

Mineral Industry Surveys

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NICKEL IN OCTOBER 2007

Reported total domestic nickel consumption in October, on a daily average basis, was 15% less than that for September, according to the U.S. Geological Survey. Daily average use of nickel metal and ferronickel for stainless and heat resisting steels was significantly less than that for September. Average daily use of nickel metal to make superalloys (such as INCONEL 718 and WASPALOY) increased by 16% from September levels. Average daily use also increased significantly in the "Other nickel and nickel alloys" category (such as INCONEL 600 and Nickel 200). Sales to plating companies averaged 27.8 metric tons per day (t/d), 9% greater than the September figure of 25.6 t/d. Percentages reported in this paragraph are based on data withheld to avoid revealing individual company proprietary data.

The United States imported 93,800 metric tons (t) of primary nickel in the first 9 months of 2007, 22% less than the 120,000 t for the corresponding period of 2006. About 86%, or 80,800 t, of the primary nickel was Class I materials. Class I materials

(electrolytic cathode, briquets, granules, pellets, powders, rondelles, etc.) are refined products with a nickel content of 99% or greater. Trade data for October 2007 will appear in a subsequent report.

On October 31, stocks in London Metal Exchange (LME) warehouses worldwide totaled 37,662 t, up 14% from 32,934 t on September 30. LME stocks grew dramatically during the summer and into the autumn as global production of austenitic stainless steel, the principal use of nickel, slowed.

World prices weakened during the summer, but partially recovered in the autumn despite the buildup in LME stocks. The average monthly LME cash price for October was \$31,045 per metric ton (\$14.082 per pound), a 5% increase from the September figure of \$29,526 per metric ton (\$13.393 per pound). The October price, however, was 40% less than the record high of \$52,161 (\$23.660 per pound) reached in May. The average LME 3-month mean nickel price for October was \$31,448 per metric ton (\$14.265 per pound).

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: | | | | | |
| October | 6,530 | 851 | 55 | 7,440 | 74,600 |
| November | 6,270 | 709 | 50 | 7,030 | 81,600 |
| December | 5,390 | 655 | 49 | 6,100 | 87,700 |
| January-December | 77,700 | 9,350 | 688 | 87,700 | XX |
| 2007: | | | | | |
| January | 6,370 | 854 | 53 | 7,280 | 7,280 |
| February | 6,020 | 759 | 53 | 6,830 | 14,100 |
| March | 5,700 | 846 | 61 | 6,600 | 20,700 |
| April | 6,280 | 812 | 56 | 7,150 | 27,900 |
| May | 6,000 | 723 | 54 | 6,780 | 34,600 |
| June | 6,080 | 827 | 60 | 6,970 | 41,600 |
| July | 5,720 | 700 | 49 | 6,470 | 48,100 |
| August | 6,210 | 815 | 56 | 7,080 | 55,200 |
| September | 5,300 ^r | 795 | 61 | 6,160 ^r | 61,300 |
| October: | | | | | |
| Steel: | | | | | |
| Stainless and heat resisting | 1,400 | 388 | W | 1,790 | 31,500 |
| Alloy (excludes stainless) | 182 | (2) | -- | 182 | 2,270 |
| Superalloys | 792 | -- | W | 792 | 10,900 |
| Copper-nickel alloys | W | -- | -- | W | W |
| Electric, magnetic, and expansion alloys | 13 | -- | -- | 13 | 108 |
| Other nickel & nickel alloys | W | -- | W | W | W |
| Cast iron | W | -- | -- | W | W |
| Electroplating (sales to platers) | 862 | -- | -- | 862 | 7,940 |
| Chemical and chemical uses | W | -- | W | W | W |
| Other uses | 1,700 | -- | 48 | 1,750 | 14,100 |
| Total reported | 4,950 ³ | 388 | 48 | 5,390 | 66,700 |
| Total all companies (calc) ⁴ | XX | XX | XX | 8,830 | 109,000 |
| 2007: January-October | 58,600 | 7,520 | 555 | 66,700 | XX |
| 2006: January-October | 66,000 | 7,990 | 588 | 74,600 | XX |

^rRevised. 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.

