

**Raw Material and Energy Surcharges 2022 - USD/lb.  
(applicable at time of shipment)**



If an alloy you purchase is not listed, call Carpenter within the U.S. at 800-654-6543 Outside the U.S., call 1-610-208-2000, press 2 for Customer Service.

12/1/2022 Last Modified

**STAINLESS STEELS**

Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® 15-15HS® Stainless/SCF260	1.44	1.52	1.53	1.97	2.14	2.08	2.00	1.82	1.71	1.69	1.66	1.67
CarTech® 15-15LC® Modified Stainless	1.24	1.29	1.28	1.61	1.75	1.74	1.69	1.55	1.44	1.41	1.39	1.36
CarTech® 20Cb-3® Stainless	4.12	4.60	5.05	6.85	7.50	6.46	6.12	5.15	5.14	5.26	5.09	5.74
CarTech® 20Mo-6® Stainless	4.73	5.26	5.72	7.61	8.31	7.25	6.85	5.84	5.76	5.95	5.84	6.52
CarTech® 302HQ-FM® Stainless	1.40	1.54	1.63	2.30	2.55	2.31	2.22	1.91	1.86	1.83	1.74	1.86
CarTech® 316L-SCQ® Stainless	2.09	2.28	2.41	3.21	3.51	3.16	3.00	2.59	2.51	2.69	2.64	2.85
CarTech® 13-8 Stainless	1.62	1.76	1.83	2.41	2.62	2.38	2.26	1.96	1.88	1.90	1.88	2.00
CarTech® 15Cr-5Ni	1.12	1.20	1.23	1.67	1.84	1.71	1.64	1.42	1.37	1.32	1.26	1.31
CarTech® 18Cr-2Ni-12Mn	0.88	0.92	0.90	1.25	1.39	1.38	1.35	1.22	1.15	1.07	1.01	0.98
CarTech® 18Cr-3Ni-12Mn	1.03	1.09	1.11	1.54	1.71	1.64	1.59	1.42	1.36	1.29	1.22	1.24
CarTech® 21Cr-6Ni-9Mn	1.34	1.45	1.51	2.12	2.35	2.18	2.11	1.85	1.79	1.73	1.64	1.72
CarTech® 22Cr-13Ni-5Mn	2.20	2.40	2.54	3.42	3.74	3.40	3.24	2.83	2.74	2.75	2.69	2.88
CarTech® 302HQ-SFQ Stainless	1.40	1.54	1.63	2.30	2.55	2.31	2.22	1.91	1.86	1.83	1.74	1.86
CarTech® Custom 631 (17Cr-7Ni)	1.21	1.31	1.37	1.94	2.16	1.98	1.90	1.65	1.59	1.55	1.48	1.56
CarTech® 15-7PH Stainless	1.60	1.73	1.79	2.37	2.58	2.37	2.26	1.97	1.88	1.90	1.87	1.97
CarTech® Custom 630 (17Cr-4Ni) Stainless	1.11	1.18	1.21	1.65	1.82	1.70	1.64	1.42	1.37	1.31	1.26	1.29
CarTech® No. 5-F Stainless (Type 416 Mod)	0.57	0.58	0.54	0.77	0.86	0.88	0.85	0.77	0.70	0.64	0.61	0.55
CarTech® 302 Stainless	1.40	1.54	1.63	2.30	2.55	2.31	2.22	1.91	1.86	1.83	1.74	1.86
CarTech® 303 Stainless	1.41	1.54	1.64	2.30	2.56	2.32	2.22	1.92	1.87	1.83	1.74	1.87
CarTech® 303 Se Stainless	1.40	1.54	1.63	2.30	2.55	2.31	2.22	1.91	1.86	1.83	1.74	1.86
CarTech® 304/304L Stainless	1.40	1.54	1.63	2.30	2.55	2.31	2.22	1.91	1.86	1.83	1.74	1.86
CarTech® 305 Stainless	1.63	1.80	1.93	2.72	3.02	2.69	2.58	2.20	2.16	2.14	2.04	2.22
CarTech® 309 Stainless	1.88	2.08	2.23	3.16	3.50	3.14	3.01	2.59	2.54	2.51	2.39	2.60
CarTech® 310 Stainless	2.43	2.71	2.95	4.16	4.61	4.07	3.89	3.32	3.28	3.27	3.11	3.44
CarTech® 316/316L Stainless	2.09	2.28	2.42	3.22	3.51	3.16	3.00	2.60	2.51	2.33	2.29	2.45
CarTech® 316L Stainless	2.09	2.28	2.42	3.22	3.51	3.16	3.00	2.60	2.51	2.33	2.29	2.45
CarTech® 321 Stainless	1.53	1.69	1.80	2.54	2.82	2.53	2.43	2.09	2.04	2.01	1.91	2.12
CarTech® 347 Stainless	1.57	1.73	1.85	2.61	2.90	2.59	2.48	2.13	2.08	2.06	1.96	2.12
CarTech® 403 Stainless	0.56	0.57	0.53	0.75	0.84	0.86	0.84	0.75	0.68	0.62	0.60	0.54
CarTech® 410 Stainless	0.56	0.57	0.53	0.75	0.84	0.86	0.84	0.75	0.68	0.62	0.60	0.54
CarTech® 416 Stainless	0.57	0.58	0.54	0.77	0.86	0.88	0.85	0.77	0.70	0.64	0.61	0.55

