

**APPENDIX A12**

**MODEL SUMMARY FOR REGRESSION OF PEEL FORCE ON SEALING PARAMETERS BY ADHESIVE AND PACKAGE**

**Table A12-1. Parameter coefficients and model fit statistics for regression of peak peel force on sealing parameters by adhesive and package**

Adhesive	Package	Model	Model ID	Dependent Variable	Intercept	Seal Temp	Seal Pressure	Dwell Time	R Square	Adjusted R Square	Prediction R Square	Mallow's Cp	Akaike's AIC	RMSE	PRESS	PRES S - SSE	Adj RS q - RSq	Cp - P	Model Selected
Amcor	PS1	PM1	PM1-1	PeakForce	-9.50	0.05	.	0.39	0.48	0.47	0.44	3	-58.83	0.72	52.57	3.70	0.01	0	TRUE
Amcor	PS1	PM1	PM1-2	PeakForce	-10.24	0.05	0.01	0.39	0.48	0.47	0.43	4	-57.54	0.73	53.64	5.14	0.02	0	
Amcor	PS1	PM1	PM1-3	PeakForce	.	0.01	.	0.33	0.98	0.98	0.98	2	-38.53	0.81	64.26	2.62	0.00	0	
Amcor	PS1	PM1	PM1-4	PeakForce	.	0.02	-0.01	0.34	0.98	0.98	0.98	3	-37.95	0.81	64.34	3.61	0.00	0	
Amcor	PS1	PM1	PM1-5	PeakForce	-7.06	0.05	.	.	0.24	0.23	0.20	2	-24.25	0.87	74.92	3.39	0.01	0	
Amcor	PS2	PM1	PM1-1	PeakForce	-7.98	0.05	.	0.39	0.59	0.58	0.56	3	-113.94	0.54	29.40	1.87	0.01	0	TRUE
Amcor	PS2	PM1	PM1-2	PeakForce	-8.88	0.05	0.01	0.39	0.60	0.59	0.56	4	-113.80	0.54	29.36	2.37	0.01	0	
Amcor	PS2	PM1	PM1-3	PeakForce	.	0.01	.	0.34	0.99	0.99	0.99	2	-88.70	0.62	38.27	1.72	0.00	0	
Amcor	PS2	PM1	PM1-4	PeakForce	.	0.02	-0.01	0.35	0.99	0.99	0.99	3	-87.64	0.62	38.55	2.35	0.00	0	
Amcor	PS2	PM1	PM1-5	PeakForce	3.58	.	.	0.37	0.30	0.30	0.27	2	-64.81	0.71	49.15	2.27	0.01	0	
Amcor	PS3	PM1	PM1-1	PeakForce	-13.46	0.05	0.02	0.47	0.63	0.62	0.61	4	-0.51	0.98	116.66	5.88	0.01	0	TRUE
Amcor	PS3	PM1	PM1-2	PeakForce	-11.73	0.05	.	0.47	0.62	0.61	0.60	3	0.55	0.99	118.90	5.22	0.01	0	
Amcor	PS3	PM1	PM1-3	PeakForce	-11.33	0.05	0.02	.	0.46	0.45	0.44	3	40.00	1.17	165.89	7.53	0.01	0	
Amcor	PS3	PM1	PM1-4	PeakForce	-9.60	0.05	.	.	0.45	0.45	0.43	2	40.16	1.17	167.16	5.91	0.00	0	
Amcor	PS3	PM1	PM1-5	PeakForce	.	0.03	-0.04	0.36	0.94	0.94	0.94	3	53.97	1.24	184.47	6.39	0.00	0	
Amcor	PS4	PM1	PM1-1	PeakForce	-5.17	0.04	.	0.37	0.40	0.39	0.36	3	-54.44	0.71	43.83	2.92	0.01	0	TRUE
Amcor	PS4	PM1	PM1-2	PeakForce	-5.49	0.04	0.00	0.37	0.40	0.38	0.34	4	-52.56	0.71	44.84	3.99	0.02	0	
Amcor	PS4	PM1	PM1-3	PeakForce	.	0.02	.	0.34	0.98	0.98	0.98	2	-49.90	0.73	46.17	1.95	0.00	0	
Amcor	PS4	PM1	PM1-4	PeakForce	.	0.02	.	0.34	0.98	0.98	0.98	2	-49.90	0.73	46.17	1.95	0.00	0	
Amcor	PS4	PM1	PM1-5	PeakForce	.	0.02	-0.01	0.34	0.98	0.98	0.98	3	-48.45	0.74	47.35	3.42	0.00	0	
Amcor	PS5	PM1	PM1-1	PeakForce	-13.09	0.05	0.02	0.33	0.64	0.63	0.62	4	-30.66	0.88	109.03	6.69	0.01	0	TRUE
Amcor	PS5	PM1	PM1-2	PeakForce	-11.04	0.05	.	0.33	0.63	0.62	0.61	3	-26.62	0.90	112.13	5.14	0.01	0	
Amcor	PS5	PM1	PM1-3	PeakForce	-11.61	0.05	0.02	.	0.55	0.54	0.53	3	-1.56	0.98	134.96	6.31	0.01	0	
Amcor	PS5	PM1	PM1-4	PeakForce	-9.56	0.05	.	.	0.53	0.53	0.52	2	1.26	1.00	137.46	4.17	0.00	0	
Amcor	PS5	PM1	PM1-5	PeakForce	.	0.03	-0.03	0.22	0.95	0.95	0.95	3	40.38	1.15	181.84	6.73	0.00	0	

