

# Mineral Industry Surveys

---

**For information, contact:**

Peter H. Kuck, Nickel Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4965, Fax: (703) 648-7757  
E-mail: pkuck@usgs.gov

Barbara J. McNair (Data)  
Telephone: (703) 648-7952  
Fax: (703) 648-7975  
E-mail: bmcnair@usgs.gov

**Internet:** <http://minerals.usgs.gov/minerals>

## NICKEL IN JANUARY, FEBRUARY, AND MARCH 2008

Reported domestic nickel consumption during the quarter ending March 31, 2008, was 11% greater than that for the first quarter of 2007, according to the U.S. Geological Survey. The 11% figure incorporates revised data received after the preparation of Tables 1 and 2. Daily average use of nickel metal and ferronickel for stainless and heat resisting steels was greater than the revised average for the first quarter of 2007, but the data were still being audited. Average daily use of nickel metal to make superalloys (such as INCONEL 718 and WASPALOY) decreased slightly from first quarter 2007 levels. Average daily use of materials in the "Other nickel and nickel alloys" category (such as INCONEL 600 and Nickel 200) increased by 16%. Sales to plating companies averaged 25.0 metric tons per day (t/d), 4% less than the 25.9 t/d average for the first quarter of 2007. Some percentages reported in this paragraph are based on data withheld to avoid revealing individual company proprietary data. The monthly consumption data for 2006 and 2007 were revised to incorporate corrections from a yearend audit.

The United States imported 125,000 metric tons (t) of primary nickel in 2007, 18% less than the 153,000 t in 2006. About 86%, or 107,000 t, of the primary nickel was Class I materials. Class I materials (electrolytic cathode, briquets, compacts, granules, pellets, powders, rondelles, etc.) are refined products with a

nickel content of 99% or greater. Combined imports of primary nickel in January and February 2008 totaled 23,000 t, compared with 18,300 t for the first 2 months of 2007. Trade data for March 2008 will appear in a subsequent report.

On March 31, 2008, stocks in London Metal Exchange (LME) warehouses worldwide totaled 50,370 t, up 5% from 47,940 t at yearend 2007. The buildup of LME stocks leveled off in early 2008, after 10 months of continuous increases. LME stocks had been at a record end-of-month low of 3,342 t in February 2007. The subsequent stock increases reflected dramatic cutbacks in global production of austenitic stainless steel, the principal use of nickel.

The LME cash mean, an indicator of world nickel prices, began to recover during the first quarter of 2008 after plummeting from the record high of \$52,161 per metric ton (\$23.660 per pound) reached in May 2007. Lower prices in the second half of 2007 were triggered by cutbacks in stainless steel production and fears of global recession. The average monthly LME cash price for March 2008 was \$31,217 per metric ton (\$14.160 per pound), up 20% from the December 2007 figure of \$25,979 per metric ton (\$11.784 per pound). The March price was still 40% less than the record high of May 2007.

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
<b>2007:</b>					
January	5,220	501	38	5,760	5,760
February	4,830	402	39	5,270	11,000
March	4,480	513	47	5,040	16,100
April	5,010	462	42	5,510	21,600
May	4,820	390	40	5,250	26,800
June	4,800	476	46	5,320	32,100
July	4,310	239	33	4,580	36,700
August	4,830	364	38	5,240	42,000
September	3,930	465	45	4,440	46,400
October	5,200	378	48	5,620	52,000
November	5,020	350	56	5,430	57,500
December	4,110	376	53	4,540	62,000
January-December	56,500	4,920	525	62,000	XX
<b>2008:</b>					
January:					
Steel:					
Stainless and heat resisting	2,780	737	W	3,510	3,510
Alloy (excludes stainless)	218	--	--	218	218
Superalloys	1,370	(2)	W	1,370	1,370
Copper-nickel alloys	W	--	--	W	W
Electric, magnetic, and expansion alloys	18	--	--	18	18
Other nickel and nickel alloys	W	(2)	W	W	W
Cast iron	W	(2)	--	W	W
Electroplating (sales to platers)	842	--	--	842	842
Chemical and chemical uses	W	--	--	W	W
Other uses	2,000	(2)	77	2,080	2,080
Total reported	7,220 <sup>3</sup>	737	77	8,030	8,030
Total all companies (calc) <sup>4</sup>	XX	XX	XX	13,200	13,200
February:					
Steel:					
Stainless and heat resisting	2,570	788	W	3,360	6,900
Alloy (excludes stainless)	281	--	--	281	500
Superalloys	1,400	(2)	W	1,400	2,850
Copper-nickel alloys	W	--	--	W	W
Electric, magnetic, and expansion alloys	19	--	--	19	37
Other nickel and nickel alloys	W	(2)	W	W	W
Cast iron	W	(2)	--	W	W
Electroplating (sales to platers)	647	--	--	647	1,490
Chemical and chemical uses	W	--	--	W	W
Other uses	1,810	(2)	182	1,990	3,960
Total reported	6,730 <sup>3</sup>	788	182	7,700	15,700
Total all companies (calc) <sup>4</sup>	XX	XX	XX	12,600	25,800
2008: January- February	14,000	1,530	259	15,700	XX
2007: January- February	10,100	903	77	11,000	XX