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CarTech® 416 (No. 5) Stainless	0.57	0.58	0.54	0.77	0.86	0.88	0.85	0.77	0.70	0.64	0.61	0.55
CarTech® 416 RS Stainless	0.57	0.58	0.54	0.77	0.86	0.88	0.85	0.77	0.70	0.64	0.61	0.55
CarTech® 416BQ Stainless (No. 5BQ)	0.57	0.58	0.54	0.77	0.86	0.88	0.85	0.77	0.70	0.64	0.61	0.55
CarTech® 420 Stainless	0.57	0.59	0.54	0.78	0.87	0.89	0.87	0.78	0.71	0.65	0.62	0.56
CarTech® 420 Mod Stainless	0.57	0.59	0.54	0.78	0.87	0.89	0.87	0.78	0.71	0.65	0.62	0.56
CarTech® 420F Stainless	0.58	0.59	0.55	0.79	0.88	0.90	0.88	0.79	0.72	0.66	0.63	0.57
CarTech® 430 Stainless	0.63	0.65	0.61	0.88	0.98	1.01	1.00	0.91	0.83	0.76	0.72	0.66
CarTech® 430F Stainless	0.63	0.65	0.61	0.88	0.98	1.01	1.00	0.91	0.83	0.76	0.72	0.66
CarTech® 430FR Stainless	0.63	0.65	0.61	0.88	0.98	1.01	1.00	0.91	0.83	0.76	0.72	0.66
CarTech® 431 Stainless	0.81	0.85	0.84	1.20	1.33	1.29	1.26	1.11	1.05	0.99	0.94	0.92
CarTech® 434 Stainless	0.83	0.85	0.81	1.08	1.19	1.22	1.19	1.09	0.99	0.94	0.93	0.86
CarTech® 440A Stainless	0.63	0.64	0.61	0.87	0.98	1.01	0.99	0.91	0.82	0.75	0.72	0.65
CarTech® 440C Stainless	0.63	0.64	0.61	0.87	0.98	1.01	0.99	0.91	0.82	0.75	0.72	0.65
CarTech® 440F-Se Stainless	0.63	0.65	0.61	0.88	0.98	1.01	1.00	0.91	0.83	0.76	0.72	0.66
CarTech® 446 Stainless	0.75	0.77	0.73	1.07	1.20	1.27	1.25	1.16	1.06	0.97	0.92	0.84
CarTech® 204-Cu Stainless	1.43	1.52	1.69	2.47	2.71	2.68	2.43	2.11	2.00	1.88	1.76	1.66
CarTech® Consumet® 304L-SCQ	1.44	1.58	1.68	2.37	2.63	2.39	2.29	1.98	1.93	1.89	1.74	1.86
CarTech® Custom 450® Stainless	1.59	1.71	1.76	2.30	2.50	2.30	2.19	1.92	1.82	1.84	1.82	1.90
CarTech® Custom 455® Stainless	1.25	1.37	1.45	2.04	2.27	2.02	1.93	1.64	1.61	2.50	1.84	1.98
CarTech® Custom 465® Stainless	1.64	1.81	1.92	2.63	2.91	2.57	2.45	2.09	2.05	2.96	2.64	2.85
CarTech® Custom 475™ Stainless	4.52	4.79	4.96	6.00	6.38	6.13	5.35	4.18	3.61	3.81	4.53	4.50
CarTech® Custom Flo 302HQ Stainless	1.40	1.54	1.63	2.30	2.55	2.31	2.22	1.91	1.86	1.83	1.74	1.86
CarTech® EnduraMet® 2205 Stainless	1.67	1.85	1.89	2.46	2.61	2.47	2.36	2.11	1.98	1.99	1.98	2.02
CarTech® Gall-Tough® PLUS Stainless	1.40	1.53	1.61	2.26	2.50	2.28	2.19	1.90	1.85	1.81	1.72	1.83
CarTech® Gall-Tough® Stainless	1.09	1.17	1.21	1.70	1.89	1.76	1.69	1.48	1.42	1.37	1.30	1.35
CarTech® 15Cr-5Ni Project 70+® Stainless	1.12	1.20	1.23	1.67	1.84	1.71	1.64	1.42	1.37	1.32	1.26	1.31
CarTech® Custom 630 Project 70+® Stainless	1.11	1.18	1.21	1.65	1.82	1.70	1.64	1.42	1.37	1.31	1.26	1.29
CarTech® 303 Project 70+® Escomatic Quality	1.41	1.54	1.64	2.30	2.56	2.32	2.22	1.92	1.87	1.83	1.74	1.87
CarTech® 303 Project 70+® Stainless	1.41	1.54	1.64	2.30	2.56	2.32	2.22	1.92	1.87	1.83	1.74	1.87
CarTech® 304/304L Project 70+® Stainless	1.40	1.54	1.63	2.30	2.55	2.31	2.22	1.91	1.86	1.89	1.80	1.93
CarTech® 316/316L Project 70+® Stainless	2.09	2.28	2.42	3.22	3.51	3.16	3.00	2.60	2.51	2.33	2.29	2.45
CarTech® 416 Project 70+® Stainless	0.57	0.58	0.54	0.77	0.86	0.88	0.85	0.77	0.70	0.64	0.61	0.55
CarTech® Pyrowear® 675 Stainless	2.74	2.88	2.96	3.68	3.94	3.86	3.38	2.65	2.28	2.33	2.34	2.22
CarTech® SCF 19 Max® Alloy	3.08	3.37	3.58	4.68	5.08	4.55	4.31	3.74	3.63	3.73	3.70	4.01
CarTech® 410 Mod Stainless	0.56	0.57	0.53	0.75	0.84	0.86	0.84	0.75	0.68	0.62	0.60	0.54

