81.0	No DATA	No DATA	No DATA	81.0	1.95	* 3.2	0.0	75.6	0.23	7.2	3.7	8	AL
AZTYBJ	69.9	71.3	68.5	69.7 *	69.8	-1.90	5.7	1.2	69.0	-2.23	* 6.9	1.9	12	LA
B9VJ6Y_AL	69.8	68.7	69.7	74.9	70.8	-1.57	6.7	2.8	71.6	-1.26	6.3	1.9	12	AL
BJGH3W_AL	77.1	75.8	74.9	77.9	76.4	0.37	3.9	1.4	76.9	0.72	4.2	1.2	12	AL
BQHUXT_AL	75.1	74.9	76.4	75.8	75.6	0.08	6.7	0.7	74.0	-0.33	6.3	2.4	12	AL
CXCLJR	74.5	72.3	76.1	77.2	75.0	-0.11	5.2	2.1	74.5	-0.16	5.3	2.0	12	LA
DALGCW	77.4	77.1	77.0	77.8	77.3	0.69	5.1	0.3 L	75.6	0.25	6.3	2.2	12	AH
DDL8W_AL	77.8	78.8	78.5	72.2	76.8	0.51	6.2	3.1	75.9	0.37	6.1	2.6	12	AL
DV229X_AL	75.6	74.8	74.5	No DATA	75.0	-0.13	6.6	0.6	75.2	0.08	5.5	2.0	11	AL
EULY2P	77.5	82.5 *H	79.5	75.1 H	78.7	1.14	8.4	3.1	79.1	1.56	6.9	2.9	12	AH
F92KYM	82.2 *	83.2 *	78.8	No DATA	81.4	2.09	* 5.3	2.3	80.4	2.04	* 5.3	1.8	7	AH
FGF9XV	75.5	77.0	76.5	78.5	76.9	0.53	5.6	1.3	75.0	0.04	6.5	2.8	12	XX
FKT9UM	80.3	88.3 X	80.6	88.9 X	84.5	3.17 X	4.6	4.7 H	83.9	3.37 X	5.2	3.9	12	ME
G9FBJR_AL	72.2	75.2	69.4	70.3 *	71.8	-1.24	5.1	2.5	71.8	-1.16	4.9	2.4	12	AL
GKRFUU_AL	78.6	80.9	80.4	79.8	79.9	1.58	5.2	1.0	77.6	1.01	6.2	2.6	12	AL
GWNGDP_AI	71.2	72.8	73.2	74.3	72.9	-0.85	3.9	1.3	71.8	-1.17	4.9	1.4	12	XX
HGRKQK	77.8	75.6	75.9	76.0	76.3	0.34	7.3	1.0	76.6	0.61	6.1	2.4	12	LB
JAPWCQ	75.8 L	76.0 L	76.5 L	75.6 L	76.0	0.22	1.5	0.4	71.8	-1.17	2.0	5.4 H	12	LA
KZTED8	77.1	77.8	79.2	76.0	77.5	0.75	6.4	1.4	78.6	1.38	6.4	2.8	12	AX
L8QQJN	77.1	79.7	81.9	81.5 *	80.1	1.63	5.8	2.2	80.5	2.09	* 5.5	1.6	12	XX
NMB2LG_AL	75.8	80.3	81.3	78.7	79.0	1.27	6.2	2.4	79.0	1.54	5.7	1.8	10	XX
QFPK7C_AL	76.5	78.8	77.3	78.1	77.7	0.81	5.6	1.0	77.4	0.93	5.0	2.9	12	AL
TJD7PB	70.0	74.5	71.1	72.8	72.1	-1.12	5.0	2.0	73.0	-0.74	5.5	2.1	12	LA
TYT7KF	72.5	77.0 H	77.4	76.2	75.8	0.15	7.1	2.3	75.9	0.35	6.7	1.7	12	LC
UG83EZ_AL	75.3 L	70.6	72.4	76.3	73.6	-0.59	4.1	2.6	72.8	-0.79	9.2	2.3	12	AL



Containerboard Interlaboratory Testing Program
Analysis 207
Bursting Strength (Mullen), 31 lb Linerboard - 31K1
 TAPPI Official Test Method T807

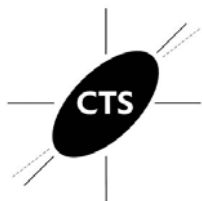
Report #667
April 2025

WebCode	Weekly Means				Monthly Results				Cumulative Results					Inst
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	
X2LT67	80.3	78.3	75.6	73.2	76.8	0.51	6.8	3.1	76.5	0.59	6.5	2.2	12	TB
XH6K47	70.0	80.4	72.8	77.5	75.2	-0.06	6.9	4.7 H	74.1	-0.32	5.9	3.1	12	LA
XZPB36	77.9	73.3	72.3 L	77.5	75.2	-0.04	5.6	2.9	76.7	0.67	5.4	2.1	12	LA
XZPB36_AL	74.5	70.8	75.2	74.9	73.9	-0.51	3.8	2.0	75.1	0.05	4.3	2.3	12	AL
Y92UYA	75.0	78.1	76.9	78.0	77.0	0.58	6.5	1.4	72.4	-0.95	6.8	4.3	12	LA
YMW9Y4	79.4	75.7	78.8	76.9	77.7	0.82	4.2	1.7	78.1	1.19	4.3	2.1	12	LA
YRCJER	76.4	75.3	72.6	73.7	74.5	-0.30	4.4	1.7	72.9	-0.76	4.4	1.6	12	XX
Z8YGTT	76.8	73.9	76.5	79.0	76.5	0.42	5.2	2.1	77.2	0.85	6.1	1.6	12	LA
ZXUAET	76.5	77.5	75.2	74.3	75.9	0.19	5.5	1.4	75.7	0.29	5.4	2.1	12	LC
ZXUAET_AL	67.0 *H	73.5	69.8 H	75.8	71.5	-1.32	10.4	3.9	74.1	-0.31	7.1	4.1	12	AK
ZY6BZR	75.7	75.5	76.4	76.6	76.1	0.25	4.2	0.5	75.8	0.33	3.9	1.2	12	AH
ZZFDLQ	76.5	77.6	74.9	76.5	76.4	0.36	5.0	1.1	75.9	0.36	4.7	1.1	12	TP

					Consensus (All Labs) Results			
Wk Mean	75.22	75.44	75.16	75.65	Month Mean	75.34	Grand Mean	74.94
Avg SDr	5.65	5.64	5.94	5.63	Avg SD	5.67	Avg SD	5.72
SD btwn Labs	3.36	3.60	3.57	2.64	SD btwn Labs	2.89	SD btwn Labs	2.67
Labs Incl	47	45	44	39	SD btwn Wks	2.12	SD btwn Wks	2.42
Labs Excl	0	1	0	1	Labs Incl	46	Labs Incl	46
Labs not Rcvd	0	1	3	7				

Key to Instrument Codes Reported by Participants

AH	Perkins Model AH	AK	L & W Autoline 300
AL	L & W Autoline 400	AX	Perkins Mullen Tester (model not specified)
LA	L&W Bursting Strength Tester	LB	L&W Burst-O-Matic
LC	L&W Autoline (207 Enrollment)	LJ	L&W Bursting Strength Tester J-Type
ME	Messmer Automatic Burst Tester ME-06	TB	TMI Monitor/Burst 1000
TP	Technidyne PROFILE/Plus	XX	Instrument make/model not specified by lab



Containerboard Interlaboratory Testing Program
 Analysis 215
Ring Crush, 42 lb Linerboard - 42L3
 TAPPI Official Test Method T822

Report #667
April 2025

WebCode	Weekly Means				Monthly Results				Cumulative Results					Inst
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	
Z8YGTT	93.3	95.8	93.6	94.2	94.2	-0.81	3.2	1.1	95.2	-0.50	3.3	1.4	8	LD
ZZFDLQ	96.0	96.2	94.9	97.6	96.1	-0.36	3.6	1.1	95.7	-0.40	3.2	1.3	8	TH

					Consensus (All Labs) Results			
Wk Mean	97.85	97.66	97.63	97.62	Month Mean	97.69	Grand Mean	97.43
Avg SDr	3.02	3.38	3.46	3.29	Avg SD	3.35	Avg SD	3.76
SD btwn Labs	4.86	4.45	4.13	4.32	SD btwn Labs	4.32	SD btwn Labs	4.36
Labs Incl	37	37	35	36	SD btwn Wks	3.12	SD btwn Wks	2.93
Labs Excl	0	0	2	1	Labs Incl	37	Labs Incl	37
Labs not Rcvd	0	0	0	0				

Key to Instrument Codes Reported by Participants

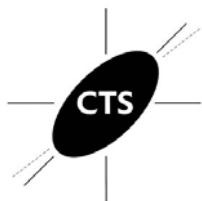
EM	Emerson 1200	LC	L&W Crush Tester 48
LD	L&W Crush Tester 248	LG	L&W 753
LX	L&W 506	LZ	L&W Crush Tester (model not specified)
MB	Messmer Buchel K440	MZ	Messmer Buchel (model not specified)
TH	TMI Compression Tester, Model 17-76	TU	TMI Universal Crush Tester (TMI K440)
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program
Analysis 217
Ring Crush, 31 lb Linerboard - 31K1
 TAPPI Official Test Method T822

