

With the least of vehicle,
Carry the most of cargos

SPEED FLOOR

Company Profile



SpeedFloor drives innovation in trucking.

SpeedFloor focuses on essential innovations. Trucks should be able to move cargo easily, and only cargo should enter the loading area. SpeedFloor rotates the floor of the truck's cargo space, transforming the labor-intensive loading and unloading process into a technology-driven approach. Designed to make it easier to handle cargo, SpeedFloor optimizes the loading area to keep only cargo inside.



COMPANY Overview

Company Name	SpeedFloor Co., Ltd.
CEO	Hyunjin Hong, Sukmin Hong
Established	November 4, 2021
Employees	15+
Registration No.	103-87-02332
Contact	+82 10-3808-2279

COMPANY History

- 2021 Nov** Established SpeedFloor Corporation
- 2023 Nov** Opened in-house production facility
- 2023 Dec** Began sales to last-mile delivery companies (major Korean logistics corporations: Lotte, Kurly etc.)
- 2024 Apr** Secured SEED funding (\$150K)
- 2024 Apr** Designated and supported as a robotics startup by the Korean government (\$300K)
- 2024 Sep** Received R&D investment from the Korean government (\$350K)

Growth of e-commerce increases loading and unloading burden on logistics workers.



Meanwhile, in the military,

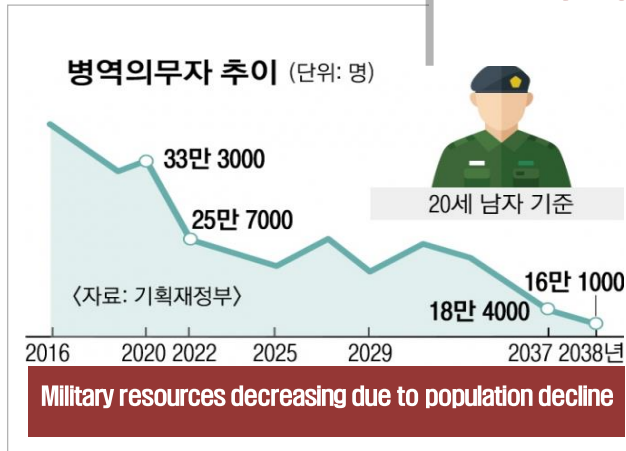


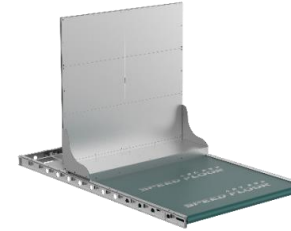
Loading and unloading of military cargo relies on soldier labor.