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CarTech® TrimRite® Stainless	0.76	0.78	0.75	1.02	1.12	1.12	1.09	0.98	0.89	0.85	0.83	0.79
CarTech® 409Cb Stainless	0.57	0.58	0.55	0.77	0.86	0.86	0.84	0.75	0.68	0.62	0.60	0.55
CarTech® 409Cb High Nickel Stainless	0.57	0.58	0.55	0.77	0.86	0.86	0.84	0.75	0.68	0.62	0.60	0.55
CarTech® 2507 Super Duplex Stainless	1.93	2.06	2.12	2.76	3.00	2.85	2.72	2.44	2.30	2.31	2.30	2.37
CarTech® Ni-Cu K500	6.98	7.87	8.79	11.78	12.83	10.65	10.05	8.12	8.39	0.00	8.25	9.66
CarTech® 330 Stainless	3.64	4.12	4.58	6.42	7.09	6.04	5.72	4.77	4.81	4.88	4.65	5.32
CarTech® 317 Stainless	2.39	2.60	2.75	3.64	3.97	3.57	3.39	2.94	2.84	2.90	2.86	3.08
CarTech® A-21®	0.87	0.93	0.93	1.28	1.40	1.32	1.26	1.10	1.03	1.00	0.97	0.98

**AEROSPACE AND HIGH TEMPERATURE ALLOYS**

CarTech® A-286 Alloy	3.27	3.71	4.14	5.43	6.82	5.97	5.74	5.01	5.05	5.12	4.64	5.16
CarTech® Alloy 2 (159 ALY / MP159)	28.58	30.23	31.59	37.58	41.13	39.06	33.75	26.18	22.39	23.30	23.09	22.82
CarTech® Greek Ascology (418 SS)	1.18	1.22	1.21	1.52	1.64	1.59	1.56	1.42	1.36	1.31	1.27	1.45
CarTech® L-605 Alloy	22.75	23.71	24.45	27.70	30.04	29.78	26.06	20.80	18.15	18.78	18.51	18.61
CarTech® Waspaloy	11.25	12.34	13.50	16.90	19.49	17.65	16.19	13.34	12.73	13.17	12.55	13.48
CarTech® 350 (Pyromet® 350)	1.50	1.59	1.61	2.07	2.24	2.12	2.02	1.80	1.69	1.70	1.71	1.74
CarTech® 355 (Pyromet® 355)	1.49	1.59	1.61	2.07	2.24	2.11	2.01	1.79	1.67	1.69	1.70	1.74
CarTech® 41 (Pyromet® 41)	11.28	12.32	13.39	16.53	18.98	17.20	15.85	13.26	12.68	13.21	12.74	13.68
CarTech® 600 (Pyromet® 600)	6.25	7.30	8.57	11.87	14.26	11.96	11.42	9.55	9.77	10.03	9.27	10.78
CarTech® 625 (Pyromet® 625)	8.24	9.19	10.25	13.10	15.60	13.63	13.04	11.35	11.37	11.79	11.13	12.44
CarTech® 680 (Pyromet® 680)	7.25	8.05	8.89	11.22	13.43	11.87	11.25	9.76	9.66	10.02	9.46	10.42
CarTech® 706 (Pyromet® 706)	4.56	5.17	5.87	7.79	9.59	8.30	7.99	6.91	7.02	7.14	6.50	7.35
CarTech® 718 (Pyromet® 718)	6.45	7.22	8.10	10.51	12.70	11.08	10.64	9.26	9.35	9.59	8.88	9.97
CarTech® 720 (Pyromet® 720)	11.36	12.44	13.60	17.04	19.47	17.66	16.15	13.23	12.60	13.00	12.44	13.40
CarTech® 80A (Pyromet® 80A)	6.63	7.73	9.03	12.42	15.09	12.74	12.20	10.30	10.53	10.78	9.89	11.44
CarTech® 825 (Pyromet® 825)	5.46	6.15	6.81	9.30	10.21	8.71	8.24	6.90	6.93	7.11	6.87	7.83
CarTech® 882 (Pyromet® 882)	0.66	0.68	0.63	0.78	0.84	0.81	0.77	0.67	0.60	0.59	0.61	0.57
CarTech® 901 (Pyromet® 901)	5.22	5.88	6.60	8.58	10.19	8.81	8.40	7.24	7.26	7.51	7.12	8.00
CarTech® CTX-1 (Pyromet® CTX-1)	9.06	9.77	10.59	13.23	14.48	13.29	11.91	9.40	8.71	9.03	8.85	9.33
CarTech® CTX-3 (Pyromet® CTX-3)	8.91	9.58	10.37	12.91	14.11	12.97	11.67	9.29	8.64	8.94	8.76	9.24
CarTech® CTX-909 (Pyromet® CTX-909)	8.89	9.57	10.36	12.90	14.09	12.95	11.65	9.27	8.62	8.93	8.74	9.22
CarTech® X-750 (Pyromet® X-750)	6.35	7.39	8.63	11.91	14.31	12.05	11.53	9.69	9.91	10.15	9.37	10.86
CarTech® Thermo-Span® Alloy	13.97	14.70	15.42	18.17	19.69	19.01	16.73	13.20	11.71	12.15	11.97	11.86

