

# Raw Material and Energy Surcharges 2020 - 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.

## STAINLESS STEELS

Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® 15-15HS® Stainless/SCF260	0.52	0.53	0.56	0.52	0.51	0.52	0.51	0.59	0.61	0.64	0.65	0.68
CarTech® 15-15LC® Modified Stainless	0.52	0.53	0.55	0.52	0.52	0.53	0.52	0.59	0.61	0.64	0.65	0.68
CarTech® 20Cb-3® Stainless	2.23	2.20	2.05	1.83	1.79	1.87	1.98	2.09	2.32	2.43	2.51	2.62
CarTech® 20Mo-6® Stainless	2.46	2.45	2.34	2.06	1.99	2.10	2.17	2.24	2.50	2.62	2.71	2.84
CarTech® 302HQ-FM® Stainless	0.72	0.72	0.69	0.64	0.63	0.65	0.68	0.70	0.75	0.77	0.79	0.83
CarTech® 316L-SCQ® Stainless	1.06	1.06	1.03	0.93	0.90	0.94	0.96	0.97	1.05	1.10	1.14	1.17
CarTech® 13-8 Stainless	0.81	0.82	0.82	0.75	0.71	0.75	0.75	0.74	0.81	0.83	0.86	0.89
CarTech® 15Cr-5Ni	0.58	0.59	0.56	0.54	0.52	0.53	0.56	0.57	0.59	0.61	0.61	0.64
CarTech® 18Cr-2Ni-12Mn	0.41	0.41	0.45	0.43	0.42	0.42	0.43	0.40	0.40	0.41	0.41	0.42
CarTech® 18Cr-3Ni-12Mn	0.49	0.50	0.52	0.48	0.48	0.49	0.50	0.48	0.49	0.51	0.52	0.53
CarTech® 21Cr-6Ni-9Mn	0.65	0.65	0.64	0.60	0.60	0.61	0.64	0.63	0.66	0.68	0.69	0.71
CarTech® 22Cr-13Ni-5Mn	1.10	1.10	1.08	0.98	0.95	1.00	1.02	1.02	1.11	1.15	1.19	1.23
CarTech® 275 Stainless	0.86	0.86	0.83	0.77	0.74	0.77	0.80	0.82	0.88	0.92	0.94	0.98
CarTech® 302HQ-SFQ Stainless	0.72	0.72	0.69	0.64	0.63	0.65	0.68	0.70	0.75	0.77	0.79	0.83
CarTech® Custom 631 (17Cr-7Ni)	0.62	0.62	0.59	0.56	0.55	0.57	0.59	0.61	0.64	0.66	0.67	0.68
CarTech® 15-7PH Stainless	0.79	0.80	0.79	0.72	0.70	0.72	0.73	0.73	0.78	0.81	0.83	0.86
CarTech® Custom 630 (17Cr-4Ni) Stainless	0.52	0.54	0.52	0.50	0.48	0.49	0.52	0.53	0.55	0.56	0.58	0.59
CarTech® No. 5-F Stainless (Type 416 Mod)	0.25	0.27	0.29	0.29	0.28	0.28	0.28	0.26	0.25	0.25	0.25	0.25
CarTech® 302 Stainless	0.68	0.68	0.65	0.60	0.59	0.61	0.64	0.66	0.71	0.73	0.75	0.79
CarTech® 303 Stainless	0.69	0.69	0.66	0.61	0.60	0.62	0.65	0.67	0.72	0.74	0.76	0.79
CarTech® 303 Se Stainless	0.68	0.68	0.65	0.60	0.59	0.61	0.64	0.66	0.71	0.73	0.75	0.79
CarTech® 304/304L Stainless	0.74	0.73	0.71	0.66	0.65	0.67	0.70	0.72	0.77	0.79	0.81	0.85
CarTech® 305 Stainless	0.86	0.86	0.81	0.75	0.73	0.76	0.80	0.83	0.90	0.93	0.95	0.99
CarTech® 309 Stainless	0.97	0.96	0.91	0.84	0.83	0.86	0.90	0.95	1.03	1.06	1.08	1.12
CarTech® 310 Stainless	1.33	1.31	1.23	1.12	1.10	1.14	1.21	1.28	1.42	1.45	1.50	1.58
CarTech® 316/316L Stainless	1.02	1.02	0.99	0.89	0.86	0.90	0.92	0.93	1.01	1.06	1.10	1.14
CarTech® 316L Stainless	1.02	1.02	0.99	0.89	0.86	0.90	0.92	0.93	1.01	1.06	1.10	1.14
CarTech® 321 Stainless	0.80	0.80	0.75	0.70	0.68	0.71	0.74	0.77	0.83	0.86	0.88	0.92

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 2020 - USD/lb.