Report #667
April 2025

WebCode	Weekly Means				Monthly Results				Cumulative Results					
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst
3TA936	72.1	73.0	71.7	69.2	71.5	-0.89	3.0	1.6	72.1	-0.54	2.6	1.5	12	LZ
7VQRFY	77.2	76.4	76.7	76.7	76.8	1.06	2.8	0.3 L	75.0	0.51	2.5	1.6	12	LD
9EABL2	76.1	78.1 L	72.6	74.2	75.2	0.50	2.4	2.4	74.2	0.21	2.5	1.7	12	TH
9HP3DU	70.9	74.9	72.7	73.0	72.9	-0.38	2.5	1.7	71.4	-0.79	3.4	2.3	12	LD
A623FZ	72.6	72.0	70.6	72.9	72.0	-0.69	4.0	1.0	71.6	-0.73	3.7	1.6	8	TU
ATRKNW	72.8	72.6	69.0	73.2	71.9	-0.73	3.8	1.9	72.5	-0.38	3.6	1.6	12	LC
B6YWDW	76.6	76.5	75.1	77.4	76.4	0.94	2.9	1.0	76.5	1.05	2.6	0.6 L	12	LD
BQHUXT	73.5	76.5	74.5	78.5	75.7	0.68	2.4	2.2	74.4	0.31	2.9	2.3	12	LD
DALGCW	73.3	75.7	74.2	76.2	74.9	0.36	2.6	1.3	74.4	0.29	2.6	1.1	12	LC
DV229X	73.5	73.7	73.0 H	73.2	73.3	-0.21	3.7	0.3 L	72.9	-0.26	3.5	1.1	12	LD
EULY2P	71.3	70.7	71.2	70.2	70.9	-1.12	2.1	0.5	71.9	-0.60	2.2	1.1	12	LD
FKT9UM	67.7 H	72.7	75.7	79.9	74.0	0.04	4.7	5.1	74.2	0.22	4.9	5.9 H	12	LX
GDPLFR	72.6	72.1	72.6	72.7	72.5	-0.52	1.7	0.3 L	72.5	-0.38	1.7	0.2 L	8	MB
GWNGDP	72.0	72.7	71.3	71.2	71.8	-0.78	2.8	0.7	73.0	-0.21	2.3	1.3	12	LD
JAPWCQ	74.1 L	74.5 L	74.1 L	74.1 L	74.2	0.11	0.6	0.2 L	73.1	-0.18	0.6	0.8	12	TU
JU9Y9B	67.9	67.2 *	68.3	68.7	68.0	-2.16 *	2.3	0.6	68.2	-1.95 *	3.0	1.5	12	EM
KRHC8	80.7 *L	81.5 *	80.7 *L	79.5	80.6	2.48 *	1.3	0.8	80.6	2.55 *	1.3	0.8	4	MZ
L8QQJN	71.7	71.6	70.9	72.8	71.8	-0.79	3.0	0.8	71.9	-0.62	2.8	1.4	12	LD
L937DP	71.6	74.2	74.0	73.6	73.3	-0.20	3.2	1.2	69.4	-1.51	3.2	3.2	12	EM
LGFG7G	78.4	83.6 X	79.7 *	81.8 *	80.9	2.57 *	3.5	2.3	80.0	2.34 *	3.5	1.8	12	TU
NMB2LG	80.4 *	80.8 *	55.3 XH	74.0	72.6	-0.47	5.1	12.0 H	76.9	1.18	3.6	7.4 H	11	LZ
Q4CGMZ	77.6	73.7	76.4	77.0	76.2	0.84	3.8	1.7	76.2	0.95	3.4	1.4	12	MB
QWTDDC	68.9	67.8 *	71.3	70.7	69.7	-1.56	3.3	1.6	70.4	-1.16	3.0	1.3	12	LC
TJD7PB	74.8	73.6	73.2	74.3	74.0	0.03	2.5	0.7	73.5	-0.05	2.3	0.8	12	LD
TXZDPW	72.2	73.0	73.6	71.9	72.7	-0.45	3.3	0.8	72.1	-0.52	3.3	0.9	12	LC
TYT7KF	76.1	75.2	77.1	74.1	75.6	0.64	2.1	1.3	76.2	0.93	2.6	2.1	12	LD
X2LT67	69.2	70.9	70.6	68.8	69.9	-1.48	2.9	1.0	70.5	-1.10	3.2	3.2	12	LC
X48DAB	78.2	76.1	78.2	77.3	77.5	1.32	2.2	1.0	77.4	1.39	2.4	1.9	12	LD
XF4GD4	74.7	75.5	75.9	73.3	74.9	0.36	2.2	1.1	74.2	0.22	2.7	1.1	10	LG
XWQY86	73.0	73.4	69.8	69.7	71.5	-0.89	2.5	2.0	71.7	-0.67	2.7	2.9	12	LD
XZPB36	73.2	77.9	76.0	74.7	75.5	0.58	2.9	2.0	75.3	0.61	2.9	2.0	12	LD
Y92UYA	76.6	72.6	74.8	73.6	74.4	0.19	3.2	1.7	69.5	-1.47	3.5	4.0	12	LD
YMW9Y4	71.1	77.0	75.9	79.6	75.9	0.74	3.5	3.6	74.3	0.27	3.5	2.8	12	LC
YRCJER	72.2	75.0	73.6 H	77.0	74.5	0.21	4.3	2.0	76.5	1.04	3.8	2.7	8	XX
Z8YGTT	73.3	73.9	72.2	71.9	72.8	-0.40	2.4	0.9	71.8	-0.65	2.3	1.1	12	LD



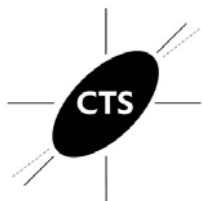
Containerboard Interlaboratory Testing Program
 Analysis 217
Ring Crush, 31 lb Linerboard - 31K1
 TAPPI Official Test Method T822

Report #667
April 2025

Consensus (All Labs) Results															
Weekly Means					Monthly Results				Cumulative Results						
WebCode	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst	
ZZFDLQ	73.9	73.5	74.5	74.5	74.1	0.08	2.2	0.5	72.7	-0.31	2.4	2.5	12	TX	
Consensus (All Labs) Results															
Wk Mean	73.67	74.19	73.76	74.20	Month Mean			73.89	Grand Mean			73.58			
Avg SDr	3.21	2.90	2.76	2.78	Avg SD			3.01	Avg SD			2.96			
SD btwn Labs	3.16	2.99	2.87	3.28	SD btwn Labs			2.71	SD btwn Labs			2.76			
Labs Incl	36	35	35	36	SD btwn Wks			2.60	SD btwn Wks			2.44			
Labs Excl	0	1	1	0	Labs Incl			36	Labs Incl			36			
Labs not Rcvd	0	0	0	0											

Key to Instrument Codes Reported by Participants

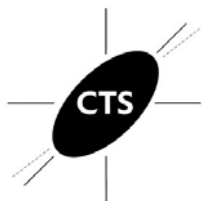
EM	Emerson 1200	LC	L&W Crush Tester 48
LD	L&W Crush Tester 248	LG	L&W 753
LX	L&W 506	LZ	L&W Crush Tester (model not specified)
MB	Messmer Buchel K440	MZ	Messmer Buchel (model not specified)
TH	TMI Compression Tester, Model 17-76	TU	TMI Universal Crush Tester (TMI K440)
TX	TMI Digital Crush Tester (model not specified)	XX	Instrument make/model not specified by lab



Containerboard Interlaboratory Testing Program
Analysis 223
STFI, 42 lb Linerboard - 42L3
 TAPPI Official Test Method T826