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<b>MAGNETIC, CONTROLLED EXPANSION AND ELECTRICAL ALLOYS</b>												
CarTech® 22-3 High Thermal Expansion	2.26	2.55	2.82	3.92	4.32	3.61	3.41	2.78	2.81	2.87	2.74	3.16
CarTech® Electrical Iron	0.34	0.34	0.29	0.39	0.42	0.39	0.37	0.28	0.25	0.22	0.22	0.19
CarTech® Glass Sealing 42	3.82	4.36	4.90	6.80	7.50	6.19	5.82	4.73	4.83	4.98	4.75	5.58
CarTech® Glass Sealing 52	4.54	5.21	5.89	8.21	9.06	7.45	7.00	5.67	5.80	6.00	5.72	6.75
CarTech® High Permeability "49"® Alloy	4.34	4.97	5.61	7.83	8.63	7.10	6.68	5.40	5.53	5.71	5.45	6.42
CarTech® HyMu "80"® Alloy	7.79	8.87	9.97	13.61	14.92	12.37	11.61	9.51	9.67	10.08	9.74	11.40
CarTech® HyMu "80"® Mark II Alloy	7.79	8.87	9.97	13.61	14.92	12.37	11.61	9.51	9.67	10.08	9.74	11.40
CarTech® HyMu "800"	8.00	9.09	10.18	13.83	15.14	12.58	11.82	9.71	9.85	10.28	9.96	11.62
CarTech® Super Invar 32-5	4.63	5.14	5.61	7.42	8.08	7.06	6.37	4.96	4.74	4.92	4.77	5.30
CarTech® Invar 36 Alloy	3.39	3.87	4.34	6.02	6.63	5.48	5.15	4.18	4.26	4.39	4.20	4.92
CarTech® Low Expansion "42"® Alloy / Thermosta	3.82	4.36	4.90	6.80	7.50	6.19	5.82	4.73	4.83	4.98	4.75	5.58
CarTech® Low Expansion 43-PH	4.03	4.60	5.16	7.20	7.96	6.63	6.25	5.13	5.23	5.35	5.10	5.95
CarTech® Nickel 200 Alloy	8.72	10.04	11.41	15.92	17.55	14.40	13.55	11.00	11.29	11.70	11.15	13.21
CarTech® Nickel 201 Alloy, Nickel 205 Alloy	8.66	9.97	11.34	15.81	17.43	14.31	13.46	10.93	11.22	11.62	11.08	13.12
CarTech® Silicon Core Iron "A-FM"	0.27	0.27	0.22	0.32	0.35	0.32	0.30	0.21	0.18	0.15	0.15	0.12
CarTech® Silicon Core Iron "B"	0.35	0.35	0.30	0.39	0.43	0.39	0.37	0.29	0.25	0.23	0.23	0.19
CarTech® Silicon Core Iron "B-FM"	0.35	0.35	0.30	0.39	0.43	0.39	0.37	0.29	0.25	0.23	0.23	0.19
CarTech® Temperature Compensator "30"® Type 2	2.81	3.21	3.59	5.01	5.53	4.56	4.29	3.46	3.52	3.63	3.47	4.06
CarTech® Temperature Compensator "30"® Type 4	2.81	3.21	3.59	5.01	5.53	4.56	4.29	3.46	3.52	3.63	3.47	4.06
CarTech® Temperature Compensator "32"	3.02	3.45	3.87	5.40	5.96	4.91	4.61	3.73	3.80	3.92	3.74	4.39
CarTech® Chrome Core® 8-FM Alloy	0.54	0.55	0.51	0.69	0.75	0.75	0.72	0.63	0.57	0.53	0.52	0.47
CarTech® Chrome Core® 12-FM Alloy	0.61	0.62	0.58	0.80	0.88	0.89	0.87	0.78	0.71	0.66	0.64	0.58
CarTech® Chrome Core® 13-FM	0.63	0.64	0.60	0.83	0.91	0.93	0.90	0.81	0.74	0.69	0.67	0.61
CarTech® Chrome Core® 13-XP	0.81	0.83	0.82	1.15	1.26	1.25	1.19	1.06	0.98	0.92	0.89	0.82
CarTech® Chrome Core® 18-FM Alloy	0.96	0.99	0.96	1.24	1.35	1.37	1.32	1.22	1.10	1.07	1.08	1.02
CarTech® Free-Cut Invar "36"® Alloy	3.39	3.87	4.34	6.02	6.63	5.48	5.15	4.18	4.26	4.39	4.20	4.92
CarTech® Hiperco® 27 Alloy	10.24	10.63	10.90	12.47	13.10	13.10	11.13	8.40	6.94	7.25	7.38	6.79
CarTech® Hiperco® 50 Alloy	18.40	19.13	19.73	22.71	23.83	23.82	20.21	15.25	12.65	13.21	13.40	12.34
CarTech® Hiperco® 50 HS Alloy	18.18	18.90	19.50	22.46	23.57	23.56	19.98	15.06	12.48	13.03	13.22	12.17
CarTech® Hiperco® 50A Alloy	18.40	19.13	19.73	22.71	23.83	23.82	20.21	15.25	12.65	13.21	13.40	12.34
CarTech® Hy Mu 77 Alloy	7.00	8.02	9.07	12.58	13.85	11.42	10.75	8.73	8.96	9.25	8.83	10.41
CarTech® Hy-Ra "49"® Alloy	4.34	4.97	5.61	7.83	8.63	7.10	6.68	5.40	5.53	5.71	5.45	6.42
CarTech® Kovar® Alloy	7.68	8.30	8.87	11.17	12.03	11.12	9.62	7.15	6.32	6.64	6.56	6.79
CarTech® MagneDur® 20-4 Alloy	2.75	3.04	3.27	4.26	4.62	3.94	3.68	3.07	3.03	3.18	3.16	3.56

