

Basic Chemistry Approximations of Main Magnet Grades									
	Alnico 5	Alnico 8	SmCo	NdFeB	NdFeB-H	NdFeB-SH	NdFeB-UH	NdFeB-EH	NdFeB-AH
Al	8%	7%	0%	0%	0%	0%	0%	0%	0%
Ni	14%	15%	0%	0%	0%	0%	0%	0%	0%
Co	24%	35%	65%	0%	1%	1%	2%	3%	4%
Cu	3%	4%	0%	0%	0%	0%	0%	0%	0%
Sm	0%	0%	35%	0%	0%	0%	0%	0%	0%
Nd	0%	0%	0%	34%	33%	31%	31%	31%	31%
Fe	51%	39%	0%	65%	63%	63%	62%	60%	59%
B	0%	0%	0%	1%	1%	1%	1%	1%	1%
Dy	0%	0%	0%	0%	2%	4%	5%	5%	6%

Monthly Average Cost of One Kilogram of Raw Materials									
	Al	Ni	Co	Cu	Sm	Nd	Fe	B	Dy
Jan-06	\$1.08	\$6.62	\$14.93	\$2.15	\$5.08	\$5.83	\$0.13	\$0.79	\$32.12
Feb-06	\$1.12	\$6.81	\$14.67	\$2.26	\$5.11	\$6.25	\$0.13	\$0.79	\$33.56
Mar-06	\$1.10	\$6.77	\$14.73	\$2.31	\$5.16	\$6.50	\$0.13	\$0.79	\$38.05
Apr-06	\$1.19	\$8.16	\$16.83	\$2.90	\$5.25	\$6.79	\$0.13	\$0.78	\$43.31
May-06	\$1.30	\$9.58	\$18.34	\$3.65	\$5.25	\$6.98	\$0.13	\$0.74	\$44.09
Jun-06	\$1.13	\$9.43	\$17.47	\$3.26	\$5.25	\$7.55	\$0.13	\$0.74	\$44.45
Jul-06	\$1.14	\$12.08	\$16.66	\$3.50	\$5.25	\$8.73	\$0.13	\$0.74	\$47.84
Aug-06	\$1.12	\$13.97	\$19.53	\$3.49	\$5.25	\$11.44	\$0.13	\$0.74	\$46.82
Sep-06	\$1.12	\$13.70	\$22.25	\$3.45	\$5.25	\$11.63	\$0.13	\$0.74	\$44.75
Oct-06	\$1.21	\$14.86	\$20.97	\$3.40	\$5.25	\$12.08	\$0.13	\$0.74	\$46.36
Nov-06	\$1.23	\$14.60	\$20.49	\$3.19	\$5.17	\$12.60	\$0.13	\$0.79	\$48.23
Dec-06	\$1.28	\$15.71	\$23.47	\$3.03	\$5.11	\$13.16	\$0.13	\$0.79	\$49.29
Jan-07	\$1.28	\$16.73	\$21.69	\$2.57	\$5.11	\$13.18	\$0.13	\$0.79	\$48.64
Feb-07	\$1.29	\$18.72	\$23.15	\$2.57	\$5.11	\$13.30	\$0.13	\$0.79	\$48.64
Mar-07	\$1.26	\$24.15	\$27.83	\$2.93	\$5.11	\$13.64	\$0.13	\$0.79	\$48.74
Apr-07	\$1.28	\$25.58	\$28.76	\$3.52	\$5.11	\$13.95	\$0.13	\$0.79	\$49.55
May-07	\$1.27	\$25.51	\$29.52	\$3.48	\$5.11	\$15.85	\$0.15	\$0.79	\$50.20
Jun-07	\$1.22	\$22.28	\$29.83	\$3.39	\$6.30	\$21.49	\$0.15	\$0.81	\$55.00
Jul-07	\$1.25	\$17.22	\$29.02	\$3.60	\$6.41	\$23.29	\$0.15	\$0.85	\$55.00
Aug-07	\$1.17	\$15.40	\$28.58	\$3.85	\$6.39	\$22.27	\$0.18	\$0.85	\$54.91
Sep-07	\$1.17	\$16.03	\$30.96	\$3.98	\$6.39	\$19.23	\$0.23	\$0.87	\$53.64
Oct-07	\$1.12	\$16.57	\$34.66	\$4.00	\$6.39	\$18.44	\$0.24	\$0.88	\$53.64
Nov-07	\$1.09	\$16.47	\$37.42	\$3.67	\$6.39	\$18.59	\$0.24	\$0.91	\$54.67
Dec-07	\$1.09	\$14.99	\$43.71	\$3.66	\$6.39	\$18.10	\$0.28	\$1.05	\$56.59
Jan-08	\$1.13	\$15.76	\$52.21	\$3.88	\$7.64	\$18.46	\$0.28	\$1.20	\$61.57
Feb-08	\$1.22	\$15.87	\$53.58	\$4.12	\$8.09	\$19.61	\$0.29	\$1.32	\$63.77
Mar-08	\$1.25	\$16.47	\$53.51	\$4.26	\$8.60	\$20.85	\$0.31	\$1.34	\$68.24
Apr-08	\$1.22	\$15.64	\$47.73	\$4.22	\$9.07	\$20.24	\$0.30	\$1.36	\$70.85
May-08	\$1.21	\$14.21	\$45.23	\$4.12	\$9.74	\$19.24	\$0.31	\$1.38	\$71.17
Jun-08	\$1.22	\$11.83	\$42.43	\$4.08	\$10.48	\$19.18	\$0.31	\$1.48	\$70.00
Jul-08	\$1.26	\$10.85	\$38.61	\$4.17	\$11.11	\$18.56	\$0.32	\$1.57	\$70.46
Aug-08	\$1.20	\$9.95	\$33.23	\$4.02	\$11.51	\$15.88	\$0.30	\$1.64	\$69.21
Sep-08	\$1.07	\$9.93	\$37.70	\$3.87	\$11.71	\$13.82	\$0.25	\$1.73	\$68.18
Oct-08	\$0.92	\$6.83	\$33.14	\$2.62	\$11.71	\$13.07	\$0.15	\$1.66	\$68.75
Nov-08	\$0.89	\$6.27	\$20.85	\$2.14	\$11.68	\$11.11	\$0.15	\$1.53	\$69.03
Dec-08	\$0.73	\$5.68	\$17.60	\$1.79	\$10.09	\$8.31	\$0.16	\$1.54	\$65.35
Jan-09	\$1.41	\$11.30	\$34.93	\$3.22	\$22.13	\$18.50	\$0.16	\$3.48	\$127.50
