

# Mineral Industry Surveys

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## NICKEL IN DECEMBER 2003

In December, reported domestic nickel consumption, on a daily average basis, was 14% less than that of November, according to the U.S. Geological Survey. Average daily nickel consumption of cathode, pellets, briquets, and ferronickel for stainless steel was 68.4 metric tons per day (t/d)—28% less than the 95.2 t/d (revised) for November, but 5% greater than the 65.3 t/d (revised) for December 2002. Consumption of elemental nickel to make superalloys and corrosion-resistant nickel-base alloys increased by 18% and 13%, respectively, from November levels, on a daily average basis. Sales to plating companies averaged 28.9 t/d, about 5% greater than the November sales figure of 27.5 t/d.

On December 31, U.S. consumer stocks of cathode, pellets, briquets, and powder totaled 1,200 metric tons (t)—11% less than the 1,310 t (revised) on November 30 and 20% less than the 1,500 t (revised) reported for yearend 2002. Stocks in London Metal Exchange (LME) warehouses worldwide totaled 24,072 t—30% less than the 34,392 t on November 30. Preliminary data collected by the International Nickel Study Group indicated that, at the end of November, world nickel producers (excluding those in Austria, China, The Former Yugoslav Republic of Macedonia, Serbia, and the Ural area of Russia) had approximately 91,700 t of nickel in primary products in stock, of which 62,000 t, or 68%, was Class I material. Class I materials are refined products with a nickel content of 99% or greater (electrolytic cathode, pellets, briquets, rondelles, powder, etc.). Class II materials include ferronickel, oxide sinter, and East Asian utility nickel—products with a nickel content of less than 99%.

The United States imported 118,000 t of primary nickel in the first 11 months of 2003, 5% more than the 112,000 t for the corresponding period of 2002. Class I materials accounted for 86% of total primary imports received during the first 11 months of 2003. Trade data for December 2003 will appear in a subsequent report.

### **Allegheny Technologies to acquire J&L Specialty Steel**

On February 17, Allegheny Technologies Inc. (ATI) announced that it had agreed to buy J&L Specialty Steel, LLC from Arcelor S.A. (J&L Specialty Steel, LLC, 2004). J&L

manufactures flat-rolled stainless steel products and has plants in Midland, PA, and Louisville, OH. The Midland meltshop has two 110-short-ton ultrahigh-powered electric furnaces and a 130-short-ton argon-oxygen-decarburization vessel, in which the stainless steel is refined while still molten. After refining, a continuous caster converts the molten steel into 7.5-inch-thick slabs with widths ranging from 26 inches to 63 inches.

ATI, headquartered in Pittsburgh, PA, is planning to integrate J&L's operations with those of its own steelmaking subsidiary, Allegheny Ludlum Corporation. Allegheny Ludlum is a leading U.S. producer of stainless steel plate, sheet, and strip, with a meltshop and other major steelmaking operations at Brackenridge, PA. The ATI subsidiary also produces nickel-based alloys, titanium metal and titanium-based alloys. J&L's assets will complement Allegheny Ludlum's current capabilities and allow Allegheny Ludlum to better utilize its hot-rolling mill at Brackenridge. The integration will raise Allegheny Ludlum stainless steelmaking capacity by 15% to 20% (an increase of about 300,000 short tons of slab per year).

On March 16, Allegheny Ludlum and J&L successfully completed integration trials. Allegheny Ludlum is planning to keep both the Brackenridge and Midland meltshops open. Allegheny Ludlum and J&L still have to finish negotiating new bargaining agreements with the United Steelworkers of America. J&L has about 850 employees, of which 550 are currently represented by a labor contract. Settlement is scheduled for May 3, but the terms of the purchase have not been disclosed (Allegheny Technologies Inc., 2004a, b).

J&L's current owner, Arcelor S.A. is the largest steelmaker in the world. Arcelor produced 44 million metric tons of steel in 2002 and has 110,000 employees in more than 60 countries.

