

Mineral Industry Surveys

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ALUMINUM IN APRIL 2007

Domestic primary aluminum production in April was 208,928 metric tons (t), according to the U.S. Geological Survey. The average daily production rate was 6,964 t, slightly lower than that of the previous month but 10% higher than the rate for April 2006. Total aluminum recovered from scrap in April 2007 was 234,000 t, 9% lower than in the previous month and 5% lower than in April 2006. In April 2007, 144,000 t of aluminum was recovered from new scrap, which was 9% lower than in March and 9% lower than in April 2006. Aluminum recovered from old scrap totaled 91,000 t in April, which was 9% lower than in the previous month and 1% higher than in April 2006.

At Alcoa's smelter in Alcoa, TN, a power outage caused by a lightning strike at a substation forced the closure of a potline in the middle of April. Workers were able to restore power quickly, but one of the two potlines had frozen and was not able to be restarted. After digging out the 164 pots and making repairs, the line was restarted in June, 7 weeks after the outage. The affected potline has an annual capacity of 107,000 t of aluminum (Alcoa Inc., 2007a, b).

The monthly average U.S. market price of primary aluminum ingot in April increased to \$1.308 per pound from \$1.290 per pound in March. The American Metal Market buying price range for aluminum used beverage cans (UBCs) increased to 92-94 cents per pound on April 3. On April 10, the UBC price range increased to 93-95 cents per pound. The price range for UBCs decreased to 92-94 cents per pound on April 17 and remained at that range for the rest of the month.

U.S. Trade

Total imports of aluminum for consumption (table 6) in the first quarter of 2007 were down by 12% compared with those in the first quarter of 2006. During the first 3 months of 2007 imports of crude metal and alloys declined by 16%, scrap

imports declined by 10%, and imports of semifabricated products declined by 4% compared with imports in the same period of 2006. During the first quarter of 2007, Canada continued to be the leading source of imported aluminum, supplying 59% of all aluminum imports, followed by Russia with 12%.

Total exports of aluminum (table 7) declined by 5% during the first quarter of 2007 compared with those in the same period of the previous year. Exports of crude metal and alloys declined by 11%, semifabricated product exports declined by 9%, and scrap exports declined by 1%, compared with those in the first quarter of 2006. The leading destinations of aluminum exports were Canada, China, and Mexico, in descending order of importance, which accounted for 74% of all exports during the first 3 months of 2007.

Update

The monthly average U.S. market price of primary aluminum ingot in May decreased to \$1.293 per pound from \$1.308 per pound in April. The American Metal Market buying price range for aluminum UBCs increased to 93-95 cents per pound on May 10. On May 17, the price range for UBCs increased to 93-96 cents per pound. The UBC price range decreased to 92-94 cents per pound on May 22 and then decreased again on May 30 to 89-91 cents per pound.

References Cited

Alcoa Inc., 2007a, Alcoa restarts Tennessee smelter ahead of schedule; curtails potline at Rockdale: Pittsburgh, PA, Alcoa Inc. press release, June 13, 1 p.
Alcoa Inc., 2007b, Power outage impacts Alcoa Tennessee operations: Pittsburgh, PA, Alcoa Inc. press release, April 16, 1 p.

TABLE 1
COMPONENTS OF ALUMINUM SUPPLY¹

(Thousand metric tons)

| Period | Primary production | Secondary recovery ² | | | Imports for consumption | | | Total new supply ³ | Total stocks, end of period ⁴ |
|-------------------|--------------------|---------------------------------|--------------------|--------------------|--------------------------|----------------------------|--------------------|-------------------------------|--|
| | | New | Old | Total | Metals and alloys, crude | Plates, sheets, bars, etc. | Total | | |
| 2006 ^p | 2,284 | 2,000 ^r | 1,040 ^r | 3,030 ^r | 3,440 | 1,220 ^r | 4,660 ^r | 9,970 ^r | 1,410 |
| 2006: | | | | | | | | | |
| April | 190 | 158 | 90 | 247 | 353 | 103 | 456 | 893 | 1,480 |
| May | 197 | 160 | 90 | 250 | 318 | 106 | 424 | 870 | 1,430 |
| June | 189 | 162 | 92 | 254 | 298 | 109 | 407 | 850 | 1,430 |
| July | 192 | 165 | 92 | 256 | 249 | 111 | 360 | 808 | 1,450 |
| August | 185 | 166 | 109 | 275 | 315 | 111 | 426 | 887 | 1,430 |
| September | 183 | 160 | 90 | 250 | 289 | 102 | 391 | 823 | 1,480 |
| October | 190 | 161 | 80 | 241 | 259 | 100 | 359 | 790 | 1,410 |
| November | 188 | 163 | 84 | 247 | 233 | 99 | 332 | 766 | 1,400 |
| December | 196 | 153 | 89 | 242 | 241 | 89 | 330 | 768 | 1,410 |
| January-April | 763 | 647 | 358 | 1,010 | 1,240 | 391 | 1,630 | 3,400 | 2,940 |
| 2007: | | | | | | | | | |
| January | 202 | 166 ^r | 97 | 263 ^r | 251 | 98 | 349 | 813 ^r | 1,460 ^r |
| February | 185 | 138 ^r | 79 | 217 ^r | 258 | 86 | 344 | 746 ^r | 1,460 ^r |
| March | 217 | 158 ^r | 100 ^r | 258 ^r | 238 | 93 | 332 | 807 | 1,410 |
| April | 209 | 144 | 91 | 234 | NA | NA | NA | NA | NA |
| January-April | 813 | 606 | 367 | 972 | NA | NA | NA | NA | NA |