Feb-09	\$1.33	\$10.41	\$30.39	\$3.31	\$20.84	\$17.73	\$0.16	\$3.50	\$131.00
Mar-09	\$1.34	\$9.70	\$29.56	\$3.75	\$20.50	\$17.94	\$0.14	\$3.40	\$140.75
Apr-09	\$1.42	\$11.12	\$32.51	\$4.40	\$20.50	\$18.50	\$0.13	\$3.20	\$148.00
May-09	\$1.46	\$12.63	\$33.79	\$4.57	\$20.50	\$18.50	\$0.13	\$3.17	\$145.00
Jun-09	\$1.57	\$14.98	\$30.03	\$5.02	\$19.50	\$18.50	\$0.13	\$2.97	\$144.09
Jul-09	\$1.67	\$15.98	\$36.19	\$5.22	\$18.50	\$19.07	\$0.15	\$2.95	\$149.07
Aug-09	\$1.94	\$19.68	\$39.26	\$6.17	\$18.50	\$20.29	\$0.16	\$2.98	\$159.00
Sep-09	\$1.83	\$17.48	\$38.13	\$6.20	\$18.50	\$20.36	\$0.14	\$2.93	\$157.77
Oct-09	\$1.88	\$18.54	\$35.12	\$6.29	\$18.50	\$22.58	\$0.15	\$2.85	\$160.00
Nov-09	\$1.95	\$16.99	\$44.22	\$6.68	\$18.50	\$26.32	\$0.16	\$2.86	\$164.46

Monthly Average Cost of One Kilogram of Raw Materials

	Al	Ni	Co	Cu	Sm	Nd	Fe	B	Dy
Dec-09	\$2.18	\$17.07	\$40.76	\$6.98	\$18.73	\$28.65	\$0.16	\$2.90	\$165.62
Jan-10	\$2.24	\$18.46	\$44.00	\$7.39	\$19.00	\$33.33	\$0.18	\$2.97	\$182.00
Feb-10	\$2.05	\$18.90	\$40.52	\$6.84	\$19.00	\$38.56	\$0.18	\$3.00	\$226.38
Mar-10	\$2.21	\$22.48	\$39.32	\$7.46	\$19.00	\$39.85	\$0.21	\$3.00	\$251.00
Apr-10	\$2.32	\$26.03	\$39.00	\$7.75	\$19.00	\$43.54	\$0.25	\$3.00	\$275.00
May-10	\$2.04	\$22.01	\$38.90	\$6.84	\$19.00	\$42.95	\$0.23	\$3.02	\$265.17
Jun-10	\$1.93	\$19.39	\$38.78	\$6.50	\$20.05	\$45.27	\$0.22	\$3.09	\$298.36
Jul-10	\$1.99	\$19.43	\$38.56	\$6.73	\$20.69	\$52.00	\$0.21	\$3.10	\$372.31
Aug-10	\$2.12	\$21.41	\$38.90	\$7.28	\$31.61	\$67.23	\$0.24	\$3.08	\$388.69
Sep-10	\$2.16	\$22.64	\$41.64	\$7.71	\$40.77	\$77.73	\$0.23	\$3.00	\$387.00
Oct-10	\$2.35	\$23.84	\$39.44	\$8.29	\$41.00	\$83.80	\$0.25	\$3.00	\$387.00
Nov-10	\$2.32	\$22.91	\$37.50	\$8.47	\$46.08	\$96.08	\$0.26	\$3.18	\$387.00
Dec-10	\$2.35	\$24.11	\$38.75	\$9.15	\$66.06	\$111.56	\$0.27	\$3.40	\$389.44
Jan-11	\$2.44	\$25.65	\$39.48	\$9.56	\$70.71	\$132.62	\$0.27	\$3.43	\$472.86
Feb-11	\$2.51	\$28.25	\$40.18	\$9.87	\$98.87	\$172.20	\$0.29	\$3.55	\$546.93
Mar-11	\$2.55	\$26.81	\$38.51	\$9.53	\$142.22	\$229.78	\$0.26	\$3.89	\$701.57
Apr-11	\$2.66	\$26.33	\$37.35	\$9.48	\$147.00	\$278.00	\$0.28	\$4.26	\$932.75
May-11	\$2.47	\$23.06	\$36.90	\$8.50	\$157.00	\$304.83	\$0.27	\$4.34	\$1,075.00
Jun-11	\$2.56	\$22.35	\$36.53	\$9.05	\$187.48	\$398.76	\$0.26	\$4.50	\$1,785.71
Jul-11	\$2.51	\$23.73	\$35.49	\$9.62	\$195.43	\$461.90	\$0.27	\$4.54	\$2,814.29
Aug-11	\$2.39	\$22.08	\$36.48	\$9.04	\$200.00	\$481.30	\$0.29	\$4.53	\$3,039.13
Sep-11	\$2.30	\$20.39	\$34.78	\$8.31	\$194.29	\$378.57	\$0.29	\$4.43	\$3,000.00
Oct-11	\$2.17	\$18.89	\$31.24	\$7.35	\$177.78	\$346.67	\$0.26	\$4.39	\$3,000.00
Nov-11	\$2.07	\$17.88	\$28.80	\$7.55	\$162.27	\$329.32	\$0.25	\$4.37	\$2,972.73
Dec-11	\$2.02	\$18.15	\$31.43	\$7.57	\$155.00	\$308.04	\$0.24	\$4.32	\$2,900.00
Jan-12	\$2.14	\$19.82	\$33.23	\$8.04	\$151.56	\$290.00	\$0.24	\$4.30	\$2,756.25
Feb-12	\$2.20	\$20.47	\$31.81	\$8.42	\$140.00	\$244.76	\$0.25	\$4.16	\$2,519.05
Mar-12	\$2.18	\$18.71	\$31.14	\$8.46	\$148.04	\$197.39	\$0.25	\$4.00	\$2,397.83
Apr-12	\$2.04	\$17.90	\$30.84	\$8.26	\$148.68	\$189.21	\$0.24	\$3.96	\$2,202.63
May-12	\$2.00	\$17.02	\$30.79	\$7.92	\$143.64	\$167.50	\$0.23	\$3.95	\$1,695.45
Jun-12	\$1.88	\$16.54	\$29.07	\$7.42	\$120.90	\$156.35	\$0.22	\$3.95	\$1,475.00
