



High Performance Metal Solutions

# Thermal Spraying with Molybdenum Powders

Innovation is the key to H.C. Starck's success in developing the highest quality molybdenum powders for thermal spray applications. Our molybdenum thermal spray powders are spherical, flowable and designed to improve and restore surfaces from large area coatings to small metal components.

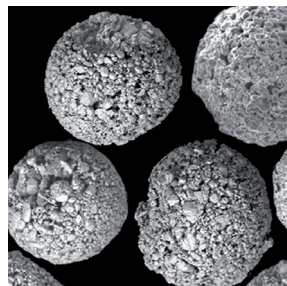
## H.C. Starck's Thermal Spray Powder Advantage

H.C. Starck's molybdenum thermal spray powders extend the life of products by repairing worn and damaged surfaces, and protecting against the detrimental effects of erosion, wear and corrosion. Our thermal spraying powders involve the disposition of powders covering a substrate forming an even coating of contiguous layers.

## Diverse Spraying Processes

- > Plasma
- > Flame
- > Detonation
- > High velocity air fuel (HVOF)
- > High velocity oxy-fuel coating spraying (HVOF)

Spray Dried Powder



Spherical and flowable

H.C. Starck 

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## Applications

From popular transportation modes like automobiles, trains, aircraft and boats to chemical plants, food manufacturing and packaging, mining, earthmoving



equipment, power generation and many applications that are subject to usage and environmental effects.

## Molybdenum Thermal Spray Powders

Pure molybdenum powder for various size specifications.

- > Coarse Grade -170+325 mesh
- > PWA 1313 -200+325
- > Finest – PWA 1338
- > Fine Grade -325 mesh

### Chemical Characteristics<sup>1</sup>

Mo (excluding gases) min. 99.8 %

<sup>1</sup> Mass fraction in % [cg/g]; ppm [µg/g]

### Physical Characteristics

Apparent Density 30 g/cubic inch minimum

Hall flow 35 s/50 g maximum

We can also alloy with carbon to produce any level of C content up to 6% (pure Mo<sub>2</sub>C).

Additional customized alloy powder products are available upon request.

## Packaging

The molybdenum powder is shipped in non-returnable polyethylene-lined 20 liter (5 gallon) plastic pails or 60 liter (15 gallon) steel drums. Special packaging inquiries welcome.

The conditions of your use and application of our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis at least must include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by H.C. Starck Solutions. All information is given without warranty or guarantee. It is expressly understood and agreed that the customer assumes and hereby expressly releases H.C. Starck Solutions from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and information. Any statement or recommendation not contained herein is unauthorized and shall not bind H.C. Starck Solutions. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent. Properties of the products referred to herein shall as general rule not be classed as information on the properties of the item for sale. In case of order please refer to issue number of the respective product data sheet. All deliveries are based on the latest issue of the product data sheet and the latest version of our General Conditions of Sale and Delivery.

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