## References Cited

- Allegheny Technologies Inc., 2004a, Allegheny Technologies updates J&L Specialty Steel asset purchase status: Pittsburgh, PA, Allegheny Technologies Inc. press release, March 16, 1 p.
- Allegheny Technologies Inc., 2004b, Allegheny Technologies updates J&L Specialty Steel asset purchase status: Pittsburgh, PA, Allegheny Technologies Inc. press release, April 16, 1 p.
- J&L Specialty Steel, LLC, 2004, [untitled]: Pittsburgh, PA, J&L Specialty Steel, LLC press release, February 17, 3 p.

TABLE 1  
CONSUMPTION OF NICKEL (EXCLUSIVE OF SCRAP), BY FORM AND USE<sup>1</sup>

(Metric tons, nickel content)

Period	Cathodes, pellets, briquets, and powder	Ferronickel	Oxide-sinter, salts, and other forms	Total	Total year to date
2002:					
December	4,550	505	53	5,110	69,100
2003:					
January	4,820	529	75	5,430 <sup>r</sup>	5,430 <sup>r</sup>
February	4,410	390	23	4,820	10,200
March	4,350	653	42	5,040	15,300
April	4,790	400	46	5,230	20,500
May	4,330	524	25	4,870	25,400
June	4,050 <sup>r</sup>	498	43	4,590 <sup>r</sup>	30,000 <sup>r</sup>
July	3,700	667	24	4,390	34,400 <sup>r</sup>
August	4,250 <sup>r</sup>	873 <sup>r</sup>	28	5,150 <sup>r</sup>	39,500 <sup>r</sup>
September	4,140 <sup>r</sup>	844 <sup>r</sup>	29	5,020 <sup>r</sup>	44,500 <sup>r</sup>
October <sup>r</sup>	4,670	911	32	5,620	50,200
November <sup>r</sup>	4,420	1,190	30	5,640	55,800
December:					
Steel:					
Stainless and heat resisting	1,220	902	W	2,120	24,300
Alloy (excludes stainless)	W	--	W	W	2,430
Superalloys	833	--	W	833	10,000
Copper-nickel alloys	24	--	--	24	W
Electric, magnetic, and expansion alloys	10	--	--	10	130
Other nickel & nickel alloys	W	--	W	W	W
Cast iron	W	--	--	W	W
Electroplating (sales to platers)	896	--	--	896	10,500
Chemical and chemical uses	W	--	--	W	W
Other uses	1,110	--	30	1,140	13,500
Total reported	4,090 <sup>2</sup>	902	30	5,020	60,800
Total all companies (calc) <sup>3</sup>	XX	XX	XX	7,720	93,600
2003: January-December	52,000	8,380	427	60,800	XX
2002: January-December	57,800	9,080	2,270	69,100	XX

<sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data; included in "Other uses" category. XX Not applicable. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Of consumption, 3,140 metric tons were consumed as cathodes and pellets, the remainder as briquets and powder.

<sup>3</sup>Figures represent calculated apparent consumption; based on the revised proportion of reported primary consumption (65.01%) to apparent primary consumption for 2001.

TABLE 2  
ENDING STOCKS OF NICKEL (EXCLUSIVE OF SCRAP) HELD BY CONSUMERS, BY FORM AND USE<sup>1,2</sup>

(Metric tons, nickel content)

Period	Cathodes, pellets, briquets, and powder		Ferronickel	Oxide-sinter, salts, and other forms	Total
2002:					
December		1,500	60	81	1,640
2003:					
January		1,360	100	44	1,500
February		1,430	54	34	1,520
March		1,230	148	43	1,430
April		1,440	49	47	1,540
May		1,430	58	41	1,530
June		1,810 <sup>r</sup>	101	71	1,980 <sup>r</sup>
July		1,470	91	56	1,610
August		1,700 <sup>r</sup>	140	49	1,890 <sup>r</sup>
September		1,250 <sup>r</sup>	99 <sup>r</sup>	49	1,400 <sup>r</sup>
October		1,310 <sup>r</sup>	109 <sup>r</sup>	56	1,480 <sup>r</sup>
November		1,310 <sup>r</sup>	227 <sup>r</sup>	57	1,590 <sup>r</sup>
December:					
Steel (stainless, heat resisting and alloy)		481	(3)	(3)	481
Nonferrous alloys <sup>4</sup>		695	(3)	(3)	695
Foundry (cast irons)		(3)	--	--	(3)
Chemical (catalysts, ceramics, plating salt, etc.) and unspecified uses		19	261	46	326
Total		1,200	261	46	1,500

