

2024-09-03

Mitsubishi Heavy Industries, Ltd.  
Mitsubishi Logisnext Co., Ltd.

## MHI and Mitsubishi Logisnext to Display “ΣSynX” Products Enabling Autonomous and Intelligent Warehouse Logistics

**-- Numerous Solutions for Safe, Automated, Decarbonized Logistics --**

- ◆ ***New “Logisnext Solutions” business brand to be shown at Logis-Tech Tokyo 2024***
- ◆ ***Automation of picking, inbound/outbound warehouse processes and truck loading/unloading, and forklift safety features will address “2024 problem”***

Tokyo, September 3, 2024 – Mitsubishi Heavy Industries, Ltd. (MHI) and Mitsubishi Logisnext Co., Ltd., part of MHI Group, will jointly exhibit at Logis-Tech Tokyo 2024. The event is scheduled to be held from September 10 through 13 at Tokyo Big Sight.

The joint exhibit (East Hall Booth 4-104) will introduce examples of MHI and Mitsubishi Logisnext’s latest developments in automated picking solutions – intelligent logistics solutions applying MHI’s Digital Innovation (DI) brand “ΣSynX” (Sigma Syncs)<sup>\*1</sup> – and matching technologies. Visitors will also see a demonstration of a next-generation forklift for automated truck cargo handling, an application under development as an independent product integrating ΣSynX technologies.

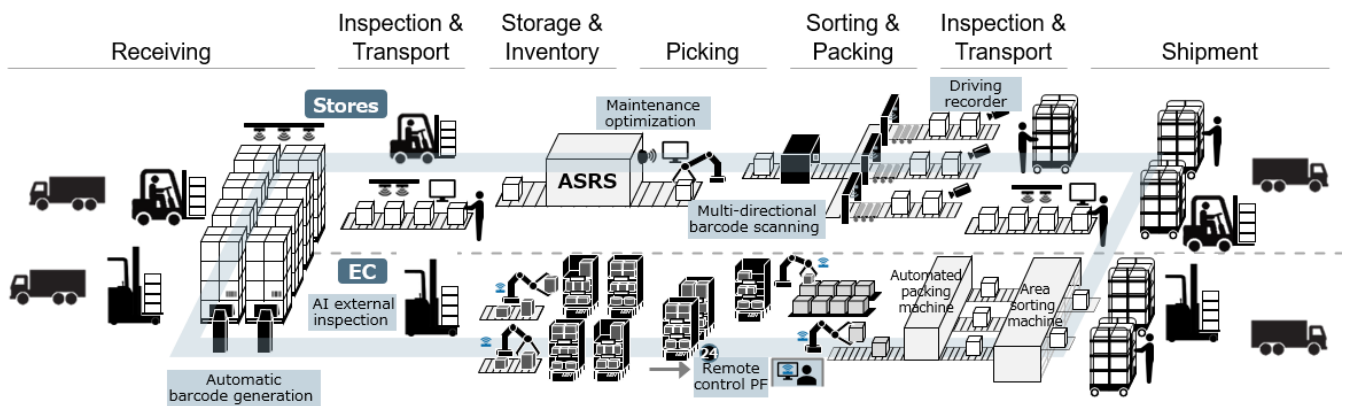


A demonstration will also introduce visitors to an unmanned forklift truck equipped with “SynfoX”<sup>\*2</sup>, Mitsubishi Logisnext’s latest automation technologies that raise the elemental technologies of ΣSynX to a practical level. Visitors will further be introduced to “Logisnext Solutions,” a new business brand launched to headline Mitsubishi Logisnext’s solutions business. Logisnext Solutions is targeted at making Mitsubishi Logisnext a total provider of integrated solutions matched to the customer’s specific workplace needs, rather than just a supplier of forklift products or automated equipment.

Also on display will be a lineup of lithium-ion battery-powered small forklift trucks developed to reduce environmental footprints and further boost work efficiency, and demonstrations will be given of the newest forklift safety features. Visitors will also be provided introductions to diverse automated equipment, peripheral devices and examples of how these systems can be integrated, with a focus on manned and

automated forklifts and automatic guided vehicles (AGVs).

Together, these exhibits at Logis-Tech Tokyo 2024 will present a complete overview of Mitsubishi Logisnext's "Logisnext Solutions" and explain what makes them so advanced: their "Smart Connections" between humans and machines, and between machines and machines, as the future of MHI Group's warehouse logistics facilitating coordination between humans and machines, equipment connections, and safety and security.