**Raw Material and Energy Surcharges 2022 - USD/lb.**  
(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® No. 1 JR® Type 1 Alloy	0.61	0.63	0.60	0.84	0.92	0.92	0.89	0.80	0.73	0.66	0.64	0.58
CarTech® No. 1 JR® Type 2 Alloy	0.56	0.57	0.53	0.76	0.85	0.87	0.85	0.76	0.69	0.63	0.60	0.54
CarTech® Rotelloy 3 Alloy	18.51	19.24	19.84	22.84	23.97	23.96	20.33	15.34	12.72	13.28	13.48	12.41
CarTech® Rotelloy 8 Alloy	18.44	19.17	19.77	22.78	23.90	23.89	20.26	15.27	12.66	13.22	13.41	12.35
CarTech® Mumetal	7.67	8.71	9.76	13.24	14.50	12.04	11.31	9.25	9.42	9.80	9.48	11.07
CarTech® Hypocore	1.79	1.87	1.88	2.25	2.39	2.37	1.98	1.41	1.11	1.14	1.17	1.03
CarTech® High Expansion 25-8	2.59	2.92	3.23	4.51	4.98	4.20	3.98	3.28	3.30	3.36	3.21	3.68
CarTech® Low Expansion 50	4.60	5.26	5.93	8.24	9.08	7.48	7.04	5.71	5.85	6.04	5.76	6.78
CarTech® Low Expansion 40	3.73	4.26	4.78	6.65	7.32	6.04	5.68	4.61	4.71	4.85	4.64	5.44
CarTech® Low Expansion 45	4.08	4.68	5.28	7.36	8.12	6.68	6.28	5.08	5.20	5.37	5.12	6.04
CarTech® High Expansion 19-7	2.06	2.32	2.54	3.54	3.91	3.32	3.14	2.59	2.60	2.63	2.51	2.86
CarTech® High Expansion 19-2	2.03	2.29	2.52	3.50	3.86	3.22	3.04	2.47	2.50	2.55	2.44	2.81
CarTech® Low Expansion 38-7	3.65	4.15	4.65	6.48	7.15	5.97	5.63	4.62	4.69	4.81	4.59	5.33
CarTech® High Expansion 72	5.19	5.33	5.43	5.90	6.05	5.16	3.89	3.10	3.17	3.16	3.13	3.37

**MEDICAL ALLOYS**

CarTech® BioDur® 108 Alloy	1.03	1.06	1.03	1.34	1.47	1.53	1.50	1.41	1.31	1.24	1.19	1.13
CarTech® BioDur® 22Cr-13Ni-5Mn Stainless	2.20	2.40	2.54	3.42	3.74	3.40	3.24	2.83	2.74	2.75	2.69	2.88
CarTech® BioDur® 316LS Stainless	2.35	2.57	2.73	3.63	3.97	3.55	3.37	2.91	2.83	2.88	2.83	3.06
CarTech® BioDur® 470/Custom 470	1.63	1.79	1.91	2.60	2.86	2.53	2.40	2.03	1.99	2.00	1.94	2.12
CarTech® BioDur® 734 Alloy	2.00	2.17	2.28	3.03	3.31	3.03	2.89	2.54	2.44	2.46	2.41	2.56
CarTech® BioDur® Carpenter CCM® Alloy	26.85	27.95	28.68	32.33	35.17	35.21	30.39	23.83	20.26	21.15	20.97	19.61
CarTech® BioDur® TrimRite® Stainless	0.76	0.78	0.75	1.02	1.12	1.12	1.09	0.98	0.89	0.85	0.83	0.79
CarTech® Micro-Melt® BioDur® Carpenter CCM® Alloy	26.65	27.75	28.47	32.09	34.94	34.98	30.20	23.70	20.15	21.05	20.86	19.52
CarTech® Micro-Melt® BioDur® CCM Plus®	25.57	26.64	27.32	30.75	33.61	33.64	29.10	22.92	19.55	20.41	20.17	18.90
CarTech® Conichrome Alloy	18.58	19.49	20.19	23.15	25.39	24.90	21.78	17.32	15.11	15.80	15.62	15.12

**CORROSION-RESISTANT ALLOYS**

CarTech® Alloy 22	8.99	9.55	10.53	13.16	15.55	13.66	13.05	11.44	11.38	11.87	11.35	12.76
CarTech® Alloy C-276	8.91	9.87	10.98	14.07	16.23	14.25	13.44	11.64	11.54	12.03	11.63	12.81
CarTech® MP35N* Alloy	29.84	31.73	33.28	40.03	43.77	40.96	35.60	27.82	24.19	25.24	24.95	25.22
CarTech® Ni-Cu 400	7.18	8.09	9.02	12.04	13.10	10.89	10.28	8.32	8.60	8.81	8.46	9.88
CarTech® Ni-Cu 405	7.18	8.09	9.02	12.04	13.10	10.89	10.28	8.32	8.60	8.81	8.46	9.88
CarTech® Custom Age 625 PLUS® / 725	7.97	8.91	9.97	12.81	15.29	13.32	12.75	11.08	11.12	11.50	10.83	12.14
CarTech® 925	5.16	5.85	6.56	8.51	10.60	9.24	8.88	7.74	7.82	7.99	7.31	8.18

**Raw Material and Energy Surcharges 2022 - USD/lb.**  
(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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\*MP35N is a trademark of SPS Technologies, Inc.