^pPreliminary. ^rRevised. NA Not available.

¹Data are rounded to no more than three significant digits, except "Primary production"; may not add to totals shown.

²Metallic recovery from purchased, tolled, or imported scrap, expanded for full coverage of industry.

³Primary production, secondary recovery, and imports for consumption.

⁴Inventory levels reflect total for both U.S. and Canadian producers; data from the Aluminum Association Inc.

TABLE 2
ESTIMATED FULL COVERAGE CONSUMPTION OF AND METALLIC RECOVERY FROM
PURCHASED NEW AND OLD ALUMINUM SCRAP¹

(Thousand metric tons)

| Period | Secondary smelters | | Integrated aluminum companies | | Independent mill fabricators | | Foundries | | Other consumers | | Total | |
|-------------------|-----------------------|--------------------|-------------------------------|-------------------|------------------------------|-------------------|-----------------------|-------------------|-----------------------|-------------------|-----------------------|--------------------|
| | Con- sump- tion | Metal recovery | Con- sump- tion | Metal recovery | Con- sump- tion | Metal recovery | Con- sump- tion | Metal recovery | Con- sump- tion | Metal recovery | Con- sump- tion | Metal recovery |
| | | | | | | | | | | | | |
| 2006 ^p | 1,930 ^r | 1,320 ^r | 901 | 792 | 892 ^r | 836 ^r | 87 ^r | 76 ^r | 9 ^r | 8 ^r | 3,820 ^r | 3,030 ^r |
| 2006: | | | | | | | | | | | | |
| April | 135 | 97 | 79 | 71 | 77 | 72 | 8 | 7 | (2) | (2) | 299 | 247 |
| May | 138 | 100 | 66 | 58 | 90 | 84 | 8 | 7 | (2) | (2) | 302 | 250 |
| June | 138 | 100 | 74 | 66 | 86 | 81 | 8 | 7 | (2) | (2) | 307 | 254 |
| July | 136 | 99 | 76 | 68 | 88 | 82 | 8 | 7 | (2) | (2) | 308 | 256 |
| August | 167 | 126 | 71 | 64 | 83 | 78 | 8 | 7 | (2) | (2) | 330 | 275 |
| September | 135 | 98 | 77 | 69 | 80 | 75 | 8 | 7 | (2) | (2) | 300 | 250 |
| October | 130 | 94 | 69 | 62 | 83 | 78 | 8 | 7 | (2) | (2) | 289 | 241 |
| November | 139 | 103 | 76 | 61 | 81 | 76 | 8 | 7 | (2) | (2) | 304 | 247 |
| December | 134 | 98 | 82 | 66 | 76 | 71 | 8 | 7 | (2) | (2) | 299 | 242 |
| January-April | 542 | 395 | 311 | 279 | 322 | 302 | 32 | 28 | 2 | 2 | 1,210 | 1,010 |
| 2007: | | | | | | | | | | | | |
| January | 152 ^r | 112 ^r | 81 ^r | 64 ^r | 85 ^r | 80 ^r | 8 | 7 | (2) | (2) | 327 ^r | 263 ^r |
| February | 115 ^r | 78 ^r | 69 ^r | 52 ^r | 85 ^r | 80 ^r | 8 | 7 | (2) | (2) | 278 ^r | 217 ^r |
| March | 149 ^r | 106 ^r | 90 ^r | 69 ^r | 82 | 76 ^r | 8 | 7 | (2) | (2) | 329 ^r | 258 ^r |
| April | 128 | 88 | 80 | 62 | 82 | 76 | 8 | 7 | (2) | (2) | 298 | 234 |
| January-April | 544 | 384 | 320 | 247 | 334 | 312 | 32 | 28 | 2 | 2 | 1,230 | 972 |

^pPreliminary. ^rRevised.

