

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

Linda M. White (Data)
Telephone: (703) 648-7986
Fax: (703) 648-7975
E-mail: lwhite@usgs.gov

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

NICKEL IN APRIL 2007

Reported domestic nickel consumption in April, on a daily average basis, was 12% greater than the total for March, according to the U.S. Geological Survey. Daily average use of nickel metal and ferronickel for stainless and heat resisting steels was 7% greater than the corresponding average for March. Use of nickel metal to make superalloys (such as INCONEL 718 and WASPALOY) increased by 17% from March levels, on a daily average basis. The increase in the superalloy category was accompanied by a 26% increase in the "Other nickel & nickel alloys" category (such as INCONEL 600 and Nickel 200). Sales to plating companies averaged 27.4 metric tons per day (t/d), 12% more than the March figure of 24.6 t/d. Percentages reported in this paragraph are based on data concealed to avoid revealing individual company proprietary data.

The United States imported 29,200 metric tons (t) of primary nickel in the first quarter of 2007, about 29% less than the 41,300 t for the corresponding quarter of 2006. About 86%, or 25,200 t, of the primary nickel was Class I materials. Class I materials are refined products with a nickel content of 99% or greater (electrolytic cathode, briquets, granules, pellets, powders, rondelles, etc.). Trade data for April 2007 will appear in a subsequent report.

On April 30, stocks in London Metal Exchange (LME) warehouses worldwide totaled 4,980 t, down 5% from 5,232 t on March 31. LME stocks have been minimal since mid-2006 owing to strong demand for austenitic stainless steel in Asia (International Nickel Study Group, 2007). On February 28, stocks bottomed out at 3,342 t—the lowest end-of-month figure reported in at least 12 years. World prices reflected the critically low stock levels. The average LME cash price for April was \$50,249 per metric ton (\$22.793 per pound), a record high. The monthly cash price has climbed steadily and sharply since early 2006.

Nickel consumers, producers, and traders continued to be concerned about tight nickel supplies and record high prices. The average LME 3-months mean nickel price for April was \$48,059 per metric ton (\$21.799 per pound). Several analysts and traders warned that the market was becoming overly speculative and that nickel prices could turn downward if key

markets for stainless steel in Europe and the United States softened.

Some stainless steel producers have begun increasing the proportion of ferritic and low-nickel stainless steels in their production mixes to counter high nickel prices. Outokumpu Oyj has increased production of LDX 2101[®], a proprietary duplex stainless steel product in which manganese replaces most of the nickel. LDX 2101[®] has only 1.5% nickel, compared with 9.2% for 304L—one of the more conventional austenitic grades of stainless steel favored by engineers. LDX 2101[®] is now being used to fabricate storage tanks and silos for the food and beverage industry. The relatively new duplex steel is also being used to make high-strength, corrosion-resistant pipes and tubes for the oil & gas industry (Koch, 2007; Outokumpu Oyj, 2007).

At the beginning of April, Glencore International AG, a Swiss-based commodities trading group, became the sole distribution agent for Xstrata Nickel. Xstrata Nickel, a business unit of Xstrata plc, is a leading producer of nickel metal, ferronickel, and cobalt metal. The distribution agreements ended months of speculation after Xstrata plc acquired Falconbridge Limited in November 2006. At that time, Falconbridge was the fourth leading nickel producer in the world, with several mines and a smelter in Canada, a ferronickel operation in the Dominican Republic, and a refinery in Norway. Glencore has a global network of some 50 sales offices in more than 40 countries. As of June 30, 2007, Glencore owned 34.66% of the issued share capital of Xstrata plc (Platts Metals Week, 2007; Xstrata plc, 2007, p. 14, 78).

References Cited

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- Platts Metals Week, 2007, Glencore/Xstrata Nickel marketing deal: Platts Metals Week, v. 78, no. 14, April 2, p. 15.
- Xstrata plc, 2007, Interim Report—2007: Zug, Switzerland, Xstrata plc, July, 84 p.