²Withheld to avoid disclosing company proprietary data

³Of consumption, 4,230 metric tons were consumed as cathodes and pellets, the remainder as briquets and powder.

⁴Figures represent calculated apparent consumption; based on the revised proportion of reported primary consumption (61.01%) to apparent primary consumption for 2006.

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: | | | | |
| October | 1,560 | | 364 | 154 | 2,080 |
| November | 1,790 | | 364 | 176 | 2,330 |
| December | 1,880 | | 380 | 160 | 2,420 |
| 2007: | | | | | |
| January | 1,920 | | 427 | 175 ^r | 2,520 ^r |
| February | 1,650 | | 466 | 182 ^r | 2,300 ^r |
| March | 1,790 | | 471 | 166 ^r | 2,420 |
| April | 1,470 | | 463 | 176 ^r | 2,110 ^r |
| May | 1,570 | | 466 | 182 ^r | 2,220 ^r |
| June | 1,550 | | 403 | 149 | 2,100 |
| July | 1,630 | | 432 | 161 | 2,230 |
| August | 1,630 | | 504 | 173 | 2,310 |
| September | 1,400 | | 466 | 257 | 2,120 |
| October: | | | | | |
| Steel (stainless, heat resisting and alloy) | 614 | | 419 | (3) | 1,030 |
| Nonferrous alloys ⁴ | 727 | | (3) | (3) | 727 |
| Foundry (cast irons) | (3) | | -- | -- | (3) |
| Chemical (catalysts, ceramics, plating salt, etc.) and unspecified uses | (3) | | -- | 210 | 210 |
| Total | 1,340 | | 419 | 210 | 1,970 |

^rRevised. -- 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 "Oxide-sinter, salts, and other forms: 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 | Ferrous scrap ² | Nonferrous scrap ³ | Total |
| 2006: | | | | | | |
| October | 6,970 | 590 | 7,560 | 3,980 | 58 | 4,030 |
| November | 6,310 | 506 | 6,820 | 4,140 | 45 | 4,190 |
| December | 5,460 | 465 | 5,930 | 4,300 | 48 | 4,350 |
| January-December | 79,000 | 7,980 | 86,900 | XX | XX | XX |
| 2007: | | | | | | |
| January | 7,620 | 745 | 8,370 | 4,240 | 57 | 4,300 |
| February | 6,190 | 617 | 6,810 | 4,180 | 80 | 4,260 |
| March | 5,500 | 933 | 6,430 | 5,430 | 51 | 5,480 |
| April | 6,750 | 776 | 7,520 | 4,550 | 53 | 4,610 |
| May | 5,620 | 787 | 6,400 | 4,810 | 51 | 4,860 |
| June | 6,060 | 867 | 6,930 | 5,120 | 51 | 5,170 |
| July | 5,640 | 457 | 6,100 | 4,880 | 32 | 4,910 |
| August | 5,540 | 503 | 6,050 | 4,710 | 28 | 4,740 |
| September | 5,350 | 496 | 5,840 | 4,890 | 30 | 4,920 |
| October | 5,820 | 565 | 6,380 | 4,940 | 42 | 4,980 |
| Total | 60,100 | 6,750 | 66,800 | 47,700 | 475 | 48,200 |

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.