Jul-12	\$1.88	\$16.16	\$29.02	\$7.59	\$110.00	\$149.78	\$0.23	\$3.87	\$1,438.26
Aug-12	\$1.84	\$15.66	\$29.21	\$7.49	\$107.30	\$145.00	\$0.21	\$3.85	\$1,411.30
Sep-12	\$2.05	\$17.22	\$29.47	\$8.07	\$96.76	\$139.29	\$0.20	\$3.85	\$1,340.00
Oct-12	\$1.98	\$17.25	\$27.10	\$8.07	\$68.00	\$122.67	\$0.22	\$3.85	\$1,200.56
Nov-12	\$1.94	\$16.30	\$23.51	\$7.69	\$60.00	\$112.00	\$0.21	\$3.73	\$1,100.00
Dec-12	\$2.09	\$17.41	\$24.04	\$7.96	\$51.70	\$103.40	\$0.21	\$3.70	\$920.50
Jan-13	\$2.04	\$17.47	\$26.13	\$8.05	\$48.00	\$98.00	\$0.24	\$3.70	\$780.00
Feb-13	\$2.05	\$17.73	\$25.52	\$8.07	\$48.00	\$98.00	\$0.24	\$3.70	\$780.00
Mar-13	\$1.91	\$16.73	\$25.53	\$7.66	\$48.00	\$97.62	\$0.23	\$3.70	\$780.00
Apr-13	\$1.86	\$15.64	\$26.17	\$7.20	\$46.10	\$94.57	\$0.22	\$3.70	\$771.43
May-13	\$1.83	\$14.95	\$27.88	\$7.23	\$40.26	\$84.91	\$0.22	\$3.67	\$698.18
Jun-13	\$1.82	\$14.27	\$30.53	\$7.00	\$35.37	\$79.95	\$0.21	\$3.61	\$670.00
Jul-13	\$1.77	\$13.71	\$29.37	\$6.89	\$34.09	\$75.22	\$0.22	\$3.60	\$670.87
Aug-13	\$1.82	\$14.29	\$27.12	\$7.19	\$36.00	\$92.52	\$0.23	\$3.60	\$699.13
Sep-13	\$1.76	\$13.78	\$28.61	\$7.16	\$36.00	\$101.42	\$0.23	\$3.60	\$752.11
Oct-13	\$1.81	\$14.07	\$27.17	\$7.19	\$36.00	\$104.16	\$0.23	\$3.60	\$740.00
Nov-13	\$1.75	\$13.73	\$26.78	\$7.07	\$36.00	\$104.00	\$0.23	\$3.60	\$696.67
Dec-13	\$1.74	\$13.91	\$26.93	\$7.20	\$36.00	\$101.82	\$0.23	\$3.60	\$670.00
Jan-14	\$1.73	\$14.08	\$28.80	\$7.29	\$36.00	\$100.24	\$0.23	\$3.60	\$651.43
Feb-14	\$1.69	\$14.20	\$14.20	\$6.42	\$36.00	\$100.33	\$0.12	\$3.60	\$650.00
Mar-14	\$1.74	\$15.66	\$15.66	\$6.71	\$36.00	\$100.71	\$0.11	\$3.60	\$641.90
Apr-14	\$1.90	\$17.38	\$17.38	\$6.74	\$36.00	\$99.00	\$0.11	\$3.60	\$590.48
May-14	\$1.75	\$19.44	\$19.44	\$6.87	\$35.43	\$99.00	\$0.10	\$3.60	\$580.00
Jun-14	\$1.83	\$18.57	\$18.57	\$7.44	\$34.00	\$96.55	\$0.09	\$3.60	\$556.00
Jul-14	\$1.95	\$19.54	\$19.54	\$7.15	\$29.61	\$92.04	\$0.09	\$3.60	\$476.09
Aug-14	\$2.97	\$18.64	\$18.64	\$6.86	\$23.73	\$92.73	\$0.09	\$3.60	\$470.00
Sep-14	\$1.99	\$18.79	\$18.79	\$6.88	\$22.38	\$90.19	\$0.08	\$3.70	\$458.75
Oct-14	\$1.94	\$15.77	\$15.77	\$6.68	\$21.63	\$85.84	\$0.08	\$3.60	\$435.26

Monthly Average Cost of One Kilogram of Raw Materials

	Al	Ni	Co	Cu	Sm	Nd	Fe	B	Dy
Nov-14	\$2.54	\$15.76	\$15.76	\$6.67	\$21.40	\$82.75	\$0.07	\$3.90	\$430.00
Dec-14	\$1.91	\$15.92	\$15.92	\$7.15	\$21.00	\$81.00	\$0.07	\$4.00	\$430.00
Jan-15	\$1.78	\$15.88	\$15.88	\$7.30	\$21.00	\$81.00	\$0.07	\$4.00	\$430.00
Feb-15	\$1.83	\$14.54	\$14.54	\$5.73	\$22.64	\$84.36	\$0.06	\$3.85	\$500.36
Mar-15	\$1.77	\$13.75	\$13.75	\$5.93	\$23.00	\$85.91	\$0.06	\$3.84	\$531.82
Apr-15	\$1.81	\$12.80	\$12.80	\$6.33	\$23.45	\$83.76	\$0.05	\$3.74	\$502.62
May-15	\$1.85	\$13.59	\$13.59	\$6.36	\$17.55	\$70.10	\$0.06	\$3.10	\$387.50
Jun-15	\$1.68	\$12.78	\$12.78	\$5.83	\$15.50	\$60.19	\$0.06	\$3.07	\$345.48
Jul-15	\$1.64	\$11.39	\$11.39	\$5.46	\$15.30	\$54.76	\$0.05	\$2.94	\$299.35
Aug-15	\$1.54	\$13.43	\$13.43	\$5.89	\$15.24	\$50.02	\$0.05	\$2.84	\$274.05
Sep-15	\$1.59	\$9.90	\$9.90	\$5.29	\$15.00	\$48.24	\$0.06	\$2.78	\$270.00
Oct-15	\$1.52	\$13.45	\$13.45	\$5.22	\$15.00	\$49.25	\$0.05	\$2.74	\$273.94
Nov-15	\$1.47	\$9.23	\$9.23	\$4.88	\$15.00	\$51.88	\$0.05	\$2.72	\$288.10
Dec-15	\$1.50	\$8.69	\$8.69	\$4.63	\$15.00	\$52.37	\$0.04	\$2.63	\$295.00