Table A12-1 Continued

Adhesive	Package	Model	Model ID	Dependent Variable	Intercept	Seal Temp	Seal Pressure	Dwell Time	R Square	Adjusted R Square	Prediction R Square	Mallow's Cp	Akaike's AIC	RMSE	PRESS	PRESS - SSE	Adj RSq - RSq	Cp - P	Model Selected
Amcor	PS6	PM1	PM1-1	PeakForce	-9.54	0.04	0.02	0.50	0.64	0.63	0.62	4	-58.27	0.80	88.74	5.19	0.01	0	TRUE
Amcor	PS6	PM1	PM1-2	PeakForce	-7.82	0.04	.	0.50	0.62	0.62	0.61	3	-55.01	0.81	90.88	4.03	0.01	0	
Amcor	PS6	PM1	PM1-3	PeakForce	.	0.02	-0.02	0.43	0.97	0.97	0.97	3	-8.50	0.96	127.29	5.04	0.00	0	
Amcor	PS6	PM1	PM1-4	PeakForce	.	0.01	.	0.40	0.96	0.96	0.96	2	-3.21	0.98	132.69	3.71	0.00	0	
Amcor	PS6	PM1	PM1-5	PeakForce	-7.26	0.04	0.02	.	0.37	0.36	0.34	3	15.65	1.05	152.78	6.78	0.01	0	
Amcor	PS7	PM1	PM1-1	PeakForce	-10.33	0.05	0.03	0.23	0.28	0.26	0.22	4	1.62	0.99	97.67	7.85	0.02	0	TRUE
Amcor	PS7	PM1	PM1-2	PeakForce	-7.95	0.05	.	0.23	0.25	0.24	0.20	3	3.56	1.00	100.03	6.44	0.02	0	
Amcor	PS7	PM1	PM1-3	PeakForce	-8.88	0.05	0.03	.	0.22	0.20	0.17	3	7.75	1.03	104.18	6.41	0.02	0	
Amcor	PS7	PM1	PM1-4	PeakForce	-6.50	0.05	.	.	0.19	0.18	0.15	2	9.38	1.04	105.95	4.42	0.01	0	
Amcor	PS7	PM1	PM1-5	PeakForce	.	0.02	.	0.18	0.97	0.97	0.97	2	10.33	1.04	106.87	4.33	0.00	0	
Amcor	PS8	PM1	PM1-1	PeakForce	-9.29	0.04	-0.02	0.81	0.68	0.67	0.66	4	-11.84	0.94	125.44	7.90	0.01	0	TRUE
Amcor	PS8	PM1	PM1-2	PeakForce	-10.68	0.04	.	0.81	0.68	0.67	0.66	3	-11.39	0.95	125.59	5.92	0.00	0	
Amcor	PS8	PM1	PM1-3	PeakForce	.	0.02	-0.06	0.74	0.94	0.93	0.93	3	23.07	1.08	160.74	6.55	0.00	0	
Amcor	PS8	PM1	PM1-4	PeakForce	.	0.00	.	0.68	0.92	0.92	0.91	2	55.27	1.22	204.34	6.08	0.00	0	
Amcor	PS8	PM1	PM1-5	PeakForce	.	.	.	0.83	0.91	0.91	0.91	1	57.50	1.23	207.20	2.67	0.00	0	
Amcor	PS9	PM1	PM1-1	PeakForce	-5.13	0.04	0.01	0.08	0.41	0.39	0.36	4	-140.77	0.47	22.12	1.74	0.02	0	TRUE
Amcor	PS9	PM1	PM1-2	PeakForce	-4.16	0.04	.	0.08	0.39	0.38	0.35	3	-139.87	0.48	22.39	1.38	0.01	0	
Amcor	PS9	PM1	PM1-3	PeakForce	-4.64	0.04	0.01	.	0.38	0.37	0.34	3	-138.63	0.48	22.68	1.40	0.01	0	
Amcor	PS9	PM1	PM1-4	PeakForce	-3.67	0.04	.	.	0.37	0.36	0.34	2	-137.85	0.48	22.87	0.97	0.01	0	
Amcor	PS9	PM1	PM1-5	PeakForce	.	0.02	.	.	0.99	0.99	0.99	1	-131.53	0.50	24.39	0.50	0.00	0	
Perfecseal	PS8	PM1	PM1-1	PeakForce	-14.42	0.05	.	1.17	0.70	0.69	0.68	3	63.31	1.25	216.62	9.34	0.00	0	TRUE
Perfecseal	PS8	PM1	PM1-2	PeakForce	-13.57	0.05	-0.01	1.17	0.70	0.69	0.68	4	64.78	1.25	219.22	12.75	0.01	0	
Perfecseal	PS8	PM1	PM1-3	PeakForce	.	0.02	-0.07	1.06	0.92	0.91	0.91	3	106.46	1.46	296.72	12.05	0.00	0	
Perfecseal	PS8	PM1	PM1-4	PeakForce	.	.	-0.01	1.17	0.90	0.90	0.90	2	128.36	1.59	349.53	10.16	0.00	0	
Perfecseal	PS8	PM1	PM1-5	PeakForce	-1.00	.	.	1.17	0.50	0.50	0.48	2	128.68	1.59	350.35	10.19	0.00	0	

