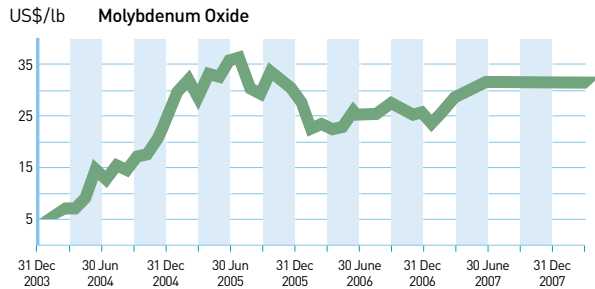


The Metal for our Times: Molybdenum

Molybdenum Prices 2003-2007



Molybdenum prices remained strong in 2007, partly due to the growing demand for molybdenum in industrial applications.

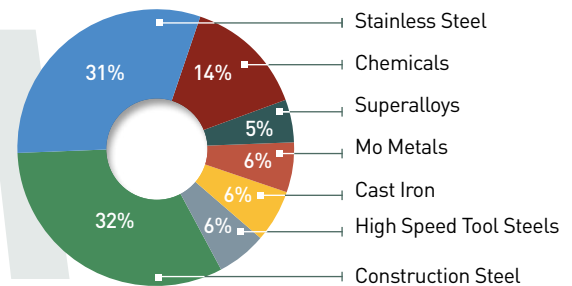
also true for the industry's development of high-sulfur heavy oils and tar sands. Molybdenum is also a crucial ingredient in the steels used in building exteriors and in high-temperature applications, such as jet engines and turbines and in gas, coal and nuclear power plants.

Another source of expanding molybdenum demand has been stricter government regulations in Europe and North America on sulfur emissions. Molybdenum is a key ingredient in catalysts employed by petroleum refineries to reduce sulfur in gasoline and diesel.



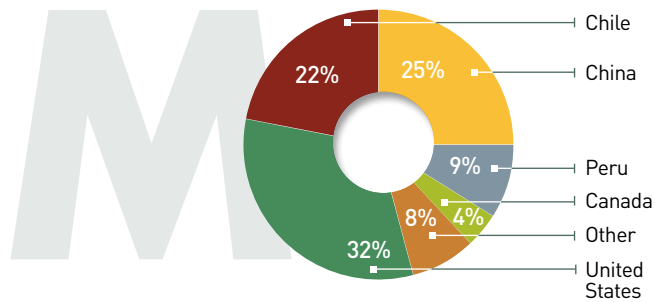
Molybdenum is used primarily as an alloying agent to enhance the strength, toughness and corrosion resistance of steel. Demand has been spurred by expanding capital projects in the energy industry in response to higher oil and gas prices and the greater need for power generation worldwide. Molybdenum is a key component in steels used in oil and gas exploration and pipelines. As the petroleum industry seeks reserves in remote areas, particularly the Arctic and offshore, it needs steel equipment that can withstand harsh and corrosive environments; this is

Industrial Demand for Molybdenum



Source: International Molybdenum Association (IMOA) 2006

World Molybdenum Production



Source: U.S. Geological Survey

Molybdenum use is also being stimulated by the quest in various steel-consuming industries for better strength-to-weight ratios. Many companies are seeking ways to economize on costs and increase performance by using new molybdenum-bearing, lighter weight, high strength steels. For example,

In addition to the growing demand for molybdenum, the price has been supported in recent years by constraints on supply. Mine closures caused a reduction of molybdenum production in China in 2005. In response, primary and by-product molybdenum mines in the rest of the world have accelerated production as much as possible. However, a major increase in total supply from new or existing mines is not expected until 2010 at the earliest. In the meantime, China, even though it has substantial molybdenum resources, has adopted export taxes and quotas in order to manage exports to the world market.

The price of molybdenum, which averaged US\$4.50 per pound between 1994 and 2004, remained at a



automobile manufacturers are increasingly using steel alloys to enhance crash-safety ratings and reduce weight. Many new cars contain about a pound of molybdenum, mainly in the body and structural components. Some auto makers have either adopted or are actively considering the use of molybdenum in engine blocks, exhaust manifolds, wheels, and lubricants. In 2007, one oil company began marketing a high-performance synthetic motor oil containing molybdenum after testing the oil on the NASCAR racing circuit demonstrated molybdenum's benefit as an additive in lubricating engines at high temperatures.

relatively high level of approximately US\$30 per pound on average in 2007, up from US\$25 per pound in 2006. The expected trends in supply and demand suggest a continued positive outlook. Given its expanding uses, worldwide demand for molybdenum should continue to grow and, in the absence of new supply coming from China, the molybdenum price is expected to remain historically strong in the near-term.