Increasing workload burden on soldiers



Limitations of loading and unloading methods relying on soldier labor





Commercial trucks and standard military vehicles

Installing 'SpeedFloor' inside the cargo compartment

**Electric loading and unloading device that soldiers
don't need to enter the cargo space for**



지게차

충돌주의
Caution
Forklift

1

Forklift replacement
effect



2

No need to enter the
cargo compartment,
preventing injuries



3

Maximizing transport
efficiency through
electrification

Automatically, horizontally

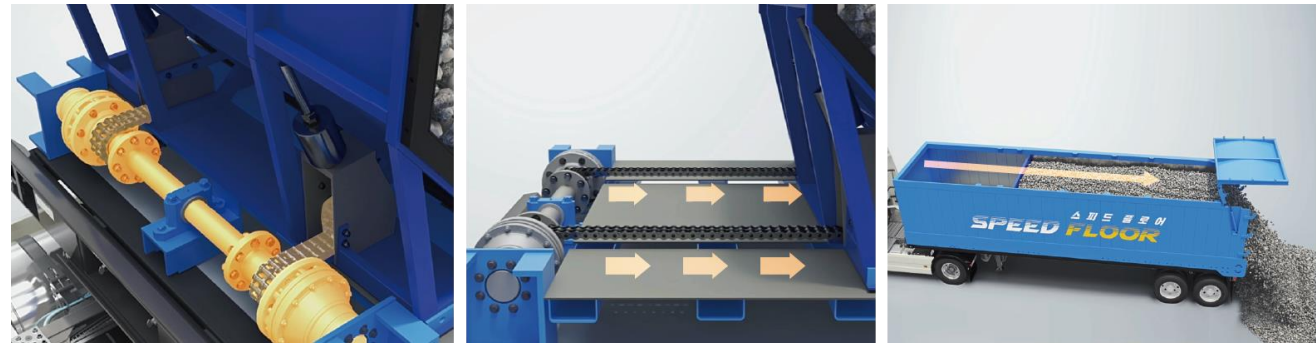
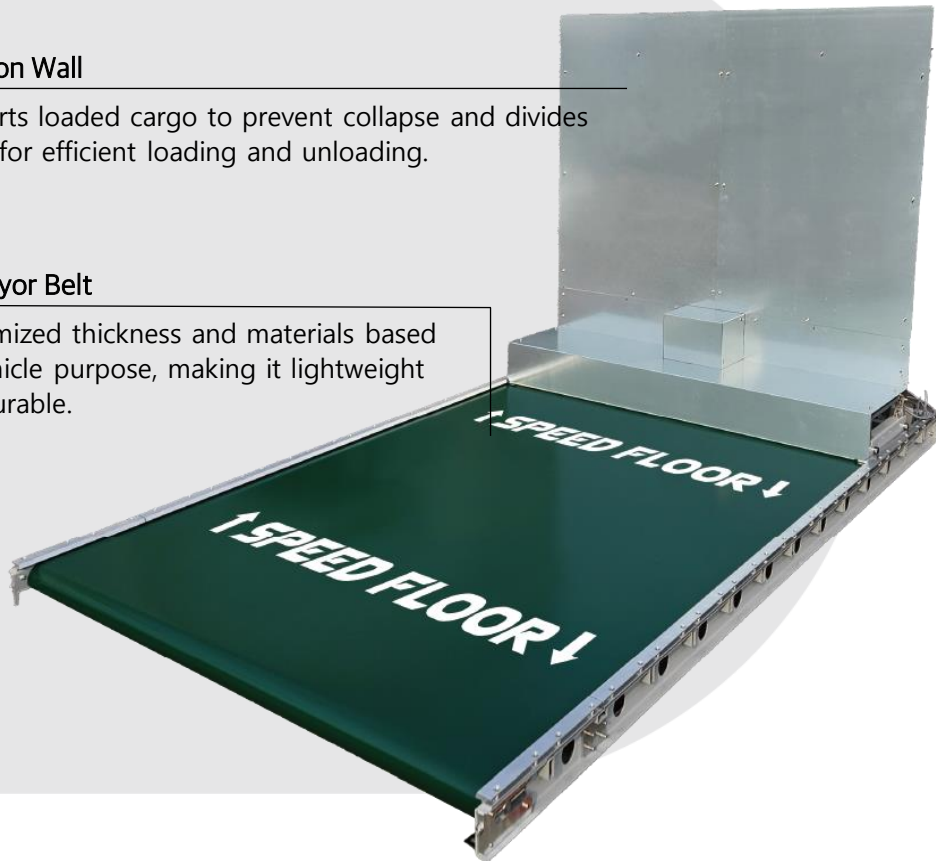
A new device that installs a conveyor belt at the bottom of the cargo space, allowing cargo placed on the belt to be pushed and pulled for loading and unloading.

