

Mineral Industry Surveys

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MAGNESIUM IN THE THIRD QUARTER 2005

Exports of magnesium from January through August 2005 were about 26% lower than those in the same period of 2004. Magnesium imports through August 2005 were about 6% less than those in the corresponding period of 2004. Russia (41%) and Israel (32%) were the principal sources of imported magnesium metal, and Canada (60%), China (16%), and Israel (16%) were the principal sources of imported alloys.

Quoted magnesium prices are shown in the table at the bottom of the page. The ranges for U.S. prices widened and were generally lower than those in the second quarter. Contract negotiations for 2006 between the magnesium producers and large consuming companies were reported to be between \$1.20 and \$1.30 per pound, less than the 2005 level of about \$1.55 per pound (Carroll, 2005).

Final countervailing duty determinations for calendar year 2003 for pure and alloy magnesium from Canada were announced in September 2005 by the U.S. Department of Commerce, International Trade Administration (ITA). For pure magnesium, the duty was 1.21% ad valorem for Norsk Hydro Canada Inc., and for alloy magnesium the rates were 1.21% ad valorem for Norsk Hydro Canada and 5.40% ad valorem for Magnola Metallurgy Inc. (U.S. Department of Commerce, International Trade Administration, 2005b). In July, the U.S. International Trade Commission (ITC) began its second 5-year review of countervailing duties on pure and alloy magnesium imported into the United States from Canada. The original duties were established in 1992, and a 5-year review was conducted in 2000 (U.S. International Trade Commission, 2005a).

The Government of Quebec and Magnola Metallurgy had

appealed the ITA's decision on countervailing duties on magnesium to a North American Free-Trade Agreement binational panel. (A 7% ad valorem countervailing duty for alloy magnesium from Magnola Metallurgy was originally established in a new shipper review in 2003.) The binational panel upheld the ITA's original determination (U.S. Department of Commerce, International Trade Administration, 2005a).

The ITC also began a second 5-year review on antidumping duties on imports of pure magnesium from China. (A duty of and 305.56% ad valorem was established in 1995, except for one company for which the duty was 24.67% ad valorem.) A continuation of the antidumping duties was established after the first 5-year review in 2000 (U.S. International Trade Commission, 2005b).

U.S. Magnesium Corp. announced that it would delay the startup of its planned expansion of 11,000 metric tons per year (t/yr). The company cited unfavorable market conditions that did not exist when the expansion plans were announced in 2004 as the main reason for its decision to delay the expansion. U.S. Magnesium did not announce a new date to bring the additional capacity online (Blamey and McBeth, 2005).

Hydro Magnesium (a unit of Norsk Hydro A/S) increased its magnesium alloy remelting-recycling capacity to 15,000 t/yr at its plant in Xi'an, China, in August 2005. The plant was originally opened in 2002 with a capacity of 10,000 t/yr, producing AZ- and AM-series alloys from remelted pure magnesium from China (Platts Metals Week, 2005a).

Also in China, Meridian Technologies Inc. completed a 3,000-t/yr joint-venture diecasting plant to produce parts for automotive firms operating in China. The firm, Shanghai

	Unit	Beginning of quarter	End of quarter
Metals Week U.S. spot Western	Dollars per pound	\$1.40-\$1.45	\$1.35-\$1.48
Metals Week U.S. spot dealer import	do.	1.35-1.45	1.26-1.38
Metals Week European free market	Dollars per metric ton	1,700-1,800	1,600-1,750
Metal Bulletin European free market	do.	1,650-1,700	1,660-1,710
Metal Bulletin China free market	do.	1,530-1,580	1,530-1,550

Meridian Magnesium Products, is a joint venture between Meridian Technologies (60%) and Shanghai Cosmopolitan Automobile Accessory Ltd. (40%). The company will produce parts such as transmission cases, seat frames, instrument panel support beams, and steering column supports components from AZ91D, AM50, and AM60 alloys produced in China (McBeth, 2005).

Minhe Magnesium Co. announced that it shelved plans to expand magnesium alloy production at its facility in Qinghai Province, China. The company originally had planned to increase alloy capacity from 4,000 t/yr to 20,000 t/yr by mid-2005, but because of unfavorable market conditions and weak prices, the expansion was delayed indefinitely (Platts Metals Week, 2005b).

MagIndustries Corp. inaugurated its first commercial-scale brine well in October near Point-Noire, Congo (Brazzaville). The brine mine field will initially include five commercial-scale production wells within a 5-square-kilometer area near the village of Mengo. Each well will be completed to a target depth of about 600 meters where it will intersect the carnallite mineralization. After additional plants are constructed, the brine solution initially will be sent to a plant for the extraction of potassium salts, which will be upgraded into several grades of potash fertilizer. After removing the potassium, the magnesium-enriched brine will be sent to the company's proposed 60,000-t/yr magnesium smelter. A final bankable feasibility study for a 40,000-t/yr potash plant was scheduled for completion in the second quarter of 2006 (MagIndustries Corp., 2005¹).

Despite the competition from Chinese magnesium, two companies were in the very preliminary stages of investigation magnesium metal production in Australia. Korab Resources Ltd. was investigating magnesium recovery from its Batchelor magnesite deposit in New South Wales, and International Minerals Corp. Pty Ltd. was investigating magnesium recovery from a waste silica-magnesia tailings pile, also in New South Wales (Metal Bulletin, 2005; Magnesium.com, 2005b[§]).

In October, the Brazilian Government expanded its antidumping duties on magnesium imported from China. In 2004, the country had imposed antidumping duties on imports with a magnesium content of 99.8% or greater. In October 2005, a new resolution imposed a duty of \$1.18 on imports from

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

China with a magnesium content less than 99.8%. This duty will be in effect until October 2009 (Magnesium.com, 2005a[§]).

U.S.-based Aleris International Inc. was expected to purchase the bankrupt Dutch firm Remag Alloys BV Delfzijl. The Dutch firm, which operated a 10,000-t/yr magnesium recycling facility in the Netherlands, filed for bankruptcy in June because of falling magnesium prices and competition from Chinese magnesium. Remag Alloys had been operating only since November 2003 and produced recycled magnesium mainly for the European automotive market (Mason, 2005).

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TABLE 1
U.S. IMPORTS FOR CONSUMPTION AND EXPORTS OF MAGNESIUM¹

(Metric tons)

	2005					
	2004	January- May	June	July	August	January- August
Imports:						
Metal	34,300	14,100	2,400	1,510	2,820	20,800
Waste and scrap	11,700	5,690	1,430	629	1,080	8,830
Alloys (magnesium content)	51,500	18,700 ^r	3,760	3,250	2,760	28,500
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	1,180 ^r	353 ^r	124	61	192	730
Total	98,600^r	38,900^r	7,770	5,450	6,850	58,900
Exports:						
Metal	1,760	250	76	78	26	430
Waste and scrap	4,790	2,450	591	338	628	4,000
Alloys (gross weight)	1,750	487	36	17	148	689
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	3,530	931	119	128	185	1,360
Total	11,800	4,120	821	561	987	6,490

^rRevised.

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

Source: U.S. Census Bureau.