+357 96 030922
info@marketpublishers.com

Global Industrial Exoskeletons Supply, Demand and Key Producers, 2026-2032

https://marketpublishers.com/r/G8E96A6098F7EN.html
Date: December 2025
Pages: 163
Price: US$ 4,480.00 (Single User License)
ID: G8E96A6098F7EN

Abstracts

The global Industrial Exoskeletons market size is expected to reach $ 1671 million by 2032, rising at a market growth of 27.3% CAGR during the forecast period (2026-2032). In 2025, the global production of Industrial Exoskeletons reached 11,900 units, with an average price of approximately US$25,000 per unit and a gross profit margin of approximately 20.2%-50%. The average production line capacity was 250 units per company. Industrial exoskeletons are wearable devices designed to enhance human strength and endurance, especially in high-intensity, repetitive industrial jobs such as manufacturing, assembly, material handling, and logistics. Through mechanical support and assistive systems, they reduce the physical burden on workers, improve work efficiency, and reduce workplace injuries. Industrial exoskeletons typically use lightweight, high-strength materials such as aluminum alloys and carbon fiber, combined with a power system (such as electric or pneumatic drive) to provide auxiliary force, helping wearers to more easily perform heavy lifting and manual labor. With the development of automation and intelligent technologies, Industrial Exoskeletons are gradually becoming an important tool for improving productivity and protecting worker health.
Upstream: Raw Material and Core Component Supply. The lightweight structural materials, sensors, actuators, and power batteries required for Industrial Exoskeletons all rely on the upstream supply chain. In terms of structural materials, high-strength and lightweight alloys and composite materials, such as carbon fiber, titanium alloys, and aluminum alloys, are used to reduce the weight of the equipment and improve wearing comfort. Regarding sensors, these include inertial measurement units (IMUs) for posture and motion capture, pressure/torque sensors for detecting applied forces, and position encoders, enabling precise perception of human movement intentions and exoskeleton status. Typical suppliers include Bosch and Analog Devices (ADI) for MEMS inertial sensors, and ATI for force/torque sensors. For drive actuators, most

+357 96 030922
info@marketpublishers.com

industrial exoskeletons use motor-reducer drives, while a few employ hydraulic or pneumatic solutions. The required high-performance brushless motors, servo motors, and reducers are mainly supplied by specialized manufacturers (such as Maxon for high-power-density motors and Harmonic Drive for harmonic reducers), and these components determine the exoskeleton's power output and control precision. Furthermore, high-energy-density rechargeable batteries are crucial for powering exoskeleton mobility. Upstream battery suppliers include lithium-ion cell and module manufacturers (such as Panasonic, LG Chem, and CATL). Currently, hardware technologies such as motors and batteries are relatively mature, providing a reliable foundation for the practical application of exoskeletons.
Midstream: Core Module Development and Complete Machine Manufacturing. The midstream consists of exoskeleton manufacturers and system integrators, responsible for integrating various components into wearable devices and developing control algorithms to achieve human-machine collaboration. Core modules include: ? Control System ? The brain of the exoskeleton, including the electronic control unit, drive circuits, and embedded software. This module integrates sensor data and controls the actuators of each joint in real time, requiring extremely high response speed and reliability. Leading companies typically develop their own controllers and operating software to ensure the safety and naturalness of human-machine interaction. ? Mechanical Structural Components ? The skeleton of the exoskeleton, including support frames, joint mechanisms, connectors, and wearable fixation devices. Midstream manufacturers need to design ergonomic mechanical structures for different application scenarios, ensuring they are both robust and durable as well as lightweight and flexible. ? Algorithms and Software Modules ? The core hardware and software that determine the intelligence level of the exoskeleton, including gait control, strength assistance algorithms, balance control, and human-machine interface. In recent years, artificial intelligence and machine learning have been introduced to adaptively adjust the exoskeleton's assistance level for different individuals and working conditions.
Industrial exoskeletons have a wide range of downstream applications, with major customers including manufacturing companies, logistics and warehousing enterprises, construction companies, and military departments. Manufacturing: On production lines in manufacturing industries such as automobiles, aerospace, and electronics assembly, workers are prone to musculoskeletal strain due to prolonged assembly, lifting, and high-altitude operations. Exoskeletons can provide strength support and fatigue relief, improving productivity and reducing workplace injuries. Logistics and Warehousing: In express delivery, warehousing, and distribution centers, handling and picking operations place a significant burden on workers' backs. Exoskeletons can help porters and couriers reduce the burden of heavy loads and lower the risk of injury, thereby improving work efficiency. Construction: Construction sites are complex environments

+357 96 030922
info@marketpublishers.com

requiring frequent handling of building materials and prolonged tool holding, leading to high levels of physical exertion and safety risks for workers. Exoskeletons can assist construction workers in lifting heavy objects, supporting their torsos, and stabilizing their bodies, reducing accidents caused by overexertion. With the increasing durability and protection levels of equipment, the construction industry is considered one of the key markets for exoskeletons in the future. Military and defense industry: The military field is one of the earliest birthplaces of exoskeleton technology. Military forces in many countries around the world have invested in the research and development of soldier-assistive exoskeletons and military exoskeleton equipment to enhance individual soldiers' ability to carry heavy loads and march, improve the efficiency of weapon handling and logistical support, etc.

