

**High Performance Metal Solutions** 

# Alloy Additives from High Performance Refractory Metals



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# Molybdenum Powder Products

# Pellets

H.C. Starck Solutions offers molybdenum Pellets as a consolidated form providing a particularly effective means of making molybdenum alloy additives. The molybdenum pellets are vacuum grade pressed and sintered with a molybdenum content of 99.8% minimum.

Pellets are sintered in hydrogen and have extremely low gas content, which keeps degassing during vacuum melting to an absolute minimum. Pellets are pressed and sintered to withstand rigorous handling. In addition, they are sufficiently small enough to dissolve rapidly and yet dense enough to settle into the molten metal bath.

Vacuum melt 99.8% and air melt 99% grade pellets are available.

We produce alloy additives from molybdenum, tungsten, tantalum and niobium refractory metals which are derived from our production processes. We use high-quality materials with some of the highest purity levels.

Superalloy materials obtain many of their high temperature strength and corrosion resistance through the use of refractory metal alloying.

H.C. Starck Solutions' offers all of the major refractory metals to the specialty alloy producers as alloying agents. Special low gas content is available which keeps out-gassing to a minimum. Various grades are available to meet customer requirements.

#### Products are offered in all forms as melt additives:

- > Chips
- > Turnings
- > Trimmings



# Pure Molybdenum OMPP Pellets (99.8%)

Pure Molybdenum OMPP Pellets are vacuum grade pressed and sintered molybdenum pellets with a molybdenum content of 99.8% minimum.

#### CHEMICAL CHARACTERISTICS 1)

Mo (excluding gases)			Typical min. 99.8%
AI	max.	0.01 %	0.002 %
С	max.	0.005 %	0.001 %
Ca	max.	0.01 %	0.001 %
Cr	max.	0.02 %	0.003 %
Cu	max.	0.005 %	< 0.001 %
Fe	max.	0.03 %	0.010 %
Mg	max.	0.01 %	0.001 %
Mn	max.	0.005 %	0.001 %
Ni	max.	0.03 %	0.001 %
Pb	max.	0.001 %	< 0.001 %
Si	max.	0.03 %	0.012 %
Sn	max.	0.005 %	0.003 %



<sup>1)</sup> Information on testing methods on request

(Mass fraction in % [cg/g]; ppm [ $\mu$ g/g])

# **Physical Characteristics**

Density:min. 0.25 pounds/inch³ (7g/cc.)Pellet size:approximately  $\frac{1}{2}$  inch  $\times \frac{3}{4}$  inch  $\times 1$  inch (12.5 mm  $\times 18$  mm  $\times 25$  mm)

# Packaging

OMPP molybdenum pellets are shipped in non-returnable 15-gallon steel drums or 5-gallon plastic pails. Special packaging inquiries welcome.

# Storage and Handling

Storage and handling are subject to the rules and regulations in the country of use.

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