

NEW STANDARD FOR **EXOSKELETON**

FRT ROBOTICS



WEAR THE **SAFETY**

ENG

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Specialized in Exoskeleton 2025

All-ways
into the Era of
Future Exoskeleton

Data based EXOSKELETON

FRT Robotics, founded in 2015, develops and manufactures industrial exoskeletons and has been driving technological innovation for a decade. Its products are designed to support muscle strength, prevent musculoskeletal disorders, and enhance work efficiency across diverse industries. The company has proven its effectiveness through projects with public institutions such as the National Fire Agency, the Korea Forest Service, and the Seoul Metropolitan Government, while expanding applications into logistics, construction, agriculture, and healthcare.



Company name

FRT Robotics Co., Ltd.



CEO

JANG JAE HO
Ph.D



Established Date

March 10, 2015



Sectors

System robot and
software development
special purpose machinery/R&D



Headquarters address

80, Jisiksaneop 4-ro, Hayang-eup,
Gyeongsan-si, Gyeongsangbuk-do,
Republic of Korea



Major bussiness

EXOSKELETON



Pride of Korean Exoskeleton, shaping into a global enterprise

CEO Jaeho Jang

We have made real improvements to workers' environments across diverse industries.

Our goal is to maximize the safety and efficiency of workers. We envision a future where humans and robots coexist, and we strive for sustainable growth by adopting eco-friendly materials and energy-efficient technologies, presenting a new paradigm of coexistence. At FRT Robotics, we foster a culture of innovation built on collaboration and trust, and through continuous research and development, we are committed to creating the highest value.

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Towards Excellence

From the beginning, we believed technology should help people — easing the burden for workers and supporting healthier, longer careers. Though the path has not been easy, our principle of people-centered technology has never wavered. For us, reaching the 'summit' means moving in the right direction, one step at a time.



10 Years of Progress, Technology Refined through Field Experience

05

~2025

Launch of **StepUp^{NEO}**
 KISTEP President's Award
 Minister of Science and ICT Innovation Award
 Procurement Innovation Pilot Project (Contract Awarded)
 Seoul Care Robot Demonstration Project
 Super-Gap Startup 1000+ Project
 2024 Robotics Flagship Project
 Gyeongsangbuk-do Governor's Startup Innovation Award
 StepUp 4 Designated as Procurement Innovation Product
 Excellent Venture Company - Daegu Newspaper President's Award
 ICT Convergence Digital Inclusion R&D Project
 Gerontechnology GT Company Award
 Good Design Prime Minister's Gold Prize (4th Gen)
 4th Industrial Revolution Startup Growth Program

~2022

Certified as Excellent Technology Evaluation Company
 Developed Dedicated Model for Korea Forest Service
 Featured in Media: Wearable Robots Applied to T Station
 Launched Products for Caregivers
 Commercial Sales of Logistics Wearable Robots
 Exhibited at CES 2020 (USA)
 Forest Science & Technology Commercialization Support Project
 R&D Specialist Support Program for Crisis-Affected Firms
 Gyeongsan Industry-Academia Convergence District Project
 Disaster Safety Robot Field Application Project
 Smart City Service Innovation Support Project
 Core Robotics Technology Development Program

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~2018

ICT Patent Management Award
 Supply Contract with Masan Robot Land
 Opened Seoul Technology Research Center
 Challenge Demo Day - Prime Minister's Grand Prize
 Commendation from Minister of Trade, Industry and Energy
 ICT · Broadcasting R&D Project
 ICT Convergence Fundamental Technology Development Project
 Robotics Industry Technology Development Project
 Established FRT Robotics Co., Ltd.
 Market-Creation Robot Distribution Project

~2015

Establishment of FRT Co., Ltd.

In industrial work environments, wearing this product effectively reduces the strain on the lower back and legs during repetitive bending tasks or heavy load handling. With its muscle support function, it decreases lumbar muscle fatigue by up to 45%, significantly lowering both fatigue and the risk of injury even during long working hours. StepUp is a wearable robot that not only helps prevent musculoskeletal disorders but also enhances both work sustainability and productivity for workers.

StepUp^{NEO}

StepUp^{NEO}

Light weight & Slim

Designed for stable,
Long-term use

Strength-Adapted Fit

Customizable Assist
Modules (S/M/L)

Expanded Convenience

Adjustable Back, Leg and
Pelvic Sizes by Body Type

WEAR THE SAFETY



StepUp

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FRT
ROBOTICS

Lighter Technology, Stronger Performance Innovation that Transforms Everyday Work

Through a decade of technological expertise, we have achieved precise motion assistance that goes beyond simple wearability. With a lightweight structure, ergonomic design, and energy-efficient passive technology, our exoskeleton responds as naturally as the human body—reducing fatigue in the field and boosting productivity.





Hyper robust

High-quality exoskeleton materials ensure long-lasting durability.



Light Weight / Comfort fit

Lightweight and body-adjustable for a perfect fit.



Power - free

A passive wearable robot that requires no power supply



45%

Reduce muscle fatigue

Provides up to 45% reduction in muscle fatigue during use.

16.8^{kgf}

Support muscle power

It offers support of up to 16.8 kg when lifting objects



Sustainable Performance

Comfortably designed for extended wear without strain.

