

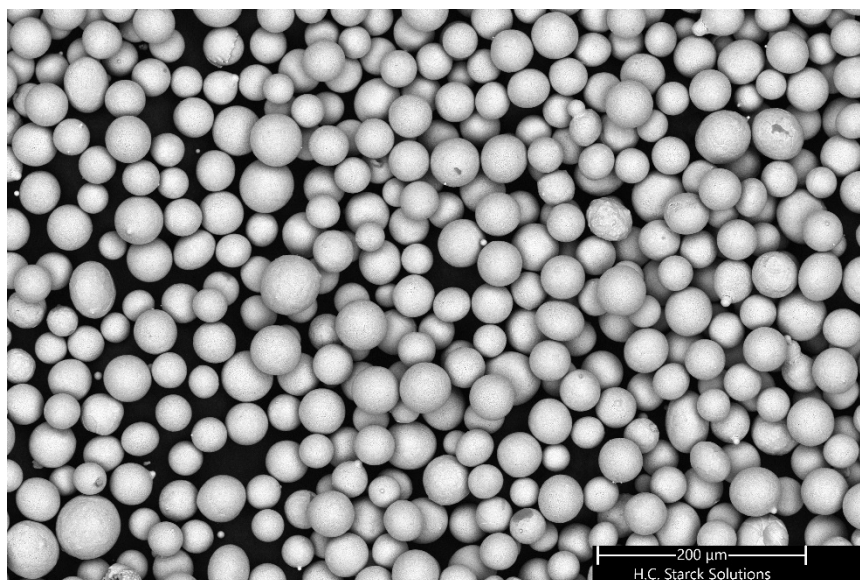
## Mo – Ti – Zr Alloy TZM AM Powder

### Description of Product:

H.C. Starck Solutions produces TZM molybdenum alloy powder (Mo +0.5%Ti +0.1%Zr) for laser powder bed fusion (L-PBF) and directed energy deposition (DED) additive manufacturing processes. The powder exhibits low oxygen content, excellent flowability, and high apparent and tap densities.

Chemical Characteristics <sup>1)</sup>	
Element	Percent %
Mo	99.2 min
Ti	0.4 – 0.55
Zr	0.06 – 0.12
C	<0.15
O	<0.1

Physical Characteristics <sup>1)</sup>		
Property	L-PBF	DED
Bulk density, g/cc	>5	>5
Flow, s/50g	<15	<17
PSD, d10, µm	>10	>40
PSD, d90, µm	<53	<150



Typical morphology of L-PBF size powder

1) Information on testing methods on request.

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- Customization**                      Inquiries regarding custom particle size and chemistry are welcome.
- Packaging**                              The TZM AM powder is packaged in polyethylene bottles with desiccant. Special packaging inquiries are welcome.
- Hazards identification in Advertising (Directive 67/548/EEC Article 26 and Directive 1999/45/EC Article 13)**  
none.
- Identification**                              The material will be identified with appropriate specification number, batch number, and nominal size. Shipping containers will be marked with the name of the customer and the purchase order number.
- Rejection**                                      H.C. Starck Solutions must receive written notification of rejected material with the reason for rejection. The right is reserved to inspect rejected material at customer plant for claim validation. The material may be returned only after proper authorization.

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