Report #667
April 2025

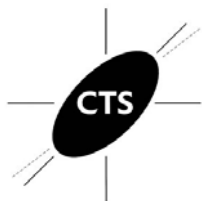
WebCode	Weekly Means				Monthly Results				Cumulative Results					
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst
3AHX2_AL	26.9	26.0	26.7	27.1	26.7	0.71	1.9	0.5	26.3	0.55	1.8	0.5	8	XX
3TA936	24.3 L	23.5	24.1 L	24.0 L	23.9	-0.97	1.0	0.4	23.8	-1.20	1.0	0.7	8	LZ
3ZRUR3	27.2	26.9	27.2	No DATA	27.1	0.96	1.9	0.2 L	26.9	0.93	1.7	0.4 L	5	LU
3ZRUR3_AL	26.0	25.8	26.8	No DATA	26.2	0.41	1.5	0.5	26.4	0.63	1.7	1.2	5	AL
6NUE26	24.3	23.7	24.6 H	23.4 H	24.0	-0.95	2.5	0.6	24.6	-0.64	2.3	1.0	8	LH
7VQRFY_AL	26.1 L	25.2	25.1 L	25.4	25.4	-0.05	1.3	0.5	25.2	-0.23	1.4	0.6	8	AL
86VYVY	23.6	23.1	No DATA	No DATA	23.3	-1.36	1.5	0.3	23.9	-1.15	1.7	1.1	6	LY
86VYVY_AL	23.4 L	23.5	No DATA	No DATA	23.5	-1.28	1.0	0.1	23.3	-1.54	1.3	0.6	6	AL
8KL4XZ	27.4	28.1	27.7	28.0	27.8	1.40	1.9	0.3	27.7	1.47	1.9	0.5	8	LH
8UNGZL	26.6	26.3	26.0	26.0	26.2	0.43	1.7	0.2 L	25.1	-0.33	1.7	1.3	8	LH
9HP3DU	27.8 H	27.1	28.8	27.9	27.9	1.45	2.5	0.7	27.6	1.40	2.3	0.6	8	LA
A623FZ	26.2	25.6	26.8	27.5	26.5	0.62	2.0	0.8	26.5	0.69	2.0	0.8	4	TT
AMGCG2_AL	45.0 XL	44.0 XL	49.0 XL	46.0 XL	46.0	12.63 X	0.0	2.2	37.4	8.24 X	0.0	9.3 H	8	AL
ATRKNW	27.1	24.6	No DATA	No DATA	25.9	0.21	1.8	1.8	25.7	0.10	1.8	1.0	6	LU
AZTYBJ	28.5	28.1	28.7	27.5	28.2	1.63	1.9	0.5	27.8	1.54	2.0	0.8	8	LH
B9VJ6Y_AL	32.1 X	31.9 X	31.2 X	31.3 X	31.6	3.74 X	2.0	0.4	31.7	4.28 X	2.0	0.5 L	8	AL
BJGH3W	24.8	24.7	25.0 L	No DATA	24.8	-0.43	1.3	0.2 L	25.2	-0.27	1.3	1.2	7	LU
BQHUXT_AL	23.9	24.6	24.5	25.3	24.6	-0.59	1.7	0.6	24.6	-0.65	1.7	0.5	8	AL
CXCLJR	25.8	26.7	25.0	25.2	25.7	0.10	1.7	0.7	25.5	-0.06	1.7	0.6	8	LY
DALGCW	24.2	25.4	25.1	24.1	24.7	-0.53	1.4	0.7	24.5	-0.71	1.4	0.5	8	LU
DDL8W_AL	25.1	26.1	25.8	26.5	25.9	0.21	1.9	0.6	26.7	0.79	1.7	1.1	8	AL
DKGRMP	25.8	25.4	25.0	25.5	25.4	-0.09	1.7	0.3	25.5	-0.03	1.6	0.3 L	8	LH
DV229X_AL	22.6	25.4	25.2	23.9	24.3	-0.77	1.7	1.3	24.1	-1.01	2.1	0.9	8	AL
DVN8VH	21.3 *	21.6 *	20.9 *	21.7 *	21.4	-2.57 *	2.0	0.4	22.9	-1.87	1.8	1.7	8	LZ
EULY2P	24.6	24.6	24.4	24.0	24.4	-0.69	1.7	0.3	24.1	-0.98	1.7	0.4 L	8	LU
F92KYM	28.8 *	28.1	28.5	No DATA	28.5	1.80	1.7	0.4	27.8	1.56	1.8	0.9	6	LU
FKT9UM	22.2	44.6 X	22.4	24.9	28.5	1.86	2.0	10.8 H	29.2	2.54 *	2.7	9.4 H	8	LZ
G9FBJR_AL	26.7	26.2	26.9	26.5	26.6	0.64	1.7	0.3	26.7	0.77	1.5	0.4 L	8	AL
GKRFUU_AL	28.2	29.0 *	29.0	28.4	28.6	1.92	2.0	0.4	28.8	2.25 *	1.9	0.4 L	8	AL
GWNGDP_AI	24.3	24.4	23.5	24.5	24.2	-0.84	1.6	0.4	24.3	-0.89	1.5	0.6	8	XX
HGRKQK	24.7	24.7	25.4	25.1	25.0	-0.34	1.8	0.3	25.0	-0.41	1.8	0.3 L	4	LU
JAPWCQ	25.0	25.6	25.5	25.4	25.4	-0.09	1.9	0.3 L	24.4	-0.83	1.9	1.1	8	XX
KRHC8	25.9 L	24.7 L	25.7 L	25.7 L	25.5	-0.02	0.7	0.5	25.5	-0.04	0.7	0.5	4	LZ
KZTED8	27.6 L	26.2 L	26.1 L	26.2 L	26.5	0.61	0.0	0.7	26.2	0.47	0.0	1.1	8	LH
LGFG7G	28.4	28.4	29.1 *H	29.0 *	28.7	1.97 *	2.2	0.4	27.7	1.48	2.1	1.2	8	LA



Containerboard Interlaboratory Testing Program
Analysis 223
STFI, 42 lb Linerboard - 42L3
TAPPI Official Test Method T826

Report #667
April 2025

Consensus (All Labs) Results															
Wk Mean	25.39	25.38	25.65	25.50	Month Mean	25.53			Grand Mean	25.55					
Avg SDr	1.64	1.67	1.78	1.85	Avg SD	1.72			Avg SD	1.73					
SD btwn Labs	1.73	1.61	1.77	1.56	SD btwn Labs	1.62			SD btwn Labs	1.44					
Labs Incl	54	53	51	46	SD btwn Wks	1.64			SD btwn Wks	1.72					
Labs Excl	2	3	2	3	Labs Incl	54			Labs Incl	54					
Labs not Rcvd	0	0	3	7											



Containerboard Interlaboratory Testing Program

Analysis 223

STFI, 42 lb Linerboard - 42L3

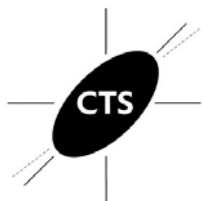
TAPPI Official Test Method T826

Report #667

April 2025

Key to Instrument Codes Reported by Participants

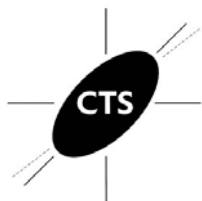
AK	L & W Autoline 300	AL	L & W Autoline 400
BK	Buchel Strip Compression Tester BK-155	LA	L&W Autoline (223 Enrollment)
LH	L&W 282	LU	L&W 52 without moisture correction(was 53)
LW	L&W 53 with moisture correction (was 53M)	LY	L&W 152 without moisture correction
LZ	L&W (model not specified)	TT	TMI Short Span Compression, 17-34 (MB K455)
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program
Analysis 225
STFI, 31 lb Linerboard - 31K1
 TAPPI Official Test Method T826