Partition Wall

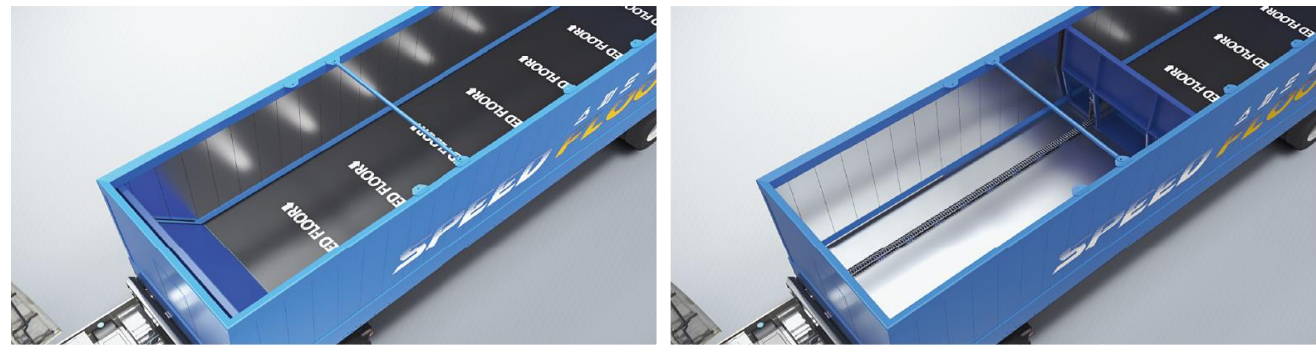
Supports loaded cargo to prevent collapse and divides space for efficient loading and unloading.

Conveyor Belt

Customized thickness and materials based on vehicle purpose, making it lightweight and durable.



The motor's rotational force is transmitted through a chain to move the conveyor belt horizontally.

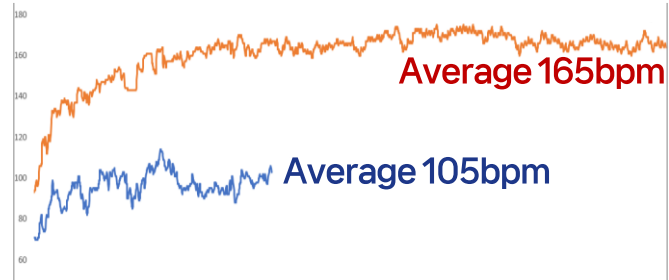


Moves the conveyor belt horizontally with the power of a strong chain.

Heart Rate Reduction **36% decrease**



Heart Rate Comparison
for Loading and Unloading 100 Boxes



Estimated Exercise Intensity **Reduced by half**

Labor Intensity Calculation Results on Heart Rate

Without
SpeedFloor

Stage 4: 80% of max exercise intensity

With
SpeedFloor

Stage 1: 40% of max exercise intensity

[Calculated using the Karvonen Formula]

Work Time Reduction **63% decrease**



Time per 100 boxes reduced by **23 minutes (63%)**

Without SpeedFloor

36 min.



With SpeedFloor

13 min.



23 min.



Cargo Space for Cargo Only

Loading/Unloading Time Comparison (1 Cycle with 300 Boxes)

SpeedFloor testing shows a reduction in total lead time by 70%—from 87 minutes with traditional methods to 26 minutes with SpeedFloor.

· Traditional Method

87min.



· SpeedFloor Loading/Unloading

26min.



70% lead time reduction

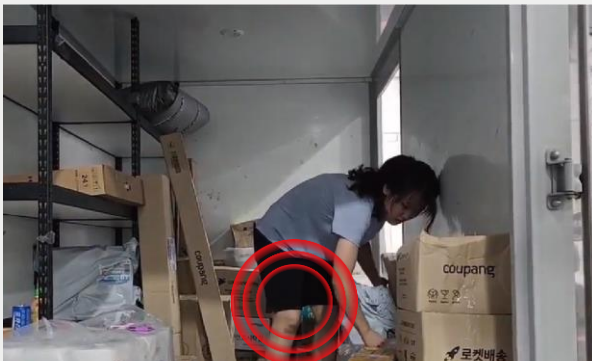


Traditional Method



SpeedFloor Method

Traditional Method



Entering the narrow cargo space

Delivery workers using manual loading/unloading methods are exposed to exhaustion, joint injuries, and other industrial accidents from repeatedly entering and exiting the cargo compartment.

