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Mineral Industry Surveys

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MAGNESIUM IN THE THIRD QUARTER 2011

U.S. magnesium exports through September 2011 were 26% less than exports for the same period of 2010. Exports of alloys, which had been the leading export category in 2010, decreased by more than 50%. Magnesium imports for consumption from January through September 2011 were 7% lower than those in the same period of 2010. Israel (84%) was the principal source of imported magnesium metal. China (27%), Israel (23%), Taiwan (11%), and Japan (11%) were the main sources of alloy imports.

Quoted magnesium prices for the third quarter of 2011 are shown in table 2. United States' prices decreased slightly, and prices in China and Europe were slightly higher. Press reports indicated that aluminum producers had contracted for most of their magnesium requirements for 2012 at $2.00 to $2.05 per pound. Secondary 90-10 magnesium alloy reportedly was selling in the range of $1.85 to $1.90 per pound (McBeth, 2011).

On September 13, the U.S. Department of Commerce, International Trade Administration (ITA) published final results of the antidumping duty review of pure and alloy magnesium imports for April 1, 2009, through March 31, 2010 for Russia. For VSMPO-Avisma Corp. (Verkhnaya Salda, Russia), the duty was set at 2.24% ad valorem. Solikamsk Magnesium Works (Solikamsk, Russia) did not ship magnesium to the United States during the period of review, so its rate was set at the rate that was in effect the last time the company had U.S. sales. However, on October 4, the ITA revised its duty calculations because it had used incorrect cost data to calculate VSMPO-Avisma's rate. The revised rate for VSMPO-Avisma was 22.38% ad valorem for the period of review (U.S. Department of Commerce, International Trade Administration, 2011).

After conducting an expedited third 5-year review of the antidumping duty order for pure magnesium imports from China into the United States, the U.S. International Trade Commission upheld the original order, determining that revocation of the duty would lead to continuation or recurrence of injury (U.S. International Trade Commission, 2011). The ITA also extended the deadline to issue final results of the antidumping duty review on imports of pure magnesium from China until December 5. The results for May 1, 2009, through April 30, 2010, were originally scheduled to be finalized in September.

A significant portion of U.S. Magnesium LLC's output from expansion of primary magnesium production capacity at its Rowley, UT, plant to 63,500 metric tons per year (t/yr) by the end of 2011 was scheduled to be supplied to Allegheny Technologies Inc.'s (ATI) nearby titanium sponge plant. ATI was increasing sponge production at the plant to 10,000 to 12,000 metric tons (t). U.S. Magnesium expansion was originally scheduled to be online by the end of 2012, but the projected increase in titanium sponge production prompted the accelerated schedule (Waite, 2011).

According to data from China Non-ferrous Metals Industry Association, China produced 504,000 t of magnesium in the first three quarters of 2011. This was 3% more than the quantity produced in same period of 2010. Nearly one-half of the country's magnesium was produced in Shanxi Province (Yang, 2011).

Latrobe Magnesium Ltd. (Sydney, Australia) completed a prefeasibility study for a plant to recover 10,000 t/yr of magnesium from coal fly ash produced at the Hazelwood powerplant in Victoria. The company planned to conduct further test work to confirm some design and feedstock assumptions used in the study and refine capital cost estimates. The company estimated that this work could be completed within 6 months, after which a bankable feasibility study would be initiated. The feasibility study also would address possible plant expansion to 40,000 t/yr. Magnesium recovery from Hazelwood coal fly ash has been under investigation since 2001 (Latrobe Magnesium Ltd., 2011).

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TABLE 1

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

(Metric tons)

		2011				
	2010	January–June	July	August	September	January–September
Imports for consumption:						
Metal	18,200	7,010	1,530	1,040	958	10,500
Waste and scrap	22,100	11,300	1,670	1,820	1,530	16,300
Alloys (magnesium content)	11,600	5,990	998	766	930	8,680
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	788	440	115	71	55	682
Total	52,700	24,800	4,310	3,700	3,470	36,200
Exports:						
Metal	5,300	2,580	472	475	422	3,950
Waste and scrap	481	653	135	159	202	1,150
Alloys (gross weight)	6,940	1,950	171	217	224	2,560
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	2,070	799	166	115	128	1,210
Total	14,800	5,980	944	967	977	8,860

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

Source: U.S. Census Bureau.

TABLE 2

MAGNESIUM PRICES, THIRD QUARTER 2011

		Beginning of quarter	End of quarter
U.S. spot dealer import	dollars per pound	2.25–2.40	2.22–2.35
U.S. spot Western	do.	2.30–2.50	2.22–2.40
China	dollars per metric ton	3,170–3,220	3,200–3,240
European free market	do.	3,250–3,350	3,300–3,350

do. Ditto.

Source: Platts Metals Week.