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Mineral Industry Surveys

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MAGNESIUM IN THE FIRST QUARTER 2009

Magnesium exports in the first quarter of 2009 were more than two times the exports in the first quarter of 2008. Magnesium imports for consumption in the first quarter of 2009 were about 32% less than those in the first quarter of 2008. Israel (53%) and China (41%) were the principal sources of imported magnesium metal. Israel (22%) was the principal source of imported alloys.

Quoted magnesium prices are shown in the table at the bottom of the page. Prices continued the decline begun in the fourth quarter of 2008, and press reports indicated that most of the drop in prices in the United States resulted from renegotiations of contracts, not spot sales. In addition, consumers were delaying deliveries because of the slowdown in the magnesium end-use markets and in consumption in secondary aluminum products (Jennemann, 2009).

The U.S. Department of Commerce, International Trade Administration (ITA) (2009), published preliminary results of its administrative review of antidumping duties on pure magnesium imported from Russia. Solikamsk Magnesium Works did not ship magnesium to the United States during the period of review (April 1, 2007, through March 31, 2008), so ITA intended to rescind the antidumping duty order for Solikamsk. The other Russian magnesium producer, VSMPO-Avisma Corp., chose not to participate in the administrative review, and requested that ITA remove all of its business proprietary information from the record. As a result of the decision not to participate, ITA used what it termed "adverse facts available" to determine Avisma's dumping margin. ITA preliminarily set Avisma's antidumping duty for pure magnesium at 43.58% ad valorem.

According to the National Bureau of Statistics of China, cumulative magnesium production in the country through April 2009 was 51% lower than production in the first 4 months of 2008. Total magnesium production through April 2009 was 118,500 metric tons (t) (China Magnesium Industry & Market Bulletin, 2009).

Although production has declined in China, companies still were announcing capacity increases. Ningxia Huaying Mining Group Co. (Ningxia Hui Autonomous Region) was expected to commission the first phase of its magnesium alloy facility at the end of October 2009. The first phase of the facility is designed to produce 50,000 metric tons per year (t/yr) of magnesium alloys. Total investment in the project, which when completed in 2012 will have an alloy production capacity of 150,000 t/yr, was expected to be $587 million (Metal-Pages, 2009b). Qinghai Salt Lake Industry Group Co. Ltd. (Qinghai Province) reportedly was buying equipment from North America to construct a 50,000-t/yr magnesium metal plant. The equipment was scheduled to be delivered by October, and construction was expected to be completed by 2011. Qinghai also planned to expand capacity to 100,000 t/yr in the future. The proposed plant would recover magnesium from magnesium chloride extracted from salt lakes in the Qinghai-Tibet plateau from which the company currently produces salt (Metal-Pages, 2009a). Fugu Coal & Chemical Group (Shaanxi Province) planned to complete a magnesium production facility with a

	Units	Beginning of quarter	End of quarter
Platts Metals Week U.S. spot Western	Dollars per pound	$3.05-$3.25	$2.70-$2.95
Platts Metals Week U.S. spot dealer import	do.	3.00-3.25	2.50-2.60
Platts Metals Week European free market	Dollars per metric ton	2,900-3,000	2,650-2,780
Platts Metals Week China	do.	2,900-3,000	2,700-2,750
Metal Bulletin European free market	do.	2,800-2,900	2,550-2,750
Metal Bulletin China free market	do.	2,800	2,680-2,750

total production capacity of 180,000 t/yr by yearend 2009. Current production capacity at the facility was 40,000 to 50,000 t/yr (Platts Metals Week, 2009a).

Conversely, Ningxia Huiye Magnesium Co. Ltd. was delaying the expansion of its magnesium ingot production capacity to the second half of 2009 because of weak market conditions. The company, with plants in Shanxi Province and Ningxia Hui Autonomous Region, had originally planned to increase the total capacity by 26,000 t/yr to 66,000 t/yr in March 2009 (Platts Metals Week, 2009b).