**Table A12-2. ANOVA statistics for regression of peak peel force on sealing parameters by adhesive and package**

Adhesive	Package	Model	Model ID	N	Model DF	Error DF	Total DF	MSE	SSE	SSR	SST	F Value for the model	Prob>F for the model	t Value for Intercept	Prob>t for Intercept	t Value for Seal Temp	Prob>t for Seal Temp	t Value for Seal Pressure	Prob>t for Seal Pressure	t Value for Dwell Time	Prob>t for Dwell Time
Amcor	PS1	PM1	PM1-1	96	3	93	95	0.53	48.86	45.25	93.76	28.61	0.00	-4.82	0.00	6.82	0.00	0.83	0.41	6.56	0.00
Amcor	PS1	PM1	PM1-2	96	3	92	95	0.53	48.50	45.25	93.76	28.61	0.00	-4.82	0.00	6.82	0.00	0.83	0.41	6.56	0.00
Amcor	PS1	PM1	PM1-3	96	3	94	96	0.66	61.64	2652.94	2713.68	1354.11	0.00	.	.	5.09	0.00	-1.18	0.24	5.21	0.00
Amcor	PS1	PM1	PM1-4	96	3	93	96	0.65	60.73	2652.94	2713.68	1354.11	0.00	.	.	5.09	0.00	-1.18	0.24	5.21	0.00
Amcor	PS1	PM1	PM1-5	96	3	94	95	0.76	71.53	45.25	93.76	28.61	0.00	-4.82	0.00	6.82	0.00	0.83	0.41	6.56	0.00
Amcor	PS2	PM1	PM1-1	96	3	93	95	0.30	27.52	40.28	67.27	45.76	0.00	-5.60	0.00	8.12	0.00	1.34	0.18	8.74	0.00
Amcor	PS2	PM1	PM1-2	96	3	92	95	0.29	26.99	40.28	67.27	45.76	0.00	-5.60	0.00	8.12	0.00	1.34	0.18	8.74	0.00
Amcor	PS2	PM1	PM1-3	96	3	94	96	0.39	36.55	2718.40	2754.59	2328.33	0.00	.	.	6.10	0.00	-0.96	0.34	6.84	0.00
Amcor	PS2	PM1	PM1-4	96	3	93	96	0.39	36.19	2718.40	2754.59	2328.33	0.00	.	.	6.10	0.00	-0.96	0.34	6.84	0.00
Amcor	PS2	PM1	PM1-5	96	3	94	95	0.50	46.88	40.28	67.27	45.76	0.00	-5.60	0.00	8.12	0.00	1.34	0.18	8.74	0.00
Amcor	PS3	PM1	PM1-1	119	3	115	118	0.96	110.78	184.68	295.46	63.90	0.00	-8.36	0.00	11.76	0.00	1.73	0.09	7.03	0.00
Amcor	PS3	PM1	PM1-2	119	3	116	118	0.98	113.68	184.68	295.46	63.90	0.00	-8.36	0.00	11.76	0.00	1.73	0.09	7.03	0.00
Amcor	PS3	PM1	PM1-3	119	3	116	118	1.37	158.36	184.68	295.46	63.90	0.00	-8.36	0.00	11.76	0.00	1.73	0.09	7.03	0.00
Amcor	PS3	PM1	PM1-4	119	3	117	118	1.38	161.25	184.68	295.46	63.90	0.00	-8.36	0.00	11.76	0.00	1.73	0.09	7.03	0.00
Amcor	PS3	PM1	PM1-5	119	3	116	119	1.54	178.07	2912.40	3090.47	632.39	0.00	.	.	6.59	0.00	-3.47	0.00	4.40	0.00
Amcor	PS4	PM1	PM1-1	84	3	81	83	0.51	40.91	27.46	68.30	17.92	0.00	-2.46	0.02	4.63	0.00	0.34	0.73	5.91	0.00
Amcor	PS4	PM1	PM1-2	84	3	80	83	0.51	40.85	27.46	68.30	17.92	0.00	-2.46	0.02	4.63	0.00	0.34	0.73	5.91	0.00
Amcor	PS4	PM1	PM1-3	84	3	82	84	0.54	44.22	2812.10	2856.03	1728.38	0.00	.	.	5.33	0.00	-0.73	0.47	5.40	0.00
Amcor	PS4	PM1	PM1-4	84	3	82	84	0.54	44.22	2812.10	2856.03	1728.38	0.00	.	.	5.33	0.00	-0.73	0.47	5.40	0.00
Amcor	PS4	PM1	PM1-5	84	3	81	84	0.54	43.93	2812.10	2856.03	1728.38	0.00	.	.	5.33	0.00	-0.73	0.47	5.40	0.00
Amcor	PS5	PM1	PM1-1	136	3	132	135	0.78	102.35	183.63	285.98	78.95	0.00	-9.69	0.00	14.00	0.00	2.45	0.02	5.82	0.00
Amcor	PS5	PM1	PM1-2	136	3	133	135	0.80	106.99	183.63	285.98	78.95	0.00	-9.69	0.00	14.00	0.00	2.45	0.02	5.82	0.00
Amcor	PS5	PM1	PM1-3	136	3	133	135	0.97	128.65	183.63	285.98	78.95	0.00	-9.69	0.00	14.00	0.00	2.45	0.02	5.82	0.00
Amcor	PS5	PM1	PM1-4	136	3	134	135	0.99	133.29	183.63	285.98	78.95	0.00	-9.69	0.00	14.00	0.00	2.45	0.02	5.82	0.00
Amcor	PS5	PM1	PM1-5	136	3	133	136	1.32	175.11	3313.52	3488.63	838.88	0.00	.	.	7.83	0.00	-3.47	0.00	3.13	0.00

