

XOS Exoskeleton

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The XOS Exoskeleton was developed by the Raytheon Sarcos team in the company's research facility in Salt Lake City, Utah. It is still in development but results so far look very promising. This exoskeleton is worn by a human, with electrodes attached to essential muscles externally on the skin. This then allows for the user to move as they normally would, having the external suit shadow the movements and therefore move with you.

This is a big deal as not only does the suit move with you, but also enhances and surpasses the limitations of human ability. For example, this suit is capable of making a 200 pound weight feel like 10 pounds, allowing for a person to do more than usual.

It's important to note that Sarcos was bought out by Raytheon and the Sarcos is the company responsible for the robotics found at Disney in the Pirates of the Caribbean and Jurassic Park rides. Raytheon is an American defense contractor, and when combined, the idea of being able to build a super soldier was a must.

Although mainly used for military purposes, there are other soon to be commercially available suits for civilians such as the HAL-5, engineered by Cyberdyne Inc. The HAL-5 has already been used to climb a mountain with a human on the user's back.

The XOS Exoskeleton is not this close to being available and is in its prototype stages but has been shown to allow users to run, catch



things, punch a punching bag with accuracy, and is very agile.

This suit can distinguish slow vs. fast movements and will not act faster than the user intended, hence making it safe to use. Users have even reported to be able to walk on the suit's heels. The suit has ran at a speed of 6.3 mph and amplifies what the user can already do as far as heavy lifting. As far as the weight of the suit itself, it doesn't matter because the suit carries its own weight and the user does not feel the weight of the suit.

Works Cited:

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