Malaysia-based CVM Minerals Ltd. announced that it was delaying completion of its primary magnesium plant under construction in Perak, Malaysia, from March until July 2009. CVM has the rights to mine dolomite from the nearby Dolomite Hills and is constructing the first of two production lines for magnesium with a 15,000-t/yr capacity. When the second line is completed, the plant's total capacity was projected to be 30,000 t/yr (Platts Metals Week, 2009c).

Solikamsk Magnesium Works (Perm Region, Russia) said it temporarily cut its magnesium production by 35% beginning in February 2009 because of the decline in the world market. In 2008, the company's magnesium production was estimated to be 17,000 t (Metal-Pages, 2009c).

Quad City Die Casting Co. planned to close its Moline, IL, diecasting facility in July because of the slowdown in demand from its principal customer, American Kawasaki Motorcycle Corp. Quad City produced aluminum, magnesium, and zinc diecastings. Approximately 100 workers were expected to be laid off (American Metal Market, 2009).

In Canada, Trimag L.P. announced that it was closing its Boisbriand, Quebec, diecasting plant in June 2009 following the loss of its major customer, General Motors Corp. (GM), to which Trimag had supplied nearly all of its high-pressure diecastings. GM canceled its business with Trimag because of low automotive demand. The plant has been idle since late 2008, and 160 workers will be permanently laid off. Trimag also had shut down an Ontario magnesium diecasting plant in 2007 (CNW Group, 2009).

References Cited

American Metal Market, 2009, Die-caster set to shutter plant: American Metal Market, May 12. (Accessed May 18, 2009, via http://www.amm.com.)

China Magnesium Industry & Market Bulletin, 2009, Output of major nonferrous metals in China, Jan. – Apr., 2009: China Magnesium Industry & Market Bulletin, no. 92, May 15, p. 3-4.

CNW Group, 2009, Trimag in Boisbriand—Closing in June: CNW Group, April 3. (Accessed April 6, 2009, at http://www.newswire.ca/en/releases/archive/April2009/03/c7412.html.)

Jennemann, Tom, 2009, Magnesium demand ticks up in April: American Metal Market, May 5 (Accessed May 12, 2009, via http://www.amm.com.)

Metal-Pages, 2009a, China's Salt Lake Group develops 50,000 tpy magnesium project: Metal-Pages, May 4. (Accessed May 12, 2009, via http://www.metal-pages.com.)

Metal-Pages, 2009b, Ningxia Huaying to commission 50,000 tpy Mg alloy facility in Oct: Metal-Pages, May 8. (Accessed May 18, 2009, via http://www.metal-pages.com.)

Metal-Pages, 2009c, Solikamsk faces tough year ahead as magnesium demand slumps: Metal Pages, April 30. (Accessed May 14, 2009, via http://www.metal-pages.com.)

Platts Metals Week, 2009a, Fugu to ready magnesium line: Platts Metals Week, v. 80, no. 16, April 20, p. 3.

Platts Metals Week, 2009b, Huiye further delays expansion: Platts Metals Week, v. 80, no. 10, March 9, p. 5.

Platts Metals Week, 2009c, Malaysian magnesium smelter delayed: Platts Metals Week, v. 80, no 10, March 9, p. 5.

U.S. Department of Commerce, International Trade Administration, 2009, Magnesium metal from the Russian Federation—Preliminary results of antidumping duty administrative review and intent to rescind in part: Federal Register, v. 74, no. 64, April 6, p. 15435-15438.

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

(Metric tons)

		2009			
	2008	January	February	March	January-March
Imports:					
Metal	44,300	2,230	2,230	3,030	7,490
Waste and scrap	24,100	1,460	1,510	2,210	5,180
Alloys (magnesium content)	13,000	587	599	328	1,510
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	1,970	12	21	7	40
Total	83,300	4,290	4,360	5,570	14,200
Exports:					
Metal	3,100	352	369	272	993
Waste and scrap	2,600	3	167	777	947
Alloys (gross weight)	6,760	693	436	591	1,720
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	1,950	157	282	236	675
Total	14,400	1,210	1,250	1,880	4,340

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

Source: U.S. Census Bureau.