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: | | | | | | | | | | |
| 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 | 8,550 | 626 | 1,350 | 7 | 579 | 1,090 | 357 | 12,600 | 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: | | | | | | | | | | |
| Australia | 876 | 26 | -- | -- | -- | -- | -- | 902 | 8,980 | -- |
| Belgium | -- | 7 | -- | -- | 1 | -- | 8 | 16 | 240 | -- |
| Brazil | 300 | -- | -- | -- | -- | -- | -- | 300 | 658 | -- |
| Canada | 3,870 | 284 | -- | 29 | 69 | 246 | (5) | 4,500 | 47,800 | 1 |
| China | -- | 3 | -- | -- | 18 | -- | -- | 21 | 256 | 7 |
| Colombia | -- | -- | 378 | -- | -- | -- | -- | 378 | 2,550 | -- |
| Denmark | -- | -- | -- | -- | -- | -- | 2 | 2 | 145 | -- |
| Dominican Republic | -- | -- | 927 | -- | -- | -- | -- | 927 | 6,350 | -- |
| Finland | 488 | 5 | -- | -- | -- | -- | 112 | 605 | 2,390 | -- |
| France | 5 | -- | -- | -- | 40 | (5) | 10 | 55 | 879 | 5 |
| Germany | -- | 8 | -- | -- | 28 | -- | 50 | 86 | 817 | 28 |
| Israel | -- | -- | -- | -- | 23 | -- | -- | 23 | 233 | -- |
| Japan | -- | 2 | -- | -- | 3 | -- | (5) | 5 | 684 | 17 |
| Mexico | -- | -- | -- | -- | 39 | 66 | 2 | 107 | 1,960 | 20 |
| Netherlands | -- | -- | -- | 1 | -- | -- | 1 | 2 | 317 | (5) |
| New Caledonia | -- | -- | 150 | -- | -- | -- | -- | 150 | 1,260 | -- |
| Norway | 935 | -- | -- | -- | -- | -- | -- | 935 | 8,600 | -- |
| Russia | 2,140 | 80 | -- | -- | -- | -- | -- | 2,220 | 16,600 | -- |
| South Africa | -- | 40 | -- | -- | -- | -- | -- | 40 | 588 | -- |
| Sweden | -- | -- | -- | -- | -- | -- | -- | -- | 21 | -- |
| United Kingdom | 22 | 59 | -- | 2 | 155 | 2 | 18 | 258 | 2,320 | 2 |
| Zimbabwe | 56 | -- | -- | -- | -- | -- | -- | 56 | 593 | -- |
| Other | -- | -- | 25 | -- | 55 | 4 | 6 | 90 | 943 | 21 |
| Total | 8,690 | 514 | 1,480 | 32 | 431 | 318 | 209 | 11,700 | 105,000 | 101 |
| 2007: January-September | 75,700 | 5,080 | 10,100 | 351 | 4,920 | 6,410 | 2,580 | 105,000 | XX | 648 |
| 2006: January-September | 98,700 | 7,110 | 10,900 | 872 | 5,190 | 10,600 | 2,840 | 136,000 | XX | 901 |

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.

