

# Mineral Industry Surveys

**For information, contact:**

Deborah A. Kramer, Magnesium Commodity Specialist  
 U.S. Geological Survey  
 983 National Center  
 Reston, VA 20192  
 Telephone: (703) 648-7719, Fax: (703) 648-7975  
 E-mail: dkramer@usgs.gov

Jesse Inestroza (Data)  
 Telephone: (703) 648-7968  
 Fax: (703) 648-7975  
 E-mail: jinestro@usgs.gov

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

## MAGNESIUM IN THE FIRST QUARTER 2004

Exports of magnesium through February 2004 were about 46% lower than those in the same period of 2003. Magnesium imports through February 2004 were about 4% higher than those in the corresponding period of 2003. Imports of magnesium metal in 2004 were primarily from Russia (67%) and Israel (25%). The principal sources of magnesium alloy imports were Canada (45%) and China (36%).

Total exports for 2003 were about 20% lower than those in 2002. Canada (64%), the Netherlands (20%), and Mexico (10%) were the principal destinations. Magnesium imports in 2003 were 5% less than imports in 2002. Primary metal represented about 33% of total U.S. magnesium imports. Russia (58%) and Israel (22%) were the principal sources of imported metal. Alloys were about 46% of the total magnesium imports in 2003. Canada (54%) and China (31%) were the principal sources of imported alloys.

Quoted magnesium prices are shown in the table at the bottom of the page. Prices rose significantly in the first quarter of 2004. Increased costs for ferrosilicon and freight in China combined with electricity shortages drove prices up. Press reports indicated that some Chinese producers withdrew from long-term contracts to take advantage of the higher prices (Cooper, 2004). Prices continued to climb in April, with the average China free market price reaching \$2,225 per metric ton by mid-month.

On February 27, U.S. Magnesium LLC filed a petition with the U.S. International Trade Commission (ITC) claiming that imports of alloy magnesium from China and pure and alloy magnesium from Russia were harming the U.S. industry. After a hearing on March 19, the U.S. Department of Commerce,

International Trade Administration (ITA) began an investigation into the claims. Although some magnesium from China and Russia was already subject to antidumping duties, this investigation included material not included in the first sets of antidumping duties. In 1995, the ITC had determined that imports of pure magnesium from China were injuring the U.S. magnesium industry, and set a duty rate of 108.26% ad valorem for pure magnesium, but no duty was established for alloy magnesium. After a new investigation begun in 2000, the ITC established a duty of 305.56% ad valorem as the China-wide rate (with one exception for a specific company) for granular magnesium, which was not covered by the 1995 determination. In both instances, magnesium from Russia had been investigated along with magnesium from China, but it was determined that imports of pure, alloy, and granular magnesium from Russia did not injure the U.S. industry, so no duty rates were established. In the new investigation, primary and secondary magnesium alloy, which would be classified under Harmonized Tariff Schedule (HTS) numbers 8104.19.00 and 8104.30.00 are the principal materials from China that are under investigation. For Russia, the investigation includes magnesium classified under HTS numbers 8104.11.00, 8104.19.00, and 8104.30.00. (HTS number 8104.11.00 is pure magnesium.) (U.S. Department of Commerce, International Trade Administration, 2004a). On April 12, the ITC determined that there was a reasonable indication that a U.S. industry was materially injured by imports of pure magnesium from Russia and alloy magnesium from China and Russia that were sold at less than fair value. As a result of the ITC's affirmative determinations, the ITA will continue to conduct the antidumping investigations, with its

	Unit	Beginning of quarter	End of quarter
Metals Week U.S. spot Western	Dollars per pound	\$1.10-\$1.17	\$1.25-\$1.35
Metals Week U.S. spot dealer import	do.	1.05-1.10	1.30-1.50
Metals Week European free market	Dollars per metric ton	1,850-1,950	1,850-1,950
Metal Bulletin free market	do.	1,850-1,950	2,100-2,200
Metal Bulletin China free market	do.	1,650-1,660	1,760-1,780

preliminary antidumping determinations due by August 5, 2004 (U.S. International Trade Commission, 2004§<sup>1</sup>). The final decision could be delayed because this is the first time that Russia will be treated as a market economy country in magnesium antidumping determinations.

In April, the ITA published the preliminary results of its antidumping duty administrative review of imports of pure magnesium from Canada for August 1, 2002, to July 31, 2003. The ITA rescinded its review of Magnola Metallurgy Inc. because it had not shipped magnesium to the United States during the period of review. The ITA also established a de minimis antidumping rate of 0.01% ad valorem for Norsk Hydro Canada Inc., which means that no cash deposit for antidumping duties is required. Final results will be issued within 120 days after publication of the preliminary results (U.S. Department of Commerce, International Trade Administration, 2004b).

In January, Timminco Ltd. had announced that it would close its Haley, Ontario, Canada, magnesium plant in the second half of 2004. In early April, however, the company decided to delay the previously announced closure because of an unanticipated increase in demand for its high-purity magnesium. The company said that the closure would be deferred until further notice (Magnesium.com, 2004§).