TABLE 1
CONSUMPTION OF NICKEL (EXCLUSIVE OF SCRAP), BY FORM AND USE¹

(Metric tons, nickel content)

Period	Cathodes, pellets, briquets, and powder	Ferronickel	Oxide-sinter, salts, and other forms	Total	Total year to date
2006:					
April	6,510	788	59	7,350	29,500
May	6,500	850	59	7,410	36,900
June	6,520	758	59	7,340	44,200
July	6,170	677	52	6,900	51,100
August	6,370	788	59	7,210	58,300
September	6,090	823	57	6,970	65,300
October	6,300	851	57	7,210	72,500
November	6,030	709	52	6,790	79,300
December	5,170	655	52	5,880	85,200
January-December	75,100	9,350	712	85,200	XX
2007:					
January	6,380	854	55	7,290	7,290
February	6,030	759	55	6,840	14,100
March	5,700	846	63	6,610	20,700
April:					
Steel:					
Stainless and heat resisting	2,590	812	W	3,410	13,400
Alloy (excludes stainless)	261	--	--	261	962
Superalloys	1,210	--	W	1,210	4,790
Copper-nickel alloys	W	--	--	W	W
Electric, magnetic, and expansion alloys	7	--	--	7	38
Other nickel & nickel alloys	W	--	W	W	W
Cast iron	W	--	--	W	W
Electroplating (sales to platers)	813	--	W	813	3,150
Chemical and chemical uses	W	--	--	W	W
Other uses	1,400	--	58	1,460	5,570
Total reported	6,290 ²	812	58	7,160	27,900
Total all companies (calc) ³	XX	XX	XX	14,000	54,800
2007: January-April	24,400	3,270	233	27,900	XX
2006: January-April	26,000	3,240	266	29,500	XX

W Withheld to avoid disclosing company proprietary data; included in "Other uses" category. XX Not applicable. -- Zero.

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

²Of consumption, 4,110 metric tons were consumed as cathodes and pellets, the remainder as briquets and powder.

³Figures represent calculated apparent consumption; based on the revised proportion of reported primary consumption (50.94%) to apparent primary consumption for 2004.

TABLE 2
ENDING STOCKS OF NICKEL (EXCLUSIVE OF SCRAP) HELD BY CONSUMERS, BY FORM AND USE^{1,2}

(Metric tons, nickel content)

Period	Cathodes, pellets, briquets, and powder	Ferronickel	Oxide-sinter, salts, and other forms	Total
2006:				
April	2,100	332	170	2,610
May	2,490	292	154	2,940
June	2,250	307	145	2,710
July	2,010	333	151	2,500
August	1,990	439	166	2,590
September	1,840	413	151	2,410
October	1,550	364	153	2,070
November	1,780	364	165	2,300
December	1,890	380	159	2,430
2007:				
January	1,980	427	162	2,570
February	1,770	466	171	2,410
March	1,900	471 ^r	155 ^r	2,530
April				
Steel (stainless, heat resisting and alloy)	600	450	(3)	1,050
Nonferrous alloys ⁴	927	W	(3)	927
Foundry (cast irons)	(3)	W	--	(3)
Chemical (catalysts, ceramics, plating salt, etc.) and unspecified uses	79	W	178	257
Total	1,610	450	178	2,230

^rRevised. W Withheld to avoid disclosing company proprietary data. -- Zero.

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

²Stocks 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.

³Included in the "Chemical and unspecified uses" category.

⁴Includes 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 USE¹

(Metric tons, nickel content)

Period	Consumption			Stocks		
	Ferrous scrap ²	Nonferrous scrap ³	Total scrap	Ferrous scrap ²	Nonferrous scrap ³	Total scrap
2006:						
April	5,250	693	5,950	2,660	49	2,710
May	4,340	644	4,980	2,760	54	2,810
June	3,840	836	4,670	3,090	44	3,130
July	4,450	658	5,100	3,110	57	3,170
August	5,560	705	6,260	2,720	50	2,770
September	5,930	741	6,680	2,350	47	2,400
October	5,040	590	5,630	2,470	58	2,530
November	NA	506	NA	NA	45	NA
December	NA	465	NA	NA	48	NA
January-December ⁴	46,500	7,980	53,500	XX	XX	XX
2007:						
January	NA	674	NA	NA	53	NA
February	NA	568	NA	NA	77	NA
March	NA	883	NA	NA	47	NA
April	NA	NA	NA	NA	52	NA

NA Not available. XX Not applicable.

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

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

³Combined consumption and stocks of aluminum-base, copper-base, and nickel-base scrap.