<sup>r</sup>Revised. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Stocks held by companies that consume nickel in more than one end-use category are credited to the major category. Stocks are subject to revisions owing to inventory adjustments.

<sup>3</sup>Included in the "Chemical and unspecified uses" category.

<sup>4</sup>Includes superalloys, nickel-copper and copper-nickel alloys, permanent magnet alloys, and other nickel alloys.

TABLE 3  
CONSUMPTION AND ENDING STOCKS OF PURCHASED SECONDARY NICKEL, BY USE<sup>1</sup>

(Metric tons, nickel content)

Period	Consumption			Stocks		
	Ferrous scrap <sup>2</sup>	Nonferrous scrap <sup>3</sup>	Total scrap	Ferrous scrap <sup>2</sup>	Nonferrous scrap <sup>3</sup>	Total scrap
2002:						
December	3,870	641	4,510	3,210	101	3,310
2003:						
January	4,690 <sup>r</sup>	645	5,340 <sup>r</sup>	3,420	107	3,530
February	4,030	758	4,790	3,080	96	3,180
March	6,430	649	7,080	2,930	105	3,040
April	5,310	674	5,980	3,210	93	3,310
May	4,920	773	5,700	3,150	102	3,250
June	4,040	645	4,680	3,100	109	3,210
July	4,340	682	5,020	3,370	105	3,480
August	4,780	755	5,530	3,310	115	3,430
September	3,810	739	4,550	3,290	108	3,400
October	5,360	763	6,120	3,110	101	3,210
November	4,960	674 <sup>r</sup>	5,640 <sup>r</sup>	2,950	97	3,050
December	4,940	653	5,590	2,810	85	2,900
2003: January-December	57,600	8,410	66,000	XX	XX	XX
2002: January-December	61,600	8,070	69,700	XX	XX	XX

<sup>r</sup>Revised. XX Not applicable.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Nickel content is calculated from an average nickel content and the reported gross weight of scrap.

<sup>3</sup>Combined consumption and stocks of aluminum-base, copper-base, and nickel-base scrap.