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: | | | | | | | | | | |
| September | 68 | 67 | (4) | 9 | 2,000 | 4,040 | 556 | 6,740 | 48,600 | 89 |
| October | 13 | 71 | 1 | 5 | 2,420 | 2,630 | 591 | 5,740 | 54,400 | 85 |
| November | 47 | 106 | 3 | 11 | 2,650 | 3,140 ^r | 491 | 6,450 | 60,800 | 66 |
| December | 57 | 71 | -- | 7 | 2,610 | 3,350 | 389 | 6,480 | 67,300 | 61 |
| January-December | 882 | 1,030 | 67 | 150 | 21,300 | 38,000 | 5,920 | 67,300 | 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 | 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 | 125 |
| 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: | | | | | | | | | | |
| Australia | -- | -- | -- | -- | 25 | -- | -- | 25 | 287 | -- |
| Bangladesh | -- | -- | -- | -- | -- | 143 | -- | 143 | 1,140 | -- |
| Belgium | -- | 1 | -- | 2 | 10 | 13 | -- | 26 | 327 | 4 |
| Canada | 8 | 4 | -- | 401 | 1,460 | 140 | 112 | 2,130 | 22,000 | 21 |
| China | 4 | 1 | -- | -- | -- | 1,010 | 7 | 1,020 | 9,380 | 17 |
| Colombia | -- | -- | -- | -- | -- | (4) | (4) | 1 | 273 | -- |
| Finland | -- | (4) | -- | -- | -- | 12 | -- | 12 | 2,240 | -- |
| France | -- | (4) | -- | -- | -- | 8 | 2 | 10 | 131 | 3 |
| Germany | -- | 21 | -- | -- | 7 | 1 | 6 | 35 | 1,660 | 2 |
| India | -- | 1 | -- | -- | -- | 720 | 11 | 732 | 4,700 | 1 |
| Italy | -- | 2 | -- | -- | -- | -- | 3 | 5 | 67 | (4) |
| Japan | -- | 11 | (4) | 1 | 564 | 663 | 4 | 1,240 | 14,200 | 5 |
| Korea, Republic of | -- | 2 | -- | -- | -- | 254 | 76 | 332 | 4,180 | 1 |
| Mexico | 16 | 6 | -- | (4) | 15 | -- | 10 | 47 | 1,080 | 4 |
| Netherlands | -- | -- | -- | -- | -- | 14 | 3 | 17 | 1,020 | (4) |
| Pakistan | -- | -- | -- | -- | -- | 1 | -- | 1 | 990 | -- |
| Singapore | -- | 4 | -- | -- | -- | (4) | 2 | 6 | 276 | 6 |
| South Africa | -- | (4) | -- | -- | -- | -- | 1 | 1 | 39 | -- |
| Spain | -- | -- | -- | -- | -- | 13 | -- | 13 | 3,640 | 11 |
| Sweden | -- | -- | -- | -- | 31 | 50 | 1 | 82 | 521 | 3 |
| Taiwan | (4) | 1 | -- | -- | -- | 2,060 | 5 | 2,060 | 14,300 | -- |
| Thailand | -- | 3 | -- | -- | -- | 6 | 68 | 77 | 724 | (4) |
| United Kingdom | -- | 2 | -- | (4) | 18 | 3 | 35 | 58 | 823 | 3 |
| Vietnam | -- | -- | -- | -- | -- | 5 | -- | 5 | 904 | -- |
| Other | 19 | 11 | -- | 1 | 10 | 55 | 84 | 180 | 1,960 | 15 |
| Total | 47 | 70 | (4) | 405 | 2,140 | 5,160 | 430 | 8,260 | 86,900 | 96 |
| 2007: January-September | 642 | 727 | 12 | 3,470 | 29,300 | 47,700 | 4,920 | 86,900 | XX | 1,280 |
| 2006: January-September | 765 | 778 | 64 | 127 | 13,600 | 28,900 | 4,450 | 48,600 | XX | 1,020 |

