

# Mineral Industry Surveys

---

**For information, contact:**

E. Lee Bray, Magnesium Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4979, Fax: (703) 648-7757  
E-mail: lbray@usgs.gov

Paula R. Neely (Data)  
Telephone: (703) 648-7949  
Fax: (703) 648-7975  
E-mail: pneely@usgs.gov

**Internet:** <http://minerals.usgs.gov/minerals>

## MAGNESIUM IN THE FIRST QUARTER 2013

U.S. magnesium exports in the first quarter of 2013 were 13% more than exports in the first quarter of 2012. Mexico (27%), Singapore (24%), Brazil (17%), and Canada (17%), were the principal destinations. Exports of alloys more than doubled and accounted for most of the increase of magnesium exports, while exports of waste and scrap decreased by 81%. Magnesium imports for consumption in the first quarter of 2013 were 10% less than imports in the first quarter of 2012. Israel was the source of 68% of imported magnesium metal, down from 90% in the first quarter of 2012. Russia (13%), Canada (9%), and Brazil (7%) were other principal sources of magnesium metal imports during the first quarter of 2013. Scrap accounted for 36% of the total first quarter 2013 imports, 42% of which came from Canada.

The quoted U.S. magnesium price ranges (table 2) declined by about 6% during the first quarter of 2013, as did those in China and Europe. The price declined in Europe and the United States during the latter part of the quarter owing to abundant supplies of magnesium and stagnant demand. In China, increased consumption was offset by a decline in exports, which contributed to the price decline in China (Cowden, 2013).

The China Magnesium Association reported that consumption of primary magnesium in China in 2012 was 310,000 metric tons (t), an increase of 12% from consumption in 2011. Production of primary magnesium in China was 698,000 t, an increase of 5.7% compared with production in 2011. Exports of magnesium from China were estimated to be 370,000 t during 2012, 7.3% less than those in the previous year (Shair, 2013a).

In March, Wulong Group Ltd. completed construction of and commissioned a 60,000-metric-ton-per-year magnesium smelter in Yuanqu County, Shanxi Province, China (Shair, 2013b).

### Update

The trend of low export demand for magnesium from China appeared to continue through May as several producers and exporters attributed weak export orders for declining prices. However, orders for delivery to consumers in Europe and the Middle East in the third quarter of 2013 were reported to be increasing. The increased orders were attributed to declining stocks at consumers that had made large purchases when a 10% export duty was removed by the Chinese Government at the beginning of the year, rather than anticipated increased demand (McBeth, 2013; Yee and Watanabe, 2013).

### References Cited

- Cowden, Michael, 2013, Magnesium prices slip on supply glut: *American Metal Market*, v. 121, no. 15-1, April 8, p. 5.  
McBeth, Karen, 2013, Europe sees Q3 magnesium bookings; North America unmoved: *Platts Metals Daily*, v. 2, no. 87, May 6, p. 6-7.  
Shair, Wendy, 2013a, China's primary magnesium consumption up 12% in 2012: *Platts Metals Daily*, v. 2, no. 46, March 7, p. 5.  
Shair, Wendy, 2013b, Wulong completes 60,000 mt magnesium alloy project: *Platts Metals Daily*, v. 2, no. 44, March 5, p. 7.  
Yee, Alvin, and Watanabe, Mayumi, 2013, China magnesium export offers slip below \$2,800/mt FOB: *Platts Metals Daily*, v. 2, no. 85, May 2, p. 6-7.

TABLE 1  
U.S. IMPORTS FOR CONSUMPTION AND EXPORTS OF MAGNESIUM<sup>1</sup>

(Metric tons)

	2013				
	2012	January	February	March	January– March
<b>Imports for consumption:</b>					
Metal	16,200	997	1,150	1,240	3,390
Waste and scrap	20,900	1,370	1,140	1,530	4,040
Alloys (magnesium content)	12,700	1,590	1,040	989	3,610
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	881 <sup>r</sup>	57	58	78	193
Total	50,800	4,010	3,380	3,840	11,200
<b>Exports:</b>					
Metal	7,020	540	730	750	2,020
Waste and scrap	2,100	79	45	31	155
Alloys (gross weight)	7,310	715	621	858	2,190
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	1,870	212	277	105	594
Total	18,300	1,550	1,670	1,750	4,960

<sup>r</sup>Revised.

<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, FIRST QUARTER 2013

		Beginning of quarter	End of quarter
U.S. spot dealer import	dollars per pound	2.00–2.10	1.90–1.96
U.S. spot Western	do.	2.15–2.30	2.15–2.25
China	dollars per metric ton	2,980–3,010	2,790–2,840
European free market	do.	3,070–3,200	2,900–3,010
do. Ditto.			

Source: Platts Metals Week.