

## Sandvik Surcharge Calculation

### One Month Prior Element Average

(\$/lb.)

	6/16/18 - 7/15/18	7/16/18 - 8/15/18	8/16/18 - 9/15/18	9/16/18 - 10/15/18	10/16/18 - 11/15/18	11/16/18 - 12/15/18
<b>Cr</b>	\$1.400	\$1.380	\$1.380	\$1.307	\$1.240	\$1.240
<b>Ni</b>	\$6.560	\$6.130	\$5.850	\$5.710	\$5.380	\$4.960
<b>Mo</b>	\$12.210	\$13.170	\$13.230	\$13.130	\$13.130	\$13.110
<b>Fe</b>	\$0.149	\$0.140	\$0.130	\$0.136	\$0.140	\$0.135

### Monthly Surcharges

(\$/lb.)

	Nov-18		Dec-18		Jan-19	
	HF	CF	HF	CF	HF	CF
<b>303</b>	\$0.37	\$0.43	\$0.31	\$0.36	\$0.25	\$0.29
<b>304L</b>	\$0.37	\$0.43	\$0.31	\$0.36	\$0.25	\$0.29
<b>321</b>	\$0.37	\$0.43	\$0.31	\$0.36	\$0.25	\$0.29
<b>347</b>	\$0.37	\$0.43	\$0.31	\$0.36	\$0.25	\$0.29
<b>2507</b>	\$0.84	\$0.98	\$0.79	\$0.93	\$0.75	\$0.88
<b>316L</b>	\$0.67	\$0.79	\$0.60	\$0.71	\$0.53	\$0.63
<b>3R60</b>	\$0.68	\$0.80	\$0.61	\$0.72	\$0.54	\$0.64
<b>310</b>	\$0.56	\$0.66	\$0.45	\$0.53	\$0.34	\$0.40
<b>2205</b>	\$0.70	\$0.83	\$0.66	\$0.78	\$0.63	\$0.74
<b>317L</b>	\$0.80	\$0.94	\$0.73	\$0.86	\$0.66	\$0.77
<b>600</b>	\$0.86	\$1.01	\$0.52	\$0.62	\$0.16	\$0.18
<b>800</b>	\$0.55	\$0.65	\$0.40	\$0.47	\$0.23	\$0.27
<b>825</b>	\$0.98	\$1.16	\$0.79	\$0.93	\$0.59	\$0.69
<b>Alloy 20</b>	\$0.87	\$1.03	\$0.70	\$0.83	\$0.52	\$0.61
<b>400</b>	\$0.67	\$0.79	\$0.38	\$0.45	\$0.04	\$0.05
<b>625</b>	\$1.90	\$2.24	\$1.61	\$1.89	\$1.29	\$1.52
<b>904L</b>	\$1.04	\$1.22	\$0.91	\$1.07	\$0.78	\$0.91
<b>2304</b>	\$0.38	\$0.45	\$0.35	\$0.41	\$0.32	\$0.37
<b>253MA</b>	\$0.38	\$0.45	\$0.32	\$0.38	\$0.26	\$0.31
<b>28//</b>	\$1.01	\$1.19	\$0.86	\$1.01	\$0.70	\$0.82
<b>2RE10</b>	\$0.51	\$0.60	\$0.40	\$0.47	\$0.29	\$0.34
<b>2RE69</b>	\$0.76	\$0.89	\$0.64	\$0.75	\$0.53	\$0.62
<b>3RE60</b>	\$0.63	\$0.74	\$0.60	\$0.70	\$0.57	\$0.67
<b>601</b>	\$0.81	\$0.95	\$0.52	\$0.62	\$0.22	\$0.26
<b>HP160</b>	\$0.66	\$0.78	\$0.61	\$0.71	\$0.55	\$0.65
<b>71</b>	\$0.86	\$1.01	\$0.52	\$0.62	\$0.15	\$0.18
<b>80</b>	\$0.65	\$0.77	\$0.59	\$0.70	\$0.54	\$0.63
<b>200</b>	\$0.94	\$1.10	\$0.50	\$0.59	\$0.00	\$0.00
<b>309</b>	\$0.42	\$0.50	\$0.35	\$0.41	\$0.27	\$0.32
<b>330</b>	\$0.56	\$0.66	\$0.39	\$0.46	\$0.21	\$0.25
<b>446</b>	\$0.34	\$0.40	\$0.32	\$0.38	\$0.32	\$0.37
<b>690</b>	\$0.87	\$1.02	\$0.58	\$0.68	\$0.27	\$0.32
<b>702</b>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>2707</b>	\$0.96	\$1.13	\$0.91	\$1.08	\$0.88	\$1.03
<b>2906</b>	\$0.66	\$0.77	\$0.60	\$0.71	\$0.57	\$0.67
<b>21.6.9</b>	\$0.42	\$0.49	\$0.38	\$0.44	\$0.34	\$0.40
<b>254SMO</b>	\$1.15	\$1.36	\$1.06	\$1.25	\$0.96	\$1.13
<b>316LVAR</b>	\$0.71	\$0.84	\$0.64	\$0.75	\$0.56	\$0.66
<b>353MA</b>	\$0.61	\$0.72	\$0.44	\$0.52	\$0.26	\$0.31
<b>HAST C276</b>	\$2.59	\$3.04	\$2.33	\$2.74	\$2.04	\$2.40
<b>NANOFLEX</b>	\$0.76	\$0.90	\$0.72	\$0.84	\$0.66	\$0.78
<b>SAFUREX</b>	\$0.66	\$0.77	\$0.60	\$0.71	\$0.57	\$0.67
<b>316Ti</b>	\$0.60	\$0.71	\$0.54	\$0.63	\$0.47	\$0.55
<b>410</b>	\$0.23	\$0.27	\$0.22	\$0.26	\$0.21	\$0.25
<b>SA29</b>	\$1.13	\$1.32	\$0.97	\$1.14	\$0.80	\$0.94
<b>SAN23</b>	\$1.20	\$1.42	\$1.09	\$1.28	\$0.97	\$1.14
<b>Nitronic 50</b>	\$0.67	\$0.78	\$0.59	\$0.70	\$0.53	\$0.62
<b>316LVM</b>		\$2.06		\$2.00		\$1.91