See footnotes at end of table.

TABLE 1--Continued  
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
<b>2008--Continued:</b>					
March:					
Steel:					
Stainless and heat resisting	2,680	715	W	3,390	10,300
Alloy (excludes stainless)	364	--	--	364	864
Superalloys	1,180	(2)	W	1,180	4,090
Copper-nickel alloys	W	--	--	W	W
Electric, magnetic, and expansion alloys	11	--	--	11	48
Other nickel and nickel alloys	W	(2)	W	W	W
Cast iron	W	(2)	--	W	W
Electroplating (sales to platers)	766	--	--	766	2,270
Chemical and chemical uses	W	--	--	W	W
Other uses	1,240	(2)	103	1,340	5,210
Total reported	<sup>3</sup> 6,240	715	103	7,060	22,800
Total all companies (calc) <sup>4</sup>	XX	XX	XX	11,600	37,400
2008: January-March	20,200	2,240	364	22,800	XX
2007: January-March	14,500	1,420	124	16,100	XX

W Withheld to avoid disclosing company proprietary data, included with "Other uses." 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>Withheld to avoid disclosing company proprietary data; included in "Other uses" of "Oxide-sinter, salts, and other form

<sup>3</sup>Of consumption, 13,250 metric tons were consumed as cathodes and pellets for the first 3 months, the remainder as briquets and powder.

<sup>4</sup>Figures represent calculated apparent consumption; based on the revised proportion of reported primary consumption (61.01% to apparent primary consumption for 2007.

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, briquettes, and powder	Ferronickel	Oxide-sinter, salts, and other forms	Total
<b>2007:</b>				
January	2,000	388	171	2,560
February	1,770	372	178	2,320
March	1,970	307	162	2,430
April	1,560	263	174	1,990
May	1,660	249	179	2,090
June	1,600	199	144	1,950
July	1,640	212	155	2,000
August	1,680	269	167	2,120
September	1,510	374	143	2,030
October	1,540	215	147	1,900
November	1,750	294	150	2,200
December	1,630	220	245	2,090
<b>2008:</b>				
January:				
Steel (stainless, heat resisting and alloy)	581	150	(3)	731
Nonferrous alloys <sup>4</sup>	1,130	(3)	(3)	1,130
Foundry (cast irons)	(3)	--	--	(3)
Chemical (catalysts, ceramics, plating salt, etc.) and unspecified uses	(3)	--	268	268
Total	<u>1,710</u>	<u>150</u>	<u>268</u>	<u>2,130</u>
February:				
Steel (stainless, heat resisting and alloy)	607	140	(3)	747
Nonferrous alloys <sup>4</sup>	1,150	(3)	(3)	1,150
Foundry (cast irons)	(3)	--	--	(3)
Chemical (catalysts, ceramics, plating salt, etc.) and unspecified uses	(3)	--	281	281
Total	<u>1,760</u>	<u>140</u>	<u>281</u>	<u>2,180</u>
March:				
Steel (stainless, heat resisting and alloy)	436	139	(3)	575
Nonferrous alloys <sup>4</sup>	944	(3)	(3)	944
Foundry (cast irons)	(3)	--	--	(3)
Chemical (catalysts, ceramics, plating salt, etc.) and unspecified uses	(3)	--	260	260
Total	<u>1,380</u>	<u>139</u>	<u>260</u>	<u>1,780</u>