⁴Consumption data do not add to totals shown owing to missing data.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF NICKEL, BY COUNTRY¹

(Metric tons, nickel content)²

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 ³	Total year to date ⁴	Wrought nickel
2006:										
March	12,300	695	1,530	67	567	817	369	16,400	45,200	124
April	12,900	730	1,300	121	621	1,100	287	17,100	62,200	83
May	10,400	1,170	1,090	107	561	1,370	279	15,000	77,200	99
June	10,900	648	1,050	67	713	1,500	326	15,200	92,400	174
July	9,460	802	1,530	98	731	1,540	215	14,400	107,000	105
August	11,000	785	1,200	80	543	1,620	290	15,500	122,000	88
September	10,100	739	1,020	72	418	1,150	336	13,800	136,000	78
October	8,150	542	1,220	161	575	1,060	358	12,100	148,000	88
November	10,300	513	932	99	564	881	311	13,600	162,000	61
December	7,450	609	1,570	76	526	957	168	11,400	173,000	59
January-December	125,000	8,780	14,600	1,210	6,850	13,500	3,680	173,000	XX	1,110
2007:										
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:										
Australia	1,470	--	--	--	--	--	(5)	1,470	2,750	--
Canada	4,210	334	--	--	80	757	27	5,410	16,300	3
China	--	--	--	--	8	--	23	31	90	(5)
Colombia	--	--	244	--	8	6	(5)	258	587	--
Dominican Republic	--	--	951	--	--	3	--	954	1,990	--
Finland	42	--	--	--	--	--	59	101	655	--
France	45	--	--	--	48	--	10	103	244	22
Germany	--	13	--	--	54	--	50	117	289	14
Japan	--	47	--	--	28	--	87	162	383	5
Mexico	1	--	--	--	25	262	14	302	637	--
New Caledonia	--	--	150	--	--	--	--	150	250	--
Norway	621	--	--	--	10	--	--	631	3,000	--
Russia	1,910	122	--	--	--	--	--	2,030	4,230	--
South Africa	118	60	--	(5)	--	--	--	178	291	--
Sweden	--	5	--	--	--	--	--	5	12	--
United Kingdom	12	35	--	5	224	2	8	286	768	2
Zimbabwe	92	--	--	--	--	--	--	92	152	--
Other	20 ⁶	10	--	2	94	59	79	264	577	5
Total	8,550	626	1,350	7	579	1,090	357	12,600	33,200	51
2007: January-March	23,500	1,720	2,810	211	1,520	2,490	959	33,200	XX	178
2006: January-March	33,900	2,240	3,700	326	1,600	2,300	1,110	45,200	XX	274

XX Not applicable. --Zero.

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

²The 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%).

³Excludes wrought nickel.

⁴May include revisions for prior months.

⁵Less than ½ unit.

⁶All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF NICKEL, BY COUNTRY¹

(Metric tons, nickel content)²

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 ³	Total year to date	Wrought nickel
2006:										
March	87	92	5	69	942	2,700	631	4,520	14,900	114
April	189	111	22	8	975	2,540	387	4,230	19,100	151
May	79	100	6	8	2,070	3,420	636	6,320	25,400	119
June	48	64	(4)	4	1,420	2,910	454	4,890	30,300	84
July	39	73	3	4	2,120	3,090	358	5,690	36,000	101
August	25	78	3	5	2,010	3,120	673	5,920	41,900	96
September	68	67	(4)	9	2,000	4,170	556	6,870	48,800	89
October	13	71	1	5	2,420	2,630	591	5,740	54,500	85
November	47	106	3	11	2,650	3,140	491	6,450	61,000	66
December	57	71	--	7	2,610	3,350	389	6,480	67,400	61
January-December	882	1,030	66	150	21,300	38,100	5,920	67,400	XX	1,230
2007:										
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	192
March:										
Australia	--	(4)	--	--	126	--	--	126	162	(4)
Belgium	--	2	--	2	--	11	8	23	137	1
Canada	8	9	--	245	1,160	200	214	1,840	4,520	12
China	--	3	--	--	--	1,480	184	1,670	3,950	7
Germany	--	19	--	--	192	2	15	228	848	3
India	--	1	--	--	19	236	44	300	802	1
Italy	--	1	--	--	--	--	12	13	22	1
Japan	--	10	--	1	1,090	470	11	1,580	5,100	5
Korea, Republic of	--	14	--	--	28	332	12	386	972	4
Mexico	67	5	--	(4)	32	2	8	114	329	4
Netherlands	--	(4)	--	--	--	119	(4)	120	454	15
South Africa	--	--	--	--	--	--	3	3	7	(4)
Spain	--	(4)	--	--	--	792	--	792	2,960	--
Sweden	--	(4)	--	--	64	27	--	91	143	(4)
Taiwan	(4)	9	--	--	--	1,540	6	1,550	4,170	21
United Kingdom	(4)	17	--	(4)	96	27	28	169	358	2
Other	18	22	5	1	--	1,090	114	1,250	2,610	23
Total	93	112	5	249	2,810	6,330	659	10,300	27,500	99
2007: January-March	269	280	8	252	8,590	16,700	1,440	27,500	XX	435
2006: January-March	317	285	28	89	3,010	9,740	1,390	14,900	XX	377