(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® 347 Stainless	0.83	0.82	0.78	0.72	0.70	0.73	0.76	0.80	0.86	0.88	0.91	0.94
CarTech® 403 Stainless	0.25	0.27	0.28	0.29	0.27	0.27	0.27	0.25	0.24	0.24	0.24	0.24
CarTech® 410 Stainless	0.25	0.27	0.28	0.29	0.27	0.27	0.27	0.25	0.24	0.24	0.24	0.24
CarTech® 416 Stainless	0.25	0.27	0.29	0.29	0.28	0.28	0.28	0.26	0.25	0.25	0.25	0.25
CarTech® 416 (No. 5) Stainless	0.25	0.27	0.29	0.29	0.28	0.28	0.28	0.26	0.25	0.25	0.25	0.25
CarTech® 416 RS Stainless	0.25	0.27	0.29	0.29	0.28	0.28	0.28	0.26	0.25	0.25	0.25	0.25
CarTech® 416BQ Stainless (No. 5BQ)	0.25	0.27	0.29	0.29	0.28	0.28	0.28	0.26	0.25	0.25	0.25	0.25
CarTech® 420 Stainless	0.25	0.27	0.29	0.29	0.28	0.28	0.28	0.26	0.25	0.25	0.25	0.25
CarTech® 420 Mod Stainless	0.25	0.27	0.29	0.29	0.28	0.28	0.28	0.26	0.25	0.25	0.25	0.25
CarTech® 420F Stainless	0.25	0.27	0.29	0.29	0.28	0.28	0.28	0.26	0.25	0.25	0.25	0.25
CarTech® 430 Stainless	0.28	0.30	0.30	0.31	0.31	0.31	0.31	0.29	0.28	0.27	0.27	0.27
CarTech® 430F Stainless	0.28	0.30	0.30	0.31	0.31	0.31	0.31	0.29	0.28	0.27	0.27	0.27
CarTech® 430FR Stainless	0.28	0.30	0.30	0.31	0.31	0.31	0.31	0.29	0.28	0.27	0.27	0.27
CarTech® 431 Stainless	0.36	0.37	0.38	0.38	0.36	0.37	0.37	0.37	0.37	0.37	0.37	0.39
CarTech® 434 Stainless	0.36	0.37	0.40	0.39	0.37	0.37	0.36	0.34	0.34	0.34	0.34	0.36
CarTech® 440A Stainless	0.28	0.30	0.30	0.31	0.31	0.31	0.31	0.29	0.28	0.27	0.27	0.27
CarTech® 440C Stainless	0.28	0.30	0.30	0.31	0.31	0.31	0.31	0.29	0.28	0.27	0.27	0.27
CarTech® 440F-Se Stainless	0.28	0.30	0.30	0.31	0.31	0.31	0.31	0.29	0.28	0.27	0.27	0.27
CarTech® 446 Stainless	0.31	0.33	0.34	0.35	0.34	0.34	0.34	0.32	0.31	0.31	0.31	0.31
CarTech® 204-Cu Stainless	0.56	0.56	0.58	0.54	0.53	0.54	0.55	0.54	0.55	0.55	0.56	0.59
CarTech® Consumet® 304L-SCQ	0.68	0.68	0.65	0.60	0.59	0.61	0.64	0.66	0.71	0.73	0.75	0.79
CarTech® Custom 450® Stainless	0.66	0.67	0.65	0.61	0.59	0.60	0.62	0.63	0.66	0.68	0.69	0.72
CarTech® Custom 455® Stainless	0.72	0.73	0.69	0.64	0.63	0.65	0.68	0.70	0.74	0.77	0.79	0.82
CarTech® Custom 465® Stainless	0.87	0.87	0.84	0.76	0.73	0.77	0.79	0.82	0.89	0.91	0.95	0.98
CarTech® Custom 475™ Stainless	1.20	1.29	1.46	1.25	1.02	0.95	0.89	0.86	0.98	1.08	1.13	1.19
CarTech® Custom Flo 302HQ Stainless	0.72	0.72	0.69	0.64	0.63	0.65	0.68	0.70	0.75	0.77	0.79	0.83
CarTech® EnduraMet® 2205 Stainless	0.80	0.83	0.83	0.77	0.73	0.76	0.75	0.72	0.78	0.80	0.82	0.87
CarTech® Gall-Tough® PLUS Stainless	0.73	0.75	0.74	0.68	0.66	0.69	0.70	0.68	0.75	0.77	0.79	0.83
CarTech® Gall-Tough® Stainless	0.47	0.48	0.47	0.44	0.43	0.44	0.46	0.46	0.48	0.48	0.49	0.52
CarTech® 15Cr-5Ni Project 70+® Stainless	0.58	0.59	0.56	0.54	0.52	0.53	0.56	0.57	0.59	0.61	0.61	0.64
CarTech® Custom 630 Project 70+® Stainless	0.56	0.58	0.56	0.54	0.52	0.53	0.56	0.57	0.59	0.60	0.62	0.63

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 2020 - USD/lb.

(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® 303 Project 70+® Escomatic Quality	0.69	0.69	0.66	0.61	0.60	0.62	0.65	0.67	0.72	0.74	0.76	0.79
CarTech® 303 Project 70+® Stainless	0.69	0.69	0.66	0.61	0.60	0.62	0.65	0.67	0.72	0.74	0.76	0.79
CarTech® 304/304L Project 70+® Stainless	0.74	0.73	0.71	0.66	0.65	0.67	0.70	0.72	0.77	0.79	0.81	0.85
CarTech® 316/316L Project 70+® Stainless	1.06	1.06	1.03	0.93	0.90	0.94	0.96	0.97	1.05	1.10	1.14	1.18
CarTech® 416 Project 70+® Stainless	0.25	0.27	0.29	0.29	0.28	0.28	0.28	0.26	0.25	0.25	0.25	0.25
CarTech® Pyrowear® 675 Stainless	0.68	0.76	0.89	0.80	0.65	0.59	0.54	0.51	0.56	0.61	0.64	0.67
CarTech® SCF 19® Alloy	1.51	1.52	1.49	1.33	1.26	1.34	1.35	1.36	1.50	1.57	1.61	1.71
CarTech® 304H Stainless	0.70	0.69	0.67	0.62	0.61	0.63	0.66	0.68	0.73	0.75	0.77	0.81
CarTech® 410 Mod Stainless	0.25	0.27	0.28	0.29	0.27	0.27	0.27	0.25	0.24	0.24	0.24	0.24
CarTech® TrimRite® Stainless	0.34	0.37	0.38	0.37	0.35	0.37	0.36	0.34	0.33	0.34	0.35	0.35
CarTech® 409Cb Stainless	0.25	0.26	0.27	0.28	0.27	0.27	0.27	0.26	0.25	0.24	0.24	0.24
CarTech® 409Cb High Nickel Stainless	0.28	0.30	0.32	0.32	0.30	0.31	0.31	0.29	0.29	0.29	0.29	0.29
CarTech® 2507 Super Duplex Stainless	0.90	0.92	0.94	0.84	0.80	0.83	0.83	0.81	0.86	0.90	0.92	0.96
CarTech® Ni-Cu K500	4.01	3.92	3.55	3.14	3.06	3.23	3.53	3.86	4.32	4.50	4.65	4.89
CarTech® 330 Stainless	2.02	1.98	1.81	1.63	1.62	1.69	1.81	1.94	2.17	2.24	2.31	2.43
CarTech® 317 Stainless	1.19	1.21	1.18	1.06	1.02	1.08	1.09	1.11	1.20	1.26	1.28	1.34
CarTech® A-21®							0.43	0.42	0.43	0.43	0.44	0.46
CarTech® Super A-21®							0.70	0.64	0.66	0.66	0.65	0.66