Jan-16	\$1.48	\$8.61	\$8.61	\$4.76	\$14.72	\$51.50	\$0.04	\$2.52	\$291.75
Feb-16	\$1.54	\$8.53	\$8.53	\$4.78	\$14.50	\$51.50	\$0.05	\$2.47	\$288.44
Mar-16	\$1.53	\$8.70	\$8.70	\$5.04	\$14.50	\$51.50	\$0.06	\$2.34	\$280.00
Apr-16	\$1.56	\$8.79	\$8.79	\$5.02	\$14.50	\$51.65	\$0.06	\$2.20	\$277.50
May-16	\$1.55	\$8.68	\$8.68	\$4.68	\$14.50	\$52.78	\$0.05	\$2.20	\$287.00
Jun-16	\$1.59	\$8.83	\$8.83	\$4.63	\$14.50	\$51.99	\$0.05	\$2.23	\$273.29
Jul-16	\$1.63	\$10.01	\$10.01	\$4.86	\$14.50	\$50.40	\$0.06	\$2.18	\$268.38
Aug-16	\$1.64	\$10.14	\$10.14	\$4.76	\$14.50	\$49.62	\$0.06	\$2.13	\$271.74
Sep-16	\$1.59	\$10.09	\$10.09	\$4.71	\$14.50	\$49.53	\$0.06	\$2.05	\$272.00
Oct-16	\$1.66	\$10.30	\$10.30	\$4.73	\$14.50	\$49.27	\$0.06	\$2.05	\$272.00
Nov-16	\$1.74	\$11.42	\$11.42	\$5.44	\$14.44	\$49.28	\$0.07	\$2.00	\$271.27
Dec-16	\$1.73	\$11.54	\$11.54	\$5.85	\$14.34	\$49.40	\$0.08	\$2.00	\$270.00
Jan-17	\$1.79	\$9.98	\$9.98	\$5.74	\$14.70	\$49.40	\$0.08	\$2.00	\$263.61
Feb-17	\$1.86	\$10.62	\$10.62	\$5.94	\$14.70	\$49.59	\$0.09	\$1.98	\$258.82
Mar-17	\$1.90	\$10.23	\$10.23	\$5.82	\$14.70	\$51.53	\$0.09	\$1.91	\$255.00
Apr-17	\$1.93	\$9.67	\$9.67	\$5.70	\$14.70	\$52.97	\$0.07	\$2.09	\$255.00
May-17	\$1.94	\$9.15	\$9.15	\$5.59	\$14.70	\$53.50	\$0.06	\$2.15	\$255.00
Jun-17	\$1.89	\$8.93	\$8.93	\$5.70	\$14.74	\$55.25	\$0.06	\$2.15	\$255.00
Jul-17	\$1.90	\$9.48	\$9.91	\$5.98	\$14.80	\$63.99	\$0.07	\$2.15	\$259.24
Aug-17	\$2.03	\$10.85	\$11.09	\$6.48	\$14.90	\$84.13	\$0.08	\$2.15	\$293.09
Sep-17	\$2.10	\$11.23	\$11.39	\$6.58	\$15.07	\$94.71	\$0.07	\$2.15	\$293.43
Oct-17	\$2.11	\$11.24	\$11.77	\$6.80	\$15.30	\$82.35	\$0.06	\$2.21	\$280.00
Nov-17	\$2.10	\$11.99	\$12.28	\$6.83	\$15.80	\$71.39	\$0.06	\$2.35	\$280.00
Dec-17	\$2.07	\$11.41	\$11.62	\$6.80	\$15.80	\$61.00	\$0.07	\$2.45	\$276.10
Jan-18	\$2.22	\$12.88	\$12.61	\$7.08	\$15.72	\$66.52	\$0.08	\$2.45	\$275.00
Feb-18	\$2.19	\$13.58	\$13.03	\$7.00	\$15.50	\$69.96	\$0.08	\$2.49	\$277.92
Mar-18	\$2.08	\$13.40	\$12.86	\$6.80	\$15.50	\$72.86	\$0.07	\$2.58	\$280.00
Apr-18	\$2.25	\$13.94	\$12.99	\$6.84	\$15.50	\$71.18	\$0.07	\$2.59	\$278.50
May-18	\$2.29	\$14.36	\$13.57	\$6.82	\$15.50	\$66.77	\$0.07	\$2.58	\$278.00
Jun-18	\$2.34	\$15.11	\$14.72	\$6.96	\$15.44	\$66.70	\$0.06	\$2.68	\$277.50
Jul-18	\$2.10	\$13.77	\$14.18	\$6.25	\$15.00	\$63.50	\$0.06	\$2.81	\$264.82
Aug-18	\$2.05	\$13.43	\$14.09	\$6.04	\$14.83	\$60.90	\$0.07	\$2.81	\$258.26
Sep-18	\$2.02	\$12.53	\$13.12	\$6.02	\$14.80	\$60.78	\$0.07	\$2.74	\$258.00
Oct-18	\$2.03	\$12.33	\$13.24	\$6.22	\$14.75	\$59.68	\$0.07	\$2.75	\$255.72
Nov-18	\$1.94	\$11.25	\$13.28	\$6.19	\$14.50	\$58.68	\$0.07	\$2.72	\$250.45
Dec-18	\$1.93	\$10.84	\$12.13	\$6.09	\$14.48	\$58.28	\$0.07	\$2.75	\$249.52
Jan-19	\$1.85	\$11.46	\$11.87	\$5.93	\$14.40	\$58.93	\$0.08	\$2.73	\$249.00
Feb-19	\$1.86	\$12.65	\$12.78	\$6.28	\$14.40	\$58.77	\$0.09	\$2.71	\$250.67
Mar-19	\$1.87	\$13.06	\$13.25	\$6.45	\$14.48	\$58.60	\$0.09	\$2.69	\$255.00
Apr-19	\$1.85	\$12.82	\$30.60	\$6.45	\$14.50	\$39.42	\$0.09	\$2.69	\$266.36
May-19	\$1.78	\$12.00	\$27.67	\$6.03	\$14.31	\$41.79	\$0.10	\$2.67	\$278.55

Total Cost of Main Materials to Produce One Kilogram of Magnets

	Alnico 5	Alnico 8	SmCo	NdFeB	NdFeB-H	NdFeB-SH	NdFeB-UH	NdFeB-EH	NdFeB-AH