Table A12-2 Continued

Adhesive	Package	Model	Model ID	N	Model DF	Error DF	Total DF	MSE	SSE	SSR	SST	F Value for the model	Prob>F for the model	t Value for Intercept	Prob>t for Intercept	t Value for Seal Temp	Prob>t for Seal Temp	t Value for Seal Pressure	Prob>t for Seal Pressure	t Value for Dwell Time	Prob>t for Dwell Time
Amcor	PS6	PM1	PM1-1	136	3	132	135	0.63	83.54	147.63	231.17	77.75	0.00	-7.82	0.00	11.31	0.00	2.28	0.02	9.93	0.00
Amcor	PS6	PM1	PM1-2	136	3	133	135	0.65	86.84	147.63	231.17	77.75	0.00	-7.82	0.00	11.31	0.00	2.28	0.02	9.93	0.00
Amcor	PS6	PM1	PM1-3	136	3	133	136	0.92	122.24	3530.26	3652.51	1280.31	0.00	.	.	6.86	0.00	-2.71	0.01	7.15	0.00
Amcor	PS6	PM1	PM1-4	136	3	134	136	0.96	128.98	3530.26	3652.51	1280.31	0.00	.	.	6.86	0.00	-2.71	0.01	7.15	0.00
Amcor	PS6	PM1	PM1-5	136	3	133	135	1.10	146.01	147.63	231.17	77.75	0.00	-7.82	0.00	11.31	0.00	2.28	0.02	9.93	0.00
Amcor	PS7	PM1	PM1-1	96	3	92	95	0.98	89.82	35.29	125.11	12.05	0.00	-3.57	0.00	5.05	0.00	1.96	0.05	2.85	0.01
Amcor	PS7	PM1	PM1-2	96	3	93	95	1.01	93.59	35.29	125.11	12.05	0.00	-3.57	0.00	5.05	0.00	1.96	0.05	2.85	0.01
Amcor	PS7	PM1	PM1-3	96	3	93	95	1.05	97.77	35.29	125.11	12.05	0.00	-3.57	0.00	5.05	0.00	1.96	0.05	2.85	0.01
Amcor	PS7	PM1	PM1-4	96	3	94	95	1.08	101.53	35.29	125.11	12.05	0.00	-3.57	0.00	5.05	0.00	1.96	0.05	2.85	0.01
Amcor	PS7	PM1	PM1-5	96	3	94	96	1.09	102.54	3649.00	3751.28	1105.93	0.00	.	.	3.95	0.00	0.48	0.63	2.13	0.04
Amcor	PS8	PM1	PM1-1	136	3	132	135	0.89	117.54	252.34	369.88	94.46	0.00	-6.42	0.00	9.76	0.00	-1.55	0.12	13.57	0.00
Amcor	PS8	PM1	PM1-2	136	3	133	135	0.90	119.68	252.34	369.88	94.46	0.00	-6.42	0.00	9.76	0.00	-1.55	0.12	13.57	0.00
Amcor	PS8	PM1	PM1-3	136	3	133	136	1.16	154.19	2230.93	2385.13	641.44	0.00	.	.	6.58	0.00	-6.17	0.00	11.03	0.00
Amcor	PS8	PM1	PM1-4	136	3	134	136	1.48	198.27	2230.93	2385.13	641.44	0.00	.	.	6.58	0.00	-6.17	0.00	11.03	0.00
Amcor	PS8	PM1	PM1-5	136	3	135	136	1.52	204.53	2230.93	2385.13	641.44	0.00	.	.	6.58	0.00	-6.17	0.00	11.03	0.00
Amcor	PS9	PM1	PM1-1	96	3	92	95	0.22	20.38	14.17	34.56	21.33	0.00	-3.72	0.00	7.65	0.00	1.68	0.10	2.02	0.05
Amcor	PS9	PM1	PM1-2	96	3	93	95	0.23	21.01	14.17	34.56	21.33	0.00	-3.72	0.00	7.65	0.00	1.68	0.10	2.02	0.05
Amcor	PS9	PM1	PM1-3	96	3	93	95	0.23	21.28	14.17	34.56	21.33	0.00	-3.72	0.00	7.65	0.00	1.68	0.10	2.02	0.05
Amcor	PS9	PM1	PM1-4	96	3	94	95	0.23	21.91	14.17	34.56	21.33	0.00	-3.72	0.00	7.65	0.00	1.68	0.10	2.02	0.05
Amcor	PS9	PM1	PM1-5	96	3	95	96	0.25	23.89	3016.29	3039.74	3987.38	0.00	.	.	9.17	0.00	0.12	0.90	1.30	0.20
Perfecseal	PS8	PM1	PM1-1	136	3	133	135	1.56	207.28	473.80	680.28	100.97	0.00	-7.07	0.00	9.22	0.00	-0.72	0.47	14.69	0.00
Perfecseal	PS8	PM1	PM1-2	136	3	132	135	1.56	206.47	473.80	680.28	100.97	0.00	-7.07	0.00	9.22	0.00	-0.72	0.47	14.69	0.00
Perfecseal	PS8	PM1	PM1-3	136	3	133	136	2.14	284.68	3095.15	3379.83	482.01	0.00	.	.	5.05	0.00	-5.55	0.00	11.63	0.00
Perfecseal	PS8	PM1	PM1-4	136	3	134	136	2.53	339.37	3095.15	3379.83	482.01	0.00	.	.	5.05	0.00	-5.55	0.00	11.63	0.00
Perfecseal	PS8	PM1	PM1-5	136	3	134	135	2.54	340.15	473.80	680.28	100.97	0.00	-7.07	0.00	9.22	0.00	-0.72	0.47	14.69	0.00