TABLE 4  
U.S. IMPORTS FOR CONSUMPTION OF NICKEL, BY COUNTRY<sup>1</sup>

(Metric tons, nickel content)<sup>2</sup>

Period and country of origin	Cathodes pellets, and briquets	Powder and flakes	Ferro-nickel	Metal-lurgical-grade oxide	Waste and scrap	Stainless steel scrap	Chemicals	Total <sup>3</sup>	Total year to date <sup>4</sup>	Wrought nickel
2002:										
November	6,560	684	991	27	181	627	222	9,300	120,000	51
December	6,970	512	750	16	225	530	312	9,310	130,000	70
January-December	97,200	6,970	12,300	1,230	3,030	6,080	2,860	130,000	XX	878
2003:										
January	5,950	928	605	10	341	322	223	8,380	8,380	55
February	7,060	954	916	8	323	424	269	9,960	18,300	115
March	17,400	1,130	1,310	34	420	476	309	21,100	39,400	93
April	7,770	678	1,700	--	496	533	321	11,500	50,900	64
May	6,160	933	1,530	7	412	461	378	9,880	60,800	37
June	10,800	368	692	(5)	226	408	327	12,800	73,600	41
July	6,240	294	1,840	11	352	420	312	9,470	83,000	49
August	7,420	762	913	(5)	477	475	544	10,600	93,600	62
September	9,990	1,030	1,180	(5)	570	744	248	13,800	107,000	48
October	7,270	565	1,010	20	326	715	255	10,200	118,000	34
November:										
Australia	896	100	--	--	--	--	--	996	11,700	--
Brazil	80	--	--	--	--	6	--	86	1,190	--
Canada	4,040	365	--	--	92	645	--	5,140	40,700	1
Colombia	--	--	148	--	--	--	--	148	2,700	--
Dominican Republic	--	--	589	--	--	--	--	589	7,730	--
Finland	560	97	--	--	--	--	147	804	7,090	--
France	137	--	--	--	38	--	50	224	2,900	(5)
Germany	(5)	3	--	--	19	2	16	41	936	19
Japan	--	4	-5	--	8	2	22	36	579	5
Mexico	1	--	--	--	11	225	2	239	1,970	--
New Caledonia	--	--	--	--	--	--	--	--	1,670	--
Norway	1,110	--	--	--	--	--	--	1,110	15,100	--
Russia	70	--	195	--	--	--	--	265	27,300	--
South Africa	20	20	--	--	6	--	--	47	305	--
Sweden	--	9	--	--	--	--	--	9	73	--
United Kingdom	--	22	--	--	105	--	9	136	2,660	(5)
Venezuela	--	--	--	--	7	6	--	13	52	--
Zimbabwe	120	--	--	--	--	--	--	120	656	--
Other	--	5	--	--	31	3	78	117	2,350	3
Total	7,030	625	932	--	317	889	324	10,100	128,000	28
2003: January-November	93,100	8,270	12,600	91	4,260	5,870	3,510	128,000	XX	625
2002: January-November	90,300	6,460	11,600	1,220	2,800	5,550	2,550	120,000	XX	810

XX Not applicable. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>The nickel contents are assumed to be as follows: metallurgical-grade oxide (77%), waste and scrap (50%), and stainless steel scrap (7.5%). The chemicals category includes chlorides (25%); sulfates (22%); other salts (22%); supported catalysts (22%); and oxide, sesquioxide, and hydroxide (65%).

<sup>3</sup>Excludes wrought nickel.

<sup>4</sup>May include revisions for prior months.

<sup>5</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 5  
U.S. EXPORTS OF NICKEL, BY COUNTRY<sup>1</sup>

(Metric tons, nickel content)<sup>2</sup>

Period and country of destination	Cathodes pellets, and briquets	Powder and flakes	Ferro-nickel	Metal-lurgical-grade oxide	Waste and scrap	Stainless steel scrap	Chemicals	Total <sup>3</sup>	Total year to date	Wrought nickel
2002:										
November	64	95	8	6	830	1,470	184	2,650	42,300	181
December	75	65	7	3	983	2,080	423	3,630	45,900	175
January-December	1,740	1,480	46	685	13,700	25,700	2,580	45,900	XX	2,570
2003:										
January	91	58	10	11	853	3,060	267	4,350	4,350	586
February	24	84	13	7	948	5,050	261	6,380	10,700	462
March	46	113	5	13	770	5,150	243	6,340	17,100	629
April	78	86	8	19	894	2,880	466	4,430	21,500	149
May	30	59	11	11	836	2,380	379	3,710	25,200	147
June	90	47	29	33	516	2,310	276	3,300	28,500	143
July	87	95	27	2	510	3,570	393	4,690	33,200	148
August	56	77	37	1	792	3,040	301	4,300	37,500	162
September	107	106	18	51	707	2,350	223	3,560	41,100	148
October	133	153	12	4	1,010	3,270	276	4,850	45,900	141
November:										
Australia	--	2	--	--	1	--	4	7	62	(4)
Belgium	--	5	--	--	--	--	--	5	278	--
Canada	2	30	--	--	622	163	170	988	10,900	10
China	--	--	1	--	--	715	61	777	5,880	2
Finland	--	--	--	--	6	--	--	6	5,000	--
Germany	--	13	--	--	6	3	5	27	347	(4)
India	--	4	--	--	12	64	2	79	955	(4)
Italy	--	1	--	--	--	--	--	1	511	(4)
Japan	22	9	--	(4)	8	24	16	79	1,340	5
Korea, Republic of	--	4	--	--	--	150	22	176	6,350	1
Mexico	160	1	--	--	--	11	8	180	830	10
Netherlands	--	16	--	--	18	22	1	57	1,320	1
South Africa	--	--	--	--	29	--	5	34	115	--
Spain	--	--	--	--	--	--	--	--	2,580	--
Sweden	--	--	--	--	31	2	(4)	33	384	--
Taiwan	1	(4)	--	--	--	381	4	386	9,190	13
United Kingdom	--	4	--	5	76	3	--	87	1,110	11
Other	25	42	--	--	10	63	73	212	1,910	49
Total	210	127	1	5	819	1,600	371	3,130	49,000	102
2003: January-November	952	1,000	172	156	8,650	34,600	3,460	49,000	XX	2,820
2002: January-November	1,660	1,410	39	682	12,700	23,600	2,150	42,300	XX	2,400

