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Mineral Industry Surveys

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MAGNESIUM IN THE SECOND QUARTER 2007

Exports of magnesium from January through June 2007 were about 4% higher than those in the same period of 2006. Magnesium imports through June 2007 were about 13% less than those in the first half of 2006. Israel (56%) and Russia (22%) were the principal sources of imported magnesium metal, and Canada (66%) was the principal source of imported alloys.

Quoted magnesium prices are shown in the table at the bottom of the page. U.S. quoted magnesium prices continued to rise because of the uncertainty in supply. U.S. magnesium consumers began committing to 2008 annual contracts earlier in 2007 than in the previous year, and contract prices were reported to be significantly higher—about $1.70 per pound for 2008 compared with 2007 contract prices of $1.20 to $1.30 per pound. Consumers feared that prices would increase even further (McDonell, 2007a).

The U.S. Department of Commerce, International Trade Administration did not change its preliminary ruling on countervailing duties for imports of pure and alloy magnesium from Canada that was established in April. The duty remained at 0% ad valorem for Norsk Hydro Canada Inc. The period of review was January 1, 2005, through August 15, 2005 (U.S. Department of Commerce, International Trade Administration, 2007).

In August U.S. Magnesium LLC announced that it had signed a contract with General Motors Corp. (GM) to supply the company with magnesium alloy for its North American operations, beginning January 1, 2008. Although a specific quantity was not announced, GM was believed to be seeking about 9,000 metric tons per year (t/yr) of the alloy. Norsk Hydro had been supplying GM with most of its magnesium requirements from its plant in Canada, but with the closure of the plant, GM had to look elsewhere for its magnesium needs (McDonell, 2007c).

In July, Norsk Hydro announced that it entered into an agreement to sell its magnesium remelters in Bottrop, Germany, and Xi'an, China, to Varomet Holdings Ltd. (a subsidiary of the Australian mining company Straits Resources Ltd.). The operations acquired from Norsk Hydro were expected to be part of a larger magnesium operation that includes GfE-MIR GmbH, a German subsidiary involved in global distribution and marketing of magnesium alloys. Varomet also has a strategic alliance with Thermo Magnesium SA, a French company operating a magnesium recycling plant in Marignac, France (formerly Pechiney's primary magnesium plant that closed in 2002) (Sagafos, 2007).

Workers at Timminco Ltd.'s Haley magnesium plant in Renfrew, Ontario, Canada, signed a 3-year collective bargaining agreement in June. The new agreement, however, covers only about 20 workers because about 180 jobs at the plant had been cut because of restructuring. Although Timminco was still producing magnesium at the 9,000-t/yr plant, the company was producing at a reduced level and was meeting some of its sales commitments with lower cost, lower quality magnesium from China (McDonell, 2007b). Timminco also exited the magnesium photoengraving plate market in the second quarter of 2007.

According to the China Magnesium Association (CMA), China produced 526,000 t of magnesium in 2006. CMA listed its top 10 magnesium producers as follows (with 2006 production in parentheses): Taiyuan Tongxiang Magnesium Industry Co. Ltd. [83,000 metric tons (t)], Taiyuan Yiwei

	Unit	Beginning of quarter	End of quarter
Metals Week U.S. spot Western	Dollars per pound	$1.55-$1.70	$1.64-$1.69
Metals Week U.S. spot dealer import	do.	1.50-1.70	1.64-1.69
Metals Week European free market	Dollars per metric ton	2,150-2,300	2,650-2,750
Metal Bulletin European free market	do.	2,040-2,120	2,500-2,600
Metal Bulletin China free market	do.	2,130-2,200	2,600-2,700

Magnesium Industry (Group) Co. Ltd. (45,000 t), Shanxi Wenxi Yinguang Magnesium Industry Group Corp. (41,800 t), Ningxia Huiye Magnesium Co. Ltd. (33,500 t), Ningxia Huayuan Magnesium Co. Ltd. (22,000 t), Shanxi Golden Trust Yiwei Magnesium Industry Corp. (15,100 t), Shanxi Wanke Jinrun Magnesium Products Co. Ltd. (14,700 t), Shanxi Xiaoyi Dongyi Coal and Electricity Aluminium Group Co. Ltd. (14,000 t), Shanxi Wenxi Hongfu Magnesium Co. Ltd. (12,000 t), and Shanxi Qizhen Magnesium Co. Ltd. (11,700 t) (Magnesium.com, 2007b).