-- 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 "Oxide-sinter, salts, and other forms: 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	Ferrous scrap <sup>2</sup>	Nonferrous scrap <sup>3</sup>	Total
<b>2007:</b>						
March	5,500	945 <sup>r</sup>	6,440 <sup>r</sup>	5,430	51	5,480
April	6,750	788 <sup>r</sup>	7,540 <sup>r</sup>	4,550	53	4,610 <sup>r</sup>
May	5,620	799 <sup>r</sup>	6,420 <sup>r</sup>	4,810	51	4,860
June	6,060	879 <sup>r</sup>	6,940 <sup>r</sup>	5,120	51	5,170
July	5,640	728 <sup>r</sup>	6,370 <sup>r</sup>	4,880	46	4,930
August	5,540	892 <sup>r</sup>	6,430 <sup>r</sup>	4,710	44	4,750
September	5,350	508 <sup>r</sup>	5,860 <sup>r</sup>	4,890	45	4,930
October	5,820	577 <sup>r</sup>	6,390 <sup>r</sup>	4,840 <sup>r</sup>	42	4,880 <sup>r</sup>
November	5,780	419 <sup>r</sup>	6,190 <sup>r</sup>	4,730	41	4,770
December	5,520	510 <sup>r</sup>	6,030 <sup>r</sup>	4,510	52	4,560
January-December	71,400	8,430 <sup>r</sup>	79,800 <sup>r</sup>	XX	XX	XX
<b>2008:</b>						
January	5,920	1,080	7,000	4,710	80	4,790
February	6,320	680	7,000	4,350	75	4,420
March	5,700	507	6,200	4,600	64	4,660
2008: January-March	17,900	2,270	20,200	XX	XX	XX
2007: January-March	19,300	2,330	21,600	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
<b>2007:</b>										
January	8,330	536	627	107	476	728	348	11,200	11,200	51
February	6,610	562	832	97	463	674	254	9,490	20,600	75
March	8,550	626	1,350	7	579	1,090	357	12,500	33,200	51
April	8,460	600	941	80	549	898	329	11,900	45,100	77
May	8,090	583	1,020	18	570	1,020	274	11,600	56,600	67
June	8,130	552	965	2	712	858	205	11,400	68,100	79
July	8,190	466	1,490	--	578	403	350	11,500	79,500	50
August	10,600	642	1,430	7	561	416	255	14,000	93,500	96
September	8,690	514	1,480	32	431	318	209	11,700	105,000	101
October	8,390	342	619	14	557	718	223	10,900	116,000	95
November	8,830	590	1,110	110	905	751	219	12,500	129,000	116
December:										
Australia	1,640	--	--	--	--	--	--	1,640	12,400	--
Belgium	--	8	--	--	--	--	4	12	307	--
Brazil	200	--	--	--	--	1	--	201	1,150	--
Canada	3,530	215	--	53	95	641	3	4,530	63,200	1
China	--	--	--	--	4	--	16	20	356	(5)
Colombia	--	--	787	--	--	8	--	795	3,540	--
Denmark	--	--	--	--	--	--	2	2	159	--
Dominican Republic	--	--	727	--	--	2	--	729	8,120	--
Finland	329	--	--	--	--	--	89	418	4,130	--
France	--	1	--	--	31	--	37	69	1,240	17
Germany	--	9	--	--	93	6	59	167	1,280	46
Israel	--	--	--	--	18	--	--	18	304	--
Japan	(5)	4	--	--	19	--	41	64	887	5
Macedonia	--	--	--	--	450	--	--	450	450	--
Mexico	--	--	--	--	32	288	3	323	2,760	--
Netherlands	--	--	--	--	--	--	20	20	365	(5)
New Caledonia	--	--	124	--	--	--	--	124	1,880	--
Norway	539	--	--	--	10	--	--	549	11,400	--
Russia	1,670	102	--	--	--	--	--	1,770	21,200	--
South Africa	--	40	--	--	--	--	--	40	746	--
United Kingdom	5	16	--	2	218	3	3	247	2,950	2
Zimbabwe	20	--	--	--	--	--	--	20	743	--
Other	1	(5)	--	1	58	10	2	70	1,170	2
<b>Total</b>	<b>7,930</b>	<b>395</b>	<b>1,640</b>	<b>56</b>	<b>1,030</b>	<b>959</b>	<b>279</b>	<b>12,300</b>	<b>141,000</b>	<b>73</b>
January-December	101,000	6,410	13,500	530	7,410	8,830	3,300	141,000	XX	931

See footnotes at end of table.

