## The exoskeleton

The exoskeleton is an autonomous electromechanical structure, external to the human body, which allows to increase the capacity of a person in terms of strength, speed and / or accuracy. Currently, many experiments are conducted in the military, for example to support the attachment of a missile under the wing of an airplane. But, ultimately, it is the applications in the civilian sector that will multiply in the construction, safety or operation of first aid during natural disasters ... Used in industry, technology exoskeletons will increase capacity handling or allow to reduce work-related musculoskeletal disorders of the operators. And in the coming years, the exo-aids significantly improve the independence of people with disabilities or reduced mobility. Evidenced by this recent event: it's a paraplegic teenager equipped with a motorized exoskeleton controlled by thought which gave the kickoff of the FIFA World Cup 2014, by shooting in the first ball. Given the variety of possible applications, it is difficult today to accurately assess the potential of this promising market.

It looks like the outline of human body, in black. It's made of high-tech things. It was created by several labs like : technology in motion, ekso bionics.

That robot is used for the disabled or in the army.

We can use exosekletons to walk, run and also another type of movement. The exoskeletons are used in the army to pick up heavy things, run faster and so on.

This robot is big and heavy, so we think the scientists will work on this problems to improve exoskeletons.

## Exemple:



ExoClimber<sup>™</sup> is designed to allow rapid ascent of stairs and steep slopes while providing the same long term load carrying capability of ExoHiker<sup>™</sup>. - See more at:

http://bleex.me.berkeley.edu/research/exoskeleton/exoclimber/#sthash.NjeWIFIS.dpuf