October 30, 2025

Nexa Ware Co. Ltd.
LOGISTEED, Ltd.
Mitsubishi HC Capital Inc.
TSUBAKIMOTO CHAIN CO.

Launch of Field Demonstration for Remote Forklift Operation System for Logistics Warehouses
― Verifying the Functions, Performance, and Business Feasibility ―

Nexa Ware Co. Ltd. (Head Office: Chiyoda-ku, Tokyo, President CEO & COO: Takayuki Kitamura, hereinafter “Nexa Ware”) and TSUBAKIMOTO CHAIN CO. (Head Office: Osaka, Osaka Prefecture, President and Representative Director, COO: Takatoshi Kimura, hereinafter “Tsubakimoto Chain”) have jointly developed an evaluation and verification system for a remote forklift operation system designed for logistics warehouses.
To verify its functions, performance, and business feasibility, a field demonstration will commence on November 4, in collaboration with LOGISTEED, Ltd. (Head Office: Chuo-ku, Tokyo, Representative Director, Executive Chairman, President and CEO: Yasuo Nakatani, hereinafter “LOGISTEED”) and Mitsubishi HC Capital Inc. (Head Office: Chiyoda-ku, Tokyo, Representative Director, President & CEO: Taiju Hisai, hereinafter “Mitsubishi HC Capital”).

The newly developed remote forklift operation system retrofits existing forklifts with remote operation units, including sensors, cameras, and actuators, enabling remote operation.
For the development of this system, LOGISTEED’s expertise and technical know-how in remote forklift operation have been leveraged, and the field demonstration will be conducted at one of LOGISTEED Group logistics centers. Furthermore, Mitsubishi HC Capital will utilize its extensive customer network to evaluate the business feasibility of the system.

The Evaluation and Verification System

The Remote Forklift for evaluation and verification

The Remote Control Console

1. Background and Purpose

In March 2025, Nexa Ware, LOGISTEED, and Mitsubishi HC Capital agreed to jointly explore the commercialization of a remote forklift operation system for logistics warehouses and signed a MOU *1. The three companies aim to drive logistics innovation, address chronic shortages of forklift operators, improve physical harsh working environments such as cold storage warehouses, and enhance safety and the overall appeal of the logistics industry.
Subsequently, Tsubakimoto Chain joined as a technical partner for the demonstration experiment. Through joint development with Nexa Ware, the evaluation and verification system was completed.

Going forward, the four companies—Nexa Ware, LOGISTEED, Mitsubishi HC Capital, and Tsubakimoto Chain—will conduct the demonstration (hereinafter “the Demonstration”) to evaluate and verify the functions, performance, and business feasibility of remote forklifts.

*1: March 27, 2025 Press Release: “Signing of MOU for Commercialization of Remote Forklift Operation System for Logistics Warehouses”
https://nexaware.com/post-234/ (Japanese Language, External Website))

2. Overview of the Demonstration

(1) Implementation Details

- Location: LOGISTEED East Japan, Ltd., Tatebayashi Branch (Tatebayashi City, Gunma Prefecture)
- Period: November 4, 2025 – December 26, 2025 (planned)
- Evaluation Summary:

Function & Performance	Various forklift operations in the logistics center will be performed using the evaluation system to assess the remote forklift’s functions and performance based on actual warehouse operations.
Business Feasibility	Based on the results of the function and performance evaluation, business feasibility will be assessed, including customer deployment strategies and business scale.

(2) System Overview

The system enables remote operation by retrofitting existing forklifts with sensors and multiple cameras. Actuators have been developed to remotely control each operational lever required for driving. By reproducing the remote operator’s delicate maneuvers on the forklift itself, the system achieves operability equivalent to that of an onboard operator.
While the introduction of unmanned forklifts has been slow in logistics sites compared to production sites due to productivity and versatility challenges, this system enables practical unmanned operation by allowing remote operation from a control console camera images and sensor data.

(3) System Features

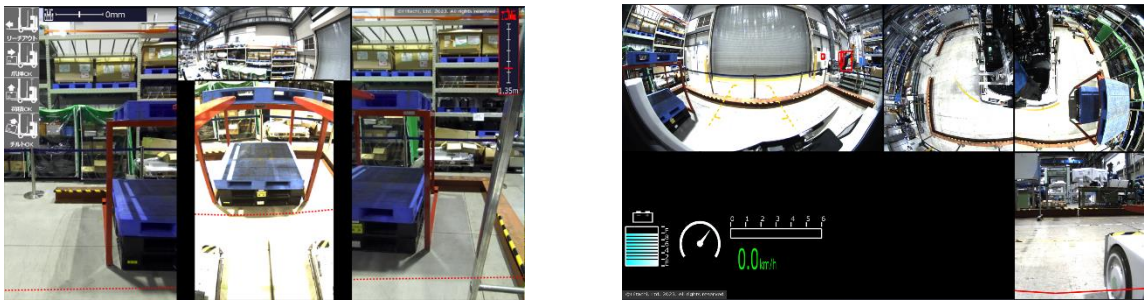
(i) Flexible Deployment:

The system can be retrofitted to existing forklifts, allowing continued use of current equipment in logistics centers. It is also compatible with other forklift models, and asset management for the forklift and the system can be handled separately, enabling flexible operation.

(ii) Camera/AR Assist Solution for Remote Operation:

For the demonstration, eight cameras and fifteen sensors are installed on the forklift. Camera images and sensor data are monitored at the remote control console to ensure safe remote operation.
Additionally, an AR assist application*2 overlays information such as travel direction and cargo position onto the camera images, further enhancing operability and safety.

*2: The AR assist application software was developed by the Research & Development Group of Hitachi, Ltd.



AR and Camera Feeds on the Control Console

(iii) Actuator Units for Remote Operation:

Electric actuators attached to each control part of the forklift reproduce real-time remote operations, including fine adjustments of levers and brake pedals, through low-latency communication and leader/follower control. The system also ensures safety through simple mechanisms and motor control that provide fail-safe operation.

Actuator for Steering and Lever Control

Actuator for Pedals Control

(4) Roles and Implementation Structure

Nexa Ware	Main entity for the remote forklift system business and the Demonstration; responsible for establishing the field communication environment.
LOGISTEED	Provides expertise and technical know-how from remote forklift operation verification; offers the field environment and supports function/performance evaluation.
Mitsubishi HC Capital	Supports business feasibility analysis with a view to future sales (leasing, subscription, service provision, etc.) of the remote forklift system.
Tsubakimoto Chain	Responsible for system development and function/performance evaluation; supports establishment of the field communication environment.

3. Future Plans

Through this Demonstration, the companies will evaluate the functions, performance, and business feasibility of the remote forklift operation system. In parallel, development of a second prototype will proceed, aiming for trial sales within fiscal 2025 and commercial sales by fiscal 2026.

4. Video Introduction

A video introducing the system and its operation is available. (Japanese Language)

Reference: Company Websites

Nexa Ware Co. Ltd. : https://nexaware.com/ (Japanese Language, External Website)

LOGISTEED, Ltd. : https://www.logisteed.com/en/

Mitsubishi HC Capital Group : https://www.mitsubishi-hc-capital.com/english/ (External Website)

TSUBAKIMOTO CHAIN CO. : https://www.tsubaki.com/ (External Website)

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