XX Not applicable. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>The nickel contents are assumed to be as follows: metallurgical-grade oxide (77%), waste and scrap (50%), and stainless steel scrap (7.5%). The chemicals category includes chlorides (25%); sulfates (22%); other salts (22%); supported catalysts (22%); and oxide, sesquioxide, and hydroxide (65%).

<sup>3</sup>Excludes wrought nickel.

<sup>4</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF NICKEL ALLOYS, BY COUNTRY<sup>1</sup>

(Metric tons, gross weight)

Period and country of origin	Unwrought alloyed ingot	Bars, rods and profiles	Wire	Plates and sheets	Foil	Tubes and pipes	Other alloyed articles	Total	Total year to date
<b>2002:</b>									
November	231	279	324	348	28	194	149	1,550	17,200
December	170	192	510	353	21	147	153	1,550	18,800
January-December	2,540	2,640	5,230	3,520	196	2,850	1,810	18,800	XX
<b>2003:</b>									
January	54	252	427	332	(2)	133	91	1,290	1,290
February	167	158	356	264	11	93	140	1,190	2,480
March	129	209	600	308	(2)	148	163	1,560	4,040
April	184	245	697	316	6	204	266	1,920	5,950
May	181	204	504	328	7	206	195	1,630	7,580
June	150	156	579	244	35	292	102	1,560	9,140
July	130	266	554	277	30	305	168	1,730	10,900
August	151	78	469	319	32	322	154	1,530	12,400
September	48	239	406	211	10	115	95	1,120	13,500
October	204	307	443	305	15	162	95	1,530	15,000
<b>November:</b>									
Australia	88	--	--	--	--	--	(2)	88	624
Belgium	34	--	(2)	--	-2	--	--	34	183
Canada	--	--	2	--	--	9	11	22	223
China	--	--	(2)	--	-2	--	30	30	280
France	--	1	42	3	--	2	1	49	1,230
Germany	1	67	96	147	23	57	9	400	5,560
Italy	--	90	3	--	--	--	2	95	1,020
Japan	--	--	6	(2)	--	1	1	8	661
Mexico	--	--	(2)	--	--	--	43	43	700
Netherlands	--	--	--	--	--	--	17	17	206
South Africa	59	--	--	--	--	--	--	59	390
Sweden	--	65	157	4	--	16	--	242	2,520
United Kingdom	13	11	20	56	--	3	13	116	2,220
Other	--	5	5	--	(2)	1	29	40	472
<b>Total</b>	<b>195</b>	<b>239</b>	<b>331</b>	<b>210</b>	<b>23</b>	<b>89</b>	<b>156</b>	<b>1,240</b>	<b>16,300</b>
2003: January-November	1,590	2,350	5,370	3,110	170	2,070	1,620	16,300	XX
2002: January-November	2,370	2,440	4,720	3,160	175	2,700	1,660	17,200	XX

XX Not applicable. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 7  
U.S. EXPORTS OF NICKEL ALLOYS, BY COUNTRY<sup>1</sup>

(Metric tons, gross weight)

