

# ADDITIVE MANUFACTURING PRODUCTS

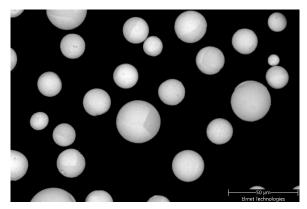
Elmet Technologies produces tungsten AM powder (W) for laser powder bed fusion (L-PBF) and directed energy deposition (DED) additive manufacturing processes. The powder exhibits low oxygen content, excellent flowability, and high apparent and tap densities.

## CHEMICAL CHARACTERISTICS<sup>1</sup>

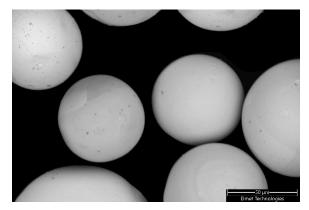
Element	Percent %	
W	99.9 min	
С	< 0.01	
0	< 0.03	

# PHYSICAL CHARACTERISTICS<sup>1</sup>

Property	L-PBF	DED
Bulk density, g/cc	>10	>10
Flow, s/50g	<7	<8
PSD, d10, μm	>10	>40
PSD, d90, μm	<53	<150



Typical morphology of L-PBF size powder



Typical morphology of DED size powder

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

## CUSTOMIZATION

Inquiries regarding custom particle size and chemistry are welcome.

#### PACKAGING

The W 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

Elmet Technologies 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.



ELMET TECHNOLOGIES 1560 Lisbon Street • Lewiston, Maine 04240

**P** +1.207.333.6100

sales@elmettech.com www.elmettechnologies.com The conditions of your use and application of Elmet Technologies products, technical assistance, and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, is your responsibility. Therefore, you are encouraged to test our products and review any technical assistance and/or information you may receive from Elmet Technologies with your own resources, and determine to your own satisfaction whether Elmet Technologies products are suitable for your intended uses and applications. This application-specific analysis should include at minimum testing to determine suitability for the intended use from a technical as well as health, safety, and environmental standpoint. Any technical assistance and/or information provided by Elmet Technologies is given without any express or implied warranty or guarantee. You agree and understand and hereby expressly release Elmet Technologies is given without any express or implied warranty or guarantee. You agree and understand and hereby expressly release Elmet Technologies from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and/ or information, except as may be contained otherwise in a written agreement between you and Elmet Technologies. Any statement or recommendation not contained herein or in a written agreement between you and Elmet Technologies is unauthorized and shall not bind Elmet Technologies. Nothing herein shall be construed as a recommendation to use any Elmet Technologies is madults in a manner violative of the intellectual property rights of any third party. No license is implied or granted under or to Elmet Technologies intellectual property. All product deliveries are based on the then current product specification and Elmet Technologies' Conditions of Sale. IN NO EVENT WILL ELMET TECHNOLOGIES BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.