Report #667
April 2025

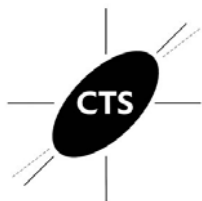
	Weekly Means				Monthly Results				Cumulative Results							
WebCode	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst		
3AHX2_AL	21.3	21.0	21.7	20.5	21.1	0.74	1.3	0.5	21.4	0.71	1.7	0.6	12	XX		
3TA936	20.0	19.5	20.5	19.7	19.9	-0.72	1.0	0.4	20.0	-0.67	1.2	0.5	12	XX		
3ZRUR3	20.9	20.3	21.1	No DATA	20.8	0.29	1.6	0.4	20.7	0.06	1.5	0.4	L 7	LU		
3ZRUR3_AL	22.4	22.0	22.1	No DATA	22.2	1.94	*	1.6	0.2	21.3	0.70	1.5	1.1	7	AL	
6NUE26	19.9 H	19.9 L	19.6	19.3	19.7	-0.99	1.5	0.3	19.7	-1.04	1.7	0.3	L 12	LH		
7VQRFY_AL	19.8	21.6	20.0	20.3	20.4	-0.08	1.2	0.8	20.7	0.03	1.1	0.7	12	AL		
86VYVY	18.7	18.4	* No DATA	No DATA	18.6	-2.24	*	1.3	0.2	19.5	-1.23	1.9	1.5	5	LY	
86VYVY_AL	18.8	18.7	No DATA	No DATA	18.8	-2.04	*	1.4	0.1	19.8	-0.88	1.3	1.4	5	AL	
8KL4XZ	20.5	21.1	20.9	21.3	21.0	0.52	1.5	0.3	21.2	0.56	1.4	0.5	12	LH		
8UNGZL	21.7	21.5	20.8	20.7	21.2	0.80	1.4	0.5	21.0	0.34	1.4	0.6	12	LH		
9HP3DU	21.6	19.7	19.8	19.9	20.3	-0.29	1.5	0.9	21.5	0.82	1.6	2.0	12	LA		
A623FZ	20.1	20.2	20.8	21.3	20.6	0.12	1.6	0.6	20.8	0.10	1.6	1.2	8	TT		
AMGCG2_AL	37.0 XL	40.0 XL	39.0 XL	39.0 XL	38.8	21.26	X	0.0	1.3 H	63.3	44.58	X 0.0	49.4 H	12	AL	
ATRKNW	20.7	19.8	No DATA	No DATA	20.2	-0.30	1.4	0.7	20.0	-0.68	1.3	0.9	10	LU		
AZTYBJ	21.9	21.2	22.0	21.8 H	21.7	1.39	1.8	0.4	21.3	0.68	1.5	0.5	12	LH		
B9VJ6Y_AL	26.7 XH	25.7 X	25.3 X	26.0 X	25.9	6.34	X	1.8	0.6	25.5	5.08	X 1.8	0.7	12	AL	
BJGH3W	20.2 L	21.0 L	19.3	No DATA	20.2	-0.39	1.0	0.8	20.6	-0.08	1.4	0.7	11	LU		
BQHUXT_AL	20.2	19.5	20.3	20.3	20.1	-0.50	1.5	0.4	20.5	-0.16	1.5	0.6	12	AL		
CXCLJR	21.8	21.5	20.3	21.3	21.2	0.86	1.6	0.6	21.3	0.69	1.4	0.5	12	LU		
DALGCW	20.0	19.3	20.4	20.5	20.1	-0.51	1.1	0.5	19.9	-0.82	1.3	0.3	L 12	LU		
DDL8W_AL	21.5	20.6	19.8	20.9	20.7	0.25	1.5	0.7	20.8	0.13	1.4	0.8	12	AL		
DKGRMP	20.6	20.6 L	20.0	20.2	20.3	-0.19	1.2	0.3	20.8	0.10	2.3	1.9	12	LH		
DV229X_AL	18.3 *	20.2	19.7 H	19.5	19.4	-1.25	1.7	0.8	18.7	-2.05	*	1.6	0.9	12	AL	
DVN8VH	18.2 *	16.5 X	17.3 X	17.1 X	17.3	-3.76	X	1.4	0.7	18.5	-2.24	*	1.4	1.5	8	XX
EULY2P	20.1	19.9	19.6	19.1	19.7	-0.97	1.2	0.4	20.0	-0.70	1.4	0.4	L 12	LU		
F92KYM	21.5	21.2	22.2	No DATA	21.6	1.29	1.7	0.5	21.5	0.86	1.6	0.3	L 7	LU		
FKT9UM	18.1 *	36.7 XH	17.5 X	21.0	23.4	3.32	X	1.8	9.0 H	21.5	0.87	1.8	5.6 H	12	LZ	
G9FBJR_AL	20.5	21.4	21.2	21.1	21.1	0.65	1.5	0.4	21.4	0.74	1.3	0.7	12	AL		
GKRFUU_AL	21.8	22.3	21.9	21.6	21.9	1.63	1.5	0.3	22.3	1.69	1.5	0.9	12	AL		
GWNGDP_AI	19.4 L	20.0	19.6	20.2	19.8	-0.84	1.3	0.4	20.0	-0.70	1.3	0.8	12	XX		
HGRKQK	21.8	21.1	21.5	22.0	21.6	1.28	1.5	0.4	21.7	1.03	1.8	0.5	12	LW		
JAPWCQ	21.4	20.9	20.5	20.4	20.8	0.35	1.1	0.5	23.1	2.48	*	1.3	4.9 H	12	XX	
KRHCR8	21.8 L	21.9 L	21.4 L	21.7 L	21.7	1.39	0.5	0.2	21.7	1.06	0.5	0.2	L 4	LZ		
KZTED8	21.8 L	21.5 L	21.9 L	21.0 L	21.6	1.23	0.0	0.4	22.7	2.16	*	0.0	4.0 H	12	LH	
LGFG7G	21.6	21.5	21.6	20.8	21.4	1.02	1.5	0.4	21.6	0.96	1.5	0.8	12	LA		



Containerboard Interlaboratory Testing Program
 Analysis 225
STFI, 31 lb Linerboard - 31K1
 TAPPI Official Test Method T826

Report #667
April 2025

Consensus (All Labs) Results															
Wk Mean	20.46	20.45	20.59	20.53	Month Mean	20.50			Grand Mean	20.68					
Avg SDr	1.40	1.37	1.47	1.37	Avg SD	1.40			Avg SD	1.46					
SD btwn Labs	1.07	1.00	0.94	0.91	SD btwn Labs	0.86			SD btwn Labs	0.96					
Labs Incl	54	52	49	46	SD btwn Wks	0.57			SD btwn Wks	1.59					
Labs Excl	2	4	4	3	Labs Incl	52			Labs Incl	54					
Labs not Rcvd	0	0	3	7											



Containerboard Interlaboratory Testing Program

Analysis 225

STFI, 31 lb Linerboard - 31K1

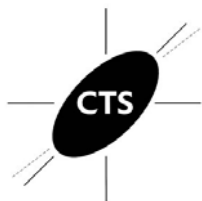
TAPPI Official Test Method T826

Report #667

April 2025

Key to Instrument Codes Reported by Participants

AK	L & W Autoline 300	AL	L & W Autoline 400
LA	L&W Autoline (223 Enrollment)	LH	L&W 282
LU	L&W 52 without moisture correction (was 53)	LW	L&W 53 with moisture correction (was 53M)
LY	L&W 152 (was 52M)	LZ	L&W (model not specified)
TT	TMI Short Span Compression, 17-34 (MB K455)	XX	Instrument make/model not specified by lab



Containerboard Interlaboratory Testing Program
 Analysis 228
Roughness - Stylus Method, 42 lb Linerboard - 42L3
 TAPPI Official Test Method T575

Report #667
April 2025

WebCode	Monthly Results				Cumulative Results				Inst
	Mean	CPV	SD		Mean	CPV	SD Months	Months	
3AHEX2_AL	248.1	1.26	29.55		199.1	-0.50	50.25	4	AL
3ZRUR3_AL	156.5	-0.74	16.22		157.5	-1.50	2.24	L 3	AL
86VYVY_AL	168.1	-0.48	17.09		245.0	0.60	69.03	4	AL
9HP3DU	205.1	0.32	40.11	H	196.9	-0.55	33.97	4	LA
AZTYBJ	175.1	-0.33	23.63		243.4	0.56	45.68	4	EV
B9VJ6Y_AL	87.4	-2.24	* 6.85	L	131.1	-2.13	* 34.67	4	AL
BJGH3W	173.1	-0.38	27.99		179.4	-0.97	11.47	4	EV
BQHUXT	149.5	-0.89	20.30		214.3	-0.14	44.44	4	LS
BQHUXT_AL	182.8	-0.16	19.78		231.1	0.27	56.42	4	AL
DDL8W_AL	160.3	-0.65	18.70		210.4	-0.23	56.21	4	AL
EULY2P	189.8	-0.01	16.77		237.6	0.42	61.29	4	EV
G9FBJR_AL	190.5	0.00	19.27		218.4	-0.04	45.21	4	AL
GKRFUU_AL	202.4	0.26	15.96		268.0	1.15	45.48	4	AL
LGFG7G	296.4	2.31	* 38.02		290.1	1.68	19.57	4	LA
NMB2LG_AL	133.8	-1.23	28.81		135.4	-2.02	* 8.06	4	AL
Q4CGMZ	291.8	2.21	* 35.70		284.0	1.53	15.07	4	LA
Q6KU42	217.5	0.59	24.46		264.5	1.06	33.43	4	LA
QFPK7C_AL	163.3	-0.59	12.40		200.6	-0.46	25.14	4	AL
QWTDDC	185.6	-0.10	24.33		234.5	0.35	56.01	4	EV
QZBGKH	140.5	-1.08	25.73		189.8	-0.72	55.60	4	LS
TJD7PB	187.1	-0.07	22.05		223.2	0.08	51.77	4	LA
UG83EZ_AL	162.9	-0.60	27.50		160.7	-1.42	8.20	4	AL
WGFYXA	211.3	0.46	17.31		258.6	0.92	64.46	4	LS
X2LT67	234.6	0.96	27.91		250.3	0.73	20.47	4	XX
Y92UYA	195.0	0.10	19.27		242.6	0.54	53.16	4	EV
YVBVBR	252.3	1.35	32.29		248.1	0.67	23.26	4	EV
Z8YGTT	179.2	-0.24	22.27		226.1	0.14	51.87	4	LS
Consensus (All Labs) Results									
Month Mean			190.38	Grand Mean			220.02		
Avg SD			24.55	Avg SD Months			43.07		
SD btwn Labs			45.97	SD btwn Labs			41.77		
Labs Incl			27	Labs Incl			27		

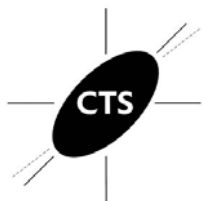


Containerboard Interlaboratory Testing Program
Analysis 228
Roughness - Stylus Method, 42 lb Linerboard - 42L
TAPPI Official Test Method T575