Period and country of destination	Unwrought alloyed ingot	Bars, rods and profiles	Wire	Plates and sheets	Foil	Tubes and pipes	Other alloyed articles	Total	Total year to date
2002:									
November	739	418	174	546	10	147	295	2,330	27,400
December	415	316	78	302	14	115	426	1,660	29,100
January-December	8,720	6,020	1,520	6,590	169	1,770	4,290	29,100	XX
2003:									
January	729	375	138	236	12	231	192	1,910	1,910
February	1,160	419	93	215	38	168	374	2,460	4,380
March	226	615	113	399	214	150	307	2,030 <sup>r</sup>	6,400
April	600	743	158	315	14	182	292	2,300	8,700
May	857	950	82	294 <sup>r</sup>	44	184	256	2,670 <sup>r</sup>	11,400
June	180	980	94	521	21	163	279 <sup>r</sup>	2,240 <sup>r</sup>	13,600
July	750	553	72	223	25	263	216	2,100 <sup>r</sup>	15,700
August	708	707	112	344	30	228	201	2,330	18,000
September	597	623	80	281	52	140	271	2,040	20,100
October	206	802	55	396	55	255	253	2,020	22,100
November:									
Australia	22	1	3	1	--	1	2	31	69
Belgium	38	61	27	7	--	(2)	(2)	134	1,000
Canada	40	33	18	40	1	88	39	259	2,520
France	52	140	1	27	(2)	(2)	4	223	2,290
Germany	18	92	4	18	2	2	4	141	4,610
India	--	3	(2)	4	--	(2)	--	7	135
Ireland	--	--	(2)	3	--	--	(2)	3	20
Italy	(2)	32	1	37	(2)	2	3	75	547
Japan	--	32	1	105	44	1	1	185	1,340
Korea, Republic of	4	13	1	22	--	1	(2)	42	387
Mexico	(2)	5	37	14	(2)	80	96	232	2,990
Netherlands	--	1	--	12	--	4	(2)	16	143
Singapore	1	20	1	2	--	1	1	26	189
Spain	14	1	--	(2)	--	(2)	1	16	142
Sweden	1	(2)	3	6	--	--	(2)	10	67
Switzerland	54	(2)	--	5	(2)	7	(2)	66	514
Taiwan	--	12	(2)	9	--	9	3	32	378
United Kingdom	24	134	2	42	--	30	3	234	4,050
Other	6	41	22	28	2	28	51	177	2,620
Total	274	621	121	382	49	254	208	1,910	24,000
2003: January-November	6,280	7,390	1,120	3,610	555	2,220	2,850	24,000	XX
2002: January-November	8,300	5,700	1,440	6,290	154	1,650	3,860	27,400	XX

<sup>r</sup>Revised. XX Not applicable. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 8  
NICKEL CONSUMPTION IN CAST AND WROUGHT PRODUCTS

	Percent	
	Wrought	Cast
December 2003:		
Stainless and heat resisting steels	75	25
Alloy steels	99	1
Superalloys	88	12
Copper-nickel alloys	72	28
Other nickel-base alloys	100	(1)

<sup>1</sup>Less than 1/2 unit.