TABLE 4--Continued  
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
2008:										
January:										
Australia	1,320	66	--	72	6	--	--	1,470	1,470	1
Belgium	--	7	--	--	3	--	20	30	30	--
Brazil	--	--	--	--	--	--	--	--	--	(5)
Canada	5,490	455	--	--	191	889	(5)	7,020	7,020	23
China	--	--	--	--	3	--	--	3	3	3
Colombia	--	--	18	--	--	--	--	18	18	--
Denmark	--	--	--	--	--	--	4	4	4	--
Dominican Republic	--	--	325	--	--	--	--	325	325	--
Finland	160	--	--	--	--	--	8	168	168	--
France	45	--	--	--	61	--	5	111	111	7
Germany	(5)	11	--	--	47	4	29	91	91	36
Israel	--	--	--	--	45	--	--	45	45	--
Japan	--	16	--	--	43	--	17	76	76	7
Mexico	--	--	--	--	36	133	1	170	170	--
Netherlands	2	4	--	--	--	--	23	29	29	(5)
New Caledonia	--	--	250	--	--	--	--	250	250	--
Norway	298	--	--	--	--	--	--	298	298	3
Russia	2,260	100	--	--	--	--	--	2,360	2,360	--
South Africa	20	20	--	--	--	--	--	40	40	--
United Kingdom	8	7	--	--	148	2	(5)	165	165	1
Zimbabwe	78	--	--	--	--	--	--	78	78	--
Other	152	1	11	4	422	22	3	614	614	1
Total	9,840	686	604	76	1,010	1,050	110	13,400	13,400	82
February:										
Australia	1,200	20	--	--	12	--	--	1,240	2,700	1
Belgium	--	5	--	--	--	--	21	26	56	--
Brazil	100	--	--	--	--	--	--	100	100	96
Canada	5,090	422	--	--	158	576	39	6,290	13,300	74
China	--	2	--	--	9	--	1	12	15	1
Colombia	--	--	618	--	--	2	--	620	637	--
Denmark	--	--	--	--	--	--	2	2	5	--
Dominican Republic	--	--	760	--	--	1	--	761	1,090	--
Finland	361	12	--	--	--	--	23	396	565	--
France	--	(5)	--	--	125	--	24	149	260	30
Germany	--	11	--	--	57	--	53	121	211	15
Israel	--	--	--	--	33	3	--	36	81	--
Japan	--	16	--	1	15	--	69	101	177	25
Macedonia	--	--	--	--	--	--	--	--	376	--
Mexico	--	--	--	--	36	140	2	178	349	--
Netherlands	--	--	--	--	--	--	8	8	37	--
New Caledonia	--	--	150	--	--	--	--	150	400	--
Norway	649	--	--	--	9	--	--	658	956	--
Russia	1,620	160	--	--	--	--	--	1,780	4,140	--
South Africa	20	39	--	--	3	--	--	62	102	--
United Kingdom	8	37	--	--	265	3	16	329	494	1
Zimbabwe	74	--	--	--	--	--	--	74	152	--
Other	--	(5)	--	4	70	9	10	93	332	4
Total	9,130	724	1,530	5	792	734	268	13,200	26,500	247
2008: January–February	19,000	1,410	2,130	81	1,800	1,780	378	26,500	XX	329
2007: January–February	14,900	1,100	1,460	204	938	1,400	602	20,600	XX	126

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 ½ 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 briquettes	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
<b>2007:</b>										
January	64	88	2	2	3,160	4,440	254	8,010	8,010	144
February	112	79	(4)	2	2,620	5,940	525	9,280	17,300	190
March	93	112	5	249	2,810	6,330	659	10,300	27,500	99
April	83	79	1	752	2,900	4,350	802	8,960	36,500	187
May	81	76	(4)	475	3,580	5,230	703	10,200	46,700	226
June	54	82	2	525	5,970	5,800	438	12,900	59,500	
July	36	63	--	560	3,240	5,300	533	9,730	69,300	81
August	71	79	(4)	503	2,920	5,190	578	9,340	78,600	134
September	47	70	(4)	405	2,140	5,160	430	8,260	86,900	96
October	62	88	2	741	2,020	5,930	344	9,190	96,000	86
November	57	84	--	709	3,330	6,240	363	10,800	107,000	127
December:										
Australia	--	--	--	--	18	(4)	--	18	354	2
Bangladesh	--	--	--	--	--	25	--	25	1,210	--
Belgium	--	1	--	4	94	18	15	132	495	--
Canada	2	10	--	419	1,350	76	104	1,970	29,500	4
China	--	(4)	--	--	--	861	17	878	12,600	13
Colombia	(4)	3	--	--	--	227	7	237	517	3
Finland	--	--	--	--	--	--	--	--	2,700	--
France	--	--	--	--	--	16	3	19	165	1
Germany	(4)	22	--	--	6	(4)	5	33	1,900	2
India	--	1	--	--	--	860	(4)	861	7,320	(4)
Italy	--	(4)	--	--	--	1	4	5	74	1
Japan	2	9	--	1	600	514	5	1,130	17,600	1
Korea, Republic of	--	4	--	--	--	267	8	279	4,820	1
Mexico	76	4	--	(4)	--	--	4	84	1,340	4
Netherlands	--	(4)	--	--	73	25	1	99	1,140	--
Pakistan	--	--	--	--	--	478	--	478	2,760	--
Singapore	--	2	--	--	--	2	9	13	355	(4)
South Africa	--	--	--	--	--	6	--	6	54	--
Spain	--	(4)	--	--	--	327	--	327	3,960	--
Sweden	--	(4)	--	--	--	--	--	(4)	697	(4)
Taiwan	(4)	2	--	--	--	1,840	27	1,870	20,500	3
Thailand	--	6	--	--	--	169	4	179	941	(4)
United Kingdom	--	9	--	--	--	9	43	61	1,060	14
Vietnam	--	--	--	--	--	318	--	318	1,470	--
Other	-4	13	--	2	1	168	36	220	2,570	43
Total	80	86	--	426	2,150	6,210	292	9,240	116,000	92
January-December	840	986	12	5,349	36,836	66,119	5,921	116,056	XX	1,589

