




# MOLYBDENUM

## 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.



high heat tolerance



strong & durable



resistant to corrosion



resistant to bacteria

### 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.

▶ A KEY INGREDIENT IN **STAINLESS STEEL** TO GIVE IT **SUPER STRENGTH**



#### INFRASTRUCTURE

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



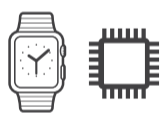
#### NATIONAL SECURITY

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



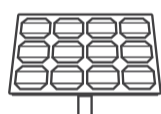
#### MODERN-DAY TECH & APPLIANCES

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

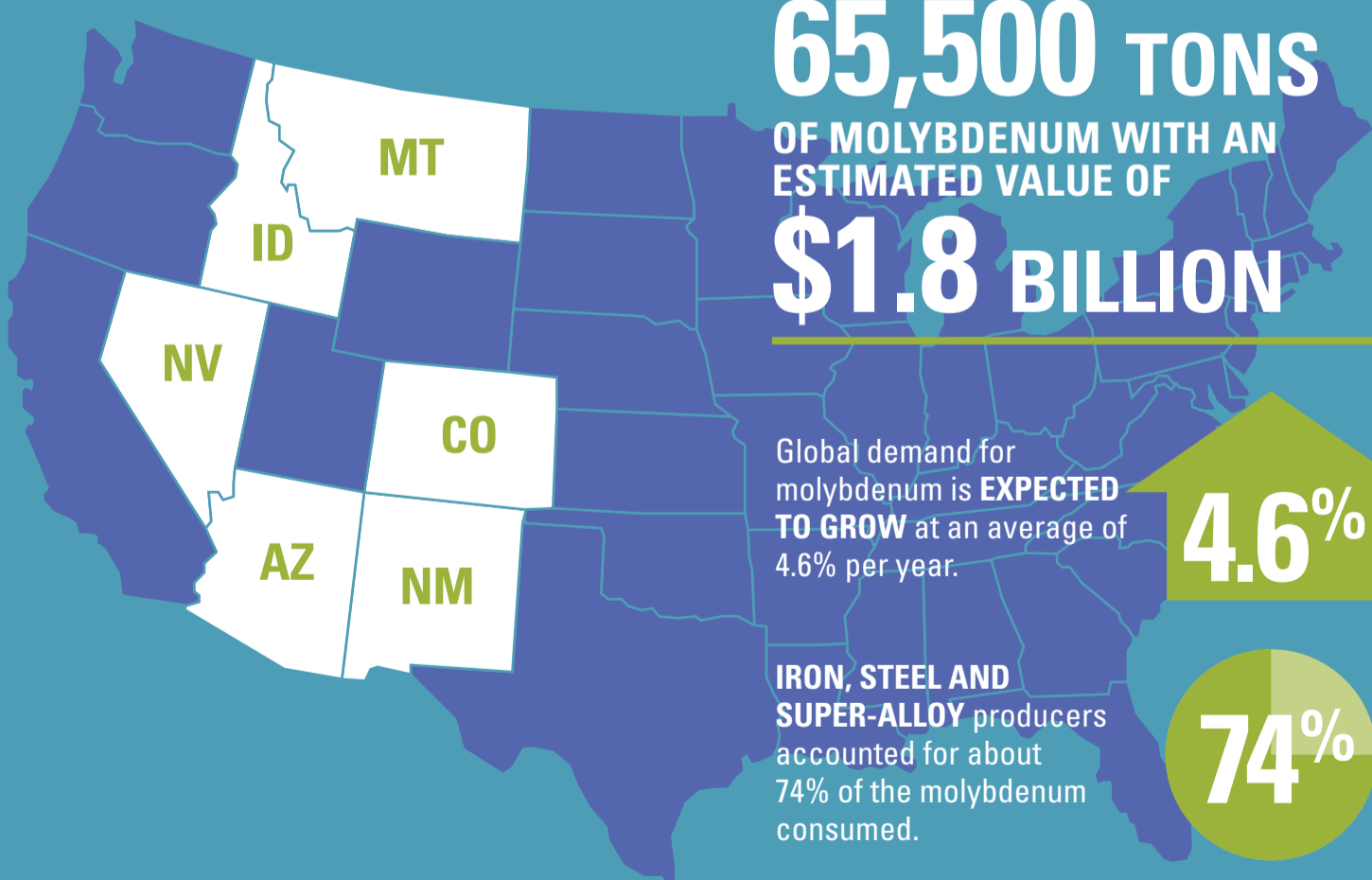
With its **resistance to corrosion and stress**, molybdenum alloys are used in oil wells, pipelines and power plants.



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 and Nevada.



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/>