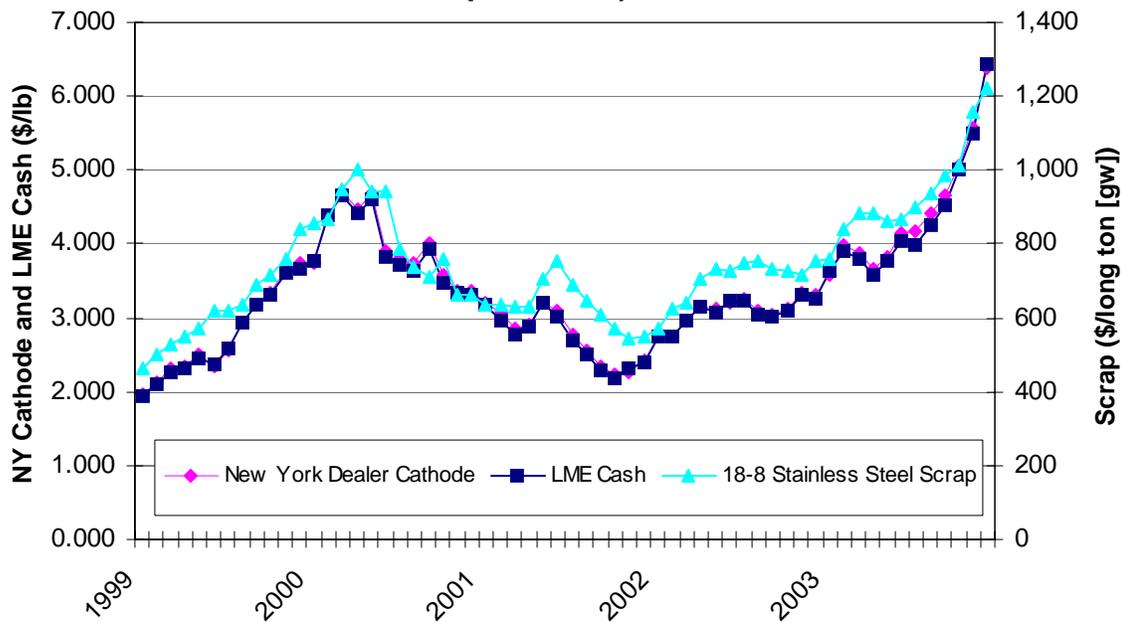
TABLE 9  
NICKEL PRICES

Date	Platts Metals Week				American Metal Market, 18/8 Stainless steel scrap Pittsburgh
	Cathode NY Dealer \$/lb.	LME Cash mean <sup>1</sup> \$/t	LME Cash mean <sup>1</sup> \$/lb.	18/8 Stainless steel scrap Free market \$/long ton (gw)	18/8 Stainless steel scrap Pittsburgh \$/long ton (gw)
2002:					
Average for month of:					
December	3.308	7,193.158	3.263	XX	755
Yearly average	3.095	6,771.751	3.072	XX	703
2003:					
Average for week ending:					
December 5	5.74-5.98	12,578.000	5.705	1,150-1,170	1,150-1,170
December 12	5.98-6.21	13,192.000	5.984	1,300-1,350	1,225-1,250
December 19	6.26-7.08	14,502.500	6.578	1,250-1,300	1,225-1,250
December 26	6.96-7.25	15,411.667	6.991	1,250-1,300	1,225-1,250
Average for month of:					
January	3.580	8,026.020	3.641	XX	757
February	3.978	8,623.000	3.911	840	840
March	3.865	8,378.810	3.801	886	885
April	3.655	7,910.125	3.588	885	885
May	3.826	8,330.625	3.779	839	861
June	4.155	8,874.762	4.026	874	867
July	4.178	8,797.391	3.990	893	897
August	4.418	9,351.375	4.242	918	935
September	4.668	9,965.341	4.520	978	985
October	5.066	11,047.174	5.011	1,041	1,013
November	5.568	12,086.500	5.482	1,153	1,160
December	6.390	14,162.500	6.424	1,262	1,222
Yearly average	4.446	9,629.469	4.368	961	942
2004:					
Average for week ending:					
January 2	7.01-7.78	16,625.000	7.541	1,250-1,300	1,225-1,250
January 9	7.22-8.28	16,451.000	7.462	1,525-1,585	1,450-1,475
January 16	6.65-7.66	14,859.500	6.740	1,475-1,550	1,450-1,475
January 23	6.85-7.02	14,844.500	6.733	1,475-1,550	1,450-1,475
January 30	6.88-7.00	14,879.500	6.749	1,475-1,550	1,450-1,475
Average for month of:					
January	6.900	15,326.548	6.952	1,517	1,463

XX Not applicable.

<sup>1</sup>Mean of the cash buyer price and the cash seller & settlement price.

### 1999-2003 AVERAGE MONTHLY PRICES (Derived from Metals Week and American Metal Market quotations)



### 1999-2003 STOCKS

