

# STRATEGIC METALS

*Your monthly guide to the latest information on the world's strategic metals*

## Strategic Metals Continue Upward

**Manganese, magnesium and molybdenum continue to enjoy a rise in demand, given the resurgence of the worldwide steel industry.** Of particular note in the growing BRIC nations (Brazil, Russia, India & China), the Indian steel industry is witnessing massive growth due to the upward trend in the country's infrastructure, real estate and automobile sectors.

### Manganese (Mn)

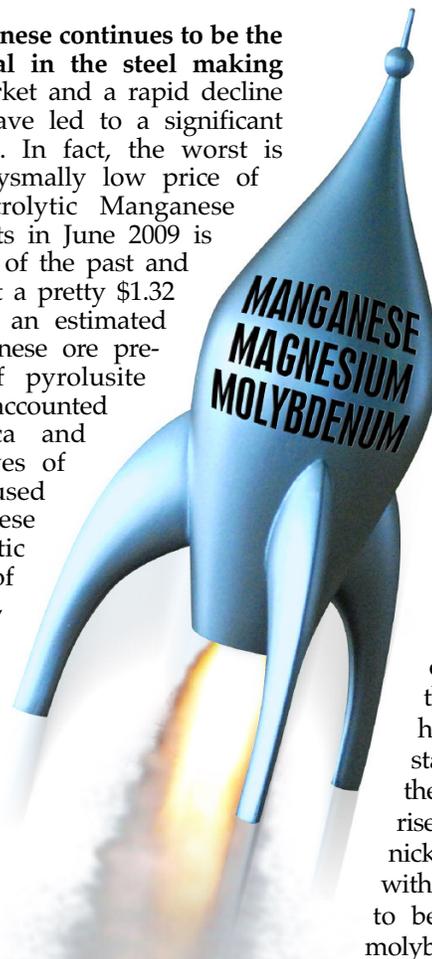
After iron ore and coal, manganese continues to be the most in-demand raw material in the steel making industry. A growing steel market and a rapid decline in China's production rate have led to a significant growth in manganese prices. In fact, the worst is believed to be over. The abysmally low price of \$1.08 per pound for Electrolytic Manganese recorded in the world markets in June 2009 is slowly becoming a nightmare of the past and the price is currently sitting at a pretty \$1.32 per pound. The world has an estimated 460 million tonnes of manganese ore predominantly in the form of pyrolusite (MnO<sub>2</sub>), and about 67% of it is accounted for by India, South Africa and Ukraine. India's huge reserves of manganese ore are largely used to produce ferro-manganese and steel. Although domestic demand and consumption of manganese are on the rise, the requirements are still small in comparison to the quantity available. Indian manganese is largely produced for the export market and as a result, production is dependent on overseas demands. Manganese in India is also used in the production of dry cell batteries and in the paint and glass sectors.

### Magnesium (Mg)

The global magnesium picture, in the short term, is not quite so rosy. According to some analysts, Chinese magnesium refineries, which account for nearly 80% of the global supply, currently operate at a mere 20% to 30% of their full capacity. The global demand and supply is unlikely to see a dramatic rise in 2010 given that automobile demand remains sluggish in most countries barring India and China. Again, more than 40% of the world's magnesium is used in the aluminum industry while more than 30% is used for structural purposes. However, since the aluminum industry is barely creeping ahead of the depressing 2009 levels, it is no wonder that there has been no evidence of a surge in buying so far this year. **The average price of magnesium in the North American market has been erratic over the last three months, having slid from \$2.24 per pound in January to \$2.38 in February, and then rising again to \$2.45 briefly in March.**

### Molybdenum (Mo)

While China's buoyant automotive market is working wonders for its steel industry, its domestic molybdenum supply is on the decline and that is providing a positive boost to the global molybdenum demand. India's auto sales have reached record highs as well. **In fact, there is a growing panic among global molybdenum traders as inventories reduce and demand escalates.** One of the major reasons for this is once again the steel market. Nickel prices have increased radically and as a result, major stainless steel manufacturers have started reducing the use of nickel. Ferritic steel production is on the rise and such steel uses molybdenum while being nickel-free. The fastest growing steel grades are those with little or no nickel. Supply discipline is expected to be established in 2010 and that could drive molybdenum prices even higher.