**Table A12-3. Parameter coefficients and model fit statistics for regression of average peel force on sealing parameters by adhesive and package**

Adhesive	Package	Model	Model ID	Dependent Variable	Intercept	Seal Temp	Seal Pressure	Dwell Time	R Square	Adjusted R Square	Prediction R Square	Mallow's Cp	Akaike's AIC	RMSE	PRESS	PRESS - SSE	Adj RSq - RSq	Cp - P	Model Selected
Amcor	PS1	PM2	PM2-1	AvgForce	-8.82	0.05	.	0.35	0.48	0.47	0.44	3	-82.69	0.64	41.06	2.95	0.01	0	TRUE
Amcor	PS1	PM2	PM2-2	AvgForce	-9.67	0.05	0.01	0.35	0.49	0.47	0.43	4	-81.92	0.64	41.72	4.09	0.02	0	
Amcor	PS1	PM2	PM2-3	AvgForce	.	0.01	.	0.29	0.97	0.97	0.97	2	-60.31	0.72	51.32	2.20	0.00	0	
Amcor	PS1	PM2	PM2-4	AvgForce	.	0.01	-0.01	0.30	0.97	0.97	0.97	3	-59.45	0.72	51.57	3.02	0.00	0	
Amcor	PS1	PM2	PM2-5	AvgForce	-6.66	0.04	.	.	0.24	0.23	0.20	2	-48.00	0.77	58.47	2.62	0.01	0	
Amcor	PS2	PM2	PM2-1	AvgForce	-9.74	0.04	0.01	0.42	0.62	0.60	0.58	4	-115.03	0.54	29.12	2.47	0.01	0	TRUE
Amcor	PS2	PM2	PM2-2	AvgForce	-8.57	0.04	.	0.42	0.60	0.60	0.58	3	-113.80	0.54	29.37	1.81	0.01	0	
Amcor	PS2	PM2	PM2-3	AvgForce	.	0.01	.	0.37	0.98	0.98	0.98	2	-85.05	0.64	39.61	1.64	0.00	0	
Amcor	PS2	PM2	PM2-4	AvgForce	.	0.01	-0.01	0.37	0.98	0.98	0.98	3	-83.65	0.64	40.11	2.38	0.00	0	
Amcor	PS2	PM2	PM2-5	AvgForce	2.54	.	.	0.40	0.35	0.34	0.32	2	-67.81	0.70	47.48	2.04	0.01	0	
Amcor	PS3	PM2	PM2-1	AvgForce	-13.14	0.05	0.02	0.51	0.68	0.68	0.67	4	-36.96	0.84	85.68	4.12	0.01	0	TRUE
Amcor	PS3	PM2	PM2-2	AvgForce	-11.83	0.05	.	0.51	0.68	0.67	0.66	3	-36.53	0.85	86.80	3.56	0.01	0	
Amcor	PS3	PM2	PM2-3	AvgForce	-9.52	0.05	.	.	0.46	0.46	0.44	2	22.53	1.09	143.91	4.85	0.00	0	
Amcor	PS3	PM2	PM2-4	AvgForce	-10.84	0.05	0.02	.	0.47	0.46	0.44	3	23.09	1.09	143.88	6.50	0.01	0	
Amcor	PS3	PM2	PM2-5	AvgForce	.	0.02	-0.04	0.41	0.93	0.93	0.93	3	30.14	1.12	150.78	5.02	0.00	0	
Amcor	PS4	PM2	PM2-1	AvgForce	-4.36	0.03	.	0.32	0.31	0.29	0.26	3	-47.75	0.74	47.44	3.14	0.02	0	TRUE
Amcor	PS4	PM2	PM2-2	AvgForce	-5.13	0.03	0.01	0.32	0.31	0.29	0.25	4	-46.39	0.74	48.10	4.14	0.03	0	
Amcor	PS4	PM2	PM2-3	AvgForce	.	0.01	.	0.30	0.97	0.97	0.97	2	-45.39	0.75	48.76	2.10	0.00	0	
Amcor	PS4	PM2	PM2-4	AvgForce	.	0.01	-0.00	0.30	0.97	0.97	0.97	3	-43.42	0.76	50.10	3.46	0.00	0	
Amcor	PS4	PM2	PM2-5	AvgForce	3.16	.	.	0.31	0.20	0.19	0.16	2	-37.14	0.79	53.88	2.41	0.01	0	
Amcor	PS5	PM2	PM2-1	AvgForce	-11.34	0.04	0.02	0.34	0.68	0.67	0.66	4	-95.34	0.69	67.72	4.11	0.01	0	TRUE
Amcor	PS5	PM2	PM2-2	AvgForce	-9.48	0.04	.	0.34	0.66	0.66	0.64	3	-89.42	0.71	70.61	3.18	0.01	0	
Amcor	PS5	PM2	PM2-3	AvgForce	-9.79	0.04	0.02	.	0.54	0.53	0.51	3	-46.67	0.83	96.81	4.48	0.01	0	
Amcor	PS5	PM2	PM2-4	AvgForce	-7.93	0.04	.	.	0.52	0.51	0.50	2	-43.16	0.85	99.09	2.95	0.00	0	
Amcor	PS5	PM2	PM2-5	AvgForce	.	0.02	-0.03	0.25	0.95	0.95	0.95	3	-13.07	0.94	122.81	4.60	0.00	0	
Amcor	PS6	PM2	PM2-1	AvgForce	-10.25	0.04	0.02	0.54	0.67	0.67	0.65	4	-72.81	0.75	79.57	4.50	0.01	0	TRUE