Report #667
April 2025

Key to Instrument Codes Reported by Participants

AL	L & W Autoline 400	EV	Emveco Microgage Model 210-R
LA	L&W Autoline (228 Enrollment)	LS	L&W 263
XX	Instrument make/model not specified by lab		



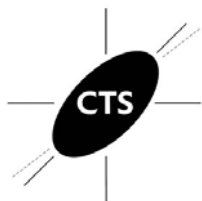
Containerboard Interlaboratory Testing Program
 Analysis 229
Roughness - Sheffield Method, 42 lb Linerboard - 42L3
 TAPPI Official Test Method T538

Report #667
April 2025

WebCode	Monthly Results			Cumulative Results				
	Mean	CPV	SD	Mean	CPV	SD Months	Months	Inst
3AHEX2_AL	383.4	-0.07	5.56	383.3	-0.30	0.21	2	XX
7VQRFY_AL	385.2	0.05	4.29	384.2	-0.22	1.41	2	AL
BQHUXT_AL	408.5	1.62	5.92	410.5	1.85 *	2.74	2	AL
DALGCW	392.2	0.52	8.18	392.8	0.46	0.85	2	XX
DDLR8W_AL	373.8	-0.72	7.18	371.9	-1.19	2.69	2	AL
DV229X	386.5	0.14	4.14	393.7	0.52	10.11	2	PP
GKRFUU_AL	393.7	0.62	6.70	395.0	0.63	1.77	2	AL
GWNGDP_AL	390.8	0.43	4.69	389.9	0.22	1.34	2	XX
L937DP	350.8	-2.26 *	5.67	368.8	-1.44	25.44	2	TS
UG83EZ_AL	361.8	-1.52	2.78 L	364.3	-1.80	3.46	2	AL
XZPB36_AL	387.3	0.19	7.67	387.2	0.01	0.21	2	AL
Z8YGTT	390.9	0.44	12.74 H	393.7	0.53	4.00	2	XX
ZXUAET_AL	392.8	0.56	4.21	396.1	0.72	4.74	2	AK
Consensus (All Labs) Results								
Month Mean			384.44	Grand Mean			387.01	
Avg SD			6.60	Avg SD Months			7.95	
SD btwn Labs			14.86	SD btwn Labs			12.68	
Labs Incl			13	Labs Incl			13	

Key to Instrument Codes Reported by Participants

AK	L & W Autoline 300	AL	L & W Autoline 400
PP	Technidyne Profile/Plus	TS	TMI Monitor/Smoothness
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program
Analysis 231
Internal Bond, 42 lb Linerboard - 42L
TAPPI Official Test Method T569

Report #667
April 2025

WebCode	Monthly Results			Cumulative Results				
	Mean	CPV	SD	Mean	CPV	SD Months	Months	Inst
6NUE26	140.6	-0.74	7.73	152.4	-0.11	10.38	4	HY
7VQRFY	178.6	1.47	8.44	167.4	0.76	7.49	4	LZ
A623FZ	133.5	-1.15	11.72	127.5	-1.56	8.48	2	TM
AZTYBJ	143.0	-0.60	7.75	151.7	-0.15	7.48	4	TM
BJGH3W	148.0	-0.31	4.00	143.0	-0.66	9.06	4	TM
BQHUXT	124.3	-1.68	6.00	124.9	-1.71	2.63	3	TM
DALGCW	175.4	1.29	13.19	182.1	1.62	4.70	4	HY
DV229X	162.6	0.54	6.27	165.9	0.67	4.32	4	HY
EULY2P	148.4	-0.28	4.16	147.9	-0.38	3.72	4	TM
GWNGDP	173.6	1.18	14.94	170.2	0.92	5.18	4	HY
NJBPPG	152.4	-0.05	3.85	152.7	-0.10	8.74	4	TM
NMB2LG	138.4	-0.86	15.47	150.8	-0.20	10.15	4	TM
TJD7PB	179.4	1.52	7.54	190.6	2.11 *	10.98	4	HY
TYT7KF	155.8	0.15	4.87	151.5	-0.16	3.05	4	HZ
UG83EZ	129.8	-1.36	9.36	131.8	-1.31	1.65	4	TM
WGFYXA	163.2	0.58	5.85	163.0	0.50	1.34	4	HY
XZPB36	146.0	-0.42	9.08	144.3	-0.58	1.92	3	TM
Y92UYA	174.5	1.24	6.86	167.2	0.75	7.56	4	HZ
YMW9Y4	144.2	-0.53	2.86	147.2	-0.42	3.03	4	TM

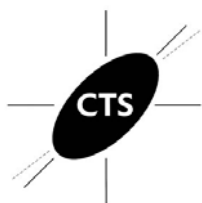
Consensus (All Labs) Results			
Month Mean	153.25	Grand Mean	154.31
Avg SD	8.67	Avg SD Months	6.67
SD btwn Labs	17.20	SD btwn Labs	17.21
Labs Incl	19	Labs Incl	19

Consensus By Method

Test Method	Group Mean	SD btwn Group	Difference from Grand Mean	Labs Included
Scott Bond Type	148.70	15.53	4.56	14
Modified Scott Bond Mechanics	177.81	2.09	24.56	3

Key to Instrument Codes Reported by Participants

HY	Huygen Digitized Scott Internal Bond Tester	HZ	Huygen Internal Bond Tester with AccuPress
LZ	L&W (model not specified)	TM	TMI Monitor/Internal Bond Tester



Containerboard Interlaboratory Testing Program
Analysis 234
COF Inclined Plane (Slide Angle), 42 lb Linerboard - 42L
 TAPPI Official Test Method T815

Report #667
April 2025

WebCode	Monthly Results				Cumulative Results			
	Mean	CPV	SD		Mean	CPV	SD Months	Months
6NUE26	28.0	0.32	6.08	H	25.0	-0.71	2.41	4
7VQRFY	21.6	-1.82	1.67		23.2	-1.30	2.78	4
AMGCG2	27.4	0.12	0.65	L	25.2	-0.64	1.51	4
AZTYBJ	28.4	0.45	1.11		29.0	0.57	0.39	L 4
B9VJ6Y	26.8	-0.08	4.56		27.3	0.04	1.48	4
BJGH3W	34.8	2.59	*	3.03	32.5	1.73	2.93	4
BQHUXT	28.8	0.59		1.92	29.4	0.72	0.71	4
DALGCW	27.6	0.17		0.85	27.6	0.14	2.85	4
DDLR8W	25.2	-0.62		1.39	27.7	0.18	1.95	4
DKGRMP	27.0	-0.01		4.12	22.3	-1.60	4.20	3
DV229X	26.4	-0.22		3.21	28.7	0.50	2.75	4
EULY2P	25.4	-0.55		1.14	25.0	-0.71	3.02	4
GKRFUU	30.2	1.06		1.15	34.0	2.21	*	4.78 4
GWNGDP	25.2	-0.62		4.21	26.8	-0.14	1.50	4
KZTED8	21.0	-2.02	*	1.22	20.9	-2.06	*	0.30 L 4
NMB2LG	27.3	0.07		4.27	30.1	0.93	2.12	4
QFPK7C	23.4	-1.22		2.70	26.5	-0.24	2.13	4
QWTDDC	29.2	0.71		1.43	29.4	0.72	1.67	4
QZBGKH	22.8	-1.42		0.84	21.2	-1.96	*	1.82 4
TJD7PB	27.2	0.05		2.17	28.3	0.35	2.13	4
UG83EZ	30.1	1.02		3.56	28.8	0.52	3.75	4
VY3VXC	24.0	-1.02		3.67	24.8	-0.77	2.76	4
WGFYXA	26.8	-0.08		0.84	27.3	0.02	0.30	L 4
X2LT67	31.4	1.46		4.04	28.8	0.51	1.98	4
Y92UYA	28.4	0.45		1.95	29.0	0.58	1.60	4
Z8YGTT	29.2	0.72		3.14	27.0	-0.06	4.62	4
ZZFDLQ	26.7	-0.11		3.27	28.6	0.44	3.04	4
Consensus (All Labs) Results								
Month Mean			27.04	Grand Mean			27.18	
Avg SD			2.90	Avg SD Months			2.56	
SD btwn Labs			2.99	SD btwn Labs			3.08	
Labs Incl			27	Labs Incl			27	

Key to Instrument Codes Reported by Participants

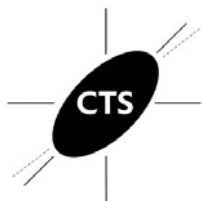
ZZ Instruments No Longer Tracked



Containerboard Interlaboratory Testing Program
 Analysis 237
Air Resistance, 42 lb Linerboard - 42L3
 TAPPI Official Test Method T460