Adjustable in length, flexible at the joints A comfortably expandable design

Next-generation wearable robot, focused on comfort and reduced weight



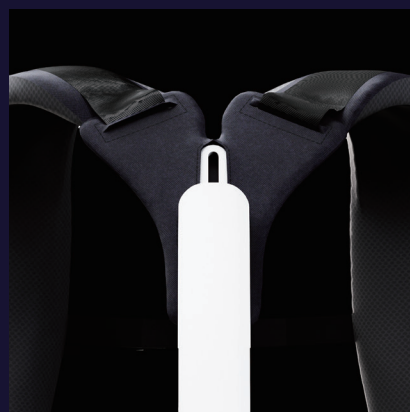
Highly adaptable, scalable wearable robot

It is equipped with scalability that allows its length and structure to be freely adjusted to fit various body types. With adjustable back, pelvis, and leg lengths, along with a flexible joint design, it ensures a comfortable fit for people of all ages and body shapes, providing optimal wearability across different work environments.



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Adjustable body sizing



Smart Force Minimal Effort

Technology should not replace the human body, but serve as a means to make life healthier and safer. An exoskeleton is not merely a device to lighten loads; it is a technology that protects workers' bodies in repetitive labor and extreme environments, while enhancing the sustainability of their lives.

The new era of the 'Future Exoskeleton' moves toward technology that understands people and expands human potential. Wearable robots are no longer an option for better workplaces and lives—they are becoming the standard of technology for our shared tomorrow.

EXOSKELETON for Industries



Nursing care

Reduces caregiver's back strain and supports safe patient care



Agriculture

Assists the back and legs in repetitive farm tasks to ease fatigue



Firefighting

Power and endurance support in critical missions



Construction

Minimizes musculoskeletal burden during extended heavy work



Logistics

Back support and efficiency boost for heavy load operations



Manufacturing

Less muscle fatigue in repetitive assembly and manufacturing tasks



Maintenance

Reduces fatigue in vehicle and aircraft maintenance



Defense

Load distribution for less fatigue in ammo and supply carrying



Healthcare

Supports rehabilitation patients' weakened legs for daily life

Our Public Mission

Every year, about 546 major wildfires occur, highlighting the urgent need for stronger fire prevention measures and safer working conditions for those on the front lines.

We must be prepared for these risks, and it is our mission to protect the people who dedicate themselves to stopping them.

Disaster Response Cases

StepUp 4th

Procurement Innovation Product

360 Units Supplied to Forest & Fire Agencies

Deployed in Major Wildfire Response





365 On-Site Proven

For 365 days a year, we have visited diverse worksites, wearing and testing our robots alongside workers. Through this process, what mattered most was listening—understanding where workers truly needed support, what discomforts they faced, and what improvements were essential. Based on this real-world feedback, our products have been continuously refined, evolving into wearable robots that deliver tangible benefits on site. Technology is perfected in the field.

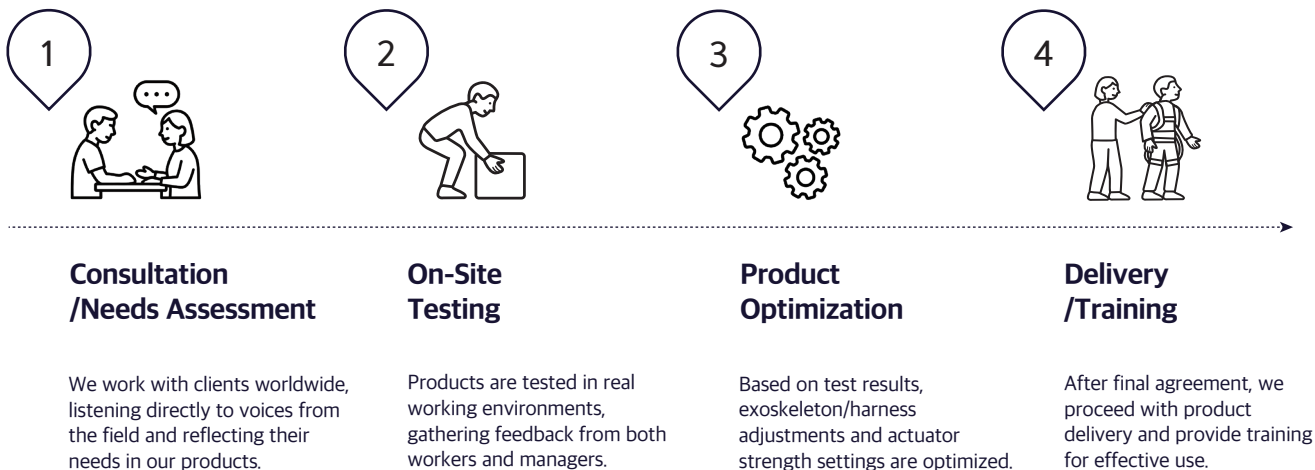
Our technology begins with our customers' stories.

We work with numerous clients at home and abroad, listening directly to the voices from the field and reflecting them in product improvements and technological innovation.



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Customer Service



**Delivering wearable solutions
that fit the needs of workers.**

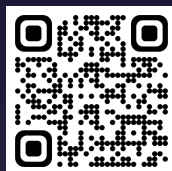
Optimized wearable solutions for caregiving, manufacturing, logistics,
defense, and daily life — with custom fit and adjustable support.



More information



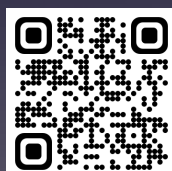
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Instagram



Youtube



Linkedin





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