^r Revised. 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: | | | | | | | | | |
| 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 | 233 | 3,620 | 2,240 | 27,200 | XX |
| 2007: | | | | | | | | | |
| 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 | 2,090 | 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: | | | | | | | | | |
| Australia | 86 | -- | -- | -- | -- | -- | (2) | 86 | 989 |
| Belgium | -- | -- | (2) | -- | -- | -- | -- | (2) | 77 |
| Canada | -- | -- | 2 | (2) | -- | 6 | 53 | 61 | 449 |
| China | -- | (2) | -- | 3 | 1 | 2 | 86 | 92 | 695 |
| France | -- | 10 | 50 | 6 | -- | 20 | 5 | 91 | 1,890 |
| Germany | 18 | 161 | 169 | 221 | 21 | 69 | 55 | 714 | 7,010 |
| Italy | -- | 78 | -- | -- | -- | -- | 1 | 79 | 2,390 |
| Japan | (2) | 8 | 4 | 10 | -- | 19 | 3 | 44 | 586 |
| Mexico | -- | (2) | (2) | -- | -- | (2) | 2 | 2 | 82 |
| Netherlands | -- | -- | (2) | -- | -- | -- | 3 | 3 | 97 |
| Sweden | -- | 12 | 163 | 2 | -- | 4 | -- | 181 | 2,220 |
| United Kingdom | 42 | 34 | 5 | 1 | (2) | 3 | 24 | 109 | 887 |
| Other | 39 | 26 | 8 | 1 | -- | 1 | 46 | 121 | 1,260 |
| Total | 185 | 329 | 401 | 244 | 22 | 124 | 278 | 1,580 | 18,600 |
| 2007: January-September | 3,166 | 4,180 | 5,010 | 2,610 | 142 | 1,810 | 1,700 | 18,600 | XX |
| 2006: January-September | 4,977 | 3,560 | 4,590 | 2,530 | 149 | 2,600 | 1,800 | 20,200 | 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 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: | | | | | | | | | |
| 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 | 385 | 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 | 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 ^r | 192 | 303 | 2,920 | 23,700 |
| September: | | | | | | | | | |
| Australia | -- | (2) | 1 | 3 | -- | 3 | 1 | 8 | 62 |
| Belgium | 146 | 156 | 7 | 1 | -- | (2) | (2) | 310 | 3,130 |
| Canada | 3 | 50 | 9 | 66 | 6 | 20 | 10 | 164 | 1,810 |
| China | 11 | 119 | 10 | 22 | (2) | 39 | 11 | 212 | 2,250 |
| France | 233 | 325 | (2) | 19 | (2) | 1 | (2) | 578 | 4,050 |
| Germany | 8 | 61 | 2 | 30 | (2) | 6 | 19 | 126 | 2,290 |
| India | 19 | 12 | 5 | (2) | -- | (2) | (2) | 36 | 188 |
| Ireland | -- | -- | (2) | 1 | -- | 1 | 1 | 3 | 33 |
| Israel | 1 | 50 | (2) | 2 | -- | (2) | (2) | 53 | 729 |
| Italy | 28 | 31 | (2) | 14 | -- | 3 | 1 | 77 | 1,030 |
| Japan | 1 | 35 | 1 | 11 | 3 | 7 | (2) | 58 | 1,650 |
| Korea, Republic of | -- | 21 | 3 | 34 | 2 | 3 | 2 | 65 | 726 |
| Mexico | (2) | 48 | 20 | 2 | 29 | 30 | 155 | 284 | 2,280 |
| Netherlands | -- | 65 | -- | 10 | (2) | 3 | (2) | 78 | 330 |
| Singapore | 5 | 5 | 6 | 2 | -- | 2 | 2 | 22 | 281 |
| Spain | -- | (2) | -- | 27 | -- | 6 | (2) | 33 | 149 |
| Sweden | 2 | 31 | -- | 9 | -- | (2) | 7 | 49 | 178 |
| Switzerland | 49 | 1 | 1 | 4 | 1 | 1 | (2) | 57 | 216 |
| Taiwan | 4 | 16 | (2) | 8 | (2) | (2) | 1 | 29 | 146 |
| United Kingdom | 68 | 141 | 15 | 55 | (2) | 11 | 5 | 295 | 2,650 |
| Other | 11 | 17 | 9 | 50 | 4 | 56 | 64 | 211 | 2,270 |
| Total | 589 | 1,180 | 89 | 370 | 45 | 192 | 279 | 2,750 | 26,400 |
| 2007: January-September | 5,180 | 11,700 | 786 | 4,500 | 174 | 2,040 | 2,090 | 26,400 | XX |
| 2006: January-September | 5,850 | 13,900 | 679 | 3,580 | 203 | 2,830 | 2,570 | 29,600 | XX |

^rRevised. 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 |
| October 2007: | | |
| Stainless and heat resisting steels | 100 | (1) |
| Alloy steels | 99 | 1 |
| Superalloys | 83 | 17 |
| Copper-nickel alloys | 97 | 3 |
| Other nickel-base alloys | 100 | (1) |

¹Less than ½ unit.