Table A12-3 Continued

Adhesive	Package	Model	Model ID	Dependent Variable	Intercept	Seal Temp	Seal Pressure	Dwell Time	R Square	Adjusted R Square	Prediction R Square	Mallow's Cp	Akaike's AIC	RMSE	PRESS	PRESS - SSE	Adj RSq - RSq	Cp - P	Model Selected
Amcor	PS6	PM2	PM2-2	AvgForce	-8.68	0.04	.	0.54	0.66	0.66	0.65	3	-69.92	0.76	81.28	3.46	0.01	0	
Amcor	PS6	PM2	PM2-3	AvgForce	.	0.02	-0.03	0.46	0.95	0.95	0.95	3	-11.33	0.95	124.51	4.78	0.00	0	
Amcor	PS6	PM2	PM2-4	AvgForce	.	0.01	.	0.43	0.95	0.95	0.95	2	-2.44	0.98	133.53	3.82	0.00	0	
Amcor	PS6	PM2	PM2-5	AvgForce	-7.79	0.04	0.02	.	0.36	0.35	0.33	3	17.15	1.05	154.59	6.97	0.01	0	
Amcor	PS7	PM2	PM2-1	AvgForce	-7.37	0.05	.	0.22	0.20	0.18	0.15	3	9.02	1.03	105.77	6.71	0.02	0	TRUE
Amcor	PS7	PM2	PM2-2	AvgForce	-8.74	0.05	0.02	0.22	0.21	0.19	0.14	4	9.81	1.03	106.24	8.41	0.03	0	
Amcor	PS7	PM2	PM2-3	AvgForce	-6.01	0.04	.	.	0.14	0.14	0.11	2	13.57	1.06	110.62	4.56	0.01	0	
Amcor	PS7	PM2	PM2-4	AvgForce	.	0.02	.	0.17	0.96	0.96	0.96	2	14.20	1.07	111.31	4.55	0.00	0	
Amcor	PS7	PM2	PM2-5	AvgForce	-7.38	0.04	0.02	.	0.15	0.14	0.10	3	14.44	1.06	111.55	6.72	0.02	0	
Amcor	PS8	PM2	PM2-1	AvgForce	-8.07	0.03	-0.02	0.79	0.80	0.80	0.79	4	-124.29	0.62	54.95	3.53	0.00	0	TRUE
Amcor	PS8	PM2	PM2-2	AvgForce	-9.48	0.03	.	0.79	0.80	0.79	0.79	3	-120.58	0.63	56.45	2.83	0.00	0	
Amcor	PS8	PM2	PM2-3	AvgForce	.	0.01	-0.05	0.73	0.94	0.94	0.94	3	-67.76	0.77	82.60	3.53	0.00	0	
Amcor	PS8	PM2	PM2-4	AvgForce	.	.	-0.01	0.80	0.92	0.92	0.92	2	-30.39	0.89	108.91	3.30	0.00	0	
Amcor	PS8	PM2	PM2-5	AvgForce	0.49	.	-0.02	0.79	0.60	0.59	0.58	3	-28.70	0.89	110.64	5.26	0.01	0	
Amcor	PS9	PM2	PM2-1	AvgForce	-2.30	0.03	.	.	0.21	0.20	0.18	2	-117.21	0.54	28.36	1.20	0.01	0	TRUE
Amcor	PS9	PM2	PM2-2	AvgForce	.	0.02	.	.	0.99	0.99	0.99	1	-116.49	0.54	28.52	0.58	0.00	0	
Amcor	PS9	PM2	PM2-3	AvgForce	-2.59	0.03	.	0.05	0.22	0.21	0.17	3	-116.30	0.54	28.64	1.79	0.02	0	
Amcor	PS9	PM2	PM2-4	AvgForce	-2.57	0.03	0.00	.	0.21	0.20	0.16	3	-115.38	0.54	28.88	1.77	0.02	0	
Amcor	PS9	PM2	PM2-5	AvgForce	.	0.02	.	0.03	0.99	0.99	0.99	2	-114.97	0.54	29.00	1.20	0.00	0	
Perfecseal	PS8	PM2	PM2-1	AvgForce	-12.02	0.04	.	1.00	0.81	0.80	0.80	3	-67.50	0.77	82.86	3.64	0.00	0	TRUE
Perfecseal	PS8	PM2	PM2-2	AvgForce	-12.19	0.04	0.00	1.00	0.81	0.80	0.79	4	-65.56	0.77	83.98	4.79	0.00	0	
Perfecseal	PS8	PM2	PM2-3	AvgForce	.	0.01	-0.05	0.91	0.91	0.91	0.91	3	12.21	1.03	147.90	5.55	0.00	0	
Perfecseal	PS8	PM2	PM2-4	AvgForce	-1.66	.	.	1.01	0.61	0.61	0.60	2	24.59	1.09	162.71	4.47	0.00	0	
Perfecseal	PS8	PM2	PM2-5	AvgForce	-1.84	.	0.00	1.01	0.61	0.61	0.60	3	26.56	1.09	164.86	6.66	0.01	0	

