

A 'catch and kill' mask that offers to get us back to work, welcome SINTX

A classic story of repurposing your tried and true Intellectual Property, allow me to introduce you to SINTX Technologies, Inc. (NASDAQ: SINT). SINTX is a leading manufacturer of silicon nitride which is a very hard, abrasion- and corrosion-resistant ceramic solid that's inherently antibacterial and antiviral. These last two factors have caused the company to create quite a stir in this new world of COVID-19.

But first, let's take a step back and look at how this company got started. Way back in 1996 the company was developing a ceramic hip replacement system. From there they launched multiple new silicon nitride spinal implants gaining regulatory clearances in Europe, Brazil, and Australia. Today their devices are used in over 35,000 human spine implantations.

From there they diversified their product line into more industrial applications such that they are now involved in aerospace, bearings, and drilling. In October 2020 they received the AS9100D certification for the Aerospace Quality Management System, meaning that SINTX equipment now meets the stringent standards of the aerospace industry thus achieving a critical step in entering the aviation, space, and defense market sectors. Of note, they have a 30,000 sq. ft., state-of-the-art manufacturing facility (and headquarters) in Salt Lake City which is FDA registered and ISO certified.

When it comes to Silicon nitride this team and their R&D is second to none. They have over 130 peer-reviewed scientific publications, more than 85 technical and scientific

presentations and 12 Patents issued with another 56 Patent applications. So when COVID-19 came along they were able to improvise and adapt to develop yet another product line to add to the mix. In October 2020 (apparently a good month for the company) the SINTX R&D team bonded silicon nitride particles consistently and evenly into the fibers of a nonwoven fabric layer, in an effort to manufacture a “catch and kill” face mask that will inactivate respiratory viruses. That’s a bit of a mouthful but essentially they found that their silicon nitride inactivated the SARS-CoV-2 virus upon contact.

And that brings us to yesterday when the company press released confirmation of results on tests done at the University of Rochester, New York, which show that fabrics containing silicon nitride had comparable efficacy against inactivation of the SARS-CoV-2 virus to what their R&D team initially discovered. This opens up a whole new, and potentially highly profitable, business to SINTX. In addition to the “catch and kill” face mask, the Company expects the antiviral fabrics could be used in many applications, such as surgical gowns and drapes, automotive and HVAC filters, wound dressings, clothing, and more. SINTX believes that products made of its fabrics will inactivate trapped pathogens and reduce the risk of disease transmission. Effective HVAC filters would be a huge step in getting people back into offices and back on to cruise liners and into airplanes.

If you think all this is pretty interesting stuff, then you’ll really like the fact that this company has no debt, over US\$20 million in cash and ONLY 26.1 million shares outstanding on a fully diluted basis. So despite their 50+% rally in this latest news, the market cap of this intriguing company is still under US\$50 million. Granted they aren’t profitable yet, and COVID-19 negatively impacted their spinal implant business. Nevertheless, as they found one door closing it definitely opened up a new door for SINTX to show off their innovative spirit.