## AEROSPACE AND HIGH TEMPERATURE ALLOYS

### Alloy Description

CarTech® A-286 Alloy	1.65	1.63	1.53	1.39	1.34	1.41	1.47	1.54	1.71	1.78	1.83	1.92
CarTech® Alloy 2 (159 ALY / MP159)	7.64	7.29	7.76	7.38	6.50	5.73	5.30	4.70	5.77	6.13	6.33	6.60
CarTech® 636 (422 SS)	0.46	0.48	0.51	0.50	0.46	0.46	0.44	0.42	0.42	0.43	0.43	0.44
CarTech® Greek Ascoloy (418 SS)	0.68	0.69	0.70	0.70	0.66	0.64	0.65	0.65	0.65	0.64	0.65	0.66
CarTech® L-605 Alloy	7.97	8.27	9.15	8.63	7.48	6.63	6.36	5.76	6.72	7.07	7.18	7.27
CarTech® Waspaloy	4.72	4.70	4.71	4.20	3.88	3.83	3.90	3.85	4.50	4.75	4.86	5.08
CarTech® 350 (Pyromet® 350)	0.71	0.73	0.75	0.67	0.63	0.66	0.66	0.64	0.67	0.70	0.71	0.75
CarTech® 355 (Pyromet® 355)	0.70	0.72	0.74	0.67	0.63	0.66	0.66	0.64	0.67	0.70	0.71	0.74
CarTech® 41 (Pyromet® 41)	4.89	4.90	4.91	4.37	4.05	4.06	4.09	3.98	4.60	4.87	4.99	5.23
CarTech® 600 (Pyromet® 600)	3.27	3.12	2.77	2.40	2.36	2.52	2.76	2.97	3.46	3.62	3.74	3.96

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 2020 - USD/lb.

(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® 625 (Pyromet® 625)	4.37	4.28	4.11	3.64	3.56	3.71	3.85	3.87	4.34	4.55	4.63	4.88
CarTech® 680 (Pyromet® 680)	3.67	3.63	3.52	3.11	2.99	3.10	3.18	3.15	3.54	3.73	3.81	4.01
CarTech® 706 (Pyromet® 706)	2.52	2.42	2.27	2.07	2.07	2.12	2.27	2.32	2.60	2.69	2.71	2.85
CarTech® 718 (Pyromet® 718)	3.53	3.42	3.27	2.95	2.93	3.00	3.17	3.20	3.56	3.70	3.75	3.94
CarTech® 720 (Pyromet® 720)	4.71	4.70	4.72	4.24	3.90	3.80	3.87	3.83	4.49	4.73	4.86	5.07
CarTech® 80A (Pyromet® 80A)	3.51	3.35	2.99	2.61	2.59	2.74	2.99	3.19	3.69	3.85	3.97	4.19
CarTech® 882 (Pyromet® 882)	0.36	0.39	0.40	0.39	0.36	0.37	0.36	0.33	0.32	0.33	0.33	0.35
CarTech® 901 (Pyromet® 901)	2.73	2.68	2.52	2.20	2.14	2.28	2.37	2.40	2.72	2.85	2.92	3.09
CarTech® CTX-1 (Pyromet® CTX-1)	3.40	3.46	3.60	3.27	2.93	2.75	2.80	2.75	3.28	3.46	3.55	3.70
CarTech® CTX-3 (Pyromet® CTX-3)	3.46	3.51	3.68	3.34	3.03	2.85	2.91	2.85	3.35	3.52	3.61	3.74
CarTech® CTX-909 (Pyromet® CTX-909)	3.45	3.50	3.67	3.33	3.02	2.84	2.90	2.84	3.34	3.51	3.60	3.73
CarTech® X-750 (Pyromet® X-750)	3.22	3.08	2.74	2.38	2.35	2.49	2.73	2.93	3.41	3.57	3.69	3.90
CarTech® Thermo-Span® Alloy	4.85	5.03	5.56	5.14	4.55	4.09	4.01	3.70	4.38	4.62	4.70	4.82
CarTech® 286-LNi Alloy	1.24	1.24	1.18	1.08	1.04	1.07	1.14	1.19	1.31	1.36	1.40	1.45

## MAGNETIC, CONTROLLED EXPANSION AND ELECTRICAL ALLOYS

### Alloy Description

CarTech® 485 Alloy	2.48	2.42	2.20	1.96	1.92	2.02	2.18	2.35	2.67	2.77	2.87	3.01
CarTech® 22-3 High Thermal Expansion	1.29	1.27	1.17	1.07	1.04	1.08	1.16	1.23	1.37	1.42	1.46	1.53
CarTech® Electrical Iron	0.20	0.22	0.23	0.24	0.22	0.21	0.21	0.19	0.18	0.17	0.17	0.18
CarTech® Glass Sealing "42-6"	2.32	2.27	2.06	1.86	1.81	1.91	2.05	2.20	2.49	2.57	2.66	2.80
CarTech® Glass Sealing 42	2.21	2.16	1.98	1.77	1.73	1.82	1.96	2.10	2.37	2.46	2.54	2.66
CarTech® Glass Sealing 52	2.68	2.62	2.38	2.12	2.08	2.19	2.36	2.54	2.88	2.99	3.09	3.24
CarTech® High Permeability "49"® Alloy	2.48	2.43	2.20	1.96	1.92	2.02	2.18	2.35	2.68	2.77	2.87	3.03
CarTech® HyMu "80"® Alloy	4.37	4.29	3.93	3.46	3.36	3.56	3.80	4.05	4.61	4.82	5.00	5.26
CarTech® HyMu "80"® Mark II Alloy	4.37	4.29	3.93	3.46	3.36	3.56	3.80	4.05	4.61	4.82	5.00	5.26
CarTech® HyMu "80"® Mark III Alloy	4.37	4.29	3.93	3.46	3.36	3.56	3.80	4.05	4.61	4.82	5.00	5.26
CarTech® HyMu "800"	4.43	4.35	4.00	3.51	3.41	3.62	3.85	4.10	4.65	4.87	5.05	5.32
CarTech® Invar 36 Alloy	1.97	1.93	1.75	1.58	1.54	1.62	1.74	1.87	2.10	2.18	2.26	2.37
CarTech® Low Expansion "42"® Alloy	2.21	2.16	1.98	1.77	1.73	1.82	1.96	2.10	2.37	2.46	2.54	2.66
CarTech® Low Expansion "42"® Thermostat	2.21	2.16	1.98	1.77	1.73	1.82	1.96	2.10	2.37	2.46	2.54	2.66

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 2020 - USD/lb.