**Table A12-4. ANOVA statistics for regression of average peel force on sealing parameters by adhesive and package**

Adhesive	Package	Model	Model ID	N	Model DF	Error DF	Total DF	MSE	SSE	SSR	SST	F Value for the model	Prob>F for the model	t Value for Intercept	Prob>t for Intercept	t Value for Seal Temp	Prob>t for Seal Temp	t Value for Seal Pressure	Prob>t for Seal Pressure	t Value for Dwell Time	Prob>t for Dwell Time
Amcor	PS1	PM2	PM2-1	96	3	93	95	0.41	38.11	35.62	73.25	29.03	0.00	-5.17	0.00	6.85	0.00	1.09	0.28	6.59	0.00
Amcor	PS1	PM2	PM2-2	96	3	92	95	0.41	37.63	35.62	73.25	29.03	0.00	-5.17	0.00	6.85	0.00	1.09	0.28	6.59	0.00
Amcor	PS1	PM2	PM2-3	96	3	94	96	0.52	49.13	1722.82	1771.37	1100.02	0.00	.	.	4.44	0.00	-1.05	0.30	5.11	0.00
Amcor	PS1	PM2	PM2-4	96	3	93	96	0.52	48.55	1722.82	1771.37	1100.02	0.00	.	.	4.44	0.00	-1.05	0.30	5.11	0.00
Amcor	PS1	PM2	PM2-5	96	3	94	95	0.59	55.85	35.62	73.25	29.03	0.00	-5.17	0.00	6.85	0.00	1.09	0.28	6.59	0.00
Amcor	PS2	PM2	PM2-1	96	3	92	95	0.29	26.65	42.95	69.60	49.42	0.00	-6.19	0.00	7.86	0.00	1.77	0.08	9.52	0.00
Amcor	PS2	PM2	PM2-2	96	3	93	95	0.30	27.56	42.95	69.60	49.42	0.00	-6.19	0.00	7.86	0.00	1.77	0.08	9.52	0.00
Amcor	PS2	PM2	PM2-3	96	3	94	96	0.40	37.97	1893.41	1931.14	1555.54	0.00	.	.	4.42	0.00	-0.76	0.45	7.24	0.00
Amcor	PS2	PM2	PM2-4	96	3	93	96	0.41	37.73	1893.41	1931.14	1555.54	0.00	.	.	4.42	0.00	-0.76	0.45	7.24	0.00
Amcor	PS2	PM2	PM2-5	96	3	94	95	0.48	45.44	42.95	69.60	49.42	0.00	-6.19	0.00	7.86	0.00	1.77	0.08	9.52	0.00
Amcor	PS3	PM2	PM2-1	119	3	115	118	0.71	81.56	176.53	258.09	82.97	0.00	-9.51	0.00	12.90	0.00	1.54	0.13	8.87	0.00
Amcor	PS3	PM2	PM2-2	119	3	116	118	0.72	83.24	176.53	258.09	82.97	0.00	-9.51	0.00	12.90	0.00	1.54	0.13	8.87	0.00
Amcor	PS3	PM2	PM2-3	119	3	117	118	1.19	139.05	176.53	258.09	82.97	0.00	-9.51	0.00	12.90	0.00	1.54	0.13	8.87	0.00
Amcor	PS3	PM2	PM2-4	119	3	116	118	1.18	137.38	176.53	258.09	82.97	0.00	-9.51	0.00	12.90	0.00	1.54	0.13	8.87	0.00
Amcor	PS3	PM2	PM2-5	119	3	116	119	1.26	145.76	2096.49	2242.25	556.16	0.00	.	.	6.55	0.00	-4.17	0.00	5.42	0.00
Amcor	PS4	PM2	PM2-1	84	3	81	83	0.55	44.30	20.18	64.14	12.24	0.00	-2.21	0.03	3.61	0.00	0.79	0.43	4.98	0.00
Amcor	PS4	PM2	PM2-2	84	3	80	83	0.55	43.96	20.18	64.14	12.24	0.00	-2.21	0.03	3.61	0.00	0.79	0.43	4.98	0.00
Amcor	PS4	PM2	PM2-3	84	3	82	84	0.57	46.66	1801.50	1848.14	1042.81	0.00	.	.	3.62	0.00	-0.15	0.88	4.56	0.00
Amcor	PS4	PM2	PM2-4	84	3	81	84	0.58	46.64	1801.50	1848.14	1042.81	0.00	.	.	3.62	0.00	-0.15	0.88	4.56	0.00
Amcor	PS4	PM2	PM2-5	84	3	82	83	0.63	51.48	20.18	64.14	12.24	0.00	-2.21	0.03	3.61	0.00	0.79	0.43	4.98	0.00
Amcor	PS5	PM2	PM2-1	136	3	132	135	0.48	63.61	134.97	198.59	93.36	0.00	-10.64	0.00	14.53	0.00	2.81	0.01	7.72	0.00
Amcor	PS5	PM2	PM2-2	136	3	133	135	0.51	67.43	134.97	198.59	93.36	0.00	-10.64	0.00	14.53	0.00	2.81	0.01	7.72	0.00
Amcor	PS5	PM2	PM2-3	136	3	133	135	0.69	92.33	134.97	198.59	93.36	0.00	-10.64	0.00	14.53	0.00	2.81	0.01	7.72	0.00
Amcor	PS5	PM2	PM2-4	136	3	134	135	0.72	96.15	134.97	198.59	93.36	0.00	-10.64	0.00	14.53	0.00	2.81	0.01	7.72	0.00
Amcor	PS5	PM2	PM2-5	136	3	133	136	0.89	118.21	2118.33	2236.54	794.47	0.00	.	.	7.30	0.00	-3.54	0.00	4.29	0.00