**BEARING AND GEAR STEELS**

CarTech® 52100	0.36	0.36	0.31	0.43	0.47	0.44	0.42	0.34	0.30	0.27	0.27	0.23
CarTech® 52100T2	0.36	0.36	0.31	0.43	0.47	0.44	0.42	0.34	0.30	0.27	0.27	0.23
CarTech® Aero-A6	0.64	0.67	0.69	0.98	1.12	1.04	0.95	0.79	0.76	0.71	0.64	0.60
CarTech® BG-42	1.76	1.83	1.85	2.34	2.51	2.48	2.32	2.11	1.93	1.94	1.98	1.91
CarTech® CBS 223	1.31	1.34	1.38	1.75	2.31	2.11	1.96	1.75	1.52	1.45	1.34	1.25
CarTech® CBS 600	1.01	1.03	0.97	1.10	1.28	1.19	1.11	0.98	0.84	0.86	0.90	0.86
CarTech® CBS50Nil	2.39	2.53	2.62	3.25	3.76	3.35	3.08	2.68	2.45	2.51	2.48	2.57
CarTech® CSS-42L	6.03	6.29	6.45	7.58	7.98	7.92	6.89	5.49	4.69	4.90	5.03	4.77
CarTech® Dynaflex	0.81	0.83	0.81	1.05	1.13	1.09	1.02	0.88	0.80	0.78	0.79	0.73
CarTech® L-6490	1.54	1.60	1.60	1.92	2.02	1.95	1.79	1.59	1.45	1.51	1.59	1.54
CarTech® Lesco® 53	1.58	1.66	1.65	1.99	2.08	1.88	1.72	1.46	1.34	1.42	1.50	1.55
CarTech® Pyrowear® Alloy 53	1.58	1.66	1.65	1.99	2.08	1.88	1.72	1.46	1.34	1.42	1.50	1.55
CarTech® M-50	1.99	2.05	2.09	2.48	3.00	2.79	2.56	2.31	2.02	2.04	2.04	1.95
CarTech® QC61	7.40	7.81	8.08	9.65	10.15	9.81	8.41	6.37	5.44	5.69	5.74	5.58
CarTech® QC64	6.82	7.18	7.42	8.82	9.28	9.00	7.72	5.87	5.01	5.25	5.31	5.14

**ALLOY STEELS**

CarTech® 300M	0.63	0.66	0.64	0.85	0.91	0.81	0.75	0.61	0.57	0.56	0.56	0.57
CarTech® 35NCD16	0.77	0.83	0.84	1.16	1.24	1.07	0.99	0.80	0.77	0.76	0.73	0.79
CarTech® 4130 , 4140, 4150	0.40	0.40	0.36	0.46	0.51	0.47	0.45	0.36	0.32	0.30	0.30	0.26
CarTech® 4319, 4320, 4343	0.59	0.62	0.60	0.80	0.85	0.75	0.70	0.56	0.52	0.51	0.51	0.52
CarTech® 4330+V, 4335+V	0.65	0.68	0.67	0.88	0.94	0.84	0.77	0.63	0.59	0.58	0.58	0.59
CarTech® 4340, 4340 VV	0.59	0.62	0.60	0.80	0.86	0.76	0.70	0.57	0.53	0.52	0.51	0.52
CarTech® 6150	0.42	0.42	0.38	0.53	0.58	0.54	0.50	0.40	0.36	0.32	0.31	0.27
CarTech® 8620	0.44	0.45	0.41	0.54	0.58	0.53	0.49	0.39	0.35	0.33	0.34	0.32
CarTech® 9310, 9315	0.71	0.76	0.76	1.03	1.10	0.96	0.89	0.71	0.68	0.67	0.65	0.69
CarTech® AerMet® 100 Alloy	6.26	6.62	6.93	8.21	8.92	8.55	7.50	5.85	5.15	5.37	5.33	5.26
CarTech® AerMet® 310 Alloy	7.00	7.38	7.70	9.10	9.81	9.44	8.24	6.40	5.59	5.83	5.83	5.72
CarTech® AerMet® 340 Alloy	7.38	7.79	8.14	9.62	10.35	9.95	8.69	6.76	5.91	6.18	6.18	6.08
CarTech® AF1410	6.10	6.45	6.69	8.04	8.46	8.08	6.95	5.27	4.55	4.77	4.79	4.73
CarTech® No. 158® Alloy	0.74	0.80	0.80	1.11	1.19	1.03	0.95	0.76	0.73	0.72	0.70	0.75
CarTech® D6AC	0.65	0.67	0.64	0.80	0.85	0.79	0.73	0.61	0.55	0.55	0.57	0.55

Carpenter reserves the right to change base values and/or add producer premiums to accurately reflect the changes in raw material markets and prices.