(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® Low Expansion 43-PH	2.31	2.26	2.06	1.86	1.81	1.91	2.05	2.20	2.49	2.57	2.66	2.80
CarTech® Nickel 200 Alloy	5.07	4.93	4.45	3.95	3.88	4.09	4.43	4.80	5.47	5.69	5.89	6.19
CarTech® Nickel 201 Alloy	5.00	4.86	4.38	3.88	3.81	4.02	4.36	4.73	5.40	5.62	5.82	6.12
CarTech® Nickel 205 Alloy	5.00	4.86	4.38	3.88	3.81	4.02	4.36	4.73	5.40	5.62	5.82	6.12
CarTech® Silicon Core Iron "A-FM"	0.15	0.17	0.18	0.19	0.17	0.17	0.17	0.15	0.14	0.13	0.13	0.14
CarTech® Silicon Core Iron "B"	0.19	0.21	0.22	0.23	0.21	0.21	0.21	0.19	0.18	0.17	0.17	0.18
CarTech® Silicon Core Iron "B-FM"	0.19	0.21	0.22	0.23	0.21	0.21	0.21	0.19	0.18	0.17	0.17	0.18
CarTech® Temperature Compensator "30"® Type 2	1.60	1.57	1.43	1.29	1.25	1.32	1.42	1.51	1.71	1.77	1.83	1.92
CarTech® Temperature Compensator "30"® Type 4	1.60	1.57	1.43	1.29	1.25	1.32	1.42	1.51	1.71	1.77	1.83	1.92
CarTech® Temperature Compensator "32"	1.72	1.69	1.54	1.37	1.34	1.41	1.52	1.63	1.84	1.91	1.98	2.08
CarTech® Chrome Core® 8-FM Alloy	0.26	0.28	0.28	0.28	0.27	0.27	0.27	0.25	0.24	0.23	0.23	0.25
CarTech® Chrome Core® 12-FM Alloy	0.28	0.30	0.31	0.31	0.29	0.29	0.29	0.27	0.26	0.26	0.26	0.27
CarTech® Chrome Core® 13-FM	0.28	0.30	0.32	0.31	0.30	0.30	0.30	0.28	0.27	0.27	0.27	0.28
CarTech® Chrome Core® 13-XP	0.38	0.40	0.45	0.44	0.40	0.39	0.39	0.36	0.36	0.36	0.36	0.37
CarTech® Chrome Core® 18-FM Alloy	0.42	0.44	0.47	0.45	0.42	0.43	0.42	0.39	0.39	0.39	0.40	0.42
CarTech® Free-Cut Invar "36"® Alloy	1.97	1.93	1.75	1.58	1.54	1.62	1.74	1.87	2.10	2.18	2.26	2.37
CarTech® High Expansion 20Ni-6Mn	1.21	1.18	1.11	1.00	0.98	1.02	1.09	1.15	1.27	1.31	1.35	1.42
CarTech® High Expansion 72	2.18	2.12	2.19	1.96	2.05	2.10	2.17	2.06	2.16	2.23	2.26	2.32
CarTech® Hiperco® 27 Alloy	2.95	3.16	3.66	3.41	2.83	2.43	2.26	1.96	2.43	2.59	2.66	2.71
CarTech® Hiperco® 50 Alloy	5.32	5.70	6.65	6.19	5.12	4.36	4.05	3.49	4.36	4.68	4.81	4.87
CarTech® Hiperco® 50 HS Alloy	5.25	5.63	6.58	6.12	5.05	4.29	3.98	3.42	4.29	4.61	4.74	4.80
CarTech® Hiperco® 50A Alloy	5.32	5.70	6.65	6.19	5.12	4.36	4.05	3.49	4.36	4.68	4.81	4.87
CarTech® Hy Mu 77 Alloy	4.02	3.92	3.54	3.14	3.07	3.25	3.52	3.83	4.34	4.51	4.67	4.92
CarTech® Hy-Ra "49"® Alloy	2.48	2.43	2.20	1.96	1.92	2.02	2.18	2.35	2.68	2.77	2.87	3.03
CarTech® Kovar® Alloy	2.01	2.10	2.28	1.98	1.58	1.40	1.42	1.52	1.80	1.97	2.08	2.19
CarTech® MagneDur® 20-4 Alloy	1.47	1.48	1.42	1.25	1.20	1.27	1.30	1.32	1.46	1.55	1.59	1.68
CarTech® No. 1 JR® Type 1 Alloy	0.25	0.27	0.29	0.29	0.28	0.28	0.28	0.26	0.25	0.25	0.25	0.25
CarTech® No. 1 JR® Type 2 Alloy	0.25	0.27	0.29	0.29	0.28	0.28	0.28	0.26	0.25	0.25	0.25	0.25
CarTech® Rotelloy 3 Alloy	5.32	5.70	6.65	6.19	5.12	4.36	4.05	3.49	4.36	4.68	4.81	4.87
CarTech® Rotelloy 8 Alloy	5.25	5.63	6.58	6.12	5.05	4.29	3.98	3.42	4.29	4.61	4.74	4.80
CarTech® Thermocouple Iron Type JP	0.12	0.14	0.15	0.16	0.14	0.14	0.14	0.12	0.11	0.10	0.10	0.11

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 2020 - USD/lb.

(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® Mumetal	4.30	4.23	3.88	3.41	3.31	3.51	3.75	4.02	4.55	4.76	4.93	5.19
CarTech® Hypocore	0.30	0.36	0.46	0.41	0.30	0.22	0.20	0.18	0.20	0.23	0.24	0.25
CarTech® High Expansion 25-8	1.46	1.43	1.33	1.20	1.18	1.23	1.31	1.40	1.56	1.61	1.66	1.74
CarTech® Low Expansion 50	2.67	2.61	2.37	2.11	2.07	2.18	2.35	2.53	2.86	2.97	3.08	3.23
CarTech® Low Expansion 40	2.17	2.12	1.94	1.74	1.70	1.78	1.92	2.06	2.32	2.41	2.49	2.62
CarTech® Low Expansion 45	2.34	2.29	2.07	1.85	1.81	1.91	2.06	2.22	2.52	2.61	2.71	2.85
CarTech® High Expansion 19-7	1.16	1.15	1.06	0.97	0.94	0.99	1.05	1.11	1.23	1.27	1.31	1.37
CarTech® High Expansion 19-2	1.15	1.14	1.07	0.97	0.95	0.99	1.05	1.11	1.23	1.27	1.31	1.37
CarTech® Low Expansion 38-7	2.09	2.04	1.86	1.68	1.64	1.72	1.85	1.98	2.24	2.31	2.39	2.51