Market Opportunities and Key Drivers: With rising labor costs, many manufacturing and logistics industries are seeking solutions to reduce worker workload and improve efficiency. Industrial exoskeletons can significantly reduce the health impact of repetitive manual labor, especially in high-load and hazardous work environments, providing employees with a more comfortable and safer way to work. Furthermore, with the increasing aging of the workforce, the demand for industrial exoskeletons is gradually increasing, especially in workplaces with older employees, where exoskeletons provide better support and extend their working life.

Market Challenges and Risks: Despite the enormous potential of industrial exoskeleton technology, significant challenges remain in its market adoption. First, technological maturity and cost remain major bottlenecks for the industry. High-performance exoskeleton systems are expensive, posing a considerable investment risk for many small and medium-sized enterprises. Second, product comfort and adaptability remain obstacles to industry development. Existing exoskeleton devices are generally heavy and require extended adaptation periods, causing inconvenience for some employees and impacting usability.

Downstream Demand Trends: As market demand for efficient work tools continues to grow, especially in manufacturing, logistics, and construction industries, the application of industrial exoskeletons will gradually become more widespread. In the future, companies will focus more on cost-effectiveness through increased productivity and reduced workplace injuries, and exoskeletons will be a key tool in achieving this goal. Furthermore, with governments and businesses placing greater emphasis on employee safety, supportive policies will help promote the adoption and market penetration of industrial exoskeletons, a trend expected to accelerate in the coming years.

This report studies the global Industrial Exoskeletons production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Industrial Exoskeletons and provides market size (US$ million) and Year-over-Year (YoY)

+357 96 030922
info@marketpublishers.com

Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of Industrial Exoskeletons that contribute to its increasing demand across many markets.

Highlights and key features of the study

Global Industrial Exoskeletons total production and demand, 2021-2032, (K Units)
Global Industrial Exoskeletons total production value, 2021-2032, (USD Million)
Global Industrial Exoskeletons production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (K Units), (based on production site)
Global Industrial Exoskeletons consumption by region & country, CAGR, 2021-2032 & (K Units)
U.S. VS China: Industrial Exoskeletons domestic production, consumption, key domestic manufacturers and share
Global Industrial Exoskeletons production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (K Units)
Global Industrial Exoskeletons production by Type, production, value, CAGR, 2021-2032, (USD Million) & (K Units)
Global Industrial Exoskeletons production by Application, production, value, CAGR, 2021-2032, (USD Million) & (K Units)
This report profiles key players in the global Industrial Exoskeletons market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Eksobionics, Cyberdyne, Sarcos Robotics, Novanta(Celera Motion), LockHeed Martin, Parker Hannifin, SUITX (Ottobock), Tmsuk, ExoAtlant, Raytheon, etc.
This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.
Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World Industrial Exoskeletons market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US$ Millions), volume (production, consumption) & (K Units) and average price (K US$/Unit) by manufacturer, by Type, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global Industrial Exoskeletons Market, By Region:

United States

China

+357 96 030922
info@marketpublishers.com

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global Industrial Exoskeletons Market, Segmentation by Type:

Upper-body Exoskeletons

Lower-body Exoskeletons

Full-body Exoskeletons

Global Industrial Exoskeletons Market, Segmentation by Drive:

Electric Drive

Mechanical Drive

Hydraulic Drive

Global Industrial Exoskeletons Market, Segmentation by Sales:

Direct Sales

Distribution

+357 96 030922
info@marketpublishers.com

Global Industrial Exoskeletons Market, Segmentation by Application:

Construction

Logistics and Warehousing

Manufacturing

Military and Defense

Other

Companies Profiled:

Eksobionics

Cyberdyne

Sarcos Robotics

Novanta(Celera Motion)

LockHeed Martin

Parker Hannifin

SUITX (Ottobock)

Tmsuk

ExoAtlant

Raytheon

Wearable Robotics Srl

RoboSuits

+357 96 030922
info@marketpublishers.com

Comau

German Bionic

ANGEL ROBOTICS

German Bionic

ANGEL ROBOTICS

Panasonic

ULS Robotics

Shenzhen Kenqing Technology Co.,Ltd.

Jiangsu Zhenjiang New Energy Equipment Co., Ltd.

MileBot Robotics

Mabao Intelligent Technology(Suzhou)Co., Ltd.

Key Questions Answered:

1. How big is the global Industrial Exoskeletons market?
2. What is the demand of the global Industrial Exoskeletons market?
3. What is the year over year growth of the global Industrial Exoskeletons market?
4. What is the production and production value of the global Industrial Exoskeletons market?
5. Who are the key producers in the global Industrial Exoskeletons market?
6. What are the growth factors driving the market demand?

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

5 MARKET ANALYSIS BY TYPE

6 MARKET ANALYSIS BY DRIVE

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

10 INDUSTRY CHAIN ANALYSIS

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Figures

LIST OF FIGURES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Global Industrial Exoskeletons Supply, Demand and Key Producers, 2026-2032

Product link: https://marketpublishers.com/r/G8E96A6098F7EN.html

Price: US$ 4,480.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G8E96A6098F7EN.html