XX Not applicable. -- Zero.

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

²The 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%).

³Excludes wrought nickel.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF NICKEL ALLOYS, BY COUNTRY¹

(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
2006:									
March	1,040	398	516	302	41	335	204	2,840	7,040
April	400	427	472	224	25	251	127	1,930	8,960
May	404	338	596	262	17	382	266	2,270	11,200
June	486	338	524	259	31	373	276	2,290	13,500
July	578	581	526	242	10	457	182	2,580	16,100
August	705	522	427	338	3	217	133	2,350	18,400
September	373	281	501	272	14	183	143	1,770	20,200
October	517	464	492	390	34	316	160	2,370	22,600
November	336	482	755	355	26	237	133	2,330	24,900
December	351	485	431	363	25	465	149	2,270	27,200
January-December	6,180	4,990	6,270	3,640	234	3,620	2,250	27,200	XX
2007:									
January	438	481	573	204	29	307	91	2,120	2,120
February	390	459	452	311	21	188 ²	148	1,970	4,090
March:									
Australia	129	--	1	--	--	--	8	138	420
Belgium	15	--	1	--	--	--	--	16	26
Canada	13	--	6	--	(2)	15	27	61	117
China	--	--	(2)	(2)	(2)	(2)	39	40	143
France	19	5	198	13	--	18	16	269	668
Germany	155	67	253	301	10	65	4	855	2,450
Italy	--	294	(2)	--	--	(2)	(2)	294	853
Japan	1	(2)	4	1	--	4	1	11	111
Mexico	--	--	(2)	--	--	(2)	4	4	22
Netherlands	--	--	(2)	6	--	1	7	14	38
Sweden	--	37	204	3	--	71	--	315	857
United Kingdom	27	23	3	1	(2)	7	17	78	295
Other	59	54	21	3	2	2	16	157	347
Total	418	480	691	328	12	183	139	2,250	6,340
2007: January-March	1,250	1,420	1,720	843	62	679	378	6,340	XX
2006: January-March	2,030	1,070	1,540	932	48	737	676	7,040	XX

¹Revised. XX Not applicable. -- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 7
U.S. EXPORTS OF NICKEL ALLOYS, BY COUNTRY¹