**Raw Material and Energy Surcharges 2022 - USD/lb.**  
(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® GNB100	0.99	1.06	1.07	1.43	1.52	1.34	1.23	1.01	0.97	0.98	0.97	1.02
CarTech® HP-9-4-20	2.94	3.14	3.27	4.08	4.30	3.94	3.46	2.68	2.44	2.53	2.52	2.62
CarTech® HP-9-4-30	2.77	2.96	3.06	3.78	3.98	3.68	3.23	2.50	2.24	2.34	2.34	2.40
CarTech® HY180	4.21	4.48	4.65	5.70	6.00	5.62	4.89	3.76	3.33	3.47	3.47	3.52
CarTech® HYTUF	0.72	0.77	0.76	1.00	1.07	0.93	0.85	0.68	0.65	0.65	0.64	0.68
CarTech® L-6305	0.51	0.52	0.49	0.64	0.69	0.65	0.60	0.50	0.45	0.43	0.43	0.39
CarTech® NiMark® Alloy 250	5.37	5.75	6.12	7.45	8.04	7.41	6.65	5.32	4.87	5.13	5.18	5.40
CarTech® NiMark+A273 Alloy 250-LR	5.37	5.75	6.12	7.45	8.04	7.41	6.65	5.32	4.87	5.13	5.18	5.40
CarTech® NiMark® Alloy 300	5.84	6.24	6.62	8.03	8.64	8.02	7.16	5.71	5.20	5.47	5.53	5.72
CarTech® Nitralloy 135	0.42	0.43	0.38	0.50	0.54	0.51	0.48	0.39	0.35	0.32	0.33	0.29
CarTech® Nitralloy N	0.76	0.82	0.81	1.10	1.17	1.02	0.94	0.76	0.73	0.72	0.71	0.75
CarTech® PremoMax® Alloy	0.57	0.59	0.57	0.79	0.85	0.79	0.73	0.61	0.57	0.53	0.52	0.49
CarTech® PremoMet® Alloy	0.93	1.00	1.02	1.37	1.46	1.28	1.18	0.96	0.92	0.92	0.90	0.95
CarTech® QM54	3.40	3.53	3.58	4.12	4.31	4.24	3.68	2.89	2.47	2.59	2.67	2.62
CarTech® UT-18	0.66	0.67	0.64	0.81	0.87	0.84	0.79	0.68	0.61	0.60	0.61	0.57

**SPECIALTY ALLOYS**

CarTech® AEREX	27.41	29.46	31.42	38.58	42.28	39.20	34.86	28.08	25.33	25.75	24.93	26.03
CarTech® JETHETE	1.80	2.00	2.12	2.89	3.05	2.57	2.36	1.90	1.91	1.94	1.86	2.13
CarTech® QS53	6.30	6.60	6.80	8.08	8.51	8.33	7.22	5.64	4.85	5.04	5.09	4.97
CarTech® XM-27	2.04	2.04	2.12	2.34	4.85	4.27	4.13	4.02	3.17	2.84	2.28	2.07

**SPECIAL PURPOSE ALLOYS**

CarTech® CBX Cupron® Alloy	6.28	6.94	7.59	9.69	10.39	8.76	8.30	6.69	6.98	7.06	6.82	7.86
CarTech® Evanohm® Alloy R	6.89	7.89	8.90	12.44	13.73	11.49	10.86	8.96	9.12	9.35	8.91	11.56
CarTech® Manganin 13	4.34	4.52	4.65	5.04	5.09	4.55	4.39	3.49	3.75	3.61	3.57	3.88
CarTech® NIAL Alloy	8.40	9.66	10.97	15.26	16.82	13.82	13.01	10.57	10.86	11.24	10.72	12.68
CarTech® NIAL Alloy / Low Resistivity NIAL	8.40	9.66	10.97	15.26	16.82	13.82	13.01	10.57	10.86	11.24	10.72	12.68

**VALVE STEELS**

CarTech® 31V (Pyromet® 31V)	5.94	6.83	7.81	10.42	12.85	11.04	10.60	9.12	9.26	9.47	8.67	9.85
CarTech® 751 (Pyromet® 751)	6.14	7.16	8.39	11.61	13.99	11.75	11.24	9.43	9.65	9.89	9.12	10.58
CarTech® 80A (Pyromet® 80A) Valve	6.63	7.73	9.03	12.42	15.09	12.74	12.20	10.30	10.53	10.78	9.89	11.44

**HIGH SPEED STEELS (not applicable to powder products)**

**Raw Material and Energy Surcharges 2022 - USD/lb.**  
(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® M1 - Tatmo	2.51	2.59	2.58	2.91	3.01	2.90	2.67	2.43	2.21	2.37	2.55	2.60
CarTech® M2 - Double 6	2.85	2.92	2.96	3.40	3.53	3.42	3.22	2.97	2.83	2.87	2.94	3.30
CarTech® M2 - Double 6-XL	2.76	2.83	2.87	3.29	3.41	3.32	3.12	2.88	2.73	2.78	2.84	3.19
CarTech® M4 - Stark	2.79	2.88	3.01	3.72	3.92	3.77	3.49	3.15	3.03	3.01	2.99	3.25
CarTech® M7 - Tatmo-VN	2.69	2.78	2.82	3.27	3.41	3.27	3.00	2.71	2.50	2.63	2.79	2.84
CarTech® M11 - Vancomo	2.70	2.81	2.83	3.28	3.43	3.35	3.03	2.64	2.35	2.49	2.64	2.59
CarTech® M35 - HS 105	4.13	4.26	4.35	4.99	5.20	5.10	4.61	3.98	3.62	3.72	3.80	4.07
CarTech® M42 - Dynamax	5.00	5.19	5.27	5.97	6.21	6.11	5.38	4.47	3.88	4.15	4.38	4.30
CarTech® M50 - CM-50	1.55	1.60	1.61	1.93	2.03	1.96	1.79	1.60	1.45	1.51	1.59	1.55
CarTech® Abscido	1.98	2.05	2.13	2.66	2.82	2.71	2.51	2.26	2.15	2.13	2.12	2.26
CarTech® Supersaw	3.99	4.14	4.22	4.88	5.11	5.04	4.41	3.56	3.06	3.21	3.33	3.21

