STRENGTHENING AMERICAN INDUSTRY EVERY DAY

WHAT IS MOLYBDENUM?

Known for its **STRENGTH**, **DURABILITY**, **RESISTANCE TO CORROSION AND BACTERIA** and **HIGH HEAT TOLERANCE** (*a melting point of 4,753°F!*), molybdenum is a key mineral and significant player in modern industrial technology.



HOW IS MOLYBDENUM USED?

With molybdenum's resistance to wear and corrosion, it is a key ingredient used to make stainless steel. In fact, more than two-thirds of all molybdenum is used as an **alloying element to make super-strength steel and cast iron**, and because it has very few substitutes, molybdenum is present in almost every industrial process today.





INFRASTRUCTURE

NATIONAL SECURITY



Due to their **super-strength**, molybdenum alloy steels are used in the construction of large structures like skyscrapers and bridges.



The strength of molybdenum alloy metals are ideal for producing armor plating for the nation's armored vehicles, missiles and aircraft parts.



MODERN-DAY TECH & APPLIANCES



Researchers and innovators use molybdenum to act as the basis of **ultra-thin, energy-efficient** televisions, chemical sensors, and

portable and smart computers.



CONVENTIONAL & EMERGING ENERGY



With its resistance to corrosion and stress, molybdenum alloys are used in oil wells, pipelines and power plants.

Molybdenum is also used as a steel alloy in hybrid cars and wind turbines, and can be found in photovoltaic cells of solar panels.

MOLYBDENUM IS A MAJOR CONTRIBUTOR TO U.S. MANUFACTURING & THE ECONOMY

In 2014, the U.S. produced approximately 65,500 tons with an estimated value of \$1.8 billion worth of molybdenum in six key states: Arizona, Colorado, Idaho, Montana, New Mexico, Nevada and Utah.



65,500 TONS of molybdenum with an estimated value of \$1.8 BILLION

Global demand for molybdenum is **EXPECTED TO GROW** at an average of 4.6% per year.

IRON, STEEL AND SUPER-ALLOY producers accounted for about 74% of the molybdenum consumed.



With its enviable reserves of molybdenum, the U.S. is well situated to meet the growing demand.

But in order to meet this growing demand, we need a more efficient U.S. minerals mining policy that supports our nation's manufacturing supply chain and boosts our economy.

SOURCES

http://minerals.usgs.gov/minerals/pubs/commodity/molybdenum/ http://pubs.usgs.gov/fs/2009/3106/pdf/fs2009-3106.pdf http://minerals.usgs.gov/minerals/pubs/mcs/2015/mcs2015.pdf http://mineidaho.com/2013/09/02/how-molybdenum-shows-up-in-everyday-life/

mineralsmakelife.org

MINERALS MAKE LIFE