01/30/06	\$4.72	\$6.43	\$11.48	\$2.07	\$2.80	\$3.30	\$3.64	\$3.95	\$4.25
02/28/06	\$4.70	\$6.37	\$11.33	\$2.22	\$2.97	\$3.48	\$3.83	\$4.14	\$4.45
03/30/06	\$4.71	\$6.39	\$11.38	\$2.30	\$3.14	\$3.73	\$4.11	\$4.44	\$4.78
04/30/06	\$5.43	\$7.36	\$12.78	\$2.40	\$3.36	\$4.04	\$4.47	\$4.86	\$5.24
05/30/06	\$6.02	\$8.14	\$13.76	\$2.46	\$3.46	\$4.15	\$4.60	\$5.00	\$5.40
06/30/06	\$5.76	\$7.79	\$13.19	\$2.66	\$3.64	\$4.33	\$4.78	\$5.17	\$5.57
07/30/06	\$5.95	\$7.91	\$12.66	\$3.06	\$4.09	\$4.81	\$5.28	\$5.68	\$6.09
08/30/06	\$6.90	\$9.20	\$14.53	\$3.98	\$4.99	\$5.65	\$6.13	\$6.56	\$6.98
09/30/06	\$7.51	\$10.11	\$16.30	\$4.04	\$5.04	\$5.66	\$6.15	\$6.59	\$7.04
10/30/06	\$7.38	\$9.84	\$15.47	\$4.20	\$5.21	\$5.85	\$6.34	\$6.78	\$7.22
11/30/06	\$7.22	\$9.62	\$15.13	\$4.37	\$5.41	\$6.07	\$6.57	\$7.01	\$7.46
12/30/06	\$8.09	\$10.83	\$17.05	\$4.56	\$5.65	\$6.32	\$6.85	\$7.33	\$7.81
01/30/07	\$7.79	\$10.34	\$15.89	\$4.57	\$5.63	\$6.28	\$6.79	\$7.25	\$7.71
02/28/07	\$8.43	\$11.16	\$16.84	\$4.61	\$5.68	\$6.34	\$6.86	\$7.34	\$7.81
03/31/07	\$10.32	\$13.62	\$19.88	\$4.73	\$5.85	\$6.51	\$7.07	\$7.59	\$8.11
04/30/07	\$10.76	\$14.19	\$20.48	\$4.84	\$5.98	\$6.65	\$7.22	\$7.75	\$8.29
05/30/07	\$10.94	\$14.44	\$20.98	\$5.49	\$6.63	\$7.27	\$7.86	\$8.40	\$8.95
06/30/07	\$10.55	\$14.06	\$21.60	\$7.41	\$8.59	\$9.21	\$9.83	\$10.41	\$10.98
07/30/07	\$9.66	\$13.03	\$21.10	\$8.03	\$9.18	\$9.76	\$10.38	\$10.94	\$11.51
08/30/07	\$9.32	\$12.62	\$20.81	\$7.70	\$8.86	\$9.46	\$10.07	\$10.62	\$11.18
09/30/07	\$10.00	\$13.57	\$22.36	\$6.70	\$7.88	\$8.52	\$9.14	\$9.72	\$10.29
10/30/07	\$10.97	\$14.95	\$24.76	\$6.43	\$7.66	\$8.33	\$8.98	\$9.59	\$10.20
11/07/07	\$11.61	\$15.89	\$26.56	\$6.49	\$7.76	\$8.45	\$9.13	\$9.77	\$10.42
12/30/07	\$12.93	\$17.88	\$30.65	\$6.35	\$7.73	\$8.47	\$9.21	\$9.93	\$10.65
01/30/08	\$15.09	\$20.98	\$36.61	\$6.47	\$8.03	\$8.88	\$9.72	\$10.55	\$11.37
02/29/08	\$15.45	\$21.50	\$37.66	\$6.87	\$8.48	\$9.34	\$10.21	\$11.06	\$11.91
03/30/08	\$15.53	\$21.58	\$37.79	\$7.31	\$8.99	\$9.91	\$10.81	\$11.68	\$12.55
04/30/08	\$14.02	\$19.42	\$34.20	\$7.09	\$8.78	\$9.74	\$10.62	\$11.44	\$12.27
05/30/08	\$13.22	\$18.33	\$32.81	\$6.76	\$8.43	\$9.42	\$10.28	\$11.08	\$11.88
06/30/08	\$12.22	\$17.00	\$31.25	\$6.74	\$8.36	\$9.33	\$10.15	\$10.92	\$11.69
07/30/08	\$11.17	\$15.52	\$28.99	\$6.53	\$8.14	\$9.11	\$9.91	\$10.64	\$11.37
08/30/08	\$9.74	\$13.48	\$25.63	\$5.61	\$7.16	\$8.16	\$8.90	\$9.58	\$10.25
09/30/08	\$10.76	\$15.01	\$28.60	\$4.88	\$6.47	\$7.50	\$8.28	\$8.99	\$9.70
10/30/08	\$9.14	\$12.85	\$25.63	\$4.56	\$6.13	\$7.18	\$7.92	\$8.59	\$9.26
11/30/08	\$6.09	\$8.44	\$17.64	\$3.89	\$5.36	\$6.43	\$7.07	\$7.63	\$8.18
12/30/08	\$5.21	\$7.20	\$14.97	\$2.94	\$4.34	\$5.39	\$5.98	\$6.48	\$6.98
01/30/09	\$10.26	\$14.21	\$30.45	\$6.43	\$9.14	\$11.14	\$12.31	\$13.29	\$14.28
02/28/09	\$9.04	\$12.49	\$27.05	\$6.17	\$8.91	\$10.97	\$12.13	\$13.09	\$14.04
03/30/09	\$8.74	\$12.10	\$26.39	\$6.22	\$9.15	\$11.39	\$12.60	\$13.60	\$14.60
04/30/09	\$9.67	\$13.37	\$28.31	\$6.40	\$9.50	\$11.86	\$13.16	\$14.22	\$15.28
05/30/09	\$10.20	\$14.06	\$29.14	\$6.41	\$9.46	\$11.77	\$13.05	\$14.11	\$15.17
06/30/09	\$9.65	\$13.12	\$26.34	\$6.41	\$9.40	\$11.69	\$12.93	\$13.95	\$14.97
07/30/09	\$11.29	\$15.45	\$30.00	\$6.61	\$9.76	\$12.13	\$13.46	\$14.57	\$15.67
