

# Mineral Industry Surveys

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## MAGNESIUM IN THE THIRD QUARTER 2006

Exports of magnesium from January through August 2006 were about 33% higher than those in the same period of 2005. Magnesium imports through August 2006 were about 14% less than those in the corresponding period of 2005, mainly as a result of a decrease in imports of magnesium alloy from China. Russia (43%), Canada (29%), and Israel (22%) were the principal sources of imported magnesium metal, and Canada (75%) and Israel (11%) were the principal sources of imported alloys.

Quoted magnesium prices are shown in the table at the bottom of the page. U.S. prices were essentially the same, and prices in Europe and China increased. Part of the price increase resulted from the Chinese Government's decision to remove the rebate on exports of steel and some nonferrous metals, including magnesium, beginning on September 15. Prior to its removal, the export rebate on magnesium had been 5% (Beijing Antaike Information Development Co., Ltd., 2006).

At the end of October, Norsk Hydro ASA announced that it would close its Becancour, Quebec, Canada, 54,000-metric-ton-per-year (t/yr) primary magnesium plant during the first half of 2007 and exit the magnesium industry. The company had been looking for a buyer for the plant since July. The timing of the closure is in connection with the end of a 10-year supply contract with General Motors Corp. As a result of Hydro's decision to exit the magnesium industry, the company will work toward divesting its magnesium casthouses in Bottrop, Germany, and in Xi'an, China. Competition from low-cost magnesium from China was cited as the reason for the company's decision (McBeth and de Klerk, 2006).

In its final determination of the review of the antidumping

duty on pure magnesium from China, the U.S. Department of Commerce, International Trade Administration (ITA), determined that pure magnesium from Tianjin Magnesium International Ltd. would not be subject to any antidumping duty. Magnesium from other exporters in China would continue to be subject to a 108.26% ad valorem duty. Tianjin Magnesium was eligible for separate treatment under the review because it was determined that the company was not under government control with regard to its exports. The period of review was from May 1, 2004, to April 30, 2005 (U.S. Department of Commerce, International Trade Administration, 2006).

In response to a "scope ruling request" filed in August 2005 by U.S. Magnesium LLC alleging that Timminco Ltd. of Canada and Pechiney of France evaded U.S. antidumping duties by remelting ingots or pure magnesium pieces from China and Russia and exporting them to the United States as Canadian- or French-origin magnesium, the ITA preliminarily determined that pure magnesium ingot and butt-end imported from China and processed by Pechiney in France were subject to antidumping duties on magnesium from China. It was the ITA's opinion that the magnesium did not undergo substantial transformation during processing and therefore could not be classified as being French origin (Lerner, 2006).

ITA also preliminarily determined that magnesium alloy extrusion billets imported from Timminco were not covered by antidumping duties on magnesium from Russia or China. Timminco demonstrated to the ITA that the billets were a product of Canada (Platts Metals Week, 2006).

After an investigation that began in June, the U.S. Environmental Protection Agency reached an agreement with

	Unit	Beginning of quarter	End of quarter
Metals Week U.S. spot Western	Dollars per pound	\$1.10-\$1.16	\$1.10-\$1.15
Metals Week U.S. spot dealer import	do.	1.09-1.15	1.09-1.15
Metals Week European free market	Dollars per metric ton	1,800-1,900	1,850-2,000
Metal Bulletin European free market	do.	1,780-1,840	1,950-2,050
Metal Bulletin China free market	do.	1,800-1,830	1,900-1,930

Halaco Engineering Co. to begin cleanup at the 43-acre site of the company's defunct magnesium recycling plant in Oxnard, CA. An agreement was reached quickly because of the nature of the hazardous material at the site and vandalism problems (Marley, 2006).

In the diecasting sector, Spartan Light Metals Inc. agreed to acquire Intermet Inc.'s idle plant in Hannibal, MO, to expand its magnesium diecasting operations. Spartan already operates two magnesium diecasting facilities in Sparta, IL, and Mexico, MO. Spartan plans to bring the new facility onstream by 2007 (American Metal Market, 2006). Intermet, which emerged from Chapter 11 bankruptcy in 2005, operates a magnesium diecasting plant in Monroe City, MO.

After its line of credit was terminated, Northern Diecast Corp. announced that it closed its magnesium diecasting plant in Harbor Springs, MI, in August. The company produced magnesium diecastings primarily for the automotive industry (Magnesium.com, 2006<sup>1</sup>).

Magnesium International Ltd.'s subsidiary, Egyptian Magnesium Co. (EMAG), signed a Memorandum of Understanding (MOU) with El Nasr Mining Co an Egyptian Government-owned mining company that holds a license for exploration and mining of magnesite at Sul Hamed in the far southeastern region of Egypt. The MOU covers the completion of an exploration program to confirm the quantity and quality of the available resource and plan a mining, crushing, and beneficiation operation. If the results of the exploration determine that the magnesite will meet it needs, EMAG plans to enter into an agreement with El Nasr Mining to supply its proposed 88,000-t/yr primary magnesium plant (Magnesium International Ltd., 2006<sup>§</sup>).

In October, Australia-based Advanced Magnesium Ltd.'s wholly owned subsidiary, Advanced Magnesium Technologies Pty. Ltd. (AMT), signed an agreement with U.S. firm Chicago White Metal Casting Inc. (Bensenville, IL) to develop a range of electroplated applications using AMT's new proprietary

magnesium alloy, AM-lite<sup>®</sup>. In September, AMT signed an agreement with a Chinese diecaster to jointly develop electroplated die-cast sanitaryware and domestic hardware products made from AM-lite<sup>®</sup>. The company agreed to purchase 10,000 metric tons of the alloy over a 2-year period. In addition, AMT supplies AM-lite<sup>®</sup> to three other manufacturers of bathroom, kitchenware, and hardware products in Asia and Europe (Advanced Magnesium Ltd., 2006<sup>§</sup>). Advanced Magnesium was formed from the remnants of Australian Magnesium Corp. Ltd. after its failed attempt to construct a magnesium plant in Australia.

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- Magnesium International Ltd., 2006<sup>§</sup> (September 22), EMAG signs MOU for supply of Egyptian magnesite, accessed November 3, 2006, at URL <http://www.mgil.com.au/investor/documents/ASXAIMMagnetiteMOUFinal220906.pdf>.

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<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)

	2006					
	2005	January- May	June	July	August	January- August
<b>Imports:</b>						
Metal	28,700	13,300	1,880	3,030	2,810	21,000
Waste and scrap	14,700	7,040	1,340	1,090	1,370	10,800
Alloys (magnesium content)	40,300	12,100	2,260	1,920	2,140	18,500
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	1,040	358	71	50	53	531
<b>Total</b>	<b>84,700</b>	<b>32,800</b>	<b>5,540</b>	<b>6,100</b>	<b>6,380</b>	<b>50,900</b>
<b>Exports:</b>						
Metal	732	1,080	612	452	588	2,740
Waste and scrap	5,630	1,520	337	320	343	2,520
Alloys (gross weight)	1,200	1,100	153	85	334	1,670
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	2,080	1,110	267	180	168	1,720
<b>Total</b>	<b>9,650</b>	<b>4,810</b>	<b>1,370</b>	<b>1,040</b>	<b>1,430</b>	<b>8,650</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.