**TOOL STEELS (not applicable to powder products)**

CarTech® A2 - Select-B	0.71	0.73	0.68	0.89	0.96	0.93	0.88	0.76	0.68	0.66	0.66	0.61
CarTech® A6 - Lesco A6	0.62	0.63	0.58	0.70	0.74	0.70	0.65	0.55	0.48	0.48	0.51	0.47
CarTech® A7 - Brickmold	1.47	1.56	1.72	2.59	2.84	2.71	2.45	2.09	2.02	1.89	1.75	1.65
CarTech® A8 - MGR	1.00	1.02	0.98	1.21	1.28	1.25	1.18	1.05	0.97	0.95	0.96	0.99
CarTech® A9 - Mazeman	1.08	1.14	1.15	1.54	1.66	1.55	1.43	1.22	1.14	1.12	1.11	1.09
CarTech® A10 - Graph-Air	0.85	0.89	0.86	1.06	1.12	1.00	0.92	0.76	0.70	0.72	0.75	0.76
CarTech® A18 - Whitebear	1.17	1.23	1.28	1.80	1.96	1.88	1.73	1.50	1.41	1.34	1.30	1.22
CarTech® D3 - GSN	0.65	0.66	0.63	0.91	1.02	1.03	0.99	0.88	0.81	0.74	0.70	0.63
CarTech® D4 - GSN+Mo	0.43	0.44	0.38	0.50	0.54	0.50	0.46	0.36	0.32	0.30	0.30	0.27
CarTech® D7 - BR-4	1.45	1.53	1.67	2.51	2.76	2.65	2.42	2.09	2.01	1.87	1.74	1.63
CarTech® H11 - Dycast	0.79	0.81	0.78	1.02	1.11	1.07	1.00	0.86	0.78	0.76	0.76	0.71
CarTech® H12 - L.P.D.®	1.03	1.05	1.01	1.23	1.30	1.27	1.20	1.07	0.99	0.98	1.00	1.03
CarTech® H13++ - VDC-RF	0.89	0.92	0.90	1.21	1.31	1.26	1.17	1.01	0.92	0.89	0.89	0.83
CarTech® H13-FM - Viscount	0.90	0.93	0.93	1.25	1.35	1.30	1.20	1.04	0.95	0.92	0.91	0.85
CarTech® H19 - Lesco19	2.81	2.91	2.99	3.65	3.87	3.79	3.40	2.84	2.60	2.56	2.51	2.64
CarTech® H21 - CLW	2.05	2.06	2.03	2.24	2.31	2.27	2.23	2.11	2.07	2.02	2.00	2.53
CarTech® H26 - H26 Mod	3.86	3.88	3.89	4.20	4.31	4.26	4.16	3.98	3.91	3.86	3.82	4.92
CarTech® H43 - Lesco 43	2.76	2.85	2.94	3.60	3.82	3.75	3.36	2.80	2.56	2.51	2.45	2.59
CarTech® L6 - Montana	1.28	1.31	1.27	1.45	1.51	1.42	1.37	1.24	1.19	1.18	1.17	1.43
CarTech® O1 - Badger	0.47	0.47	0.41	0.53	0.57	0.53	0.50	0.41	0.37	0.34	0.34	0.33
CarTech® O6 - Graph-Mo	0.43	0.44	0.38	0.50	0.54	0.50	0.46	0.36	0.32	0.30	0.30	0.27
CarTech® O7 - Lesco O7	0.64	0.64	0.59	0.70	0.74	0.71	0.68	0.59	0.55	0.52	0.52	0.57



**Raw Material and Energy Surcharges 2022 - USD/lb.  
(applicable at time of shipment)**



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® S1 - XL®-Chisel	0.79	0.79	0.75	0.91	0.97	0.93	0.89	0.78	0.74	0.70	0.69	0.77
CarTech® S4 - Damascus	0.37	0.37	0.31	0.42	0.46	0.42	0.40	0.31	0.26	0.24	0.24	0.20
CarTech® S5 - Lanark	0.66	0.68	0.64	0.79	0.84	0.79	0.72	0.60	0.54	0.54	0.56	0.52
CarTech® S7 - Bearcat	0.73	0.74	0.69	0.84	0.89	0.86	0.80	0.69	0.61	0.61	0.64	0.60
CarTech® CAT4039	0.91	0.93	0.91	1.11	1.18	1.12	1.03	0.90	0.81	0.83	0.86	0.82
CarTech® Lescowear	1.40	1.46	1.52	2.08	2.24	2.16	2.00	1.75	1.67	1.60	1.54	1.53
CarTech® Mandrel	0.70	0.74	0.72	0.98	1.05	0.91	0.85	0.67	0.63	0.62	0.61	0.63
CarTech® 420-FM - Saxman-FM	0.71	0.73	0.71	1.03	1.15	1.18	1.14	1.03	0.95	0.87	0.83	0.76
CarTech® 420SS - Saxman6R	0.71	0.73	0.71	1.03	1.15	1.18	1.14	1.03	0.95	0.87	0.83	0.76

<b>Conversion Services (Natural Gas Surcharges)</b>												
Process 1 - Non-Ti Air Cool	0.08	0.07	0.07	0.05	0.05	0.11	0.11	0.09	0.09	0.15	0.15	0.15
Process 2 - Non Ti Fce Cool	0.13	0.10	0.10	0.08	0.08	0.16	0.16	0.14	0.14	0.22	0.22	0.22
Process 3 - General Ti	0.08	0.07	0.07	0.05	0.05	0.11	0.11	0.09	0.09	0.15	0.15	0.15
Process 4 Special Processing	0.13	0.10	0.10	0.08	0.08	0.16	0.16	0.14	0.14	0.22	0.22	0.22
Process 5 - Machining Only	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Process 6 - Remelt Only	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00