Report #667
April 2025

WebCode	Monthly Results				Cumulative Results				Inst
	Mean	CPV	SD		Mean	CPV	SD Months	Months	
3AHX2_AL	33.4	0.39	1.39		33.2	0.38	0.35	4	XX
3ZRUR3_AL	30.5	-1.16	1.27	L	32.5	-0.07	1.82	3	AL
7VQRFY_AL	34.9	1.18	2.25		35.6	1.92 *	0.61	4	AL
9HP3DU	33.0	0.19	1.44		32.5	-0.08	1.29	4	LA
A623FZ	28.4	-2.27 *	2.88		29.5	-2.04 *	1.56	2	GA
AMGCG2_AL	29.4	-1.76	3.02		31.6	-0.70	1.65	4	XX
ATRKNW_AL	34.3	0.89	2.70		32.8	0.11	1.05	4	AL
AZTYBJ	32.6	-0.05	1.49		32.7	0.01	0.79	4	LP
B6YWDW	35.7	1.64	1.60		34.1	0.95	1.42	4	XX
B9VJ6Y_AL	35.1	1.32	3.93		36.3	2.41 *	1.05	4	AL
BJGH3W_AL	32.6	-0.04	2.74		32.1	-0.37	0.58	4	AL
BQHUXT_AL	33.4	0.41	3.19		32.9	0.17	0.41	4	AL
DALGCW	30.6	-1.08	7.68	H	32.2	-0.29	1.90	4	TP
DDLR8W_AL	30.3	-1.25	2.86		30.9	-1.17	1.63	4	AL
DKGRMP	4.3	-15.18 X	0.21	L	23.3	-6.13 X	16.41 H	3	LP
DV229X	33.6	0.51	5.87	H	33.2	0.39	0.86	4	TP
EULY2P	32.5	-0.10	3.83		33.6	0.61	1.60	4	GA
G9FBJR_AL	33.3	0.34	2.47		33.7	0.72	0.46	4	AL
GKRFUU_AL	35.7	1.65	1.93		33.9	0.79	1.40	4	AL
GWNGDP	31.6	-0.58	3.07		32.6	-0.04	1.05	4	TP
GWNGDP_AL	31.3	-0.72	1.83		31.9	-0.50	1.09	4	XX
HPYJZL	31.7	-0.54	2.46		32.2	-0.29	1.52	4	LP
KZTED8	35.4	1.45	3.43		34.6	1.30	1.05	2	XX
L8QQJN	35.1	1.31	4.01		35.1	1.61	2.28	4	GG
LGFG7G	31.9	-0.40	2.11		32.7	0.04	0.56	4	LA
NMB2LG_AL	33.6	0.51	3.12		32.4	-0.15	0.91	4	AL
Q4CGMZ	31.2	-0.79	1.76		31.9	-0.50	1.03	4	LA
Q6KU42	31.8	-0.49	1.03	L	31.7	-0.60	0.63	4	LA
QFPK7C_AL	31.1	-0.86	2.45		30.5	-1.38	1.04	4	AL
QTEJWF	31.8	-0.44	2.83		32.1	-0.35	1.44	4	LP
QZBGKH	28.8	-2.08 *	2.98		28.8	-2.50 *	0.60	4	TD
TJD7PB	33.1	0.24	3.18		32.6	-0.01	0.53	4	LP
UG83EZ_AL	32.8	0.05	3.48		32.3	-0.25	0.37	4	AL
VY3VXC_AL	34.6	1.04	2.50		34.3	1.06	2.14	4	AL
WGFYXA	33.3	0.36	3.38		31.5	-0.75	1.84	4	LP
X2LT67	31.2	-0.78	3.38		31.1	-1.02	0.37	4	LP
XZPB36_AL	32.0	-0.34	1.80		31.2	-0.92	0.79	3	AL
Y92UYA	33.1	0.21	2.15		33.0	0.20	0.32	4	LP
Z8YGTT	34.8	1.15	4.73		35.0	1.51	1.36	4	GA



Containerboard Interlaboratory Testing Program

Analysis 237

Air Resistance, 42 lb Linerboard - 42L3

TAPPI Official Test Method T460

Report #667

April 2025

WebCode	Monthly Results			Cumulative Results				
	Mean	CPV	SD	Mean	CPV	SD Months	Months	Inst
ZXUAET AL	34.3	0.87	2.07	32.3	-0.20	2.60	H 3	AK

Consensus (All Labs) Results			
Month Mean	32.66	Grand Mean	32.65
Avg SD	3.09	Avg SD Months	1.27
SD btwn Labs	1.87	SD btwn Labs	1.53
Labs Incl	39	Labs Incl	39

Key to Instrument Codes Reported by Participants

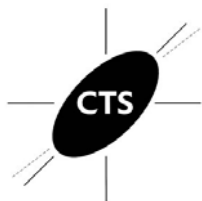
AK	L & W Autoline 300	AL	L & W Autoline 400
GA	Gurley Precision #4340 Automatic Densometer	GG	Gurley Precision #4320 Densometer
LA	L&W Autoline (237 Enrollment)	LP	L&W Air Permeance Tester SE 166
TD	TMI Gurley Densometer	TP	Technidyne Profile/ plus Roughness & Porosity
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program
Analysis 240
Flat Crush Strength (CMT), 26 lb Corrugating Medium - CM13
 TAPPI Official Test Method T809

Report #667
April 2025

WebCode	Weekly Means				Monthly Results				Cumulative Results						Inst
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks		
4EMFR4	58.3 L	58.3 L	58.4 L	58.4 L	58.3	-0.07	0.6	0.1 L	57.8	-0.30	0.7	0.3 L	16	LD	
7VQRFY	54.4	51.7 *	54.4	53.3	53.4	-1.89	3.7	1.3	55.3	-1.39	3.9	2.4	16	LD	
8KL4XZ	56.0	57.6	56.7	57.7	57.0	-0.56	3.4	0.8	57.1	-0.60	3.0	1.3	16	EM	
8UNGZL	61.4	63.5	63.0	61.9	62.5	1.47	4.1	1.0	60.9	1.07	3.8	1.6	12	LD	
923RJZ	60.6	55.5	53.2 *	56.5	56.5	-0.77	3.4	3.1 H	57.7	-0.33	3.5	2.4	16	LD	
9X8TDH	47.7 XH	45.6 XH	43.7 XH	48.5 X	46.4	-4.51 X	7.3	2.2	49.1	-4.15 X	5.1	3.6	16	TH	
ATRKNW	61.5	61.6	59.9	58.9	60.5	0.73	3.6	1.3	60.4	0.87	3.9	3.6	12	LC	
CXCLJR	63.6	60.8	62.3	64.2 *	62.7	1.56	4.2	1.5	59.2	0.32	4.8	4.1	16	LD	
DALGCW	59.9	58.9	61.3	59.3	59.8	0.49	3.4	1.0	58.8	0.14	4.2	1.5	16	LC	
DKGRMP	54.5	56.7	61.3	60.2	58.2	-0.13	3.4	3.1 H	57.4	-0.49	3.7	2.3	16	LD	
DPYVUU	62.8	61.0	61.9	61.5	61.8	1.23	1.9	0.8	62.2	1.64	2.7	0.7	16	LC	
DV229X	52.8	53.0 *	53.6 *	55.3	53.7	-1.80	2.7	1.2	54.6	-1.73	3.4	1.4	16	LD	
DVN8VH	55.4	58.6	56.7	56.0	56.7	-0.69	4.7	1.4	55.3	-1.41	6.1	2.3	12	EN	
EULY2P	57.6	58.4	55.7	56.9	57.1	-0.51	3.4	1.1	55.8	-1.18	3.5	1.9	16	LD	
F62BTR	62.7	63.0	63.1	61.1	62.5	1.48	2.0	0.9	62.9	1.96 *	2.5	0.8	16	TB	
FKT9UM	60.4	61.6	59.9	60.4	60.6	0.77	3.4	0.7	60.8	1.01	3.4	2.2	16	LD	
GDPLFR	56.4	56.6	56.3	56.7	56.5	-0.74	1.7	0.2 L	57.2	-0.55	1.7	0.6	12	MB	
GWNGDP	61.3 L	59.4	58.4	59.0	59.5	0.36	3.3	1.3	58.9	0.17	3.5	1.6	16	LD	
HGRKQK	61.8	60.1	58.4	58.8	59.8	0.46	4.2	1.5	58.2	-0.13	4.5	1.6	12	LD	
HPYJZL	59.8	58.5	56.1	55.9	57.6	-0.36	3.1	1.9	57.9	-0.24	2.0	1.0	16	LD	
HY8ZRT	54.5	63.3 H	62.3	57.6 H	59.4	0.33	5.4	4.1 H	59.5	0.46	4.6	2.6	16	LD	
JAPWCQ	60.0 L	59.7 L	60.1 L	59.7 L	59.9	0.50	0.5	0.2 L	57.0	-0.66	0.7	3.2	16	TU	
KRHCR8	57.3 L	57.3	57.4 L	59.3	57.8	-0.26	1.6	1.0	57.8	-0.29	1.6	1.0	4	XX	
KZTED8	61.5	59.6	58.7	59.1	59.7	0.45	3.3	1.2	60.0	0.68	3.6	1.3	16	LD	
LGFG7G	61.1	62.2	59.1	62.2	61.2	0.98	4.4	1.5	60.5	0.88	6.2	2.4	16	TU	
QFPK7C	55.8	56.9	55.9	56.8	56.3	-0.81	4.1	0.6	56.5	-0.86	3.7	1.3	16	LZ	
QTEJWF	58.1	57.8	56.7	57.2	57.5	-0.40	4.3	0.6	58.1	-0.15	3.7	1.3	16	LD	
QWTDCC	56.7	57.9	58.8	56.5	57.5	-0.39	3.4	1.1	56.3	-0.94	3.4	2.2	16	EN	
RLQF63	56.7	56.6	57.4	55.7	56.6	-0.71	2.7	0.7	62.3	1.70	4.3	6.4 H	16	TX	
TJD7PB	59.7	58.7	58.4	62.5	59.8	0.49	3.9	1.9	58.7	0.11	4.3	1.7	16	XX	
TYT7KF	57.7	57.8	58.5	56.8	57.7	-0.31	4.2	0.7	57.5	-0.43	3.5	0.9	16	LD	
UG83EZ	53.3	54.8	56.1	53.7	54.5	-1.51	3.1	1.3	55.1	-1.47	4.5	1.9	16	LD	
WGFYXA	26.8 XL	No DATA		No DATA	56.3	41.5	-6.32 X	1.8	20.8	49.8	-3.81 X	2.2	12.9 H	5	LD
WK2J3D	63.5 L	61.0 L	59.0 L	60.9 L	61.1	0.96	0.8	1.8	60.7	0.97	0.9	1.6	16	XX	
X2LT67	60.9	57.9	60.5	60.9	60.1	0.57	3.1	1.5	59.4	0.40	3.8	2.1	16	LD	