See footnotes at end of table.

TABLE 5--Continued  
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 briquettes	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
<b>2008:</b>										
January:										
Australia	--	--	--	--	23	12	--	35	35	(4)
Bangladesh	--	--	--	--	28	--	--	28	28	--
Belgium	--	1	--	--	323	25	8	357	357	(4)
Canada	10	10	--	732	1,560	127	90	2,530	2,530	14
China	22	2	--	--	13	540	82	659	659	8
Colombia	--	--	--	--	--	--	(4)	(4)	(4)	--
Finland	--	--	--	--	--	58	--	58	58	--
France	--	(4)	--	--	--	9	--	9	9	4
Germany	--	26	--	29	36	(4)	17	108	108	5
India	--	2	--	--	3	605	11	621	621	(4)
Italy	--	1	--	--	--	1	--	2	2	1
Japan	--	15	--	1	528	422	23	989	989	11
Korea, Republic of	--	2	--	--	--	618	5	625	625	4
Mexico	88	2	--	--	--	--	13	103	103	1
Netherlands	--	--	--	--	13	67	51	131	131	2
Pakistan	-4	--	--	--	--	274	--	274	274	--
Singapore	--	5	--	2	--	24	5	36	36	48
South Africa	--	--	--	--	7	--	1	8	8	1
Spain	--	(4)	--	--	--	467	--	467	467	--
Sweden	--	--	--	--	--	--	--	--	--	--
Taiwan	--	4	--	--	19	1,560	9	1,590	1,590	4
Thailand	--	1	--	--	--	384	5	390	390	--
United Kingdom	--	13	--	--	9	--	7	29	29	2
Vietnam	--	--	--	--	--	276	--	276	276	--
Other	26	18	--	1	2	117	122	285	285	110
<b>Total</b>	<b>146</b>	<b>102</b>	<b>--</b>	<b>764</b>	<b>2,540</b>	<b>5,610</b>	<b>449</b>	<b>9,610</b>	<b>9,610</b>	<b>215</b>
February:										
Australia	--	(4)	--	--	19	2	--	21	56	2
Bangladesh	--	--	--	--	--	--	--	--	28	--
Belgium	--	5	--	--	--	12	9	26	382	--
Canada	3	9	--	483	1,150	133	123	1,900	4,430	41
China	--	4	--	--	--	799	36	839	1,500	20
Colombia	--	--	--	--	--	--	1	1	2	4
Finland	--	--	--	--	--	440	--	440	498	--
France	--	(4)	--	--	--	11	7	18	28	1
Germany	--	20	--	--	17	3	36	76	182	4
India	--	1	--	--	--	964	--	965	1,590	1
Italy	--	--	--	--	--	--	(4)	(4)	1	(4)
Japan	--	8	--	--	938	266	5	1,220	2,210	1
Korea, Republic of	--	1	--	(4)	33	554	7	595	1,220	2
Mexico	117	2	--	(4)	--	--	10	129	233	2
Netherlands	--	--	--	--	18	333	25	376	508	--
Pakistan	--	--	--	--	--	175	--	175	449	--
Singapore	--	2	--	--	--	18	11	31	67	1
South Africa	--	(4)	--	--	--	--	--	(4)	8	--
Spain	--	(4)	--	--	--	324	--	324	791	--
Sweden	--	--	--	--	41	8	5	54	54	--
Taiwan	--	1	4	--	--	10	1,580	21	1,620	3,210
Thailand	--	5	--	--	--	305	4	314	704	1
United Kingdom	--	6	--	--	11	11	21	49	78	12
Vietnam	--	--	--	--	--	733	--	733	1,010	--
Other	--	12	--	--	(4)	243	53	308	593	76
<b>Total</b>	<b>121</b>	<b>79</b>	<b>--</b>	<b>483</b>	<b>2,230</b>	<b>6,920</b>	<b>374</b>	<b>10,200</b>	<b>19,800</b>	<b>168</b>
2008: January–February	267	181	--	1,250	4,770	12,500	823	19,800	XX	383
2007: January–February	176	168	3	4	5,780	10,400	779	17,300	XX	336

