

LIFTSUIT® 2.0 SPECIFICATION

The LiftSuit® 2.0 is a lightweight textile exoskeleton that supports the back and hip muscles when lifting objects or working in a forward-leaning position. It features integrated elastic elements that store energy to support the user and reduce the workload.



Size	S/M + L/XL	
Size selection	User selects LiftSuit® 2.0 size based on user's T-shirt size (S/M/L/XL)	
	S/M	L/XL
Mass overall Dimension (packed) Dimension (coat rack)	0.9 kg Approx. 39x39x11 cm Approx. 100x30x15 cm	1 kg Approx. 39x39x11 cm Approx. 110x40x15 cm
Back height Chest Hip Thigh Load reduction	40 cm 72-94 cm 69-100 cm 49-63 cm Up to 35%	46 cm 87-115 cm 86-120 cm 57-73 cm
List Price	CHF 900 without taxes (around € 850)	

LIFTSUIT® 2.0 APPLICATIONS

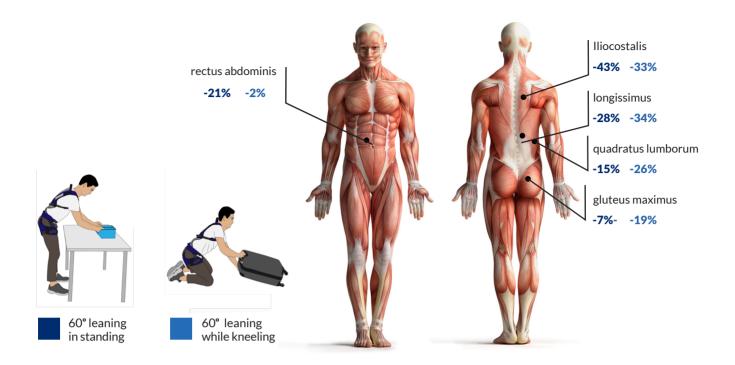
The LiftSuit® 2.0 supports all work that requires frequent lifting of objects from below hip level or working in a forward-leaning position. Use cases include applications in logistics, construction, warehousing, healthcare, agriculture, and others.



LIFTSUIT® 2.0 BIOMECHANICAL PERFORMANCE

The LiftSuit® 2.0 supports back- and hip muscles when lifting objects from below hip level or while remaining in a forward-leaning position. It functions as a layer of artificial muscles outside the body. This way, it reduces the load on its users' muscles. The level of load reduction has been quantified through a series of experiments in a biomechanical laboratory.

LOAD REDUCTION WHEN WORKING IN FORWARD LEANING POSITIONS



*Results represent the average reduction for 8 participants. Individual reductions may vary and depend on the particular person and the task performed while using the LiftSuit® 2.0.

LOAD REDUCTION WHEN LIFTING LOADS REPETITIVELY



No Exo Repetitive lifting of 6 kg
Heart rate (HR)= 122 bpm
Working heart rate (WHR) = 58 bpm



Liftsuit Repetitive lifting of 6 kg HR = 117 bpm (\downarrow 4bpm) WHR = 54 bpm (\downarrow 7%)