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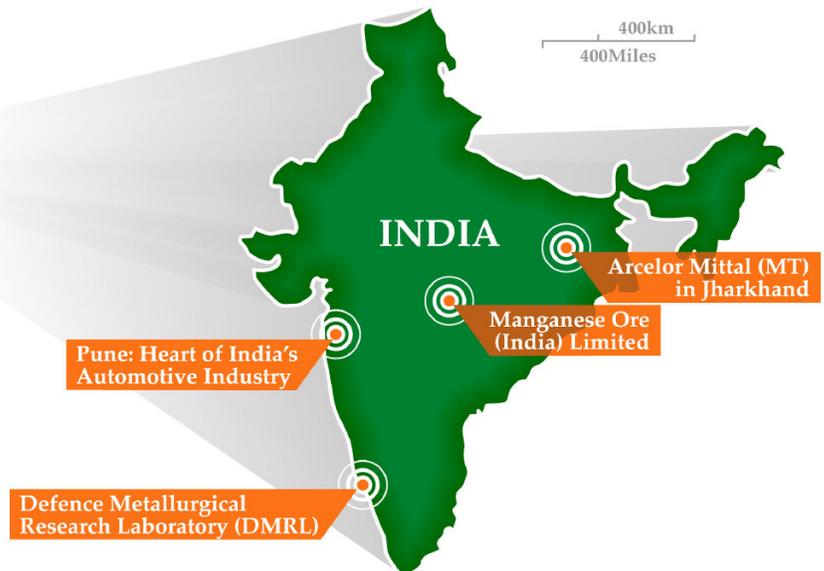
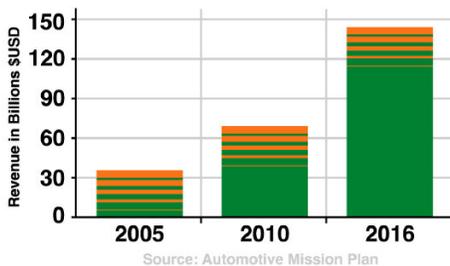
## India's Emerging Ambitions

The Indian government plans to sell a stake of about 10% from the state-owned Manganese Ore (India) Ltd as part of the government's drive to sell steel-related state assets. Manganese Ore is the nation's largest manganese producer and meets about 65% of the domestic needs. The company, meanwhile, has plans to ramp up its ferromanganese production capacity. **On the flip side, the company's finance director has warned that the company's profits at the end of the current fiscal is likely to show a drop of about 22% because of the lower steel demand last year.**

The Indian Space Research Organization is funding a \$37.5 million, 500 tonnes per year titanium sponge plant in the southern state of Kerala. Titanium dioxide will be used as the raw material for the plant and at present, India's Defence Metallurgical Research Laboratory (DMRL) is in the final stages of separating the magnesium from titanium dioxide to ensure that the plant rakes in some money. **This will give a slight boost to the nation's magnesium production as well.**



### INDIA'S BOOMING AUTOMOTIVE INDUSTRY



**On the manganese-mining front, steel giant ArcelorMittal (MT) is going through a rough phase.** The company has faced stiff opposition from the local residents of the mineral-rich state of Jharkhand as it tries to implement the manganese and iron ore mining rights awarded by the government in January 2009. **Consequently, the company's plans to set up a 12 million tonnes per year integrated steel plant have not seen the light of day yet.** In fact, the company has had to announce a change in the project site.

**India's automobile sector is going through the roof.** Auto sales reached record highs over the last year or so and if the government has its way, the trend is set to continue over the next six years. **The Automotive Mission Plan for the 2006–16 period aims to turn India into a global automotive hub that will manufacture automobiles and auto components.** The plan aims to achieve a production capacity worth close to \$133 billion. **Good news indeed for the steel industry and consequently, the manganese and molybdenum industry.**

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## The Critical Crystal Ball

On-going Influences on Prices for Molybdenum, Manganese & Magnesium

**India's federal budget presented on February 28, 2010 proposes to invest more than \$38 billion in the Indian infrastructure sector during 2010-11.** The announcement has predictably spread considerable cheer in the country's steel sector. In the opinion of India's Steel Secretary, Atul Chaturvedi, the domestic demand for steel will see a significant growth of about 10% in the wake of project implementations. This is higher than the 9% likely to be recorded over the current 2009-10 period. Steel production over the 2010-11 period is expected to peak at more than 65 million tonnes, a substantial increase over the 61-62 million tonnes expected this year. The budget announcement was almost immediately followed by a price rise of \$11-13 per tonne in the Indian market. **The budget announcement bodes well for both global and domestic manganese demand.**

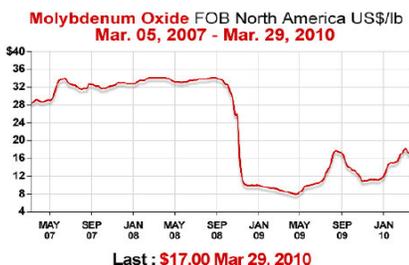
**In the Indian market, ferro-manganese (70%) is currently selling at about \$1,320 per metric tonne – a 5% hike over prices recorded in mid-March. The higher production costs are expected to further ramp up the price over the next three months.** The market price of

manganese ore (40%) is between \$242 and \$264 per metric tonne. The high price of the ore has given a boost to the price of silicon manganese (60/14) as well. The price chart has seen a rise of 15% over the last four weeks. The export price of silicon manganese has reached a buoyant \$1,300 per metric tonne FOB.



**Magnesium prices in the European market have recorded an increase of over 3% since December 2009. The prices averaged between \$2,800 and \$2,900 per metric tonne during the month of March and although the global picture remains unclear, we see demand for Magnesium increasing steadily over the next 18 months.**

Riding on the improved steel demand globally, the month of March began with global molybdenum prices reaching \$16-17 per pound. JP Morgan forecasts a production growth of 7% this year and 6% in 2011. **The trend indicates that prices in 2011 could average at \$23 per pound.** Since no new supply will hit the market until 2011, analysts think it would take a major dip in the demand for petrochemicals, stainless steel, and specialty steel to depress molybdenum prices.



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