(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
2006:									
March	1,040	1,800	63	473	33	281	360	4,050	10,400
April	955	1,730	71	371	30	245	246	3,650	14,100
May	687	1,610	95	394	19	236	326	3,360	17,400
June	550	1,650	75	426	21	226	286	3,230	20,700
July	317	1,230	61	391	16	194	261	2,470	23,100
August	606	1,460	95	400	16	234	292	3,110	26,200
September	814	1,350	62	443	14	494	207	3,380	29,600
October	829	1,430	66	412	21	1,170	253	4,180	33,800
November	488	1,170	80	361	14	182	223	2,520	36,300
December	387	1,430	55	537	14	226	198	2,850	39,200
January-December	7,550	18,000	881	4,890	252	4,410	3,240	39,200	XX
2007:									
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:									
Australia	(2)	3	3	4	--	4	(2)	14	24
Belgium	1	221	9	4	1	3	2	241	867
Canada	11	84	15	35	7	48	22	222	645
China	(2)	192	3	43	(2)	35	40	314	759
France	112	217	(2)	21	(2)	5	1	356	1,060
Germany	53	323	2	317	2	3	2	702	1,230
India	1	13	4	10	(2)	2	--	30	53
Ireland	(2)	--	(2)	(2)	--	(2)	1	2	9
Israel	--	99	(2)	2	(2)	(2)	(2)	101	288
Italy	61	5	1	65	(2)	2	5	139	363
Japan	322	49	(2)	12	(2)	22	1	406	942
Korea, Republic of	--	42	1	12	1	8	1	65	242
Mexico	4	112	17	5	1	64	32	235	709
Netherlands	--	5	--	2	--	12	3	22	67
Singapore	2	22	4	16	(2)	2	3	49	117
Spain	2	(2)	(2)	2	--	(2)	(2)	4	41
Sweden	--	1	1	2	--	1	4	9	29
Switzerland	(2)	1	3	4	--	(2)	(2)	9	20
Taiwan	(2)	2	2	8	--	3	1	16	45
United Kingdom	67	187	6	73	(2)	6	7	346	967
Other	84	25	7	65	3	96	33	313	768
Total	720	1,600	78	702	15	316	158	3,590	9,250
2007: January-March	1,830	4,220	169	1,610	31	836	559	9,250	XX
2006: January-March	1,920	4,900	221	1,150	87	1,200	947	10,400	XX

XX Not applicable. -- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 8
NICKEL CONSUMPTION IN CAST AND WROUGHT PRODUCTS

	Percent	
	Wrought	Cast
April 2007:		
Stainless and heat resisting steels	100	(1)
Alloy steels	99	1
Superalloys	91	9
Copper-nickel alloys	96	4
Other nickel-base alloys	100	(1)

¹Less than ½ unit.

TABLE 9
NICKEL PRICES

Date	Platts Metals Week				American Metal Market ²			
	Cathode NY Dealer \$/lb.	LME Cash mean ¹ \$/t	LME Cash mean ¹ \$/lb.	18/8 Stainless steel scrap free market \$/long ton (gw)	18/8 Stainless steel scrap Pittsburgh \$/long ton (gw)	304 Stainless steel scrap: solids, clips Pittsburgh \$/long ton (gw)	316 Stainless steel scrap: solids, clips Pittsburgh \$/long ton (gw)	
2006:								
Average for month of:								
April	8.184	17,931.806	8.134	1,656	1,531	XX	XX	
May	9.425	21,064.524	9.555	1,909	1,813	XX	XX	
June	9.664	20,747.045	9.411	1,963	2,088	XX	XX	
July	11.750	26,568.571	12.051	2,275	2,138	XX	XX	
August	13.808	30,727.955	13.938	2,493	2,419	XX	XX	
September	13.634	30,117.381	13.661	2,534	2,681	XX	XX	
October	14.822	32,692.500	14.829	2,584	2,662	XX	XX	
November	14.535	32,099.773	14.560	2,561	XX	2,783	3,750	
December	15.657	34,559.079	15.676	2,728	XX	2,805	3,881	
Yearly average	10.982	24,243.860	10.997	2,090	2,090	XX	XX	
2007:								
Average for week ending:								
April	6	21.839-24.188	50,106.875	22.728	4,000-4,150	XX	3,900-3,950	5,500-5,600
April	13	23.494-24.057	50,474.375	22.895	3,950-4,100	XX	3,900-3,950	5,500-5,600
April	20	23.934-24.027	50,154.500	22.750	4,100-4,150	XX	3,900-3,950	5,500-5,600
April	27	23.290-24.698	50,318.500	22.824	4,000-4,100	XX	3,900-3,950	5,500-5,600
May	4	23.723-24.315	51,137.500	23.196	4,140-4,185	XX	3,900-3,950	5,500-5,600
May	11	24.115-24.840	52,981.875	24.032	4,000-4,050	XX	4,150-4,200	5,700-5,800
May	18	24.409-25.188	53,206.000	24.134	3,700-3,800	XX	4,150-4,200	5,700-5,800
May	25	23.220-24.989	51,861.000	23.524	3,300-3,400	XX	4,150-4,200	5,700-5,800
June	1	23.218-23.554	50,731.250	23.011	2,800-3,000	XX	3,700-3,800	5,000-5,100
June	8	20.589-23.283	47,268.500	21.441	2,450-2,550	XX	3,700-3,800	5,000-5,100
June	15	19.092-20.460	41,742.500	18.934	1,800-2,000	XX	3,700-3,800	5,000-5,100
June	22	17.142-19.456	38,833.500	17.615	1,800-2,000	XX	3,700-3,800	5,000-5,100
Average for month of:								
January		16.177	36,795.227	16.690	2,866	XX	2,917 ^r	4,114 ^r
February		18.309	41,171.125	18.675	3,141	XX	3,146 ^r	4,243 ^r
March		21.238	46,303.409	21.003	3,738	XX	3,481 ^r	4,856 ^r
April		23.139	50,249.474	22.793	4,069	XX	3,925	5,550
May		23.737	52,160.833	23.660	3,638 ³	XX	4,060 ^r	5,589 ^r