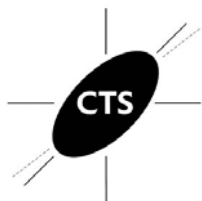
Containerboard Interlaboratory Testing Program
 Analysis 240
Flat Crush Strength (CMT), 26 lb Corrugating Medium - CM13
 TAPPI Official Test Method T809

Report #667
April 2025

Consensus (All Labs) Results																	
Wk Mean	58.58	58.50	58.63	58.30	Month Mean	58.52	Grand Mean	58.47									
Avg SDr	3.46	3.38	3.36	3.68	Avg SD	3.46	Avg SD	3.70									
SD btwn Labs	3.07	2.80	2.60	2.91	SD btwn Labs	2.69	SD btwn Labs	2.27									
Labs Incl	40	39	39	41	SD btwn Wks	1.53	SD btwn Wks	2.19									
Labs Excl	2	2	2	1	Labs Incl	40	Labs Incl	40									
Labs not Rcvd	0	1	1	0													

Key to Instrument Codes Reported by Participants

EM	Emerson 1200 Series	EN	Emerson 2200 Series
LC	L&W Crush Tester 48	LD	L&W Crush Tester 248
LZ	L&W Crush Tester (model not specified)	MB	Messmer Buchel K440
TB	TMI Monitor/Compression Tester, 17-70	TH	TMI Compression Tester, Model 17-76
TU	TMI Universal Crush Tester (TMI K440)	TX	TMI Crush Tester (model not specified)
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program

Analysis 250

Report #667

April 2025

Fluted Edge Crush Strength (CFC), 26 lb Corrugating Medium - CM13

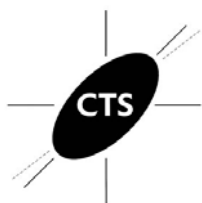
TAPPI Official Test Method T843

WebCode	Weekly Means				Monthly Results				Cumulative Results					
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst
7VQRFY	70.5	68.3	72.8	68.1	69.9	0.93	3.6	2.2	68.1	0.35	3.2	2.0	16	LD
ATRKNW	70.6	69.2	69.9	H 67.0	69.2	0.61	4.3	1.6	69.1	0.76	4.1	1.8	12	LC
DALGCW	67.7	66.8	68.4	71.0	68.5	0.30	3.6	1.8	68.9	0.68	3.7	1.7	16	LC
DV229X	69.7	70.2	69.1	66.6	68.9	0.49	4.0	1.6	68.9	0.70	3.7	1.3	16	LD
DVN8VH	66.3	66.8	65.8	66.6	66.3	-0.61	2.5	0.5	66.0	-0.53	3.0	1.7	12	LC
GDPLFR	65.8	65.0	65.3	65.6	65.4	-1.01	1.7	0.3	65.4	-0.78	1.7	0.3	L 12	MB
GWNGDP	70.9	69.9	71.2	70.6	70.7	1.25	3.7	0.6	70.0	1.16	3.3	1.0	16	LD
HGRKQK	68.7	67.6	67.2	68.8	68.1	0.15	4.3	0.8	65.1	-0.91	4.8	2.4	12	LD
HPYJZL	69.7	74.1	* 69.3	69.3	H 70.6	1.23	5.6	2.3	69.7	1.01	3.0	1.3	16	LD
KRHCR8	64.4	L 64.9	L 63.5	L 64.4	L 64.3	-1.49	1.1	0.6	64.3	-1.26	1.1	0.6	4	XX
KZTED8	57.6	X 56.1	X 57.0	XL 56.9	X 56.9	-4.66	X 3.5	0.6	57.2	-4.26	X 4.0	0.9	8	XX
QFPK7C	65.0	62.2	*H 61.8	* 63.0	63.0	-2.04	* 3.9	1.4	61.9	-2.25	* 4.3	3.1	16	LZ
QTEJWF	66.7	66.5	66.5	68.4	67.0	-0.32	3.8	0.9	68.2	0.38	3.3	1.5	16	LD
TJD7PB	70.3	69.9	68.8	68.9	69.5	0.74	2.8	0.7	68.6	0.54	3.5	1.2	12	XX
UG83EZ	67.8	65.0	66.6	64.8	66.1	-0.73	3.6	1.4	66.9	-0.14	3.6	1.8	16	LD
WK2J3D	70.7	L 68.9	L 70.8	L 73.6	*L 71.0	1.39	0.8	1.9	70.8	1.51	0.9	1.5	16	XX
X2LT67	68.1	68.7	66.4	H 65.4	67.1	-0.27	4.1	1.5	66.4	-0.34	4.4	2.0	16	LD
XF4GD4	66.9	65.3	65.7	67.2	66.3	-0.64	3.8	1.0	65.2	-0.88	3.7	1.6	16	LZ

					Consensus (All Labs) Results			
Wk Mean	68.22	67.61	67.59	67.61	Month Mean	67.76	Grand Mean	67.27
Avg SDr	3.37	3.40	3.66	3.84	Avg SD	3.57	Avg SD	3.43
SD btwn Labs	2.14	2.78	2.85	2.66	SD btwn Labs	2.33	SD btwn Labs	2.37
Labs Incl	17	17	17	17	SD btwn Wks	1.38	SD btwn Wks	1.70
Labs Excl	1	1	1	1	Labs Incl	17	Labs Incl	17
Labs not Rcvd	0	0	0	0				

Key to Instrument Codes Reported by Participants

LC	L&W Crush Tester 48	LD	L&W Crush Tester 248
LZ	L&W Crush Tester (model not specified)	MB	Messmer Buchel K440
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program
Analysis 255
Ring Crush (RCT), 26 lb Corrugating Medium - CM13
 TAPPI Official Test Method T822