## MEDICAL ALLOYS

### Alloy Description

CarTech® BioDur® 108 Alloy	0.45	0.46	0.51	0.47	0.47	0.48	0.47	0.41	0.41	0.42	0.43	0.43
CarTech® BioDur® 22Cr-13Ni-5Mn Stainless	1.10	1.10	1.08	0.98	0.95	1.00	1.02	1.02	1.11	1.15	1.19	1.23
CarTech® BioDur® 316LS Stainless	1.19	1.20	1.16	1.04	1.00	1.05	1.08	1.09	1.18	1.23	1.27	1.35
CarTech® BioDur® 470/Custom 470	0.86	0.86	0.83	0.77	0.73	0.77	0.80	0.82	0.88	0.92	0.94	0.98
CarTech® BioDur® Carpenter CCM® Alloy	8.34	8.78	10.00	9.30	7.94	7.00	6.54	5.65	6.84	7.30	7.41	7.54
CarTech® BioDur® TrimRite® Stainless	0.34	0.37	0.38	0.37	0.35	0.37	0.36	0.34	0.33	0.34	0.35	0.35
CarTech® Micro-Melt® BioDur® Carpenter CCM® Alloy	8.34	8.78	10.00	9.30	7.94	7.00	6.54	5.65	6.84	7.30	7.41	7.54
CarTech® Micro-Melt® BioDur® CCM Plus®	7.93	8.34	9.50	8.83	7.54	6.65	6.21	5.36	6.49	6.93	7.03	7.15
CarTech® Micro-Melt® BioDur® CCM LS Alloy	8.34	8.78	10.00	9.30	7.94	7.00	6.54	5.65	6.84	7.30	7.41	7.54

## CORROSION-RESISTANT ALLOYS

### Alloy Description

CarTech® Alloy C-276	4.60	4.62	4.57	4.00	3.78	3.94	3.96	3.94	4.39	4.66	4.77	5.05
CarTech® MP35N* Alloy	8.98	8.57	9.00	8.47	7.55	6.84	6.42	5.84	6.98	7.38	7.62	7.99
CarTech® MP35N* Alloy (Tubing)	17.96	17.15	17.99	16.93	15.09	13.67	12.83	11.68	13.96	14.76	15.24	15.97
CarTech® Ni-Cu 400	4.15	4.06	3.68	3.27	3.18	3.37	3.66	4.02	4.48	4.66	4.81	5.05
CarTech® Ni-Cu 405	4.15	4.06	3.68	3.27	3.18	3.37	3.66	4.02	4.48	4.66	4.81	5.05
CarTech® Custom Age 625 PLUS® / 725	4.23	4.13	3.96	3.51	3.44	3.58	3.73	3.75	4.20	4.40	4.48	4.73
CarTech® 925	2.81	2.72	2.52	2.26	2.23	2.34	2.45	2.48	2.79	2.90	2.94	3.10

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 2020 - USD/lb.

(applicable at time of shipment)



## Alloy Description

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
--	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

\*MP35N is a trademark of SPS Technologies, Inc.

## BEARING AND GEAR STEELS

CarTech® 52100	0.26	0.27	0.27	0.27	0.26	0.26	0.25	0.22	0.21	0.23	0.22	0.25
CarTech® 52100T2	0.26	0.27	0.27	0.28	0.27	0.26	0.25	0.22	0.22	0.23	0.22	0.24
CarTech® Aero-A6	0.36	0.36	0.36	0.36	0.34	0.33	0.32	0.29	0.28	0.29	0.28	0.31
CarTech® BG-42	1.46	1.40	1.43	1.37	1.30	1.24	1.18	1.10	1.09	1.11	1.09	1.14
CarTech® CBS 223	0.74	0.73	0.73	0.72	0.68	0.66	0.63	0.58	0.58	0.59	0.57	0.62
CarTech® CBS 600	0.48	0.48	0.49	0.49	0.47	0.45	0.44	0.39	0.39	0.41	0.40	0.44
CarTech® CBS50Nil	1.64	1.57	1.57	1.50	1.41	1.33	1.29	1.21	1.24	1.26	1.25	1.33
CarTech® CSS-42L	2.52	2.32	2.59	2.41	2.17	1.95	1.75	1.54	1.73	1.84	1.88	1.97
CarTech® Dynaflex	0.63	0.62	0.62	0.61	0.58	0.55	0.53	0.48	0.48	0.48	0.47	0.50
CarTech® L-6490	1.16	1.11	1.14	1.09	1.03	0.97	0.92	0.84	0.84	0.85	0.84	0.89
CarTech® Lesco® 53	0.96	0.93	0.96	0.92	0.87	0.82	0.80	0.74	0.76	0.79	0.79	0.86
CarTech® Pyrowear® Alloy 53	0.96	0.93	0.96	0.92	0.87	0.82	0.80	0.74	0.76	0.79	0.79	0.86
CarTech® M-50	1.32	1.28	1.30	1.25	1.18	1.12	1.06	0.98	0.97	0.99	0.97	1.04
CarTech® QC61	2.77	2.53	2.83	2.60	2.30	2.01	1.81	1.61	1.94	2.10	2.16	2.26
CarTech® QC64	2.62	2.40	2.68	2.47	2.19	1.92	1.73	1.53	1.82	1.97	2.02	2.11

## ALLOY STEELS

### Alloy Description

CarTech® 16NCD13	0.50	0.50	0.49	0.48	0.45	0.43	0.43	0.42	0.43	0.45	0.45	0.49
CarTech® 300M	0.45	0.44	0.44	0.44	0.41	0.39	0.39	0.36	0.37	0.39	0.38	0.41
CarTech® 3311	0.49	0.48	0.47	0.46	0.44	0.41	0.42	0.41	0.43	0.45	0.45	0.48
CarTech® 35NCD16	0.53	0.52	0.51	0.50	0.48	0.45	0.46	0.46	0.47	0.48	0.49	0.51
CarTech® 4130 , 4140, 4150	0.27	0.28	0.29	0.29	0.28	0.27	0.27	0.23	0.23	0.24	0.23	0.25
CarTech® 4319, 4320, 4343	0.41	0.41	0.40	0.40	0.38	0.36	0.36	0.34	0.35	0.36	0.36	0.39
CarTech® 4330+V, 4335+V	0.46	0.45	0.45	0.45	0.42	0.40	0.40	0.37	0.38	0.40	0.39	0.42
CarTech® 4340 VV	0.42	0.42	0.42	0.42	0.40	0.38	0.38	0.36	0.37	0.38	0.38	0.41
CarTech® 4340	0.40	0.40	0.40	0.40	0.38	0.36	0.36	0.34	0.35	0.36	0.36	0.39
CarTech® 4340L	0.44	0.44	0.44	0.44	0.42	0.40	0.40	0.37	0.39	0.40	0.40	0.43

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 2020 - USD/lb.