In March, the Queensland and Federal governments reached agreement on terms to exit their involvement as secured creditors with Australian Magnesium Corp. (AMC). As part of the agreement, AMC will relinquish to the government A\$46.4 million, the land that would have been used as a plant site, and physical and other assets that are not required to implement the company's new business plan. AMC will retain the Queensland Magnesia Corp. (QMAG) magnesia business and its magnesite resources, the magnesium pilot plant, assets and intellectual property associated with the advanced magnesium technology process, and physical assets that could be used in developing the advanced magnesium process. According to AMC, it plans to develop three business units—the advanced magnesium technology process for alloys and semifabricated products, the QMAG business, and primary magnesium production technology development. The company continued to seek investors in the projects (Australian Magnesium Corp., 2004§).

In Congo (Brazzaville), Magnesium Alloy Corp. (MagAlloy) continued to develop its proposed 60,000-metric-ton-per-year (t/yr) Kouilou magnesium project. MagAlloy formed a wholly owned subsidiary, MagEnergy Inc., to facilitate the power requirements for the Kouilou Project, such as energy generation and transmission, and in addition, MagEnergy intends to be active in upstream and downstream petroleum production and distribution in Africa. MagEnergy will be responsible for

further development of the previously announced memorandum of understanding (MOU) with Eskom Enterprises Ltd., a wholly owned subsidiary of Eskom Ltd., the state energy commission of South Africa. Under terms of the MOU, MagAlloy and Eskom agreed to rehabilitate and develop the Inga hydroelectric plant and the transmission of power to Pointe-Noire. In addition, MagEnergy has recently entered into a transmission MOU to construct a new electrical transmission line connecting Inga to MagAlloy's plant site. MagAlloy also signed an MOU with Germany's Ferrostaal AG to provide engineering, procurement, and construction services for the Kouilou plant. Under the terms of the agreement, Ferrostaal would act as MagAlloy's principal contractor (Magnesium Alloy Corp., 2004a§, b§).

In March, Gossan Resources Ltd. entered into an agreement with Hatch Associates Ltd. for the first in a series of preliminary feasibility studies of its Inwood magnesium project. Currently, an initial economic assessment utilizing Mintek of South Africa's new atmospheric silicothermic magnesium extraction process is underway. If technically and economically feasible, Gossan Resources intends to construct a 50,000-t/yr plant to recover magnesium from dolomite in Manitoba, Canada (Gossan Resources Ltd., 2004§).

## References Cited

- Cooper, Mike, 2004, European magnesium prices spiral higher on tightness: Metal Bulletin, no. 8833, March 15, p. 16.
- U.S. Department of Commerce, International Trade Administration, 2004a, Notice of initiation of antidumping duty investigations—Magnesium metal from the People's Republic of China and the Russia Federation: Federal Register, v. 69, no. 58, March 25, p. 15293-15297.
- U.S. Department of Commerce, International Trade Administration, 2004b, Pure magnesium from Canada; preliminary results of antidumping duty administrative review and preliminary partial rescission of review: Federal Register, v. 69, no. 74, April 16, p. 20597-20599.

## Internet References Cited

- Australian Magnesium Corp., 2004 (March 25), AMC and government reach agreement, accessed April 6, 2004, at URL <http://www.austmg.com/html/news.htm>.
- Gossan Resources Ltd., 2004 (March 31), Gossan initiates magnesium studies, accessed April 7, 2004, at URL <http://www.gossan.ca/en/news/040331.pdf>.
- Magnesium Alloy Corp., 2004a (March 30), Ferrostaal assumes principal contractor role for the development of the Kouilou magnesium project, accessed April 7, 2004, at URL <http://www.magnesiumalloy.ca/press/040330.htm>.
- Magnesium Alloy Corp., 2004b (March 4), Magalloy expands into energy to enhance magnesium project, accessed April 7, 2004, at URL <http://www.magnesiumalloy.ca/press/040304.htm>.
- Magnesium.com, 2004 (April 3) Timminco reschedules magnesium production plan, accessed April 4, 2004, at URL [http://www.magnesium.com/w3/newsroom/news\\_open.php?news=1733](http://www.magnesium.com/w3/newsroom/news_open.php?news=1733).
- U.S. International Trade Commission, 2004 (April 12), ITC votes to continue cases on magnesium from China and Russia, accessed April 13, 2004, at URL <http://www.usitc.gov/er/nl2004/er0412bb1.htm>.

---

<sup>1</sup>References that include a section mark (§) are found in the Internet References Cited section.

TABLE 1  
U.S. IMPORTS FOR CONSUMPTION AND EXPORTS OF MAGNESIUM<sup>1</sup>

(Metric tons)

	2003	2004		January- February
		January	February	
<b>Imports:</b>				
Metal	27,300	2,710	1,920	4,630
Waste and scrap	16,200	980	977	1,960
Alloys (magnesium content)	38,800	3,870	3,660	7,530
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	1,160	125	66	191
<b>Total</b>	<b>83,400</b>	<b>7,680</b>	<b>6,630</b>	<b>14,300</b>
<b>Exports:</b>				
Metal	8,770	209	93	302
Waste and scrap	5,040	423	371	794
Alloys (gross weight)	2,320	203	226	429
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	4,260	291	487	778
<b>Total</b>	<b>20,400</b>	<b>1,130</b>	<b>1,180</b>	<b>2,300</b>

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

Source: U.S. Census Bureau.