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

²Less than 1/2 unit.

TABLE 3
CONSUMPTION OF AND RECOVERY FROM PURCHASED
NEW AND OLD ALUMINUM SCRAP IN APRIL 2007¹

(Metric tons)

| | Consumption | | Calculated metallic recovery | |
|-------------------------------|-------------------|-------------------------|------------------------------|-------------------------|
| | Tabulated reports | Estimated full coverage | Tabulated reports | Estimated full coverage |
| | | | | |
| Secondary smelters | 106,000 | 128,000 | 73,600 | 88,300 |
| Integrated aluminum companies | 80,200 | 80,200 | 62,500 | 62,500 |
| Independent mill fabricators | 68,300 | 81,900 | 63,600 | 76,400 |
| Foundries | 6,590 | 7,910 | 5,790 | 6,950 |
| Other consumers | 316 | 379 | 316 | 379 |
| Total | 262,000 | 298,000 | 206,000 | 234,000 |

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

TABLE 4
PURCHASED AND TOLL-TREATED ALUMINUM-BASE SCRAP AND SWEATED PIG IN APRIL 2007¹

(Metric tons)

| | April | | | January-April | | |
|---------------------------------------|---------------------|------------------------------|-----------------------|--------------------|------------------------------|-----------------------|
| | Stocks, opening | Net receipts ² | Melted or consumed | Stocks, closing | Net receipts ² | Melted or consumed |
| New scrap: | | | | | | |
| Extrusion | 17,600 | 44,500 | 45,100 | 17,100 | 203,000 | 204,000 |
| Can stock clippings | 1,210 | 33,700 | 33,600 | 1,300 | 136,000 | 136,000 |
| Other wrought sheet/clippings | 4,190 ^r | 21,300 | 21,600 | 3,880 | 87,300 | 87,500 |
| Casting | 1,380 ^r | 5,990 | 5,960 | 1,420 | 24,200 | 25,400 |
| Borings and turnings | 3,100 ^r | 13,300 | 13,400 | 3,010 | 54,200 | 54,100 |
| Dross and skimmings | 3,480 ^r | 35,700 | 35,800 | 3,430 | 143,000 | 143,000 |
| Total new scrap | 31,000 ^r | 155,000 | 155,000 | 30,100 | 648,000 | 650,000 |
| Old scrap: | | | | | | |
| Used castings | 3,510 ^r | 13,500 | 13,600 | 3,400 | 54,700 | 54,900 |
| Used extrusion | 419 ^r | 2,500 | 2,500 | 419 | 10,000 | 10,000 |
| Used cans (shredded, loose, baled) | 728 | 55,900 | 55,500 | 1,140 | 214,000 | 217,000 |
| Other wrought products | 2,340 | 22,700 | 22,700 | 2,340 | 94,100 | 94,100 |
| Fragmentized shredder (auto shredder) | 2,930 ^r | 11,200 | 11,400 | 2,700 | 53,400 | 53,200 |
| Total old scrap | 9,920 ^r | 106,000 | 106,000 | 9,990 | 426,000 | 429,000 |
| Sweated pig | -- ^r | 544 | 544 | -- | 2,390 | 2,390 |
| Total all classes | 40,900 ^r | 261,000 | 262,000 | 40,100 | 1,080,000 | 1,080,000 |

-- Zero.

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

²Includes data on imported aluminum-base scrap.

TABLE 5
ALUMINUM ALLOYS PRODUCED AT SECONDARY SMELTERS IN THE UNITED STATES FOR 2007^{1,2}

(Metric tons)

