

BNNANO AND ECK INDUSTRIES DEMONSTRATE 70% STRENGTH IMPROVEMENT TO AN ALUMINUM ALLOY USING BORON NITRIDE NANOBARBS™

BNNano, Inc. and Eck Industries announced that adding Boron Nitride NanoBarbs™ into an advanced aluminum alloy casting, boosts the yield strength by 70%.

BURLINGTON, NC, USA, April 22, 2021 /EINPresswire.com/ -- [BNNano, Inc.](#) and [Eck Industries](#) today announced the successful incorporation of Boron Nitride [NanoBarbs™](#) into an advanced aluminum alloy casting, boosting the yield strength of the alloy by 70% at 0.4wt% NanoBarb™ loading.

Eck Industries provides high value cast products for the military, aviation, medical, high performance automotive, hybrid vehicles, space, and industrial markets. Eck casts a wide variety of aluminum alloys to optimize light-weighting, elevated temperature performance, and increased strength. Flagship castings have included the A206 final drive housing for Bradley Fighting Vehicles and 200 series air & liquid-cooled cylinder heads for small aircraft. Eck has a history of collaboration with leading researcher institutions such as the Oak Ridge National Laboratory, Ames Laboratory and Lawrence Livermore National Laboratory and are leading the commercialization efforts of Al-Ce alloys developed with funding from the Department of Energy and the Critical Materials Institute.

BNNano is an advanced manufacturing company that pioneered the patent pending NanoBarb™, an enhanced Boron Nitride Nanotube that when added to commodity materials unlocks tremendous properties and creates revolutionary products. This unique engineering material is the foundation for their NanoBarb™ Aluminum Master Alloy that when added to molten aluminum (utilizing standard processes) imparts into the alloy its significant strength.

Jason Taylor, CTO and co-founder of BNNano noted, "Our NanoBarb™ Aluminum master alloy performed exactly as we designed it; the NanoBarbs™ distributed in the melt without agglomeration and bonded to the aluminum alloy, thereby delivering a significant performance enhancement."

David Weiss, VP of R&D at Eck Industries said, "One of the biggest issues in the production of composite materials is agglomeration of the particles. The unique chemistry and aspect ratio of

NanoBarbs™ makes agglomeration less likely and therefore more effective in strengthening the base alloy. We are excited to bring NanoBarb™ reinforced aluminum casting alloys to our customers.”

Steve Wilcenski, CEO and co-founder of BNNano stated, “We are excited at the progress we are seeing in our partnership with Eck Industries. We are fortunate to work with a company who not only recognize but can implement the cutting edge application of our material in their materials and forms. We believe great things are to come and look forward to what we will do in the future.”

Steve Wilcenski
BNNano, Inc.
+1 919-621-2936

[email us here](#)

Visit us on social media:

[Twitter](#)

[LinkedIn](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/539114682>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2021 IPD Group, Inc. All Right Reserved.