Report #667
April 2025

	Weekly Means				Monthly Results				Cumulative Results					
WebCode	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst
4EMFR4	43.6 L	43.5 L	43.6 L	43.5 L	43.5	0.75	0.7	0.1 L	44.4	1.20	0.6	0.5	16	LD
7VQRFY	40.8	41.3	42.9	44.6	42.4	0.06	3.3	1.7	43.3	0.58	3.5	1.9	16	LD
8XQGZJ	38.7	37.6	39.4	38.6	38.6	-2.18 *	3.4	0.7	40.2	-1.17	4.4	3.0	8	XX
923RJZ	40.9	44.9	40.7	39.6	41.5	-0.44	3.0	2.3	40.5	-1.00	3.1	1.6	16	LD
9EABL2	39.7	39.0	39.9	41.0	39.9	-1.41	3.4	0.8	41.8	-0.28	3.0	1.3	16	TH
DALGCW	41.8	41.0	44.7	44.8	43.1	0.47	3.6	2.0	42.9	0.36	3.1	1.7	16	LC
DKGRMP	43.7	40.8	39.7	39.1	40.8	-0.86	2.6	2.0	39.1	-1.83	3.3	2.4	16	LD
DPYVUU	41.1	40.2 L	40.3 L	40.6	40.5	-1.03	1.4	0.4	41.2	-0.62	2.0	1.2	16	XX
DV229X	42.9	44.6	42.4	No Data	43.3	0.60	2.9	1.1	42.1	-0.10	3.6	1.8	15	LD
F62BTR	40.4	40.5	41.6	40.9	40.9	-0.84	2.2	0.5	41.3	-0.56	2.1	0.9	16	XX
FKT9UM	41.6	47.3 *	48.4 *	41.4	44.7	1.42	3.4	3.7 H	43.8	0.88	3.3	2.8	16	LZ
GDPLFR	41.6	41.8	41.7	41.8	41.7	-0.32	1.8	0.1 L	41.7	-0.35	1.7	0.2 L	12	MB
GWNGDP	41.4	39.7	42.4	42.8	41.6	-0.42	2.8	1.4	41.8	-0.24	2.8	1.3	16	LD
HPYJZL	44.6	41.3	40.4	41.0	41.8	-0.28	3.0	1.9	40.7	-0.89	1.9	1.1	16	LD
HY8ZRT	45.0	44.0 H	44.8	42.8	44.1	1.09	4.0	1.0	44.0	0.97	3.7	0.9	16	LD
JAPWCQ	42.1 L	42.1 L	42.2 L	42.3 L	42.2	-0.06	0.6	0.1 L	42.7	0.25	0.7	0.8	16	TU
KRHC8	43.2	43.2 L	44.6	44.1	43.8	0.89	1.3	0.7	43.8	0.87	1.3	0.7	4	MZ
QTEJWF	39.6	39.3	39.7	40.1	39.7	-1.55	3.5	0.4	38.7	-2.06 *	3.0	1.3	16	LD
RLQF63	42.3	47.0 *	42.1	40.4 H	42.9	0.39	3.2	2.9	43.6	0.76	3.2	3.0	16	LZ
TJD7PB	41.1	42.3	40.7	41.2	41.3	-0.57	3.3	0.7	41.4	-0.52	3.4	1.0	16	XX
TYT7KF	46.8 *H	44.1	44.6	43.0	44.6	1.38	4.0	1.6	43.7	0.82	3.1	1.2	16	LD
X48DAB	42.0	43.9	47.9 *	46.6 *	45.1	1.65	2.5	2.6	45.5	1.88	2.7	2.0	16	LD
XGDNGW	44.9	44.0	45.8	42.3	44.3	1.17	3.6	1.5	45.1	1.61	3.9	1.6	12	LD
Z8YGTT	41.5	39.8	43.1	43.1	41.9	-0.25	3.8	1.6	41.7	-0.35	3.5	1.7	16	LD
ZXUAET	41.2	43.9	40.9	45.5	42.9	0.35	2.7	2.2	41.9	-0.21	2.2	1.7	12	LD

Consensus (All Labs) Results									
Wk Mean	42.11	42.28	42.58	42.12	Month Mean	42.28	Grand Mean	42.27	
Avg SDr	3.02	3.14	2.90	2.74	Avg SD	2.96	Avg SD	2.93	
SD btwn Labs	1.88	2.46	2.48	2.05	SD btwn Labs	1.69	SD btwn Labs	1.74	
Labs Incl	25	25	25	24	SD btwn Wks	1.65	SD btwn Wks	1.66	
Labs Excl	0	0	0	0	Labs Incl	25	Labs Incl	25	
Labs not Rcvd	0	0	0	1					



Containerboard Interlaboratory Testing Program
Analysis 255
Ring Crush (RCT), 26 lb Corrugating Medium - CM13
TAPPI Official Test Method T822

Report #667
April 2025

Key to Instrument Codes Reported by Participants

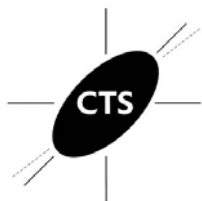
LC	L&W Crush Tester 48	LD	L&W Crush Tester 248
LZ	L&W Crush Tester (model not specified)	MB	Messmer Buchel K440
MZ	Messmer Buchel (model not specified)	TH	TMI Compression Tester, Model 17-76
TU	TMI Universal Crush Tester (TMI K440)	XX	Instrument make/model not specified by lab



Containerboard Interlaboratory Testing Program
 Analysis 261
STFI, 26 lb Corrugating Medium - CM13
 TAPPI Official Test Method T826

Report #667
April 2025

WebCode	Weekly Means				Monthly Results				Cumulative Results					Inst
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	
3TA936	13.1	13.3	12.7	13.4	13.1	-1.22	0.9	0.3	13.3	-0.69	1.3	0.4	16	XX
7VQRFY	12.8	14.0	13.8	14.1 L	13.7	-0.08	1.0	0.6	13.7	0.00	0.9	0.4	16	LA
8KL4XZ	13.9	14.6	14.4	14.7	14.4	1.44	1.0	0.4	14.4	0.99	1.1	0.4	16	LH
9X8TDH	13.3	13.6	12.8	13.2	13.2	-1.02	1.0	0.4	16.4	4.09 X	1.2	4.8 H	16	TS
BQHUXT	13.9	13.5	14.2	14.2	13.9	0.49	1.0	0.3	13.9	0.22	1.1	0.4	16	LA
DALGCW	13.3	13.7	13.5	13.5	13.5	-0.45	1.1	0.2 L	13.6	-0.23	1.0	0.3 L	16	LU
DKGRMP	14.0	13.9	13.8	13.4	13.8	0.10	1.0	0.2	13.5	-0.32	1.2	0.3	16	XX
DV229X	13.5	13.8	12.9	13.3	13.4	-0.69	1.0	0.4	13.0	-1.05	1.0	0.4	16	LB
FKT9UM	13.0	12.4 *	9.9 X	22.2 XH	14.4	1.37	1.9	5.4 H	12.3	-2.22 *	1.4	2.9 H	16	LZ
JAPWCQ	13.8	13.3	13.6	13.5	13.6	-0.34	1.2	0.2	15.3	2.52 *	1.2	3.3 H	16	XX
KRHCR8	13.4 L	13.4 L	13.3 L	14.3 L	13.6	-0.20	0.5	0.5	13.6	-0.15	0.5	0.5	4	LZ
KZTED8	15.1 XL	14.9 L	14.0 L	14.5 L	14.6	1.89	0.0	0.5	14.4	1.04	0.0	0.7	16	LH
LGFG7G	14.8 X	14.1	14.2	13.9	14.3	1.12	1.3	0.4	14.5	1.23	1.3	0.6	16	LA
Q4CGMZ	13.1	14.8	13.4	13.1 H	13.6	-0.22	1.2	0.8	13.6	-0.15	1.3	0.6	16	LA
Q6KU42	14.3 *	14.7	14.4	14.6	14.5	1.62	1.1	0.2 L	14.2	0.76	1.1	0.6	16	LA
TYT7KF	13.2 H	13.9 H	13.6 H	13.7 H	13.6	-0.24	1.8	0.3	14.1	0.54	1.7	0.4	16	XX
UG83EZ	13.5	14.1 L	13.1	14.4	13.8	0.13	0.9	0.6	13.7	0.02	1.0	0.5	16	LA
WGFYXA	No DATA	No DATA	No DATA	13.1	13.1	-1.34	0.9	0.0	13.2	-0.74	0.9	0.1 L	4	LH
WK2J3D	12.9	12.2 *	1.1 X	13.1	9.8	-8.16 X	1.0	5.8 H	12.8	-1.42	1.0	3.2 H	16	XX
XL7R4A	13.7	13.9	14.2	13.5	13.8	0.22	1.2	0.3	13.7	0.03	1.2	0.4	12	LU
YMW9Y4	13.2	13.0	13.3	12.7 L	13.1	-1.38	0.9	0.3	13.3	-0.67	0.9	0.5	16	XX
Z8YGTT	13.5	13.6	13.6	12.9	13.4	-0.60	1.0	0.3	13.4	-0.43	1.0	0.4	16	LB
ZXUAET	13.5 H	13.8	14.6	14.5	14.1	0.81	1.2	0.6	14.4	1.06	1.1	0.5	12	LH
ZZFDLQ	13.6	12.9	13.1	12.5	13.0	-1.43	1.1	0.5	13.5	-0.36	1.1	0.5	16	TT
Consensus (All Labs) Results														
Wk Mean	13.46	13.71	13.64	13.65	Month Mean	13.71			Grand Mean	13.71				
Avg SDr	1.13	1.04	1.14	1.06	Avg SD	1.14			Avg SD	1.12				
SD btwn Labs	0.39	0.69	0.55	0.65	SD btwn Labs	0.48			SD btwn Labs	0.65				
Labs Incl	21	23	21	23	SD btwn Wks	1.22			SD btwn Wks	1.21				
Labs Excl	2	0	2	1	Labs Incl	23			Labs Incl	23				
Labs not Rcvd	1	1	1	0										



Containerboard Interlaboratory Testing Program

Analysis 261

STFI, 26 lb Corrugating Medium - CM13

TAPPI Official Test Method T826

Report #667

April 2025

Key to Instrument Codes Reported by Participants

LA	L&W Autoline	LB	L&W Model 152
LH	L&W 282	LU	L&W 52 without moisture correction (was 53)
LZ	L&W (model not specified)	TS	TMI Monitor/STFI Compression Tester, 17-33
TT	TMI Short Span Compression, 17-34 (MB K455)	XX	Instrument make/model not specified by lab

End of Report