

**APPENDIX A14**

**MODEL SUMMARY FOR REGRESSION OF PEEL FORCE ON SEALING PARAMETERS - OVERALL**

**Table A14-1. Parameter coefficients and model fit statistics for regression of peak peel force on sealing parameters overall**

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
PM3	PM3-1	PeakForce	-6.76	0.03	0.01	0.52	0.33	0.32	0.32	4	546.95	1.27	1834.45	13.00	0.00	0	TRUE
PM3	PM3-2	PeakForce	-5.96	0.03	.	0.52	0.32	0.32	0.32	3	548.34	1.27	1836.67	9.77	0.00	0	
PM3	PM3-3	PeakForce	.	0.02	-0.02	0.47	0.94	0.94	0.94	3	627.40	1.32	1968.89	9.71	0.00	0	
PM3	PM3-4	PeakForce	.	0.01	.	0.45	0.94	0.94	0.94	2	644.01	1.33	1998.42	6.73	0.00	0	
PM3	PM3-5	PeakForce	1.83	.	0.01	0.51	0.19	0.19	0.19	3	750.01	1.39	2195.40	11.87	0.00	0	

**Table A14-2. ANOVA statistics for regression of peak peel force on sealing parameters overall**

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
PM3	PM3-1	1131	3	1127	1130	1.62	1821.45	877.97	2699.41	181.08	0.00	-9.23	0.00	14.97	0.00	1.84	0.07	17.84	0.00
PM3	PM3-2	1131	3	1128	1130	1.62	1826.90	877.97	2699.41	181.08	0.00	-9.23	0.00	14.97	0.00	1.84	0.07	17.84	0.00
PM3	PM3-3	1131	3	1128	1131	1.74	1959.18	29152.7	31111.88	5594.89	0.00	.	.	12.01	0.00	-4.33	0.00	15.83	0.00
PM3	PM3-4	1131	3	1129	1131	1.76	1991.69	29152.7	31111.88	5594.89	0.00	.	.	12.01	0.00	-4.33	0.00	15.83	0.00
PM3	PM3-5	1131	3	1128	1130	1.94	2183.52	877.97	2699.41	181.08	0.00	-9.23	0.00	14.97	0.00	1.84	0.07	17.84	0.00

**Table A14-3. Parameter coefficients and model fit statistics for regression of average peel force on sealing parameters overall**

Model	Model ID	Dependent Variable	Intercept 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
PM4	PM4-1	AvgForce	-6.01	0.03	0.01	0.50	0.31	0.31	0.31	4	372.73	1.18	1572.26	10.86	0.00	0	TRUE
PM4	PM4-2	AvgForce	-5.25	0.03	.	0.50	0.31	0.31	0.31	3	374.36	1.18	1574.57	8.14	0.00	0	
PM4	PM4-3	AvgForce	.	0.01	-0.02	0.45	0.92	0.92	0.92	3	447.03	1.22	1678.56	8.18	0.00	0	
PM4	PM4-4	AvgForce	.	0.01	.	0.44	0.92	0.92	0.92	2	460.96	1.22	1699.82	5.75	0.00	0	
PM4	PM4-5	AvgForce	0.94	.	0.01	0.49	0.21	0.21	0.21	3	530.47	1.26	1807.75	9.48	0.00	0	

**Table A14-4. ANOVA statistics for regression of average peel force on sealing parameters overall**

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
PM4	PM4-1	1131	3	1127	1130	1.39	1561.40	713.09	2274.50	171.57	0.00	-8.87	0.00	13.08	0.00	1.90	0.06	18.50	0.00
PM4	PM4-2	1131	3	1128	1130	1.39	1566.43	713.09	2274.50	171.57	0.00	-8.87	0.00	13.08	0.00	1.90	0.06	18.50	0.00
PM4	PM4-3	1131	3	1128	1131	1.48	1670.38	18622.3	20292.64	4191.85	0.00	.	.	9.54	0.00	-4.00	0.00	16.59	0.00
PM4	PM4-4	1131	3	1129	1131	1.50	1694.07	18622.3	20292.64	4191.85	0.00	.	.	9.54	0.00	-4.00	0.00	16.59	0.00
PM4	PM4-5	1131	3	1128	1130	1.59	1798.27	713.09	2274.50	171.57	0.00	-8.87	0.00	13.08	0.00	1.90	0.06	18.50	0.00