| | April | | | January-April | | |
|---|---------------------|------------|------------------|--------------------|------------|------------------|
| | Stocks, opening | Production | Net shipments | Stocks, closing | Production | Net shipments |
| Die-cast alloys: | | | | | | |
| 13% Si, 360, etc. (0.6% Cu, max.) | 2,760 ^r | 1,620 | 1,780 | 2,600 | 6,950 | 6,860 |
| 380 and variations | 2,440 ^r | 12,900 | 12,500 | 2,790 | 58,900 | 59,300 |
| Sand and permanent mold: | | | | | | |
| 95/5 Al-Si, 356, etc. (0.6% Cu, max.) | 1,110 | 1,510 | 1,500 | 1,110 | 6,160 | 6,240 |
| No. 319 and variations | 1,740 ^r | 4,040 | 3,020 | 2,760 | 21,500 | 20,500 |
| F-132 alloy and variations | 696 | 1,420 | 1,430 | 685 | 5,610 | 5,610 |
| Al-Zn alloys | 314 | 186 | 181 | 319 | 768 | 756 |
| Al-Si alloys (0.6% to 2.0% Cu) | 41 | 24 | 24 | 41 | 96 | 96 |
| Al-Cu alloys (1.5% Si, max.) | 283 | 411 | 411 | 283 | 1,650 | 1,650 |
| Other ³ | 4,300 ^r | 11,000 | 11,200 | 4,040 | 41,800 | 42,400 |
| Wrought alloys: | | | | | | |
| Extrusion billets | 5,130 ^r | 10,300 | 10,500 | 4,970 | 41,900 | 41,800 |
| Total all alloys | 18,800 ^r | 43,400 | 42,600 | 19,600 | 185,000 | 185,000 |
| Less: | | | | | | |
| Primary aluminum consumed | XX | 3,780 | XX | XX | 15,600 | XX |
| Primary silicon consumed | XX | 1,980 | XX | XX | 8,820 | XX |
| Other alloying ingredients consumed | XX | 387 | XX | XX | 2,630 | XX |
| Net metallic recovery from aluminum scrap and sweated pig consumed in production of secondary aluminum ingot ⁴ | XX | 37,200 | XX | XX | 158,000 | XX |

XX Not applicable.

¹Excludes integrated aluminum companies.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Includes alloys No. 12, Al-Mg, Al-Si-Cu-Ni, aluminum-base hardeners, variations of these alloys, plus other aluminum alloys.

⁴No allowance made for melt-loss of primary aluminum and alloying ingredients.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN MARCH 2007¹

(Metric tons)

| Country | Metals and alloys, crude | | Plates, sheets, bars, etc. | | Scrap | | Total | |
|----------------------|--------------------------|-------------------|----------------------------|-------------------|--------|-------------------|---------|-------------------|
| | March | January- March | March | January- March | March | January- March | March | January- March |
| Argentina | 5,870 | 12,000 | 8 | 40 | -- | -- | 5,880 | 12,000 |
| Australia | 8,730 | 19,100 | 13 | 42 | 403 | 1,480 | 9,140 | 20,600 |
| Bahrain | 2,730 | 8,150 | 1,520 | 4,010 | -- | -- | 4,250 | 12,200 |
| Belgium | -- | 58 | 932 | 3,500 | -- | 14 | 932 | 3,570 |
| Brazil | 9,240 | 22,000 | 2,350 | 8,780 | 1 | 1 | 11,600 | 30,800 |
| Canada | 164,000 | 479,000 | 38,800 | 114,000 | 26,600 | 78,500 | 229,000 | 672,000 |
| China | 4,700 | 12,400 | 12,700 | 37,700 | -- | 16 | 17,400 | 50,100 |
| France | 42 | 281 | 196 | 847 | -- | 20 | 238 | 1,150 |
| Germany | 110 | 672 | 9,080 | 25,700 | 109 | 122 | 9,300 | 26,500 |
| Hungary | -- | -- | 17 | 43 | -- | -- | 17 | 43 |
| Italy | 110 | 180 | 839 | 2,540 | (2) | 23 | 949 | 2,740 |
| Japan | 35 | 129 | 1,140 | 3,260 | 30 | 129 | 1,200 | 3,520 |
| Korea, Republic of | 58 | 145 | 341 | 562 | 40 | 58 | 439 | 765 |
| Mexico | 1,250 | 3,690 | 1,660 | 5,050 | 8,500 | 24,900 | 11,400 | 33,700 |
| Netherlands | 56 | 165 | 87 | 458 | -- | -- | 143 | 623 |
| Norway | 629 | 1,290 | 59 | 137 | -- | -- | 688 | 1,420 |
| Russia | 19,900 | 122,000 | 5,490 | 14,800 | -- | 1,660 | 25,400 | 139,000 |
| South Africa | 6,640 | 20,300 | 4,840 | 12,400 | -- | -- | 11,500 | 32,700 |
| Spain | 13 | 24 | 88 | 305 | -- | -- | 101 | 329 |
| Sweden | -- | -- | 91 | 298 | -- | -- | 91 | 298 |
| Switzerland | (2) | (2) | 547 | 1,380 | -- | -- | 547 | 1,380 |
| United Arab Emirates | 9,650 | 24,800 | -- | -- | -- | 18 | 9,650 | 24,800 |
| United Kingdom | 290 | 848 | 491 | 1,340 | 34 | 38 | 814 | 2,220 |
| Venezuela | 3,190 | 5,480 | 1,010 | 3,210 | -- | 166 | 4,210 | 8,860 |
| Other | 1,100 | 13,700 | 11,000 | 36,800 | 3,180 | 11,000 | 15,300 | 61,600 |
| Total | 238,000 | 746,000 | 93,300 | 277,000 | 38,900 | 118,000 | 370,000 | 1,140,000 |

