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Mineral Industry Surveys

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MAGNESIUM IN THE FOURTH QUARTER 2010

U.S. magnesium exports for 2010 were 25% lower than exports in 2009. Magnesium imports for consumption in 2010 were 12% higher than those in 2009. Israel (87%) was the principal source of imported magnesium metal. Israel and Taiwan (22% each) and China (11%) were the main sources of alloy imports.

Quoted magnesium prices for the fourth quarter 2010 are shown in the table below. Magnesium contracts in North America for 2011 reportedly settled between $2.30 and $2.35 per pound for pure magnesium or diecasting alloy and $1.80 to $1.90 per pound for secondary 90/10 magnesium alloy (McBeth, 2010b).

After hearing arguments from U.S. magnesium diecasters and the U.S. primary magnesium producer, in February 2011, the U.S. International Trade Commission voted to retain antidumping duties on magnesium alloy from China and revoke antidumping duties on magnesium alloy imported from Russia. These votes resulted from a full sunset review of duties on magnesium alloy imports from China and Russia that were established in 2005 (U.S. International Trade Commission, 2011). Despite the removal of the antidumping duties, Russia's Solikamsk Magnesium Works reportedly did not plan to sell magnesium into the United States in 2011. The company planned to produce 13,500 metric tons (t) of magnesium in 2011 for its customers in Belarus, Kazakhstan, and Russia (Riley, 2011b).

In December, the U.S. Department of Commerce, International Trade Administration (ITA), published the final results of its antidumping duty review of pure magnesium imports from China. The ITA determined that for May 1, 2008, through April 30, 2009, for Tianjin Magnesium International Co. Ltd. (TMI), the duty was 0.73% ad valorem, and for other exporters from China, the rate would be 111.73% ad valorem (U.S. Department of Commerce, International Trade Administration, 2010b). In November, the ITA issued a rescission of the antidumping duty order on magnesium alloy from TMI for April 1, 2009, through March 31, 2010, because TMI had not shipped magnesium alloy to the United States during that period (U.S. Department of Commerce, International Trade Administration, 2010a).

In February 2011, a judge for the U.S. Court of International Trade (CIT) ruled that the ITA did not properly apply its rules in determining a dumping duty of 111.73% ad valorem for imports of magnesium from TMI for May 1, 2007, to April 31, 2008, and remanded the decision to the ITA. ITA had applied a punitive duty because one of TMI's suppliers was uncooperative with the investigation. TMI appealed the duty determination, and the CIT judge ruled that the ITA would have to show a link between the supplier and TMI for the duty to be applied. The ITA had 60 days to make a new decision (U.S. Court of International Trade, 2011).

U.S. Magnesium LLC planned to increase the magnesium production capacity at its Rowley, UT, plant to 63,500 metric tons per year (t/yr) by 2013. The company's most recent capacity increase to 52,000 t/yr was completed in 2008. The plans to increase capacity were originally proposed in 2004, but because of the global recession, plans for the second expansion were put on hold. About 11,000 t/yr of U.S. Magnesium's production was committed to Allegheny Technologies Inc. (ATI) for use in its nearby titanium sponge plant, which started operations in 2009. This magnesium, which is used in the Kroll process to produce titanium sponge from titanium tetrachloride,

	Units	Beginning of quarter	End of quarter
Platts Metals Week U.S. spot Western	Dollars per pound	$2.55-$2.70	$2.35-$2.50
Platts Metals Week U.S. spot dealer import	do.	2.30-2.50	2.25-2.40
Platts Metals Week European free market	Dollars per metric ton	3,150-3,250	2,950-3,050
Platts Metals Week China	do.	2,850-2,950	2,900-2,950

do. Ditto.

was committed for several years, until ATI's plant ramps up to full capacity (McBeth, 2010c).

In January 2011, the U.S. Circuit Court of Appeals for the District of Columbia denied U.S. Magnesium's appeal of the U.S. Environmental Protection Agency's (EPA) decision to include the company's Rowley magnesium production facility as a Superfund site. U.S. Magnesium had challenged the agency's 2008 listing decision and argued that the agency had overestimated the risk that pollutants from the facility might enter the air and soil. The designation of the facility as a Superfund site gives the EPA the authority to investigate the site further to determine if a cleanup is necessary. The designated site encompasses 1,830 hectares (4,530 acres) on the southwest edge of the Great Salt Lake. Contaminants at the site include acidic wastewater, dioxins, furans, heavy metals, hexachlorobenzene, polychlorinated biphenyls, and polycyclic aromatic hydrocarbons (Fahys, 2011).

Dead Sea Magnesium Ltd. (Beer Sheva, Israel) announced that it would increase production at its magnesium plant in Sdom, Israel, by as much as 10% through debottlenecking. The plant has the capacity to produce 34,000 t/yr of magnesium, and the company said that the increased production level should be reached in the first quarter of 2011. Most of the additional output was expected to be shipped to the United States, with some to Europe and Brazil. Dead Sea Magnesium attributed the increase in production to improved markets (Riley, 2011a).

According to the China Nonferrous Metals Industry Association, China produced 654,000 t of magnesium in 2010, 31% more than 2009 production. Approximately 384,000 t of magnesium was exported in 2010, with about one-half as unwrought magnesium (China Metal Market—Precious & Minor Metals Monthly, 2011).

Garfield Alloys Inc. (Garfield Heights, OH) announced that it was closing its Garfield Alloys de Mexico S. de R.L. de C.V. subsidiary. The plant, which opened in 2005, had the capacity to process 4,000-t/yr of various types of magnesium scrap. Production at the plant stopped in December, and the closure was expected to be completed in the first quarter of 2011. Garfield Alloys determined that capacity at its existing U.S. operations in Bellevue, OH, (MagReTech Inc.), which recycles class I scrap, and outside Cleveland, OH, which processes magnesium dross, would be sufficient to meet customer needs (McBeth, 2010a).

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TABLE 1

U.S. IMPORTS FOR CONSUMPTION AND EXPORTS OF MAGNESIUM[1]

(Metric tons)

		2010				
	2009	January-September	October	November	December	January-December
Imports:						
Metal	21,400	13,700	1,560	2,070	932	18,200
Waste and scrap	20,900	16,100	1,930	2,130	1,950	22,100
Alloys (magnesium content)	4,790	8,560	1,200	1,150	712	11,600
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	204	577	40	132	39	788
Total	47,300	38,900	4,730	5,480	3,640	52,700
Exports:						
Metal	6,120	4,400	395	183	325	5,300
Waste and scrap	2,280	399	35	24	23	481
Alloys (gross weight)	9,190	5,560	369	464	538	6,940
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	2,050	1,560	221	164	129	2,070
Total	19,600	11,900	1,020	835	1,020	14,800

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

Source: U.S. Census Bureau.