

Molybdenum Powder

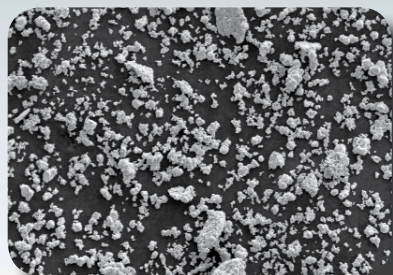
Technical Information Bulletin

Powders That Shape Your World



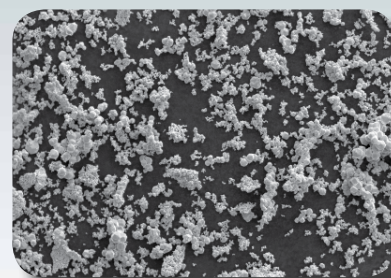
Global Tungsten & Powders Corp. produces two standard types of molybdenum powder with average particle size ranges that are less than six microns. Reduction from oxide to metal powder is accomplished in a hydrogen atmosphere with carefully controlled furnace conditions to yield a desired particle size and quality. The Fisher Sub-Sieve Size (FSSS) is the basis for average particle size measurement. After reduction, the molybdenum is milled and/or sifted and blended depending upon the specific needs of the customer. Single blend lots of up to 5,000 kilograms are available in the following standard two types:

Type 290



A powder with a minimum purity of 99.9%. It is commonly used for fabrication into rod and wire products.

Type 490



A powder with a minimum purity of 99.95%. This product finds special applications wherever maximum metalworking capability is required as in forging and rolling. Machinability of the sintered metal is excellent.

Impurity Content:	Type 290	Type 490
Element	99.90%	99.95%
Al	40	10
As	15	15
C	50	35
Ca	20	10
Cr	80	10
Cu	20	10
Fe	100	40
K	50	30
Mg	20	10
Mn	10	10
Na	50	10
Ni	100	30
P	15	15
Pb	10	10
Si	40	20
Sn	100	25
W	250	250
Loss on Reduction	0.20%	0.15%

(Maximum PPM except LOR which is maximum percent)

Physical Specifications:	Screening	FSSS Range	Bulk Density (g/in ³)
290	100 mesh	2.5-4.3	20 Minimum
290	250 mesh	2.5-4.3	20 Minimum
490	100 mesh	3.5-5.5	18-35
490	250 mesh	3.5-5.5	18-35

Non-standard FSSS ranges between one and six microns as well as finer mesh screening is available at additional cost. Both types pass 99.9% through the designated screen.



Customization

Customization and impurity levels can be discussed at time of inquiry.

Ordering

Specify desired powder type. Nonstandard products require the submission of a material specification for consideration prior to ordering.

Certification

Each shipment of powder is accompanied by a standard report which includes FSSS, bulk density, loss on reduction (water and oxygen), and purity level.

Packaging

Each lot is packaged in plastic bags inside of metal pails at approximately 34 kilograms per pail.



Global Tungsten & Powders
1 Hawes Street
Towanda, PA 18848
USA
Phone: +1 (570) 268-5000
Fax: +1 (570) 268-5323
e-mail: info@globaltungsten.com

History of Global Tungsten & Powders:

For over 60 years, GTP in Towanda has been producing tungsten, molybdenum, cobalt, and tantalum powder products. GTP produces a wide range of materials, which are used in the manufacture of numerous products. These products include metal working tools for cutting, rolling, and stamping; high temperature jet engine components and protective coatings; circuit manufacturing chemicals for microelectronics; catalysts for petrochemical processing.