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Australia uses anti-microbial copper to beat COVID-19

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The process, known as ACTIVAT3D copper, has been developed by modifying SPEE3D's world-leading 3D printing technology

Australian company SPEE3D has successfully developed and tested a fast and affordable way to 3D print anti-microbial copper onto metal surfaces. Laboratory tests have shown that touch surfaces modified by this process 'contact kills' 96% of SARS-CoV-2, the virus that causes COVID-19, in just two hours.

The process, known as ACTIVAT3D copper, has been developed by modifying SPEE3D's world-leading 3D printing technology, using new algorithms for controlling their metal printers to allow existing metal parts to be coated with copper. Copper parts are difficult to produce using traditional methods and thus 3D printing may be the only tool available to rapidly deploy copper. SPEE3D technology makes it fast and affordable.

Australian NATA accredited clinical trial speciality laboratory, 360Biolabs, tested the effect of ACTIVAT3D copper on live SARS-CoV-2 in their Physical Containment 3 (PC3) laboratory. The results showed that 96% of the virus is killed in two hours and 99.2% of the virus killed in 5 hours, while stainless steel showed no reduction in the same time frame. Stainless steel is currently the material typically used in hygiene environments.

With laboratory testing complete, it is hoped the Australian-developed breakthrough can be applied to common touch items like door handles, rails and touch plates in hospitals, schools and other public places.