SpeedFloor Method



Loading/unloading work from outside

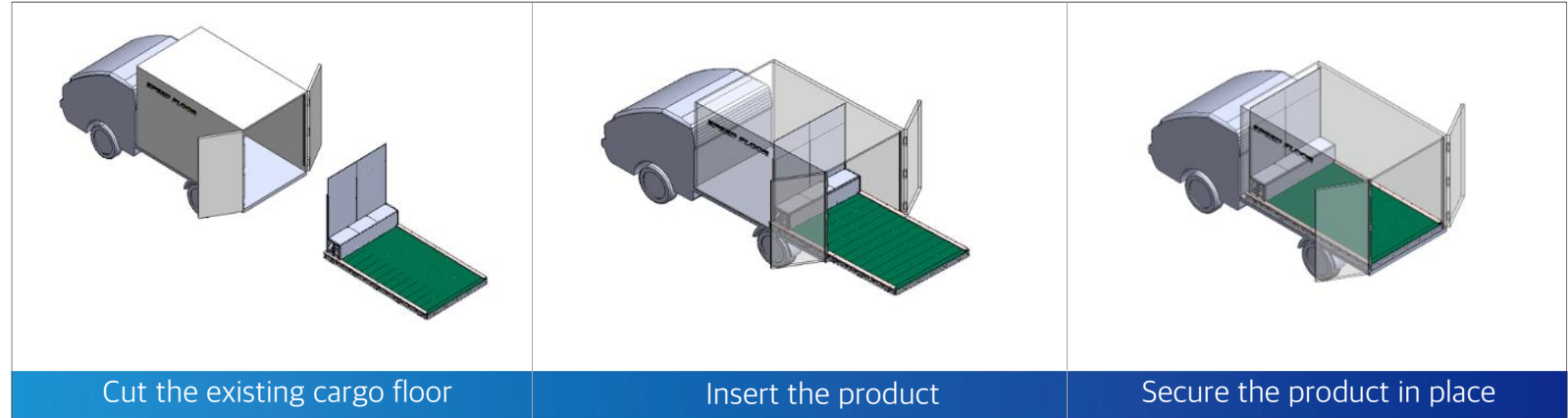
Workers can operate from outside the cargo space, moving items with the push of a button, allowing for faster and safer deliveries without the need to enter the compartment.

Installation Method for SpeedFloor

SpeedFloor installs a conveyor at the bottom of the cargo compartment for seamless and easy installation.

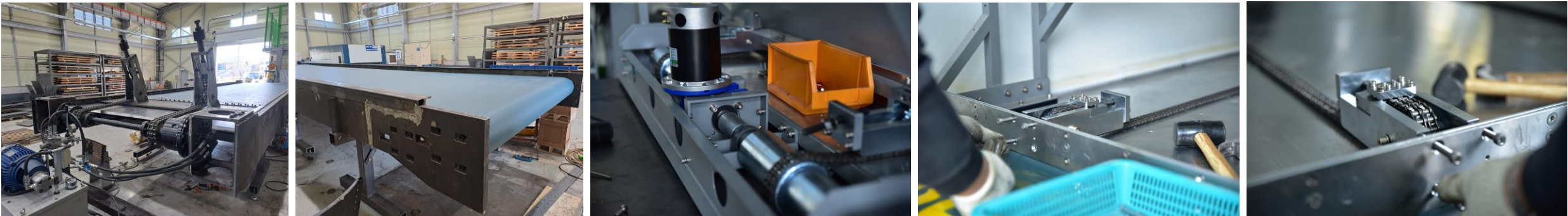
Simple and Non-Disruptive Installation

SpeedFloor is installed by cutting the existing cargo floor, inserting the product, and securing it in place. Its simple design allows for easy installation without vehicle downtime.



In-House Manufacturing and Installation

SpeedFloor is quickly manufactured from production to installation in our own factory, allowing for same-day intake and dispatch.



Product specifications

Speed Floor offers custom manufacturing for all types of cargo vehicles from 1 Ton to 25 Ton.