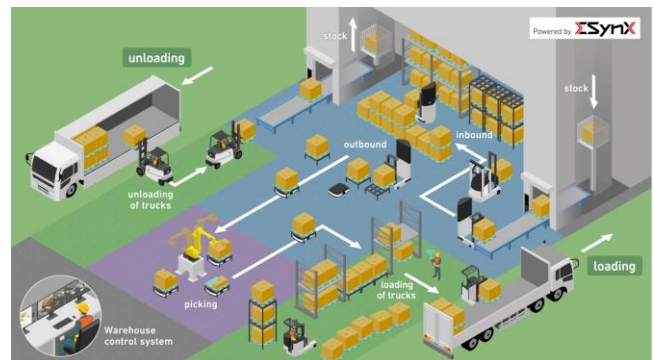
Going forward, MHI and Mitsubishi Logisnext will continue contributing to the development of the logistics industry through provision of optimal solutions of outstanding quality integrating the expansive lineups of products and services of the entire MHI Group, backed by a long track record and experience in solving diverse issues faced by customers, in terms of automation, safety, decarbonization, etc.

### Notes

- \*1:  $\Sigma$ SynX is MHI's Digital Innovation brand expressing "Smart Connections" integrating intelligence and technologies for coordination between humans and machines. Applying these concepts, this standard platform synchronizes and coordinates various types of machinery systems, including logistics products.
- \*2: SynfoX are innovative automation technologies integrating the elemental technologies under development for  $\Sigma$ SynX, applying the technologies and track record of Mitsubishi Logisnext cultivated as a pioneer in unmanned transport systems. SynfoX's technologies are being developed for guidance systems and with a clear view toward commercialization based on manufacturing costs, etc.

## ■ MHI Group Exhibition

“Smart Connections”: solutions for intelligent logistics developed applying  $\Sigma$ SynX. MHI Group is developing, and has begun providing, solutions enabling integration of work processes, from picking and inbound/outbound warehouse processes to truck loading/unloading, reflecting the needs expressed by the customers.



### Automated picking solutions (video presentation)

Picking processes that were performed by operators based on their experience are carried out through “Smart Connections” integrating unmanned forklifts, AGVs and palletizers controlled by a host system equipped with  $\Sigma$ SynX. The system optimizes picking processing, improves throughput and also helps to alleviate current shortages of logistics operators, frees workers from the arduous labor of picking heavy items, and contributes to reducing human error.

### Automated inbound/outbound warehouse process solutions, truck loading/unloading, coordination between humans and machines (demonstration using conceptual machinery)

By applying the expertise of highly experienced operators with warehouse control systems and next-generation unmanned forklifts, MHI Group has achieved “man-machine coordination” with manned forklifts equipped with integrated modules for performing work within a given area. The Company also developed an all-wheel-steering-equipped unmanned forklift capable of responding to diverse truck berth environments and operating conditions. By enabling swift cargo handling applying “pivotal turning” and “sideways movement,” reductions are achieved in truck waiting time and idling time during plan changes, resulting in safe and efficient warehouse operations and ability to provide logistic systems adaptable to diverse customer environments.

### New unmanned forklift equipped with SynfoX (demonstration using prototype)

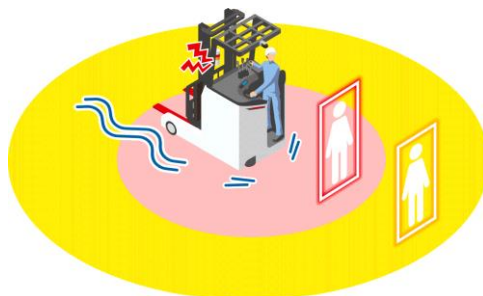
A demonstration will be carried out of an unmanned forklift equipped with “SynfoX” automation technologies, intended for commercial production. The forklift can perform mapping of, and travel through, the work environment in the warehouse, and can detect and pick pallets randomly placed on floors and shelves. By switching operating modes, the forklift can also be manually operated during emergencies, etc.

### Solutions in many fields (demonstration & product display)

Visitors will also see a demonstration of a lithium-ion battery-powered small forklift for a carbon-neutral society featuring “OmniEye®,”\* an AI-powered human detection system, and regenerative braking control for safety and security needs. The lineup of offerings will also be on display. We will also introduce a variety of safety and security support options for logistics applications, and present diverse solutions for dealing with the “2024 problem,” sweeping regulatory changes related to working style reforms in the logistics

industry.

\* "OmniEye®" is a registered trademark of Regulus Co., Ltd.



\*This illustration shows the detection range of other workers.

### Logis-Tech Tokyo 2024

Dates: September 10 (Tue) – 13 (Fri), 2024 10:00-17:00

Venue: Tokyo Big Sight, East Hall Booth 4-104

Pre-registration: <https://www.logistech-online.com/en/>

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