H.C. Starck Solutions 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 H.C. Starck Solutions’ 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.

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Short Description</th>
<th>Key Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMP/MoMP</td>
<td>High purity molybdenum powder for pressing and sintering applications</td>
<td>Highest Purity</td>
</tr>
<tr>
<td>OMP</td>
<td>Molybdenum powder produced for applications like alloy additions</td>
<td>High purity, finer size</td>
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<tr>
<td>OMPF</td>
<td>Fine molybdenum powder for applications like conductive inks or alloy additions</td>
<td>Finest size</td>
</tr>
<tr>
<td>MIMP Type I</td>
<td>Highly deagglomerated high purity molybdenum powder for applications like paste or metal injection molding</td>
<td>High purity, lower oxygen</td>
</tr>
<tr>
<td>MIMP Type II</td>
<td>Highly deagglomerated molybdenum powder for applications requiring the finest powders for ceramic metallization or metal injection molding applications</td>
<td>Finest agglomerate size</td>
</tr>
<tr>
<td>PDMP</td>
<td>Plasma densified pure molybdenum powder designed for additive manufacturing and thermal spray applications</td>
<td>Bulk density &gt;5g/cc</td>
</tr>
<tr>
<td>RTP</td>
<td>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</td>
<td>High Green Strength</td>
</tr>
<tr>
<td>SOMP</td>
<td>Agglomerated and sintered spherical powder for thermal spray applications</td>
<td>Custom sizes available</td>
</tr>
</tbody>
</table>

Applications

- Additive Manufacturing
- Alloying
- Infiltration
- Brake Pads
- Metal Matrix Composites
- Ceramic Metallization
- Metal Injection Molding
- Chemical Catalysts
- Photovoltaics
- Detonation Initiators
- Pressed and Sintered Ingots
- Diamond Tooling
- Pressed and Sintered Shapes
- Electronics
- Thermal Spray Technology
- Heating Elements
- Sputtering Targets
- X-ray anodes

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USA

H.C. Starck Inc.
460 Jay Street
Coldwater, MI 49036 USA
T +1 517 279 9511
F +1 517 269 9512
info@hcstarcksolutions.com
www.hcstarcksolutions.com