Cargo Area for Cargo Only

Basic model with universal applicability

※ Standard Specifications

Power Consumption: 12V, Max 50A
Drive Motor: 750W (1HP)
Operating Temperature: -25°C~80°C
Equipment Weight: 220kg
Total Operation Time: Within 60sec.
Equipment Size: 1,650x2,900x90mm

Standard Refrigerated/Freezer Van

Specialized for fresh goods with minimized cold air loss

※ Standard Specifications

Power Consumption: DC 12V~24V, Max 50A
Drive Motor: 750W (1HP) / Single or Dual
Operating Temperature: -25°C~80°C
Equipment Weight: Customizable
Total Operation Time: Within 60sec.
Equipment Size: Customizable

Variable Refrigerated/Freezer Van

Energy-efficient transport by refrigerating/freezing only the loaded cargo

※ Standard Specifications

Power Consumption: DC 12V~24V, Max 50A
Drive Motor: 750W (1HP) / Single or Dual
Operating Temperature: -25°C~80°C
Equipment Weight: Customizable
Total Operation Time: Within 60sec.
Equipment Size: Customizable

Medium Automatic Van

Handles diverse cargo with a single vehicle

※ Standard Specifications

Drive Motor: Dual DC Motor
Operating Temperature: -25°C~80°C
Equipment Weight: 1500~2000kg
Total Operation Time: 60~80 seconds
Equipment Size: Customizable

Large Cargo/Trailer

From bulk materials to pallets and boxes

※ Standard Specifications

Drive Motor: Hydraulic Motor (40HP)
Operating Temperature: -25°C~80°C
Equipment Weight: 1500~2000kg
Total Operation Time: Within 80 seconds
Equipment Size: 2,300x1,000x1,500mm
※ Customizable

SpeedFloor holds several certifications and patents, backed by advanced technology.



8 Registered Patents, 9 Pending Applications



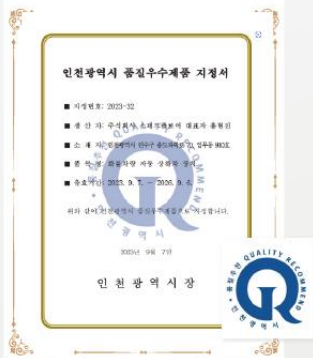
ISO 14001



ISO 9001



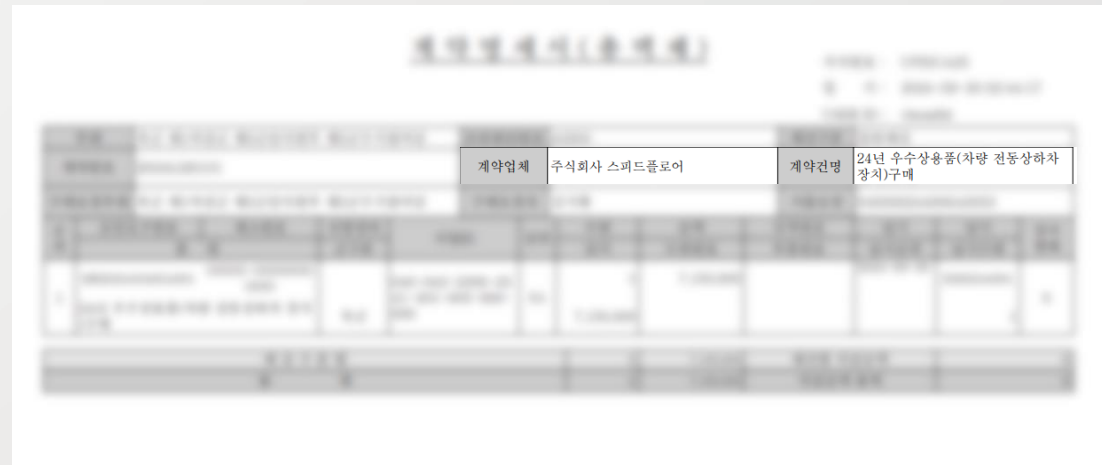
· 2022 Ministry of Oceans · 2024 Ministry of Transport
 Awarded 'NET certificate'



Supplied to **Incheon Metropolitan City**



Government's **Green Technology Certification**



Supply Contract with the Korean Army for SpeedFloor