^rRevised. XX Not applicable.

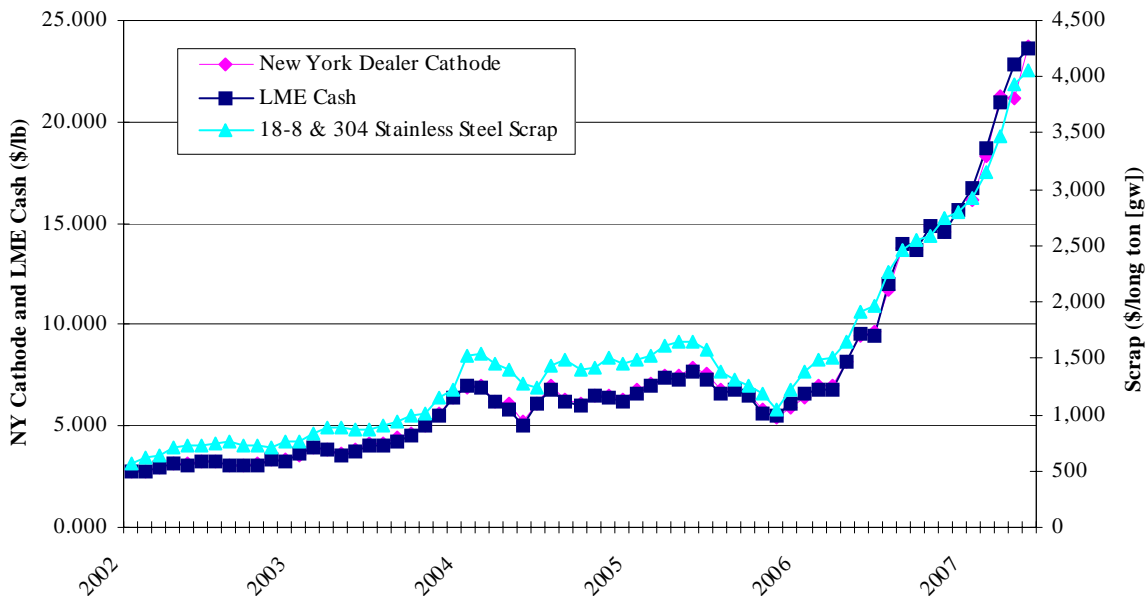
¹Mean of the cash buyer price and the cash seller and settlement price.

²On November 1, 2006, American Metal Market (AMM) changed its price listings for austenitic stainless steel scrap. AMM has begun reporting prices for Type 316 solids & clips and has changed its listing for 18-8 bundles, solids & clips to Type 304 solids & clips. See November AMM Scrap Iron & Steel Prices section for details. All prices remain in dollars per gross (long) ton. More complete AMM price data will appear in subsequent U.S. Geological Survey Mineral Industry Surveys. AMM monthly averages are calculated by the U.S. Geological Survey.

³Confirmed by Platts Metals Week.

2002-2007 AVERAGE MONTHLY PRICES

[Derived from Platts Metals Week (MW) and American Metal Market (AMM) quotations]
 Stainless steel scrap: AMM 2002-2003; MW 2004-Oct. 2006; AMM 304, Nov. 2006 to present



2002-2007 STOCKS

End of month stocks for the London Metal Exchange (LME) actually represent opening reported stocks for the first business day of the following month

