# **MOLYBDENUM POWDER PRODUCTS**

A Wide Range of Technology-Based Solutions





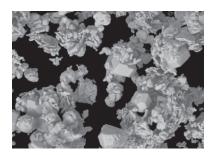
### **TECHNOLOGY METALS DESIGNED FOR PARTICLE ACCELERATORS**

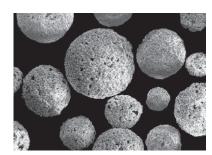
Elmet Technologies offers a wide variety of molybdenum powder in the size and purity to match any customer's requirements. From extremely fine Metal Injection Molding powder (MIMP) to flowable Ready-To-Press powder (RTP). Stringent specifications for molybdenum powders can be met by Elmet Technologies' expansive powder production capabilities.

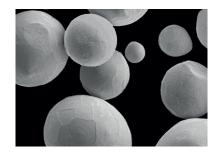
Molybdenum alloy powders are available such as TZM (Mo-0.5Ti-0.1Zr) and MHC (Mo-1.2Hf-0.1C), or oxide dispersion strengthened alloys such as MoLa (Mo-1.0La2O3). Custom alloys are available per customer request.

### **Key Advantages**

- > Widest range of Mo powder sizes and morphologies
- > Customized properties based on customer specification
- > High Purity
- > Quantities available from laboratory scale up to high volume automated manufacturing
- > Alloy powders and Molybdenum based compounds
- > Research and Development services for custom powders and alloys







# POWDERS CUSTOMIZED TO MEET THE APPLICATION REQUIREMENTS

The physical and chemical properties of the powders can be adjusted to meet individual customer requirements. Typical purity exceeds 99.95%. Standard screens sizes of -5 to -325 mesh are available, with finer sizes down to -635 mesh available on lab scale quantities. Split screen fractions such as -100+325 mesh are available. The oxygen content can be offered at lower levels through special reduction conditions as well as special packaging to protect the powder.

PRODUCT TYPE	SHORT DESCRIPTION	KEY FEATURE
MMP/MoMP	High purity molybdenum powder for pressing and sintering applications	Highest Purity
OMP	Molybdenum powder produced for applications like alloy additions	High purity, finer size
OMPF	Fine molybdenum powder for applications like catalysts, conductive inks or alloy additions	Finest size
MIMP Type I	Highly deagglomerated high purity molybdenum powder for applications like paste or metal injection molding applications	High purity, lower oxygen
MIMP Type II	Highly deagglomerated molybdenum powder for applications requiring the finest powders for ceramic metallization or metal injection molding applications	Finest agglomerate size
PDMP	Plasma densified pure molybdenum powder designed for additive manufacturing and thermal spray applications	Bulk density >5g/cc
RTP	Ready-to-Press molybdenum powder with organic binder, which is a uniformly agglomerated pure molybdenum powder designed for uniform mold filling and high pressed and sintered density	High Green Strength
SOMP	Agglomerated and sintered spherical powder for thermal spray applications	Custom sizes available

## **Applications**

the second secon		
> Additive Manufacturing	> Metal Injection Molding	> Pressed and Sintered Shapes

> Allovina	> Chemical Catalysts	> Electronics
> Alloying	> Chemical Catalysts	> Liectionics

/ Infiltration / Individuals / Inferrial Spray recliniolog	> Infiltration	> Photovoltaics	> Thermal Spray Technology
--	----------------	-----------------	----------------------------

> Brake Pads	> Detonation Initiators	> Heating Elements
--------------	-------------------------	--------------------

> Metal Matrix Composites	> Pressed and Sintered Ingots	> Sputtering T	argets
---------------------------	-------------------------------	----------------	--------

> Ceramic Metallization > Diamond Tooling > X-ray anodes



#### **ELMET TECHNOLOGIES**

1560 Lisbon Street • Lewiston, Maine 04240

**P** +1.207.333.6100

sales@elmettech.com www.elmettechnologies.com The conditions of your use and application of Elmet Technologies products, technical assistance, and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, is your responsibility. Therefore, you are encouraged to test our products and review any technical assistance and/or information you may receive from Elmet Technologies with your own resources, and determine to your own satisfaction whether Elmet Technologies products are suitable for your intended uses and applications. This application-specific analysis should include at minimum testing to determine suitability for the intended use from a technical as well as health, safety, and environmental standpoint. Any technical assistance and/or information provided by Elmet Technologies is given without any express or implied warranty or guarantee. You agree and understand and hereby expressly release Elmet Technologies from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and/or information, except as may be contained otherwise in a written agreement between you and Elmet Technologies. Any statement or recommendation not contained herein or in a written agreement between you and Elmet Technologies is unauthorized and shall not bind Elmet Technologies. Nothing herein shall be construed as a recommendation to use any Elmet Technologies products in a manner violative of the intellectual property rights of any third party. No license is implied or granted under or to Elmet Technologies intellectual property. All product deliveries are based on the then current product specification and Elmet Technologies' Conditions of Sale. IN NO EVENT WILL ELMETTECHNOLOGIES BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.