08/30/09	\$12.60	\$17.14	\$31.99	\$7.03	\$10.40	\$12.93	\$14.36	\$15.54	\$16.73
09/30/09	\$12.00	\$16.40	\$31.26	\$7.05	\$10.38	\$12.88	\$14.29	\$15.46	\$16.63
10/30/09	\$11.44	\$15.52	\$29.30	\$7.80	\$11.13	\$13.63	\$15.02	\$16.17	\$17.32
11/30/09	\$13.43	\$18.49	\$35.22	\$9.08	\$12.55	\$15.07	\$16.57	\$17.83	\$19.09
12/30/09	\$12.64	\$17.32	\$33.05	\$9.88	\$13.31	\$15.80	\$17.28	\$18.51	\$19.75
01/30/10	\$13.64	\$18.69	\$35.25	\$11.48	\$15.22	\$17.92	\$19.54	\$20.89	\$22.24
02/28/10	\$12.83	\$17.50	\$32.99	\$13.26	\$17.80	\$21.19	\$23.09	\$24.63	\$26.16
03/30/10	\$13.09	\$17.67	\$32.21	\$13.71	\$18.72	\$22.52	\$24.59	\$26.24	\$27.88
04/30/10	\$13.55	\$18.12	\$32.00	\$15.00	\$20.45	\$24.60	\$26.84	\$28.60	\$30.36
05/30/10	\$12.90	\$17.42	\$31.94	\$14.78	\$20.04	\$24.03	\$26.19	\$27.91	\$29.62
06/30/10	\$12.48	\$16.96	\$32.22	\$15.56	\$21.46	\$26.00	\$28.40	\$30.28	\$32.15
07/30/10	\$12.44	\$16.90	\$32.31	\$17.85	\$25.16	\$30.89	\$33.81	\$36.05	\$38.29
08/30/10	\$12.84	\$17.36	\$36.35	\$23.04	\$30.53	\$36.26	\$39.29	\$41.62	\$43.94
09/30/10	\$13.69	\$18.52	\$41.34	\$26.61	\$33.98	\$39.48	\$42.52	\$44.86	\$47.21
10/30/10	\$13.37	\$17.97	\$39.98	\$28.68	\$35.98	\$41.35	\$44.37	\$46.69	\$49.02

Total Cost of Main Materials to Produce One Kilogram of Magnets

	Alnico 5	Alnico 8	SmCo	NdFeB	NdFeB-H	NdFeB-SH	NdFeB-UH	NdFeB-EH	NdFeB-AH
11/30/10	\$12.78	\$17.16	\$40.50	\$32.87	\$40.02	\$45.14	\$48.14	\$50.45	\$52.75
12/30/10	\$13.27	\$17.81	\$48.31	\$38.14	\$45.19	\$50.05	\$53.08	\$55.41	\$57.74
01/30/11	\$13.69	\$18.32	\$50.41	\$45.30	\$53.82	\$59.76	\$63.38	\$66.14	\$68.89
02/28/11	\$14.24	\$18.98	\$60.72	\$58.77	\$68.38	\$74.86	\$79.01	\$82.14	\$85.27
03/30/11	\$13.62	\$18.16	\$74.81	\$78.34	\$90.45	\$98.56	\$103.77	\$107.66	\$111.55
04/30/11	\$13.29	\$17.70	\$75.73	\$94.74	\$110.99	\$122.29	\$129.12	\$134.15	\$139.18
05/30/11	\$12.68	\$16.99	\$78.93	\$103.86	\$122.68	\$136.01	\$143.82	\$149.56	\$155.30
06/30/11	\$12.51	\$16.78	\$89.36	\$135.80	\$167.88	\$192.12	\$204.91	\$214.20	\$223.49
07/30/11	\$12.47	\$16.65	\$91.47	\$157.27	\$209.29	\$250.78	\$270.76	\$285.18	\$299.60
08/30/11	\$12.45	\$16.72	\$93.71	\$163.87	\$220.20	\$265.35	\$286.92	\$302.47	\$318.03
09/30/11	\$11.78	\$15.84	\$90.60	\$128.95	\$185.50	\$232.00	\$253.28	\$268.62	\$283.96
10/30/11	\$10.67	\$14.32	\$82.53	\$118.08	\$174.92	\$222.05	\$243.30	\$258.61	\$273.91
11/30/11	\$9.93	\$13.31	\$75.52	\$112.17	\$168.62	\$215.60	\$236.63	\$251.78	\$266.93
12/30/11	\$10.60	\$14.26	\$74.68	\$104.94	\$160.16	\$206.27	\$226.81	\$241.62	\$256.44
01/30/12	\$11.29	\$15.17	\$74.65	\$98.80	\$151.35	\$195.23	\$214.79	\$228.90	\$243.01
02/29/12	\$11.05	\$14.79	\$69.68	\$83.42	\$131.67	\$172.18	\$190.06	\$202.97	\$215.88
03/30/12	\$10.65	\$14.29	\$72.06	\$67.31	\$113.60	\$152.88	\$169.91	\$182.21	\$194.50
04/30/12	\$10.44	\$14.05	\$72.09	\$64.53	\$106.99	\$142.92	\$158.58	\$169.90	\$181.22
05/30/12	\$10.29	\$13.88	\$70.29	\$57.14	\$89.67	\$116.90	\$129.02	\$137.80	\$146.58
06/30/12	\$9.78	\$13.17	\$61.21	\$53.34	\$81.57	\$105.05	\$115.60	\$123.26	\$130.93
07/30/12	\$9.72	\$13.11	\$57.36	\$51.11	\$78.66	\$101.62	\$111.91	\$119.39	\$126.87
08/30/12	\$9.68	\$13.08	\$56.54	\$49.48	\$76.54	\$99.10	\$109.21	\$116.56	\$123.90
09/30/12	\$9.99	\$13.44	\$53.02	\$47.53	\$73.22	\$94.62	\$104.23	\$111.22	\$118.21