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 ½ 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>2007:</b>									
January	438	481	573	204	29	307	91	2,120	2,120
February	390	459	452	311	21	188	148	1,970	4,090
March	418	480	691	328	12	183	139	2,250	6,340
April	423	505	688	403	25	257	178	2,480	8,820
May	412	432	648	359	(2)	157	235	2,240	11,100
June	219	495	657	255	10	253	205	2,100	13,200
July	529	449	558	258	11	156	209	2,170	15,300
August	152	553	347	251	11	189	218	1,720	17,000
September	185	329	401	244	22	124	278	1,580	18,600
October	344	226	474	268	(2)	307	202	1,820	20,500
November	262	256	408	319	11	493	221	1,970	22,400
December:									
Australia	92	--	(2)	--	--	--	(2)	92	1,340
Belgium	18	--	(2)	(2)	--	--	--	18	110
Canada	(2)	--	2	--	--	24	42	68	686
China	3	1	(2)	(2)	--	1	180	185	1,050
France	--	24	88	19	--	9	11	151	2,320
Germany	171	114	62	228	18	88	2	683	9,170
Italy	--	67	--	--	--	--	(2)	67	2,550
Japan	1	16	3	--	--	7	11	38	1,060
Mexico	--	--	1	--	--	2	2	5	96
Netherlands	--	--	--	--	--	--	4	4	109
Sweden	--	50	73	(2)	--	7	--	130	2,830
United Kingdom	31	52	6	(2)	--	15	9	113	1,230
Other	97	13	33	1	(2)	(2)	14	158	1,580
Total	413	337	268	248	18	153	275	1,710	24,100
January-December	4,180	5,000	6,160	3,450	171	2,770	2,400	24,100	XX
<b>2008:</b>									
January:									
Australia	164	--	--	--	--	--	(2)	164	164
Belgium	18	--	(2)	--	--	--	--	18	18
Canada	18	24	6	(2)	--	39	114	201	201
China	--	1	1	(2)	(2)	(2)	143	145	145
France	--	9	41	17	--	41	8	116	116
Germany	84	107	51	181	--	130	7	560	560
Italy	3	135	--	--	--	--	(2)	138	138
Japan	(2)	--	7	23	--	1	8	39	39
Mexico	--	--	(2)	--	--	2	(2)	2	2
Netherlands	--	--	--	--	--	(2)	1	1	1
Sweden	--	54	174	4	--	4	--	236	236
United Kingdom	25	56	3	(2)	--	4	11	99	99
Other	7	17	11	1	--	3	17	56	56
Total	319	403	294	226	(2)	224	309	1,775	1,775

See footnotes at end of table.