Taiyuan Huangzhai Yiwei Magnesium expected to begin production of magnesium ingot at a new 6,000-t/yr plant in Shanxi Province, China, at the end of September. The new plant is a joint venture between Taiyuan (51% share) and Alconix Corp. (Tokyo, Japan) (49% share). Alconix planned to import the magnesium into Japan to meet the growing demand in the electronics and aerospace industries (Magnesium.com, 2007a).

In June, Taiyuan Yiwei, China Direct Inc., and Shanxi Senrun Coal Chemistry Co. Ltd. began joint construction on a magnesium facility in Shanxi Province. On May 30, China Direct announced that it would acquire a 52% stake in the joint magnesium facility, Shanxi Jinwei Magnesium Co. Ltd. Taiyuan Yiwei and Shanxi Senrun hold the remaining 48%. Taiyuan Yiwei and Shanxi Senrun agreed to contribute their facilities that were under construction and their energy resources for production, and China Direct agreed to finance the joint venture. Jinwei has a designed production capacity of 20,000 t/yr of magnesium. The first phase of production was expected to start in the fourth quarter of 2007, with an annual production capacity of 12,000 t/yr. The second phase of 8,000 t/yr was expected to be operational in 2008 (Blamey, 2007). China Direct also owned a majority interest in Chang Magnesium Co. Ltd., which completed construction of a 7,000-t/yr magnesium facility in Taiyuan, Shanxi Province, in January 2007 (China Direct Inc., 2007).

Shanxi Qizhen Magnesium Co. Ltd. announced that it would begin producing magnesium alloys by the end of 2007. The company planned to produce about 1,000 metric tons per month of alloy from ingot that it produces at its plant in Shanxi Province. The company planned to export the material to Europe (Platts Metals Week, 2007).

Production at Shanxi Wenxi Hongfu was temporarily halted in July in response to an environmental crackdown by the Chinese Government. The company has the capacity to produce 50,000 t/yr of magnesium and had planned to produce 30,000 t in 2006. Officials from the company did not state when the plant would reopen (Shair, 2007).

SPX Corp. announced that it completed the sale of its Contech business unit to Marathon Automotive Group LLC, a company formed by Marathon Asset Management LLC, for approximately $146 million in cash. Contech was reported as a discontinued operation at the end of the third quarter of 2006. On March 7, 2007, SPX announced that it had entered a definitive agreement to sell Contech, which produces magnesium diecastings primarily for the automotive market (SPX Corp., 2007).

South Korean steelmaker POSCO Co. Ltd. opened its first magnesium sheet plant in July. POSCO invested $27.8 million in the project and expected to produce 3,000 t/yr of magnesium sheet from the plant in Suncheon (Reuters India, 2007).

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

(Metric tons)

		2007				
	2006	January-March	April	May	June	January-June
Imports:						
Metal	31,900	5,220	2,370	2,020	2,540	12,100
Waste and scrap	17,200	4,450	1,020	2,030	1,660	9,160
Alloys (magnesium content)	25,200	6,300	1,870	1,420	1,760	11,400
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	927	427	41	99	43	609
Total	75,300	16,400	5,300	5,570	6,010	33,300
Exports:						
Metal	4,170	1,210	311	397	408	2,330
Waste and scrap	3,680	345	21	66	117	549
Alloys (gross weight)	2,290	813	442	892	825	2,970
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	2,180	310	86	98	86	580
Total	12,300	2,680	861	1,450	1,440	6,430

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

Source: U.S. Census Bureau.