10/30/12	\$9.43	\$12.62	\$41.42	\$41.89	\$64.94	\$84.15	\$92.77	\$99.04	\$105.31
11/30/12	\$8.42	\$11.20	\$36.28	\$38.26	\$59.37	\$76.97	\$84.86	\$90.59	\$96.32
12/30/12	\$8.72	\$11.57	\$33.72	\$35.33	\$52.94	\$67.49	\$74.13	\$78.97	\$83.81
01/30/13	\$9.24	\$12.32	\$33.78	\$33.51	\$48.39	\$60.52	\$66.19	\$70.34	\$74.50
02/28/13	\$9.14	\$12.15	\$33.39	\$33.51	\$48.38	\$60.52	\$66.18	\$70.33	\$74.48
03/29/13	\$8.97	\$11.97	\$33.39	\$33.38	\$48.25	\$60.39	\$66.05	\$70.20	\$74.35
04/30/13	\$8.95	\$12.01	\$33.15	\$32.34	\$47.08	\$59.12	\$64.73	\$68.84	\$72.96
05/31/13	\$9.26	\$12.50	\$32.21	\$29.05	\$42.44	\$53.36	\$58.47	\$62.23	\$66.00
06/28/13	\$9.79	\$13.32	\$32.22	\$27.36	\$40.26	\$50.78	\$55.71	\$59.36	\$63.02
07/31/13	\$9.43	\$12.82	\$31.02	\$25.75	\$38.71	\$49.34	\$54.26	\$57.91	\$61.55
08/30/13	\$8.99	\$12.14	\$30.23	\$31.64	\$44.96	\$55.75	\$60.86	\$64.62	\$68.39
09/30/13	\$9.27	\$12.58	\$31.20	\$34.67	\$48.98	\$60.54	\$66.03	\$70.08	\$74.12
10/31/13	\$8.97	\$12.12	\$30.26	\$35.60	\$49.62	\$60.91	\$66.31	\$70.28	\$74.25
11/29/13	\$8.82	\$11.93	\$30.01	\$35.55	\$48.70	\$59.22	\$64.30	\$68.05	\$71.80
12/27/13	\$8.89	\$12.01	\$30.10	\$34.81	\$47.45	\$57.53	\$62.43	\$66.05	\$69.66
01/29/14	\$9.36	\$12.69	\$31.32	\$34.27	\$46.58	\$56.35	\$61.14	\$64.68	\$68.23
02/28/14	\$5.78	\$7.52	\$21.83	\$34.23	\$46.36	\$56.08	\$60.75	\$64.14	\$67.53
03/03/14	\$6.35	\$8.26	\$22.78	\$34.35	\$46.33	\$55.91	\$60.52	\$63.89	\$67.25
04/05/14	\$7.01	\$9.13	\$23.89	\$33.77	\$44.76	\$53.44	\$57.71	\$60.84	\$63.96
05/08/14	\$7.78	\$10.16	\$25.04	\$33.76	\$44.56	\$53.06	\$57.28	\$60.37	\$63.46
06/10/14	\$7.47	\$9.75	\$23.97	\$32.92	\$43.26	\$51.38	\$55.41	\$58.38	\$61.34
07/13/14	\$7.84	\$10.23	\$23.07	\$31.39	\$40.19	\$46.95	\$50.44	\$53.02	\$55.59
08/15/14	\$7.57	\$9.84	\$20.42	\$31.62	\$40.28	\$46.92	\$50.36	\$52.90	\$55.43
09/17/14	\$7.55	\$9.84	\$20.05	\$30.75	\$39.21	\$45.70	\$49.07	\$51.55	\$54.03
10/20/14	\$6.39	\$8.32	\$17.82	\$29.27	\$37.28	\$43.43	\$46.60	\$48.93	\$51.26
11/22/14	\$6.43	\$8.35	\$17.74	\$28.22	\$36.15	\$42.27	\$45.40	\$47.71	\$50.01
12/25/14	\$6.45	\$8.41	\$17.70	\$27.62	\$35.57	\$41.72	\$44.86	\$47.17	\$49.48
01/27/15	\$6.43	\$8.38	\$17.67	\$27.62	\$35.57	\$41.72	\$44.86	\$47.17	\$49.47
02/28/15	\$5.87	\$7.65	\$17.37	\$28.76	\$38.07	\$45.42	\$49.03	\$51.68	\$54.33
03/01/15	\$5.57	\$7.26	\$16.98	\$29.28	\$39.20	\$47.08	\$50.91	\$53.71	\$56.50
04/03/15	\$5.22	\$6.80	\$16.52	\$28.55	\$37.89	\$45.29	\$48.91	\$51.55	\$54.19
05/06/15	\$5.53	\$7.20	\$14.98	\$23.90	\$31.09	\$36.69	\$39.51	\$41.58	\$43.65
06/08/15	\$5.20	\$6.76	\$13.73	\$20.53	\$26.97	\$32.01	\$34.53	\$36.38	\$38.24
07/11/15	\$4.65	\$6.05	\$12.76	\$18.68	\$24.23	\$28.55	\$30.73	\$32.34	\$33.95
08/13/15	\$5.43	\$7.08	\$14.06	\$17.07	\$22.18	\$26.14	\$28.17	\$29.67	\$31.18
09/15/15	\$4.08	\$5.29	\$11.68	\$16.47	\$21.48	\$25.40	\$27.36	\$28.81	\$30.26

Total Cost of Main Materials to Produce One Kilogram of Magnets									
	Alnico 5	Alnico 8	SmCo	NdFeB	NdFeB-H	NdFeB-SH	NdFeB-UH	NdFeB-EH	NdFeB-AH
10/18/15	\$5.42	\$7.06	\$13.99	\$16.81	\$21.93	\$25.90	\$27.92	\$29.43	\$30.93
11/20/15	\$3.80	\$4.93	\$11.25	\$17.70	\$23.03	\$27.20	\$29.29	\$30.82	\$32.35
12/23/15	\$3.58	\$4.65	\$10.90	\$17.86	\$23.32	\$27.60	\$29.73	\$31.30	\$32.86