(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® 4340L+	0.48	0.48	0.48	0.48	0.46	0.43	0.43	0.41	0.42	0.43	0.43	0.47
CarTech® 6150	0.33	0.34	0.34	0.34	0.32	0.31	0.30	0.27	0.26	0.27	0.26	0.28
CarTech® 8620	0.31	0.31	0.32	0.32	0.30	0.29	0.29	0.26	0.26	0.27	0.26	0.29
CarTech® 9310 V V	0.52	0.51	0.50	0.49	0.47	0.43	0.44	0.43	0.46	0.47	0.47	0.51
CarTech® 9310, 9315	0.49	0.48	0.47	0.46	0.44	0.41	0.42	0.41	0.43	0.44	0.44	0.48
CarTech® AerMet® 100 Alloy	2.11	2.21	2.42	2.21	1.91	1.75	1.70	1.56	1.86	1.98	2.03	2.09
CarTech® AerMet® 310 Alloy	2.31	2.42	2.66	2.44	2.10	1.90	1.83	1.68	2.02	2.15	2.22	2.28
CarTech® AerMet® 340 Alloy	2.45	2.57	2.82	2.58	2.23	2.03	1.96	1.79	2.14	2.28	2.35	2.41
CarTech® AF1410	2.31	2.11	2.34	2.16	1.92	1.69	1.56	1.42	1.68	1.79	1.85	1.92
CarTech® No. 158® Alloy	0.52	0.52	0.50	0.49	0.47	0.44	0.45	0.44	0.46	0.48	0.48	0.52
CarTech® D6AC	0.44	0.44	0.46	0.45	0.43	0.41	0.40	0.37	0.36	0.36	0.36	0.38
CarTech® GNB100	0.72	0.70	0.70	0.68	0.64	0.60	0.60	0.58	0.60	0.60	0.61	0.63
CarTech® HP-9-4-20	1.36	1.27	1.33	1.25	1.13	1.03	1.00	0.96	1.08	1.12	1.16	1.20
CarTech® HP-9-4-30	1.22	1.14	1.21	1.13	1.03	0.93	0.90	0.86	0.96	1.00	1.04	1.08
CarTech® HTC	0.31	0.32	0.33	0.34	0.33	0.32	0.32	0.29	0.28	0.27	0.27	0.28
CarTech® HY180	1.83	1.70	1.82	1.69	1.53	1.37	1.31	1.23	1.41	1.48	1.53	1.59
CarTech® HYTUF	0.50	0.49	0.49	0.48	0.46	0.43	0.44	0.43	0.44	0.44	0.45	0.47
CarTech® L-6305	0.41	0.41	0.42	0.42	0.40	0.38	0.37	0.34	0.33	0.32	0.31	0.32
CarTech® NiMark® Alloy 250	2.08	2.15	2.24	1.99	1.77	1.73	1.71	1.63	1.92	2.05	2.11	2.20
CarTech® NiMark+A273 Alloy 250-LR	2.08	2.15	2.24	1.99	1.77	1.73	1.71	1.63	1.92	2.05	2.11	2.20
CarTech® NiMark® Alloy 300	2.21	2.29	2.41	2.14	1.91	1.84	1.81	1.73	2.02	2.16	2.23	2.32
CarTech® Nitralloy 135	0.28	0.29	0.30	0.31	0.29	0.28	0.28	0.25	0.24	0.24	0.24	0.25
CarTech® Nitralloy N	0.52	0.51	0.51	0.50	0.47	0.45	0.46	0.45	0.46	0.47	0.47	0.49
CarTech® PremoMax® Alloy	0.50	0.50	0.49	0.49	0.47	0.45	0.44	0.41	0.41	0.42	0.40	0.43
CarTech® PremoMet® Alloy	0.72	0.70	0.68	0.66	0.63	0.59	0.60	0.58	0.60	0.62	0.62	0.66
CarTech® QM54	2.13	1.98	2.08	1.94	1.77	1.60	1.55	1.47	1.64	1.71	1.76	1.82
CarTech® UT-18	0.45	0.45	0.47	0.46	0.44	0.42	0.41	0.38	0.37	0.36	0.36	0.37
CarTech® UT-19	0.57	0.56	0.55	0.54	0.51	0.48	0.49	0.49	0.51	0.51	0.52	0.54

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 2020 - USD/lb.

(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## SPECIALTY ALLOYS

### Alloy Description

CarTech® AEREX	16.04	15.08	15.44	14.63	13.72	12.71	12.39	12.04	13.38	13.86	14.16	14.61
CarTech® JETHETE	1.24	1.18	1.12	1.07	1.00	0.93	0.98	1.01	1.11	1.15	1.18	1.25
CarTech® QS53	2.00	1.85	1.99	1.86	1.68	1.51	1.40	1.28	1.45	1.54	1.57	1.64
CarTech® XM-27	0.60	0.60	0.61	0.61	0.60	0.58	0.57	0.54	0.54	0.56	0.55	0.59

