Desktop Metal and Uniformity Labs Announce Breakthrough in Aluminum Sintering for Binder Jetting Technology

Fully Dense, Sinterable 6061 Aluminum with Better Than Wrought Strength to Be Available Exclusively for the Desktop Metal Production System

BOSTON & FREMONT, Calif.--(BUSINESS WIRE)-- Desktop Metal, Inc. (NYSE: DM), a leader in mass production and turnkey additive manufacturing (AM) solutions, and Uniformity Labs, a leading additive manufacturing company that is revolutionizing industrial 3D printing materials and processes, today announced a breakthrough powder that enables aluminum sintering for binder jetting AM technology. This new powder is the result of a multi-year collaboration between the companies to develop a low-cost, raw material yielding fully dense, sinterable 6061 aluminum with greater than ten percent (10%) elongation and improved yield strength (YS) and ultimate tensile strength (UTS) versus wrought 6061 aluminum with comparable heat treatment.

“This breakthrough represents a major milestone in the development of aluminum for binder jetting and a significant step forward for the AM industry as it is one of the most sought-after materials for use in automotive, aerospace and consumer electronics,” said Ric Fulop, CEO and co-founder of Desktop Metal. “The global aluminum castings market is more than $50 billion per year, and it is ripe for disruption with binder jetting AM solutions.

Fully dense, sinterable 6061 aluminum with better than wrought strength will be available for binder jetting technology, marking a significant step forward for the Additive Manufacturing (AM) industry as it is one of the most sought-after materials for use in automotive, aerospace and consumer electronics. (Photo: Business Wire)
These are the best reported properties we are aware of for a sintered 6061 aluminum powder, and we are excited to make this material available exclusively to Desktop Metal customers as part of our ongoing partnership with Uniformity Labs.”

“The introduction of lightweight metals to binder jetting opens the door to a wide variety of thermal and structural applications across industries,” said Adam Hopkins, founder and CEO of Uniformity Labs. “This innovation is a key step towards the adoption of mass-produced printed aluminum parts.”

This new powder enables the sintering of unadulterated 6061 aluminum and represents a significant improvement over prior techniques used to sinter aluminum, which required coating powder particles, mixing sintering aids into powder, using binders containing expensive nanoparticles, or adding metals such as lead, tin and magnesium. Critically, the powder also enables compatibility with water-based binders and has a higher minimum ignition energy (MIE) relative to other commercially available 6061 aluminum powders, resulting in an improved safety profile. Desktop Metal and Uniformity Labs plan to continue to work together over the coming year to qualify the powder and scale production for commercial release. Once fully qualified, Uniformity 6061 aluminum will be available for use with the Desktop Metal Production System™ platform, which is the only metal binder jetting solution with an inert, chemically inactive processing environment across the printer and auxiliary powder processing equipment, enabling customers to achieve consistent, high-quality material properties across volumes of end-use parts with reactive materials, such as aluminum.

About Desktop Metal

Desktop Metal, Inc., based in Burlington, Massachusetts, is accelerating the transformation of manufacturing with an expansive portfolio of 3D printing solutions, from rapid prototyping to mass production. Founded in 2015 by leaders in advanced manufacturing, metallurgy, and robotics, the company is addressing the unmet challenges of speed, cost, and quality to make additive manufacturing an essential tool for engineers and manufacturers around the world. Desktop Metal was selected as one of the world’s 30 most promising Technology Pioneers by the World Economic Forum and named to MIT Technology Review’s list of 50 Smartest Companies.

For more information, visit www.desktopmetal.com.

About Uniformity Labs

Uniformity Labs, founded in 2014 and based in Fremont CA, develops breakthrough material and software solutions that aim to accelerate and expand global commercial / industrial 3D printing (AM) markets. Our patented technology enables significant cost savings, speed & quality improvements across all mainstream AM printers. Uniformity’s feedstock materials and print processes have a dramatic impact on the AM value chain by increasing reliability and efficiency of printing.

For more information, visit www.uniformitylabs.com.

Forward Looking Statements
This press release contains certain forward-looking statements within the meaning of the federal securities laws. Forward-looking statement generally are identified by the words “believe,” “project,” “expect,” “anticipate,” “estimate,” “intend,” “strategy,” “future,” “opportunity,” “plan,” “may,” “should,” “will,” “would,” “will be,” “will continue,” “will likely result,” and similar expressions. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions and, as a result, are subject to risks, uncertainties. Many factors could cause actual future events to differ materially from the forward-looking statements in this document, including but not limited to the risks and uncertainties set forth in the Company’s filings with the U.S. Securities and Exchange Commission. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and the Company assumes no obligation and does not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. The Company does not give any assurance that it will achieve its expectations.

View source version on businesswire.com:

Desktop Metal
Lynda McKinney – 978-224-1282
lyndamckinney@desktopmetal.com

Uniformity Labs
Frank De Maria – 347-647-0284
Frank.deMaria@purposefulcommunications.com

Source: Desktop Metal, Inc.