

# Mineral Industry Surveys

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## MAGNESIUM IN THE FOURTH QUARTER 2013

Total U.S. magnesium exports in 2013 were 12% less than exports in 2012. Mexico (34%), Canada (20%), Singapore (17%), and Brazil (15%) were the principal destinations for magnesium exports. Exports of alloys increased by 13%, but were more than offset by decreased exports of crude metal (18%), scrap (78%), and semifabricated magnesium materials (15%).

Total magnesium imports for consumption in 2013 were 10% less than imports in 2012. Israel was the source of 69% of imported magnesium metal, down from 82% in 2012. Canada (9%), Russia (8%), Kazakhstan (7%), and Brazil (6%) were the other principal sources of magnesium metal imports during 2013. Scrap accounted for 38% of total magnesium imports, 40% of which came from Canada. Crude metal and alloys accounted for 33% and 27%, respectively, of all magnesium imports during 2013.

The quoted U.S. magnesium import price ranges (table 2) increased slightly during the fourth quarter of 2013, as did prices in China and Europe.

Magnesium production in China in 2013 was 770,000 t, an increase of 3.7% compared with that in 2012. Production in December 2013, however, was 31.4% less than production in December 2012. Exports of unwrought magnesium from China were 212,000 t, 21.5% more than those in 2012. Exports of

magnesium alloys in 2013 were 102,000 t, 10.4% more than those in 2012 (Yee, 2014a, b).

In December 2013, production started at Shanxi Wulong Investment Group's magnesium alloy plant in Yuanqu County, Shanxi Province, China. The 60,000-metric-ton-per-year (t/yr) plant was built adjacent to a coke plant, which started production in November, that would supply coke gas to power the magnesium plant (Shair, 2014b). At the end of January 2014, production started at Wenxi Baiyu Magnesium Corp.'s 30,000-t/yr magnesium alloy plant (Shair, 2014a).

U.S. Magnesium LLC (Salt Lake City, UT) announced plans to expand its magnesium plant at Rowley, UT, to 76,500 t/yr from 63,500 t/yr by yearend 2015 (Cowden, 2014).

### References Cited

- Cowden, Michael, 2014, U. S. Magnesium to increase capacity: American Metal Market, v. 122, no. 7-3, February 12, p. 4.  
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Yee, Alvin, 2014a, China Mg output plunges 31% in Dec, up 4% on year: Platts Metals Daily, v. 3, no. 34, February 18, p. 6.  
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TABLE 1  
U.S. IMPORTS FOR CONSUMPTION AND EXPORTS OF MAGNESIUM<sup>1</sup>

(Metric tons)

	2012	2013				
		January– September	October	November	December	January– December
<b>Imports for consumption:</b>						
Metal	16,200	11,000	1,280	1,960	930	15,200
Waste and scrap	20,900	12,400	1,980	1,700	1,420	17,500
Alloys (magnesium content)	12,700	9,000	946	726	1,710	12,400
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	881	581	71	91	92	835
<b>Total</b>	<b>50,800</b>	<b>33,000</b>	<b>4,280</b>	<b>4,480</b>	<b>4,150</b>	<b>45,900</b>
<b>Exports:</b>						
Metal	7,020	5,250	119	196	224	5,790
Waste and scrap	2,100	389	32	29	21	471
Alloys (gross weight)	7,310	6,420	635	767	425	8,240
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	1,870	1,210	203	104	79	1,600
<b>Total</b>	<b>18,300</b>	<b>13,300</b>	<b>989</b>	<b>1,100</b>	<b>749</b>	<b>16,100</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.

TABLE 2  
MAGNESIUM PRICES, FOURTH QUARTER 2013

		Beginning of quarter	End of quarter
U.S. spot dealer import	dollars per pound	1.85–1.95	1.90–1.95
U.S. spot Western	do.	2.10–2.15	2.10–2.15
China	dollars per metric ton	2,550–2,600	2,600–2,630
European free market	do.	2,625–2,725	2,700–2,800
do. Ditto.			

Source: Platts Metals Week.