## SPECIAL PURPOSE ALLOYS

### Alloy Description

CarTech® 180 Alloy	3.17	3.14	2.86	2.53	2.44	2.58	2.85	3.20	3.40	3.56	3.63	3.82
CarTech® CBX Cupron® Alloy	3.73	3.67	3.33	2.94	2.87	3.03	3.32	3.67	4.01	4.18	4.30	4.51
CarTech® Cupron® Alloy	3.73	3.67	3.33	2.94	2.87	3.03	3.32	3.67	4.01	4.18	4.30	4.51
CarTech® Evanohm® Alloy R	3.91	3.81	3.45	3.08	3.04	3.20	3.45	3.72	4.22	4.38	4.53	4.74
CarTech® Manganin 13	2.51	2.50	2.31	2.03	1.96	2.06	2.30	2.58	2.68	2.81	2.84	2.99
CarTech® NIAL Alloy	4.88	4.74	4.29	3.81	3.73	3.94	4.26	4.62	5.26	5.47	5.67	5.95
CarTech® NIAL Alloy / Low Resistivity NIAL	4.88	4.74	4.29	3.81	3.73	3.94	4.26	4.62	5.26	5.47	5.67	5.95
CarTech® PCLW-SNX Alloy	2.54	2.54	2.31	2.04	1.95	2.06	2.31	2.64	2.71	2.86	2.89	3.04
CarTech® Tophel® Alloy	4.68	4.55	4.13	3.67	3.60	3.80	4.10	4.44	5.05	5.25	5.43	5.70
CarTech® Tophet® Alloy A	4.24	4.13	3.74	3.34	3.29	3.46	3.73	4.03	4.57	4.75	4.92	5.15
CarTech® Tophet® Alloy C	3.23	3.15	2.87	2.56	2.52	2.65	2.85	3.08	3.47	3.61	3.73	3.91

## VALVE STEELS

### Alloy Description

CarTech® 31V (Pyromet® 31V)	3.18	3.06	2.81	2.48	2.46	2.58	2.75	2.84	3.23	3.38	3.45	3.64
CarTech® 751 (Pyromet® 751)	3.20	3.06	2.72	2.36	2.32	2.48	2.72	2.92	3.40	3.55	3.67	3.88
CarTech® 80A (Pyromet® 80A) Valve	3.51	3.35	2.99	2.61	2.59	2.74	2.99	3.19	3.69	3.85	3.97	4.19

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

### Alloy Description

CarTech® M1 - Tatmo	1.72	1.64	1.68	1.60	1.50	1.41	1.33	1.24	1.23	1.26	1.26	1.35
CarTech® M2 - Double 6	2.43	2.31	2.27	2.16	2.03	1.92	1.85	1.76	1.76	1.76	1.74	1.79

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 2020 - USD/lb.

(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® M2 - Double 6-XL	2.43	2.31	2.27	2.16	2.03	1.92	1.85	1.76	1.76	1.76	1.74	1.79
CarTech® M2 - HS29	2.34	2.23	2.19	2.08	1.96	1.85	1.79	1.70	1.70	1.70	1.68	1.73
CarTech® M2 - HS29-XL	2.34	2.23	2.19	2.08	1.96	1.85	1.79	1.70	1.70	1.70	1.68	1.73
CarTech® M3I - Corsair	2.49	2.36	2.32	2.20	2.08	1.96	1.89	1.79	1.79	1.78	1.76	1.80
CarTech® M3II - Crusader	2.69	2.55	2.50	2.37	2.23	2.11	2.03	1.92	1.92	1.91	1.87	1.90
CarTech® M4 - Stark	2.81	2.67	2.59	2.46	2.32	2.19	2.10	1.99	1.99	1.96	1.91	1.93
CarTech® M7 - Tatmo-VN	2.06	1.95	1.98	1.88	1.77	1.66	1.57	1.46	1.46	1.47	1.46	1.53
CarTech® M11 - Vancomo	1.80	1.70	1.78	1.68	1.57	1.47	1.37	1.26	1.27	1.31	1.31	1.39
CarTech® M33 - Kelvan	2.47	2.31	2.48	2.32	2.12	1.94	1.77	1.59	1.68	1.76	1.78	1.88
CarTech® M35 - HS 105	2.68	2.52	2.56	2.41	2.24	2.08	1.97	1.83	1.89	1.92	1.91	1.96
CarTech® M42 - Dynamax	2.43	2.27	2.44	2.28	2.09	1.91	1.74	1.56	1.65	1.73	1.75	1.85
CarTech® M50 - CM-50	1.05	1.01	1.03	0.99	0.93	0.88	0.83	0.76	0.76	0.77	0.76	0.81
CarTech® M51	3.84	3.59	3.63	3.41	3.15	2.90	2.73	2.54	2.65	2.68	2.66	2.69
CarTech® M52 - CM52	1.96	1.87	1.84	1.75	1.65	1.56	1.50	1.42	1.41	1.41	1.39	1.44
CarTech® T15 - Dynavan	4.13	3.89	3.77	3.57	3.34	3.12	2.99	2.85	2.90	2.86	2.80	2.77
CarTech® Abscido	1.76	1.68	1.64	1.56	1.48	1.40	1.34	1.26	1.26	1.24	1.21	1.23
CarTech® Supersaw	1.80	1.67	1.82	1.70	1.54	1.40	1.27	1.12	1.21	1.27	1.28	1.35

## TOOL STEELS (not applicable to powder products)

### Alloy Description

CarTech® A2 - Select-B	0.46	0.46	0.46	0.45	0.43	0.42	0.40	0.36	0.36	0.37	0.36	0.39
CarTech® A6 - Lesco A6	0.36	0.36	0.37	0.37	0.35	0.34	0.32	0.29	0.28	0.30	0.29	0.33
CarTech® A7 - BR-3	1.92	1.84	1.77	1.68	1.59	1.51	1.43	1.33	1.32	1.27	1.20	1.18
CarTech® A7 - Brickmold	1.96	1.87	1.80	1.71	1.62	1.54	1.46	1.36	1.35	1.30	1.23	1.21
CarTech® A8 - MGR	0.71	0.69	0.69	0.67	0.64	0.61	0.59	0.55	0.54	0.56	0.54	0.58
CarTech® A8+ - MGR-MQ	0.71	0.69	0.69	0.67	0.64	0.61	0.59	0.55	0.54	0.56	0.54	0.58
CarTech® A9 - Mazeman	0.87	0.85	0.84	0.81	0.76	0.72	0.70	0.65	0.66	0.67	0.65	0.68
CarTech® A10 - Graph-Air	0.52	0.51	0.51	0.50	0.47	0.44	0.44	0.41	0.42	0.44	0.44	0.49
CarTech® A18 - Whitebear	1.19	1.14	1.12	1.08	1.02	0.97	0.92	0.85	0.85	0.83	0.80	0.81
CarTech® D2 - Olympic	0.70	0.68	0.68	0.66	0.63	0.61	0.58	0.54	0.53	0.54	0.52	0.54
CarTech® D3 - GSN	0.40	0.40	0.40	0.40	0.39	0.38	0.37	0.34	0.34	0.35	0.33	0.35

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 2020 - USD/lb.

