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Press Release

The robot used to fight the fire in the Notre-Dame is now being used to fight COVID-19.

Fitted with maxon DC motors is Colossus, a remotely controlled robot that is being used to disinfect surfaces removing the need for human contact. In April 2019, Colossus was integral in fighting the Notre-Dame fire, going inside the unstable Cathedral spraying more than 3,000 litres of water.

Developed by French company Shark Robotics, in partnership with the Sapeurs-Pompiers de Paris (Paris firefighters) brigade, the design of Colossus Robot is versatile to adapt to many different unsafe and hazardous situations. The Bataillon de Marins-Pompiers (marine fire service) from Marseille, France have engaged two Colossus robots in the battle against COVID-19.

Removing the need for human contact the robots are fitted with a decontamination unit to disinfect surfaces. Built into Colossus is a 50 litre tank with nozzles that spray micro particles of disinfectant liquid, capable of disinfecting up to 20,000 m2 in three hours. There is the option to fit the robot with a smoke removal fan for access to an area on fire, or even with a motorised handling arm to grasp and move objects. Fitted with maxon DC motors, these multipurpose robots are capable of supporting the unit in large-scale incidents.

Operated remotely by a Fireman the robots can change operating systems in less than 30 seconds without intervention. Equipped with multiple heat sensing cameras and sensors for investigating hostile environments and fitted with a carrier enables the transportation of equipment or evacuating an injured person on a hauled stretcher. It's also possible to add a HD camera for a 360 degree perspective to examine the surroundings both in light or darkness, or to fit sensors to measure factors such as temperature, radiation, or the presence of bacteriological agents.

Measuring 1.6m long, 78cm wide and standing 76cm tall, Colossus weighs 500kgs, is capable of carrying loads up to 1 tonne and is constructed of aeronautical aluminium and steel. There are two 400W DC motors and six batteries allowing for 10 to 12 hours of operational time. Working in environments that are hostile and harsh, it was important to have components that were resistant to dust, water, flames, microparticles and extreme temperatures. The DC motors had to be very energy efficient and reliable as well as compact. There are 19 different DC motor combinations and maxon products in Colossus, all selected in collaboration with MDP maxon France.

For more information on Shark Robotics' Colossus see <u>shark-robotics.com</u> or speak to an Engineer at maxon Australia tel. +61 2 9457 7477.

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The press release is available on the internet at: www.maxongroup.net.au



The Colossus robot © maxon Group

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