MATE-XT
Muscular Aiding Tech Exoskeleton
MATE-XT is the new upper-limb exoskeleton totally passive (w/o motors). It is designed to assist the user during flexo-extension movements of the shoulder.

MECHANICAL SHOULDER CHAIN
Structure that facilitates the free movement of the user, such as sliding and rotating joints

GARMENT INTERFACE
All parts in direct contact with the user’s body

TORQUE GENERATOR BOX
Core mechanism that stores and transforms potential mechanical energy in order to create an adjustable assistive torque (8 levels)
HOW DOES IT WORK?

MATE-XT GIVES YOU THE EXACT LEVEL OF SUPPORT WHEN AND WHERE YOU NEED IT

The assistance torque provided by the MATE-XT exoskeleton suit follows your individual shoulder flexion/extension angle (maximum torque is at 90° degree)

MATE-XT MOVES IN HARMONY WITH YOUR SHOULDERS

Thanks to a chain of passive degrees of freedom, the flexion-extension rotation axis of the human shoulder is aligned with that of MATE-XT.

JUST THE WAY YOU DO
MATE-XT FITS YOUR BODY, GIVING YOU THE FREEDOM TO MOVE

- New shoulder length regulation design
- Ergonomically designed cuffs
- High-tech, lightweight carbon-fiber structure
- Breathable fabrics
- Intuitive lock/unlock mechanism for easy donning/doffing
- Intuitive labels for regulations and adjustments
- Slim active box design
- Available sizes: L and S

MATE-XT WORKS WHEN, WHERE AND HOW YOU DO.
EXTREMELY ERGONOMIC, EVERYWHERE

- Lightweight structure
- Effortless donning and doffing
- Low encumbrance
- Multiple assistance levels
- Highly breathable
- Repeatable and easy-to-use adjustments
- Certified ergonomics
- Highly comfortable cuffs

EXTERNAL RESISTANCE

- Dust & dirt
- Water
- UV
- Outdoor environment

Comau Mate-XT Exoskeleton
WHY IS MATE UNIQUE?

FOR WORKERS

REDUCED MUSCULAR EFFORT
30% AT SHOULDER LEVEL

PERCEIVED EFFORT REDUCTION
25% LESS MUSCLE STRAIN PERCEIVED

BACK SUPPORT RELIEF
50% OF WORKERS IMPROVED THEIR POSTURE

FOR COMPANIES

POSITIVELY IMPACT YOUR ERGONOMICS

LESS EXECUTION TIME

AND HIGHER PRECISION

ADDRESS WORK-RELATED MUSCULOSKELETAL DISORDERS
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