

Magna hopes to roll out technology to help sterilize PPEs from COVID-19

?We're hoping we can save some lives with this project?

Can already-established technology be used to help frontline workers sterilize their personal protective equipment (PPE) of COVID-19?

That is the question Aurora-based Magna is hoping to find out as they look to ramp up production on purification system already in production in Newmarket to aid in the fight.

The Puro is a cooler-sized box that was developed to harness the anti-microbial and anti-viral properties of ozone. Often used today as a way to kill odour-causing microbes on things like hockey equipment, Magna is working with partners in the science and medical fields to test the product to see if it can help aid the COVID-19 fight. If the results are successful, they hope to significantly ramp up production of the device in York Region.

?Our engineers dreamed up this product they call Puro, which is a box they can then attach an ozone creating device to fill up the space with ozone, and the ozone is highly effective in killing bacteria,? explains Scott Worden, Senior Manager, Corporate Communications, at Magna International. ?The tests they had originally run found that it was effective in knocking out the MRSA bacteria (a bacteria that is frequently found in hospital and other healthcare environments). They were looking at things like hockey equipment and other sorts of household stuff that you can't throw into the clothes washer necessarily and can get kind of gross from bacteria. They developed this product about five years ago.?

Magna floated the potential efficacy of this product at the end of March as the Federal Government began engaging with large companies on redirecting their manufacturing energies towards products that can be used to address the pandemic.

Since then, Mr. Worden says reception from potential partners, including medical researchers, has been encouraging.

?Once we started discussing this publicly about a week ago, our team ? the engineers and the Puro team ? have received quite a bit of interest and feedback,? he says. ?They are at a point now where they are working with some of testing facilities and there are multiple tests going on in parallel right now. One of the tests is just to test [whether] the ozone chamber in the Puro product knocks out the COVID-19 virus. Will it kill the virus the way that it kills bacteria? That is the first question we're trying to answer with the tests.

?A parallel test they are doing is to test the N95 masks [in the chamber], one of the critical pieces of personal protective equipment that frontline workers need [and] if they can be reused after spending their time in the chamber being cleaned up and sterilized. That

is the key: if we find out that we can put PPEs into the chamber, can it kill any COVID-19 virus that is on there and then have healthcare people reuse those masks? That will help alleviate the shortage and the anxiety over having enough PPE.?

Mr. Worden says Magna anticipates it will take about two weeks to get through this testing stage.

?We'll know at the end of that time period whether or not it is going to be effective in killing COVID-19. If we get the news we're hoping for and the tests prove out our hypothesis and what we're hoping, it is about six weeks to tool up and start being able to manufacture Puro in higher volumes.

?Magna employees are problem-solvers by nature and so, in this situation, with the global pandemic going on and our regular business kind of on hold right now with all the automotive manufacturing that is on hold for everybody's safety, we really want to try and find a way to help. We're very much hoping we'll be able to save some lives with this project.?

By Brock Weir