

## Metal Powder Works CP Titanium Powder Achieves Handbook Values in Cold Spray Applications with US Based HAMR Industries

**Metal Powder Works Limited (ASX: MPW) ("MPW" or "the Company")**, a leading developer of advanced metal powder production technology, today announced a significant milestone in the qualification of its commercially pure titanium (CP-Ti) powder for cold spray applications.

MPW's CP-Ti powder has been independently validated by a US aerospace-qualified partner HAMR Industries LLC ("HAMR") against the same handbook used by global OEMs and Tier-1 suppliers. HAMR Industries, an existing MPW Powder Production Partner has successfully validated that MPW's CP-Ti powder delivers performance characteristics consistent with established industry handbook values when deployed through cold spray technology. This achievement represents a critical validation of the powder's technical specifications and commercial viability for advanced manufacturing applications.

The team met the strength requirements as published in MMPDS (Metallic Materials Properties Development and Standardization). MMPDS is the primary source of statistically-based design allowable properties for metallic materials and fasteners used in many different commercial and military aerospace applications around the world. Achieving these strength values confirms that MPW's CP-Ti powder performs on par with, or better than, conventional wrought titanium, and matches the performance of powders produced using legacy methods, at a fraction of the cost.

This validation distinguishes MPW's titanium powder from alternatives produced using legacy atomization techniques. While many powders can be suitable for general additive or spray applications, few have been independently confirmed to achieve handbook mechanical property values equivalent to wrought titanium. MPW's process not only meets these demanding aerospace standards but does so with a cost-efficient, scalable technology offering a unique combination of performance, repeatability, and commercial viability that sets it apart in the titanium powder market.

"This achievement validates our ongoing mission," said MPW Managing Director John Barnes. "We are proving that our consistent powder production technology delivers not just more cost-effective powders, but also high-performance materials that meet the most demanding industry standards."

This achievement represents a significant opportunity to enter another key segment of the CP-Ti powder market, which in 2024 was valued at approximately USD 847 million<sup>1</sup>. MPW has identified this market as a strategic priority due to constrained supply conditions and robust demand across multiple high-value industries that require materials with exceptional lightweight strength, superior corrosion resistance, and proven biocompatibility.

### Key Market Applications

- **Aerospace & Defence** Critical applications include airframe components, precision fasteners, and advanced component repair through cold spray technology, where material reliability and

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weight reduction are paramount.

- **Medical & Dental** Essential for biomedical implants, precision surgical instruments, and specialized dental devices that demand both biocompatibility and mechanical performance in challenging biological environments.
- **Energy & Chemical Processing** Utilized in demanding applications such as specialized valves, process piping systems, and heat exchangers where resistance to aggressive chemicals and high-temperature performance are critical.
- **Marine & Offshore** Provides long-term durability for components exposed to harsh seawater environments, where conventional materials would fail due to corrosion over extended service periods.
- **Additive Manufacturing & Repair** Enables near-net shape production capabilities and advanced surface restoration techniques, supporting both new manufacturing processes and equipment lifecycle extension.

This validation confirms that MPW's CP-Ti powder meets the stringent requirements for additive manufacturing standards, reinforcing the Company's commitment to advancing its partnership with HAMR Industries.

Beyond cold spray applications, MPW is actively engaging with customers across traditional CP-Ti market segments, where initial testing has yielded comparable performance results. These customer qualification programs are progressing well, and MPW anticipates providing additional updates as these partnerships mature.

HAMR Industries CEO Michael Schmitt had this to say, "The MPW CP Ti worked extremely well in our system; there were no flowability issues, and we achieved a very high deposition efficiency using air as our process gas. We are awaiting mechanical test results, but the microstructure appeared comparable to those of other CP Ti materials that we have processed."

**Ends.**

This announcement has been authorised for release by the Board of Directors.

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### **ABOUT METAL POWDER WORKS**

Metal Powder Works Limited (ASX:MPW) manufacturing base is in Pittsburgh, USA and specialises in the production of high-quality metal powders for additive manufacturing and other advanced applications. MPW has developed a patented, non-thermal powder production process known as *DirectPowder™*. The MPW process represents the first true innovation in powder manufacturing in over 50 years. This innovative method converts premium bar stock into quality powder for a variety of materials and applications, significantly improving yield and affordability. MPW currently has 16+ powders in production including high strength aluminum, Copper and Copper Nickel alloys, and specialty alloys including CP-Ti and Zircaloy. In 2024, Metal Powder Works was named as Material Company of the Year by the 3D Printing Industry Awards.

For further information please see [www.metalpowderworks.com](http://www.metalpowderworks.com)

### **ABOUT HAMR INDUSTRIES**

HAMR Industries LLC is at the cutting edge of advanced manufacturing, specializing in cold spray additive manufacturing (CSAM) and tailored materials engineering solutions. Headquartered in Clinton, Pennsylvania, HAMR is known for pushing the boundaries of what's possible in part production, repair, and complex multi-material systems.

### **FORWARD LOOKING STATEMENTS**

Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices or potential growth of Metal Powder Works Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.

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