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MAGNESIUM METAL IN THE FOURTH QUARTER 2022

Total magnesium metal imports for consumption in the fourth quarter of 2022 were 22,100 metric tons (t), 17% less than imports in the third quarter of 2022, 91% more than those in the fourth quarter of 2021, and 41% more than those in the fourth quarter of 2020. Total imports of magnesium for consumption in 2022 were 85,800 t, 75% more than those in 2021 and 34% more than those in 2020 (table 1).

Compared with imports in the third quarter of 2022, imports of scrap and alloys increased by 10% and 7%, respectively, but imports of metal decreased by 70% and imports of semifabricated products decreased slightly in the fourth quarter of 2022. In the fourth quarter of 2022, alloys accounted for 41% of imports, with Czechia (39%), Taiwan (16%), the Republic of Korea (14%), and Hungary (13%) as the leading sources. Scrap accounted for 40% of the magnesium imports in the fourth quarter of 2022, with Canada (29%), China including Hong Kong (14%), Czechia (13%), and Germany (11%) as the leading sources. Magnesium metal accounted for 12% of the total imports, with China including Hong Kong (50%), Canada (20%), and Brazil (10%) being the leading sources (fig. 1, table 1).

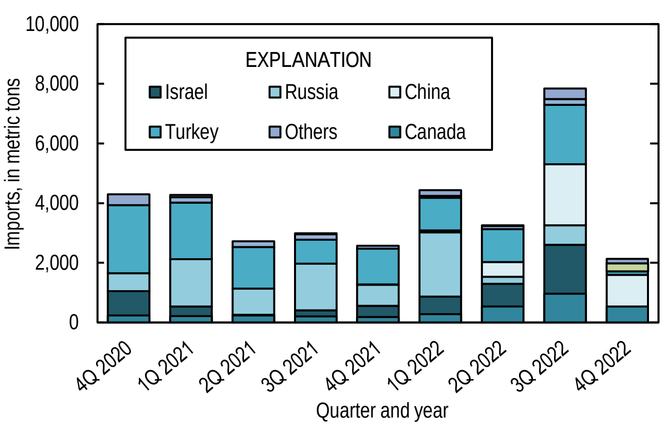

Figure 1. Quarterly imports of magnesium metal from the fourth quarter of 2020 through the fourth quarter of 2022. Source: U.S. Census Bureau, adjusted by USGS.

Total magnesium metal exports in the fourth quarter of 2022 were 10% more than exports in the third quarter of 2022, 52% less than those in the fourth quarter of 2021, and 81% less than those in the fourth quarter of 2020. Exports of alloys and semifabricated products increased by 102% and 3%, respectively, but exports of scrap and metal decreased by 22% and 7%, respectively, compared with exports in the third quarter of 2022 (table 1).

Canada (23%), Mexico (19%), New Zealand (17%), and Montenegro (13%) were the leading destinations for magnesium exports in the fourth quarter of 2022. Canada received 3% of the metal, 53% of alloy, 6% of semifabricated product, and 13% of scrap exports. Mexico received 40% of alloy and 22% of scrap exports. New Zealand and China received 43% and 17%, respectively, of semifabricated product exports. Montenegro and Mexico received 47% and 22%, respectively, of scrap exports.

The U.S. spot dealer import and the U.S. spot Western price average prices for magnesium decreased by 13% in the fourth quarter of 2022. In Europe, the average price was 12% less at the end of the quarter compared with that of the beginning of the quarter (table 2).

Update

Many magnesium metal consumers reported having sufficient inventories for the first quarter of 2023 after significant purchases in the summer and early fall of 2022, which was cited for the 70% decrease in magnesium metal imports in the fourth quarter of 2022 compared with imports in the third quarter of 2022. Magnesium imports from China including Hong Kong during the fourth quarter of 2022 were 1,420 t compared with 2,040 t and 488 t in the third and second quarters of 2022, respectively (figure 1). Prior to the second quarter of 2022, imports of primary magnesium metal from China rarely have exceeded 10 t in any quarter since antidumping duties were imposed in 1994, which currently is at a rate of 111.74% ad valorum. Concerns about deliveries from US Magnesium LLC's smelter in Rowley, UT, have been cited for increased imports since it declared force majeure on September 29, 2021. The 63,500-metric-ton-per-year smelter experienced an equipment failure and some customers stated that they were forced to obtain magnesium from other sources. (See Magnesium in the

Third Quarter 2021 and Magnesium in the Third Quarter 2022.) US Magnesium did not disclose how much capacity was affected by the situation and has not provided updates about the progress of repairs (Jonson, 2022; 2023).

References Cited

Jonson, Nick, 2022, US primary, secondary magnesium prices slip on weak demand, lower offers: S&P Global Platts Metals Daily, v. 11, no. 203, October 13, p. 4.

Jonson, Nick, 2023, US primary, secondary magnesium prices hold steady amid ample consumer inventories: S&P Global Platts Metals Daily, v. 12, no. 13, January 19, p. 5–6.

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

(Metric tons)

		2022			
	2021	October	November	December	January–December
Imports for consumption:					
Metal	13,400	820	801	1,040	19,900
Waste and scrap	19,000	2,760	2,920	3,170	31,700
Alloys (magnesium content)	14,100	3,610	3,060	2,460	29,300
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	3,390	573	568	344	4,850
Total	49,900	7,760	7,350	7,010	85,800
Exports:					
Metal	1,690	2	5	7	252
Waste and scrap	1,510	42	63	181	1,940
Alloys (gross weight)	2,440	132	131	60	1,190
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	1,950	84	253	69	2,200
Total	7,590	261	452	317	5,580

[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, FOURTH QUARTER 2022

		Beginning of quarter	End of quarter
U.S. spot dealer import	dollars per pound	6.50–7.25	5.50–6.50
U.S. spot Western	do.	6.50–7.25	5.50–6.50
European free market	dollar per metric ton	3,750–3,850	3,300–3,400

do. Ditto.

Source: S&P Global Platts Metals Week.