Table A12-4. Continued

Adhesive	Package	Model	Model ID	N	Model DF	Error DF	Total DF	MSE	SSE	SSR	SST	F Value for the model	Prob>F for the model	t Value for Intercept	Prob>t for Intercept	t Value for Seal Temp	Prob>t for Seal Temp	t Value for Seal Pressure	Prob>t for Seal Pressure	t Value for Dwell Time	Prob>t for Dwell Time
Amcor	PS6	PM2	PM2-1	136	3	132	135	0.57	75.07	154.15	229.22	90.35	0.00	-8.86	0.00	11.71	0.00	2.20	0.03	11.29	0.00
Amcor	PS6	PM2	PM2-2	136	3	133	135	0.59	77.82	154.15	229.22	90.35	0.00	-8.86	0.00	11.71	0.00	2.20	0.03	11.29	0.00
Amcor	PS6	PM2	PM2-3	136	3	133	136	0.90	119.73	2438.27	2558.00	902.86	0.00	.	.	6.08	0.00	-3.33	0.00	7.79	0.00
Amcor	PS6	PM2	PM2-4	136	3	134	136	0.97	129.71	2438.27	2558.00	902.86	0.00	.	.	6.08	0.00	-3.33	0.00	7.79	0.00
Amcor	PS6	PM2	PM2-5	136	3	133	135	1.11	147.62	154.15	229.22	90.35	0.00	-8.86	0.00	11.71	0.00	2.20	0.03	11.29	0.00
Amcor	PS7	PM2	PM2-1	96	3	93	95	1.07	99.06	26.18	124.01	8.21	0.00	-2.90	0.00	4.23	0.00	1.08	0.28	2.57	0.01
Amcor	PS7	PM2	PM2-2	96	3	92	95	1.06	97.82	26.18	124.01	8.21	0.00	-2.90	0.00	4.23	0.00	1.08	0.28	2.57	0.01
Amcor	PS7	PM2	PM2-3	96	3	94	95	1.13	106.07	26.18	124.01	8.21	0.00	-2.90	0.00	4.23	0.00	1.08	0.28	2.57	0.01
Amcor	PS7	PM2	PM2-4	96	3	94	96	1.14	106.76	2437.98	2544.71	708.09	0.00	.	.	3.57	0.00	-0.14	0.89	2.01	0.05
Amcor	PS7	PM2	PM2-5	96	3	93	95	1.13	104.83	26.18	124.01	8.21	0.00	-2.90	0.00	4.23	0.00	1.08	0.28	2.57	0.01
Amcor	PS8	PM2	PM2-1	136	3	132	135	0.39	51.41	211.78	263.20	181.24	0.00	-8.43	0.00	11.77	0.00	-2.38	0.02	19.92	0.00
Amcor	PS8	PM2	PM2-2	136	3	133	135	0.40	53.62	211.78	263.20	181.24	0.00	-8.43	0.00	11.77	0.00	-2.38	0.02	19.92	0.00
Amcor	PS8	PM2	PM2-3	136	3	133	136	0.59	79.07	1222.05	1301.11	685.21	0.00	.	.	6.68	0.00	-7.84	0.00	15.11	0.00
Amcor	PS8	PM2	PM2-4	136	3	134	136	0.79	105.61	1222.05	1301.11	685.21	0.00	.	.	6.68	0.00	-7.84	0.00	15.11	0.00
Amcor	PS8	PM2	PM2-5	136	3	133	135	0.79	105.37	211.78	263.20	181.24	0.00	-8.43	0.00	11.77	0.00	-2.38	0.02	19.92	0.00
Amcor	PS9	PM2	PM2-1	96	3	94	95	0.29	27.16	7.70	34.51	8.81	0.00	-1.81	0.07	5.07	0.00	0.41	0.69	1.02	0.31
Amcor	PS9	PM2	PM2-2	96	3	95	96	0.29	27.94	2181.64	2209.40	2436.46	0.00	.	.	7.73	0.00	-0.38	0.70	0.71	0.48
Amcor	PS9	PM2	PM2-3	96	3	93	95	0.29	26.85	7.70	34.51	8.81	0.00	-1.81	0.07	5.07	0.00	0.41	0.69	1.02	0.31
Amcor	PS9	PM2	PM2-4	96	3	93	95	0.29	27.11	7.70	34.51	8.81	0.00	-1.81	0.07	5.07	0.00	0.41	0.69	1.02	0.31
Amcor	PS9	PM2	PM2-5	96	3	94	96	0.30	27.80	2181.64	2209.40	2436.46	0.00	.	.	7.73	0.00	-0.38	0.70	0.71	0.48
Perfecseal	PS8	PM2	PM2-1	136	3	133	135	0.60	79.22	330.01	409.19	183.38	0.00	-10.26	0.00	11.48	0.00	0.24	0.81	20.38	0.00
Perfecseal	PS8	PM2	PM2-2	136	3	132	135	0.60	79.18	330.01	409.19	183.38	0.00	-10.26	0.00	11.48	0.00	0.24	0.81	20.38	0.00
Perfecseal	PS8	PM2	PM2-3	136	3	133	136	1.07	142.35	1507.63	1649.98	469.53	0.00	.	.	4.24	0.00	-5.83	0.00	14.07	0.00
Perfecseal	PS8	PM2	PM2-4	136	3	134	135	1.18	158.23	330.01	409.19	183.38	0.00	-10.26	0.00	11.48	0.00	0.24	0.81	20.38	0.00
Perfecseal	PS8	PM2	PM2-5	136	3	133	135	1.19	158.20	330.01	409.19	183.38	0.00	-10.26	0.00	11.48	0.00	0.24	0.81	20.38	0.00