-- 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 ALUMINUM IN MARCH 2007¹

(Metric tons)

| Country or territory | Metals and alloys, crude | | Plates, sheets, bars, etc. | | Scrap | | Total | |
|----------------------|--------------------------|-------------------|----------------------------|-------------------|---------|-------------------|---------|-------------------|
| | March | January- March | March | January- March | March | January- March | March | January- March |
| Australia | 31 | 88 | 150 | 335 | 5 | 19 | 186 | 442 |
| Azerbaijan | -- | -- | -- | 3 | -- | -- | -- | 3 |
| Belgium | 77 | 238 | 234 | 1,100 | -- | -- | 312 | 1,340 |
| Brazil | (2) | 8 | 638 | 2,620 | 331 | 504 | 969 | 3,130 |
| Canada | 9,360 | 27,900 | 36,600 | 107,000 | 14,200 | 39,600 | 60,100 | 174,000 |
| China | 43 | 112 | 1,340 | 3,280 | 55,700 | 162,000 | 57,100 | 165,000 |
| Czech Republic | -- | -- | 9 | 79 | -- | -- | 9 | 79 |
| Dominican Republic | (2) | 10 | 12 | 109 | -- | -- | 13 | 119 |
| France | 42 | 71 | 942 | 3,180 | 3 | 3 | 986 | 3,250 |
| Germany | 57 | 279 | 667 | 2,370 | 97 | 149 | 821 | 2,800 |
| Hong Kong | (2) | 299 | 968 | 2,980 | 2,630 | 7,160 | 3,600 | 10,400 |
| India | 19 | 65 | 122 | 216 | 1,340 | 3,250 | 1,480 | 3,530 |
| Israel | 42 | 209 | 596 | 1,380 | -- | -- | 637 | 1,590 |
| Italy | (2) | 8 | 336 | 921 | 95 | 95 | 431 | 1,020 |
| Japan | 2,120 | 3,930 | 1,820 | 4,610 | 3,220 | 10,200 | 7,170 | 18,700 |
| Korea, Republic of | 18 | 146 | 1,700 | 4,240 | 17,600 | 50,500 | 19,300 | 54,900 |
| Malaysia | -- | 7 | 435 | 645 | 452 | 568 | 887 | 1,220 |
| Mexico | 14,900 | 49,200 | 21,400 | 63,700 | 7,160 | 19,700 | 43,400 | 133,000 |
| Netherlands | 4 | 1,550 | 55 | 161 | 57 | 79 | 116 | 1,790 |
| Russia | 20 | 274 | 25 | 91 | -- | -- | 44 | 365 |
| Saudi Arabia | -- | -- | 2,030 | 4,960 | -- | -- | 2,030 | 4,960 |
| Singapore | 20 | 68 | 119 | 476 | -- | 6 | 139 | 550 |
| Spain | 15 | 28 | 169 | 611 | -- | 40 | 184 | 680 |
| Sweden | -- | 9 | 61 | 70 | -- | -- | 61 | 78 |
| Taiwan | 1 | 89 | 172 | 674 | 8,290 | 22,400 | 8,460 | 23,200 |
| Thailand | 2 | 3 | 912 | 2,780 | 554 | 2,170 | 1,470 | 4,950 |
| United Kingdom | 35 | 104 | 1,450 | 4,330 | 172 | 306 | 1,660 | 4,740 |
| Venezuela | (2) | (2) | 47 | 187 | -- | (2) | 47 | 187 |
| Other | 227 | 1,460 | 5,610 | 13,300 | 1,340 | 4,170 | 7,180 | 18,900 |
| Total | 27,000 | 86,200 | 78,600 | 226,000 | 113,000 | 323,000 | 219,000 | 635,000 |

-- 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.