TABLE 9
NICKEL PRICES

| Date | Platts Metals Week | | | | American Metal Market ^{1,2} | | | |
|--------------------------|--------------------------------|---------------------------------------|---|--|---|---|---|--|
| | Cathode NY Dealer \$/lb. | LME Cash mean ³ \$/t | LME Cash mean ³ \$/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: | | | | | | | | |
| 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: | | | | | | | | |
| October 5 | 13.969-14.534 | 30,248.500 | 13.720 | 2,350-2,575 | XX | 2,300-2,325 | 3,600-3,650 | |
| October 12 | 13.854-15.101 | 30,932.500 | 14.031 | 2,350-2,575 | XX | 2,300-2,325 | 3,600-3,650 | |
| October 19 | 14.564-15.169 | 31,745.000 | 14.399 | 2,350-2,575 | XX | 2,300-2,325 | 3,600-3,650 | |
| October 26 | 14.514-15.124 | 31,295.500 | 14.195 | 2,550-2,620 | XX | 2,300-2,325 | 3,600-3,650 | |
| November 2 | 14.466-14.803 | 31,245.500 | 14.173 | 2,550-2,620 | XX | 2,300-2,325 | 3,600-3,650 | |
| November 9 | 14.564-15.008 | 31,739.000 | 14.397 | 2,690-2,730 | XX | 2,575-2,600 | 3,950-4,000 | |
| November 16 | 15.010-15.716 | 32,748.500 | 14.854 | 2,755-2,800 | XX | 2,575-2,600 | 3,950-4,000 | |
| November 23 | 13.881-15.033 | 29,639.000 | 13.444 | 2,645-2,730 | XX | 2,575-2,600 | 3,950-4,000 | |
| November 30 | 12.969-13.695 | 27,852.500 | 12.634 | 2,352-2,465 | XX | 2,575-2,600 | 3,950-4,000 | |
| December 7 | 12.080-12.570 | 25,925.500 | 11.760 | 2,240-2,352 | XX | 2,775-2,800 | 4,100-4,150 | |
| December 14 | 12.112-12.475 | 25,781.000 | 11.694 | 2,240-2,352 | XX | 2,725-2,750 | 4,150-4,200 | |
| December 21 | 12.071-12.409 | 25,982.000 | 11.785 | 2,240-2,352 | XX | 2,725-2,750 | 4,150-4,200 | |
| December 28 | 12.157-12.749 | 26,688.750 | 12.106 | 2,240-2,352 | XX | 2,725-2,750 | 4,150-4,200 | |
| Average for month of: | | | | | | | | |
| January | 16.177 | 36,795.227 | 16.690 | 2,866 | XX | 2,917 | 4,114 | |
| February | 18.309 | 41,171.125 | 18.675 | 3,141 | XX | 3,146 | 4,243 | |
| March | 21.238 | 46,303.409 | 21.003 | 3,738 | XX | 3,481 | 4,856 | |
| 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 | XX | 4,060 | 5,589 | |
| June | 18.491 | 41,704.762 | 18.917 | 2,016 | XX | 3,719 | 5,018 | |
| July | 15.285 | 33,416.591 | 15.158 | 1,501 | XX | 2,804 | 4,032 | |
| August | 12.680 | 27,643.182 | 12.539 | 1,571 | XX | 2,364 | 3,708 | |
| September | 13.291 | 29,526.000 | 13.393 | 2,168 | XX | 2,036 | 3,151 | |
| October | 14.225 | 31,044.891 | 14.082 | 2,493 | XX | 2,263 | 3,538 | |
| November | 14.178 | 30,599.886 | 13.880 | 2,634 | XX | 2,533 | 3,905 | |
| December | 12.105 | 25,979.028 | 11.784 | 2,296 | XX | 2,746 | 4,149 | |

XX Not applicable.