TABLE 6--Continued  
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
<u>2008--Continued:</u>									
February:									
Australia	176	--	--	--	--	--	(2)	176	340
Belgium	--	--	(2)	1	--	--	--	1	19
Canada	18	--	9	--	--	11	44	82	282
China	1	(2)	1	--	1	11	140	154	299
France	--	12	55	32	--	18	5	122	238
Germany	168	153	75	296	3	73	3	771	1,330
Italy	--	26	--	--	--	(2)	1	27	165
Japan	--	10	15	17	--	2	9	53	91
Mexico	--	(2)	1	--	--	1	2	4	7
Netherlands	--	--	--	--	--	--	4	4	6
Sweden	--	24	130	4	--	28	--	186	422
United Kingdom	48	88	5	2	(2)	6	5	154	255
Other	19	62	17	(2)	--	2	20	120	173
Total	430	375	308	352	4	152	233	1,850	3,630
2008: January-February	749	778	602	578	4	376	542	3,630	XX
2007: January-February	828	940	1,030	515	50	496	239	4,090	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 ½ 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
<b>2007:</b>									
January	417	1,340	48	395	6	255	244	2,700	2,700
February	688	1,280	43	508	9	265	157	2,950	5,650
March	720	1,600	78	702	15	316	158	3,590	9,250
April	519	1,300	76	780	8	235	167	3,090	12,300
May	615	1,190	123	458	13	217	326	2,940	15,300
June	457	1,430	132	492	20	202	239	2,970	18,200
July	612	1,050	97	363	19	163	220	2,520	20,800
August	566	1,290	100	429	38	192	303	2,920	23,700
September	589	1,180	89	370	45	192	279	2,750	26,400
October	666	1,450	94	464	32	175	342	3,220	29,700
November	458	1,250	91	320	39	190	275	2,620	32,300
December:									
Australia	--	5	1	1	--	3	1	12	91
Belgium	176	296	10	3	--	(2)	(2)	487	4,380
Canada	202	59	10	47	4	41	12	374	2,560
China	6	52	3	81	--	45	23	210	2,920
France	85	368	2	39	--	1	2	498	5,630
Germany	40	115	4	15	1	1	2	177	2,820
India	--	18	1	1	(2)	(2)	2	23	278
Ireland	--	--	1	2	--	--	2	4	43
Israel	--	63	1	1	--	1	(2)	66	970
Italy	36	57	8	19	--	1	1	123	1,460
Japan	7	25	2	75	7	1	1	118	1,930
Korea, Republic of	--	41	1	19	--	2	1	64	947
Mexico	(2)	42	16	3	72	4	111	247	3,010
Netherlands	--	9	--	2	--	1	4	16	472
Singapore	6	35	1	2	--	4	2	49	382
Spain	1	1	--	--	--	17	(2)	19	184
Sweden	(2)	81	2	12	--	(2)	1	97	376
Switzerland	57	1	(2)	2	(2)	1	(2)	61	352
Taiwan	(2)	9	(2)	13	--	1	1	25	210
United Kingdom	69	111	40	67	1	12	5	305	3,500
Other	(2)	19	16	25	4	90	89	239	2,990
Total	685	1,410	119	429	89	226	260	3,210	35,500
January-December	6,990	15,800	1,090	5,710	334	2,630	2,970	35,500	XX

See footnotes at end of table.

TABLE 7--continue  
U.S. EXPORTS OF NICKEL ALLOYS, BY COUNTRY

1

(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
<b>2008:</b>									
<b>January:</b>									
Australia	3	1	1	1	--	1	1	8	8
Belgium	166	257	19	2	1	(2)	(2)	445	445
Canada	104	52	12	59	7	29	15	278	278
China	2	88	12	27	2	16	33	180	180
France	86	280	4	30	--	(2)	5	405	405
Germany	1	147	7	23	(2)	5	1	184	184
India	--	9	3	2	--	2	(2)	16	16
Ireland	(2)	--	(2)	1	--	(2)	1	2	2
Israel	5	105	1	2	--	4	(2)	117	117
Italy	63	22	2	17	--	2	2	108	108
Japan	27	19	29	63	2	39	6	185	185
Korea, Republic of	5	73	3	26	19	2	(2)	128	128
Mexico	1	40	26	18	105	2	137	329	329
Netherlands	7	44	--	9	(2)	4	3	67	67
Singapore	4	10	2	1	--	17	1	35	35
Spain	4	(2)	--	(2)	(2)	(2)	(2)	4	5
Sweden	(2)	3	(2)	9	--	1	8	21	21
Switzerland	(2)	1	1	2	--	5	(2)	9	9
Taiwan	4	6	(2)	5	1	2	2	20	20
United Kingdom	56	158	10	75	1	13	3	316	316
Other	7	23	17	79	10	31	74	241	241
<b>Total</b>	<b>545</b>	<b>1,340</b>	<b>149</b>	<b>451</b>	<b>148</b>	<b>175</b>	<b>292</b>	<b>3,100</b>	<b>3,100</b>
<b>February:</b>									
Australia	--	1	(2)	(2)	(2)	2	1	4	11
Belgium	32	357	10	6	--	1	(2)	407	853
Canada	3	49	17	36	6	92	13	216	495
China	20	97	6	55	1	29	18	225	407
France	256	181	5	24	(2)	1	4	471	876
Germany	32	107	3	36	(2)	4	2	184	367
India	(2)	9	4	2	1	5	2	23	40
Ireland	--	--	(2)	3	--	(2)	1	4	6
Israel	(2)	158	(2)	3	(2)	(2)	(2)	162	279
Italy	96	19	(2)	119	--	(2)	1	236	344
Japan	2	31	13	19	2	3	6	75	260
Korea, Republic of	(2)	47	9	30	2	18	1	108	236
Mexico	2	56	10	8	21	4	162	262	591
Netherlands	1	1	--	2	--	1	2	6	74
Singapore	6	15	3	4	--	9	3	40	75
Spain	6	1	--	--	--	(2)	(2)	7	12
Sweden	--	4	11	13	--	(2)	1	29	51
Switzerland	14	3	3	3	--	1	2	25	34
Taiwan	(2)	(2)	(2)	10	(2)	3	(2)	14	35
United Kingdom	29	222	26	64	1	14	9	366	681
Other	8	89	13	53	1	81	86	329	562
<b>Total</b>	<b>507</b>	<b>1,450</b>	<b>133</b>	<b>490</b>	<b>35</b>	<b>268</b>	<b>314</b>	<b>3,190</b>	<b>6,290</b>
<b>2008: January-February</b>	<b>1,050</b>	<b>2,790</b>	<b>282</b>	<b>941</b>	<b>182</b>	<b>442</b>	<b>605</b>	<b>6,290</b>	<b>XX</b>
<b>2007: January-February</b>	<b>1,110</b>	<b>2,620</b>	<b>91</b>	<b>903</b>	<b>15</b>	<b>520</b>	<b>401</b>	<b>5,650</b>	<b>XX</b>