01/25/16	\$3.55	\$4.62	\$10.75	\$17.56	\$22.97	\$27.21	\$29.32	\$30.86	\$32.40
02/27/16	\$3.53	\$4.58	\$10.62	\$17.56	\$22.90	\$27.08	\$29.17	\$30.70	\$32.22
03/31/16	\$3.61	\$4.68	\$10.73	\$17.57	\$22.74	\$26.77	\$28.80	\$30.28	\$31.77
04/30/16	\$3.65	\$4.73	\$10.79	\$17.62	\$22.74	\$26.72	\$28.73	\$30.21	\$31.68
05/03/16	\$3.59	\$4.66	\$10.72	\$18.00	\$23.30	\$27.43	\$29.51	\$31.03	\$32.55
06/05/16	\$3.65	\$4.73	\$10.81	\$17.73	\$22.77	\$26.66	\$28.65	\$30.10	\$31.55
07/08/16	\$4.11	\$5.33	\$11.58	\$17.19	\$22.16	\$26.00	\$27.96	\$29.40	\$30.84
08/10/16	\$4.16	\$5.40	\$11.67	\$16.93	\$21.97	\$25.89	\$27.87	\$29.33	\$30.79
09/12/16	\$4.13	\$5.37	\$11.63	\$16.90	\$21.94	\$25.87	\$27.85	\$29.31	\$30.77
10/15/16	\$4.22	\$5.48	\$11.77	\$16.81	\$21.86	\$25.79	\$27.78	\$29.24	\$30.70
11/17/16	\$4.68	\$6.08	\$12.48	\$16.82	\$21.87	\$25.79	\$27.78	\$29.25	\$30.72
12/20/16	\$4.74	\$6.16	\$12.52	\$16.87	\$21.89	\$25.78	\$27.76	\$29.23	\$30.69
01/22/17	\$4.15	\$5.38	\$11.63	\$16.87	\$21.74	\$25.52	\$27.45	\$28.86	\$30.28
02/24/17	\$4.41	\$5.71	\$12.05	\$16.94	\$21.72	\$25.41	\$27.31	\$28.71	\$30.10
03/29/17	\$4.26	\$5.52	\$11.79	\$17.60	\$22.28	\$25.86	\$27.73	\$29.10	\$30.48
04/30/17	\$4.04	\$5.23	\$11.43	\$18.08	\$22.74	\$26.29	\$28.15	\$29.52	\$30.89
05/01/17	\$3.83	\$4.96	\$11.10	\$18.25	\$22.91	\$26.45	\$28.30	\$29.67	\$31.03
06/03/17	\$3.74	\$4.85	\$10.96	\$18.84	\$23.48	\$26.98	\$28.84	\$30.20	\$31.56
07/06/17	\$4.07	\$5.29	\$11.62	\$21.82	\$26.46	\$29.87	\$31.76	\$33.16	\$34.55
08/08/17	\$4.58	\$5.94	\$12.42	\$28.68	\$33.80	\$37.42	\$39.56	\$41.13	\$42.71
09/10/17	\$4.71	\$6.11	\$12.68	\$32.27	\$37.30	\$40.71	\$42.86	\$44.44	\$46.02
10/13/17	\$4.80	\$6.25	\$13.00	\$28.06	\$32.95	\$36.37	\$38.42	\$39.94	\$41.46
11/15/17	\$5.03	\$6.54	\$13.51	\$24.34	\$29.35	\$32.98	\$35.04	\$36.56	\$38.08
12/18/17	\$4.79	\$6.22	\$13.08	\$20.81	\$25.84	\$29.61	\$31.64	\$33.13	\$34.63
01/20/18	\$5.26	\$6.81	\$13.70	\$22.69	\$27.65	\$31.29	\$33.32	\$34.82	\$36.32
02/22/18	\$5.45	\$7.06	\$13.89	\$23.86	\$28.85	\$32.48	\$34.53	\$36.05	\$37.56
03/27/18	\$5.37	\$6.96	\$13.78	\$24.84	\$29.84	\$33.45	\$35.51	\$37.04	\$38.57
04/29/18	\$5.49	\$7.09	\$13.87	\$24.27	\$29.26	\$32.87	\$34.92	\$36.45	\$37.97
05/31/18	\$5.69	\$7.36	\$14.25	\$22.77	\$27.80	\$31.49	\$33.55	\$35.07	\$36.60
06/01/18	\$6.08	\$7.88	\$14.97	\$22.75	\$27.78	\$31.47	\$33.53	\$35.06	\$36.59
07/04/18	\$5.72	\$7.45	\$14.46	\$21.66	\$26.46	\$29.99	\$31.95	\$33.42	\$34.88
08/06/18	\$5.64	\$7.36	\$14.35	\$20.78	\$25.47	\$28.93	\$30.85	\$32.28	\$33.71
09/08/18	\$5.28	\$6.88	\$13.71	\$20.74	\$25.42	\$28.87	\$30.78	\$32.20	\$33.62
10/11/18	\$5.29	\$6.90	\$13.77	\$20.37	\$25.01	\$28.45	\$30.35	\$31.76	\$33.17
11/13/18	\$5.14	\$6.75	\$13.71	\$20.03	\$24.58	\$27.94	\$29.80	\$31.18	\$32.57
12/16/18	\$4.80	\$6.28	\$12.95	\$19.89	\$24.42	\$27.77	\$29.61	\$30.98	\$32.34
01/18/19	\$4.82	\$6.27	\$12.76	\$20.11	\$24.62	\$27.95	\$29.78	\$31.15	\$32.51
02/20/19	\$5.22	\$6.79	\$13.35	\$20.07	\$24.62	\$27.98	\$29.84	\$31.22	\$32.59
03/25/19	\$5.40	\$7.02	\$13.68	\$20.01	\$24.65	\$28.10	\$29.99	\$31.39	\$32.80
04/27/19	\$9.53	\$13.06	\$24.97	\$13.49	\$18.73	\$22.79	\$24.90	\$26.54	\$28.18
05/30/19	\$8.69	\$11.89	\$22.99	\$14.30	\$19.73	\$23.96	\$26.13	\$27.80	\$29.47