(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® D4 - GSN+Mo	0.57	0.56	0.56	0.55	0.53	0.51	0.50	0.46	0.45	0.46	0.45	0.47
CarTech® D5 - Riptide	0.60	0.57	0.63	0.60	0.56	0.52	0.48	0.42	0.45	0.48	0.48	0.52
CarTech® D7 - BR-4	1.80	1.72	1.66	1.59	1.51	1.43	1.36	1.26	1.26	1.21	1.15	1.14
CarTech® H10 - Dart	0.59	0.58	0.60	0.58	0.55	0.52	0.50	0.45	0.45	0.46	0.45	0.50
CarTech® H11 - Dycast	0.56	0.56	0.56	0.55	0.52	0.50	0.48	0.43	0.43	0.44	0.43	0.46
CarTech® H11+ - Dycast-VAR	0.56	0.56	0.56	0.55	0.52	0.50	0.48	0.43	0.43	0.44	0.43	0.46
CarTech® H12 - L.P.D.®	0.73	0.71	0.71	0.69	0.65	0.62	0.60	0.56	0.56	0.57	0.56	0.60
CarTech® H13 - VDC®	0.75	0.73	0.73	0.71	0.67	0.64	0.61	0.56	0.56	0.56	0.54	0.56
CarTech® H13+ - VDC-MQ	0.75	0.73	0.73	0.71	0.67	0.64	0.61	0.56	0.56	0.56	0.54	0.56
CarTech® H13++ - VDC-RF	0.72	0.70	0.70	0.68	0.64	0.61	0.59	0.54	0.53	0.54	0.52	0.55
CarTech® H13-FM - Viscount	0.75	0.73	0.73	0.71	0.67	0.64	0.61	0.56	0.56	0.56	0.54	0.56
CarTech® H14 - Lumdie	0.91	0.88	0.85	0.82	0.78	0.75	0.74	0.72	0.71	0.73	0.71	0.74
CarTech® H19 - Lesco19	1.98	1.87	1.86	1.76	1.64	1.52	1.44	1.34	1.38	1.39	1.36	1.37
CarTech® H21 - CLW	1.79	1.71	1.63	1.56	1.48	1.40	1.39	1.36	1.36	1.36	1.34	1.37
CarTech® H26 - H26 Mod	3.42	3.24	3.08	2.93	2.77	2.61	2.59	2.54	2.55	2.55	2.52	2.54
CarTech® H43 - Lesco 43	1.85	1.76	1.80	1.70	1.60	1.51	1.42	1.30	1.30	1.31	1.30	1.37
CarTech® L6 - Montana	0.99	0.96	0.92	0.89	0.84	0.80	0.80	0.77	0.78	0.79	0.79	0.82
CarTech® O1 - Badger	0.31	0.32	0.31	0.32	0.30	0.29	0.29	0.26	0.25	0.27	0.25	0.28
CarTech® O6 - Graph-Mo	0.27	0.27	0.28	0.28	0.27	0.26	0.25	0.22	0.22	0.23	0.22	0.25
CarTech® O7 - Lesco O7	0.47	0.46	0.45	0.45	0.43	0.41	0.40	0.37	0.37	0.38	0.37	0.40
CarTech® S1 - XL®-Chisel	0.64	0.63	0.60	0.59	0.56	0.54	0.53	0.50	0.49	0.50	0.49	0.51
CarTech® S2 - Trident	0.36	0.36	0.36	0.36	0.34	0.33	0.32	0.28	0.28	0.29	0.28	0.31
CarTech® S4 - Damascus	0.23	0.24	0.24	0.24	0.24	0.23	0.22	0.19	0.19	0.20	0.19	0.22
CarTech® S5 - Lanark	0.46	0.46	0.46	0.45	0.43	0.41	0.39	0.35	0.35	0.36	0.35	0.39
CarTech® S7 - Bearcat	0.41	0.41	0.42	0.42	0.40	0.38	0.37	0.33	0.33	0.34	0.34	0.38
CarTech® S7+ - S7-MQ	0.41	0.41	0.42	0.42	0.40	0.38	0.37	0.33	0.32	0.34	0.34	0.38
CarTech® CAT4039	0.63	0.62	0.63	0.61	0.58	0.55	0.52	0.48	0.47	0.49	0.47	0.51
CarTech® Chipper	0.58	0.57	0.58	0.56	0.54	0.52	0.50	0.45	0.45	0.46	0.45	0.48
CarTech® HC-H13	0.82	0.79	0.79	0.76	0.72	0.69	0.66	0.60	0.60	0.60	0.58	0.61
CarTech® Lescowear	1.44	1.38	1.35	1.29	1.22	1.16	1.11	1.04	1.03	1.01	0.98	0.99
CarTech® LSC2367	0.79	0.77	0.79	0.76	0.72	0.68	0.65	0.59	0.59	0.60	0.59	0.64

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 2020 - USD/lb.

(applicable at time of shipment)



Alloy Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CarTech® Mandrel	0.45	0.44	0.43	0.43	0.40	0.38	0.39	0.37	0.39	0.41	0.40	0.44
CarTech® Staminal®	0.50	0.49	0.48	0.47	0.45	0.42	0.42	0.40	0.42	0.44	0.43	0.47
CarTech® Typlex	0.66	0.64	0.62	0.60	0.57	0.53	0.54	0.52	0.55	0.57	0.56	0.61
CarTech® 420-FM - Saxman-FM	0.44	0.44	0.44	0.44	0.42	0.41	0.40	0.37	0.37	0.38	0.36	0.39
CarTech® 420SS - Saxman6R	0.44	0.44	0.44	0.44	0.42	0.41	0.40	0.37	0.37	0.38	0.36	0.39

## Conversion Services (Natural Gas Surcharges)

Process 1 - Non-Ti Air Cool	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02
Process 2 - Non Ti Fce Cool	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.03
Process 3 - General Ti	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02
Process 4 Special Processing	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.03
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

Unless otherwise noted, trademarks reg. U.S. Pat. & Tm. Off. to CRS Holdings, Inc., a subsidiary of Carpenter Technology Corporation.

Last Modified 30-Nov-20, 9:01 PM