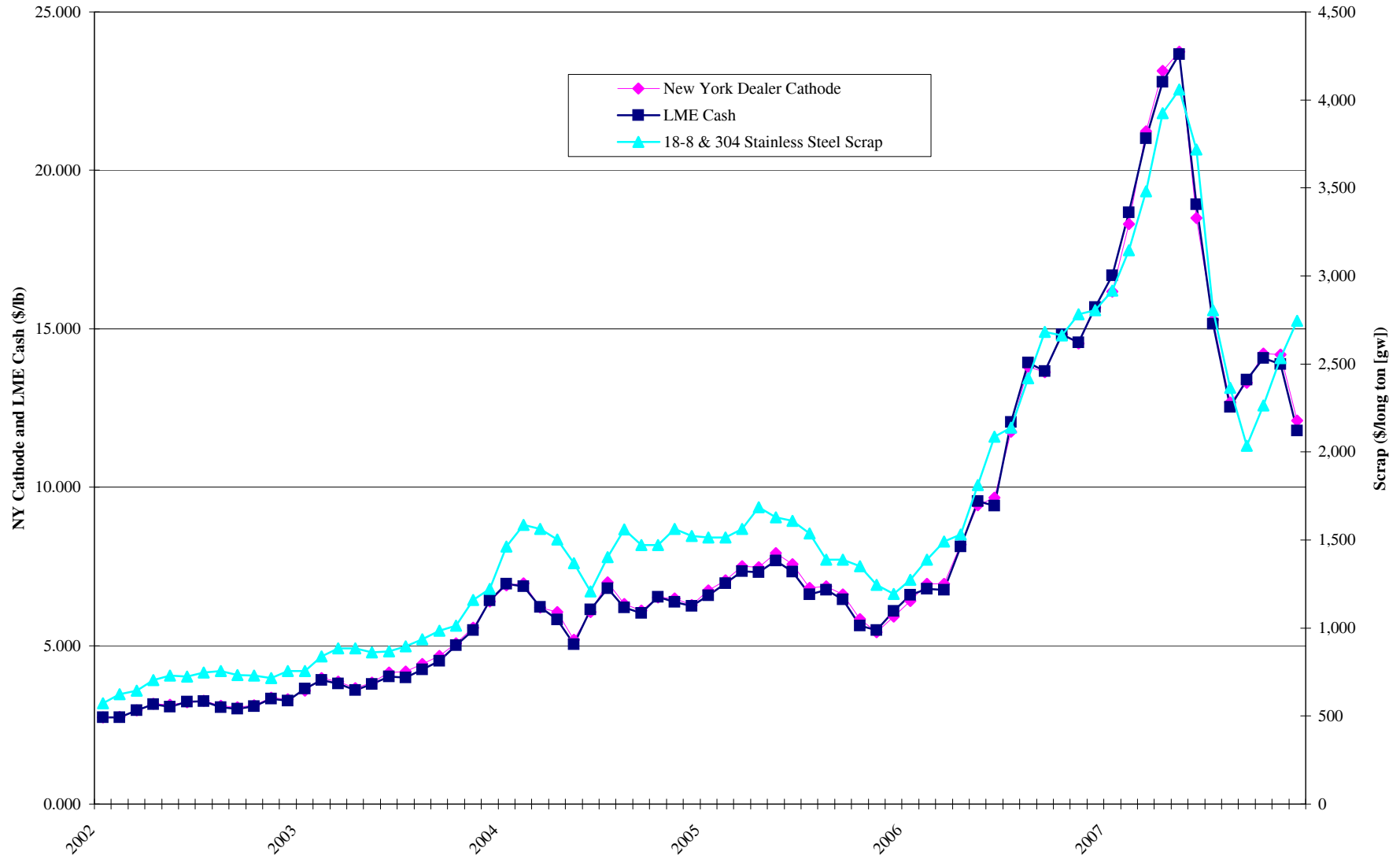
¹On November 1, 2006, American Metal Market (AMM) changed its price listings for austenitic stainless steel scrap. AMM has begun reporting prices for Type 316 solids & clips and has changed its listing for 18-8 bundles, solids & clips to Type 304 solids & clips. See November 2006 AMM Scrap Iron & Steel 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 prior to July 2007 were calculated by the U.S. Geological Survey.

²American 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. See individual issues for details.

³Mean of the cash buyer price and the cash seller and settlement price.

2002-2007 AVERAGE MONTHLY PRICES

[Derived from Platts Metals Week (MW) and American Metal Market (AMM) quotations]
New York dealer cathode and LME cash from MW and stainless steel scrap from AMM



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

