Mineral Industry Surveys

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MAGNESIUM METAL IN THE FIRST QUARTER 2023

Total magnesium metal imports for consumption in the first quarter of 2023 were 25,200 metric tons (t), 14% more than imports in the fourth quarter of 2022, 55% more than those in the first quarter of 2022, and 75% more than those in the first quarter of 2021 (table 1).

Compared with imports in the fourth quarter of 2022, imports of magnesium metal increased by 203%, but imports of alloys, scrap, and semifabricated products decreased by 9%, 8%, and 52%, respectively, in the first quarter of 2023. In the first quarter of 2023, alloys accounted for 33% of imports, with Czechia (25%), the Republic of Korea (19%), and Canada (15%) as the leading sources. Scrap accounted for 32% of the magnesium imports in the first quarter of 2023, with Canada (42%), China including Hong Kong (14%), Mexico (10%), and India (9%) as the leading sources. Magnesium metal accounted for 32% of the total imports, with Israel (49%), Turkey (34%), and China including Hong Kong (7%) being the leading sources (fig. 1, table 1).

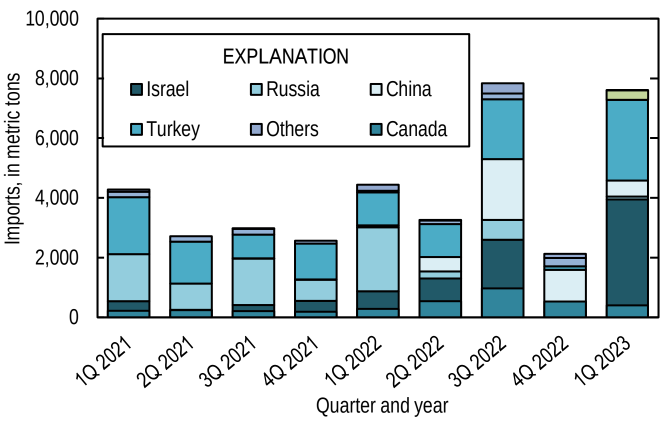

Figure 1. Quarterly imports of magnesium metal from the first quarter of 2021 through the first quarter of 2023. Source: U.S. Census Bureau, adjusted by USGS.

Total magnesium metal exports in the first quarter of 2023 were 6% less than exports in the fourth quarter of 2022, 40% less than those in the first quarter of 2022, and 43% less than those in the fourth quarter of 2021. Exports of metal and alloys increased by 36% and 35%, respectively, but exports of scrap and semifabricated products decreased by 19% and 29%, respectively, compared with exports in the fourth quarter of 2022 (table 1).

Canada (43%), China (13%), the Republic of Korea (10%), Mexico (8%) and Montenegro (8%) were the leading destinations for magnesium exports in the first quarter of 2023. Canada received 2% of the metal, 83% of alloy, 8% of semifabricated product, and 13% of scrap exports. Mexico received 16% of alloy and 2% of semifabricated product exports. China received 38% scrap and 14% of semifabricated product exports. The Republic of Korea received 32% of metal and 31% of semifabricated product exports. Montenegro received 33% of scrap exports.

The U.S. spot dealer import and the U.S. spot Western price average prices for magnesium decreased by 8% in the first quarter of 2023. In Europe, the average price was 6% less at the end of the quarter compared with that of the beginning of the quarter (table 2).

Update

Lower demand was cited for decreased prices in Europe. The price decrease in the United States was attributed to high inventory levels at aluminum smelters and die casters as most were reported to have placed sufficient orders before the start of the year. Some diecasters were reported to not be taking delivery of all contracted magnesium, an indication that demand has decreased, making more magnesium available for the spot market, also contributing to lower prices. Another factor contributing to lower magnesium prices in the United States was speculation that US Magnesium LLC might restart production from some capacity at its primary magnesium smelter in Rowley, UT. The smelter declared force majeure on deliveries to contracted customers in September 2021 citing an equipment failure. The magnitude of shutdown at the 63,500-metric-ton-per-year smelter was not announced by company. (See Magnesium in the Third Quarter 2022.) Company officials stated in March 2023 that equipment was being delivered and the repairs were expected to be completed by early summer, with production expected to resume by early in the third quarter of 2023 (Jonson, 2023a-c; Thompson, 2023).

On April 26, the U.S. International Trade Commission renewed antidumping duty on pure magnesium imported from China, determining that removing the duty would harm the industry in the United States. The antidumping duty rate of 108.26% was first imposed in 1995 and has been renewed in four prior sunset reviews (Lazzaro, 2023; U.S. International Trade Commission, 2023). Despite the antidumping duty, China supplied more than 4,000 t of magnesium in 2022 and 538 t in the first quarter of 2023 amid shortages caused by decreased production from US Magnesium (fig. 1).

References Cited

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

(Metric tons)

		2023			
	2022	January	February	March	January–March
Imports for consumption:					
Metal	19,900	2,590	2,730	2,690	8,010
Waste and scrap	31,700	2,740	2,600	2,830	8,160
Alloys (magnesium content)	29,300	2,470	2,430	3,390	8,290
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	4,850	286	171	252	710
Total	85,800	8,080	7,930	9,160	25,200
Exports:					
Metal	252	4	3	11	19
Waste and scrap	1,940	166	47	19	232
Alloys (gross weight)	1,190	193	70	173	436
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	2,200	80	108	98	287
Total	5,580	444	228	301	973

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

Source: U.S. Census Bureau; data adjusted by the U.S. Geological Survey.

TABLE 2
MAGNESIUM PRICES, FIRST QUARTER 2023

		Beginning of quarter	End of quarter
U.S. spot dealer import	dollars per pound	5.50−6.50	5.00−6.00
U.S. spot Western	do.	5.50−6.50	5.00−6.00
European free market	dollar per metric ton	3,300−3,400	3,050−3,250

do. Ditto.

Source: S&P Global Platts Metals Week.