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 ½ unit.

Source: U.S. Census Bureau.

TABLE 8  
NICKEL CONSUMPTION IN CAST AND WROUGHT PRODUCTS

	Percent	
	Wrought	Cast
<b>2008:</b>		
January:		
Stainless and heat resisting steels	100	(1)
Alloy steels	99	1
Superalloys	84	16
Copper-nickel alloys	96	4
Other nickel-base alloys	100	(1)
February:		
Stainless and heat resisting steels	100	(1)
Alloy steels	99	1
Superalloys	84	16
Copper-nickel alloys	96	4
Other nickel-base alloys	100	(1)
March:		
Stainless and heat resisting steels	100	(1)
Alloy steels	99	1
Superalloys	84	16
Copper-nickel alloys	96	4
Other nickel-base alloys	100	(1)

<sup>1</sup>Less than ½ unit.

TABLE 9  
NICKEL PRICES

Date	Platts Metals Week				American Metal Market <sup>1</sup>	
	Cathode NY Dealer \$/lb.	LME Cash mean <sup>2</sup> \$/t	LME Cash mean <sup>2</sup> \$/lb.	18/8 Stainless steel scrap free market \$/long ton (gw)	304 Stainless steel scrap: solids, clips Pittsburgh \$/long ton (gw)	316 Stainless steel scrap: solids, clips Pittsburgh \$/long ton (gw)
<b>2007:</b>						
<u>Average for month of:</u>						
January	16.177	36,795.227	16.690	2,866	2,917	4,114
February	18.309	41,171.125	18.675	3,141	3,146	4,243
March	21.238	46,303.409	21.003	3,738	3,481	4,856
April	23.139	50,249.474	22.793	4,069	3,925	5,550
May	23.737	52,160.833	23.660	3,638	4,060	5,589
June	18.491	41,704.762	18.917	2,016	3,719	5,018
July	15.285	33,416.591	15.158	1,501	2,804	4,032
August	12.680	27,643.182	12.539	1,571	2,364	3,708
September	13.291	29,526.000	13.393	2,168	2,036	3,151
October	14.225	31,044.891	14.082	2,493	2,263	3,538
November	14.178	30,599.886	13.880	2,634	2,533	3,905
December	12.105	25,979.028	11.784	2,296	2,745	4,149
Yearly average	16.905	37,216.201	16.881	2,678	2,999	4,321
<b>2008:</b>						
<u>Average for month of:</u>						
January	12.686	27,679.773	12.555	2,523	2,535	4,013
February	12.962	27,948.452	12.677	2,690	2,628	4,175
March	14.296	31,216.974	14.160	3,020	2,905	4,579
April	13.452	28,968.068	13.140	3,063	3,297	4,818

<sup>1</sup>American Metal Market began publishing monthly stainless consumer buying prices for the first time in its September 2007 issue. Computation of the monthly average price is based on the number of actual working days in the month and does not include weekends and holidays.

<sup>2</sup>Mean of the cash buyer price and the cash seller and settlement price.